Exercise is Medicine® - Symposium - Promoting Physical Activity Across the Lifespan: Linking Health Care and Communities

Tuesday, May 28, 2019, 1:00 PM - 3:00 PM
Room: Hotel-Grand Ballroom A

Unique opportunities and challenges exist in promoting physical activity for populations across the lifespan. Linking health care and community resources is an effective approach to improving clinical and behavioral outcomes, including increased physical activity, and utilizing clinical and community guidelines is one strategy to help create linkages for specific age groups. Several current physical activity promotion initiatives consider these unique opportunities and challenges for particular age groups and leverage existing guidelines to facilitate effective linkages. The purpose of this tutorial is to explore the opportunities in leveraging community-clinical linkages for physical activity promotion across the lifespan, describe relevant guidelines that can be for this effort, and highlight examples of initiatives that are effectively implementing such linkages across the lifespan, including those oriented towards children and youth, adults, and older adults.

1 1:00 PM - 1:10 PM
Chair: Elizabeth A. Joy, FACSM. Intermountain Healthcare, Salt Lake City, UT
(No relevant relationships reported)

2 1:10 PM - 1:40 PM
Children and Youth
Cynthia R. LaBella, Northwestern University’s Feinberg School of Medicine, Chicago, IL
(No relevant relationships reported)

3 1:40 PM - 2:10 PM
Adults 18-64 years
John D. O’mara. Centers for Disease Control and Prevention, Atlanta, GA
(No relevant relationships reported)

4 2:10 PM - 2:40 PM
Older Adults
Basia Belza. University of Washington, Seattle, WA
(No relevant relationships reported)

2:40 PM - 3:00 PM
Overall Discussion

Exercise is Medicine® - Symposium - The Mind-Body Connection in Pregnancy: What You Should Know to Exercise

Tuesday, May 28, 2019, 1:00 PM - 3:00 PM
Room: Hotel-Grand Ballroom B

Pregnancy can create unexpected upheavals to a woman’s life, challenging dimensions of her well-being including sense of meaning and purpose. Exercising plays a significant role in easing mental and physical symptoms during pregnancy. Women rely heavily on their healthcare providers for advice but barriers often still exist regarding exercise counseling and prescription. Dr. Kari Bo will discuss the current research on the musculoskeletal system in pregnancy and strategies to assist women with their physical changes. Ms. Kate Rope will explore the connection between exercise and mood during pregnancy and postpartum, and practical approaches to overcoming barriers to help this population move their body to improve their mood. Dr. Byron LaGary Carter will discuss how testing for statistical ‘interactions’ does not always illustrate how the effects of exercise are linked and then work through the dose-response relationships between these two behaviors, preventing the harmful effects of sitting. Conversely, others have recently suggested that sitting may attenuate the beneficial effects of physical activity on several health outcomes. In this tutorial lecture we will examine the concepts of ‘joint’ and ‘independent’ associations between sitting time, physical activity and health outcomes. Several recent dose-response meta-analyses have concluded that sitting time is adversely associated with health outcomes ‘independent’ of levels of moderate-vigorous physical activity. In contrast, others have shown that physical activity significantly attenuates or even eliminates the harmful effects of sitting. Conversely, others have recently suggested that sitting may attenuate the beneficial effects of physical activity on several health outcomes. We will begin with a review of recent systematic reviews and meta-analyses, and then work through the dose-response relationships between these two behaviours, individually and together, to demonstrate, without using any complex statistical jargon, how testing for statistical ‘interactions’ does not always illustrate how the effects of
Sedentary lifestyles and physical inactivity are major challenges for modern societies. The objective determination of activity behavior is a challenge, especially the distinction between sleeping, sitting and low-intensive activities. Large European studies show that the duration of sedentarism is less important if it is regularly interrupted. Changes in behavior are important in all phases of life and behavioral modification is highly influenced by the setting. Interventions to modify sedentary lifestyles are still rare, but represent an important task for health researchers. This symposium will highlight European findings on sedentary behavior measurement and sedentary behavior modification for health.

Reducing sedentary time by modifications of behavior, including standing, light physical activity and moderate to vigorous physical activity

Alan E. Donnelly, University of Limerick, Limerick, Ireland
(No relevant relationships reported)

The challenge of reducing sedentary time of patients

Jürgen M. Steinacker, FACSMA, Ulm University, Ulm, Germany
(No relevant relationships reported)

Overall Discussion
26 Karen Fleming, Sunnybrook Health Sciences Center, Toronto, ON, Canada
(No relevant relationships reported)

27 Stacy Tylka, Washington University, St. Louis, MO
(No relevant relationships reported)

A-09 Morris/Paffenbarger EIM Keynote Lecture -
More Active People for a Healthier World
Tuesday, May 28, 2019, 5:30 PM - 6:15 PM
Room: Hotel-Grand Ballroom A

28 Fiona Bull, World Health Organization, Geneva, Switzerland
(No relevant relationships reported)
Once thought to be a waste product of anaerobic metabolism, lactate is now known to form continuously under aerobic conditions. Shuttling between producer and consumer cells facilitates at least three purposes for lactate: (1) a major energy source, (2) the major gluconeogenic precursor, and (3) a signaling molecule. With Lactate Shuttle theory in mind lactate is used for sports nutrition and hydration, resuscitation from acidosis and Dengue, treatment of Traumatic Brain Injury, maintenance of glycaemia, reduction of inflammation, cardiac support following MI and in heart failure, and to improve cognition. Yet, when dysregulated lactate shuttling disrupts metabolic flexibility, and worse supports, oncogenesis. Lactate production in cancer (the Warburg Effect) is involved in all main sequela for carcinogenesis: angiogenesis, immune escape, cell migration, metastasis and self-sufficient metabolism. History of the tortuous path of discovery in lactate metabolism and shuttling will be discussed in the Wolfe Lecture.

Ketone bodies provide a fuel for various organs, including the muscle and brain, under conditions of metabolic and energy stress. Are these molecules tailor-made to be the optimal fuel for stressful conditions, or are they just the best the body can produce in difficult circumstances? Theories and claims around the benefits of deliberate exposure to high levels of circulating ketones have become a hot topic in clinical applications, health, and performance. Two different strategies have developed as a means of achieving this — chronic adherence to a ketogenic Low carbohydrate, high fat diet (LCHF) and the intake of exogenous ketone supplements. This symposium will tackle achieving this – chronic adherence to a ketogenic diet for health, weight loss and ageing.

The Physical Activity Guidelines for Americans, second edition will be released in late 2018. The Guidelines are based upon the 2018 Physical Activity Guidelines Advisory Committee Scientific Report, a series of extensive literature reviews on physical activity and health. This session will describe the new key guidelines for specific populations and highlight the science behind several new topics for this edition, including sedentary behavior and bout length of physical activity; brain health and cognition, and individuals with chronic conditions. The Guidelines will be released with an accompanying communication campaign and resources for health professionals to help support and encourage all Americans to be more physically active. These materials will be shared as resources for the ACSM audience to use with their patients and clients.

Ketogene diets provide a fuel for various organs, including the muscle and brain, under conditions of metabolic and energy stress. Are these molecules tailor-made to be the optimal fuel for stressful conditions, or are they just the best the body can produce in difficult circumstances? Theories and claims around the benefits of deliberate exposure to high levels of circulating ketones have become a hot topic in clinical applications, health, and performance. Two different strategies have developed as a means of achieving this — chronic adherence to a ketogenic Low carbohydrate, high fat diet (LCHF) and the intake of exogenous ketone supplements. This symposium will tackle the biochemistry and physiology of ketosis for human health and sports performance from a number of angles, involving experts from different aspects of research and different perspectives. This symposium will discuss the science behind several new topics for this edition, including sedentary behavior and bout length of physical activity; brain health and cognition, and individuals with chronic conditions. The Guidelines will be released with an accompanying communication campaign and resources for health professionals to help support and encourage all Americans to be more physically active. These materials will be shared as resources for the ACSM audience to use with their patients and clients.
Issues in Determining the Effects of Energy Availability and Bone Turnover
Craig Sale, FACSM. Nottingham Trent University, Nottingham, United Kingdom
(No relevant relationships reported)

High Resolution peripheral Quantitative CT to assess microarchitectural parameters in athletes with decreased energy availability and/or bone stress injuries.
Kathryn Ackerman, FACSM. Boston Children's Hospital, Boston, MA
(No relevant relationships reported)

Bone indentation as an in vivo measurement of bone quality in female athletes with a history of bone stress injuries.
Kristin L. Popp. Harvard Medical School, Boston, MA
(No relevant relationships reported)

Overall Discussion

The currently heavy burden of heart failure (HF) and atrial fibrillation (AF) as major clinical manifestations of cardiovascular disease in later life will only increase with population aging. Although promoting physical activity is included in clinical CVD practice guidelines, little is known about its role in HF and even less is known about its role in HF subtypes, such as HF with preserved ejection fraction which is proportionally higher in older women and race-ethnic minorities. There is also a dearth of evidence regarding how much and at what intensity physical activity should be recommended for older women in the prevention or control of AF. This symposium will present both epidemiological and clinical perspectives on physical activity in the prevention and management of HF and AF in older adults, including a cohort of older women being evaluated in a large community-based pragmatic randomized, controlled physical activity trial.

The Benefits of Water Immersion and Aquatic Exercise: A Rising Tide of Evidence

Chair: Holly J. Benjamin, FACSM. University of Chicago, Chicago, IL
(No relevant relationships reported)

Under the SEA: The Benefits of Water Immersion and Aquatic Exercise: A Rising Tide of Evidence
Holly J. Benjamin, FACSM. University of Chicago, Chicago, IL
(No relevant relationships reported)

Under the SEA: The Benefits of Water Immersion and Aquatic Exercise: A Rising Tide of Evidence
Bruce Becker, FACSM. University of Washington, Seattle, WA
(No relevant relationships reported)

Under the SEA: The Benefits of Water Immersion and Aquatic Exercise: A Rising Tide of Evidence
Hirofumi Tanaka, FACSM. University of Texas at Austin, Austin, TX
(No relevant relationships reported)

Exercise is Medicine® - Symposium - Exercise and the Aging Heart: Prevention and Management of Heart Failure (HF) and Atrial Fibrillation (AF)

Wednesday, May 29, 2019, 9:30 AM - 11:30 AM
Room: Hotel-Grand Ballroom A

Chair: Michael J. LaMonte, FACSM. University at Buffalo - SUNY. Buffalo, NY
(No relevant relationships reported)

Prevention and Management of Heart Failure
Charles B. Eaton. Brown University Warren Alpert School of Medicine, Providence, RI
(No relevant relationships reported)

Prevention and Management of Atrial Fibrillation
Marco V. Perez. Stanford University Medical School, Stanford, CA
(No relevant relationships reported)

Implementing a Community-based Trial on Exercise for HF and AF Prevention
Marcia L. Stefanick. Stanford University School of Medicine, Stanford, CA
(No relevant relationships reported)

Exercise is Medicine® - Symposium - Exercise is Cancer Medicine: How do we Prove it?
Breaking Down the Barriers to Translational Research in Humans

Wednesday, May 29, 2019, 9:30 AM - 11:30 AM
Room: Hotel-Grand Ballroom B

Exercise is well-established as a safe and efficacious method to enhance quality of life, physical fitness, and some disease or treatment-related symptoms in cancer survivors. There is an increasing preclinical evidence base of studies investigating the efficacy and mechanisms of exercise-mediated cancer control, yet very few studies...
have investigated the impact of exercise on cancer-specific outcomes in humans. The goal of this symposium is to stimulate research on the potential benefits of exercise as an adjunct anti-cancer therapy by providing the audience with a summary of current evidence and describing key study design components. Topics will include 1) a primer on tumor biology and microenvironment; 2) review of preclinical evidence and mechanisms; 3) an overview of non-invasive methods and biomarkers to assess cancer response; and 4) review of the limited clinical evidence and next steps for translational research in humans.

Chair: Kathryn H. Schmitz, FACSM. Penn State Cancer Institute, Hershey, PA
(No relevant relationships reported)

9:30 AM - 9:35 AM
9:35 AM - 10:00 AM
10:00 AM - 10:25 AM
10:25 AM - 10:50 AM
10:50 AM - 11:15 AM
11:15 AM - 11:30 AM

Overall Discussion

### A-17 Thematic Poster - Acute Exercise

**Wednesday, May 29, 2019, 9:30 AM - 11:30 AM**

**Room: CC-102A**

**Chair:** Juan Murias. University of Calgary, AB, Canada
(No relevant relationships reported)

**Board #1**

**9:30 AM - 11:30 AM**

**Upper- and Lower-body Resistance Exercise With and Without Blood Flow Restriction on Autonomic Modulation**

Yu Lun Tai1, Erica M. Marshall2, Jason C. Parks2, J. Derek Kingsley, FACSM1. 1University of Texas Rio Grande Valley, Brownsville, TX. 2Kent State University, Kent, OH. (Sponsor: Dr. J. Derek Kingsley, FACSM)

Email: yulun.tai@utrgv.edu
(No relevant relationships reported)

**Board #2**

**9:30 AM - 11:30 AM**

**Cardiovascular Disease Risk Influences Cerebrovascular Regulation in Older Adults**

Sophy J. Perdomo1, Jaimie Ward1, Yunwei Liu1, Eric D. Vidoni2, Emily Witte1, Jason F. Sisante1, Kiersten Kirkendoll1, Jeffrey Burns3, Sandra A. Billinger1, Kiersten Kirkendoll1, Jeffrey Burns3, Sandra A. Billinger1. 1University of Kansas Medical Center, Kansas City, KS. 2University of Kansas Alzheimer’s Disease Center; Fairway, KS 3University of Kansas Alzheimer’s Disease Center; Fairway, KS

Email: sperdomo@kumc.edu (No relevant relationships reported)

**Board #3**

**Looking Beyond A-vo2 Difference: Peripheral Adaptations And Vo2 Max In Trained And Untrained Adults**

Jayson R. Gifford1, Ryan Garten2, Joshua Weavil1, Ryan Broxterman1, Joel Trinity1, Russell Richardson1. 1Brigham Young University, Brigham Young University, UT. 2Virginia Commonwealth University, Richmond, VA. 3University of Utah, Salt Lake City, UT

Email: jayson.gifford@utah.edu
(No relevant relationships reported)

**Board #4**

**9:30 AM - 11:30 AM**

**Autonomic Modulation After High-Intensity Heavy Rope Exercise in Resistance-trained Individuals**

Erica M. Marshall, Jason C. Parks, Tyler J. Singer, Stacie M. Hurnn, J. Derek Kingsley, FACSM. Kent State University, Kent, OH.

(Sponsor: J. Derek Kingsley, FACSM)

(No relevant relationships reported)

**Board #5**

**9:30 AM - 11:30 AM**

**Effects Of Matched Intermittent Versus Continuous Exercises On The Changes Of Cardiac Biomarkers**

Feifei Li1, Will Hopkins1, Tie Jie Li2, Longyan Yi1. 1Hebei Normal University, Shijiazhuang, China. 2Victoria University, Melbourne, Australia.

Email: lifeifei.daisy@hotmail.com
(No relevant relationships reported)

**Board #6**

**9:30 AM - 11:30 AM**

**Exercise Tolerance: New Insights From Single-leg Cycling Exercise**

Danilo Iannetta, Ahmad Qahtani, Louis Passfield, Martin MacInnis, Juan M. Murias. University of Calgary, Calgary, AB, Canada

Email: danilo.iannetta@ucalgary.ca
(No relevant relationships reported)

**Board #7**

**9:30 AM - 11:30 AM**

**Despite Menstrual Phase Differences in Respiration, Blood Lactate, and Muscle Deoxygenation, Exercise Performance is Unchanged**

Jordyn Smith, Glen R. Belfry. Western University, London, ON, Canada

Email: jsmit577@uwwo.ca
(No relevant relationships reported)

**Board #8**

**9:30 AM - 11:30 AM**

**Effect Of Ultra-endurance Exercise On Alveolar-Capillary Recruitment And Lung Diffusion**

Glenn Stewart1, Caitlin Jorgenson1, Courtney Wheatley1, Paul Robach1, Alice Gave1, Briana Ziegler2, Jesse Schwartz1, Bryan Taylor1, Loic Chabridon2, Pierre Bouzat3, Bruce Johnson1. 1Mayo Clinic, Rochester, MN. 2Ecole Nationale de Sport de Montagne, Chamonix, France. 3University of Leeds, Leeds, United Kingdom.

*Grenoble University Hospital, Grenoble, France

Email: stewart.glenn@mayo.edu
(No relevant relationships reported)

### A-18 Thematic Poster - Exercise and Cancer

**Wednesday, May 29, 2019, 9:30 AM - 11:30 AM**

**Room: CC-101A**

**Chair:** Claudio Battaglini, FACSM. University of North Carolina at Chapel Hill, Chapel Hill, NC
(No relevant relationships reported)
Board #1  9:30 AM - 11:30 AM
Effects Of A 16-week Aerobic And Resistance Exercise Intervention On Leptin/adiponectin Ratio In Overweight And Obese Breast Cancer Survivors
Kaylie Zapanta, Kyuvan Lee, Nathalie Sami, Christina M. Diel-Conwright, FACSM. University of Southern California, Los Angeles, CA
Email: kzapanta@usc.edu
(No relevant relationships reported)

Board #2  9:30 AM - 11:30 AM
Effect of Exercise During Versus After Chemotherapy For Breast Cancer On Fatigue and Quality Of Life
Kelcey A. Bland1, Amy A. Kirkham2, Joshua M. Bovard2, Donald C. McKenzie3, Margot K. Davis2, Tamara Shenkier3, Karen A. Gelmon3, David Zucker2, Kristin L. Campbell1. 1Australian Catholic University, Melbourne, Australia. 2University of Alberta, Edmonton, AB, Canada. 3University of British Columbia, Vancouver, BC, Canada. 4British Columbia Cancer Agency, Vancouver, BC, Canada.
Email: kelcey.bland@acu.edu.au
(No relevant relationships reported)

Board #3  9:30 AM - 11:30 AM
Heavy-load Resistance Exercise In Women At Risk Of Breast Cancer-related Lymphedema During Chemotherapy: Randomized Trial
Kira B.N. Bloomquist1, Lis Adamsen1, Sandra C. Hayes1, Christian Lillelund1, Christina Andersen1, Karl Bang Christensen1, Peter Oturai1, Bent Ejertsen1, Malgorzata K. Tuxen1, Tom Moller1, 1Copenhagen University Hospital, Rigshospitalet, Copenhagen, Denmark. 2Queensland University of Technology, Brisbane, Australia. 3The University of Copenhagen, Copenhagen, Denmark. 4Copenhagen University Hospital, Herlev-Gentofte Hospital, Herlev, Denmark.
Email: kira.bloomquist@regionh.dk
(No relevant relationships reported)

Board #4  9:30 AM - 11:30 AM
A Randomised Clinical Trial Of ‘Prehabilitation’ High Intensity Interval Training (HIIT) Before Urological Cancer Surgery
James EM Blackwell1, Matthew S. Brook2, Brett Doleman, Alistair Morton, John P. Williams, Jonathan N. Lund, Bethan E. Phillips. University of Nottingham, Nottingham, United Kingdom. (Sponsor: Professor Craig Sale, FACSM)
Email: james.blackwell@nhs.net
(No relevant relationships reported)

Board #5  9:30 AM - 11:30 AM
High Adherence To Home-Based Exercise Improves Muscle Strength And Cardiorespiratory Fitness With Advanced Prostate Cancer
Erik D. Hanson1, Jackson L. Carver2, Alexander Lucas2, Michael Bass2, Mohamad Alzrie1, Young Whang1, Michael Harrison1, Matthew I. Milowsky1, Rhonda L. Bitting1, Claudio L. Battaglini, FACSM. 1University of North Carolina at Chapel Hill, Chapel Hill, NC. 2Wake Forest University, Winston-Salem, NC. 3Duke University, Durham, NC. (Sponsor: Claudio Battaglini, FACSM)
Email: edhanson@email.unc.edu
(No relevant relationships reported)

Board #6  9:30 AM - 11:30 AM
Pre-surgical Exercise In Men With Prostate Cancer Undergoing Prostatectomy
Favil Singh1, Robert U. Newton1, Dennis R. Taaffe, FACSM2, Jeffery Thavaseelan2, Matthew Brow5, Elliean Ooi1, Kazanori Nosaka1, Daniel A. Galvao, FACSM3. 1Edith Cowan University, Perth, Australia. 2Perth Urology Clinic, Perth, Australia. 3Swan Urology, Perth, Australia. (Sponsor: Daniel Galvao, FACSM)
Email: fsingh@ecu.edu.au
(No relevant relationships reported)
A-20 Thematic Poster - Walking Biomechanics

Wednesday, May 29, 2019, 9:30 AM - 11:30 AM
Room: CC-101B

84  9:30 AM - 11:30 AM
Chair: Julia Freedman Silvernail. University of Nevada, Las Vegas, Las Vegas, NV
(No relevant relationships reported)

Board #6  9:30 AM - 11:30 AM
Land leg vs. Drive Leg Hamstring Graft Harvest Side Does Not Affect Performance or RTS Rates and Does Not Increase Risk for Future Hamstring Injuries Following UCLR in Professional Baseball Pitchers
Peter Chalmers1, Brandon Erickson2, John D’Angelo3, Kevin Ma4, Christopher Ahn4, Joshua Dines3, Anthony Rome4.1University of Utah, Salt Lake City, UT. 2Rothman Orthopaedic Institute, Tarrytown, NY. 3MLB, New York, NY. 4Columbia, New York, NY.
Email: Brandon.Erickson@rothmanortho.com
(No relevant relationships reported)

90  9:30 AM - 11:30 AM
Board #6  9:30 AM - 11:30 AM
Increased Dynamic Knee Joint Load at the Non-Modified Limb during Medial Knee Thrust Gait Modification
Oladipo Eddo, Bryndan Lindsey, Matthew Prebble, Shane V. Caswell, Nelson Cortes. George Mason University, Manassas, VA
Email: ncorbes@gmu.edu
(No relevant relationships reported)

91  9:30 AM - 11:30 AM
Board #7  9:30 AM - 11:30 AM
Diabetes is Associated with Slow Walking Speed in People with Knee Osteoarthritis
Aqel M. Alenazi1, Mohammed M. Alshehri2, Shaima Aloitham2, Corey Gray1, Abdalghani A. Yahya1, Jason Rucker2, Bader A. Alqahtani1, Saad M. Bandawas2, Patricia M. Kluding1.1University of Kansas Medical Center and Prince Sattam Bin Abdulaziz University; Kansas City, KS. 2University of Kansas Medical Center; Kansas City, KS. 1Prince Sattam Bin Abdulaziz University, Alkhary, Saudi Arabia. 2King Saud University, Riyadh, Saudi Arabia.
Email: aalenazi@kumc.edu
(No relevant relationships reported)

A-21 Free Communication/Slide - Factors Influencing Work Capacity in the Heat

Wednesday, May 29, 2019, 9:30 AM - 11:00 AM
Room: CC-202C

93  9:30 AM - 11:00 AM
Chair: Ollie Jay, FACSM. University of Sydney, Lidcombe, Sydney, Australia
(No relevant relationships reported)

94  9:30 AM - 9:45 AM
Relationship Between Muscle Oxygenation and Oxygen Uptake During Exercise in the Heat
Email: Margaret.Morrissey@uconn.edu
(No relevant relationships reported)

95  9:45 AM - 10:00 AM
Application of the Thermal-Circulatory Ratio to Individuals Without History of Exertional Heat Illness
Email: brad.endres@uconn.edu
(No relevant relationships reported)

10:00 AM - 10:15 AM
Sex Differences in Internal Temperature Responses to Prolonged Exercise in the Heat
Email: gabrielle.giersch@uconn.edu
(No relevant relationships reported)
### A-24 Clinical Case Slide - Hip and Thigh II

**Wednesday, May 29, 2019, 9:30 AM - 11:30 AM**  
**Room:** CC-306

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<th>Title</th>
<th>Authors</th>
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### A-25 Clinical Case Slide - Knee I

**Wednesday, May 29, 2019, 9:30 AM - 11:10 AM**  
**Room:** CC-105B

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### A-26 Clinical Case Slide - Knee II

**Wednesday, May 29, 2019, 9:30 AM - 11:10 AM**  
**Room:** CC-106
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<tr>
<th>A-26</th>
<th>Rapid Fire Platform - Biomarkers in Sport, Performance and Health</th>
<th>Wednesday, May 29, 2019, 9:30 AM - 10:50 AM</th>
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<td>134</td>
<td>9:30 AM - 10:50 AM</td>
<td>Chair: William Byrnes, FACSM. University of Colorado Boulder, Boulder, CO</td>
<td>(No relevant relationships reported)</td>
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<td>135</td>
<td>9:30 AM - 9:40 AM</td>
<td>Relationship Between Hepcidin, Interleukin-6, and Ferritin In Division-I Cross-country Runners Over A Competitive Season</td>
<td>Jesse A. Goodrich1, Sewan Kim1, Dillon J. Frisco1, Kimberly Detwiler1, Miguel Rueda1, Sourav Poddar2, William C. Byrnes, FACSM1. 1University of Colorado Boulder, Boulder CO. 2University of Colorado Denver, Denver, CO. (Sponsor: William C. Byrnes, FACSM) Email: <a href="mailto:jesse.goodrich@colorado.edu">jesse.goodrich@colorado.edu</a></td>
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<td>136</td>
<td>9:40 AM - 9:50 AM</td>
<td>Patterns Of Change In Proteomic Markers Of Overreaching In Collegiate Swimmers</td>
<td>Amy M. Knab1, David C. Neiman, FACSM2, Arunod J. Groen3, Artyom Pugachev1, Alexander Rakikov4, Ariel E. Blount1, McKenzie Stevens1, Lola Balatova1. 1Queens University of Charlotte, Charlotte, NC. 2Appalachian State University, Boone, NC. 3ProteiQ Biosciences, Berlin, Germany. 4Lomonosov Moscow State University, Moscow, Russian Federation Email: <a href="mailto:knabai@queens.edu">knabai@queens.edu</a></td>
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<tr>
<td>137</td>
<td>9:50 AM - 10:00 AM</td>
<td>The Association Between Sonographic Metrics of Shoulder Injury and Serum Biomarker Profile in Response to a Hand-Cycling Task</td>
<td>Prakubta Jayabalan1, Dheeraval Amir1, Hyunyoung Kim1, Julia Frani1, Yan-Sheng Lin1, Jennifer Soo Hoo1. 1Shirley Ryan AbilityLab, Chicago, IL. 2Rosalind Franklin University, Chicago, IL. 3Northwestern Feinberg School of Medicine, Chicago, IL. 4Weill Cornell Medicine, New York, NY Email: <a href="mailto:pjayabalan@srLab.org">pjayabalan@srLab.org</a></td>
</tr>
<tr>
<td>138</td>
<td>10:00 AM - 10:10 AM</td>
<td>Are Molecular Deficits Relevant to Concussion Present in Collegiate Football Players Entering the NFL Draft?</td>
<td>Laura J. Kunce1, John Keenan1, Amanda Carlson-Phillips2, Michael A. Schmidt3, Caleb M. Schmidt3, Zung V. Tran4. 1Thorne, Scottsdale, AZ. 2EXOS, Phoenix, AZ. 3University of Southern Indiana, Evansville, IN. 4University of Limerick, Limerick, Ireland. Email: <a href="mailto:lkunce@thorne.com">lkunce@thorne.com</a></td>
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<tr>
<td>139</td>
<td>10:10 AM - 10:20 AM</td>
<td>Associations Between Circulating Basal BDNF, IGF-1 and Physical Fitness</td>
<td>Heikki Kyrolainen, FACSM1, Matti Santtila1, Kai Pihlajainen1, Juha Viirre1. 1University of Jyvaskyla, Jyvaskyla, Finland. 2Finnish Defence Forces, Helsinki, Finland. (Sponsor: Jorunn Sundgot-Borgen, FACSM) Email: <a href="mailto:monica.k.torstveit@uib.no">monica.k.torstveit@uib.no</a></td>
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</table>

**A-27** Tutorial Lecture - Establishing Personalized Wellness Programs for People with Disabilities

Wednesday, May 29, 2019, 9:30 AM - 10:20 AM
Room: CC-108

Between 15-20% of Americans have a physical or intellectual disability. Health care costs for these people are double costs of people without disabilities. The primary barriers facing wellness programs for people with disabilities are cost, transportation and insufficient knowledge of health professionals on how to adapt programs or make reasonable accommodations to facilitate access to exercise equipment. This tutorial will discuss the basics of establishing wellness programs for people with disabilities in academic centers around the country. Utilizing students as trainers for PWD will decrease the cost of providing wellness services as well as provide hands on learning experiences for pre-professionals. Academic based wellness programs have the ability to transform the delivery of programs to people with disabilities while providing experiential learning for students in healthcare programs.

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<tr>
<td>140</td>
<td>10:20 AM - 10:30 AM</td>
<td>Effects Of An Intensified Training Period On Resting Metabolic Rate, Energy Availability, Blood-biomarkers And Performance</td>
<td>Monica K. Torstveit1, Thomas B. Stenqvist1, Anna K. Melin1. 1University of Agder, Kristiansand, Norway. 2University of Copenhagen, Copenhagen, Denmark. Email: <a href="mailto:monica.k.torstveit@uib.no">monica.k.torstveit@uib.no</a></td>
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<tr>
<td>141</td>
<td>10:30 AM - 10:40 AM</td>
<td>Salivary Biomarkers in College Female Basketball Players during the Late Competition Season</td>
<td>Kevin J. Finn, FACSM2, Jack Ramsone, FACSM3, Michaela Martinez1. 1University of Central Missouri, Warrensburg, MO. 2College of William and Mary, Williamsburg, VA Email: <a href="mailto:kfinn@ucmo.edu">kfinn@ucmo.edu</a></td>
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<tr>
<td>142</td>
<td>10:40 AM - 10:50 AM</td>
<td>Salivary IgA as a Predictor of Upper Respiratory Tract Infections in Elite Rugby Union Players</td>
<td>Caoimhe Tiernan1, Tom Comyns1, Mark Lyons1, Alan M. Nevill1, Giles Warrington, FACSM2. 1University of Limerick, Limerick, Ireland. 2University of Wolverhampton, Wolverhampton, United Kingdom Email: <a href="mailto:caoimhe.tiernan@ui.ie">caoimhe.tiernan@ui.ie</a></td>
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**A-28** Tutorial Lecture - Evaluation and Management of Patellar and Achilles Tendinopathies

Wednesday, May 29, 2019, 9:30 AM - 10:20 AM
Room: CC-300

Tendinopathies involve athletes of running and jumping sports and are frequently challenging to treat. Many times, tendinopathies are career-ending injuries. The goal of this tutorial lecture is to provide a current and practical method to evaluate and manage patellar and achilles tendinopathies in athletes of running and jumping sports. The speakers will seek to provide a step-by-step approach that the audience can implement in their practices.

| 146  | 10:10 AM - 10:20 AM                                                           | Generalized Tendinopathy: Pattern, Pathophysiology, and Management | Leonardo P. Oliveira, FACSM. Cleveland Clinic Florida, Weston, FL Email: leonardo.oliveira@ccc.com | (No relevant relationships reported) |
A-29  Tutorial Lecture - The Personal Virtue of Exercise: Fighting for Happiness

Wednesday, May 29, 2019, 9:30 AM - 10:20 AM
Room: CC-305

The purported benefits of exercise for cardiovascular health have been well-established however, little attention has been received to define its relationship with happiness. The purpose of this tutorial is to engage and inform the audience by reviewing research that has examined the influence of physical activity on happiness, loneliness and suicidal thoughts. The panelists will explore possible mechanisms of how physical activity influences happiness, loneliness and suicidal thoughts. They will attempt to determine the optimal principles of fitness needed to aspire to happiness by reviewing study participant characteristics, biological interactions and various physical activities. Participants will educate and encourage attendees to be more proactive in conversations about mental health. The knowledge gained by coaches, trainers, sport psychology consultants and clinicians working with the general population and athletes will allow attendees to master the application of exercise as a personal virtue in the quest for happiness.

148  Melanie Poudveigne, FACSM. Clayton State University, Morrow, GA
(No relevant relationships reported)

149  Yuri Feito, FACSM. Kennesaw State University, Kennesaw, GA
(No relevant relationships reported)

A-30  Tutorial Lecture - To HIIT or Not to HIIT: High Intensity Interval Training Considerations for Cancer Survivors

Wednesday, May 29, 2019, 9:30 AM - 10:20 AM
Room: CC-303

Cancer survivors remain distinctly at risk for poor cardiorespiratory fitness, weight gain, excessive fatigue, and emotional distress that can be mitigated by exercise participation. High intensity interval training (HIIT) has emerged as a novel approach within clinical exercise settings due to its substantial health benefits with relatively less time commitment required. Benefits of HIIT participation include increased cardiorespiratory fitness, lean mass, and quality of life, in addition to decreased fatigue, fat mass, depression when compared with moderate continuous aerobic exercise in breast, lung and testicular cancer settings. HIIT may be a missing link in the cancer rehabilitation spectrum vital to the improvement of physical, psychological and emotional health of cancer survivors. Here, we present an overview of the benefits of HIIT on cancer treatment-induced side effects and related health outcomes, including a proposed HIIT exercise prescription for cancer survivors.

150  Kyuwan Lee. University of Southern California, Los Angeles, CA
(No relevant relationships reported)

151  Christina Dieli-Conwright, FACSM. University of Southern California, Los Angeles, CA
(No relevant relationships reported)

A-31  Clinical Workshop-Hands On Demonstration - Physical Exam of the Lumbar Spine

Wednesday, May 29, 2019, 9:30 AM - 10:20 AM
Room: CC-304G

This session will demonstrate beginning and advanced methods to assist in determining the source of pain from a lumbar spine disorder. Part of the session will discuss potential sources of pain around the lumbar spine and how a patient’s history may assist in determining the source of pain. The majority of the session will be spent going through the physical exam of the lumbar spine and how findings on exam help to determine the source of pain and appropriate solutions for treating the pain. Also, part of the treatment plan will be discussed as it relates to findings on physical exam.

152  Joseph Ihm, FACSM. Shirley Ryan AbilityLab, Chicago, IL
(No relevant relationships reported)

A-32  Exercise is Medicine® - Tutorial Lecture - EIM Opportunities in Community Health and Underserved Populations

Wednesday, May 29, 2019, 9:30 AM - 10:20 AM
Room: CC-305

Disparities in chronic diseases are attributed to the lack of access to health-promoting environments and resources in low-income communities. Within this context, underserved populations are specifically vulnerable. The coordination of Exercise is Medicine: Community Health and Underserved Populations present an upstream approach to address the public health issue of a lack of physical activity participation among people living in health disparate communities. Through capacity building and implementation of EIM in community settings, this session provides best practice, systematic approaches employed by members of this EIM committee. We present interventions tailored to the different needs of unique communities through ecological approaches using the community resource guide and other more individualized tactics to link physical activity resources and providers while evaluating the dissemination of EIM-relevant frameworks. We also demonstrate adaptable EIM models that can be replicated within diverse community structures, resources, and populations.

153  NiCole R. Keith, FACSM. Indiana University – Purdue University, Indianapolis, Indianapolis, IN
(No relevant relationships reported)

154  Ryan Conners. University of Alabama in Huntsville, Huntsville, AL
(No relevant relationships reported)

155  Andrea Jacobo. University of Tennessee Extension, Memphis, TN
(No relevant relationships reported)

A-33  Exchange Lecture - American Psychological Association Exchange Lecture - Project REST: Innovative Responses to Improving Student Athlete Sleep and Wellbeing

Wednesday, May 29, 2019, 10:40 AM - 11:30 AM
Room: CC-305

Student athletes are at high risk of sleep problems, perhaps due to over-scheduling and difficulty balancing academics, athletics, and personal demands. Athletic departments utilize a scope of student support services including nutrition, physical training and traditional sport medicine. Yet, relatively few are employing sleep interventions. Project REST (Recovery Enhancement and Sleep Training) was developed through a collaborative partnership between national leading experts in sleep science and sport psychology. The developers aimed at empowering student athletes with information and strategies to help improve their sleep rather than challenging systemic processes (e.g., training schedules, travel, academic appointments, etc.) as they believed it was key to empowering student athletes to make sleep and wellness changes in the face of “real-world” demands. Initially awarded funding by the NCAA Innovations in Research and Practice program in 2016, Dr. Amy Athey and Dr. Michael Grandner gathered key data informing how the sleep habits of student athletes are related to their mental and physical well-being. Further, Project REST offered a relatively simple sleep intervention program that positively impacted users in making changes that lead to improved mental health, academic and athletic performance outcomes. Findings from this 2016 Project REST research program will be shared. Further, in 2018, Drs. Athey and Grandner were awarded the NCAA Innovations in Research and Practice program funding to create and evaluate key educational resources from the initial 2016 REST Project. Outcomes from the 2018 Project REST resources and examples of the educational video library will be shared. Project REST’s success in benefiting sleep, mental health, and athletic performance, despite its simplicity, suggests that such a program could be readily adopted for use by a number of athletics organizations at a relatively low cost.

156  Amy Athey. University of Arizona, Tuscon, AZ
(No relevant relationships reported)

A-34  Tutorial Lecture - Adaptive Cycling

Wednesday, May 29, 2019, 10:40 AM - 11:30 AM
Room: CC-300

This tutorial lecture will review adaptive cycling including the disability groups who participate, governing regulations, adaptive equipment, common medical issues and injuries.
The acute management of a sports-related concussion continues to evolve with the learned knowledge of basic and clinically applied research findings. One of the types of sustained concussions is referred to as labyrinthine. While the pathophysiology of the associated inner ear trauma with labyrinthine concussions is not fully understood, commonly found symptoms associated with the injury include vertigo, postural imbalance, hearing loss, tinnitus, nausea, vomiting, and any combination of these. Treatment interventions for sports-related concussion are multidisciplinary, yet many practitioners are not familiar with commonly used, standardized and effective vestibular rehabilitation techniques for this population of patients. This clinical workshop will facilitate a hands-on learning environment allowing participants to become familiar with appropriate interventions. A team approach will be emphasized in an effort to maximize proper assessment and treatment goals for efficient and effective management of labyrinthine concussions.
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<th>Board</th>
<th>Title</th>
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<tbody>
<tr>
<td>173</td>
<td>One-Year Changes in Cardiovascular Risk Markers in Police Officers</td>
<td>9:30 AM - 11:00 AM</td>
<td>Steven E. Martin, Danielle Kravits, Kory Sealy, Karina Wilson, Jason R. Lytle, Sean T. Stanelle, John S. Green, FACSM, Stephen F. Crouse, FACSM. Texas A&amp;M University, College Station, TX. (Sponsor: Stephen F. Crouse, FACSM)</td>
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<tr>
<td>174</td>
<td>The Impact of Isometric Exercise Muscle Mass on Post-Exercise Blood Pressure</td>
<td>9:30 AM - 11:00 AM</td>
<td>Lindsay A. Lew, Morgan D. Silvester, Kaitlyn Liu, Sarah Bailey, Kyra E. Pyke. Queen’s University, Kingston, ON, Canada. Email: <a href="mailto:131a2@queensu.ca">131a2@queensu.ca</a></td>
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<td>175</td>
<td>The Effects Of Long-term Functional Training On VO2max</td>
<td>9:30 AM - 11:00 AM</td>
<td>Adrian Aron, Heather Curmea, Emily Hiatt, Ross Copeland, Amanda Slaughter. Radford University, Radford, VA. (Sponsor: Trent Hargens, FACSM)</td>
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<td>176</td>
<td>Prime: Hemodynamic/vascular Changes Following Peripheral Focused Low-mass, High-repetition Training In Older Adults</td>
<td>9:30 AM - 11:00 AM</td>
<td>Joaquin Ortiz de Zevallos, Michael A. Welsch, FACSM, Mary N. Woessner, Neil M. Johannsen, Daniel P. Credeur, Conrad P. Earnest, FACSM, William E. Kraus, FACSM, Jason D. Allen, FACSM. University of Virginia, Charlottesville, VA. University of Mississippi Medical Center, Jackson, MS, USA, Jackson, MS. Victoria University, Melbourne, Australia. Louisiana State University, Baton Rouge, LA. University of Southern Mississippi, Hattiesburg, MS. Texas A&amp;M University, College Station, TX. Duke University School of Medicine, Durham, NC. (Sponsor: Professor Jason D. Allen, FACSM)</td>
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<tr>
<td>177</td>
<td>Effects of Domestic and International Tournaments on Heart Rate Variability in Elite Rugby Sevens Players</td>
<td>9:30 AM - 11:00 AM</td>
<td>Andrew A. Flatt, Daniel Howells, Sean Williams. Georgia Southern University, Savannah, GA. Rugby Football Union, Twickenham, United Kingdom. University of Bath, Bath, United Kingdom. Email: <a href="mailto:aflatt@georgiasouthern.edu">aflatt@georgiasouthern.edu</a></td>
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<td>178</td>
<td>The Effects of an Intensive Endurance Training Period on Nocturnal HRV and Endurance Performance</td>
<td>9:30 AM - 11:00 AM</td>
<td>Pia Kaikkonen, Juha Ahitaine. Tampere Research Center of Sports Medicine, Tampere, Finland. Neuromuscular Research Center, Faculty of Sport and Health Sciences, University of Jyväskylä, Jyväskylä, Finland.</td>
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### A-38 Free Communication/Poster - Monitoring

**Wednesday, May 29, 2019, 7:30 AM - 12:30 PM**

**Room:** CC-Hall WA2

- **Board #17**
  - **Title:** Validity And Reliability Of Heart Rate Devices Compared Second-by-second Versus Minute-by-minute
  - **Authors:** James W. Navalta, FACSM, Gabriela Guzman, Crystal Maxwell, Jeffrey Montes. University of Nevada, Las Vegas, Las Vegas, NV.
  - **Email:** james.navalta@unlv.edu
  - **Sponsor:** James W Navalta, FACSM
  - **Reported Relationships:** No relevant relationships reported
American College of Sports Medicine

188 Board #26 9:30 AM - 11:00 AM
Comparisons of Portable Metabolic Sensors During Outdoor Cycling
Katherine Costello, Darrel Woods, Alexander Toulouse, Patrick R. Davis. Sam Houston State University, Huntsville, TX
(No relevant relationships reported)

189 Board #27 9:30 AM - 11:00 AM
Accuracy of an Armband Heart Rate Monitor
Daniel Hagan, John Wygand, FACSM, John Petrizzo, Robert Otto, FACSM. Adelphi University, Garden City, NY. (Sponsor: Robert M. Otto, FACSM)
Email: danielhagan@mail.adelphi.edu
(No relevant relationships reported)

190 Board #28 9:30 AM - 11:00 AM
Validation of Garmin Fitness Tracker Biomechanics
Bryson Carrier, Tim Holmes, Lauren Williams, Siri Dahl, Libby Weber, Andrew Creer, Tyler Standifird. Utah Valley University, Orem, U T.
(No relevant relationships reported)

191 Board #29 9:30 AM - 11:00 AM
Validation of Garmin Fitness Tracker Metabolic Data (VO₂max)
Brayden Jolley, Bryson Carrier, Tyler Standifird, Andrew Creer. Utah Valley University, Orem, UT
(No relevant relationships reported)

192 Board #30 9:30 AM - 11:00 AM
Katherine Balfany¹, Ming-Sheng (Matthew) Chan², Robert G. Lockie¹, Scott K. Lym¹, ¹California State University, Fullerton, Fullerton, CA. ²Athos, Mad Apparel Inc, Redwood City, CA. (Sponsor: Daniela A. Rubin, FACSM)
(No relevant relationships reported)

193 Board #31 9:30 AM - 11:00 AM
NICA Injury Surveillance System: Concussion Risk Factors
Christopher C. Nkoy, Stuart Willick, Daniel Kushner, Masaru Tanamoto. University of Utah Orthopedic Center, Salt Lake City, UT
(No relevant relationships reported)

A-39 Free Communication/Poster - Muscle Dynamics
Wednesday, May 29, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

194 Board #32 9:30 AM - 11:00 AM
EEG Measurement In Elderly People During Stepping Exercise With Visual Perception Tasks
Takahide Kato¹, Taichi Hayasaki¹, Tsukasa Sanuki¹, Takashi Kawagoe², Stanley M. Yamashiro³, ¹National Institute of Technology, Toyota College, Toyota, Japan. ²Aichi Medical University, Nagakute, Aichi, Japan. ³University of Southern California, Los Angeles, CA.
(No relevant relationships reported)

195 Board #33 9:30 AM - 11:00 AM
Does Squat Depth and Width Influence Quadriceps Muscle Activation?
Matt Denning¹, Brad Gardiner¹, Tyler Standifird¹, Lauren Williams³. ¹Brigham Young University - Idaho, Rexburg, ID. ²Weber State University, Ogden, UT. ³Utah Valley University, Orem, UT. (Sponsor: Doug Powell, FACSM)
(No relevant relationships reported)

Board #34 9:30 AM - 11:00 AM
Contractile Parameters Of The Knee Extensors In Young, Middle-aged, And Older Males
Phaon L. Ha, Alex A. Olimos, Matthew T. Strattton, Alyssa R. Bailly, Micah J. Poiyal, Joshua A. Jones, Benjamin E. Dalton, Amber N. Haire, Trisha A. VanDusseldorp, Yuri Feito, FACSM, Garrett M. Hester. Kennesaw State University, Kennesaw, GA. (Sponsor: Dr. Yuri Feito, FACSM)
(No relevant relationships reported)

Board #35 9:30 AM - 11:00 AM
Effect Of Knee Joint Angle On Neuromuscular Activation Of The Quadriceps Femoris During Fatiguing Contractions
Hirosi Akina¹, Aya Tornita², Ryosuke Ando³. ¹Research Center of Health, Physical Fitness & Sports, Nagoya University, Nagoya, Aichi, Japan. ²Chukyo University, Nagoya, Aichi, Japan. ³Japan Institute of Sports Sciences, Kita-ku, Tokyo, Japan. (Sponsor: Katsumi Asano, FACSM)
Email: akina@nagoya-u.jp
(No relevant relationships reported)

Board #36 9:30 AM - 11:00 AM
Joint Flexibility is Affected by Muscle Size in Human Planter Flexors
Keigo Tornoo, Tadasu Saga, Hiromasa Ueno, Masafumi Terada, Akinori Nabagoto, Tadao Isaka. Ritsumeikan University, Kusatsu, Japan
Email: sh02026@ed.ritsumei.ac.jp
(No relevant relationships reported)

Board #37 9:30 AM - 11:00 AM
Lower Extremity Joint Power and Muscle Activation in High and Low Lactate Threshold Cyclists
Brian K. Leary. The University of Texas, Austin, TX
(No relevant relationships reported)

Board #38 9:30 AM - 11:00 AM
Can Transcranial Direct Current Stimulation Improve Counter-movement Jump Performance?
Yu Liu, Xiuling Bian, Lingyan Huang. Shanghai University of Sport, Shanghai, China
Email: yuliu@sus.edu.cn
(No relevant relationships reported)

Board #39 9:30 AM - 11:00 AM
Relationship between Muscle Damage Magnitude and Sense of Knee Position
Ana C. C. Pereira, Elisangela Silva, Daniela M. Bueno, Denis B. da Silva, Stefani A. M. dos Reis, Wagner Z. de Freitas. FEDERAL INSTITUTE OF EDUCATION, SCIENCE AND TECHNOLOGY SOUTH OF MINES, MUZAMBINHO, Brazil
Email: carolina_gpe_11@hotmail.com
(No relevant relationships reported)

Board #40 9:30 AM - 11:00 AM
Muscle Activity While Swimming in Triathlon Wetsuits
Boram Lim, Cordero Roché, Andy Do. University of Nevada, Las Vegas, Las Vegas, NV. (Sponsor: John A. Mercer, FACSM)
Email: boram.lim@unlv.edu
(No relevant relationships reported)

Board #41 9:30 AM - 11:00 AM
Sex Differences in Correlations Between Muscle Architecture and Impulse in a Heterogenous Group of Athletes
Jacob R. Goodlin¹, Caleb D. Bazylizer². ¹Point Loma Nazarene University, San Diego, CA. ²East Tennessee State University, Johnson City, TN
Email: jgoodlin@pointloma.edu
(No relevant relationships reported)

Thornhill Presenting
P16 Final Program

204 Board #42  9:30 AM - 11:00 AM
Comparison in Peak Torque Rotations Between Dominant and Non-Dominant Arms in Powerlifters
Erick G. P. de Lucena, Luz A. A. Castaño, Guilherme H. J. Silva, Cassiano A. Massafra, Adonias O. F. de Souza, Luis F. M. Teixeira, Marco C. Uchida. School of Physical Education, University of Campinas, Campinas, Brazil
Email: el1606406@unicamp.br
(No relevant relationships reported)

205 Board #43  9:30 AM - 11:00 AM
Age-related Differences in Vertical Jump Power and Muscle Size and Quality of the Vastus Lateralis
Ahaele C. Cathay1, Chimonye C. Agu-Udumba1, Eric J. Sobolewski2, Brennon J. Thompson3, Ty B. Palmer1. 1Texas Tech University, Lubbock, TX. 2Furman University, Greenville, SC. 3Utah State University, Logan, UT
(No relevant relationships reported)

206 Board #44  9:30 AM - 11:00 AM
Rate Of Velocity, Torque, And Power Development In Middle-Aged And Older Males
(No relevant relationships reported)

207 Board #45  9:30 AM - 11:00 AM
The Effects Of Muscular Fatigue And Gender On Lower Extremity Biomechanics During The Forward Lunge
Ania Lipat, Amanda Stone, Hillary Holmes, Chris Hass, FACSFM. University of Florida, Gainesville, FL. (Sponsor: Chris J Hass, FACSFM)
Email: ania.lipat@ufl.edu
(No relevant relationships reported)

208 Board #46  9:30 AM - 11:00 AM
Acute Effects Of Elastic Resistance Band On Post-activation Potentiation In Elite Handball Athletes
Luís Felipe T. Polito1, Douglas P. Marin2, Christiano B. Utrado1, Jonato Prestes1, Allan Igor S. Serafini1, Rosemarí Ottoni1. 1Universidade Metodista de São Paulo, São Bernardo do Campo, Brazil. 2Univerisidade Federal do Maranhão, Maranhão, Brazil.
(No relevant relationships reported)

209 Board #47  9:30 AM - 11:00 AM
Knee Extensor Torque Is Increased By Far-Infrared Emitting Fabric
Manoel Silva1, Antonio C. Morares1, João Barbieri1, Renato Barroso1, Gabriel Figueiredo1, Leonardo Motta1, Rômulo Bertuzzi1, Arthur Gáspari1. 1Universidade Federal do Paraná, Curitiba, Brazil. 2University of São Paulo, São Paulo, Brazil.
(No relevant relationships reported)

A-40 Free Communication/Poster - Resistance Training

Wednesday, May 29, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

210 Board #48  11:00 AM - 12:30 PM
The Acute Effects of a Resistive Exercise on Sprint Times in High School Track Athletes
Kayla Starker, Abigail Larson, Mark DeBeliso, FACSFM. Southern Utah University, Cedar City, UT
(No relevant relationships reported)

ACSM 66th Annual Meeting

211 Board #49  11:00 AM - 12:30 PM
The Effects of Five Weeks of Bench Press Training on Salivary Biomarkers of Inflammation in Recreationally-trained College-age Males
Brent M. Peterson, PhD, MS, MPH, Jacob K. Gardner, PhD, Kelsey L. Miller, MS, Justin Chia, BS, Juan Santacruz, BSc, Austin Cattaneo, BSc. Biola University, La Mirada, CA
Email: brent.peterson@biola.edu
(No relevant relationships reported)

212 Board #50  11:00 AM - 12:30 PM
Evidence Of A Ceiling Effect For Training Volume In Muscle Hypertrophy And Strength In Trained Men
Matthieu Barbalho1, Victor Silveira Coswig2, James Steele3, James P. Fisher1, Jurgen Gessing1, Paula Gentile1. 1Federal University of Goiás, Goiânia, Brazil. 2Federal University of Pará, Castanhal, Brazil. 3Southampton Solent University, Southampton, United Kingdom. (University of Koblenz-Landau, Landau, Germany
(No relevant relationships reported)

213 Board #51  11:00 AM - 12:30 PM
Effects Of An 8-week Mixed-methods Strength Training On Maximal Strength Of Weightlifting Athletes.
Gianpiero Greco, Francesco Camporeale, Francesco Fischetti. University of Study of Bari, Bari, Italy
Email: gianpigreco@hotmail.it
(No relevant relationships reported)

214 Board #52  11:00 AM - 12:30 PM
Temporary Increasing in Muscle Thickness and Upper Arm Circumference Immediately After Resistance Exercise
MASAHIRO GOTO1, Yoshihiro Yamashina1, Yousuke Yamato1, Hiroto Honda1, Hiroshi Sakai2, Shigenor Torita3, Takafumi Hamaoka2. 1Aino University, Osaka, Japan. 2Tokyo Medical University, Tokyo, Japan
Email: m-goto@pt.u.aino.ac.jp
(No relevant relationships reported)

215 Board #53  11:00 AM - 12:30 PM
The Effect Of Strength Training On Physical Performance In Adolescent Female Soccer Players
ELENA PARDOS MAINER, LUCIA SAGARRA ROMERO, OLIVER GONZALO SKOK. Universidad San Jorge, Zaragoza.
Spain, Villanueva de Gállego, Zaragoza, Spain.
Email: emainer13@gmail.com
(No relevant relationships reported)

216 Board #54  11:00 AM - 12:30 PM
Effect of a 2-Week Strength Training Learning Intervention on Self-selected Weight Training Intensity
Sabrina Ahmad, Steve Glass, FACSFM, Taylor Gabler. Grand Valley State University, Allendale, MI. (Sponsor: Jeff Potteiger, FACSFM)
(No relevant relationships reported)

217 Board #55  11:00 AM - 12:30 PM
Acute Resistance Training Does Not Impair Cognitive Function in Costa Rican Older Adults
Rebeca Hernández-Gamboa, José Moncada-Jiménez. University of Costa Rica, San José, Costa Rica
Email: jose.moncada@ucr.ac.cr
(No relevant relationships reported)

218 Board #56  11:00 AM - 12:30 PM
Does the Physiological Tremor Identify the Intensity of Resistance Exercise?
Wonil Park1, Gyuoseong Hong2, Jaesong Lee1, Hun-young Park3, Jonghoon Park3. 1Korea University, Seoul, Korea, Republic of. 2Convergence Center, LG Electronics, Seoul, Korea, Republic of. 3Kunkuk University, Seoul, Korea, Republic of.
Email: voguse0403@gmail.com
(No relevant relationships reported)
The Comparison of Velocity between Front Squat, Back Squat, Sumo and Conventional Deadlift

Jovana Kasovic, Benjamin Martin, Christopher A. Fabs. Lindenwood University, Belleville, IL.
(No relevant relationships reported)

The Effects of Eccentric Duration on Squat and Bench Press Concentric Performance

Matthew Jubel1, Joseph P. Carzoli1, Colby A. Sousa1, Daniel J. Belcher1, Eric R. Helms2, Andy V. Khamoui1, Michael Whitehurst, FACSM, Michael C. Zourdos1. Florida Atlantic University, Boca Raton, FL. (Sponsor: Florida Atlantic University, Boca Raton, FL)
(No relevant relationships reported)

Workout-Life Balance: How Psychological Stress Affects Force Production in Competitive Powerlifters and Healthy Controls

Kearan J. Dung, J. Mark VanNess, Nathaniel J. Holmgren, Courtney D. Jensen. University of the Pacific, Stockton, CA. Email: k_dung2@u.pacific.edu
(No relevant relationships reported)

A Three-Dimensional Assessment of Push-Pull Power Ratios Across Various Loads

Gianna D. Maragliano1, J. Mark VanNess2, Maggie E. Bristow1, Nathaniel J. Holmgren1, Joseph Arbali1, Courtney D. Jensen1. 1University of the Pacific, Stockton, CA. 2CSU, Chico, Chico, CA
Email: g_maragliano@u.pacific.edu
(No relevant relationships reported)

Correlations Between Resistance Exercise Repetitions Achieved At 60% And 80% 1rm Load In Female Subjects

Jeff T. Wight1, Caleb Williams2, Mike Anton1, Peter M. Magyari, FACSM1. 1Jacksonville University, Jacksonville, FL. 2LaGrange College, LaGrange, GA. A. Airrosti Rehab Centers LLC, San Antonio, TX. University of North Florida, Jacksonville, FL. (Sponsor: Pete Magyari, FACSM, Jacksonville, FL)
(No relevant relationships reported)

Prioritization of Resistance Training In NCAA Division I Track and Field Athletes

Matthew K. Beeler1, D H. Dombrowski2, Emily M. Post1, Lydia K. Caldwell1, William H. DuPont1, Carl M. Maresh, FACSM1, Craig R. Denegar3, M F. Joseph1, William J. Kraemer, FACSM1. 1The Ohio State University, Columbus, OH. 2University of Connecticut, Storrs, CT. (Sponsor: William J. Kraemer, FACSM)
(No relevant relationships reported)

Optimal Load Based on Body Mass: A Pilot Study with The Hang Power Clean

Marcel Lopes dos Santos1, Ricardo Berton2, Adam Jagodinsky1, Michael Torry1, Kristen Lagally, FACSM1, 1Illinois State University, Normal, IL. 2University of Sao Paulo, Sao Paulo, Brazil
Email: ml_lopes@ilstu.edu
(No relevant relationships reported)

Comparing Relative Attempt Progressions Of Elite Male And Female Raw Powerlifters

Spencer K. Travis1, Caleb D. Bazylter1, Michael C. Zourdos2. 1East Tennessee State University, Johnson City, TN. 2Florida Atlantic University, Boca Raton, FL
(No relevant relationships reported)
| Board #72 | 11:00 AM - 12:30 PM | FEM Analysis of Lumbosacral Joints on the Lift Barbell Preparation Phrase | Yuwei Song, Ke Rong, Xiyuan Zhang, Nanjing Sport Institute, Nanjing, China | Email: Syw00008@163.com | (No relevant relationships reported) |
| Board #73 | 11:00 AM - 12:30 PM | Muscle Excitation During A Weighted And Unweighted Supine Bridge (a Pilot Study) | Kelsey Lewis¹, Wenhui Mao², Sydni Wilhoite³, Li Li, FACSM¹. ¹Georgia Southern University, Statesboro, GA. ²Nanjing Normal University, Nanjing, China. (Sponsor: Li Li, FACSM) | Email: kio06040@georgiasouthern.edu | (No relevant relationships reported) |
| Board #74 | 11:00 AM - 12:30 PM | The Influence of Menthol on Joint Range of Motion | William Staffiere, Jason Gillis, Michelle Varnell, Joseph Gallo, Kevin Silva, Jacob Moriarty, Salem State University, Salem, MA | Email: staffiere.w@husky.neu.edu | (No relevant relationships reported) |
| Board #75 | 11:00 AM - 12:30 PM | Effect Of Chamois Design On Rider Comfort And Saddle Pressure During Sub-Maximal Cycling | Ross D. Wilkinson¹, Mason Marcus², Jason Williams³, Todd Carver². ¹The University of Queensland, St Lucia, Queensland, Australia. ²Biomechanics Laboratory - Sports Science Center, Bogota D.C., Colombia. ³University of Nevada, Las Vegas, Las Vegas, NV. (No relevant relationships reported) | Email: rwilkinson@aq.edu.au | (No relevant relationships reported) |
| Board #76 | 11:00 AM - 12:30 PM | Effects of Bicycle Crank Length on Gross Efficiency, Power, and Joint Kinematics During Cycling Ergometry | Christiane R. O’Hara, Robert D. Clark, Kelly Bodwin, Cameron Swick, Natalie Grohmann, Austin Bohn, Ashley Shen, California Polytechnic State University, San Luis Obispo, CA. (Sponsor: Todd Hagopian, FACSM) | Email: crohara@calpoly.edu | (No relevant relationships reported) |
| Board #77 | 11:00 AM - 12:30 PM | Analysis of Kinematics And Electromyography of Cyclists In the Length of Handling | Pablo Rodriguez¹, Rodrigo Argothy², Jenner Cubides³, Sergio Cruz-Leon¹. ¹Rosario University, Bogota D.C., Colombia. ²Biomechanics Laboratory - Sports Science Center, Bogota D.C., Colombia. ³Military school of cadets “General José María Córdova, Bogota D.C., Colombia. (No relevant relationships reported) | Email: tedd.girouard@unlv.edu | (No relevant relationships reported) |
| Board #78 | 11:00 AM - 12:30 PM | Effects of Saddle Height and Workrate on Frontal Plane Knee Joint Biomechanics | Erik Hummer, Tanner Thorsen, Songning Zhang, FACSM. University of Tennessee, Knoxville, TN. (Sponsor: Songning Zhang, FACSM) | Email: ehummer@vols.utk.edu | (No relevant relationships reported) |
248 Board #86 9:30 AM - 11:00 AM
Muscle Activity Magnitude and Patterns During Plyometric Exercise on Land and in Shallow Water
Cordero D. Roche. University of Nevada, Las Vegas, NV. (Sponsor: John Mercer, FACSM)
Email: cdroche89@gmail.com
(No relevant relationships reported)

249 Board #87 9:30 AM - 11:00 AM
Influence of Testing Position on Hip Torque and Relationships with Frontal Plane Kinematics in Females
Neal R. Glaviano, David M. Bazett-Jones. University of Toledo, Toledo, OH. (Sponsor: Christopher Ingersoll, FACSM)
Email: neal.glaviano@utoledo.edu
(No relevant relationships reported)

250 Board #88 9:30 AM - 11:00 AM
Descriptive Kinetics on Unique Skills Performed by a Professional Acrobatic Artist
Alina P. Swafford, Cordero D. Roche. University of Nevada, Las Vegas, NV. (Sponsor: John A. Mercer, FACSM)
(No relevant relationships reported)

251 Board #89 9:30 AM - 11:00 AM
The Analysis Of The Neuromuscular Performance Of The Colombian Military Leap
John E. Rincon1, Rodrigo Argeu1, Jenifer Cubides1, Daniel Cohen1. 1Rosario University, Bogota D.C., Colombia. 2Biomechanics Laboratory - Sports Science Center - Coldeportes, Bogota D.C., Colombia. 3Militar school of cadets “General José María Córdova, Bogota D.C., Colombia
(No relevant relationships reported)

252 Board #90 9:30 AM - 11:00 AM
Gender Differences Between Muscle Activation during Star Excursion Balance Test on Stable Versus Unstable Surfaces
Navpreet Kaur, Kunal Bhanot, Germaine Ferreira. University of Saint Augustine for Health Sciences, AUSTIN, TX. (Sponsor: Dr. John Mercer, FACSM)
Email: nkaur@usa.edu
(No relevant relationships reported)

253 Board #91 9:30 AM - 11:00 AM
Influence of Turf Surface on Change of Direction Parameters
Wendi Weimar, Brandi Decoux, Nicholas Moore, Christopher Wilburn. Auburn University, Auburn, AL
Email: weimawh@auburn.edu
(No relevant relationships reported)

254 Board #92 9:30 AM - 11:00 AM
Kinetic Strategies during Single-Leg Hopping in Individuals With and Without Chronic Ankle Instability
Hiroshi Sagawa1, Adam E. Jagodinsky1, Mohammed Zaman1, Christopher Wilburn2, Wendi H. Weimar1. 1University of Nevada, Las Vegas, NV. (Sponsor: John A. Mercer, FACSM) 2University of Nevada, Las Vegas, NV
(No relevant relationships reported)

255 Board #93 9:30 AM - 11:00 AM
Biomechanics of Pitching: Horizontal Abduction Predicts Power; Power Predicts Strikeouts and Wins
(No relevant relationships reported)

256 Board #94 9:30 AM - 11:00 AM
Knee Injury Risk Stratification With The Less-rcmc
Ryan Wexler1, Sean Higginbotham1, Ryan Colson1, Michael Torry1, Craig Simons1, Kevin Shibleburne1, Mike Decker1. 1Illinois State University, Normal, IL. (Sponsor: John A. Mercer, FACSM)
Email: rywex24@yahoo.com
(No relevant relationships reported)

257 Board #95 9:30 AM - 11:00 AM
Association Between Lower Extremity Functional Tests and Injury in Division I Female Collegiate Athletes
Peter J. Lisman, Bethany Essalihi, Daniel C. MacLea, Nathan Wilder. Towson University, Towson, MD
Email: plisman@towson.edu
(No relevant relationships reported)

258 Board #96 9:30 AM - 11:00 AM
Predicting Scapular Dynamic Alignment During Throwing From The Scapular Dynamic Alignment During Shoulder Abduction
Hajime Toda, Yuki Nomura, Masaki Katayose. Sapporo medical university, Sapporo, Japan
Email: toda.h@spmed.ac.jp
(No relevant relationships reported)

259 Board #97 9:30 AM - 11:00 AM
The Influence of Medial Knee Position Asymmetry on the LESS
Michael Torry1, Ryan Wexler1, Sean Higginbotham1, Ryan Colson1, Craig Simons2, Kevin Shibleburne1, Michael Decker1. 1Illinois State University, Normal, IL. 2Pacific University, Forest Grove, OR.
3University of Denver, Denver, CO. 4University of Denver, Normal, IL
Email: mrtorry@gmail.com
(No relevant relationships reported)

260 Board #98 9:30 AM - 11:00 AM
The Effect of Direct Head Impact in Judo on Internal of Cervical Spine
Haruo Murayama1, Masahito Hitosugi2, Yasuki Motozawa2, Masahiro Ogino1, Katsuhiro Koyama1, Dokkyo Medical University, Shimotsuga-gun, Japan. 2Shiga University of Medical Science, Otsu, Japan. 3Teikyo University, Utsunomiya, Japan. 4University of Tamansushi, Kofu, Japan
Email: immurayama@ dokkyomed.ac.jp
(No relevant relationships reported)

261 Board #99 9:30 AM - 11:00 AM
Comparison of Maximal Forces Produced During Different Chokehold Techniques
Andrew Craig-Jones1, Damon McCune1, Duncan French2, Kyle Larimer2, David Chiang1, John Mercer, FACSM1. 1UNLV, Las Vegas, NV. 2UFC Performance Institute, Las Vegas, NV
(No relevant relationships reported)

262 Board #100 9:30 AM - 11:00 AM
A Kinematic, Kinetic, and Electromyographic Comparison of “New” And “Dead” Pointe Shoes in Professional Ballet Dancers
Tal Amasay1, Jessica Aquino1, Jatin Louder2, Andrew Craig-Jones1, Damon McCune1, Andrew Craig-Jones1. 1Barry University, Miami Shores, FL. 2University of Nevada, Las Vegas, NV. (Sponsor: Christopher Ingersoll, FACSM)
(No relevant relationships reported)

263 Board #101 9:30 AM - 11:00 AM
Evaluating Segmental Contribution To Whole-body Center Of Mass Movement In Sub-maximal Overhand Throwing
Jake Rosburg, Talin Louder. The University of South Dakota, Vermillion, SD
Email: jake.rosburg@gmail.com
(No relevant relationships reported)

264 Board #102 9:30 AM - 11:00 AM
Ankle Bracing Effects on Contributions to the Support Moment during Hopping
Carlos Santillan, Illinois State University, Bloomington, IL. (Sponsor: Dale Brown, FACSM)
Email: Cksantill@gmail.com
(No relevant relationships reported)
Board #103 9:30 AM - 11:00 AM
Support Moment Dynamics Are Similar In Individuals With and Without Chronic Ankle Instability During Hopping
Umair Ali Vasudevanraj1, Adam E. Jagodinsky1, Mohammed Zaman1, Christopher Wilburn2, Wendi H. Weimar3. 1Illinois State University, Normal, IL. 2Auburn University, Auburn, AL. 3University of Akron, Ohio. (Sponsor: Dr. Dale Brown, FACSM). (No relevant relationships reported)

Board #104 9:30 AM - 11:00 AM
Test-Retest Reliability of Performance Scores Using a Markerless Motion Capture System
Eric M. Mosier1, Andrew C. Fry2, Justin X. Nicoll1, Dimitrije Cabarkapa1, Stephanie A. Sontag2. 1Northwestern Missouri State University, Maryville, MO. 2University of Kansas, Lawrence, KS. (No relevant relationships reported)

Board #105 9:30 AM - 11:00 AM
Identification of Risk Factors Associated with Groin Injury in an Upright Standing Position
Maria C. Herrera1, Tal Amasay1, Zacharias Papadakis1, Ana Castillo1, Samantha Day1, Noah Padgett2. 1Barry University, Miami, FL. 2University of South Florida, Tampa, FL. (No relevant relationships reported)

Board #106 9:30 AM - 11:00 AM
Effects Of Stroboscopic Vision On Reactive Strength Index Scores In Female Ncaa Division I Volleyball Players
Talin Louder, Melissa Kroll, Jordan Preuss, Lara Boman. The University of South Dakota, Vermillion, SD. Email: talin.louder@usd.edu. (No relevant relationships reported)

Board #107 9:30 AM - 11:00 AM
Women’s Collegiate Volleyball Players Exhibit Kinetic Asymmetries during Sport-Specific Tasks
Jenna D. Smith, Kevin R. Ford, FACSM, Audrey E. Westbrook, Rachel A. Kordonowy, Jeffrey B. Taylor. High Point University, High Point, NC. (Sponsor: Kevin R. Ford, FACSM). Email: jsmith8@highpoint.edu. (No relevant relationships reported)

Board #108 9:30 AM - 11:00 AM
Differences in Lower-Extremity Kinematics Among Female Collegiate Soccer and Volleyball Players
Anjuli Gairola, Dustin Malandra, Marisa J. Christensen. Cabrini University, Radnor, PA. (No relevant relationships reported)

Board #109 9:30 AM - 11:00 AM
Age and Knee Confidence Effects on LESS and LESS-RMC Scores in Female Youth Soccer Players
Sean E. Higinbotham1, Ryan Wedler1, Ryan Colson2, Michael R. Torry1, Michael J. Decker1. 1Illinois State University, Normal, IL. 2Pennsylvania State University, Forest Grove, OR. 3University of Denver, Denver, CO. (No relevant relationships reported)

Board #110 9:30 AM - 11:00 AM
Lower Extremity Force Production And Postural Stability Changes With Age In Young Male Soccer Players
Frantisek Zahalka1, Tomas Maly1, Kevin R. Ford, FACSM2, Dai Sugimoto1, Lucia Mala1, Tomas Gryc1, Veronika Mikesova1. 1Charles University, FPES, Prague, Czech Republic. 2High Point University, High Point, NC. (No relevant relationships reported)

Board #111 9:30 AM - 11:00 AM
Evaluation Of A Novel Acl Injury Prevention Technique:can Martial Arts Fall Training (break-falling And Rolling) Alter The Lower Extremity At-risk Biomechanics In Soccer Athletes?
Karen M. Myrick1, Zobian John Edward Franklin1, Conor Kasabo1, Thomas Martin1, Michael Golden1, Darin Reisler2, Richard Feinn1, Juan Garbalosa1. 1Quinnipiac University, Hamden, CT. 2Custom Nemo Solutions, West Hartford, CT. (No relevant relationships reported)

Board #112 9:30 AM - 11:00 AM
Isokinetic Strength and Strength Asymmetries of Lower Extremities in Professional Soccer Players
Tomas Maly1, Frantisek Zahalka1, Kevin R. Ford, FACSM2, Dai Sugimoto1, Lucia Mala1, David Bujnovsky1, Mikulas Hank1, Egon Kunzmann1. 1Charles University, FPES, Prague, Czech Republic. 2High Point University, High Point, NC. (No relevant relationships reported)

Board #113 9:30 AM - 11:00 AM
Effect of Previous Groin Pain on Sagittal Plane Joint Moments During Soccer Instep Kicks
Anna C. Severin1, Daniel B. Melliloff2, Mark GL Sayers2. 1University of Arkansas for Medical Sciences, Little Rock, AR. 2University of the Sunshine Coast, Sippy Downs, Australia. Email: aseverin@uams.edu. (No relevant relationships reported)

Board #114 9:30 AM - 11:00 AM
Using Isokinetic Strength Assessment to Predict Performance and Prevent Injuries in Indian Cricket Fast Bowlers
Sai A. Krishna, Thigagaraj K. Alwar, Rajendran Ramasamy, Sakthi Vinayagam, Arumugam Sivarangan. Centre for Sports Science, Chennai, India. (No relevant relationships reported)

Board #115 9:30 AM - 11:00 AM
Biceps and Triceps Contribute to Pitching Performance in College Baseball
Marie R. Acosta1, J. Mark Van Ness1, William P. Lydon1, Brian G. Graham1, Alexis C. King2, Courtney D. Jensen3. 1University of the Pacific, Stockton, CA. 2University of Illinois at Urbana-Champaign, Champaign, IL. (No relevant relationships reported)

Board #116 9:30 AM - 11:00 AM
Biomechanical Predictors of Fastball Velocity in Collegiate Pitching
Samson J. Abernathy1, William P. Lydon1, J. Mark VanNess1, J.P. Wong1, Alexis C. King2, Courtney D. Jensen3. 1University of the Pacific, Stockton, CA. 2University of Illinois at Urbana-Champaign, Champaign, IL. (No relevant relationships reported)
Board #117 9:30 AM - 11:00 AM
Match Acceleration and Deceleration Patterns in Female Collegiate Soccer Players
Jessica L. Trapp, Matthew F. Moran, Julie K. Nolan, Alicja B. Stannard, Sacred Heart University, Fairfield, CT
Email: jessica.trapp15@gmail.com
(No relevant relationships reported)

Board #118 9:30 AM - 11:00 AM
The Kick Motion Analysis Of Adolescent Male Soccer Player With Osgood-schlatter Disease
Seira Taki1, Michio Tojima2, Shuji Takekomi3, Suguru Torii4. 1Graduate School of Medicine, The University of Tokyo, Tokyo, Japan. 2Tokyo International University, Saitama, Japan. 3Waseda University, Saitama, Japan. Email: saranaga0330@hotmail.com
(No relevant relationships reported)

Board #119 9:30 AM - 11:00 AM
Relationship Between Core Endurance and the Landing Error Scoring System in Youth Soccer Players
Brooke A. Smith1, Stephanie M. Trigsted2, Michelle C. Bolinger3, Frank S. Barnett4, Jason Bailey5, Anh-Dung Nguyen6. 1High Point University, High Point, NC. 2University of Wisconsin Madison, Madison, WI. 3University of North Florida, Jacksonville, FL. 4Utah Jazz, Salt Lake City, UT. 5North Carolina FC, Cary, NC. Email: bsmit32@highpoint.edu
(No relevant relationships reported)

Board #120 9:30 AM - 11:00 AM
Using Functional Movement Screento Predict Injuries in Soccer Players
Rodrigo Pandelo, Domingos R. Pandelo, Jr. Centro de Alta Performance, Santos, Brazil
Email: rodrigo.pandelo@hotmail.com
(No relevant relationships reported)

A-45 Free Communication/Poster - Rehabilitation & Disability

Wednesday, May 29, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

Board #121 11:00 AM - 12:30 PM
Different Exercise Regimens On Rehabilitation Of Patients With Stable Coronary Heart Disease
Chen Liang1, Can Guo1, Jianhong Zhang1, Qun Ye2, Lindan Zhai3, Fengrun Zhao4. 1National Institute of Sports Medicine, Beijing, China. 2Beijing University of Chinese Medicine, Beijing, China. Email: lecl3@163.com
(No relevant relationships reported)

Board #122 11:00 AM - 12:30 PM
Effect of Walking Exercise on Metabolic and Pulmonary Function In Non-ambulatory Stroke Survivors, Pilot Data
Abdulaffah A. Alqhtani, Ramzi Alajam, Sarah Eickmeyer, Wen Liu. University of Kansas Medical Center, Kansas City, KS
Email: aalqhtani@kumc.edu
(No relevant relationships reported)

Board #123 11:00 AM - 12:30 PM
Effects Of Intra-dialytic Exercises On Physical Fitness And Health Related Quality Of Life (HRQOL).
Aashish Contractor, Jaimi Patel. Sir H.N. Reliance Foundation Hospital, Mumbai, India
Email: aashish.contractor@rfhospital.org
(No relevant relationships reported)
Feasibility Of Overground High-intensity Interval Training (hi) In Persons With Chronic Stroke

Daniel L. Carl, Victoria Scholl, Sarah Doren, Emily Staggs, Dustyn Whitelse, Kari Dunning, Hamza Sultan, Pierce Boyne. University of Cincinnati, Cincinnati, OH. Email: daniel.carl@uc.edu

(Cardiorespiratory Differences Between Knee Scooter and Crutch Use for Mobility.

Charles RC Marks, Caitlyn Heath. Oakland University, Rochester, MI. (Sponsor: Tamara Hsw-Buttler, FACSM) Email: marks@oakland.edu

Feasibility of Stroke Volume Measurement during Treadmill Exercise in Adults with Down syndrome.

Brooks A. Hibner, Thessa L.M. Hilgenkamp, Elizabeth C. Schroeder, Bo Fernhall, FACSM. University of Illinois at Chicago, Chicago, IL. Email: bhibnen2@uic.edu

Exercise Preconditioning Reduces Brain Damage and Accelerates Physical Rehabilitation in Rats with Cerebral Ischemia.

Wenqian Deng, Ke Chen, Daanahao Wang, Haihao Ma, Yanan Zhao, Xiang Zhou. Chengdu Sport Institute, Chengdu, China. (Sponsor: Tongjian You, FACSM) Email: deng_wen_qian@163.com

The Effect of Physical Activity on Hemodynamic Response to Angiotensin Converting Enzyme Inhibition in Hypertension.

Stephen A. Maris, Jonathan S. Williams. Brigham and Women’s Hospital & Harvard Medical School, Boston, MA. Email: stephen.a.maris@gmail.com

Previous Aerobic Exercise Increase Vo2 Peak And Improves Renal Protective Effects In Chronic Kidney Disease.

Wesley H. Silva, Rafael S. Luiz, Alexandre Saul, Natália R. Vaccas, Luciana Jorge, Samuel Trinidad, Rodolfo Ramposo, Nestor Schor (in memorian). Universidade Federal de São Paulo, São Paulo - SP, Brazil. Email: wesleyhenriique@gmail.com

Renal Function Responses To Steady-state Moderate-intensity And High-intensity Interval Exercise In Mid-spectrum Chronic Kidney Disease.

Jeffrey S. Forsse, Matthew N. Peterson, Zacharias Papadakis, Nicholas Schwedeschk, Burritt W. Hess, Jackson O. Griggs, D. Crawford Allison, Ron L. Wilson, J. Kyle Taylor, Kathryn Dugan, Kathy W. Jones, Kathleen Adair, Mitchell C. Cholewinski, Peter W. Grandjean, FACSM. Stephen F Austin State University, Nacogdoches, TX. Baylor University, Waco, TX. Family Health Center, Waco, TX. Baylor Scott & White Health, Waco, TX. Medical & Clinical Laboratory Sciences, Montgomery, AL. (Sponsor: Peter W. Grandjean, FACSM) Email: forssesj@fasu.edu

An Investigation Into Age-related Sarcopenia In Rodents.

Shelby C. Osburn, Petey W. Munnford, Matthew A. Romero, Paul A. Roberson, Kaelin C. Young, Michael D. Roberts. Auburn University, Auburn, AL. Email: sco0004@auburn.edu

Skeletal Muscle Phosphodiester Content is Related to Muscle Mass and Strength in Older Sarcopenic Adults.

J. Matthew Hinkley, Heather H. Cornnell, Robert A. Standlej, Rick B. Vega, Brett H. Goodpaster, Paul M. Coen. Translational Research Institute for Metabolism and Diabetes, Orlando, FL. Email: jagordon@umass.edu

Amount and Variability of Adipose Tissue Content in Human Quadriiceps Muscles of Older Adults.

Joseph A. Gordon III, Rajakumaran Nagarajan, Mark S. Miller, Bruce M. Damor, Jane A. Kent. FACSM. University of Massachusetts, Amherst, MA. Vanderbirt University, Nashville, TN. (Sponsor: Jane Kent, FACSM) Email: jagordon@umass.edu

Age-related Changes In The Passive Properties Of The Plantarflexor Muscles.

Hayden K. Giuliani, Gena R. Gerstner, Jacob A. Mota, Eric D. Ryan. University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Abbie E. Smith-Ryan, FACSM)

Longevity and Physical Vitality during Aging Altered by Adipose-derived Mesenchymal Stem Cell-Lysate Injection.

Chia-Hua Kuo, FACSM. University of Taipei, Taipei, Taiwan. Email: kuochiahuah@gmail.com

Aging Alters NAD+, Sirtuins and Targeted Protein Levels and Acetylation in the Mouse.

Dongwook Yeo, Chounghun Kang, Li Li Ji, FACSM. University of Minnesota Twin Cities, Minneapolis, MN. Inha University, Incheon, Korea. Republic of (Sponsor: Li Ji, Ph.D., FACSM) Email: yeoxx039@umn.edu

Comparison of Strength and Cognitive Performance in Elderly Individuals Aged 60 To 70 Years.

Andre de Camargo Smolarek, Luis H. Ferreira, Steven R. McAnulty, Alan C. Usher, FACSM, Luis P. Mascarenhas, Tacito P. Souza-Junior. UNICENTRO, Itu, Brazil. UFPR Curitiba, Brazil. Appalachian State University, Boone, NC. Texas Woman’s University, Denton, TX. (Sponsor: Alan C Uter, FACSM) Email: andreecsk@gmail.com
A-48 Free Communication/Poster - Joint Health and Arthritis

Wednesday, May 29, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

307 Board #145 11:00 AM - 12:30 PM
Relationships Among Skeletal Muscle Satellite Cells, Capillarization, And Vo2peak In Older Adults
Nathan Serrano1, Andrew C. D’Lugos1, Jordan C. Ormsby1, Nicholas T. Thomas1, Chad C. Carroll2, Farshad F. Marvast1, Glenn A. Gaesser, FACSM3, Jared M. Dickinson, FACSM4. 1Arizona State University, Phoenix, AZ. 3Paradise University, West Lafayette, IN. 2University of Illinois Urbana-Champaign, Urbana, IL. (Sponsor: Jared M Dickinson, FACSM)
Email: nserrano1991@gmail.com
(Note relevant relationships reported)

308 Board #146 11:00 AM - 12:30 PM
Predicting Prevalence and Mortality in Female Mice Using The Mouse Frailty Phenotype
Dongmin Kwak1, Cory W. Baumann2, LaDora V. Thompson3, 1Boston University, Boston, MA. 2University of Minnesota, Minneapolis, MN
Email: skkt0831@gmail.com
(Note relevant relationships reported)

A-49 Free Communication/Poster - Physiologic Applications in Skeletal Muscle

Wednesday, May 29, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

312 Board #150 11:00 AM - 12:30 PM
Association between Muscle Carnosine Content and Changes in Muscle Cytokines following Lower-Body Resistance Exercise
David D. Church1, Adam R. Jajtner2, Jeremy R. Townsend3, Kyle S. Beyer4, Michael B. La Monica5, Leonardo P. Oliveira6, Jay R. Hoffman, FACSM7. 1University of Arkansas for Medical Sciences, Little Rock, AR. 2Kent State University, Kent, OH. 3Lipscomb University, Nashville, TN. 4Bloomsburg University, Bloomsburg, PA. 5Missouri State University, Springfield, MO. 6The University of Chicago, Chicago, IL. 7University of Central Florida, Orlando, FL. (Sponsor: Jay R. Hoffman, FACSM)
Email: pbatters@uccs.edu
(Note relevant relationships reported)

313 Board #151 11:00 AM - 12:30 PM
Redefining Physiologic Predictors of Endurance Performance with Measures of Skeletal Muscle Oxygenation: E pluribus unum
Philip M. Batterson, Michael R. Norton, Sarah E. Hetz, Sachi Rohilla, Keston Lindsay, Andrew W. Subdahi, FACSM, Robert A. Jacobs. University of Colorado Colorado Springs, Colorado Springs, CO. (Sponsor: Andrew W. Subdahi, FACSM)
Email: pbatters@uccs.edu
Reported Relationships: P.M. Batterson: Consulting Fee; Moxy

314 Board #152 11:00 AM - 12:30 PM
Western Diet-Induced Obesity Does Not Cause Diaphragm Muscle Abnormalities
Rachel C. Kelley, Dongwoon Hahn, Derek R. Muscato, Leonardo F. Ferreira. University of Florida, Gainesville, FL. (Sponsor: Dr. Michael Reid, FACSM)
Email: kellyrc@ufl.edu
(Note relevant relationships reported)

315 Board #153 11:00 AM - 12:30 PM
Anabolic Signaling Phosphorylation Does Not Explain Differential Muscle Protein Synthesis with Intra-Set Rest Manipulation
Colleen F. McKenna1, Amadeo F. Salvador1, Andrew T. Askow1, Sarah S. Barke1, Scott A. Paluska, FACSM1, Jonathan M. Oliver2, Nicholas A. Burd3. 1University of Illinois Urbana-Champaign, Urbana, IL. 2Texas Christian University, Fort Worth, TX. (Sponsor: Scott A. Paluska, FACSM)
Email: mckenna1@illinois.edu
(Note relevant relationships reported)

316 Board #154 11:00 AM - 12:30 PM
Resistance Exercise-Induced Hormonal Response Promotes Satellite Cell Proliferation in Untrained Men
Hui-Ying Luk1, Danielle E. Levitt2, James Boyett3, Sharon Rojas4, Shawn M. Flader5, Brian K. McFarlin, FACSM6, Jakob L. Vingren, FACSM7. 1University of Illinois Chicago, Chicago, IL. 2Texas Christian University, Lubbock, TX. 3University Of North Texas, Denton, TX. (Sponsor: Jakob L. Vingren, FACSM)
(Note relevant relationships reported)

317 Board #155 11:00 AM - 12:30 PM
Contralateral Repeated Bout Effect of Elbow Flexors Not Observed in Young Women
Bailey A. Brown, Xin Ye, Ling Xin. University of Mississippi, Oxford, MS
(Note relevant relationships reported)
Board #156 11:00 AM - 12:30 PM
Tissue Hemodynamics of Skeletal Muscle and Prefrontal Cortex is Related to Rowing Time Trial Performance
Mauricio Martinez, Matthew Dove, Leilani Madrigal, Joshua Cotter.
California State University of Long Beach, Long Beach, CA
Email: mauricio.martinez01@student.csulb.edu
(No relevant relationships reported)

Board #157 11:00 AM - 12:30 PM
Calf Muscle Endurance and Gait Variability among Older Adults
ADEOLA A. SANNI, Kevin McCully, FACSM. UNIVERSITY OF GEORGIA, Athens, GA. (Sponsor: Kevin McCully, FACSM)
Email: aas56767@uga.edu
(No relevant relationships reported)

Board #158 11:00 AM - 12:30 PM
Effects Of Rate Of Force Production On Vastus Lateralis Penetration Angle During Isometric Squats And Knee Extensions
Oklahoma State University, Stillwater, OK
Email: cody.diehl@okstate.edu
(No relevant relationships reported)

Board #159 11:00 AM - 12:30 PM
Electrical Pulse Stimulation Induced Increase In Lipid And Mitochondria Depends On Donor’s Physical Activity Level
Mario Garcia1, Christopher Figueroa2, Jeffrey D. Convington2, Steven R. Smith3, Sudip Bajpeyi1
1University of Texas at El Paso, El Paso, TX, 2The University of Vermont Medical Center, Burlington, VT, 3Sanford Burnham Prebys Medical Discovery Institute, Orlando, FL
Email: s95lsb@163.com
(No relevant relationships reported)

Board #160 11:00 AM - 12:30 PM
Whole-body Heat Shock Accelerates Recovery from a Single Blunt Trauma Contusionin Mice
Josh S. Godwin, Ben Klatt, Haley Brownlee, Alan R. Needle, Kevin Zwetsloot, R. Andrew Shanely.
Appalachian State University, Boone, NC. (Sponsor: David C. Nieman, FACSM)
Email: santanashy@hotmail.com
(No relevant relationships reported)

Board #161 11:00 AM - 12:30 PM
The Effect of 10%O2 Microenvironment and Electric Pulse Stimulation on Glucose and Lipid Metabolism
Li Songbo1, Sun Jingquan2, Wang Yang1, Yan Lu1, Wang Yi1.
1Beijing Sport University, Beijing, China. 2Sichuan University, Sichuan, China
Email: 95lsb@163.com
(No relevant relationships reported)

Board #162 11:00 AM - 12:30 PM
Assessment Of Quadriceps Femoris Penetration Angle And Force Production Asymmetry In College-Aged Males
Ashley N. Fox, Daniel J. Blackwood, Daniel J. Larson, Christopher D. Black, FACSM, Rebecca D. Larson. University of Oklahoma, Norman, OK
Email: ashlinfox@ou.edu
(No relevant relationships reported)

Board #163 11:00 AM - 12:30 PM
Comparison Of Effects Of Different Exercise Modes On Gastrocnemius Of Obese Rats
Xinjuan liu, Nianyun zhang, Lei Sheng. Nanjing Sports Institute, Nanjing, China
Email: 59684540@qq.com
(No relevant relationships reported)
American College of Sports Medicine

### A-50 Free Communication/Poster - Supplements and Nutritional Ergogenic Aids

**Wednesday, May 29, 2019, 7:30 AM - 12:30 PM**

#### Board #172 9:30 AM - 11:00 AM
**Effect of Red Spinach Extract Supplementation on Cycle Time Trial Performance in Recreationally Active Individuals**
Adam M. Gonzalez, Matthew R. Accetta, Robert W. Spitzz, Gerald T. Mangine, Jamie J. Ghigiarelli, Katie M. Sell. Hofstra University, Hempstead, NY. *Kennesaw State University, Kennesaw, GA*
Email: adam.gonzalez@hofstra.edu
(No relevant relationships reported)

#### Board #173 9:30 AM - 11:00 AM
**The Probiotic Streptococcus Salivarius M18 Increases Plasma Nitrite But Does Not Alter Blood Pressure**
Mia C. Burleigh. University of the West of Scotland, West Kilbride, United Kingdom. (Sponsor: Jason David Allen, FACSM)
Email: mia.burleigh@uws.ac.uk
(No relevant relationships reported)

#### Board #174 9:30 AM - 11:00 AM
**Effect of Beetroot Juice Supplementation on Thermoregulation and Running in a Hot Environment**
Elizabeth H. Kasparek, Jason C. Dorman, Thayne A. Munce, FACSM, Sanford Sports Science Institute, Sioux Falls, SD. (Sponsor: Thayne A. Munce, FACSM)
Email: elizabeth.kasparek@sanfordhealth.org
(No relevant relationships reported)

#### Board #175 9:30 AM - 11:00 AM
**Ergogenic Effect of Citrulline Malate Supplementation on Total Training Load and Muscle Thickness in Trained Women.**
Tatiane G. Pinto, Sidney Diyyo Tamura, Luis Felipe Milano Teixeira. NEPECE - HOSBOS/UNISO, Sorocaba, Brazil
Email: luis.teixeira@prof.uniso.br
(No relevant relationships reported)

#### Board #176 9:30 AM - 11:00 AM
**Oral Creatine Supplementation On Physically Active Elderly Women Cognition Improvement**
Marco Machado, Elvis Q. Borges, Lacy F. Machado, Alexander J. Koch, Dahlson Paulucio. 1 Universidade Iguaçu Campus v at Ruperuma, Ruperuma, Brazil. 2 Lenoir-Rhyne University, Hickory, NC
Email: marconmachado1@gmail.com
(No relevant relationships reported)

#### Board #177 9:30 AM - 11:00 AM
**Creatine Supplementation And Repeated Sprint Ability - A Systematic Review And Meta-analysis**
Mark Glaister, FACSM. St Mary’s University, Twickenham, United Kingdom
Email: mark.glaister@stmaries.ac.uk
(No relevant relationships reported)

#### Board #178 9:30 AM - 11:00 AM
**The Effect of Creatine Supplementation on Muscle Oxygen Saturation and Arterial Stiffness**
Tim Werner. Salisbury University, Salisbury, MD
Email: tjwerner@salisbury.edu
(No relevant relationships reported)

#### Board #179 9:30 AM - 11:00 AM
**Exhaustive Resistance Exercise Alters Serum Creatine and Guanidinoacetic Acid in Active Men**
Zoran S. Milosevic, Patrik Drid, Saad Al Fazazi, Valdemar Stajer, Nebojsa Maksimovic, Sergej M. Ostojic. 1 University of Novi Sad, Novi Sad, Serbia. 2 University of Granada, Granada, Spain
(No relevant relationships reported)
WEDNESDAY, MAY 29, 2019

P26 Final Program

349 Board #187 9:30 AM - 11:00 AM
No Recovery Differences with Acute vs. Pre-load Montocorency Tart Cherry Juice Supplementation Following Strenuous Exercise
Jerusalem Tesfaye1, Kelly Rичетти, Robert Rичетти, Tom Cliffорд2, Mitchell Фишер1, Devin Drummen1, 1Central Washington University, Ellensburg WA. 2Newcastle University, Newcastle upon Tyne, United Kingdom
(No relevant relationships reported)

350 Board #188 9:30 AM - 11:00 AM
Performace Enhancing Effects Of Ecdysterone- A Human Intervention Study
Patrick Diel1, Eduard Isenmann1, Gabriella Ambrosio2, Jan Felix Joseph,elijke de la Torre1, Philipp Zimmer1, Byramntas Kazaucks, Catrin Goebel1, Francesco M Botre2, Maria Kristina Parr3, 1German Sports University Cologne, Cologne, Germany. 2Freie Universitaet Berlin, Berlin, Germany. 3Laboratorio Antidoping FMSI, Rome, Italy. 4Australian Sports Drug Testing Laboratory, National Measurement Institute, Australia, North Ryde, Australia
Email: diel@dsks-koeln.de
(No relevant relationships reported)

351 Board #189 9:30 AM - 11:00 AM
Citrus Active Substances Improve Elite Weightlifters' Aerobic Exercise And Resilience
MENG LIU, Chongqing Institute of Sport Science, Chongqing, China
Email: 314025572@qq.com
(No relevant relationships reported)

352 Board #190 9:30 AM - 11:00 AM
7-Day Hydrogen Inhalation Affects Exercise Performance and Hormonal Profiles in Young Volunteers
Sergej M. Ostojic, Dejan Javorac, Valdemar Stajec. University of Novi Sad, Novi Sad, Serbia
(No relevant relationships reported)

353 Board #191 9:30 AM - 11:00 AM
Using Combined Curcumin and Boswellia Serrata Supplementation to Alter Inflammatory Response to Consecutive Exercise Days
Asheal A. Davis, John H. Curtis, Meolody A. Gary, Elizabeth A. Tanner, Jakob L. Vingren, FACSM, Brian K. McFarlin, FACSM. University of North Texas, Denton, TX. (Sponsor: Brian McFarlin, FACSM)
Email: asheal.davis@unt.edu
(No relevant relationships reported)

354 Board #192 9:30 AM - 11:00 AM
Curcumin Supplementation Alters Inflammatory Cytokines Following Exercise
Brian K. McFarlin, FACSM, Elizabeth A. Tanner, Melody A. Gary, Asheal A. Davis, John H. Curtis, Jakob L. Vingren, FACSM. University of North Texas, Denton, TX
Email: brian.mcfarlin@unt.edu
Reported Relationships: B.K. McFarlin: Industry contracted research; Research Grant to UNT.

355 Board #193 9:30 AM - 11:00 AM
Effect Of New Zealand Blackcurrant Extract On Recovery From Exercise Induced Muscle Damage Following Half Marathon Running
Rianne Costel1, Stephen D. Myers1, Mark E.T. Willems1, Fiona Myers2, Nathan A. Lewis2, Sam D. Blacker1, 1University of Chichester, Chichester, United Kingdom. 2University of Portsmouth, Portsmouth, United Kingdom. 3English Institute of Sport, Bath, United Kingdom
(No relevant relationships reported)

356 Board #194 9:30 AM - 11:00 AM
New Zealand BlackCurrant Extract Increases Circulating Hsp32 And Hsp90α But Doesn’T Affect Circulating Hsp72
Ben J. Lee1, Tessa R. Flood1, Ania M. Hilles1, Ella F. Walker1, Lucy Wheeler2, Kimberly M. Ashdown1, Mark ET Willems1, Matthew R. Kuenner1, 1University of Chichester, Chichester, United Kingdom. 2High Point University, High Point, NC
Email: b.lee@chi.ac.uk
(No relevant relationships reported)

357 Board #195 9:30 AM - 11:00 AM
Does Supplementation With Pedicoccus Acidilactici Probiotics Alter Inflammatory Response To Exercise On Consecutive Days?
John H. Curtis, Asheal A. Davis, Elizabeth A. Tanner, Melody A. Gary, Jakob L. Vingren, FACSM, Brian K. McFarlin, FACSM. University of North Texas, Denton, TX. (Sponsor: Brian McFarlin, FACSM)
Email: john.curtis@unt.edu
(No relevant relationships reported)

358 Board #196 9:30 AM - 11:00 AM
Combined Dietary Polyphenol Supplementation Reduces Inflammation Associated Gene Expression Following a Half Marathon Race
Elizabeth A. Tanner, Melody A. Gary, Asheal A. Davis, Brian K. McFarlin, FACSM. University of North Texas, Denton, TX. (Sponsor: Brian McFarlin, FACSM)
Email: elizabeth.tanner@unt.edu
(No relevant relationships reported)

359 Board #197 9:30 AM - 11:00 AM
Mood;There Are Some Connection Between Probiotics Supplementation On Marathon Runners?A Double Blind Study
Geovana SF Leite1, Valdir de Aquino Lemos1, Helena A P Batatinha1, Edgar Tavares1, Ayane S. Resende1, Ricardo A. Fock1, José C. R Neto1, Ronaldo V T dos Santos1, Antonio H. Lancha Junior1, 1University of São Paulo, São Paulo, Brazil. 2Federal University of São Paulo, São Paulo, Brazil
Email: geovana.leite@usp.br
(No relevant relationships reported)

360 Board #198 9:30 AM - 11:00 AM
No Acute Effects of Placebo or Open-Label Placebo Supplementation on Strength and Neuromuscular Fatigue
Dennis P. Kwon, Alina P. Swafford, David H. Fukuda, Jeffrey R. Stout, Matt S. Stock. University of Central Florida, Orlando, FL
Email: dkwongolf@knights.ucf.edu
(No relevant relationships reported)

361 Board #199 9:30 AM - 11:00 AM
Evaluation of the Placebo Effect in Elite and Amateur Athletes
Andressa F. de Abreu, Domingos R. Pandelo, Jr. Centro de Alta Performance, Santos, Brazil
Email: andressaabreu_82@hotmail.com
(No relevant relationships reported)

362 Board #200 9:30 AM - 11:00 AM
Effects of Nutritional Supplementation on Body Composition and Bio-markers during Army Initial Entry Training
Jeremy McAdam1, Kaitlin McGinnis1, Darren Beck2, Andressa F. de Abreu, Domingos R. Pandelo, Jr. Centro de Alta Performance, Santos, Brazil
Email: andressaabreu_82@hotmail.com
(No relevant relationships reported)
Board #201  9:30 AM - 11:00 AM
Adverse Reactions and Perceived Benefits of Dietary Supplements used by SEAL Qualification Training Students
Kim Beals, Mita Lovalekar, Matthew E. Darnell, Bradley C. Nindl, FACSM. University of Pittsburgh, Pittsburgh, PA. (Sponsor: Bradley C Nindl, FACSM)
Email: beals.kim@pitt.edu
(No relevant relationships reported)

Board #202  9:30 AM - 11:00 AM
Dark Chocolate Supplementation Elevates Resting Energy Expenditure In Exercise Trained Females
Michael J. Webster, FACSM, Katie M. Presler, Derya Keskin. Valdosta State University, Valdosta, GA
Email: MJWebster@Valdosta.edu
(No relevant relationships reported)

Board #203  9:30 AM - 11:00 AM
Amelioration Of Capillary Regression Of Skeletal Muscle Under Disuse Condition By Enterococcus Facelum Strain R30 Supplementation
Hidemi Fujino1, Hiroyo Kondo1, Takuya Ikiji1, Yusuke Hirayama1, Airo Takegaki1, Akiko Ishihara1. 1Kobe University Graduate School of Health Sciences, Kobe, Japan. 2Nagoya Women's University, Nagoya, Japan. 3Kaneka Corporation, Takasago, Japan. 4Kyoto University, Kyoto, Japan
Email: fujino@phoenix.kobe-u.ac.jp
(No relevant relationships reported)

Board #204  9:30 AM - 11:00 AM
Circulating Levels of Select Micro-RNA Are Not Impacted by Manipulating Nutrient Intake Following High-Intensity Cycling
Jeremy Vai1, Ryan Sapp2, Daniel Shill3, Michael Saunders, FACSM3, Christopher Wonmack, FACSM, James Hagberg, FACSM, Nicholas Luden1. 1James Madison University, Harrisonburg, VA. 2University of Maryland, College Park, MD. (Sponsor: Michael Saunders, FACSM)
(No relevant relationships reported)

Board #205  9:30 AM - 11:00 AM
Can a Dynamic Warm-up Reduce the Magnitude of Immune Perturbation Following Vigorous Aerobic Exercise?
Mahmoud T. Elzayat, Emily Claire-pyle LaVoy. University of Houston, Houston, TX
Email: melzayat@uh.edu
(No relevant relationships reported)

Board #206  9:30 AM - 11:00 AM
Mobilization and Fcy-Receptor Expression of Six NK Cell Subsets During and After Exercise
Masatoshi Suzuki1, Kazuyoshi Takeda1, Pang N. Shek1, Roy J. Shephard, FACSM2, Ko Okumura3, 1Meiji University, Tokyo, Japan. 2Ritsumeikan University, Tokyo, Japan. 3University of Toronto, Toronto, ON, Canada (Sponsor: Roy J. Shephard, FACSM)
Email: suzuki@meiji.ac.jp
(No relevant relationships reported)

Board #207  9:30 AM - 11:00 AM
Tumor Necrosis Factor-alpha, TNFR, And STNFR Relationships to Body Temperature
Eliott Arroyo1, Brittany N. Follwowy1, Jeremiah A. Vaughan1, Joseph A. Laudato1, Brandon M. Gibson1, Ellen L. Glickman, FACSM1, Adam R. Jajtner1. 1Kent State University, Kent, OH. 2Ripon College, Ripon, WI. 3Bemidji State University, Bemidji, MN. (Sponsor: Ellen L. Glickman, FACSM)
(No relevant relationships reported)
A-52  Free Communication/Poster - Exercise and Children

Wednesday, May 29, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

376  Board #214  9:30 AM - 11:00 AM
Associations Among Obesity, Physical Activity, Nutrition, And Family Environment In Adolescents
Kimbo E. Yee1, Karin A. Pfeiffer, FACSM, Lorraine J. Weatherspoon1, Deborah L. Felz2, Joey C. Eisenmann1. 'The Citadel, Charleston, SC. 1Michigan State University, East Lansing, MI. 2Leeds Beckett University, Leeds, United Kingdom
Email: kyeo@citadel.edu
(No relevant relationships reported)

377  Board #215  9:30 AM - 11:00 AM
Factors Associated to Mechanical Efficiency among Adolescent Boys Performing a Graded Maximal Exercise
Georges Jabbour, Lina Majed. Qatar University, Doha, Qatar
Email: georgesjabbour1980@hotmail.com
(No relevant relationships reported)

378  Board #216  9:30 AM - 11:00 AM
Weight Trajectories Are Associated With Exercise Capacity Among Children With Complex Congenital Heart Defects
Tyler Kung1, Kenneth Tang, Warsame Yusuf2, Jane Lougheed2, Patricia E. Longmuir3. 'Children's Hospital of Eastern Ontario Research Institute, Ottawa, ON, Canada. 2Children's Hospital of Eastern Ontario, Ottawa, ON, Canada
Email: tkung@cheo.on.ca
(No relevant relationships reported)

379  Board #217  9:30 AM - 11:00 AM
Boys with Obesity have Attenuated Cardiorespiratory Fitness Independent of Fat Mass
Julianna J. Kilpatrick1, Kyleigh Allie1, Oscar E. Suman, FACSM, Eric Rivas1. 'Texas Tech University, Lubbock, TX. 2University of Texas Medical Branch, Galveston, TX (Sponsor: Oscar E. Suman, FACSM)
Email: jkilpatrick@ttu.edu
(No relevant relationships reported)

A-53  Free Communication/Poster - Exercise & Neuroscience

Wednesday, May 29, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

380  Board #218  9:30 AM - 11:00 AM
Social Media-Based Physical Activity Promotion by Craft Brewing Establishments Located in Knoxville, Tennessee
Paula-Marie M. Ferrara, Eugene C. Fitzhugh, Cory T. Beaumont, Kelley Strohacker, FACSM. University of Tennessee, Knoxville, TN
Email: pferrar1@vols.utk.edu
(No relevant relationships reported)

381  Board #219  9:30 AM - 11:00 AM
Pre- and Post-Season Electroencephalography Measures of Brain Vital Signs in Youth Football Players
Thayne A. Munce, FACSM1, Shaun D. Fickling2, Daniel N. Poel1, Jason D. Dorman1, Ryan C.N. D’Arey2. 'Sanford Sports Science Institute, Sioux Falls, SD. 2Simon Fraser University, Metro Vancouver, BC, Canada
Email: thayne.munce@sanfordhealth.org
(No relevant relationships reported)
Board #228 9:30 AM - 11:00 AM
Concussion History Does Not Predict Papillary Light Reflex or Visual Sensory Performance in Young Adults
Cassie B. Ford, Christina B. Vander Veit, Nikki Barczak, Patricia R. Combs, Jamie DeCicco, Lillian Vandermark, Kou Yang, Erik A. Wikstrom, FACSM, Jason P. Mihalik. University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Erik A. Wikstrom, FACSM)
Email: cbford@unc.edu
(No relevant relationships reported)

Board #229 9:30 AM - 11:00 AM
Working Memory Differences Between Fallers and Non Fallers
Michelle (Yee) S. Wong, Lindsay S. Nagamatsu. Western University, London, ON, Canada
Email: ywong252@uwo.ca
(No relevant relationships reported)

Board #230 9:30 AM - 11:00 AM
Effects Of Different Load Forced Swimming On The Expression Of Pd-95 And Ncam In Hippocampus Of Rats
Yuan Qiong-jia1, Fu Yan2, Zhang Ye-ting1. 1Chengdu Sport Institute, Chengdu, China; 2Southwest Minzu University, Chengdu, China
Email: zjyli@163.com
(No relevant relationships reported)

Board #231 9:30 AM - 11:00 AM
Protective Effects Of Treadmill Exercise On aβ1-42-Induced Inflammation And Cognitive Impairment In Rat
Hu Xiao-yong, Fu Yan, Luo Xiao. Southwest Minzu University, Chengdu, China
(No relevant relationships reported)

Board #232 9:30 AM - 11:00 AM
Treadmill Exercise Alters Microglia Phenotype via Inhibiting NF-κB Signaling in Rats Hippocampally Injected With Aβ1-42
Fu Yan1, Zhang Ye-ting2, Hu Xiao-yong1. 1Southwest Minzu University, Chengdu, China; 2Chengdu University, Chengdu, China
Email: 340905131@qq.com
(No relevant relationships reported)

Board #233 9:30 AM - 11:00 AM
Brain Modulation For Perceived Exertion Processing After Different Cycling Exercise Intensities: An fMRI Study
Henrique Bortolotti1, Eduardo Bodnariuc Fontes1, Kell Grandjean Costa1, Brunno Campos2, Timothy Noakes3, Maria Augusta Peduti Dal Molin Kiss4, Li Li Min2. 1-42-induced
Email: henriquebortolotti@gmail.com
(No relevant relationships reported)

Board #234 9:30 AM - 11:00 AM
Different Characteristics Of Brain Function Between Endurance And Sprinting Athletes: A Resting State fMRI Study
Keying Zhang1, Chunmei Cao2, Weimo Zhu, FACSM. 1Tsinghua University, Beijing, China, China; 2University of Illinois at Urbana-Champaign, Urbana, IL, Urbana, IL. (Sponsor: Weimo Zhu, FACSM)
Email: bsuzky0812@163.com
(No relevant relationships reported)

Abstract Withdrawn
ACSM 66th Annual Meeting

Board #251 11:00 AM - 12:30 PM

Physical Activity and Sedentary Behaviors Influence Executive Function and Psychological Well-being in Chinese University Students
Tao Huang, Kun Wang, Xiang Fan, Zuosong Chen. Shanghai Jiao Tong University, Shanghai, China
Email: taohuang@sjtu.edu.cn
(No relevant relationships reported)

Board #252 11:00 AM - 12:30 PM

High Intensity Interval Training Is Associated With Decreased Negative Affect In Individuals With Anxiety Disorders
Vincenzo Lauriola1, Kathleen M. McIntyre1, Yael Stovezky2, Tse-Hwei J. Choo3, Abby Fyer1, Rene Hen1, Blair Simpson3, Richard P Sloan1. 1Columbia University, New York, NY. 2New York State Psychiatric Institute, New York, NY
Email: vl2286@columbia.edu
(No relevant relationships reported)

Board #253 11:00 AM - 12:30 PM

Examination of Eating Disorder Risk among Female College Athletes and Performers
Allison B. Smith1, Toni M. Torres-McGhee3, Samantha R. Weber1, Dawn M. Emerson2, Kelly Pritchett1. 1University of South Carolina, Columbia, SC. 2University of Kansas, Lawrence, KS. 3Central Washington University, Ellensburg, WA
(No relevant relationships reported)

Board #254 11:00 AM - 12:30 PM

The Relationship Between Physical Activity, Sleep Quality, and Subjective Well-being in College Students
Zhanjia Zhang1, Zhonghui He1, Weiyan Chen1. 1University of Michigan, Ann Arbor, MI. 2Peking University, Beijing, China
(No relevant relationships reported)

Board #255 11:00 AM - 12:30 PM

Patterns of Physical Activity and Mental State Among College-Aged Men and Women
David Bellar1, Ben Kern1, Lawrence W. Judge2, Gregory R. Davis3. 1University of Louisiana at Lafayette, Lafayette, LA. 2Ball State University, Muncie, IN
Email: dbellar@louisiana.edu
(No relevant relationships reported)

Board #256 11:00 AM - 12:30 PM

Moderate and Intense Exercise not Modify Anxiety Scores but Promote Different Affective Answers in Adults
Cyril G. Borges, Marcos Mônico-Neto, Sergio Tufik, Hanna K. M. Antunes. Universidade Federal de São Paulo, UNIFESP, São Paulo, Brazil
Email: cyroborges@hotmail.com
(No relevant relationships reported)

Board #257 11:00 AM - 12:30 PM

Impact of Wearing Graduated Compression Stockings on Physiological and Psychological Responses during Prolonged Sitting
Yukari Horiiuchi1, Yoko Handa Kirihara2, Masahiro Horiiuchi2. 1Kyushu Sangyo University, Fukuoka, Japan. 2Mt. Fuji Research Institute, Fuji-yoshida, Japan
Email: yhoriiuchi@jp.kyusan-u.ac.jp
(No relevant relationships reported)

Board #258 11:00 AM - 12:30 PM

Psychosocial Mechanism of Adolescents’ Physical and Mental Health: A Self-Determination Health Behavior Perspective
Tao Zhang1, Xiangli Gu2, Scott Martin, FACSMD. 1University of North Texas, Denton, TX. 2University of Texas at Arlington, Arlington, TX
Email: TAO.ZHANG@UNT.EDU
(No relevant relationships reported)
P32 Final Program

435 Board #273 11:00 AM - 12:30 PM Effects of Alternative Treatments on Behavioral Outcomes In Patients with Mild Cognitive Impairment, Alzheimer’S Disease and Dementia: A Comprehensive Summary of Evidence and Meta-analysis
Kate Yzquierdo, Anna Ivaschenko, Zung V Tran. MedAware Systems, Inc., Broomfield, CO
Email: kjendersee@medawaresystems.com
(No relevant relationships reported)

436 Board #274 11:00 AM - 12:30 PM Mental Health in First Responders and Military Personnel: Is Physical Activity A Viable Option?
Allyson G. Box, Steven J. Petruzzello, FACSM. University of Illinois Urbana-Champaign, Urbana, IL. (Sponsor: Steven J. Petruzzello, FACSM)
(No relevant relationships reported)

437 Board #275 11:00 AM - 12:30 PM Effects Of Physical Activity On Cognitive Function In Alzheimer’S Disease: A Comprehensive Meta-analysis
Zung V Tran, Anna Ivaschenko, Kate Yzquierdo, Travis Spear, Laura James, Ben Battenburg, Elissa Hoitt, Vanessa Nault, Kristin Nicotra. MedAware Systems, Inc., Broomfield, CO
Email: zvtran@medawaresystems.com
(No relevant relationships reported)

438 Board #276 11:00 AM - 12:30 PM Depression and Fitness Level in College Students Attending a Diverse University
Sharon Jalene, Jennifer Pharr, Brach Poston. University of Nevada Las Vegas, Las Vegas, NV
Email: sharon.jalene@unlv.edu
(No relevant relationships reported)

439 Board #277 11:00 AM - 12:30 PM Comparison Between Pilates And Home-exercises On Health-related Outcomes In Individuals With Chronic Low Back Pain
Caroline Ribeiro Tottoli, Yara Marques, Katharina Mascarenhas, Lais Medeiros, Isabela Costa, Elaine Oliveira, Everton Nunes, Wagner Martins, Rodrigo Luiz Carregaro. Universidade de Brasilia (UnB), Brasilia, Brazil
(No relevant relationships reported)

440 Board #278 11:00 AM - 12:30 PM Do Pilates And Home-exercises Improve Balance And Kinesiophobia Of Individuals With Low Back Pain?
Rodrigo Luiz Carregaro, Caroline Tottoli, Yara Marques, Katharina Mascarenhas, Lais Medeiros, Isabela Costa, Elaine Oliveira, Wagner R. Martins, Everton Nunes. Universidade de Brasilia (UnB), Brasilia, Brazil
Email: rodrigocarregaro@unb.br
(No relevant relationships reported)

441 Board #279 11:00 AM - 12:30 PM Effect Of Core Strength Training On Dysfunction And Rehabilitation Of Patients With LBP
Yushi Hu. ChengDu Sport Institute, ChengDu, China
Email: 603457104@qq.com
(No relevant relationships reported)

442 Board #280 11:00 AM - 12:30 PM Dose-related Effects of Moderate Intensity Walking Exercise on Sensitivity to Pain in Healthy Humans
Anna M. Polaski, Amy L. Phelps, Matthew C. Kostek, FACSM, Kimberly A. Szucs, Benedict J. Kolber. Duquesne University, Pittsburgh, PA
(No relevant relationships reported)

ACSM 66th Annual Meeting

443 Board #281 11:00 AM - 12:30 PM The Efficacy of Qigong on the Main Symptoms of Fibromyalgia. A Randomized Clinical Trial
Caio Vinicius M. Sarmento, Taylor Pfeifer, Sanghee Moon, Mehrdad Maz, Sue Min Lai, Yvonne Colgrove, Irina V. Smirnova, Wen Liu. The University of Kansas Medical Center; Kansas City, KS
Email: cmessiasarmento@kumc.edu
(No relevant relationships reported)

444 Board #282 11:00 AM - 12:30 PM Effect Of Core Strength Training On Efficiency, Core Strength Of Patients With LBP
Siqi Song1, Yushi Hu2, Xiaoru Zhang3. 1ChengDu Sport Institute, Chengdu, China. 2ChengDu Sport Institute, ChengDu, China
Email: 603457104@qq.com
(No relevant relationships reported)

445 Board #283 11:00 AM - 12:30 PM The Mapping Knowledge Analysis of Exercise Intervention for Drug Dependence Research at Home and Abroad
Yuehui Zhou. School of Sport Science, Qufu Normal University, Jining, China
Email: mszyzh2006@126.com
(No relevant relationships reported)

446 Board #284 11:00 AM - 12:30 PM Exercise As An Adjuvant For Post-acute Withdrawal Syndrome In Substance Use Disorder
Raj Mashi1, Michael Landis1, Barbra Maslih2, Kabeer Maslih3, Justin Bates1. 1Potomac Highlands Guild, Inc, Petersburg, WV. 2Texas Tech University Paul Foster School of Medicine, El Paso, TX. 3West Virginia University, Morgantown, WV
Email: rajm@ghgm.net
(No relevant relationships reported)

447 Board #285 11:00 AM - 12:30 PM Physical Activity, Physical Function And Quality Of Life In Patients With Single And Multiple Chronic Diseases
Fiona Skelly1, Niall Moyna1, Noel McCaffrey1, Lisa Loughney1, Kieran Dowd2, Andrew McCarron1, Mairead Cantwell1, Brona Furlong1. 1Dublin City University; University of Technology, Westmeath, Ireland. 2Athlone Institute of Technology, Mervue, Ireland
Email: fiona.skelly2@mail.dcu.ie
(No relevant relationships reported)

448 Board #286 11:00 AM - 12:30 PM Physical Activity and Quality of Life: Using Exercise as Treatment in Primary Care
Stefanie M. Meyer, Mary Larson, Joe Deutsch. North Dakota State University, Fargo, ND. (Sponsor: Donna J. Terbizan, FACSM)
Email: steffanie.meyer@nds.edu
(No relevant relationships reported)

449 Board #287 11:00 AM - 12:30 PM Physical Activity and Quality of Life: Using Exercise as Treatment in Primary Care
Stefanie M. Meyer, Mary Larson, Joe Deutsch. North Dakota State University, Fargo, ND. (Sponsor: Donna J. Terbizan, FACSM)
Email: steffanie.meyer@nds.edu
(No relevant relationships reported)

450 Board #288 11:00 AM - 12:30 PM Effects Of Cooled Compression Exercise Technology On Health, Sleep, And Quality Of Life In Veterans.
Chloe Wennecke1, Pat Marques2, Grove Higgins1, Sara Webb2, Lindsay Haughton1, Liz Grimm2, Mary Wilson2, Aaron Black2, Cristian Torres1. 1Vasper Systems, Moffett Field, CA. 2Colorado Springs Center for Human Performance and Rehabilitation, Colorado Springs, CO. (Sponsor: 7960, FACSM)
Email: steffanie.meyer@nds.edu
(No relevant relationships reported)
Board #289 11:00 AM - 12:30 PM

High-intensity Interval Training And Moderate-intensity Continuous Training In Adults With Crohn's Disease: A Pilot Trial

Garry A. Tew1, Dean Leighton2, Roger Carpenter3, Simon Anderson4, Louise Langmead1, John Ramage4, James Faulkner5, Elizabeth Coleman6, Caroline Fairhurst7, Michael Seed8, Lindsay Bottoms9.

1Northumbria University, Newcastle-upon-Tyne, United Kingdom. 2Queen Mary University of London, London, United Kingdom. 3University of York, York, United Kingdom. 4University of York, York, United Kingdom. 5University of East London, London, United Kingdom. 6Hampshire Hospitals NHS Foundation Trust, Winchester, United Kingdom. 7University of Winchester, Winchester, United Kingdom. 8University of York, York, United Kingdom. 9University of East London, London, United Kingdom. (Sponsor: Prof Glyn Howatson, FACSM)

Email: garry.tew@northumbria.ac.uk

(No relevant relationships reported)

Board #290 11:00 AM - 12:30 PM

Metabolic Profile And Myocardial Performance Of Renal Transplant Recipients Adherent To Unsupervised Exercise As Prescription Program.

Beatrice Leonel1, Luciano Moscarelli1, Elena Zappelli2, Chiara Inglotto3, Marco Mandoli3, Giorgio Galanti4, Pietro Amedeo Modesti1, Laura Stefanis4, 1Sports Medicine Center - University of Florence, Florence, Italy. 2Nephrology Unit - University of Florence, Florence, Italy. 3Sports Medicine, Florence, Italy. 4Sports Medicine - FIMS (Italian Federation of Sport Medicine), Florence, Italy.

(No relevant relationships reported)

Board #291 11:00 AM - 12:30 PM

The Effect Of Traditional Chinese Exercise On early Diabetic Nephropathy

Jing Li1, Tongtong Gao2, Mian Jia1, YiYan Jiang1. 1Dongzhimen Hospital of Beijing University of Chinese Medicine, Beijing, China. 2World Federation of Chinese Medicine Societies, Beijing, China. 3Beijing Pinggu Hospital of Traditional Chinese Medicine, Beijing, China.

Email: Natalah.lee@163.com

(No relevant relationships reported)
461
Board #309
11:00 AM - 12:30 PM
Lifestyle and Exercise Intervention Reduces Blood Pressure: A Multicenter Control Trial
Guillermo Hernando Rodríguez Vélez1, Elvis Alvarez Camero2, Elisero Iglesias-Soler3, Manuel Avelino Giráldez García1. 1Facultad de Ciencias Naturales, Exactas y de la Educación, Universidad de Cauca, Popayán, Colombia. 2Florida Hospital. Translational Research Institute, Orlando, FL. 3Facultad de Ciencias del Deporte y la Educación Física, University of A Coruña, A Coruña, Spain
Email: ghvr1958@gmail.com
(No relevant relationships reported)

462
Board #300
11:00 AM - 12:30 PM
Tai Chi as Antihypertensive Lifestyle Therapy: A Systematic Review and Meta-Analysis
Yin Wu1, Blair T. Johnson1, Shiqi Chen2, Yiyang Chen3, Jill Livingston1, Linda S. Pescatello, FACSM1. 1University of Connecticut, Storrs, CT. 2University of Michigan, Ann Arbor, MI. 3Shanghai University of Sport, Shanghai, China. (Sponsor: Linda S. Pescatello, FACSM)
Email: yin2.wu@uconn.edu
(No relevant relationships reported)

463
Board #301
11:00 AM - 12:30 PM
Physical Activity Patterns Vary by BMI and Asthma Control in Patients with Asthma
Molly B. Conroy, FACSM1, Bonny J. Rockette-Wagner2, Juan Wsnivesky3, Fernando Holguin4, Shiqi Chen1, Emily Federmann3, Vonghorne Smith1, Alex Federmann1. 1University of Utah, Salt Lake City, UT. 2University of Pittsburgh, Pittsburgh, PA. 3Icahn School of Medicine at Mount Sinai, New York, NY. 4University of Colorado, Aurora, CO
Email: Molly.Conroy@hsc.utah.edu
(No relevant relationships reported)

464
Board #302
11:00 AM - 12:30 PM
Less Evening Exercise is Associated with Progressive Visual Field Defect in POAG Patients
Yuanbo Liang1, Xiafei Pan1, Kai Xu2, Xin Wang1, Guofu Cheng1, Huanhuan Cheng1, Jie Cheng1, Alice Jia Liu1. 1The Eye Hospital, School of Ophthalmology and Optometry, Wenzhou Medical University, Wenzhou, China. 2The Eye Hospital, Shanghai Jiaotong University, No.5 Linggupu Road, Nanjing, Jiangsu, China, Nanjing, China
Email: yuanboliang@126.com
(No relevant relationships reported)

465
Board #303
11:00 AM - 12:30 PM
Increased Functional Capacity For Adaptive Athletes Through High Intensity Functional Training (HIFT)
Victor Andrews1, Katie M. Heinrich1, Derek A. Crawford2, Theresa Larson1, Max Converse1. 1Kansas State University, Manhattan, KS. 2Pittsburg State University, Pittsburg, KS. Movement Rx Integrated Health, San Diego, CA. 3Adaptive Athletic, San Francisco, CA
Email: victornardrews1@k-state.edu
(No relevant relationships reported)

466
Board #304
11:00 AM - 12:30 PM
The Effects of Endurance Stair Climbing on Individual Health
Ryan Doyel, Joseph Dadabo, Courtney Stefanski, Prakash Jayabalani.
Northwestern University Feinberg School of Medicine / Shirley Ryan AbilityLab, Chicago, IL
(No relevant relationships reported)

467
Board #305
11:00 AM - 12:30 PM
Ankylosing Spondylitis: How Important is Exercise as Part of Management
Christa Jane van Rensburg, FACSM, Audrey Jansen van Rensburg, Catharina C. Grant, Dimakatso A. Ramagole. Sports Medicine, University of Pretoria, Pretoria, South Africa
Email: christa.janevanrensburg@up.ac.za
(No relevant relationships reported)
**Board #313**

**Physical Play with Children Predicts Better Hematological Health; Hematological Health Predicts Cognitive and Behavioral Development**

Kendall D. Bietsch1, Cynthia Villalobos1, William E. Herrin1, Jessica Avalos1, Norah Madaya2, Courtney D. Jensen1. 1University of the Pacific, Stockton, CA. 2Uganda Bureau of Statistics, Kampala, Uganda

Email: k.bietsch@u.pacific.edu

(No relevant relationships reported)

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**Board #314**

**Health/Fitness Assessments of Resident Physicians by Exercise Science Interns - Exercise Prescriptions and Follow-Up Measures**

Rachel R. Swinford, Stephen M. Fallowfield, Brain D. Krohn, NiCole R. Keith, FACSM. IUPUI, Indianapolis, IN. (Sponsor: NiCole Keith, FACSM)

Email: rswinfor@iupui.edu

(No relevant relationships reported)

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**Board #315**

**Examining the Effects of Exercise Referral Schemes on Changes in Physical Activity Levels.**

Nikita Z. Rowley1, James Steele2, Steve Mann1, Gary Liguori, FACSM3, Alfonso Jimenez2, Elizabeth Horton1. 1Coventry University, Coventry, United Kingdom. 2ukactive, London, United Kingdom. 3Places for People, London, United Kingdom. 4University of Rhode Island, Kingston, RI

Email: nikitarowley@outlook.com

(No relevant relationships reported)

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**Board #316**

**Low Usage of Physical Activity Related Diagnostic Codes Among Indiana Medical Providers**

NiCole R. Keith, FACSM1, Lauren R. Lemble2, Erik A. Imel3. 1Indiana University Purdue University, Indianapolis, Indianapolis, IN. 2Regenstrief Institute, Incorporated, Indianapolis, IN. 3Indiana University School of Medicine, Indianapolis, IN

Email: nkeith@iupui.edu

(No relevant relationships reported)

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**Board #317**

**Making Strides Towards Health: Expanding Physician-led Walking Groups In The Community**

Alexa Namba, Adeola Awodele, Cherie Conley, Sarah McMahon, Jaehan Yi, Amy Zhao, Janet Bettger. Duke University, Durham, NC

Email: alexa.namba@duke.edu

(No relevant relationships reported)

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**Board #318**

**Translating Physical Activity Evidence into Exercise Medicine the Moving Medicine Project, UK**

Kush Joshi1, Natasha Jones2, Hamish Reid1, Ralph Smith1, Rebecca Robinson1. 1Homerton University Hospital, London, United Kingdom. 2Oxford University Hospitals, Oxford, United Kingdom. 3Sheffield University Hospitals, Sheffield, United Kingdom. (Sponsor: Kathryn Schmitz, FACSM)

(No relevant relationships reported)

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**Board #319**

**Tennis Players Enjoy Better General, Physical, Social and Mental Health: A Survey of 10,380 United States Tennis Association Leagues Players Using Norm-Based SF-36 Scores**

Jared C. Tishelman, Daniel Bu, James Gladstone, Alexis Colvin. Icahn School of Medicine at Mount Sinai, New York, NY

(No relevant relationships reported)
In patients with exercise limitations, determining what constitutes an abnormal response relies on understanding the range of normal physiological response to exercise. An individual’s age, sex, ethnicity and level of fitness may influence the “normal” response to exercise. In this seminar we will explore the interplay between age, sex and training. We hope to provide a framework for discussion and highlight advances in the understanding of “normal” response to exercise in order to inform exercise testing as a means to determine the cause of a patient’s symptoms during activity.

**B-01** Highlighted Symposium - The Wheat from the Chaff: Recent Developments in Understanding Normal and Abnormal Cardiovascular and Pulmonary Exercise Physiology

*Wednesday, May 29, 2019, 1:00 PM - 3:00 PM*

**Room:** CC-Valencia B

Chair: John Granton, University of Toronto, Toronto, ON, Canada

**487 1:00 PM - 1:05 PM**

*What is Normal? Cardio-Pulmonary Hemodynamics at Rest and During Exercise in Healthy Older Subjects*

Stephen Wright, Sinai Health System, Toronto, ON, Canada

**488 1:05 PM - 1:30 PM**

*Studying the Abnormal by Understanding the Normal*

Susanna Mak, Sinai Health System, University of Toronto, Toronto, ON, Canada

**489 1:30 PM - 1:55 PM**

*Potential Sex Differences in Lung Mechanics*

Yannick Molgat-Seon, University of British Columbia, Vancouver, BC, Canada

**490 1:55 PM - 2:20 PM**

*What is Supranormal - Adaptation of Cardiovascular Physiology to Elite Performance?*

Benjamin D. Levine, FACSM, Presbyterian Hospital, The University of TX SW Medical Center, Dallas, TX

**491 2:20 PM - 2:45 PM**

*Studying the Abnormal by Understanding the Normal*

Susanna Mak, Sinai Health System, University of Toronto, Toronto, ON, Canada

**492 2:45 PM - 3:00 PM**

*Overall Discussion*

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**B-02** Symposium - DIVA (Dance, Instrumentalist, Vocalist, Actor) - Exploring the World of Performing Arts Medicine

*Wednesday, May 29, 2019, 1:00 PM - 3:00 PM*

**Room:** CC-300

Chair: Randall Dick, FACSM. Athletes and the Arts, Carmel, IN

(No relevant relationships reported)

1:00 PM - 1:10 PM

1:10 PM - 1:30 PM

1:30 PM - 1:55 PM

The Marching Arts (Drum Corp) Athlete

Steve Rock, Medical Associates Clinic, Dubuque, IA

(No relevant relationships reported)

Pain in the Performing Arts Population

Bronwen J. Ackermann, University of Sydney, Sydney, Australia

(No relevant relationships reported)

Pain in the Performing Arts Population

Sang Hie Lee, University of South Florida School of Music, Tampa, FL

(No relevant relationships reported)

P36 Final Program
The “anaerobic threshold” concept arose from Karl Wasserman’s intention to develop procedures for early detection of heart disease. The presumed mechanism for an abrupt increase in blood lactate concentration with increasing work intensity was a lack of oxygen in the exercising muscles. This explanation has been superseded by oxygen-independent hypotheses. Nevertheless, the noninvasive gas exchange threshold remains current and is widely used both clinically and in sports science. Objectives of this symposium are to present the following: 1) modern uses and limitations of the gas exchange threshold, 2) different exercise thresholds and the potential mechanisms behind them, 3) the role of oxygen in lactate metabolism, and 4) a state-of-the-art view of whole body lactate metabolism. This symposium will appeal to a broad audience from basic scientists to those with applied interests.

**B-04 Symposium - The “Anaerobic Threshold”: 50+ Years of Controversy**

**Wednesday, May 29, 2019, 1:00 PM - 3:00 PM**

**Room: CC-Valencia A**

The overall aim of this symposia will be to discuss the role of aerobic exercise facilitating neurological function and rehabilitation in individuals with neurological diseases and disorders. Presenters will provide a background of animal and human studies and the proposed mechanism by which aerobic exercise enhances function in Parkinson’s disease, stroke, and other neurological populations. The scientific background, rationale, and results from clinical trials evaluating the efficacy of aerobic exercise in PD and stroke will be presented; specifically results from a NIH sponsored randomized controlled trial, Cyclical Lower-extremity Exercise (CYCLE) Trial for Parkinson’s disease in which the two modes of aerobic exercise, voluntary and forced, were evaluated and an AHA sponsored clinical trial, Heart-Brain Retraining, in which aerobic exercise was evaluated in the facilitation of motor reluming post stroke. The clinical strategy of implementing an aerobic exercise into neurological therapy program will be discussed, along with integration into community settings.

**B-05 Exercise is Medicine® - Symposium - The Role of Aerobic Exercise in Facilitating Neurological Function and Rehabilitation**

**Wednesday, May 29, 2019, 1:00 PM - 3:00 PM**

**Room: Hotel-Grand Ballroom A**

Habitual physical activity and regular exercise training are known to improve cardiovascular health and longevity. Therefore, a physically active lifestyle is a key aspect of primary and secondary prevention strategies. An appropriate dose, type and intensity are essential to maximally benefit from a physically active lifestyle. The goals of this symposium are to I) explore the minimal effective dose of exercise to yield (cardiovascular) health benefits, II) compare the health effects of aerobic versus resistance exercise, III) compare cardiovascular health benefits of moderate- versus high-intensity exercise training, and IV) discuss whether you can exercise too much.
B-07 Thematic Poster - Blood Flow

**Wednesday, May 29, 2019, 1:00 PM - 3:00 PM**

**Room:** CC-101

### Board #1

**1:00 PM - 3:00 PM**

**Imaging Transcranial Doppler: A Novel Approach to Assess Cerebral Blood Flow**

- Catherine L. Jarrett1, Katherine L. Shields1, Ryan M. Broxterman1, Soung Hun Park1, Jason R. Gifford2, Russell S. Richardson1
- 1University of Utah, Salt Lake City, UT. 2Brigham Young University, Provo, UT

**Chair:** Kyna E. Pyke, Queen’s University, Kingston, ON, Canada

**Email:** catherine.jarrett@utah.edu

(No relevant relationships reported)

### Board #2

**1:00 PM - 3:00 PM**

**Arm Circumference As A Method To Standardize The Practical Blood Flow Restriction Pressure**

- Scott J. Dankel1, J Grant Mouser2, Takashi Abe1, Zachary W. Bell1, Samuel L. Buckner3, Kevin T. Mattocks4, Matthew B. Jessee5
- 1University of Delaware, Newark, DE. 2Rutgers University, Newark, NJ. 3The University of South Florida, Tampa, FL. 4Lindenwood University-Belleville, Belleville, IL. 5University of Southern Mississippi, Hattiesburg, MS

**Chair:** Erik Hanson1, Daniel P. Credeur3, Lee Stoner, FACSM1

**Email:** bzhang@tsinghua.edu.cn

(No relevant relationships reported)

### Board #3

**1:00 PM - 3:00 PM**

**Exercise Intensity and Middle Cerebral Artery Dynamics in Humans**

- Emily Witte1, Yumei Liu1, Jaimie L. Ward1, Katie S. Kempf1, Alcien Whitaker1, Eric D. Vidoni2, Jesse C. Craig3, David C. Poole, FACSM3
- 1University of Delaware, Newark, DE. 2Rutgers University, Newark, NJ. 3University at Buffalo, Buffalo, NY.

**Chair:** Scott Montain, FACSM, USARIEM, Natick, MA

**Email:** jslysz@uoguelph.ca

(No relevant relationships reported)

### Board #4

**1:00 PM - 3:00 PM**

**The Influence of a High Sodium Meal on Cerebrovascular Reactivity**

- Kamila U. Migdal1, Austin T. Robinson1, Joseph C. Watso1, Matthew C. Babcock1, Jorge M. Serrador2, William B. Farquhar, FACSM3
- 1University of Delaware, Newark, DE. 2University of Kansas Alzheimer's Disease Center, Fairway, KS. 3Kansas State University, Manhattan, KS

**Chair:** Kyna E. Pyke, Queen’s University, Kingston, ON, Canada

**Email:** bsaco@leeds.ac.uk

(No relevant relationships reported)

### Board #5

**1:00 PM - 3:00 PM**

**The Effects of Prolonged Sitting on Cerebral Perfusion and Executive Function**

- Jade Blackwell1, Quentin Willey1, Bill Evans1, Katie Bunet1, Erik Hanson1, Daniel Credere3, Lee Stoner, FACSM1
- 1University of North Carolina, Chapel Hill, Chapel Hill, NC. 2University of Maryland, College Park, MD. 3University of Southern Mississippi, Hattiesburg, MS

**Chair:** Abigail L. Cook, Gemma K. Lyall, Karen M. Birch, FACSM

**Sponsor:** Karen M. Birch, FACSM

**Email:** bsaco@leeds.ac.uk

(No relevant relationships reported)
American College of Sports Medicine

Wednesday, May 29, 2019, 1:00 PM - 3:00 PM

**Board #4** 1:00 PM - 3:00 PM

Continuous Forearm Cooling Attenuates Increase in Core Temperature of Elite Cyclists under Heat Stress

Eric T. Hedge, Katharyn A. Zuj, Alexander G. Stothart, Erica H. Gavel, Len S. Goodman, Sean D. Peterson. *University of Waterloo, Waterloo, ON, Canada. 2University of Toronto, Toronto, ON, Canada. 3Defence Research and Development Canada - Toronto Research Centre, Toronto, ON, Canada*

Email: ehdgel@uwaterloo.ca

(No relevant relationships reported)

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**Board #5** 1:00 PM - 3:00 PM

Influence of Face and Head Cooling on Thermoregulation and Perception During Simulated American Football

Daniel A. Judelson, FACSM, Mitchell Naughton, Christopher J. Tyler. *1Nike, Inc., Beaverton, OR. 2University of Roehampton, London, United Kingdom*

Email: dan.judelson@nike.com

(No relevant relationships reported)

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**Board #6** 1:00 PM - 3:00 PM

Precooling’s Effects on American Football Skills

Libby Bradley, Kevin Miller, Brian Weise, Jason Novak. *Central Michigan University, Mount Pleasant, MI*

Email: brad11j@cmich.edu

(No relevant relationships reported)

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**Board #7** 1:00 PM - 3:00 PM

An Ice Vest Limits the Rise in Core Temperature During a Rugby Sevens Warm-up

Lee Taylor, FACSM; Christopher J. Stevens, Heidi R. Thornton, Nick Poulo, Bryna CB Christmas. *1Aspetar – Orthopaedic and Sports Medicine Hospital, Doha, Qatar. 2Southern Cross University, Coffs Harbour, Australia. 3Newcastle Knights Rugby League Club, Newcastle, Australia. 4Australian Rugby Union (ARU), Sydney, Australia. 5Qatar University, Doha, Qatar*

Email: lee.taylor@aspetar.com

(No relevant relationships reported)

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**Board #8** 1:00 PM - 3:00 PM

*Thematic Poster - Ergogenic Aids*

*Wednesday, May 29, 2019, 1:00 PM - 3:00 PM*

**Room:** CC-102A

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**Board #9** 1:00 PM - 3:00 PM

Omega-3 Supplementation Does Not Impair Torque and Power Improvements Following 8 Weeks Eccentric Quadriceps Training

Lynsey S. James, David J. Hunter, Beth Hussey, Glenda Anderson, Sarabajt S. Mastana, Martin R. Lindley. *Loughborough University, Loughborough, United Kingdom*

Email: l.wilson2@lboro.ac.uk

(No relevant relationships reported)

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**Board #10** 1:00 PM - 3:00 PM

The Effects of Two Multi-Ingredient Pre-Workout Supplements on Endurance Capacity and Anaerobic Cycling Performance

Meaghan E. Beckner, Brian J. Martin, Alexis A. Pihoker, Matthew E. Dannell, Alicia L. Kjellgren, Paul J. Arciero, FACSM, Mita T. Lovalekar, Kim Beals, Shawn D. Flanagan, Bradley C. Nindl, FACSM. *1University of Pittsburgh, Pittsburgh, PA. 2Skidmore College, Saratoga, NY*

Email: meh115@pitt.edu

Reported Relationships: M.E. Beckner: Industry contracted research. Isagenix International LLC.

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**Board #3** 1:00 PM - 3:00 PM

Acute Capsaicin Supplementation Improves 400 and 3000 Meters Running Time-trial Performance in a Distance-dependent Way

Valeria L G Panissa, Lázaro F A Da Costa, Alcione De Sáê, Marcelo C. De Freitas, Fabricio E. Rossi. *1University of São Paulo, São Paulo, Brazil. 2Federal University of Piauí, Teresina, Brazil. 3University of Western of São Paulo, Presidente Prudente, Brazil*

Email: valeriapanissa@gmail.com

(No relevant relationships reported)

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**Board #4** 1:00 PM - 3:00 PM

Acute Supplementation with Caffeine Improves Strength and Increases Metabolic Stress After a Maximal Strength Test

Luis H. Boiko Ferreira, Andre C. Smolarek, Steven R. McAmury, Brad J. Schoenfeld, Alan A. Aragon, Alan C. Utter, FACSM, Tácito P. Souza-Junior. *1Universidade Federal do Paraná, Bauru, Brazil. 2Appalachian State University, Boone, NC. 3CUNY Lehman College, Bronx, NY. 4California State University, Northridge, CA. 5Texas Woman's University, Denton, TX. Sponsor: Alan C. Utter, FACSM*

Email: libhboikoferreira@gmail.com

(No relevant relationships reported)

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**Board #7** 1:00 PM - 3:00 PM

Potato Ingestion as an Effective Race Fuel to Improve Cycling Performance in Trained Cyclists

Amadeo F. Salvador, Colleen F. McKenna, Susanah Scaroni, Rafael A. Alamilla, Isabel G. Martinez, Ryan Cloud, Adriana Miliko, Alex Keeble, Alexander V. Ulanov, Scott Paluska, FACSM, Elizabeth Broad, Nicholas A. Burd. *1University of Illinois at Urbana-Champaign, Urbana, IL. 2US Olympic Committee, Chula Vista, CA. Sponsor: Scott A. Paluska, FACSM*

Email: amadeos2@illinois.edu

(No relevant relationships reported)

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**Board #8** 1:00 PM - 3:00 PM

Post-exercise And Pre-sleep Protein-polyphenol Supplementation Improves Recovery Following Muscle-damaging Eccentric Exercise: Preliminary Findings

Tom S. O. Jameson, George F. Pavis, MariLou L. Diks, Benjamin T. Wolf, Catherine Mikus, Niina Alamdar, Francis B. Stephens. *1University of Exeter, Exeter, United Kingdom. 2Beachbody LLC, Santa Monica, CA*

Email: t.jameson@exeter.ac.uk

(No relevant relationships reported)

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**Board #10** 1:00 PM - 3:00 PM

Thematic Poster - Hormones and Obesity

*Wednesday, May 29, 2019, 1:00 PM - 3:00 PM*

**Room:** CC-102B

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**Board #1** 1:00 PM - 3:00 PM

**Board #2** 1:00 PM - 3:00 PM

**Board #3** 1:00 PM - 3:00 PM

**Board #4** 1:00 PM - 3:00 PM

**Board #5** 1:00 PM - 3:00 PM

**Board #6** 1:00 PM - 3:00 PM

**Board #7** 1:00 PM - 3:00 PM

**Board #8** 1:00 PM - 3:00 PM

**Board #9** 1:00 PM - 3:00 PM

**Board #10** 1:00 PM - 3:00 PM

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**www.acsm.org**
**Board #1**  
**1:00 PM - 3:00 PM**  
*Post Meal Hypoglycemia With and Without Exercise in Non-Obese and Obese Individuals.*  
Jay W. Porter¹, Ryan Pettit-Mee¹, Sean Ready¹, Nathan C. Winn PhD¹, Anand Chockalingam MD², Guido Lastra Gonzalez MD², Jill A. Kanaley PhD, FACSM³. ¹University of Missouri, Columbia, MO. ²University of Missouri School of Medicine, Columbia, MO. ³Sponsor: Jill A Kanaley, FACSM  
Email: jopp64@mail.missouri.edu  
(No relevant relationships reported)

**Board #2**  
**1:00 PM - 3:00 PM**  
*Population And Sex Differences In The Associations Between Igf-1, Protein Consumption, And Lean Mass*  
Lee Weidauer, Tianna Beare, Teresa Binkley, Maggie Minett, Bouny Specker. South Dakota State University, Brookings, SD.  
(Sponsor: Dr. Matthew Vukovich, FACSM)  
Email: lee.weidauer@sdsstate.edu  
(No relevant relationships reported)

**Board #3**  
**1:00 PM - 3:00 PM**  
*Changes in Metabolic Hormones and Their Associations With Cancer-Related Fatigue in Cancer Survivors*  
Po-Ju Lin¹, Michelle C. Janelisins², Eva Culakova¹, Julia E. Inglis¹, Ian R. Kleckner¹, Luke J. Peppone¹, Charles E. Heckler¹, Laura J. P. Feldman¹, Joan Long³, Jeremy Deutsch⁴, Karen M. Mustian¹. ¹University of Rochester Medical Center, Rochester, NY. ²Metro Minnesota Community Oncology Research Consortium, St. Louis Park, MN. ³Cancer Research Consortium of West Michigan NCORP, Grand Rapids, MI. ⁴Wichita NCORP, Wichita, KS  
Email: po-ju_lin@urmc.rochester.edu  
(No relevant relationships reported)

**Board #4**  
**1:00 PM - 3:00 PM**  
*Improved Immune Profile Accompanying Increased Fitness Following an Exercise Intervention Among Overweight Older Women*  
Emily C. LaVoy¹, Mahmoud T. Elzayat¹, Maria Cardenas², Michael M. Levitt¹, Carmen A. Cook¹, Melody D. Phillips, FACSM³. ¹University of Houston, Houston, TX. ²Emory University, Atlanta, GA. ³Texas Christian University, Fort Worth, TX  
Email: elavoy@uh.edu  
(No relevant relationships reported)

**Board #5**  
**1:00 PM - 3:00 PM**  
*Obesity, Physical Activity, And Sedentary Behavior, Not Diet, Predict Low Testosterone Status in Men*  
Trevor J. Dufner¹, John S. Fitzgerald¹, James N. Roemmich, FACSM², Patrick B. Wilson³. ¹University of North Dakota, Grand Forks, ND. ²USDA, Grand Forks, ND. ³Grand Forks Human Nutrition Research Center, USDA, Grand Forks, ND.  
(Sponsor: James N Roemmich, FACSM)  
Email: trevorj.dufner@und.edu  
(No relevant relationships reported)

**Board #6**  
**1:00 PM - 3:00 PM**  
*Energy Availability is Predictive of LH Pulse Frequency Across a 3-month Diet and Exercise Trial*  
Kristen J. Koltun, Mary Jane De Souza, FACSM, Nancy I. Williams, FACSM. Penn State University, University Park, PA  
(No relevant relationships reported)

**Free Communication/Slide - Resistance Training**  
**Wednesday, May 29, 2019, 1:00 PM - 3:00 PM**  
**Room: CC-202C**  
**Chair:** Kevin R. Ford, FACSM. High Point University, High Point, NC  
(No relevant relationships reported)
B-12  Free Communication/Slide - Skeletal Muscle Basic Science

Wednesday, May 29, 2019, 1:00 PM - 3:00 PM
Room: CC-308

559  1:00 PM - 3:00 PM
Chair: Graham R. McGinnis. University of Las Vegas Nevada, NV
(No relevant relationships reported)

560  1:00 PM - 1:15 PM
Sites of Disruption in Dystrophic Muscle Following Eccentric Contractions
Cory W. Baumann1, Gordon L. Warren, FACSM, Dawn A. Lowe, FACSM. 1University of Minnesota, Minneapolis, MN. 2Georgia State University, Atlanta, GA
Email: cbaumann@umn.edu
(No relevant relationships reported)

561  1:15 PM - 1:30 PM
The Effects of High Intensity Interval Training on Autophagy in Soleus Muscle of Rats
Xiwen Cui1, Yiming Zhang2, Zan Wang2, Jingjie Yu2. 1China Institute of Sport Science, Beijing, China. 2Beijing Sport University, Beijing, China
Email: cuixinwenbsu@qq.com
(No relevant relationships reported)

562  1:30 PM - 1:45 PM
Bovine Milk Exosome Depletion Affects Skeletal Muscle and Liver in Young Growing Rats
Hailey A. Partyl, C. Brooks Mobley1, Petey W. Mumford, Matthew A. Romero1, Yufeng Zhang1, Janos Zempleni1, John J. McCarthy, FACSM1, Kaelin C. Young2, Michael D. Roberts1, Andreas N. Kavazis, FACSM1. 1Auburn University, Auburn, AL. 2University of Nebraska-Lincoln, Lincoln, NE. 3University of Kentucky College of Medicine, Lexington, KY. 4Edward Via College of Osteopathic Medicine-Auburn Campus, Auburn, AL. (Sponsor: Andreas N Kavazis, FACSM)
Email: hap0017@auburn.edu
(No relevant relationships reported)

563  1:45 PM - 2:00 PM
Resolvin E1 Attenuates Inflammatory Induced Muscle Atrophy In Human Derived Muscle Cells
Martin R. Lindley1, Luke Baker2, Neil Martin1, Gareth Pritchard1, Marc Kimber1, Jiani Qian1, Mark P. Lewis1. 1Loughborough, Loughborough, United Kingdom. 2University of Leicester, Leicester, United Kingdom
Email: m.r.lindley@lboro.ac.uk
(No relevant relationships reported)

564  2:00 PM - 2:15 PM
Concurrent Exercise of the Arm Extensors Modulates Anabolic Signaling and Gene Expression for Ribosome Biogenesis
Tommy R. Lundberg1, Björn Hasson1, Luke A. Olsen2, Ferdinand von Walden1, Rodrigo Fernandez-Gonzalo1. 1Karolinska Institutet, Stockholm, Sweden. 2University of Kansas Medical Center, Kansas City, KS
Email: tommy.lundberg@ki.se
(No relevant relationships reported)

565  2:15 PM - 2:30 PM
The Skeletal Muscle Transcriptome Signature of 84-day Bed Rest and its Reversal by Resistance Exercise
Rodrigo Fernandez-Gonzalo, Per A. Tesch, Tommy R. Lundberg, Eric Rullman, Thomas Gustafsson. Karolinska Institutet, Stockholm, Sweden
Email: rodrigo.gonzalo@ki.se
(No relevant relationships reported)

566  2:30 PM - 2:45 PM
Lifelong Deficiency in Ulk1-Mediated Autophagy Precipitates Skeletal Muscle Aging
Anna S. Nienkjaer1, William Michael Southern2, Grant Mercer1, Sarah M. Greising2, Jarrod A. Call1. 1University of Georgia, Athens, GA. 2University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

567  2:45 PM - 3:00 PM
A Crtc2/Creb1-mediated Molecular Mechanism for the Beneficial Effects of Exercise on Weight Loss
Nelson E. Bruno. The Scripps Research Institute, Jupiter, FL
Email: nbruno@scripps.edu
(No relevant relationships reported)

B-13  Free Communication/Slide - Testing and Measurement

Wednesday, May 29, 2019, 1:00 PM - 3:00 PM
Room: CC-105B

568  1:00 PM - 3:00 PM
Chair: Kimberly Reich. High Point University, Burlington, NC
(No relevant relationships reported)

569  1:00 PM - 1:15 PM
Accuracy of the Cosmed K5 Portable Metabolic System
Scott E. Crouter, FACSM1, Samuel R. LaMunion1, Paul R. Hibbing1, Andrew S. Kaplan1, Michael E. Quarrantillo1, David R. Bassett, Jr, FACSM1. 1The University of Tennessee Knoxville, Knoxville, TN. 2University of Wisconsin-Milwaukee, Milwaukee, WI
Email: scrouter@utk.edu
(No relevant relationships reported)

570  1:15 PM - 1:30 PM
Agreement between Deuterium Oxide and Bioimpedance Spectroscopy Measures of Total Body Water
Zackary Cicone1, Clifton Holmes1, Bjorn Hornikel1, Todd Freeborn1, Jordan Moon1, Michael Fedewa1, Michael Esco, FACSM1. 1University of Alabama, Tuscaloosa, AL. 2Impedimed, Inc, Carpichael, CA. (Sponsor: Michael R. Esco, FACSM)
Email: zcicone@crimson.ua.edu

571  1:30 PM - 1:45 PM
Exercise Testing Protocol Matters: Sub-maximal and Maximal Measures Before and After Marathon Training
Christopher J. Lundstrom, Emma J. Lee. 1University of Missouri, Kansas City, MO. 2University of Missouri-Kansas City, Kansas City, MO. (Sponsor: Thomas R. Allison, FACSM)
Email: land9082@ummu.edu
(No relevant relationships reported)

572  1:45 PM - 2:00 PM
The Exercise Response In Blood Flow Restriction Training Varies As A Function Of Cuff Type
Johanna Vogel, Jan Wilke, Lutz Vogt, Winfried Banzer, FACSM. 1Institute of Sports Sciences, Frankfurt, Germany. (Sponsor: Winfried Banzer, FACSM)
Email: johvogel@em.uni-frankfurt.de
(No relevant relationships reported)

573  2:00 PM - 2:15 PM
Influence of Testing Sequence on an Adult’s Ability to Achieve Maximal Aerobic and Anaerobic Power
Email: lund0982@umn.edu
(No relevant relationships reported)
B-14 Clinical Case Slide - Oncology
Wednesday, May 29, 2019, 1:00 PM - 3:00 PM
Room: CC-304E

577 1:00 PM - 3:00 PM
Chair: Holly Benjamin, FACSM. University of Chicago, Chicago, IL.
(No relevant relationships reported)

578 1:00 PM - 3:00 PM
Discussant: Allison Betof Warner. Memorial Sloan Kettering Cancer Center, New York, NY
(No relevant relationships reported)

579 1:00 PM - 3:00 PM
Discussant: Jason L. Blackham. Intermountain Healthcare, Ogden, UT
(No relevant relationships reported)

580 1:00 PM - 1:20 PM
Decreased Movement Of Right Arm In A Non-verbal Child
Eric M. Bankert, Scott Annett, Vicki R. Nelson. Steadman Hawkins Clinic of the Carolinas, Greenville Health System, Greenville, SC.
(Sponsor: Kyle J. Cassas, FACSM)
Email: E.Bankert@ghs.org
(No relevant relationships reported)

581 1:20 PM - 1:40 PM
The Use Of Individualized Exercise Prescription To Target Oxidative Metabolism In A Stage Iv Colorectal, Metastatic Cancer Patient
Inigo San-Millan. University of Colorado School of Medicine, Aurora, CO
Email: inamillan@gmail.com
(No relevant relationships reported)

582 1:40 PM - 2:00 PM
Hand Mass in an Active Military Personnel
Benjamin Tan, Daniel Montero. Mayo Clinic Hospital, Jacksonville, FL.
(Sponsor: George Pujalte, FACSM)
(No relevant relationships reported)

583 2:00 PM - 2:20 PM
A Pheochromocytoma in an Elite Collegiate Athlete
Pierre L. Viviers, FACSM, Craig Thompson, Glen Hagemeur, Wayne Derman.
(No relevant relationships reported)

584 2:20 PM - 2:40 PM
Anaplastic Oligodendroglioma: Impacts Of Aerobic And Flexibility Training On Physiological, Psychosocial, And Cognitive Function
Brent M. Peterson, Alyse P. Brennecke, Daniel Y.K. Shackelford, Jessica M. Brown, Reid Hayward.
(No relevant relationships reported)

585 2:40 PM - 3:00 PM
Stomach Cancer - Physical and Functional Tests
Email: brent.peterson@biola.edu
(No relevant relationships reported)

586 1:00 PM - 3:00 PM
Chair: Cheri Blauwet. Harvard Medical School, Boston, MA
(No relevant relationships reported)

587 1:00 PM - 3:00 PM
Discussant: Dennis Khalili-Borna, FACSM. Kaiser Permanente, Fontana, CA
(No relevant relationships reported)

588 1:00 PM - 3:00 PM
Discussant: Medic M. Hall. University of Iowa Sports Medicine, Iowa City, IA
(No relevant relationships reported)

589 1:00 PM - 1:20 PM
Severe Shoulder Pain in a Healthy Adolescent Child
Ashkan Alkhamis, M.D., J. Parker Chapman, M.D., Laurel Blakemore, M.D., Jason Zaremski, M.D., FACSM. University of Florida, Gainesville, FL
Email: ashkanalkhamis@uff.edu
(No relevant relationships reported)

590 1:20 PM - 1:40 PM
Treatment of Neurogenic Thoracic Outlet Syndrome in a Professional Baseball Pitcher with Soft Tissue Technique
Jean-Paul Lucke. Rothman Orthopaedic Institute, Philadelphia, PA
Email: Jean-Paul.Lucke@rothmaninstitute.com
(No relevant relationships reported)

591 1:40 PM - 2:00 PM
Abnormal Anatomical Etiology and the Resultant Bilateral Thoracic Outlet Syndrome: An Exploration Case Report
Jennifer Rizzo, Brent M. Peterson, Concordia University Irvine, Irvine, CA.
(No relevant relationships reported)
Rapid Fire Platform - Physical Activity and Health in 2019: An Expansive Snapshot

1:00 PM - 2:20 PM
Chair: Geoffrey Whitfield. Centers for Disease Control and Prevention, Atlanta, GA
(No relevant relationships reported)

1:00 PM - 1:10 PM
10-year Trends In Americans Sedentary Behavior (Sitting), Tiago V. Barreira1, Deindre M. Harrington2, Ted W. Zderic3, John M. Schuna Jr4, 1Syracuse University, Syracuse, NY; 2University of Leicester, Leicester, United Kingdom; 3University of Houston, Houston, TX; 4Oregon State University, Corvallis, OR Email: tvbarrei@syr.edu
(No relevant relationships reported)

1:10 PM - 1:20 PM
Effects of an Acute Physical Activity Intervention on Classroom Behavior in Off-Task Preschoolers, Sarah Burkart, Christine W. St. Laurent, Sofiya Alhassan, FACSM. University of Massachusetts Amherst, Amherst, MA Email: shfburr13@gmail.com
(No relevant relationships reported)

1:20 PM - 1:30 PM
Improving Research Dissemination and Reach: Impact of a Daily Twitter Campaign in Exercise Oncology, Sarah Weller1, Kirstin Lane2, Logan Meyers1, Kristin L. Campbell, FACSM1, 1University of British Columbia, Vancouver, BC, Canada; 2University of Victoria, Victoria, BC, Canada. (Sponsor: Kristin L. Campbell, FACSM) Email: sarah.weller@ubc.ca
(No relevant relationships reported)

1:30 PM - 1:40 PM
Increasing Non-Exercise Physical Activity With Training Reduces Chance Of Non-Response To Exercise, Joshua E. McGee1, Damon L. Swift1, Nicole R. Gnievsk1, Patricia M. Brophy1, Chelsea A. Solar1, Joseph A. Houmard, FACSM1, Leslie D. Lutes2, 1East Carolina University, Greenville, NC; 2University of British Columbia, Kelowna, BC, Canada. (Sponsor: Joseph A. Houmard, FACSM) Email: mgcgeej16@students.ecu.edu
(No relevant relationships reported)

1:40 PM - 1:50 PM
Trainability Benefits Provide Answers To The Cardiorespiratory Fitness Deficit In Childhood Acute Lymphoblastic Leukemia Survivors, Maxime Caru1, Kateryna Petrykvey1, Maria Samoilenko1, Simon Drouin1, Valérie Lemay1, Laurence Kern2, Lucia Romo2, Patrick Beaulieu1, Pascal St-Onge1, Laurence Bertout1, Geneviève Lefebvre1, Caroline Leverdiere1, Gregor Andelfinger1, Maja Krajinovic1, Daniel Sinnett1, Daniel Curmi1, 1Saint-Joseph University Hospital, Montreal, QC, Canada; 2University of Paris Nanterre, Nanterre, France. 1University of Quebec in Montreal, Montreal, QC, Canada Email: maxime.caru@umontreal.ca
(No relevant relationships reported)

1:50 PM - 2:00 PM
Physical Activities in Northern Song Dynasty (906-1127), China: A Painting Analysis, Weimn Zhu, FACSM1, Shantian Wen2, Hai Yan3, 1University of Illinois at Urbana-Champaign, Urbana, IL; 2Huzhou University, Huzhou, China Email: weimzhux@uiuc.edu
(No relevant relationships reported)

2:00 PM - 2:10 PM
A Spring in Your Step: Exercise Training Increases Stretch-Shortening Cycle Potentiation and Walking Economy, Shannon L. Mathis1, Stephen J. Carter2, Harshvardhan Singh1, Gary R. Hunter, FACSM3, 1University of Alabama in Huntsville, Huntsville, AL; 2Indiana University Bloomington, Bloomington, IN; 3University of Alabama at Birmingham, Birmingham, AL. (Sponsor: Rebecca E. Hassan, FACSM) Email: shannon.mathis@uh.edu
(No relevant relationships reported)

2:10 PM - 2:20 PM
Differences in Sleep Quality and Adherence to Energy Intake and Physical Activity Recommendations during an 18-Month Behavioral Weight Loss Intervention, Seth A. Creasy, Danielle M. Ostendorf, Jill L. Kaar, Jaron Arbet, Laura Grau, Zhaoxing Pan, Holly R. Wyatt, Daniel H. Bessesen, Edward L. Melanson, FACSM, Victoria A. Catenucci, University of Colorado Denver, Aurora, CO. (Sponsor: Edward L. Melanson, FACSM) Email: seth.creasy@ucdenver.edu
(No relevant relationships reported)

Exchange Lecture - European College of Sport Science Exchange Lecture - Sport Eligibility and Classification in the Paralympic Games – Past, Present, Future

Wednesday, May 29, 2019, 1:00 PM - 1:50 PM
Room: CC-303

Challenging the interests of para-sport is the threat of one-sided and predictable competition, in which the athlete with minimal impairment always wins. To prevent this, para-athletes are placed in categories for competition based on the impact of impairment on performance; these are called sport classes. The International Paralympic Committee (IPC) Classification Code encourages para-sport governing bodies to develop evidence-based classification systems, determining which athletes are eligible to compete in a sport and how athletes are grouped together for competition. In this symposium two world experts will present the recent state of the art on this topic. Prof Walter Thompson will represent ACSM and will give an overview on “Who is eligible for the Paralympic Games and why are there so many classes?”. Prof Yves Vanlandewyck represents ECSS and will talk about “The IPC Classification Code and Position Stand on the Scientific Principles of Athlete Classification”.

Walter R. Thompson, FACSM. Georgia State University, Atlanta, GA
(No relevant relationships reported)

Yves Vanlandewyck. KU Leuven, Leuven, Belgium
(No relevant relationships reported)
Concussion diagnosis and treatment has become prominent within the sports medicine arena throughout the past decade. While much attention has been placed on male-dominated sports, female athletes are diagnosed at an alarming rate. Current evidence indicates that female athletes are more susceptible to concussive injuries and may have more severe courses of injury. This presentation will focus on female athletes (10-17 years) during the first 4 weeks following an initial concussion. A discussion on the susceptibility and severity of concussion among the genders will be explored. Multi-dimensional symptoms associated with concussion including the report of increased symptoms by female athletes will be identified. In this tutorial, clinicians/academics will discuss various diagnostic measures and rehabilitation interventions for adolescent female athletes following a concussion. The tutorial will focus on the first 4 weeks as they are crucial to the success of recovery.

606 M. Alyssa Mastrandelo, FACSM. Stockton University, Galloway, NJ (No relevant relationships reported)

607 Nicole T. Yedlinsky. University of Kansas Medical Center, Kansas City, KS (No relevant relationships reported)

B-21 Exercise is Medicine® - Tutorial Lecture - Exercise and Cancer: Clinical Endpoints Needed to Change Standard of Care

Wednesday, May 29, 2019, 1:00 PM - 1:50 PM
Room: Hotel-Grand Ballroom D

A growing body of research has shown exercise, as well as other lifestyle behaviors (e.g., maintaining a healthy weight) to be associated with a lower risk of cancer mortality, as well as fewer cancer treatment-related side effects. However, exercise prescriptions or referral to certified exercise programs are not yet a part of cancer care. Our tutorial will discuss the research to date showing the benefits of exercise and other lifestyle behaviors after a cancer diagnosis, with a specific focus on what clinical endpoints need to be included in exercise trials to change the standard of care received after a cancer diagnosis. Studies in progress with clinical endpoints, as well as different models of cancer survivorship programs, will also be discussed.

612 Melinda L. Irwin, FACSM. Yale University, New Haven, CT (No relevant relationships reported)

613 Tara Sanft. Yale University, New Haven, CT (No relevant relationships reported)

B-22 Tutorial Lecture - Exertional Compartment Syndrome: A Global Perspective

Wednesday, May 29, 2019, 2:10 PM - 3:00 PM
Room: CC-203

This tutorial lecture will present an international perspective from the USA to the Netherlands regarding the diagnosis and treatment and outcomes of exertional compartment syndrome.

614 Mark Hutchinson, FACSM. University of Illinois at Chicago, Chicago, IL (No relevant relationships reported)

615 Wes O. Zimmermann. Royal Netherlands Army, department of sports medicine, Utrecht, Netherlands (No relevant relationships reported)

B-23 Tutorial Lecture - Keeping Olympians Healthy and Performing: The Mental Game

Wednesday, May 29, 2019, 2:10 PM - 3:00 PM
Room: CC-303

Sport and physical activity have both physical and mental health benefits for participants. However, in recent years, athlete mental health has received increasing attention in sports medicine, through the publication of clinical overviews and empirical studies on this topic. Elite athletes have unique internal and external emotional pressures that may lead to an increased prevalence of mental health problems. An elite athlete’s “mental health” might be viewed as secondary to physical health; however, it is as important for healthy performance. Athletes with mental health problems should be considered injured and mental health problems may, by their severity, affect athletic performance and limit or preclude training and competition until successfully managed and treated. While sport psychiatry focuses on diagnosis and treatment of psychiatric illness in athletes in addition to utilization of psychological approaches to enhance performance, non-sport psychiatry clinicians often deliver psychiatric care to athletes without a full understanding of the diagnostic and therapeutic issues unique to this population. The responsibility for identifying and raising mental health concerns should not lie solely with doctors and psychologists but also with other practitioners such as nutritionists, physiologists, physiotherapists and coaches who should be better equipped to identify and act upon athlete mental health concerns. This symposium will focus attention on the prevention, recognition and management of mental health concerns in athletes to enable attendees to gain competence in these important areas of athlete health.

616 Margo Mountjoy, FACSM. McMaster University, IOC Medical Commission – Games Group, Hamilton, ON, Canada (No relevant relationships reported)

617 Jorunn Sundgot-Borgen, FACSM. The Norwegian School of Sport Sciences, Oslo, Norway (No relevant relationships reported)

618 Carla Edwards. McMaster University, Hamilton, ON, Canada (No relevant relationships reported)
One of the most challenging decisions regarding return to play involves cases where intracranial lesions are discovered. Congenital findings such as arachnoid cysts, post traumatic findings such as subdural hematomas or parenchymal contusions, or findings in patients who have suffered a cerebrovascular event challenge a healthcare provider to make the right decision about allowing the athlete to return to contact or collision sports. Via a clinical case format, an evidence and experience-based decision making process will be presented for these situations.

625  Stanley A. Herring, FACSM. University of Washington, Seattle, WA
   (No relevant relationships reported)
**ACSM 66th Annual Meeting**

**P46 Final Program**

**B-29 Symposium - CAQ Review Session (Part 1)**

**Wednesday, May 29, 2019, 3:15 PM - 5:15 PM**

**Room: CC-305**

The CAQ review sessions are an ongoing series of symposia developed in conjunction with the American Medical Society for Sports Medicine and presented at both the ACSM and AMSSM Annual Meetings, presented by content experts, that are designed to provide, over several years, a comprehensive review for the Primary Care Sports Medicine CAQ exam.

<table>
<thead>
<tr>
<th>635</th>
<th>3:15 PM - 3:20 PM</th>
<th>Chair: Kevin R. Vincent, FACSM. University of Florida, Gainesville, FL</th>
<th>(No relevant relationships reported)</th>
</tr>
</thead>
<tbody>
<tr>
<td>636</td>
<td>3:20 PM - 3:40 PM</td>
<td><strong>Cold Environment Related Injuries</strong></td>
<td>William O. Roberts, FACSM. University of Minnesota, St Paul, MN</td>
</tr>
<tr>
<td>637</td>
<td>3:40 PM - 4:00 PM</td>
<td><strong>Heat Environment Related Injuries</strong></td>
<td>Brian J. Krabak, FACSM. University of Washington, Seattle, WA</td>
</tr>
<tr>
<td>638</td>
<td>4:00 PM - 4:20 PM</td>
<td><strong>Physical Therapy Rehabilitation Prescriptions</strong></td>
<td>Ashley Zapf, University of Texas, Austin, TX</td>
</tr>
<tr>
<td>639</td>
<td>4:20 PM - 4:40 PM</td>
<td><strong>Ultrasound Pearls</strong></td>
<td>Mederic M. Hall, University of Iowa Sports Medicine Center, Iowa City, IA</td>
</tr>
<tr>
<td>640</td>
<td>4:40 PM - 5:00 PM</td>
<td><strong>Nutrition</strong></td>
<td>Heather K. Vincent, FACSM. University of Florida, Gainesville, FL</td>
</tr>
</tbody>
</table>

**Overall Discussion**

**B-30 Symposium - Identifying Molecular Targets to Attenuate Muscle Fatigue**

**Wednesday, May 29, 2019, 3:15 PM - 5:15 PM**

**Room: CC-304B**

This session will highlight how mechanistic insights into muscle fatigue are being exploited to identify molecular approaches to attenuate fatigue in clinical populations.

<table>
<thead>
<tr>
<th>641</th>
<th>3:15 PM - 3:20 PM</th>
<th>Chair: Edward P. Debold. University of Massachusetts Amherst, Amherst, MA</th>
<th>(No relevant relationships reported)</th>
</tr>
</thead>
<tbody>
<tr>
<td>642</td>
<td>3:20 PM - 3:45 PM</td>
<td><strong>How Fatigue Affects Myosin’s Function and Can it be Reversed?</strong></td>
<td>Edward Debold. University of Massachusetts Amherst, Amherst, MA</td>
</tr>
<tr>
<td>643</td>
<td>3:45 PM - 4:10 PM</td>
<td><strong>Pharmaceutical Approaches to Attenuate Muscle Weakness and Fatigue in Neuromuscular Diseases</strong></td>
<td>Eva Chin. Cytotherapeutics, Inc., South San Francisco, CA</td>
</tr>
<tr>
<td>644</td>
<td>4:10 PM - 5:35 PM</td>
<td><strong>Approaches to Lessen Fatigue in the Elderly</strong></td>
<td>Gweneael Layec. University of Massachusetts Amherst, Amherst, MA</td>
</tr>
</tbody>
</table>

**B-31 Symposium - Is it Over-training or Under-recovering? Physiological, Nutritional and Medical Aspects to Consider**

**Wednesday, May 29, 2019, 3:15 PM - 5:15 PM**

**Room: CC-Valencia B**

Over-training syndrome (OTS) is one of the most mis-understood and elusive concepts in elite athlete preparation. The etiology of OTS is multifactorial but key features include long-term underperformance and the classic elements of chronic under-recovery and maladaptation. This session explores the concept of over-training versus under-recovery from a multi-disciplinary perspective, including including physiology, nutrition, immunology and sports medicine. Current views on implementing and assessing training load, fatigue and recovery monitoring, and medical/health aspects associated with over-training/under-recovery will be shared. Various recovery interventions such as training recovery cycles, sleep, nutrition and precautionary approaches to body composition manipulation and indiscriminate use of sleep aids and various ergogenic aids/stimulants, will also be covered.

| 645 | 4:35 PM - 5:00 PM | **The Role of the CNS in Fatigue** | Markus Amann. University of Utah, Salt Lake City, UT | (No relevant relationships reported) |
| 646 | 3:15 PM - 3:20 PM | **How Caffeine May Impact Performance, Sleep and Recovery: Unraveling Interindividual Variability** | Nanci Guest. University of Toronto, Toronto, ON, Canada | (No relevant relationships reported) |
| 647 | 3:20 PM - 3:45 PM | **A Physiologists Approach to Under-recovery/Over-training** | Trent Stellingwerff, FACSM. Canadian Sport Institute -Pacific, Victoria, BC, Canada | (No relevant relationships reported) |
| 648 | 3:45 PM - 4:10 PM | **How Caffeine May Impact Performance, Sleep and Recovery: Unraveling Interindividual Variability** | Nanci Guest. University of Toronto, Toronto, ON, Canada | (No relevant relationships reported) |
| 649 | 4:10 PM - 4:35 PM | **How Caffeine May Impact Performance, Sleep and Recovery: Unraveling Interindividual Variability** | Nanci Guest. University of Toronto, Toronto, ON, Canada | (No relevant relationships reported) |

**B-32 Symposium - Medical Care at Mass Community-Based Cycling Events – Making Cycling SAFER**

**Wednesday, May 29, 2019, 3:15 PM - 5:15 PM**

**Room: CC-300**

Recreational cycling is a growing sport and participation numbers in mass community-based cycling events are also increasing. These events attract thousands of recreational cyclists and events are typically on a single-day or in stages over a number of days. The profile of the participants is also changing, attracting more older cyclists and female cyclists. The medical care that is provided at these events is important but can be challenging. The incidence of medical encounters has not been well studied, and the nature of medical encounters varies from acute injuries to medical complications affecting many organ systems and can range in severity from minor to severe life-threatening (including death). This symposium will focus on the available data on medical encounters at these mass community-based cycling events, give participants
The healthy pulmonary circulation is a low-pressure high-flow system. However, ageing and/or cardiovascular disease (e.g., heart failure) are associated with elevations in pulmonary vascular pressures that are exacerbated during exercise when pulmonary arterial driving pressure is increased to facilitate distension and recruitment of under-perfused pulmonary capillaries. Such increases in pulmonary arterial pressure represent a substantial increase in right ventricular (RV) afterload, which can limit RV contractile reserve and cause exercise-induced RV dysfunction in heart failure and even in healthy individuals if the exercise is sufficiently intense and prolonged. This symposium will highlight the RV-pulmonary vascular unit as an important barometer of cardiovascular symptoms and outcomes, and will detail current knowledge on how RV-pulmonary vascular function impact upon exercise tolerance in health and disease. Additionally, given its potential negative impact on RV function, this symposium will discuss whether exercise (acute and chronic) is good for all individuals and in all circumstances.
**Exercise is Medicine® Symposium - Exercise is Medicine On-Campus: Perspectives from University Leaders**

**Wednesday, May 29, 2019, 3:15 PM - 5:15 PM**

**Room:** Hotel-Grand Ballroom A

The 2019 Annual Meeting will mark the 10-year anniversary of the Exercise is Medicine On-Campus program. This initiative has grown into EIM's most successful outreach with a goal of insuring that every student will leave college or University more fit than when they started and with a lifetime plan for fitness. To date over 200 campuses have been recognized for their commitment to this lofty goal. This symposium will highlight the perspectives of key University leaders on promoting exercise on campus.

**Chair: Robert E. Sallis, FACSM. Kaiser Permanente Medical Center, Fontana, CA**

(No relevant relationships reported)

**Presenter:** Christine Sapienza, Jacksonville University, Jacksonville, FL

(No relevant relationships reported)

**Chair: Devorah Lieberman, President, University of La Verne, La Verne, CA**

(No relevant relationships reported)

**Presenter:** Jerry R. Youkey. University of South Carolina Greenville School of Medicine, Greenville, SC

(No relevant relationships reported)

**Presenter:** Wesley K. Lefferts1, Jacob P. DeBlois2, Trevor A. Day3, Jan E. Soriano4, Leah Mann3, Zahrah Rampuri4, Brittany侯斯顿1, Spencer Bourassa1, Corey Young1, Melissa Benton2, Andrew Subudhi2, Paul Visich2. University of Colorado, Aurora, CO

Email: hlisiros@une.edu

(No relevant relationships reported)

**Presenter:** Jacob P. DeBlois1, Wesley K. Lefferts2, Taylor S. Harman1, Kevin S. Heffernan1, Trevor A. Day2, Tom D. Brutsaert2, Paul Soriano4, Leah Mann3, Zahrah Rampuri4, Brittany Heath1, Lee Spahr1, Spencer Bourassa1, Corey Young1, Melissa Benton2, Andrew Subudhi2, Paul Visich2. University of Colorado, Aurora, CO

Email: tlisiros@une.edu

(No relevant relationships reported)

**Chair: Billie K. Alba. USARIEM, Natick, MA**

(No relevant relationships reported)

**Effect of High-Altitude Hypoxia on Neurovascular Coupling During Cognitive Activity**

Wesley K. Lefferts1, Jacob P. DeBlois2, Trevor A. Day2, Jan E. Soriano1, Leah Mann1, Zahrah Rampuri1, Brittany侯斯顿1, Scott Thrall1, Jordan Bird1, Kevin S. Heffernan1, Tom D. Brutsaert2. University of Colorado, Aurora, CO

(No relevant relationships reported)

**Board #1 3:15 PM - 5:15 PM**

Resting Heart Rate Variability at Sea Level does not Predict Arterial Desaturation or Ventilatory Responses to Acute Hypoxia Exposure


(Sponsor: Joseph W. Starnes, FACSM)

(No relevant relationships reported)

**Board #2 3:15 PM - 5:15 PM**

Biological Variation of Resting Ventilation and its Diagnostic Accuracy for Acute Mountain Sickness at Altitude

Kirsten E. Coffman, Samuel N. Cheuvront, FACSM, Robert W. Kenefick, FACSM. U.S. Army Research Institute of Environmental Medicine (USARIEM), Natick, MA. (Sponsor: Robert W Kenefick, FACSM)

(No relevant relationships reported)

**Board #3 3:15 PM - 5:15 PM**

Arterial Desaturation during Moderate Aerobic Exercise in Hypoxia is Positively Correlated to VO2 Peak at Sea Level in Men and Women


(No relevant relationships reported)

**Board #4 3:15 PM - 5:15 PM**

Variability in Human Plasma Volume Responses during High-Altitude Sojourn

Andrew J. Young, FACSM, Claire E. Berryman, Scott J. Montain, FACSM, Beth A. Biedlemann, Stefan M. Pasiakos, FACSM, Jerry R. Youkey. Kaiser Permanente Medical Center, Fontana, CA

(No relevant relationships reported)

**Board #5 3:15 PM - 5:15 PM**

Resting and Submaximal Exercise Hemodynamic Changes When Sea Level Individuals Are Exposed to Altitude (11,237ft)

Holley Sirois1, Gabriel Tilton1, Thomas Bresnahan1, Jordan Stebbins1, Parker Nally1, Juleah Heath1, Lee Spahr1, Spencer Bourassa1, Corey Young1, Melissa Benton2, Andrew Subudhi2, Paul Visich2, University of Colorado, Aurora, CO

Email: hsirois@une.edu

(No relevant relationships reported)

**Board #6 3:15 PM - 5:15 PM**

Hypoxic Cerebrovascular Reactivity Does Not Predict Cognitive Function in Mt. Everest Basecamp Trekkers

Jacob P. DeBlois1, Wesley K. Lefferts2, Taylor S. Harman1, Kevin S. Heffernan1, Trevor A. Day2, Tom D. Brutsaert2. Syracuse University, Syracuse, NY

University of Illinois at Chicago, Chicago, IL

University of Washington, Seattle, WA

University of Colorado, Aurora, CO

(No relevant relationships reported)

**Board #7 3:15 PM - 5:15 PM**

Effects of High-Altitude Hypoxia on Neurovascular Coupling During Cognitive Activity

Wesley K. Lefferts1, Jacob P. DeBlois2, Trevor A. Day2, Jan E. Soriano1, Leah Mann1, Zahrah Rampuri1, Brittany侯斯顿1, Scott Thrall1, Jordan Bird1, Kevin S. Heffernan1, Tom D. Brutsaert2. University of Illinois at Chicago, Chicago, IL

Syracuse University, Syracuse, NY

Mt Royal University, Calgary, AB, Canada

University of Calgary, Calgary, AB, Canada.

(Sponsor: Bo Fernhall, FACSM)

Email: wleffert@uic.edu

(No relevant relationships reported)
681 Board #8 3:15 PM - 5:15 PM
The Effects of Hypoxia on Cerebral Blood Flow Velocity and Hemodynamics during Ergometer Bicycle Exercise
Seongdae Kim1, Hee-Hyeok Lee1, Sangho Kim1, Moon-Hyun Hwang1, Ilgyu Jeong1, "Hannam University, Daejeon, Korea, Republic of. "Korea University, Sejong, Korea, Republic of. "Incheon National University, Incheon, Korea, Republic of.
(No relevant relationships reported)

682 Board #7 3:15 PM - 5:15 PM
Free-Living Accelerometer Calibration: A Novel Direct Observation System
Melanna F. Cox, Greg J. Petrucci, Robert T. Marcotte, Brittany R. Masteller, John Staadenmayer, Patty S. Freedson, FACSM, John R. Sirard, FACSM. University of Massachusetts, Amherst, MA.
(Sponsor: John R. Sirard, FACSM)
(No relevant relationships reported)

683 Board #6 3:15 PM - 5:15 PM
Reliability Analysis of the COSMED K5 Portable Metabolic System
Lindsey E. White, Jacob P. DeBlois, Tiago V. Barreira. Syracuse University, Syracuse, NY
(No relevant relationships reported)

684 Board #5 3:15 PM - 5:15 PM
Feasibility of a 6-week Handcycling High Intensity Interval Training Program for Spinal Cord Injury Adults with Developmental Disabilities in a Day Program
Alicia Koontz, Sarah Bass, Anas Dighirni, Theresa Czyzter. University of Pittsburgh, Pittsburgh, PA
(No relevant relationships reported)

685 Board #4 3:15 PM - 5:15 PM
Insights On Free-living Sedentary Behavior Estimates Using A Hip- Or Wrist-worn Accelerometer
Robert T. Marcotte, Greg J. Petrucci, Jr, Melanna F. Cox, Patty S. Freedson, FACSM, John W. Staadenmayer, John R. Sirard, FACSM. University of Massachusetts Amherst, Amherst, MA.
(Sponsor: John R. Sirard, PhD, FACSM)
Email: rmarcotte@umass.edu
(No relevant relationships reported)

686 Board #3 3:15 PM - 5:15 PM
Using A Thigh Worn Accelerometer To Identify Periods Of Seated Car Travel
Kate Lyden1, Craig Spears1, David Loudon1, Cami Christopher2, Rachel Barnett3, Julian Martinez3, Mami Takezi3, Sarah Keadle3. 1PAL Technologies, Glasgow, United Kingdom. 2California Polytechnic State University, San Luis Obispo, CA
Reported Relationships: K. Lyden: Consulting Fee; PAL Technologies.

687 Board #2 3:15 PM - 5:15 PM
A Fit 5 Program for Adults with Developmental Disabilities
Justine M. Renziehausen, Paola M. Rivera, Baker M. Kayla, Nicholas A. Leahy, Jeanette M. Garcia. University of Central Florida, Orlando, FL
(No relevant relationships reported)

688 Board #1 3:15 PM - 5:15 PM
Automatic Segmentation of Walking Strides in Wearable Accelerometry Data with Adaptive Empirical Pattern Transformation
JACEK K. URBANJEK1, Marta Karas1, William Fadel1, Marcin Straczkiewicz1, Jaroslaw Harelaz1, Ciprian Crainicenau1. 1Johns Hopkins School of Medicine, BALTIMORE, MD. 2Johns Hopkins School of Public Health, BALTIMORE, MD. 3Indiana University, Indianapolis, IN. 4Indiana University Bloomington, Bloomington, IN
Email: jurban6c@jhu.edu
(No relevant relationships reported)

689 Board #7 3:15 PM - 5:15 PM
Actigraph Accelerometer: Can It Be Done?
Greg J Petrucci Jr., Robert T. Marcotte, Melanna F. Cox, John Staadenmayer, Patty S. Freedson, FACSM, John R. Sirard, FACSM. University of Massachusetts Amherst, Amherst, MA.
Email: gpetrucci@umass.edu
(No relevant relationships reported)

690 Board #8 3:15 PM - 5:15 PM
New Findings in Physical Activity Assessment
Wednesday, May 29, 2019, 3:15 PM - 5:15 PM
Room: CC-102A
**P50 Final Program**

<table>
<thead>
<tr>
<th>Board #4</th>
<th>3:15 PM - 5:15 PM</th>
<th>Comparison of Energy Expenditure in Wheelchair Users During Active Video Gaming with Adapted Game Controllers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laurie A. Malone, FACSM, Sangeetha Padalabanaranayanan, Mohanraj Thirumalai. UAB/Lakeshore Research Collaborative, Birmingham, AL.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:lmalone@uab.edu">lmalone@uab.edu</a></td>
<td>(No relevant relationships reported)</td>
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</tbody>
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<thead>
<tr>
<th>Board #5</th>
<th>3:15 PM - 5:15 PM</th>
<th>Prediction of Energy Expenditure from Accelerometers during Physical Activity in Adults with Down Syndrome: The Effect of Accelerometer Placement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthony T. Allred, Poram Choi, Stamatis Agiovlasitis, FACSM. Mississippi State University, Mississippi State, MS. (Sponsor: Stamatis Agiovlasitis, FACSM)</td>
<td></td>
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<tr>
<td>Email: <a href="mailto:ata54@msstate.edu">ata54@msstate.edu</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<th>Board #6</th>
<th>3:15 PM - 5:15 PM</th>
<th>Comparing Gross Efficiency Between Rigid And Hydraulic Prosthetic Ankles During Graded Treadmill Walking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isaac B. Yoder, Alexander J. Koch. Lenoir-Rhyne University, Hickory, NC.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:isaac.yoder@my.lru.edu">isaac.yoder@my.lru.edu</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<th>Board #7</th>
<th>3:15 PM - 5:15 PM</th>
<th>Feasibility and Effectiveness of Community-Based Virtual Reality Group Exercise Training in Persons with Spinal Cord Injury</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ryan R. Porter, Kevin W. Kopena, Jennifer L. Trilk, FACSM. ¹University of South Carolina School of Medicine Greenville, Greenville, SC. ²Roger C. Peace Rehabilitation Hospital, GHS, Greenville, SC. (Sponsor: Jennifer L. Trilk, FACSM)</td>
<td></td>
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<tr>
<td>Email: <a href="mailto:ata54@msstate.edu">ata54@msstate.edu</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<th>Board #8</th>
<th>3:15 PM - 5:15 PM</th>
<th>Effects Of Virtual Reality On Pain And Fatigue In Individuals With SCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daniel Azurdia, Angelica Alberto, Travis Watkins, Isabel Lorimer, Mercedes Fernandez, Mai Jara, Danica Tolentino, Ovande Furtado, Taeyou Jung. California State University, Northridge, Northridge, CA.</td>
<td></td>
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<tr>
<td>Email: <a href="mailto:walshkp@acom.edu">walshkp@acom.edu</a></td>
<td>(No relevant relationships reported)</td>
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</tr>
</tbody>
</table>

**B-39 Free Communication/Slide - Adolescent and Young Adult Female Athlete**

**Wednesday, May 29, 2019, 3:15 PM - 5:15 PM**

| Room: CC-202C |

**700** 3:15 PM - 5:15 PM  
Chair: Nancy I. Williams, FACSM. Pennsylvania State University, State College, PA.  
(No relevant relationships reported)

**701** 3:15 PM - 3:30 PM  
Assessment of Sport Specialization and Menstrual Dysfunction in High School Athletes During Pre-season Screening  
Email: skintobonehelp@gmail.com  
(No relevant relationships reported)

**ACSM 66th Annual Meeting**

**3:30 PM - 3:45 PM**  
Association Between Sport Specialization and Low BMD Among Female High School Distance Runners  
Mitchell J. Raah, FACSM, Michelle T. Barrack, Adam S. Tenforde, Michael D. Rosenthal, Jeanne F. Nichols, FACSM. ¹San Diego State University, San Diego, CA. ²California State University Long Beach, Long Beach, CA. ³Spaulding Rehabilitation Hospital/Harvard Medical School, Charlestown, MA. ¹University of California San Diego, La Jolla, CA.  
Email: mraah@sdsu.edu  
(No relevant relationships reported)

**3:45 PM - 4:00 PM**  
The Relationship between Bone Mineral Accrual and Changes of Body Composition in Competitive Girl Runners  
Norimitsu Kinoshita, Eriko Uchiyama, Kenta Okuyama. ¹Hosei University, Tokyo, Japan. ²Shimane University, Shimane, Japan.  
Email: sportsmed.kinoshita@hosei.ac.jp  
(No relevant relationships reported)

**4:00 PM - 4:15 PM**  
Examining Energy Availability and Injury Prevalence in Collegiate Dancers  
Kenya Moore, Toni M. Torres-McGehee, Erin M. Moore, Elena Burrus, Kelly Pritchett, Susan Anderson. ¹University of South Carolina, Columbia, SC. ²University of South Florida, Tampa, FL. ³Central Washington University, Ellensburg, WA.  
(No relevant relationships reported)

**4:15 PM - 4:30 PM**  
How are Adolescent Ballet Dancers’ Eating Attitudes Related to Social Media Viewing Habits?  
Toni-Ann M. Triolo, Catherine A. Schaeffer, Robin L. Collier, Alan M. Levine. ¹Marywood University, Scranton, PA. ²SUNY Potsdam, Potsdam, NY.  
Email: tmtriolo@m.marywood.edu  
(No relevant relationships reported)

**4:30 PM - 4:45 PM**  
Surgical Outcomes of Os Trigonum Syndrome in Dancers  
Keifer P. Walsh, Alabama College of Osteopathic Medicine, Birmingham, AL.  
Email: walshkp@acom.edu  
(No relevant relationships reported)

**4:45 PM - 5:00 PM**  
Comparison of Total Body Composition and Bone Mineral Density Measures in Female Collegiate Athletes  
Kyle Leppert, Peter Lisman, Nicolas D. Knuth, Nathan Wilder, Devon Dobrosielski. Towson University, Towson, MD.  
Email: kleppert@towson.edu  
(No relevant relationships reported)

**5:00 PM - 5:15 PM**  
Awareness of the Female Athlete Triad in NCAA Cross Country Coaches  
Anna G. Warner, Katherine H. Rizzone, Scott Davis, Timothy Harvey, Robert D. Chetlin. ¹Mercyhurst University, Erie, PA. ²University of Rochester Medical Center, Rochester, NY. ³Marshall University, Huntington, WV. (Sponsor: Paul M Gordon, FACSM)  
Email: awarne53@lakers.mercyhurst.edu  
(No relevant relationships reported)

**B-40 Free Communication/Slide - Behavioral Approaches to Increasing Physical Activity**

**Wednesday, May 29, 2019, 3:15 PM - 5:15 PM**

| Room: CC-105B |

**709** 3:15 PM - 5:15 PM  
Chair: John M. Jakicic, FACSM. University of Pittsburgh, Pittsburgh, PA.  
(No relevant relationships reported)
710 3:15 PM - 3:30 PM
A Comparison Between Physician and Patient Perceptions Regarding Barriers to Exercise
John Genuel, Jessica Lucas, Elizabeth Rothel, Maine Dartmouth Sports Medicine Fellowship, Augusta, ME. Central Maine Medical Center, Lewiston, ME.
(No relevant relationships reported)

711 3:30 PM - 3:45 PM
Physical Activity Promotion: Content Analysis of Nationally Representative Elementary School Websites
Thomas L. McKenzie, FACSM, David Kahan, San Diego State University, San Diego, CA.
Email: tmcKenzie@sdsu.edu
(No relevant relationships reported)

712 3:45 PM - 4:00 PM
Generating and Applying a Physical Activity Model for an Underserved Community: A Mixed Methods Approach
Kori Hahn, Kara Hamilton, Shewantee Howard-Baptiste, Melissa Powell, Mia Fanggili, Gregory Heath, FACSM. The University of Tennessee Chattanooga, Chattanooga, TN. (Sponsor: Gregory Heath, FACSM)
Email: zm252@utk.edu
(No relevant relationships reported)

713 4:00 PM - 4:15 PM
Variations in Preschoolers' Physical Activity Across the School Year
Email: Connec.Tompkins@med.uvm.edu
(No relevant relationships reported)

714 4:15 PM - 4:30 PM
Supporting Physical Health Of Black Male Faculty Through A Wellness-integrated Professional Development Program: FIT Leaders
Emily R. Martini, Turhan Carol, Carl M. Marsh, FACSM, Joshua J. Joseph, David A. Delaine. The Ohio State University, Columbus, OH. (Sponsor: Carl M. Marsh, FACSM)
Email: martini.36@osu.edu
(No relevant relationships reported)

715 4:30 PM - 4:45 PM
Effects Of A National School Intervention Programme On The Levels Of Physical Activity
Fernando Rodriguez-Rodriguez, Carlos Cristi-Montero, José Castro-Piñero. Pontificia Universidad Católica de Valparaíso, Viña del Mar, Chile. Universidad de Cádiz, Cádiz, Spain. (Sponsor: Alvaro Guorovich, FACSM)
Email: fernando.rodriguez@pacv.cl
(No relevant relationships reported)

716 4:45 PM - 5:00 PM
Acceptability of a Walking Intervention Among Inactive Adults Using a Smartphone-Based Gaming Application
Jason R. Bentley, Zakkoyya H. Lewis-Trammell, Maria C. Swartz, Elizabeth J. Lyons. University of Texas Medical Branch, Galveston, TX. Loyola Marymount University, Los Angeles, CA.
Email: jasbentley@utm.edu
(No relevant relationships reported)

717 5:00 PM - 5:15 PM
Use of Wearable Technology and Social Media to Improve Physical Activity and Dietary Behaviors among College Students: A 12-week Randomized Pilot Study
Zachary C. Pope, Daheia J. Barr-Anderson, FACSM, Beth A. Lewis, Mark A. Pereira, Zan Gao, FACSM. University of Minnesota, Minneapolis, MN. (Sponsor: Zan Gao, FACSM)
Email: popex157@umn.edu
(No relevant relationships reported)

B-41 Free Communication/Slide - Exercise and Cardiovascular Risk Factors
Wednesday, May 29, 2019, 3:15 PM - 5:15 PM
Room: CO-105A

718 3:15 PM - 5:15 PM
Chair: Bradley Fleenor. Ball State University, Muncie, IN.
(No relevant relationships reported)

719 3:15 PM - 3:30 PM
Ambulatory Central Blood Pressure Over 24 Hours Following Intermittent Vs. Continuous Moderate Intensity Exercise
McKenzie A. Williams, Erika Silva, Nicholas Carlini, Brandon Kistler, Bradley Fleenor, Matthew Harber, FACSM. Ball State University, Muncie, IN. (Sponsor: Matthew Harber, FACSM)
(No relevant relationships reported)

720 3:30 PM - 3:45 PM
Maximal Exercise Blood Pressure and Glycemic Responses: Association with Resting Parameters in Healthy Young Adults.
Email: manuzanoletti@gmail.com
(No relevant relationships reported)

721 3:45 PM - 4:00 PM
Ambulatory Blood Pressure Reduction In Response To Supramaximal Interval Exercise; Interactions With Antihypertensive Medication.
Miguel Ramirez-Jimenez, Felix Morales-Palomo, Juan E Ortega, Ricardo Mora-Rodriguez. UNIVERSIDAD DE CASTILLA-LA MANCHA, Toledo, Spain.
Email: miguel.ramirez@uclm.es
(No relevant relationships reported)

4:00 PM - 4:15 PM
Cardiorespiratory Fitness & Healthy Vascular Aging
Nicholas A. Carlini, Matthew P. Harber, FACSM, Bradley S. Fleenor. Ball State University, Muncie, IN.
(No relevant relationships reported)

4:15 PM - 4:30 PM
The Differential Effects Of Amount, Intensity, And Mode Of Exercise Training On A Novel Lipoprotein Multimarker Of Insulin Resistance
Leanna M. Ross, Cris A. Slentz, Irina Shalaurova, Margery A. Hambrecht, FACSM, William E. Kraus, FACSM. Duke University Medical Center, Durham, NC. Laboratory Corporation of America Holdings (LabCorp), Morrisville, NC. East Carolina University, Greenville, NC.
(No relevant relationships reported)

4:30 PM - 4:45 PM
Effect of Aerobic Exercise on Blood Glucose and CVD Risk in Glucose Metabolism Disorders People
Yan Wang, Shousheng Xu, Xuemli Li, Juan Wang, Zhengheng Wang, FACSM. Beijing Sport University, Beijing, China. (Sponsor: Zhengheng Wang, FACSM)
(No relevant relationships reported)
P52  Final Program

725  4:45 PM - 5:00 PM
Differences in Daytime vs. Night-time Travel Stress and Recovery as Measured by Heart Rate Variability
Christa Jane van Rensburg, FACSM, Catharina C. Grant, Audrey Jansen van Rensburg, Dimakatso A. Ramagole, Gehart Kalmeier. Sports Medicine, University of Pretoria, Pretoria, South Africa
Email: christa.janevanrensburg@up.ac.za
(No relevant relationships reported)

726  5:00 PM - 5:15 PM
Autonomic Modulation Adjustments In Two Different Ergometric Tests In Young Adults
Giovanna Lima de Oliveira, Vanessa Ferrari da Fonseca, Beatriz Pozzo, Amanda Archeleiga Guedes, Adriana Hernandez Marques, Tais Capucho Santos, Fernanda Panacioni, Aureno Moelcin, Renata Labronici Bertin, Anderson Zampier Ulbrich. UFPR, Curitiba, Brazil
Email: gilima0914@gmail.com
(No relevant relationships reported)

B-42  Clinical Case Slide - Hip and Thigh I
Wednesday, May 29, 2019, 3:15 PM - 5:15 PM
Room: CC-304E

727  3:15 PM - 5:15 PM
Chair: Aaron Rubin, FACSM. Kaiser Permanente, Fontana, CA
(No relevant relationships reported)

728  3:15 PM - 5:15 PM
Discussant: Peter Gerbino, FACSM. Monterey Sports Medicine, Monterey, CA
(No relevant relationships reported)

729  3:15 PM - 5:15 PM
Discussant: Melody Hrubec. UIC Sports Medicine, Chicago, IL
(No relevant relationships reported)

730  3:15 PM - 3:35 PM
Buttock Pain - Cross Country Skier
Jake H. Reisner, Elena J. Jelsing. Mayo Clinic, Rochester, MN
Email: reisner.jacob@mayo.edu
(No relevant relationships reported)

731  3:35 PM - 3:55 PM
A Simple Leg Injury? - World Champion Super-Heavyweight Weightlifter
David Cole1, Ryan Rompolas2, Mark E. Lavallee, FACSM1. 1York Hospital - WellSpan Health, York, PA. 2Francisncan Health Sports Medicine, Lafayette, IN. (Sponsor: Mark E. Lavallee, FACSM)
(No relevant relationships reported)

732  3:55 PM - 4:15 PM
Left Anterior Hip and Groin Pain-Rowing
Jeffrey Smith, Kentaro Onishi. UPMC, Pittsburgh, PA. (Sponsor: Brian Davis, FACSM)
Email: smithjd7@upmc.edu
(No relevant relationships reported)

733  4:15 PM - 4:35 PM
Acute Proximal Posterior Thigh Pain in a Division 1 Women’s Soccer Player
Alyssa Nep, Steven Schaal, Kentaro Onishi. UPMC, Pittsburgh, PA. (Sponsor: Brian Davis, FACSM)
Email: nephan@apmc.edu
(No relevant relationships reported)

734  4:35 PM - 4:55 PM
Right Lateral Hip Injury - Squash
Jacqueline M. Spangenberg, Monica E. Rho. Shirley Ryan AbilityLab, Chicago, IL
Email: jspangenbe@sralab.org
(No relevant relationships reported)

ACSM May 28 – June 1, 2019
Orlando, Florida

B-43  Clinical Case Slide - Spine I
Wednesday, May 29, 2019, 3:15 PM - 4:35 PM
Room: CC-306

735  4:55 PM - 5:15 PM
A Typically Female Hip Issue in a Male Basketball Coach
Keri L. Denay, FACSM. University of Michigan, Ann Arbor, MI
Email: kschwide@med.umich.edu
(No relevant relationships reported)

736  3:15 PM - 4:35 PM
Chair: Joseph Ihm, FACSM. Shirley Ryan AbilityLab, Chicago, IL
(No relevant relationships reported)

737  3:15 PM - 4:35 PM
Discussant: Oluseun A. Olufade. Emory University, Johns Creek, GA
(No relevant relationships reported)

738  3:15 PM - 4:35 PM
Discussant: Prakash Jayabal. Shirley Ryan AbilityLab/ Northwestern University, Chicago, IL
(No relevant relationships reported)

739  3:15 PM - 3:35 PM
Bilateral Upper Extremity Weakness in a Wrestler
Kimberly S. Casten, Adam Lewno. University of Michigan, Ann Arbor, MI. (Sponsor: Robert Kinningham, FACSM)
(No relevant relationships reported)

740  3:35 PM - 3:55 PM
Back Injury - Crossfit
Kevin Bonfield. University of Kentucky, Lexington, KY
Email: kevin.bonfield@uky.edu
(No relevant relationships reported)

741  3:55 PM - 4:15 PM
Osteomyelitis After Deadlifting Injury- A Rare Case Of A Burst Abscess
Edmund M. Qiao, Kenneth Vitale. UCSD School of Medicine, La Jolla, CA
Email: emqiao@ucsd.edu
(No relevant relationships reported)

742  4:15 PM - 4:35 PM
Perplexing Presentation- Preserving Function
Germaine Herman. Eskenazi Health System, Indianapolis, IN
Email: germaine.herman@eskenazihospitals.edu
(No relevant relationships reported)

B-44  Rapid Fire Platform - Distance Running
Wednesday, May 29, 2019, 3:15 PM - 4:35 PM
Room: CC-Hall WA2

743  3:15 PM - 4:35 PM
Chair: Clare E. Milner, FACSM. Drexel University, Philadelphia, PA
(No relevant relationships reported)

744  3:15 PM - 3:25 PM
Changes in Shock Absorption and Kinematics during a Half Marathon as Measured with Inertial Sensors
Marti A. Zandbergen, Michel Klaassen, Jaap Buurke, Jasper Roessingh. Roessingh Research and Development, University of Twente, Enschede, Netherlands. (Sponsor: Brian W. Noehren, FACSM)
Email: m.zandbergen@rrd.nl
(No relevant relationships reported)
Differences in Lower Extremity Kinematic Variability between Healthy Runners Classified as Low or High Mileage
Amanda Estep1, Steven Morrison2, Shane Caswell1, Nelson Cortez1, 1Austin Peay State University, Clarksville, TN, 2Old Dominion University, Norfolk, VA. (No relevant relationships reported)

Are Joint Kinetics Proximally Redistributed Following A Long Run In Well-trained Runners?
Max R. Paquette, Victoria A. White, Jake A. Melaro, Douglas W. Powell, FACSM. University of Memphis, Memphis, TN. (Sponsor: Douglas Powell, FACSM) Email: max.r.paquette@memphis.edu (No relevant relationships reported)

Pelvic Motion Differences in Three Different Techniques of Jogging Stroller Propulsion
Tylor W. Standifird, Williams Lauren, Steven McCuch, Johnny Crinn, Caitlyn Stainbrook, Kirk Wyckoff. Utah Valley University, Orem, UT. (Sponsor: Douglas Powell, FACSM) Email: tylor.standifird@uvu.edu (No relevant relationships reported)

Immediate Effects of a Textured Insole on Running Biomechanics in Rearfoot Strikers
Ann-Uriel H. Knauseberger1, Matthew F. Moran1, Justin C. Wager2. 1Sacred Heart University, Fairfield, CT. 2New Balance Sports Research Laboratory, Lawrence, MA. (No relevant relationships reported)

Comparison of Running Gait Kinematics Among College Students With and Without ASD
Brian Riots1, Michael Salazar2, Teri Todd, Melissa Mache2, Danielle N. Jarvis1. 1California State University Northridge, Northridge, CA. 2California State University Chico, Chico, CA Email: brian.riots.613@my.csun.edu (No relevant relationships reported)

Stride Frequency Manipulation: Physiological And Perceptual Responses During Backward Running With Body Weight Support
Kenji Masumoto1, Daniel Denton1, Andrew Craig-Jones2, John A. Mercer, FACSM2. 1Kyushu University, Fukuoka, Japan. University of Nevada, Las Vegas, NV. (Sponsor: Professor John A. Mercer, FACSM) (No relevant relationships reported)

Non-Linear Relationship between Footstrike Angle and Vertical Loading Rate during Running
Mikel R. Stiffler-Joachim, Christa M. Wille, Bryan C. Heiderscheit. UW-Madison, Madison, WI Email: joachim@ortho.wisc.edu (No relevant relationships reported)

Since its clinical description as “punch drunk” in the classic 1928 JAMA article by M Ardland, subsequent clinical naming of Chronic Traumatic Encephalopathy by Critchley in 1957, first neuropathological description by Roberts in 1969, and finally NIH consensus published neuropathological criteria in 2016, CTE has recently exploded in the public’s awareness as a risk of repetitive brain trauma (RBT). Much hysteria unfortunately exists today. This tutorial will focus on the now more than 45 publications from the CTE Center at Boston University co-founded in 2008 by the presenter. The controversy between causation and causative association will be addressed in human and animal studies. Finally, research showing that it is repetitive brain trauma including but not requiring concussion will be a focus, as will be risk of CTE related to RBT exposure in different sports at high risk of RBT.

Robert C. Cantu, FACSM. Robert C. Cantu MD Concussion Center at Emerson Hospital, Concord, MA (No relevant relationships reported)

Athletes (like most weight- and health-conscious people) are susceptible to food trends and popular diets. Yet, they often fail to distinguish between healthful or misleading nutrition practices. This clinical workshop will offer three nutrition-oriented case studies of athletes who have fallen prey to current popular diets and ended up with unintended consequences. A sports dietitian will present each case and share nutrition counseling strategies.

Nancy Clark, FACSM. Sports Nutrition Services, Boston, MA (No relevant relationships reported)

Jacque Scaramella. U.S. Olympic Committee, Chula Vista, CA (No relevant relationships reported)

Petra Lundström. Karolinska Institutet, Stockholm, Sweden (No relevant relationships reported)
## P54 Final Program

### B-49 Tutorial Lecture - Select Issues in Managing Pain in Athletes: A Team Physician Consensus Statement

The goal of Select Issues in Managing Pain in Athletes: A Team Physician Consensus Statement is to help the team physician improve the care of the athlete by understanding the different types of pain these athletes may experience and by developing comprehensive non pharmacological and pharmacological strategies to manage acute and chronic pain. This consensus statement is focused on the youth athlete but many of the principles will apply to the collegiate and professional athletic populations.

- **Stanley A. Herring, FACSM. University of Washington, Seattle, WA**


Traumatic brain injury is associated with autonomic dysfunction, resulting in an elevated heart rate and systolic blood pressure response. This worsens headaches with exercise. Submaximal exercise testing can determine the symptom threshold. Seated recumbent or water-based exercises are strategic modes of training that may enhance recognized methods of post-concussion rehabilitation. In this presentation, video demonstration will be used to show clinicians a guideline for exercise testing and prescription in the management of post concussion syndrome.

- **John Leddy. University at Buffalo, Buffalo, NY**
- **Robert Scales. Mayo Clinic, Scottsdale, AZ**

### B-51 Exercise is Medicine® - Tutorial Lecture - Cost Outcomes of Assessing and Advising Physical Activity in Healthcare: Methods and Outcomes from Intermountain Healthcare

Adopting physical activity promotion as a key strategy to improve population health will require healthcare systems to demonstrate cost implications of physical inactivity. These cost implications will be increasingly informative to healthcare systems that now bear greater financial risk than previous payment models. This session seeks to address Strategy 2 of the Healthcare Sector National Physical Activity Plan: to recognize physical activity and insufficient physical activity as treatable and preventable with profound ... cost implications. This session will present analytic methods developed for evaluating cost relationships of physical activity assessed in healthcare settings. Both methods and outcomes of multiple analyses will be presented.

- **Trever J. Ball. Intermountain Healthcare, Salt Lake City, UT**
- **Elizabeth A. Joy, FACSM. Intermountain Healthcare, Salt Lake City, UT**

## ACSM 66th Annual Meeting

### B-52 Exercise is Medicine® - Tutorial Lecture - Physical Activity can Help Seniors with Diabetic Foot

The lecture will provide critical review and analysis of the current state of knowledge in our understanding in regarding peripheral neuropathy, including seniors suffering from the diabetic foot. Peripheral neuropathy, such as diabetic foot, is a debilitating disease associated with peripheral nerve degeneration, pain, burning sensation, numbness, and reduced quality of life. Evidence showed that exercise is the most effective modality for relieving the symptoms and improving functionality. The lecture will focus on the effects of the disability on movement control, possible neural adaptive behavior due to the pathology, and how physical activity can help people suffering from this disease. The lecture aims to familiarize attendees with the pathological and neurological basis of peripheral neuropathy, progresses in current researches, questions, problems, and the frontier of knowledge related to how exercise as medicine can help, neurologically and functionally, to improve quality of life.

- **Li Li, FACSM. Georgia Southern University, Statesboro, GA**

### B-53 Free Communication/Poster - High Intensity Training

- **Board #1 2:00 PM - 3:30 PM**
  **Effects Of High-intensity Interval Training Vs Sprint Interval Training On Body Composition And Aerobic Power In Healthy Young Women**
  - Paulo Gentil1, João Pedro Naves1, Ricardo Viana1, Ana Cristina Rebelo1, Claudio Andre de Lira1, Gustavo Pimentel1, Patrícia Cristina Lobo1, Jordana Oliveira1, Rodrigo Ramirez-Campilllo2. 1Federal University of Goias, Goiania, Brazil. 2University of Los Lagos, Osorno, Chile

  **Board #2 2:00 PM - 3:30 PM**
  **Application of High-intensity Interval Training Program of Increased Intensity and Decreased Volume: A Pre-competition Case**
  - Guoqiang MA. Shanghai Research Institute of Sports Science, Shanghai, China
  Email: maguoqiang1978@163.com

  **Board #3 2:00 PM - 3:30 PM**
  **Effects Of High-intensity Interval Training On Aerobic Capacity And Sleep Quality In Middle-aged Women**
  - Ting Y. Wang. Tzu Chi University of Science and Technology, Hualien County, Taiwan
  Email: tingyao.wang@gmail.com

  **Board #4 2:00 PM - 3:30 PM**
  **Examining Work-to-Rest Ratios to Optimize Upper Body Sprint Interval Training**
  - Michael B. La Monica1, David H. Fukuda2, Tristan M. Starling-Smith1, Nicolas W. Clark3, Jose Morales1, Jay R. Hoffman, FACSM, Jeffrey R. Stout2. 1Missouri State University, Springfield, MO. 2University of Central Florida, Orlando, FL. 3Universitat Ramon Llull, Barcelona, Spain
  Email: michaellamonica@missouristate.edu
| Board #12 | 2:00 PM - 3:30 PM | The Effect Of Varying High-intensity Interval Training Style Warm-ups On Hemodynamic, Power, And Flexibility Responses
Nelson Wise, Orlando Cepeida, Klarissa Ybarra, Brenda Palma, Brianna Lopez, Manuel Nunez, Ezra Meza, Alexandrina Hinojosa, Amanda Hankins, Murat Karabulut, FACSM. The University of Texas Rio Grande Valley, Brownsville, TX
Email: nelson.wise01@utrgv.edu
(No relevant relationships reported)
|
| Board #13 | 2:00 PM - 3:30 PM | Performance Recovery In Army Reserve Officer Training Corps Cadets Following A Bout Of High-intensity Exercise
Jay A. Campbell, Rebecca D. Larson, Christopher D. Black, FACSM, Kellea N. McGuire. University of Oklahoma, Norman, OK
Email: jcampbell21@ou.edu
(No relevant relationships reported)
|
| Board #14 | 2:00 PM - 3:30 PM | Comparing Strength Outcomes Of An 8 Week Hift Intervention Vs 8 Week Traditional Weight Training.
Jason Sartor. Kansas State University, Manhattan, KS
(No relevant relationships reported)
|
| Board #15 | 2:00 PM - 3:30 PM | Effect Of Ethnicity On Change In Vo2max And Substrate Oxidation In Response To HiiT
Jamie DeRevere1, Todd A. Astorino1, Sean Walsh, FACSM2
(No relevant relationships reported)
|
| Board #16 | 2:00 PM - 3:30 PM | High-intensity Interval Training Does Not Induce Anti-Inflammatory Changes In Healthy Men
Paul Nagelkirk, James Sackett, Dan Farrell. Ball State University, Muncie, IN
Email: zfennel@unm.edu
(Sponsor: Dr. Gibson, FACSM)
|
| Board #17 | 2:00 PM - 3:30 PM | Mots-c Plasma Levels Following A Single Session Of Mict And HiiT
Zachary Fennel1, Kurt A. Escobar2, Roberto Nava1, Christine M. Mermier1, Fabiano T. Amorim1
(No relevant relationships reported)
|
| Board #18 | 2:00 PM - 3:30 PM | Effects Of Heart Rate Variability Modulation on High Intensity Functional Training Strength Outcomes
Brady K. Kurtz2, Nicholas B. Drake2, Justin A. Deblauw1, Derek A. Crawford1, Katie M. Heinrich1. Kansas State University, Manhattan, KS. 2Pittsburg State University, Pittsburg, KS.
(Sponsor: Craig Harms, FACSM)
Email: bbkurtz@ksu.edu
(No relevant relationships reported)
|
| Board #19 | 2:00 PM - 3:30 PM | Differences In Physiological Demands Between Common High-intensity Interval Training Protocols
David Elmer, Elise Barron, Juan Chavez. Berry College, Mount Berry, GA
Email: delmer@berry.edu
(No relevant relationships reported)

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**American College of Sports Medicine**

| Board #5 | 2:00 PM - 3:30 PM | Four Weeks of Low Volume High-intensity Interval Training Has No Effect On Vo2max,
Dan A. Gordon1, Patrick Swain1, Don Keiller1, Viviana Merzbach1, Diane Johnson1, Luciano Prado2, Andre Mai-a-Lima1, Henry Chung1. Anglia Ruskin University, Cambridge, United Kingdom. 2Universidad Federal de Minas Gerais, Belo Horizonte, Brazil
Email: dan.gordon@anglia.ac.uk
(No relevant relationships reported)
|
| Board #6 | 2:00 PM - 3:30 PM | High-intensity Interval Training In The Heat: A “hotter” Alternative For Promoting Cardiovascular Health And Performance?
Isabelle F. Albin, Leah Glickman, Alexs A. Matias, Peter A. Califano, Justin M. Faller, Stephen J. Ives. Skidmore College, Saratoga Springs, NY
Email: mlmqzz@gmail.com
(No relevant relationships reported)
|
| Board #7 | 2:00 PM - 3:30 PM | Effectiveness Of Hiit And Mict On Body Weight And Fat% Of Overweight Adults: A Meta-analysis
Xiaofei Wang, Chenggang Zhang, Bing Zhang. Tsinghua University, Beijing, China. (Sponsor: Weimao Zhu, FACSM)
Email: 15652662676@163.com
(No relevant relationships reported)
|
| Board #8 | 2:00 PM - 3:30 PM | Inter-Individual Adaptive Responses to Sprint Interval Training in Recreationally Active Males
Tom P. Aird, Brian P. Carson. University of Limerick, Limerick, Ireland
Email: tom.aid@ul.ie
(No relevant relationships reported)
|
| Board #9 | 2:00 PM - 3:30 PM | Six Hit Treadmill Training Sessions Improves Lipid Oxidation and Ventilatory Thresholds Intensities
Marcelo L. Marquezi1, Juliana M. Lino1, Antonio H. Lancha Jr.1, 2Universidade Cidade de Sao Paulo, Sao Paulo, Brazil. 1Universidade de Sao Paulo, Sao Paulo, Brazil
Email: mlmqzz@gmail.com
(No relevant relationships reported)
|
| Board #10 | 2:00 PM - 3:30 PM | Effects Of High-intensity Strength Training On Muscle Strength Gain And Muscle Hypertrophy In Males And Females: A Meta-analysis
Yukina Mochizuki, Naoki Kikuchi, Noriko Kaji, Takashi Okada, Kentaro Terada, Yoshiaki Hashaka, Nobuyasu Tomabeichi, Yoshiaki Soga, Tomoya Era, Naoyuki Kobatake, Tetsunari Nishiyama. Nippon sport science university, Tokyo, Japan
Email: my.ca0813@gmail.com
(No relevant relationships reported)
|
| Board #11 | 2:00 PM - 3:30 PM | Influence Of Combining Aerobic And High Intensity Interval Training on 400m Performance And Post-exercise Responses.
Panagiotis Doukas1, Amvrosios Chatziapostolou1, Costas Chryssanthopoulos1, Giorgios Paradissi1, Maria Maridaki1, Michael Koutsilieri1, Anastassios Philippou1. National and Kapodistrian University of Athens, Athens, Greece. 1Educons University, Novi Sad, Serbia
Email: Pdoukas@gmail.com
(No relevant relationships reported)
| Board #20 | 2:00 PM - 3:30 PM | Relationship Between Running Bio-mechanics, Hip Mobility, and Knee Injury Risk In Division III Runners. | Zachery P. Juaire, Ana B. Freire Ribeiro. Augsburg University, Minneapolis, MN. (Sponsor: Mark Blegen, FACSM) Email: juaire@augsburg.edu (No relevant relationships reported) |
| Board #21 | 2:00 PM - 3:30 PM | Lower Extremity Stiffness in Collegiate Distance Runners Pre- and Post-Competition | Jake P. Tavernite, Matthew F. Moran. Sacred Heart University, Fairfield, CT Email: tavernitej@mail.sacredheart.edu (No relevant relationships reported) |
| Board #22 | 2:00 PM - 3:30 PM | Physiological Correlates With 300 And 1000 M Performance In U14 Athletes | PROKOPIOS CHATZAKIS, NATIONAL AND KAPODISTRIAN UNIVERSITY OF ATHENS, ATHENS, Greece (No relevant relationships reported) |
| Board #23 | 2:00 PM - 3:30 PM | Effects of Pulsed Electromagnetic Field Application on Aerobic Performance in Runners During Short-Term Altitude Training | Tanuj Wadhvi, Nauris Tamulevicius, Guillermo R. Oviedo, Ashmeet S. Anand, Dör Vaknin, Fraser Houston. The University of Tampa, Tampa, FL, Universitat Ramon Llull, Barcelona, Spain (No relevant relationships reported) |
| Board #24 | 2:00 PM - 3:30 PM | The Effects of Hip Tightness on Running Mechanics and the FMS Deep Squat in DI Track & Field Runners | Samuel D. Rosario, Ana B. Freire Ribeiro. Augsburg University, Minneapolis, MN. (Sponsor: Dr. Mark Blegen, FACSM) Email: rosarios@augsburg.edu (No relevant relationships reported) |
| Board #25 | 2:00 PM - 3:30 PM | Prevalence And Spectrum Of Electrocardiogram Abnormalities In Amateur Marathon Runners | xu wen. Zhejiang University, Hangzhou, China. (Sponsor: Stanley Sai-chuen HUI, FACSM) Email: wenxu@zju.edu.cn (No relevant relationships reported) |
| Board #26 | 2:00 PM - 3:30 PM | Running Economy of Highly-Trained Distance Runners in Marathon Racing Shoes compared to Track Spikes | Kyle R. Barnes, Jordan Juwiazi. Grand Valley State University, Wyoming, MI, Grand Valley State University, Allendale, MI. (Sponsor: Stephen Glass, FACSM) (No relevant relationships reported) |
| Board #27 | 2:00 PM - 3:30 PM | Influence of Body Weight, FMS, & Summer Training on Mile Run Performance in Endurance Runners | Nathan Goslin-Klemme, Preston Kauker, Jake Till, Elaina Beechler. Loras College, Dubuque, IA. (Sponsor: Vincent Paolone, FACSM) Email: ngoslin10@gmail.com (No relevant relationships reported) |
American College of Sports Medicine

802 Board #36  2:00 PM - 3:30 PM
Relationship Among Physiological, Perceptual, And Biomechanical Variables During Exercise On A Non-motorized Treadmill In D2 Cross-country Athletes
Sean Bonilla, Anne Roquet, Elizabeth Corella, Steven Deverell, Miranda J. Reid, Jason Ng, Nicole Dabbs. California State University, San Bernardino, San Bernardino, CA. (Sponsor: Bryan Haddock, FACSM)
(No relevant relationships reported)

803 Board #37  2:00 PM - 3:30 PM
Evaluation of Running Performance in Recreationally Active Individuals at Submaximal Speeds; Shod vs. Barefoot Conditions
Matthew Miltenberger, Nicholas Roughan, Gavin Moir, Shala Davis, FACSM. East Stroudsburg University, East Stroudsburg, PA. (Sponsor: Dr. Shala Davis, FACSM)
Email: mmiltenber@gmail.com
(No relevant relationships reported)

804 Board #38  2:00 PM - 3:30 PM
Relationship Between Training Load and Intensity and Next Day Resting Heart Rate in Running.
Julio Morales, Keith Fallon. Lamar University, Beaumont, TX
Email: jmoralesa@lamar.edu
(No relevant relationships reported)

B-55 Free Communication/Poster - Soccer
Wednesday, May 29, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

805 Board #39  2:00 PM - 3:30 PM
Number Of Sprints Performed By Players Of Different Playing Positions During A Soccer Match
Mario Norberto Sevillo de Oliveira Junior, Alyson Felipe da Costa Sena, Jefferson Fernando Coelho Rodrigues Junior, Christian Emmanuel Torres Cabido, Emerson Silami Garcia, Christiano Eduardo Veneroso. Federal University of Maranhão, São Luís, Brazil
Email: mesevilio@hotmail.com
(No relevant relationships reported)

806 Board #40  2:00 PM - 3:30 PM
Structured Physical Training Program Reduces Injury Risk Factors Unrelated to Performance Improvements in Soccer Players
Meleesa Wohleber, Jason Metz. West Liberty University, West Liberty, WV
Email: meleesa.wohleber@westliberty.edu
(No relevant relationships reported)

807 Board #41  2:00 PM - 3:30 PM
Effects of Soccer Kicking Training Using Virtual Reality on Kicking Performance in Boy Soccer Players
Somi Yun1, Min Gi Jung1, Jaemyung Kim1, Yunbin Lee1, Dae Taek Lee1, Seung Chan Lim2. 1Kookmin University, Seoul, Korea, Republic of 2Airpaz, Seoul, Korea, Republic of
Email: ysmysm7@naver.com
(No relevant relationships reported)

808 Board #42  2:00 PM - 3:30 PM
Initial Profiling of Division II Soccer Athletes Revealed Minimal Body Composition Changes Throughout Competitive Season
Sara L. Terrell, Diana L. Griesseder, Charles R. Allen, Zachary Wallace, James M. Lynch. Florida Southern College, Lakeland, FL
Email: sterrell@fsouthern.edu
(No relevant relationships reported)

809 Board #43  2:00 PM - 3:30 PM
Use Of Muscle Saturation Oxygen As A New Marker Of Fatigue In Female Soccer Players
Aldo A. Vasquez-Bonilla1, Ismael Martinez-Guardado2, Jeffrey M. Mjaanes M. Mjaanes, FACSM1, Samantha Guerrero-Flores3, Rafael Timón1, Guillermo Olcina1. 1National Pedagogical University Francisco Morazán, San Pedro Sula, Honduras. 2University of Extremadura, Cáceres, Spain. 3Northwestern University, Evanston, IL. (Sponsor: Jeffrey M. Mjaanes, FACSM)
Email: alvasquez@alumnos.unex.es
(No relevant relationships reported)

810 Board #44  2:00 PM - 3:30 PM
Effects of Video Feedback on Kicking Performance and Temporal Patterns in U-10 Soccer Players
Bernat Buscà, Marc Quintana, Joan Aguilera-Castells, Mónica Solana-Tramunt, Jose Morales, Ainhoa Nieto. FPCEE Blanquerna. Ramon Llull University, Barcelona, Spain
Email: bernatbs@blanquerna.url.edu
(No relevant relationships reported)

811 Board #45  2:00 PM - 3:30 PM
Lower and Upper Body Muscle Characteristics among Collegiate Baseball and Soccer Players
Savannah Ange, Pragya Sharma Ghimire, Peter Gaither, Sara Rogers, Leland Nielsen, Martin Carnmichael, Amir Blochibhiboya. Lander University, Greenwood, SC
Email: psharmaghimire@lander.edu
(No relevant relationships reported)

812 Board #46  2:00 PM - 3:30 PM
Performance Implications of Arousal State in Female Collegiate Soccer Players
Adam Love1, Neil M. Johannsen1, Brian A. Irving, FACSM1, Jack Marucci1, Shelly Mullenix1, Arnold Nelson, FACSM1, Guillaume Spielmann1, Erik Lind1. 1Louisiana State University, Baton Rouge, LA. 2State University of New York-Cortland, Cortland, NY. (Sponsor: Brian A. Irving, FACSM)
(No relevant relationships reported)

813 Board #47  2:00 PM - 3:30 PM
Relative Age Effects In Men’s Collegiate Soccer Are Influenced By Nationality, Position, Class, And Success
(No relevant relationships reported)

814 Board #48  2:00 PM - 3:30 PM
Influence of Thresholds on GPS Speed Zones and Sprint Determination in Female Collegiate Soccer Players
Matthew F. Moran, Jessica L. Trapp. Sacred Heart University, Fairfield, CT
Email: moramn@sacredheart.edu
(No relevant relationships reported)

815 Board #49  2:00 PM - 3:30 PM
Comparison of Performance Measures Between Starters Vs Non-starters in a Division Ill Women’S Soccer Team
Barry Myers, Dillon Frees, John MacDonald, Ronald W. Mendel. University of Mount Union, Alliance, OH. (Sponsor: Ron Oetteteter, FACSM)
Email: myersbj2019@mountunion.edu
(No relevant relationships reported)

816 Board #50  2:00 PM - 3:30 PM
Correlation between Sprint Tests and Agility 505 Test and Ktest in Elite Young Soccer Players
Lee Cabell1, Frantisek Zahalka2, Tomas Malý3, Lucia Malá2. 1Arkansas Tech University, Russellville, AR. 2Charles University, Prague, Czech Republic. 3Charles University, Prague, Czech Republic. (Sponsor: Kevin Ford, FACSM)
Email: llee.cabell@gmail.com
(No relevant relationships reported)

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### P58 Final Program

| Board #51 | 2:00 PM - 3:30 PM | 821 | Tensionomyographic And Sprint Assessments Following Different Warmup Protocols In Collegiate Male Soccer Athletes  
Datei: Herring, Michael J. Redd, Tristan M. Sturling-Smith, Jeffrey R. Stout, David H. Fukuda. University of Central Florida, Orlando, FL  
(No relevant relationships reported) |
|---|---|---|---|
| Board #52 | 2:00 PM - 3:30 PM | 822 | Effect Of Eccentric Training On Balance And Explosive Strength In Women University Soccer Players  
Datei: Camargo Rosas, John Javier Rincón-Gómez, Daniel Felipe Urrego Villalón, Leidy Sofía Molina Rodríguez, Silvia Lucía Lara Gómez. Universidad Nacional de Colombia - Bogotá, Bogota, Colombia  
Email: dacamargon@unal.edu.co  
(No relevant relationships reported) |
| Board #53 | 3:30 PM - 5:00 PM | 823 | Physical, Cognitive and Dietary Characteristics of Older Women with Declines in Balance and Walking Ability  
Datei: Kimura, Yasuji; Hisato, Mamoru; Hisato, Kazuko; Koki, Junko; Kawai, Toshinobu; Ikegami, Mieko; Shimada, Mieko; Kayo, Nobuko; Hu, Hong; FACSM.  
1, National Institute of Sport, Tokyo, Japan. 2, Novena University, Singapore. 3, Singapore Sports School, Singapore. 4, Singapore Sports Institute, Singapore. 5, National Institute of Education, Singapore. 6, National Institute of Sport, Tokyo, Japan.  
Email: yasuok1944@yahoo.co.jp  
(No relevant relationships reported) |
| Board #54 | 3:30 PM - 5:00 PM | 824 | The Effects Of Exercise Training To Frailty Patient During Post-acute Care Hospitalization  
Datei: Tsai, Yu-Tsai; Ho, Chih-Shan; Kao, Mi-Jung; Ho, Chih-Shan. Taipeh City Hospital, Taipei.  
National Taiwan Sport University, Taipei, Taiwan.  
Email: smallldcpp@gmail.com  
(No relevant relationships reported) |
| Board #55 | 3:30 PM - 5:00 PM | 825 | Functional Capability, Flexibility, Strength And Quality Of Life In Sedentary Or Trained Elderly Women  
Datei: Machado, Otávio A S; Machado, Claudia; Vieira De Souza, Bruna; Gianolla, Fabio; Killian, Luiz E; Chacon, Giovanna A C; Machado, Otávio A S; Waldecir, Waldecir P Lima; Góes, Renata Góes.  
1, National Institute of Sport, Tokyo, Japan. 2, Novena University, Singapore. 3, Singapore Sports School, Singapore. 4, Singapore Sports Institute, Singapore. 5, National Institute of Education, Singapore. 6, National Institute of Sport, Tokyo, Japan.  
Email: otavioasm@gmail.com  
(No relevant relationships reported) |
| Board #56 | 3:30 PM - 5:00 PM | 826 | The Role of ‘Exercise Is Medicine’ in Asia: Perspectives for the Older Adult Population  
Datei: Hee Park, Chae, Jiuyi Tanaka, FACSM, Jae Hoon Seo, Andiara Schwingle, Wojtek Chodzko-Zajko, FACSM.  
1, Korea National Sport University, Seoul, Korea, Republic of. 2, University of Tsukuba, Tsukuba, Japan. 3, University of Illinois at Urbana-Champaign, Urbana-Champaign, IL. (Sponsor: Angela Ridgel, FACSM)  
Email: chaeaph@knsu.ac.kr  
(No relevant relationships reported) |
| Board #57 | 3:30 PM - 5:00 PM | 827 | Exercise is Medicine®/Poster - EIM – The Elderly and Their Health Problems  
Wednesday, May 29, 2019, 1:00 PM - 6:00 PM  
Room: CC-Hall WA2  
(No relevant relationships reported) |
| Board #58 | 3:30 PM - 5:00 PM | 828 | Does High-Cadence Cycling Improve Emotional Recognition in Individuals With Parkinson’s Disease?  
Datei: Dowdell, Bryan; Harper, Sara; Verron, Alena; Kim, Jin Hyun; Brandson, Paddy.  
Kent State University, Kent, OH.  
(No relevant relationships reported) |
Free Communication/Poster - Aging and Older Adults

Wednesday, May 29, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

Board #63  3:30 PM - 5:00 PM
Significant Improvement In Dxa Scores Is Observed With Osteoporotic Patients When High Force, Short Duration Stimulus Is Created
Jason M. Conviser, FACSM1, Jenny Conviser1, Joe Koehler1.
1Ascend - Consultation in Health Care, Chicago, IL. 2Performance Health Systems, Northbrook, IL.
Email: j.conviser@onesmallworldusa.com
(No relevant relationships reported)

Board #64  3:30 PM - 5:00 PM
Improving Functional Capacity And Physical Activity Through Education: Four-year Follow-up Of Paroye Study
José M. Rodrigues da Silva1, Marcia Uchoa de Rezende2, Tânia Carvalho Spada1, Lucila da Silva Francisco1, Helenilson Pereira dos Santos1, Júlia Maria D’Andréa Greve1, Emmanuel Gomes Ciolac1.
1Post-graduate Program in Movement Sciences, São Paulo State University - UNESP, Bauru, Brazil. 2Faculty of Medicine, University of São Paulo, Institute of Orthopedics and Traumatology, São Paulo, Brazil. 3Institute of Orthopedics and Traumatology, São Paulo, Brazil.
Email: cacoereigafsa@hotmail.com
(No relevant relationships reported)

Board #65  3:30 PM - 5:00 PM
Intergenerational Multicomponent Training Strategy to Improve Cardiovascular Risk Factors and Quality of Life in Elderly
Raquel Silva, Andreia Pizarro, Joana Carvalho. Faculty of Sport - University of Porto, Porto, Portugal
Email: raquelestrilma1@hotmail.com
(No relevant relationships reported)

Board #66  3:30 PM - 5:00 PM
Barriers of Being Active: Differences Between Two Generations
Benedetta Tosi, Martina Rosselli, Gabriele Mascherini, Cristian Petri, Giorgio Galanti, Pietro Amedeo Modesti. University of Florence, Florence, Italy
(No relevant relationships reported)

Board #67  3:30 PM - 5:00 PM
Optimal Loads for Power in Young and Old Men and Women Using Plate-Loaded Resistance Machines
Keri Strand1, Lucrezia Lucchi1, Tamara Gonzalez Copo2, Nicholas Chen1, Joseph F. Signorile1. 1University of Miami, Coral Gables, FL. 2San Juan Bautista School of Medicine, Caguas, PR.
Email: kss333@miami.edu
(No relevant relationships reported)

Board #68  3:30 PM - 5:00 PM
Evidence-based Fall Prevention Program. A 5-year Evaluation.
Harry Papadopoulos. Pacific Lutheran University, Tacoma, WA.
(Sponsor: Eli Lankford, FACSM)
Email: papadopaul@plu.edu
(No relevant relationships reported)

Board #69  3:30 PM - 5:00 PM
Effects Of Exercise Classes And Subsequent Independent Exercise Practice On Physical Fitness In Older Adults
Tomoaki Sakai, Takahiro Nakano. Nagoya Gakuen University, Seto, Aichi, Japan. (Sponsor: Kiyoji Tanaka, FACSM)
(No relevant relationships reported)
P60 Final Program

ACSM 66th Annual Meeting

Board #84 3:30 PM - 5:00 PM

Handgrip Strength as a Screening Assessment for Functional Limitations
Nathan W. Saunders, Alyssa K. Braun, Meghan E. Hess, Uriel Ibarra-Moreno, Megan D. Salvatore. University of Mount Union, Alliance, OH
Email: saundersw@mountunion.edu
(No relevant relationships reported)

Board #89 3:30 PM - 5:00 PM

Relationship Between Functional Physical Condition And Age In Institutionalized Older Adults In Bogotá-colombia
Cindy Lorena Benavides, Jose Alexander Garcia, Jairo Alejandro Fernández Ortega, Diogo Rodrigues Bezerra. Corporación Universitaria CENDA, Bogota, Colombia
(No relevant relationships reported)

Board #80 3:30 PM - 5:00 PM

Objectively-determined Physical Activity And Its Association With Mobility Limitations In Older, Chronic Disease Patients
Victoria R. DeScenza1, Alexander R. Lucas2, Christina Simpson3, Ciaran M. Fairman1, Jennifer M. Thomas-Ahmer1, Jessica Bowman1, Zachary L. Chaplow1, Marcy Haynam1, Steven K. Clinton1, Brian C. Focht, FACSM1. 1The Ohio State University, Columbus, OH. 2Virginia Commonwealth University, Richmond, VA. 3Edith Cowan University, Perth, Australia. (Sponsor: Brian C. Focht, FACSM)
(No relevant relationships reported)

Board #81 3:30 PM - 5:00 PM

Cardiovascular Risk Among Non-sedentary Elderly: Circumferences Trend Analysis Over Three Decades
Carolina Gonzalez Beltran1, João Pedro da Silva Junior1, Rafael Benito Mancini1, Tatiane Kosimenko Ferrari1, Timoteo Leandro Araujo1, Sandra Matsudo1, José da Silva Guedes1, Victor Keihan Matsudo1. 1CELAFSCS, São Paulo, Brazil. 2Universidade de São Paulo- USP, São Paulo, Brazil. 3UNIFMU Faculdades Metropolitanas Unidas, São Paulo, Brazil. 4Universidad Mayor, Santiago, Chile. 5Santa Casa, São Paulo, Brazil
(No relevant relationships reported)

Board #82 3:30 PM - 5:00 PM

Different Exercise Training On Reaction Time In Older Adults With Mild Cognitive Impairment
Linda Lin1, Michael S W Lo2, Nai-Hsin Yang1, Guei-Jang Li1. 1National Cheng Kung University, Tainan, Taiwan. 2Kun Shan University, Tainan, Taiwan
Email: lin22@mail.ncku.edu.tw
(No relevant relationships reported)

Board #83 3:30 PM - 5:00 PM

Bone-targeted Exercise For Older Men With Osteopenia And Osteoporosis: LIFTMOR For Men Trial Preliminary Findings
Amy T. Harding1, Benjamin K. Weeks2, Lisa J. Weis3, Conor Lambert1, Steven L. Watson1, Belinda R. Beck, FACSM1. 1Griffith University, Gold Coast, Australia. 2The Bone Clinic, Brisbane, Australia
Email: amy.harding@griffithuni.edu.au
(No relevant relationships reported)

Board #84 3:30 PM - 5:00 PM

Behavioral Responses on a Virtual Reality Induced Cognitive Task Between Young and Older Adults
Brett Baker, Yeonhak Jung, Preeti Chopra, Darla Castelli. The University of Texas at Austin, Austin, TX. (Sponsor: John Bartholomew, FACSM)
(No relevant relationships reported)

Board #85 3:30 PM - 5:00 PM

Relationship Between Attention And Balance In Older Adults
Congming Chen, Chunmei Cao. Tsinghua University, Beijing, China
Email: 1073798249@qq.com
(No relevant relationships reported)
American College of Sports Medicine

Free Communication/Poster - Physical Activity and Health I

Wednesday, May 29, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

863 Board #97  2:00 PM - 3:30 PM
The Relationship between Physical Activity and Physical Performance and Cognitive Abilities in the Chinese Elderly
Liu Ruidong, Chen Congming, Cao Chunmei. Tsinghua University, BEIJING, China
Email: 763689088@qq.com
(No relevant relationships reported)

864 Board #98  2:00 PM - 3:30 PM
Cardiorespiratory Fitness and Body Mass Index with Gastroesophageal Reflux Disease in Older Adults
Joey M. Savedra, Angelique Brellethin, Duck-Chul Lee, FACSAM. Iowa State University, Ames, IA. (Sponsor: Dr. DC-Lee, FACSAM)
Email: joeysav@iastate.edu
(No relevant relationships reported)

865 Board #99  2:00 PM - 3:30 PM
Longitudinal Stability of Exercise Behavior Across Exercise Domains
Matthijs D. van der Zee, Denise van der Mee, Meike Bartels, Eco J.C. de Geus. Vrije Universiteit Amsterdam, Amsterdam, Netherlands
Email: m.d.vander.zee@vu.nl
(No relevant relationships reported)
Board #106 2:00 PM - 3:30 PM
Cardiorespiratory Fitness and Prevalence of Lifestyle-related Diseases in Japanese Men And Women: WASEDA’S Health Study
Susumu S. Sawada, FACSM1, Ryoko Kawakami1, Kunpei Tanisawa1, Hiroki Tabata1, Nobuhiro Nakamura1, Kim Hyon-Ke2, Masayuki Konishi2, Tomoko Iso1, Chiyoko Usui1, Taishi Midorikawa1, Mitsuhiro Higuchi, FACSM2, Katashiko Suzuki1, Suguru Torii1, I-Lin Min, FACSM3, Steven N. Blair, FACSM4, Isao Munok1, Kaori Ishii1, Koichiro Okai1, Shizuo Sakamoto1. 1Waseda University, Saitama, Japan. 2Michigan State University, East Lansing, MI. 3The Public Authority for Applied Education and Training, Kuwait, Kuwait. (No relevant relationships reported)

Board #108 2:00 PM - 3:30 PM
A Comparison of Obesity and Other CVD Risk Factors between Boys and Girls in Kuwait
Abdulaziz K. Alfarhan1, Lorraine J. Weatherspoon1, Wei Li1, Karin A. Pfeiffer, FACSM1, Nabil K. Badawy2, Joseph J. Carlson1. 1Texas Tech University, Lubbock, TX. 2Texas Tech University Health Sciences Center, Lubbock, TX. Email: yususumi@gmail.com (No relevant relationships reported)

Board #109 2:00 PM - 3:30 PM
Handgrip Strength and Congestive Heart Failure in Aging Adults: Getting a Grip on Heart Health
Ryan McGrath1, Duck-Chul Lee, FACSM2, William Kraemer, FACSM3, Brenda Vincent4, Donna J. Terbizan, FACSM1. 1North Dakota State University, Fargo, ND. 2Northwestern University, Chicago, IL. 3University of Arkansas, Fayetteville, AR. 4University of South Carolina, Columbia, SC. (Sponsor: Stephen H. Wong, FACSM) Email: hegang@cupes.edu.cn (No relevant relationships reported)

Board #110 2:00 PM - 3:30 PM
Association Between Grip Strength and Diabetes Prevalence in 45- to 60-Year Old Chinese Men
Jian Wang, Zhengheng Wang, FACSM, Yan Wang, BEIJING SPORT UNIVERSITY, BEIJING, China. (Sponsor: Zhengheng Wang, FACSM) Email: wangjian2006cn@126.com (No relevant relationships reported)

Board #111 2:00 PM - 3:30 PM
Non-Exercise Estimated Cardiorespiratory Fitness Mediates the Relationship Between Comorbidities and Health-Related Quality of Life in Korean Older Adults
Inhwan Lee, Youngyoon Jin, Jinhyung Cho, Kiuk Jang, Taehyung Shini, Yujin Lee, Haeryun Hong, Hyun-Sik Kang, Sungkyunkwan University, Suwon, Korea, Republic of (No relevant relationships reported)

Board #112 2:00 PM - 3:30 PM
Longitudinal Associations Between Handgrip Strength and Cardiovascular Biomarkers Among Rural Adults: A Project FRONTIER
Youngdeok Kim1, Joaquin U. Gonzales1, Hernachandra Reddy2. 1Texas Tech University, Lubbock, TX. 2Texas Tech University Health Sciences Center, Lubbock, TX. Email: youngdeok.kim@ttu.edu (No relevant relationships reported)

Board #113 2:00 PM - 3:30 PM
Reallocating Sedentary Time to Sleep or Physically Active Behaviors: Associations with BMI in College Students
Rachel M. Sanders, Michael V. Fedewa, Hayley V. MacDonald, Mark T. Richardson, John C. Higginbotham. University of Alabama, Tuscaloosa, AL. Email: rmsanders1@ crimson.ua.edu (No relevant relationships reported)

Board #114 2:00 PM - 3:30 PM
Co-existence Of Physical Activity and Sedentary Behavior Among Children And Adolescents In Shanghai, China
Yang Liu, Si-Tong Chen, Jin-Tao Hong, Yan Tang, Zhen-Bo Cao, Jie Zhang, Zheng Zhu, Pei-Jie Chen. Shanghai University of Sport, Shanghai, China. (Sponsor: Mark Tremblay, FACSM) Email: docliuyang@gmail.com (No relevant relationships reported)

Board #115 2:00 PM - 3:30 PM
Association Of Cardiovascular Health Trajectories And Cardiorespiratory Fitness: The Cardia Study
Brittany S. Pope1, Jonathan J. Ruiz-Ramie1, Jacob L. Barber1, Abbi D. Lane-Cordova1, Donald M. Lloyd-Jones2, Mercedes Carnethon2, Cora E. Lewis3, Pamela J. Schreiner4, Michael P. Bank5, Stephen Sidney6, Mark A. Sarnyski, FACSM1. 1University of South Carolina, Columbia, SC. 2Northwestern University, Chicago, IL. 3University of Alabama at Birmingham, Birmingham, AL. 4University of Minnesota, Minneapolis, MN. 5Wake Forest University, Winston-Salem, NC. 4Kaiser Permanente Northern California, Oakland, CA. (No relevant relationships reported)

Board #116 2:00 PM - 3:30 PM
A Prospective Cohort Study of Physical Fitness and Incident Glaucoma: The Niigata Wellness Study
Ryoko Kawakami1, Susumu S. Sawada, FACSM2, Yuko Gando2, Haruki Momma3, Minoru Tashiro4, 1-I-Min Lee, FACSM2, Steven N. Blair, FACSM3, 1University of Oregon, Eugene, OR. 2Waseda University, Tokorozawa, Japan. 3National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan. 4Harvard Medical School, Boston, MA. 5Wake Forest University, Winston-Salem, NC. (No relevant relationships reported)

Board #117 2:00 PM - 3:30 PM
Effects of Arterial Stiffness Between Objectively Measured Physical Activity and Domain-Specific Cognition in Older Adults
Leidy Gutierrez-Martinez, Angelique BRELLENTHIN, Duck-chul Lee, FACSM, Iowa State University, Ames, IA. (Sponsor: Duck-chul Lee, FACSM) Email: leidysyg@iastate.edu (No relevant relationships reported)

Board #118 2:00 PM - 3:30 PM
Benefits of Behavior: Exercise Enhances Perception of Physical Function Independent of Improvement Among Diabetic Patients
Shahnaz A. Behin1, Cynthia Villalobos1, Nathaniel J. Holmgren1, Alexis C. King2, J. Mark VanNess3, Paul D. Vosti4, Courtney D. Jensen5, 1University of the Pacific, Stockton, CA. 2University of Illinois at Urbana-Champaign, Champaign, IL. 3St. Joseph's Medical Center, Stockton, CA. Email: s_behin3@su.pacific.edu (No relevant relationships reported)
American College of Sports Medicine

885 Board #119  2:00 PM - 3:30 PM
Sedentary Behavior and Physical Inactivity among College Students Affect Core Strength, Flexibility, and Posture
Amanda A. Price, Khadijia Jackson, Darlene Lane, Kurt W. Kornatz. Wichita State University, Wichita, KS.
Email: priceaa@wwsu.edu
(No relevant relationships reported)

886 Board #120  2:00 PM - 3:30 PM
Effects Of BMI And VO2peak On Cardiometabolic Health In Inactive, Overweight And Obese Adults
Joshua S. Beaumont, Benjamin E. Hook, Jane C. Hurley, Sonia Vega-Lopez, Marc A. Adams, Siddhartha S. Angadi, FACSM. Arizona State University, Phoenix, AZ. (Sponsor: Siddhartha Angadi, FACSM)
Email: josh.beaumont@asu.edu
(No relevant relationships reported)

887 Board #121  2:00 PM - 3:30 PM
Temporal Trends Of Physical Activity Among High School Students In The United States, 2011-2017
Seungho Ryu, Heontae Kim, Paul Loprinzi, Minsoo Kang, FACSM. The University of Mississippi, Oxford, MS. (Sponsor: Minsoo Kang, FACSM)
(No relevant relationships reported)

888 Board #122  2:00 PM - 3:30 PM
Temporal Associations of Nocturnal Sleep Duration with Physical Activity and Sedentary Time in Preschool Children
Wendy Y. Huang1, Ka Ho Lai1, Ruirui Xing1, Stephen H.S. Wong, FACSM. 1Hong Kong Baptist University, Hong Kong, China. 2The Chinese University of Hong Kong, Hong Kong, China
Email: wendyhuang@hkbu.edu.hk
(No relevant relationships reported)

889 Board #123  2:00 PM - 3:30 PM
An Extended Twin-pedigree Study Of Voluntary Exercise Behavior In The Netherlands
Eco J.C. de Geus, Quinta Helmer, Dorret Boomsma, Matthijs D. van der Zee. Vrije Universiteit Amsterdam, Amsterdam, Netherlands
(No relevant relationships reported)

890 Board #124  2:00 PM - 3:30 PM
Diurnal and Circannual Variation in Body Temperature: Implications for Heat Illness Protocols
Nathanial J. Holmgren1, J. Mark VanNess2, Lewis E. Jacobson2, Jonathan M. Saxe3, Courtnei D. Jensen4. 1University of the Pacific, Stockton, CA. 2St. Vincent's Hospital, Indianapolis, IN
Email: n_holmgren@u.pacific.edu
(No relevant relationships reported)

891 Board #125  2:00 PM - 3:30 PM
Compliance with Physical Activity Guidelines and Associations with Physical Literacy Among Future Physical Educators
Katherine E. Spring, Megan E. Holmes, Vonjoong Ryuh, Chih Chia Chen. Mississippi State University, Starkville, MS
(No relevant relationships reported)

892 Board #126  2:00 PM - 3:30 PM
Association Between Walking and Sunburn: A Potential Trade-Off Between Cancer Prevention and Risk Factors
Calvin P. Tribby, David Berrigan, Frank M. Perna. National Cancer Institute, Bethesda, MD
Email: calvin.tribby@nih.gov
(No relevant relationships reported)

893 Board #127  2:00 PM - 3:30 PM
Relationship between Neighborhood Environment and Physical Activity in Freshmen from Tsinghua University in Beijing, China
Jiali Cheng, Hongjuan Yu, Chenggang Zhang. Tsinghua University, Beijing, China. (Sponsor: James Fleming Sallis, Jr., FACSM)
Email: cj18@mails.tsinghua.edu.cn
(No relevant relationships reported)

894 Board #128  2:00 PM - 3:30 PM
Factors Leading to Discrepancies in Accumulated Physical Activity During School Hours in Elementary School Students
Robert Booker1, Riley Galloway2, Megan E. Holmes1. 1Mississippi State University, Mississippi State, MS. 2Missouri State University, Springfield, MO
(No relevant relationships reported)

895 Board #129  2:00 PM - 3:30 PM
Title: Association of Sleep and Physical Activity with Cardiometabolic Risk in Older Women: A Compositional Analysis
Joowon Lee1, Maura E. Walker2, Karen A. Matthews2, Lewis H. Kuller2, Nalini Ranjit2, Kelley P. Gabriel, FACSM. 1Boston University, Boston, MA. 2University of Pittsburgh, Pittsburgh, PA. 3University of Texas Health Science Center, Austin, TX. (Sponsor: Kelley Petece Gabriel, FACSM)
Email: leej8900@bu.edu
(No relevant relationships reported)

896 Board #130  2:00 PM - 3:30 PM
Screen and Non-screen Sedentary Time in Older Adults Living in a Retirement Community
Ryan Ziebart, Joshua Pak, Karisa Faenissi, David Benner Jr., Emerson Sebastian, Northern Illinois University, DeKalb, IL
Email: Z1787586@students.niu.edu
(No relevant relationships reported)

897 Board #131  2:00 PM - 3:30 PM
Geographical Effects In Familial Clustering Of Physical Activity, Adiposity And Metabolic Syndrome
Raquel N. Chaves1, Michele C. Souza2, Thayse N. Gomes2, Fernanda K. Santos3, Sara Pereira4, Vincent P. Diego5, Adam Baxter-Jones6, José Maia7. 1Federal University of Technology of Paraná, Curitiba, Brazil. 2Federal University of Santa Catarina, Florianópolis, Brazil. 3Federal University of Sergipe, Aracaju, Brazil. 4Federal University of Vçosa, Vçosa, Brazil. 5CFI2D, Faculty of Sport, University of Porto, Porto, Portugal. 6University of Texas Rio Grande Valley, School of Medicine, South Texas Diabetes and Obesity Institute, Brownsville, TX. 7University of Saskatchewan, Saskatoon, SK, Canada
Email: raquelchaves@live.com.pt
(No relevant relationships reported)

898 Board #132  2:00 PM - 3:30 PM
Objectively-Measured PA and Sedentary Behavior Across The Lifespan Of Individuals With and Without Metabolic Syndrome
Lundon C. Burton, Eduardo Bustamante, FACSM. University of Illinois at Chicago, Chicago, IL
Email: lburton2@ucc.edu
(No relevant relationships reported)

899 Board #133  2:00 PM - 3:30 PM
Vitamin D Status And Muscular Strength In Youth: NHANES 2011-2014
Nicholas M. Pilli, Jaime N. Thomas, Jennifer L. Barnes, Kelly R. Launorn. Illinois State University, Normal, IL. (Sponsor: Dale Brown, FACSM)
(No relevant relationships reported)
WEDNESDAY, MAY 29, 2019

P64  Final Program

900  Board #134  2:00 PM - 3:30 PM
Is Seasonal Affective Disorder A Symptom Of A Larger Collection Of Sedentary And Obesity-related Disorders?
Stephanie Ta1, Nathaniel J. Holmgren2, J. Mark VanNess3, Alexis C. King4, Lewis E. Jacobson4, Jonathan M. Saxe1, Courtney D. Jensen2.
1University of the Pacific, Stockton, CA. 2University of Illinois at Urbana-Champaign, Champaign, IL. 3St. Vincent Hospital, Indianapolis, IN.
Email: t2@u.pacific.edu
(No relevant relationships reported)

901  Board #135  2:00 PM - 3:30 PM
Muscular Strength and Whole-Body Bone Mineral Density in Older Adults With and Without Artificial Joints
Hyoonsoo Kim. Iowa State University, Ames, IA. (Sponsor: Duch-chul Lee, FACSM)
Email: hskim@iastate.edu
(No relevant relationships reported)

902  Board #136  2:00 PM - 3:30 PM
Changes in Psychological State Measures After Green versus Suburban Walking Exercise: A Pilot Crossover Study
Junia N. Brito1, Zachary C. Pople1, Nathan R. Mitchel1, Ingrid E. Schneider1, Teresa H. Horton2, Mark A. Pereira1.
1University of Minnesota, Minneapolis, MN. 2Northwestern University, Evanston, IL. (Sponsor: Matthew Buman, FACSM)
Email: nogu013@umn.edu
(No relevant relationships reported)

903  Board #137  2:00 PM - 3:30 PM
Relationship Of Physical Activity And Quality Of Life During ART Treatment Among People Living With HIV
Xuemei Sui1, FACSM1, Shan Qiao1, Yuchi Ma2, Yujiao Zhou3, Xiaoming Li1.
1University of South Carolina, Columbia, SC. 2Guangxi CDC, Nanning, China.
Email: MSUI@mailbox.sc.edu
(No relevant relationships reported)

904  Board #138  2:00 PM - 3:30 PM
Physical Activity, Sedentary Time, And BMI In 1st-4th Grade Hispanic Children In Puerto Rico
José A. Martínez-Rodríguez, Lucía del Rosario Martínez, Carmen Nevárez, Mercedes Rivera, Israel Almodóvar, Farah A. Ramírez-Marrero, FACSM. University of Puerto Rico, Rio Piedras, Puerto Rico.
(No relevant relationships reported)

905  Board #139  2:00 PM - 3:30 PM
Modeling Longitudinal Changes in Physical Activity Levels: Oporto Growth Health and Performance Study
Michele de Souza Ribas1, Raquel Chaves2, Thayse Gomes1, Fernanda Santos1, Sara Pereira1, José Maia1, 1Federal University of Santa Catarina, Florianópolis, Brazil. 2Federal University of Technology of Paraná, Curitiba, Brazil. 3Federal University of Viçosa, Viçosa, Brazil. 4Faculty of Sport, University of Porto, Porto, Portugal.
Email: souza.michele@ufsc.br
(No relevant relationships reported)

906  Board #140  2:00 PM - 3:30 PM
Additive And Interactive Effects Of Mvpa And Sitting Time On Metabolic Syndrome Risk Indicators
Jaemyung Kim1, Hyo Lee2, Miyoung Lee1.
1Kookmin University, Seoul, Korea, Republic of. 2Sangmyung University, Seoul, Korea, Republic of.
Email: jaemyung3102@gmail.com
(No relevant relationships reported)

907  Board #141  2:00 PM - 3:30 PM
Associations of Cardiorespiratory Fitness and Muscular Strength with Arterial Stiffness in Older Adults
Emma Albin, Angelique Beillenthin, Duck-chul Lee, FACSM. Iowa State University, Ames, IA. (Sponsor: Duck-chul Lee, FACSM)
(No relevant relationships reported)

ACSM May 28 – June 1, 2019
Orlando, Florida

ACSM 66th Annual Meeting

908  Board #142  2:00 PM - 3:30 PM
Effects Of Physical Activity For Relative Risk Of Falls And Fall-related Fractures In The Elderly
Yujie Liu, Jinguin Liu, Xiao Hou, Zentyan Tang. Tsinghua University, Beijing, China.
Email: 317846401@qq.com
(No relevant relationships reported)

909  Board #143  2:00 PM - 3:30 PM
High Prevalence of Hypertension in Apparently Healthy Physically-Active College-Aged Adults Under the New Hypertension Guidelines
Lisa Ferguson-Stegal1, Brenden J. Shanley1, Alyssa D. Hutch1, Brandon J. Putrbaugh2, Lauren Faust2, Anousack Phousarith2, Hannah Scheel1, Alicia Williams1, Megan Wolﬁe1, Britni A. Delcastillo1, Owen Sloop2, Marisa D. Smet2. Hamline University, Saint Paul, MN. 1University of Minnesota - Duluth, Duluth, MN. 2University of Rhode Island, Kingston, RI. 3University of A Coruna, A Coruña, Spain. 4Places for People, Camberley, United Kingdom. 5GO fit LAB, Ingesport, Madrid, Spain.
Email: xian.mayo@urjc.es
(No relevant relationships reported)

910  Board #144  2:00 PM - 3:30 PM
A Modifiable Factors-based Model for Detecting Physically Inactive Individuals Using the Eurobarometer Survey
Xian Mayo1, Gary Liguori, FACSM1, Eliseo Iglesias-Soler2, Fernando del Villar1, Steve Mann3, Alfonso Jimenez3. 1King Juan Carlos University, Madrid, Spain. 2University of Valencia, Valencia, Spain. 3University of Rhode Island, Kingston, RI. 4University of A Coruna, A Coruña, Spain. 5Places for People, Camberley, United Kingdom. 6GO fit LAB, Ingesport, Madrid, Spain.
Email: xian.mayo@urjc.es
(No relevant relationships reported)

911  Board #145  2:00 PM - 3:30 PM
Examining the Influence of Waist Circumference in Cardiovascular Disease Mortality Risk Prediction Modeling
Matthew W. Nehme1, Andrew G. Day1, Xuemei Sui2, Steven N. Blair, FACSM1, Robert Ross, FACSM1. 1University of the Pacific, Stockton, CA. 2University of South Carolina, Columbia, SC. (Sponsor: Dr. Robert Ross, FACSM)
Email: m.nelms@queensu.ca
(No relevant relationships reported)

912  Board #146  2:00 PM - 3:30 PM
The Prevalence of Depression Among Diabetic Patients is Associated with Hemoglobin
Angela A. Colbuck1, Cynthia Villalobos1, Jonathan M. Saxe1, Lewis E. Jacobson1, J. Mark VanNess2, Courtney D. Jensen2. 1University of California, Berkeley, Berkeley, CA. 2University of the Pacific, Stockton, CA. 3Saint Vincent Hospital, Indianapolis, IN.
(No relevant relationships reported)

913  Board #147  2:00 PM - 3:30 PM
Changes In Physiological Factors And Performances In Female Track-and-field Athletes Transitioning To Senior
Yuka Tsukahara1, Suguru Torii2, Fumihiro Yamasawa1, Jun Iwamoto1, Takanobu Otsuka2, Hideyuki Goto3, Torao Kusakabe3, Hideo Matsumoto1, Takao Akama1. 1Keio University, Tokyo, Japan. 2Utsunomiya University, Tochigi, Japan. 3National Research Institute, Tokyo, Japan. 4Keita Orthopaedic Hospital, Tatebayashi, Japan. 5Tokai Gakuen University, Nagoya, Japan. 6Shigakkan University, Obu, Japan. 7Kyoto Daini Red-Cross Hospital, Kyoto, Japan.
Email: yuka.visa@gmail.com
(No relevant relationships reported)
Board #154 3:30 PM - 5:00 PM
Effects Of Resistance Training On Muscle Strength Of Breast Cancer Survivors
Wanderson Santos1, Gabriel Siqueira1, Paulo Gentil1, Claudio Lira1, Mário Campos1, João Mota1, Raquel Schincaglia1, Claudio Battaglini, FACSM1, Carlos Vieira1, Federal University of Goiás, Goiânia, Brazil. 2University of North Carolina at Chapel Hill, Chapel Hill, NC. Email: wanderson.nilo@gmail.com
(No relevant relationships reported)

Board #155 3:30 PM - 5:00 PM
Effect of Exercise Therapy During Treatment for Gynecological Cancer: A Systematic Review and Meta-Analysis
Alice Iannaccone1, Cristina Cortis1, Elisabeth Edwardsen1, Giovanni Capelli1, 1University of Cassino and Lazio Meridionale, Cassino, Italy. 2Norwegian School of Sport Sciences, Oslo, Norway. (Sponsor: Carl Foster, FACSM) Email: alice.iannaccone@unicas.it
(No relevant relationships reported)

Board #156 3:30 PM - 5:00 PM
Factors Affecting the Change in Quality of Life in Participants of a Cancer Exercise Program
Emanuel Schembri1, Friederike Rosenberger1, Karen Steindorf1, Joachim Wiskemann, FACSM1, University Hospital Heidelberg, National Center for Tumor Diseases (NCT) Heidelberg and Heidelberg University, Institute of Sports and Sports Sciences, Heidelberg, Germany. 2University Hospital Heidelberg and National Center for Tumor Diseases (NCT) Heidelberg, Heidelberg, Germany. 3German Cancer Research Center (DKFZ) and National Center for Tumor Diseases (NCT) Heidelberg, Heidelberg, Germany. (Sponsor: Joachim Wiskemann, FACSM) Email: schembri.emanuel@gmail.com
(No relevant relationships reported)

Board #157 3:30 PM - 5:00 PM
Home Exercise Program with Weekly Phone Calls Impacts Quality of Life in Cancer Survivors
Jill E. Mayer, Kayleigh Plameau. Ithaca College, Ithaca, NY. Email: jmayer@ithaca.edu
(No relevant relationships reported)

Board #158 3:30 PM - 5:00 PM
Personal Training vs. Group-based Exercise Prescription Compliance In Breast Cancer Survivors
Mary C. Hiddle1, Kelli A. LeBreton1, Kelley R. Covington1, Catherine M. Jankowski, FACSM1, 1University of North Carolina at Chapel Hill, Chapel Hill, NC. 2University of Colorado, Aurora, CO. (Sponsor: Catherine Jankowski, FACSM) Email: kcovington@unc.edu
(No relevant relationships reported)

Board #159 3:30 PM - 5:00 PM
Higher Perceived Colorectal Cancer Risk Is Associated with Greater Aerobic Physical Activity in Adults
Rosenda Murillo, Keana Assadifar, Umairna Memon, Shreya Desai, Daphne C. Hernandez, Lorraine R. Reitzel. University of Houston, Houston, TX. Email: rlcovington@unc.edu
(No relevant relationships reported)

Board #160 3:30 PM - 5:00 PM
The Effect of Familiarization on the Reliability of Isokinetic Assessment in Breast Cancer Survivors
Filipe Dinato de Lima1, Sandro Nobre Chaves1, Lucas Ugliara1, Andrew Correa Fonseca1, Jonathan Santana Sarandy1, Natâlia Leite Colombelli1, Claudio L. Battaglini, FACSM1, Martino Bottaro1, 1University of Brasilia, Brasília, Brazil. 2University Center of Brasilia, Brasília, Brazil. 3University of North Carolina at Chapel Hill, Brasilia, Brazil. (Sponsor: Claudio L. Battaglini, FACSM) Email: fendinatolima@gmail.com
(No relevant relationships reported)

American College of Sports Medicine

Wednesday, May 29, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

Board #149 3:30 PM - 5:00 PM
Effects Of Combined Training on the Body Composition In Breast Cancer Survivors: A 1- y Follow-up
Thais R S Paulo1, Juliana Vizei2, Fabrieco E. Rossi1, Izrael F. Freitas Junior1, 1Federal University of Rio Grande do Norte, UFRN, Natal, Brazil. 2Sao Paulo State University, UNESP, Presidente Prudente, Brazil. 3Federal University of Piauí, UFPI, Teresina, Brazil. Email: thais.reis.silva@hotmail.com
(No relevant relationships reported)

Board #150 3:30 PM - 5:00 PM
Effects Of Chemotherapy On Muscle Performance In Women With Breast Cancer
Vitor Alves Marques1, Rafael Ribeiro Alves1, Thaynã Coelho Guimarães1, Wender Alves Silva1, Claudio Barbosa de Lira1, Mario Hebling Campos1, João Ferreira Júnior2, Paulo Viana Gentil1, Carlos Alexandre Vieira1. 1University Federal of Goiás, Goiânia, Brazil. 2Federal Institute of Minas Gerais -, Rio das Pombas, Brazil. Email: vitor.alvesmarques@hotmail.com
(No relevant relationships reported)

Board #151 3:30 PM - 5:00 PM
Impact Of Prehabilitation In Oncology Via Exercise - Breast Cancer: The Improve-B Study
Maximilian Koeppel1, Joachim Wiskemann, FACSM1, Erica Schleicher2, René B. Kass2, Kathryn H. Schmitz, FACSM2. 1National Center for Tumor Diseases, Heidelberg, Germany. 2Penn State College of Medicine, Hershey, PA. (Sponsor: Kathryn Schmitz, FACSM)
(No relevant relationships reported)

Board #152 3:30 PM - 5:00 PM
Preliminary Findings from an eHealth Intervention to Increase Physical Activity Among Young Adult Cancer Survivors.
Leah Meuter1, Ashlen Kuntz1, Cami Christopher1, Suzanne Phelan1, Siobhan Phillips1, Sarah Keadle1. 1University of Colorado, Aurora, CO. 2University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Catherine Jankowski, FACSM)
(No relevant relationships reported)

Board #153 3:30 PM - 5:00 PM
Higher Perceived Breast Cancer Risk is Associated with Less Aerobic Physical Activity in Women
Shreya Desai, Keana Assadifar, Umairna Memon, Daphne C. Hernandez, Lorraine R. Reitzel, Rosenda Murillo. The University of Houston, Houston, TX. Email: sdesai11@uh.edu
(No relevant relationships reported)
Board #163 3:30 PM - 5:00 PM
Cancer Survivorship Fitness Program: College and Community Connect
Joseph O’Haire, Jill E. Mayer, Jennifer Hunter, Frank Micale. Ithaca College, Ithaca, NY
Email: johaire@ithaca.edu
(no relevant relationships reported)

Board #164 3:30 PM - 5:00 PM
Body Composition, Strength, and Physical Function Following Two Training Interventions for Breast Cancer Survivors
1Roanoke College, Salem, VA. 2University of North Carolina Greensboro, Greensboro, NC. 3Florida State University, Tallahassee, FL.
Email: Artese@roanoke.edu
(no relevant relationships reported)

Board #165 3:30 PM - 5:00 PM
Cross-sectional Correlates of Physical Activity and Sedentary Time among Young Adult Cancer Survivors
Ashlen Kuntz, Leah Meuter, Gabrielle Jee, Cayetano Ramirez, Cami Christopher, Sarah Keadle. California Polytechnic State University, San Luis Obispo, CA. (Sponsor: Todd Hagopian, FACSM)
(no relevant relationships reported)

Board #166 3:30 PM - 5:00 PM
Social Representations About Physical Activity in a Group Of Women With Breast Cancer In Bogota
Oscar Jose Julían Castañeda Espitia, Sergio Jhoan Delgado Sanchez, Cindy Natalia Agueldo Cárdenas, Bernardo Castiblanco Torres. Universidad Santo Tomás Colombia, Bogota, Colombia.
Email: oscarcastaneda@usatomatics.edu.co
(no relevant relationships reported)

Board #167 3:30 PM - 5:00 PM
Assessment of Physical Activity Levels and Quality of Life in Women Suffering from Breast Cancer
Maria Maridaki1, Argyro Papadopetrika2, Andreae Andrioti1, Anastassios Philippou2. 1National and Kapodistrian University of Athens, Dafni, Greece. 2National and Kapodistrian University of Athens, Gouda-Athens, Greece. (No relevant relationships reported)

Board #168 3:30 PM - 5:00 PM
Effects of a Lifestyle Intervention on Self-Efficacy Outcomes in Prostate Cancer Patients Undergoing Androgen Deprivation
Brian C. Focht, FACSM1, Alexander R. Lucas1, Elizabeth Grainger1, Christina Simpson1, Ciaran M. Fairman1, Jennifer M. Thomas-Ahner1, Jessica Bowman1, Victoria R. DeScenza2, Zachary L. Chaplow1, Kathryn Dispennette1, Marcy Haynaim1, Steven K. Clinton1. 1The Ohio State University, Columbus, OH. 2Virginia Commonwealth University, Richmond, VA. 3Edith Cowan University, Perth, Australia.
(no relevant relationships reported)

Board #169 3:30 PM - 5:00 PM
Relationship Between Perceived Fatigue &Muscular Performance Fatigability in Cancer Survivors
Ritielli Valeriano1, Carlos A. Veira2, Filipe D. de Lima1, Claudio L. Battaglini, FACSM1, Martim Bottaro1. 1Universidade de Brasilia, Brasilia, Brazil. 2Universidade Federal de Goiás, Goiânia, Brazil. 3University of North Carolina, Chapel Hill, NC.
Email: ritielli@gmail.com
(no relevant relationships reported)

Board #170 3:30 PM - 5:00 PM
Effects Of Exercise Dose And Type During Breast Cancer Chemotherapy On Longer-term Body Composition Outcomes
Dong-Woo Kang1, Ki-Yong An1, Andra R. Morielli2, Christine M. Friedenreich1, Donald C. McKenzie1, Karen Gelmon2, John R. Mackey3, Robert D. Reid4, Kerry S. Coureyna1. 1University of Alberta, Edmonton, AB, Canada. 2Alberta Health Services, Calgary, AB, Canada. 3University of British Columbia, Vancouver, BC, Canada. 4British Columbia Cancer Agency. Vancouver, AB, Canada. 5Cross Cancer Institute, Edmonton, AB, Canada. 6University of Ottawa Heart Institute, Ottawa, ON, Canada.
(no relevant relationships reported)

Board #171 3:30 PM - 5:00 PM
A Modified Participatory Action Research Process To Enhance Utilization Of A Co-located Exercise Oncology Clinic
Mary A. Kennedy1, Robert U. Newton1, Sara Bayes1, Dennis R. Taaffe, FACSM1, Nigel Spry2, Nicolas H. Hart1, Michael Davis3. 1The Ohio State University, Columbus, OH. 2Virginia Commonwealth University, Richmond, VA. 3Edith Cowan University, Joondalup, Australia. (Sponsor: Daniel Galvão, FACSM)
Email: m.kennedy@ecu.edu.au
(no relevant relationships reported)

Board #172 3:30 PM - 5:00 PM
Feasibility And Adherence For Exercise During All Chemotherapy: EnACT
Kelsey G. Taylor, Eric A. Schleicher, Melanie Potiaumpai, Jessica Moyer, Natasha Burse, Kathryn Schmitz, FACSM. Penn State Hershey College of Medicine, Hershey, PA. (Sponsor: Kathryn Schmitz, FACSM)
Email: ktyaylor@pbs.psu.edu
(no relevant relationships reported)

Board #173 3:30 PM - 5:00 PM
Moving Medicine: Development Of An Exercise Oncology Tool For Clinical Practice
Rebecca Robinson1, Kush Joshi2, Hamish Reid3, Natasha Jones2, Mike Loosemore2, Kathy Hornby2, Florence Newton1. 1Faculty of Sports and Exercise Medicine, Sheffield, United Kingdom. 2Faculty of Sports and Exercise Medicine, London, United Kingdom. (Sponsor: Kathryn Schmitz, FACSM)
Email: rjprobinson@doctors.org.uk
(no relevant relationships reported)
American College of Sports Medicine

Board #174 3:30 PM - 5:00 PM
Exercise During Chemotherapy And Its Effects On Symptom Management: Enact: Exercise In All Chemotherapy
Erica Schleicher, Melanie Potiaumapi, Kelsey Taylor, Jessica Moyer, Natasha Burse, Kathryn Schmitz, FACSM. Pennsylvania State University, Hershey, PA. (Sponsor: Kathryn Schmitz, FACSM)
Email: ericaschleicher@gmail.com
(No relevant relationships reported)

Board #175 3:30 PM - 5:00 PM
The Effects of Different Intensity Exercise on Lactate Metabolism of DEN-induced Hepatocellular Carcinoma.
Lu Cao, Zhengtang Qi, Shuzhe Ding. East China Normal University, Shanghai, China
Email: 982371586@qq.com
(No relevant relationships reported)

Board #176 3:30 PM - 5:00 PM
Exercise during Chemotherapy Improves Physical Function: Findings from ExACT: Exercise in All Chemotherapy
Melanie Potiaumapi, Erica Schleicher, Kelsey G. Taylor, Jessica Moyer, Natasha Burse, Kathryn Schmitz, FACSM. Penn State University College of Medicine, Hershey, PA. (Sponsor: Kathryn Schmitz, FACSM)
(No relevant relationships reported)

Board #177 3:30 PM - 5:00 PM
Communicating Exercise Oncology Research in the Digital Age: Presenting the Exercise Oncology Twitter Conference
Keith M. Thraen-Borowski, Sarah Weller, Ciaran Fairman. Loras College, Dubuque, IA. University of British Columbia, Vancouver, BC, Canada. Edith Cowan University, Joondalup, Australia
Email: keith.thraenborowski@loras.edu
(No relevant relationships reported)

Board #178 3:30 PM - 5:00 PM
Effects of Taichi-Qigong Exercise On Qol of Nasopharyngeal Carcinoma Survivors
Xiaoju HU, Stanley Sai-chuen HUI, FACSM. The Chinese University of Hong Kong, Shatin, Hong Kong. (Sponsor: Stanley Sai-chuen Hui, FACSM)
Email: moonicaahu@link.cuhk.edu.hk
(No relevant relationships reported)

Board #179 3:30 PM - 5:00 PM
Objectively Assessed Physical Activity And Sedentary Behavior In Patients With Advanced Renal Cell Carcinoma
Reported Relationships: P. Zimmer: Consulting Fee; IPSEN Pharma GmbH. Industry contracted research; IPSEN Pharma GmbH

Board #180 3:30 PM - 5:00 PM
Effect of High Intensity Interval Training on Cardiorespiratory Fitness in Breast Cancer Patients Undergoing Anthracycline Chemotherapy
Kyuwan Lee, Citlalin Lopez-Torres, Caia Rice, Christina Dieli-Conwright, FACSM. U of Southern California, Los Angeles, CA. (Sponsor: Christina Dieli-Conwright, FACSM)
Email: kyuwanlee@usc.edu
(No relevant relationships reported)

Board #181 3:30 PM - 5:00 PM
Physiological Fitness Efficiency of Breast Cancer Survivors Improves Despite Maintenance of Aerobic Capacity: Preliminary Analysis
Jordan T. Lee, Chad W. Wagoner, Stephanie A. Sullivan, Erik D. Hanson, Brian C. Jensen, Lee Stoner, FACSM, Aaron Piepmeier, Kirsten A. Niyrop, Hyman B. Muns, Claudio L. Battaglini, FACSM. University of North Carolina Chapel Hill, Chapel Hill, NC. University of Rhode Island, South Kingstown, RI. (Sponsor: Dr. Claudio Battaglini, FACSM)
Email: jlee25@live.unc.edu
(No relevant relationships reported)

Board #182 3:30 PM - 5:00 PM
Acute Effect of Aerobic Exercise on Arterial Stiffness in Breast Cancer Survivors: Preliminary Results
Georgios Grigoriadis, Brooks A. Hibner, Elizabeth C. Schroeder, Alexander J. Rosenberg, Eireann Griffin, Amanda V. Sardelli, Oana C. Danciu, Bo Fernhall, FACSM, Tracy Baynard, FACSM.
University of Illinois at Chicago, Chicago, IL. University of North Texas Health Science Center, Fort Worth, TX. Northwestern University, Chicago, IL. University of Campinas, Sao Paulo, Brazil. (Sponsor: Tracy Baynard, FACSM)
(No relevant relationships reported)

Board #183 3:30 PM - 5:00 PM
Do Taxane Based Chemotherapies Impair Improvements in VO2 in Female Cancer Survivors
Stephen LoRusso, Henry Piascik, Karen Wonders, FACSM.
Saint Francis University, Loretto, PA. Maple Tree Cancer Alliance, Dayton, OH
Email: slorusso@francis.edu
(No relevant relationships reported)

Board #184 3:30 PM - 5:00 PM
Taxane Based Chemotherapies Impact on Balance and VO2 in Female Cancer Survivors.
Maura Jegerski, Karen Wonders, FACSM, Stephen LoRusso. Saint Francis University, Loretto, PA. Maple Tree Cancer Alliance, Dayton, OH
Email: slorusso@francis.edu
(No relevant relationships reported)

Board #185 3:30 PM - 5:00 PM
The Effect Of Doxorubicin On Myocardial Extracellular Matrix Degradation
Wisam Najdawi, Eric C. Bredahl, Joan Eckerson, FACSM, Jacob Siedlik, Kristen Drescher. Creighton University, Omaha, NE. Creighton School of Medicine, Omaha, NE. (Sponsor: Joan Eckerson, FACSM)
Email: WsamNajdawi@creighton.edu
(No relevant relationships reported)

Board #186 2:00 PM - 3:30 PM
Evaluating Physiological Stress Response in Junior LevelTrack and Field Athletes
Eon Campbell, Rachael Irving, Lowell Dilworth, Janet Bailey. The University Of The West Indies, Mona, Kingston 7, Jamaica. (Sponsor: Melanie Poudevigne, FACSM)
Email: ceon88@yahoo.com
(No relevant relationships reported)

American College of Sports Medicine
WEDNESDAY, MAY 29, 2019
www.acsm.org
953 Board #187 2:00 PM - 3:30 PM
The Acute Cardiovascular And Respiratory Responses To Isotonic Versus Isometric Whole Body Resistance Exercises
Andrew Scott, James Daubney, Courtney Green, Barnaby Lyons, George Nicholas, Manisha Patel. University of Portsmouth, Portsmouth, United Kingdom
Email: andrew.scott@port.ac.uk
(No relevant relationships reported)

954 Board #188 2:00 PM - 3:30 PM
Effects of Acute Moderate Exercise on Nitric Oxide and Endothelial Microparticles in Patients with Hypertension
Yan Yan, Xuemi Li, Juan Wang, Yan Wang, Zhengzhen Wang, FACSM. Beijing Sport University, Beijing, China. (Sponsor: Zhengzhen Wang, FACSM)
(No relevant relationships reported)

955 Board #189 2:00 PM - 3:30 PM
Changes in Oxygen Uptake, Blood Acidosis, and Muscle Oxygenation During Maximal Interval Exercise
Anton Usaj1, Franc Kandare2, Matjaž Flešar2, Serge P von Duvillard, FACSM3. 1Faculty of sport, Ljubljana, Slovenia. 2University Clinics of Pulmonary Diseases and Allergy, Golnik, Slovenia. 3University Clinics for Pulmonary Diseases and Allergy, Golnik, Slovenia.
4University of Salzburg, Salzburg, Austria. (Sponsor: Serge P von Duvillard, FACSM)
Email: tone.usaj@gmail.com
(No relevant relationships reported)

956 Board #190 2:00 PM - 3:30 PM
Sodium Induced Volume Loading and the Exercise Pressor Reflex
Evan L. Matthews, John J. Del Vecchio, Peter A. Hosick. Montclair State University, Montclair, NJ
Email: matthewse@montclair.edu
(No relevant relationships reported)

957 Board #191 2:00 PM - 3:30 PM
Recovery Pattern of Cardiac Autonomic Control Following Aerobic Exercise with Different Volumes in Hypertensive Men
(No relevant relationships reported)

958 Board #192 2:00 PM - 3:30 PM
Pulse Wave Reflection Responses After Aerobic Exercise with Different Volumes in Normotensive and Hypertensive Men
Guilherme Fonseca, Tainah de Paula, Mario Neves, Felipe Cunha. State University of Rio de Janeiro, Rio de Janeiro, Brazil
Email: guilhermefonseca08@gmail.com
(No relevant relationships reported)

959 Board #193 2:00 PM - 3:30 PM
Peak Physiological Responses In Cycling And A New Underwater Swimming Test In Highly Trained Artistic Swimmers
Eric Viana1, David J. Bentley2, Adam Pinos1, Lars MacNaughton1, Heather M. Logan-Sprenger1. 1Faculty of sport, Ljubljana, Slovenia. 2University Clinics of Pulmonary Diseases and Allergy, Golnik, Slovenia.
(No relevant relationships reported)

960 Board #194 2:00 PM - 3:30 PM
Sex Differences in Autonomic Function Following Aerobic Exercise
Noelle Merchant, Joe Champagne, Huimin Yan. University of Massachusetts Boston, Boston, MA
Email: noelle.merchant001@umb.edu
(No relevant relationships reported)

961 Board #195 2:00 PM - 3:30 PM
Augmentation of Oxygen Uptake Response through Inhalation of Molecular Hydrogen during an Incremental Exercise Test
Arnane Hori, Hisayoshi Ogata, Masatoshi Ichihara, Takaharu Kondo, Norio Hotta. Chubu University, Kasugai, Japan
Email: amana199679@gmail.com
(No relevant relationships reported)

962 Board #196 2:00 PM - 3:30 PM
Heavy Rope Exercise on Cardiovascular Hemodynamics and Arterial Stiffness in Resistance-Trained Individuals
Jason C. Parks, Erica M. Marshall, Tyler J. Singer, Stacie M. Humm, J. Derek Kingsley, FACSM. Kent State University; Kent, OH.
(Sponsor: J. Derek Kingsley, FACSM)
(No relevant relationships reported)

963 Board #197 2:00 PM - 3:30 PM
Cardiac Autonomic and Blood Pressure Responses to an Acute Session of Battling Ropes Exercise
Douglas R. Bergen1, Alexei Wong1, Michael Nordwall1, Arturo Figueroa, FACSM2. 1Marymount University, ARLINGTON, VA. 2Texas Tech University, Lubbock, TX. (Sponsor: Arturo Figueroa, FACSM)
Email: drb96235@marymount.edu
(No relevant relationships reported)

964 Board #198 2:00 PM - 3:30 PM
Renal Vascular Responsiveness to Sympathetic Activation is Not Affected by Prior High Intensity Anaerobic Exercise
Jonathan Larson. University at Buffalo, Buffalo, NY. (Sponsor: Zach Schlader, FACSM)
(No relevant relationships reported)

965 Board #199 2:00 PM - 3:30 PM
Autonomic Nervous System and its Relevance in the Regulation of Heart Rate Recovery Post Exercise
Henry H. Leon-Ariza1, Daniel A. Botero-Rosas1, María M. Dussan-Trujillo1, Dario Reyes-Cruz1, Heilmy K. Suarez-Perez2, María I. Maldonado-Arangó1, María A. Pulido-Restrepo1. 1La Sabana University, Bogotá, Colombia. 2Juan N Corpas University, Bogotá, Colombia
Email: preparamifsica2@gmail.com
(No relevant relationships reported)

966 Board #200 2:00 PM - 3:30 PM
Hypotensive Effects of High Intensity Resistance Training to Muscle Failure in Hypertensive Postmenopausal Women
Email: julianacarneiro77@hotmail.com
(No relevant relationships reported)

967 Board #201 2:00 PM - 3:30 PM
Effects of Electronic and Conventional Cigarette Smoking on Post-exercise Autonomic Recovery
Choun-Sub KIM, Maengkyu KIM, Hye-Young Jung, Min-Ghyu SUN, Yong-woo KIM. Kyungpook National University, Daegu, Korea, Republic of Korea
Email: kimmk@kmu.ac.kr
(No relevant relationships reported)

968 Board #202 2:00 PM - 3:30 PM
Renal Vascular Responsiveness to Sympathetic Activation is Not Affected by Prior High Intensity Anaerobic Exercise
Jonathan Larson. University at Buffalo, Buffalo, NY. (Sponsor: Zach Schlader, FACSM)
(No relevant relationships reported)
974 Board #208 2:00 PM - 3:30 PM
Circulating Inflammatory And Oxidative Stress Responses To Steady-state Moderate-intensity And High-intensity Interval Exercise In Mid-spectrum Chronic Kidney Disease
Matthew N. Peterson1, Jeffrey S. Forrse1, Zacharias Papadakis1, Nicholas Schwedock2, Burritt W. Hess3, Jackson O. Griggs2, D. Crawford Allison2, Ron L. Wilson1, J. Kyle Taylor1, Kathryn Dugan4, Cathy W. Jones5, Kathleen Adair6, Mitchell C. Cholewinski7, Peter W. Grandjean, FACSM8, Baylor University, Waco, TX. 1Family Health Center, Waco, TX. 2 Baylor Scott & White Health, Waco, TX. 3Auburn University-Montgomery, Montgomery, AL. (Sponsor: Peter W. Grandjean, FACSM)
(No relevant relationships reported)

975 Board #209 2:00 PM - 3:30 PM
Arterial Stiffness Response to High Intensity Interval Training in Young Healthy Individuals
Isabela Roque Marcal, Miss1, Pedro Guilherme de Mattos Falqueiro, Mr2, Bianca Fernandes, Miss3, Vanessa Teixeira do Amaral ‘Teixeira do Amaral, Miss5, Gabriel de Souza Zanini, Mr6, Awaasi Yupiwa Ngomane, Misses7, Mathews Monge Soares Corrêa, Mr8, Guilherme Veiga Guimarães, Mr9, Emmanuel Gomes Ciolac, Mr10, 1São Paulo State University, Bauru, Brazil. 2University of São Paulo, São Paulo, Brazil. 3Baylor Scott & White Health, Waco, TX. 4Family Health Center, Waco, TX. 5Baylor Scott & White Health, Waco, TX. 6Auburn University-Montgomery, Montgomery, AL. (Sponsor: Peter W. Grandjean, FACSM)
(No relevant relationships reported)

980 Board #214 2:00 PM - 3:30 PM
Menstrual Phase Differences In The Physiological Resolution Of Periodic Breath-holding During Heavy Intensity Fartlek Exercise
Calaina Brooke1, Jordyn Smith2, Glen R. Belfry3, 1Western University, Toronto, ON, Canada. 2Western University, London, ON, Canada
(No relevant relationships reported)

981 Board #215 2:00 PM - 3:30 PM
Integrative Physiological Responses To A 25-day Ultra-endurance Exercise Challenge
Nicholas B. Tiller1, Scott T. Chiesa2, Justin D. Roberts3, Louise A. Turner1, Siana Jones2, Lee M. Romer, FACSM4, 1Sheffield Hallam University, Sheffield, United Kingdom. 2University College London, London, United Kingdom. 3Anglia Ruskin University, Cambridge, United Kingdom. 4Brunei University London, London, United Kingdom. (Sponsor: Lee Romer, FACSM)
Email: n.tiller@shu.ac.uk
(No relevant relationships reported)

982 Board #216 2:00 PM - 3:30 PM
Genetic, Physiologic, And Behavioral Predictors Of Cardiorespiratory Fitness In Specialized Military Men
(No relevant relationships reported)

983 Board #217 2:00 PM - 3:30 PM
Influence of Menstrual Cycle Phase on Cardiovascular Drift and Maximal Oxygen Uptake During Heat Stress
Tori M. Stone. The University of Alabama, Tuscaloosa, AL
(Sponsor: Jonathan E Wingo, FACSM)
Email: tmstone3@crimson.ua.edu
(No relevant relationships reported)
P70  Final Program

984  Board #218  2:00 PM - 3:30 PM
Should Vo2 Be Normalized By Fat-free Mass In Recreationally Active Adolescent Males And Females?
Marco Meucci, Hwan Kim, Nicholas David Tocci, Austin Trump Lasitter, Kaitlin Taylor McShea. Appalachian State University, Boone, NC. (Sponsor: Scott R Collier, FACSM)
Email: meuccim@appstate.edu
(No relevant relationships reported)

986  Board #220  2:00 PM - 3:30 PM
Sedentary Behaviors Modulates Metabolic and Inflammatory Biomarkers in Healthy Males
Chen Zheng, Stephen H.S. Wong, FACSM. The Chinese University of Hong Kong, Hong Kong, Hong Kong. (Sponsor: Stephen H.S. Wong, FACSM)
Email: zhengchen@link.cuhk.edu.hk
(No relevant relationships reported)

B-62  Free Communication/Poster - Oxygen Uptake Kinetics

Wednesday, May 29, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

988  Board #222  2:00 PM - 3:30 PM
Ventilatory Variability is Not Associated with Differences in VO2peak Between Gas Sampling Intervals
Cory M. Scheadler1, Nicholas Hanson2, Matthew Garver1, Andrew Schille1. 1Northern Kentucky University, Highland Heights, KY. 2Western Michigan University, Kalamazoo, MI. (University of Central Missouri, Warrensburg, MO. 3University of Cincinnati, Cincinnati, OH. (Sponsor: Dennis Kerrigan, FACSM)
Email: scheadlerc1@nku.edu
(No relevant relationships reported)

989  Board #223  2:00 PM - 3:30 PM
Chronic Adaptations on the Oxygen Uptake Kinetics in Trained Older Adults With Coronary Artery Disease
Rita Pinto1, Joana Reis2, Vitor Angarten1, Madalena Lemos Pires3, Mariana Borges4, Vanessa Santos5, Xavier Melo6, Paula Sousa7, Jose Machado Rodrigues8, Francisco Alves9, Helena Santa-Clara10. 1Faculdade de Motricidade Humana - Universidade de Lisboa, CIPER - Centro Interdisciplinar de Estudo da Performance Humana, Lisboa, Portugal. 2Universidade Europeia, Lisboa, Portugal. 3Ginásio Clube Português, GCP Lab, Lisboa, Portugal. 4Centro Hospitalar Lisboa Norte, EPE/Hospital Pulido Valente, Lisboa, Portugal. 5Faculdade de Medicina - Universidade de Lisboa, Lisboa, Portugal.
Email: mr.pinto@campus.ul.pt
(No relevant relationships reported)

ACSM 66th Annual Meeting

990  Board #224  2:00 PM - 3:30 PM
Dynamic Adjustment Of Beat-by-beat Cardiac Output And Vo2 Kinetics During Moderate Intensity Exercise Transitions
Erin Calaine Inglis, Danilo Iarnetta, Juan M. Murias. University of Calgary, Calgary, AB, Canada
Email: ecinglis@ucalgary.ca
(No relevant relationships reported)

991  Board #225  2:00 PM - 3:30 PM
Case Study of Physiological Measurements during Yoga Asana Practice
Kathryn-Ann B. Conroy1, Jason Casey1, William Seffens2, Paula Seffens3. 1U. of North GA, Oakwood, GA. 2U. of North GA, Dahlonega, GA. (Sponsor: Walter R Thompson, FACSM)
(No relevant relationships reported)

B-63  Free Communication/Poster - Anterior Cruciate Ligament Injury

Wednesday, May 29, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

992  Board #226  3:30 PM - 5:00 PM
Limb Stiffness is Lower in Those Who Rupture Cruciate Ligament Injury
Chris Richter1, Enda King2, Katherine Daniels1, Andy Franklyn Miller1, Ray Morran1, Mark Jackson1, Siobhan Strike1. 1Sports Surgery Clinic, Dublin 9, Ireland. 2University of Rochester, London, United Kingdom.
Email: nr.chris.richter@gmail.com
(No relevant relationships reported)

993  Board #227  3:30 PM - 5:00 PM
Gait Asymmetry Can Predict Functional Performance Post ACL Reconstruction: A Pilot Study
Yasir A Alshehri, Marcio Santos, Scott Muller, Bryan Vopat, Paul Schroeppe, Jeffrey Randall, Milind Phadnis, Wen Liu. University of Kansas Medical Center, Kansas City, KS.
Email: yalshehri@kumc.edu
(No relevant relationships reported)

994  Board #228  3:30 PM - 5:00 PM
Hip, Knee, And Ankle Contributions During Sloped Walking In Individuals With Aclr
Katie Corona, Hillary H. Holmes, Randall Kaweck, Janine A. Roper. Auburn University, Auburn, AL. (Sponsor: Mark Tillman, FACSM)
Reported Relationships: K. Corona: Other (please describe): This study was sponsored by an undergraduate research fellowship from Auburn University.

995  Board #229  3:30 PM - 5:00 PM
Post-Trial Feedback Alters Single and Dual Task Landing Performance in Healthy and ACL Reconstructed Athletes
Thomas W. Kernozek, FACSM1, Brett McCutchen1, Maria Lee1, Jackie Cleeman1, Jessica Ossenger1, Jeremy Schiedermayer1, Becky Heinert1, Drew Rutherford1. 1University of Wisconsin-La Crosse, La Crosse, WI. 2Gundersen Health System, La Crosse, WI.
Email: kernozek.thom@uwlaux.edu
(No relevant relationships reported)

996  Board #230  3:30 PM - 5:00 PM
Spatiotemporal Variables During Self-selected and Fastest-Comfortable Walking Speeds in Individuals Following ACL Reconstruction
Jennifer L. Hammet, Michelle McLeod1, Harris S. Slone2, Chris M. Gregory, FACSM3. 1Emory University, Atlanta, GA. 2College of Charleston, Charleston, SC. 3Medical University of South Carolina, Charleston, SC. (Sponsor: Dr. Chris Gregory, FACSM)
Email: jllhammet@emory.edu
(No relevant relationships reported)
Board #231 3:30 PM - 5:00 PM
Dexterity of the Lower Limb Coordination In ACL Injured Athletes
Issei Ogawara¹, Yohei Shinokochi², Ken Nakata³. ¹Osaka University, Toyonaka, Japan. ²Osaka University of Health and Sport Sciences, Sennan-gun, Japan
Email: ogawaraissei@hs.s.osaka-u.ac.jp
(No relevant relationships reported)

Board #232 3:30 PM - 5:00 PM
Altered Somatosensory Cortex Activation in ACLR Patients during Single-Legged Balance Task
Yong Woo An¹, Max Jiganti², Ben Meyer³. ¹New Mexico State University, Las Cruces, NM. ²Burrell College of Osteopathic Medicine, Las Cruces, NM. ³Mountain View Regional Medical Center, Las Cruces, NM
Email: anyong@mmsu.edu
(No relevant relationships reported)

Board #233 3:30 PM - 5:00 PM
Manipulating Initial Peak vGRF During Walking Affects Loading Throughout Stance in Individuals with ACL Reconstruction
Alyssa Evans¹, Britteney A. Luc-Harkey², Hope C. Davis³, J. Troy Blackburn⁴, Matthew K. Seeley⁵, Jason R. Franz⁶, Brian Pietrosimone, FACSM⁷. ¹University of North Carolina at Chapel Hill, Chapel Hill, NC. ²Brigham and Women’s Hospital, Boston, MA. ³Brigham Young University, Provo, UT. (Sponsor: Brian Pietrosimone, FACSM)
Email: alyssa.evans@gmail.com
(No relevant relationships reported)

Board #234 3:30 PM - 5:00 PM
Lower Extremity Kinematic Differences Between ACLR and Non-Surgical Limb During a Cutting Task
Christine D. Pollard, JJ Hannigan, Justin A. Ter Har. Oregon State University-Cascades, Bend, OR
Email: christine.pollard@osascades.edu
(No relevant relationships reported)

Board #235 3:30 PM - 5:00 PM
Altered Brain Morphology In Women With History Of ACLR Rupture: A Structural MRI Study
Felix Proessl, Anne Z. Beethé, Adam J. Sterczała, Courtenay Dunn-Lewis, Christopher Connaboy, Bradley C. Nindl, FACSM, Shawn D. Flanagan. University of Pittsburgh, Pittsburgh, PA
(No relevant relationships reported)

Board #236 3:30 PM - 5:00 PM
Persistent Reductions in Strength of Sensorimotor Circuits Governing Injured Leg After ACL Rupture
Adam J. Sterczała, Courtenay Dunn-Lewis¹, Felix Proessl¹, Anne Z. Beethé¹, Bradley C. Nindl, FACSM¹, William J. Kraemer, FACSM¹, Shawn D. Flanagan¹. ¹University of Pittsburgh, Pittsburgh, PA. ²Ohio State University, Columbus, OH
Email: ajp355@pitt.edu
(No relevant relationships reported)

Board #237 3:30 PM - 5:00 PM
Characterization Of Gender Differences In Kinematics And Surface Emg In ACLR
Zhe Wang, Siyu Huang, Jian Chen. Wuhan Sports University, China, Wuhan, China
Email: wangzhe.1129@163.com
(No relevant relationships reported)
1011 Board #245 3:30 PM - 5:00 PM
Effects of Arch Type of the Propulsion Mechanics of Jumping and Hopping Tasks
Christopher M. Willburn, Brandi E. Decoux, Randy T. Fawcett, Portia T. Williams, Nicholas H. Moore, Wendi H. Weimar. Auburn University, Auburn, AL
Email: cew0405@auburn.edu
(No relevant relationships reported)

1012 Board #246 3:30 PM - 5:00 PM
Effect of Sex on Linear and Nonlinear Kinematic Variability during a Stop Jump
Alex Peebles, Shane Ross, Robin Queen, FACSM. Virginia Tech, Blacksburg, VA
Email: apeebles@vt.edu
(No relevant relationships reported)

1013 Board #247 3:30 PM - 5:00 PM
The Effect Of Video And Verbal Biofeedback In Landing Mechanics Parameters During Drop Vertical Jump.
Gabriel A. Paz1, Haroldo G. Santana1, Marianna F. Maia1, Antônio CB Brandão2, Victor Dos Santos Junior2, Humberto Miranda1.
1Federal University of Rio de Janeiro, Rio de Janeiro, Brazil. 2Physical Assessment and Training Center – CAPT, Rio de Janeiro, Brazil.
Email: gabriel.andrade.paz@gmail.com
(No relevant relationships reported)

1014 Board #248 3:30 PM - 5:00 PM
Association Of The Autonomous Nervous System And The Neuromuscular Performance In The Vertical Jump
Alexander Montoya Martinez1, David Alejandro Torres Solano1, Hernando Andrei Ortiz Guzman1, Juan David Marquez1, Camilo Ernesto Povea Combariza1, Mauricio Serrato Roa2, Rodrigo Esteban Argothy Bucheli1.
1National University of Colombia, Bogota, Colombia. 2Sports Science Center - Coldeportes, Bogota, Colombia.
3Biomechanics laboratory - Sports Science Center -Coldeportes, Bogota, Colombia.
Email: almontoya@unal.edu.co
(No relevant relationships reported)

1015 Board #249 3:30 PM - 5:00 PM
Screening for Injury Risk in Gymnasts: Examining the Sport Specificity of the Drop Vertical Jump
Valerie Cohen1, Shannon Linderman1, Donna M. Scarborough1, Deborah King1, Dave Diggins1, Luke S. Ohi1. Massachusetts General Hospital, Boston, MA. 2Ithaca College, Ithaca, NY
Email: vocohen1@ithaca.edu
(No relevant relationships reported)

1016 Board #250 3:30 PM - 5:00 PM
The Influence Of Concussion History On Landing Biomechanics In Adolescent Athletes: A Pilot Investigation.
Jason M. Avedesian, Janet S. Dufek, FACSM. University of Nevada, Las Vegas, Las Vegas, NV. (Sponsor: Janet S. Dufek, FACSM)
Email: jason.avedesian@unlv.edu
(No relevant relationships reported)

1017 Board #251 3:30 PM - 5:00 PM
Post-Trial Feedback May Alter Single and Dual Task Landing Performance in Female Collegiate Athletes
Maria Lee1, Jess Ossager1, Jeremie Schiedermayer1, Becky Heinert1, Drew Rutherford1, Thomas W. Kemozek, FACSM1. University of Wisconsin-La Crosse, La Crosse, WI. 2Gundersen Health System, La Crosse, WI
(No relevant relationships reported)
American College of Sports Medicine

1023 Board #257 2:00 PM - 3:30 PM
Total Energy Intake and Self-selected Macronutrient Distribution During Wildland Fire Suppression
Alexander Marks1, Joe Soi2, Joe Domitrovich3, Molly West4, Brent C. Ruby, FACSM1. 1University of Montana, Missoula, MT. 2United States Forest Service, Missoula, MT. 3University of California, Berkeley, Berkeley, CA. (Sponsor: Brent Ruby, FACSM)
(No relevant relationships reported)

1024 Board #258 2:00 PM - 3:30 PM
Longitudinal Changes in Single-Leg Dynamic Balance Asymmetries Among Firefighter Recruits: An Observational Cohort Study
David J. Cornell1, Stacy L. Gnacinski1, Kyle T. Ebersole1. 1University of Massachusetts Lowell, Lowell, MA. 2Drake University, Des Moines, IA. 3University of Wisconsin-Milwaukee, Milwaukee, WI. (Sponsor: Terry J. Housh, FACSM)
Email: david_cornell@uml.edu
(No relevant relationships reported)

1025 Board #259 2:00 PM - 3:30 PM
Contributors to Perceived Occupational Fatigue in Career Firefighters
Gena R. Gersten, Jacob A. Mota, Hayden K. Giuliani, Eric D. Ryan. University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Abbie Smith-Ryan, FACSM)
(No relevant relationships reported)

1026 Board #260 2:00 PM - 3:30 PM
Sedentary Behavior and Daily Steps Count In Brazilian Wildland Military Firefighters - Brasilia Firefighters Study

1027 Board #261 2:00 PM - 3:30 PM
Firefighters' Quality of Life is Positively Associated With Cardiorespiratory Fitness Both on Men and Women
Luiz Guilherme G. Porto1, Leonardo Correa Segedi2, Daniel Saint Martin1, Edgard Soares1, Guillerme E. Molina1, Carlos Janssen da Cruz2, Rosenkranz Maciel Nogueira1, Denise L. Smith2, Stefanos N. Kales2. 1University of Brasilia, Faculty of Physical Education - UnB - Brasilia - Brazil; Group of Studies in Physiology and Epidemiology of Exercise and Physical Fitness (GEAFS), Brasilia, Brazil. 2Brasil A Fire Department Firefighters, Brasilia, Brazil. (No relevant relationships reported)

1028 Board #262 2:00 PM - 3:30 PM
Comparing the Subjective and Objective Responses to Submaximal and Maximal Tasks in Firefighter Recruits
Edward K. Smith1, Kyle T. Ebersole1, Rudi A. Zander1, Michael H. Haischer1, Vanessa J. Kleiss1, Cody S. Tesh1. 1University of Wisconsin-Milwaukee, Milwaukee, WI. 2City of Milwaukee Fire Department, Milwaukee, WI
(No relevant relationships reported)

1029 Board #263 2:00 PM - 3:30 PM
Effect Of Uncompensable Heat From The Wiff Helmet
Charles L. Dunke, FACSM, Tyler Stenersen. University of Montana, Missoula, MT
Email: charles.dunke@umontana.edu
(No relevant relationships reported)

1030 Board #264 2:00 PM - 3:30 PM
Th Effects Exercise Within Personal Protective Equipment Microclimate On Mental Processing On Different Age Populations
Morgan D’Ganigian, Cory Coehoorn, Lynneith Stuart-Hill. University of Victoria, Victoria, BC, Canada
(No relevant relationships reported)

B-66 Free Communication/Poster - Military Physiology

1031 Board #265 2:00 PM - 3:30 PM
Commercial Footwear with Lateral Torsional Stiffness that May Reduce Injury Risk in Army Basic Trainees
Jesse Hall1, Erin M. Miller2, Donald L. Gross3. 1University of New England, Biddeford, ME. 2Baylor University-Keller Army Community Hospital Division I Sports Physical Therapy Fellowship, West Point, NY
Email: stephen.a.foulis.civ@mail.mil
(No relevant relationships reported)

1032 Board #266 2:00 PM - 3:30 PM
Changes in Body Composition during U.S. Army Basic Combat Training
Stephen A. Foulis, Julie M. Hughes, Leila A. Walker, Katelyn I. Guertiere, Kathryn M. Taylor, Susan P. Proctor, Carl E. Friedl, U.S. Army Research Institute of Environmental Medicine, Natick, MA
Email: stephen.a.foulis.civ@mail.mil
(No relevant relationships reported)

1033 Board #267 2:00 PM - 3:30 PM
Relationship Of Sex And Physical Activity On Vertical Jump Power Changes In U.S. Army Trainees
Peter N. Frykman, Kathryn M. Taylor, Barry A. Spiering, Marilyn A. Sharp, Brittany R. Hotaling, Julie M. Hughes, Stephen A. Foulis. USARIEM, Natick, MA
Email: peter.n.frykman.civ@mail.mil
(No relevant relationships reported)

1034 Board #268 2:00 PM - 3:30 PM
Effects of U.S. Army Basic Combat Training on Vertical Jump Ability in Men and Women
Barry A. Spiering, Peter N. Frykman, Marilyn A. Sharp, Brittany R. Hotaling, Kathryn M. Taylor, Julie M. Hughes, Stephen A. Foulis. U.S. Army Research Institute of Environmental Medicine, Natick, MA
Email: barry.a.spiering.ct@mail.mil
(No relevant relationships reported)
1049 Board #283 2:00 PM - 3:30 PM  Cardiovascular Risk Factors of Working Primary School Teachers
Martina Uvacsek, Mate Petrekanić, Lilla Török, Judit Boda-Ujlaky, University of Physical Education, Budapest, Hungary. (Sponsor: Pat Vehr, FACSM)
Email: uvacsek.martina@tt.hu
(No relevant relationships reported)

1050 Board #284 2:00 PM - 3:30 PM  Effects of Environmental Condition and Body Fat Percentage on Substrate Utilization during and following Exercise
Brittany N. Follows1, Jeremiah A. Vaughan1, Elliott Arroyo1, Brandon M. Gibson1, Joseph A. Lauado1, Ellen L. Glickman, FACSM1, Adam R. Jagniecki2, Ripon College, Ripon, WI. 2Bemidji State University, Bemidji, MN. 3Kent State University, Kent, OH. (Sponsor: Ellen Glickman, FACSM)
(No relevant relationships reported)

1051 Board #285 2:00 PM - 3:30 PM  An Examination of Physiological Responses in EMT Students During Occupational and Heat Stress
Hayden Gerhart1, Amy Fiorentini2, Kristi Storti2, Robert Alman3, Yongsuak Seo1, Louis Pesce1, Madeline Bayles, FACSM1, Indiana University of Pennsylvania, Indiana, PA. 4Center for Disease Control and Prevention, Pittsburgh, PA. (Sponsor: Madeline P. Bayles, FACSM)
Email: hdgerhart@gmail.com
(No relevant relationships reported)

1052 Board #286 2:00 PM - 3:30 PM  Effects Of Nsaid Use On Biomarkers Of Kidney Stress Following A Marathon
Whitley C. Atkins1, Aaron R. Caldwell1, Cory L. Butts2, Lisa Jansen1, Melani R. Kelly1, Margaret Gibson9, Dawn M. Emerson3, Brendon P. McDermott, FACSM1, ‘University of Arkansas, Fayetteville, AR. 2Weber State University, Ogden, UT. 3University of Kansas, Lawrence, KS. 4Truman Medical Center, Kansas City, MO
(No relevant relationships reported)

1053 Board #287 2:00 PM - 3:30 PM  A Novel Assessment of Law Enforcement Officer Response to a Dynamic Shooting Protocol
John Eric W. Smith1, Brandon D. Shepherd1, Teena M. Garrison1, Benjamin M. Krings2, Matthew J. McAllister1. ‘Mississippi State University, Mississippi State, MS. 2University of Wisconsin-Platteville, Platteville, WI. 3Texas State University, San Marcos, TX
Email: johneric.smith@msstate.edu
(No relevant relationships reported)

1054 Board #288 2:00 PM - 3:30 PM  Correlation Between VO2max and Anaerobic Power in Law Enforcement SWAT Team Members
Shan H. Caddel, Matthew C. Jackson, Nicole C. Dabbs, Jason Ng, California State University, San Bernardino, San Bernardino, CA
(No relevant relationships reported)

1055 Board #289 2:00 PM - 3:30 PM  Influence Of Working Hours On Pregnancy Outcomes: A Systematic Review And Meta-analysis
Margie H. Davenport, Robin Featherstone, Ben Vandermeer, Meghan Sebastianski, Chenxi Cai. University of Alberta, Edmonton, AB, Canada
Email: mdavenport@ualberta.ca
(No relevant relationships reported)

1056 Board #290 2:00 PM - 3:30 PM  Influence Of Shift Work On Pregnancy Outcomes: A Systematic Review And Meta-analysis
Chenxi Cai, Robin Featherstone, Meghan Sebastianski, Margie H. Davenport. University of Alberta, Edmonton, AB, Canada
Email: ccai1@ualberta.ca
(No relevant relationships reported)
1063 Board #297 3:30 PM - 5:00 PM
Acute and Chronic Changes of Hematological Variables in College Football Athletes with Sickle Cell Trait
Haoyan Wang1, Nathan P. Lemoine, Jr1, Matt Martone1, Brian A. Irving, FACSM2, Guillaume Spielmann1, Jack Marucci1, Shelly Mullenix1, Derek D. Calvert1, Timothy S. Church2, Jennifer Rood1, Brian Harrell1, Neil M. Johannsen1, 1Louisiana State University, Baton Rouge, LA. 2Pennington Biomedical, Baton Rouge, LA. 3Baton Rouge General Sports Medicine, Baton Rouge, LA.
Email: hwang56@lsu.edu
(No relevant relationships reported)

1064 Board #298 3:30 PM - 5:00 PM
Blood Flow Response and Changes in Fluid Distributions after Percussive Massage Therapy
Timothy R. Macaulay, Joel E. Ramirez, Jaeyhong Choi, Malcolm Jones, E. Todd Schroeder, FACSM. University of Southern California, Los Angeles, CA
Email: trmacaula@usc.edu
(No relevant relationships reported)

1065 Board #299 3:30 PM - 5:00 PM
Low Energy Availability May Cause REE Suppression and Bone Loss in Japanese Male Athletes
Motoko Taguchi1, Kanako Moto1, Shiyung Lee1, Suguru Torii1, Nobuko Hongu, FACSM2, Waseda University, Saitama, Japan. 1University of Arizona, Tucson, AZ. (Sponsor: Nobuko Hongu, FACSM)
(No relevant relationships reported)

1066 Board #300 3:30 PM - 5:00 PM
Nocturnal Hypoglycemia Incidents Following Moderate and Vigorous Physical Activity in Athletes With Type 1 Diabetes
Jason R. Jaggers, Kristi King, Kupper Wintergerst. University of Louisville, Louisville, KY. (Sponsor: Ann Swank, FACSM)
Email: jason.jaggers@louisville.edu
(No relevant relationships reported)

1067 Board #301 3:30 PM - 5:00 PM
The Implications of New Blood Pressure Guidelines on Hypertension Prevalence in Former NFL Players
Garrett H. Williams, Genevieve E. Smith, Mark M. Cassidy, Gregory W. Stewart, FACSM. Tulane University School of Medicine, New Orleans, LA. (Sponsor: Gregory Stewart, MD, FACSM)
(No relevant relationships reported)

1068 Board #302 3:30 PM - 5:00 PM
Comparison between Dual X-ray Absorptiometry and Magnetic Resonance Imaging for Visceral Fat Assessment in Athletes
Hiroko Murata1, Tomoyoshi Yagi1, Eri Takai1, Suguru Torii1, Taishi Midorikawa1, Nobuko Hongu, FACSM2, Motoko Taguchi1. 1Waseda University, Tokyo, Japan. 2Obirin University, Tokyo, Japan. 1Arizona University, Tucson, AZ. (Sponsor: Nobuko Hongu, FACSM)
(No relevant relationships reported)

1069 Board #303 3:30 PM - 5:00 PM
Rapid Diagnostic Testing as a Tool for Guiding Treatment of Infectious Disease in Elite Athletes
Andrew Hedges, Dustin Nabhan, FACSM, William Moreau, FACSM. United States Olympic Committee, Colorado Springs, CO. (Sponsor: 7960, FACSM)
Email: andrew.hedges13@gmail.com
(No relevant relationships reported)

1070 Board #304 3:30 PM - 5:00 PM
Effects of Two Cooling Strategies on Performance and Perceptual Measures Among Athletes with an SCI
Kathleen R. Connor1, Robert C. Pritchett1, Kelly L. Pritchett1, Charles P. Katica2, Gary E. McCall, FACSM3, Stacey T. Yee3, Ruyuan H. Cheng1, Bryce Ulrich1, Nathan Adams1, Sarah Johnston1. 1Central Washington University, Ellensburg, WA. 2Pacific Lutheran University, Parkland, WA. 3University of Puget Sound, Tacoma, WA
(No relevant relationships reported)

1071 Board #305 3:30 PM - 5:00 PM
Hydration Status and Drinking Behavior of Adolescent Athletes
(No relevant relationships reported)

1072 Board #306 2:00 PM - 3:30 PM
Medical Encounters, Cardiac Arrests and Deaths During a 109km Mass-Participation Cycling Event Involving 102251 Starters
Jamnelene Killople1, Martin Schwellnus, FACSM2, Dina Janse Van Rensburg, FACSM3, Sonja Swanevelder2, Esme Jordaan1. 1Mediclinic Southern Africa, Stellenbosch, South Africa. 2SEM1U, University of Pretoria, Pretoria, South Africa. 3Sports Medicine, University of Pretoria, Pretoria, South Africa. 4South African Medical Research Council, Cape Town, South Africa. (Sponsor: Martin Schwellnus, FACSM)
(No relevant relationships reported)

1073 Board #307 3:30 PM - 5:00 PM
Impact of Silver Ion Laundry Treatment on Athletic Gear and Environmental Pathogens and Athlete Health
Priya Balachandran1, John J. Openshaw2. 1Applied Silver, Inc., Hayward, CA. 2Stanford University, Palo Alto, CA
Email: priya@appliedsilver.com
(No relevant relationships reported)

1074 Board #308 3:30 PM - 5:00 PM
Effects of Mistletoe Extract Supplementation on Inflammation Markers after Strenuous Exercise in Rowers
Soo-Min Ha1, Jung-Sook Kim1, Bo-Sung Kim1, Jeong-Ah Lee2, Yoon-Jung Choi1, Do-Yeon Kim1. 1Pusan National University, Busan, Korea. Republic of: 2Kyungang University, Busan, Korea, Republic of
Email: fantasista@pusan.ac.kr
(No relevant relationships reported)

1075 Board #309 3:30 PM - 5:00 PM
A Retrospective Analysis Of VPBs In Trained Bicuspid Aortic Valve Athletes.
Matteo Donadelli1, Lorenzo Casatori1, Giorgio Galanti2, Pietro Amedeo Modiosti1, Laura Stefani1. 1Sports Medicine, Florence, Italy. 2Sports Medicine-FIMS( Italian Federation of Sport Medicine), Florence, Italy. 1Sports Medicine Center-University of Florence, Florence, Italy.
(No relevant relationships reported)

1076 Board #310 3:30 PM - 5:00 PM
Knowledge, Attitude, and Behavior Related to Exertional Heat Illnesses in Japanese College Athletes
Yuki Murata1, Kazuaki Kato1, Yuri Hosokawa2, Samantha E. Searmer2, Ryo Uchida3, Naoyu University, Nagaoy, Japan. 2Ritsumeikan University, Kusatsu, Japan. 3Korey Stringer Institute at University of Connecticut, Storrs, CT
(No relevant relationships reported)

1077 Board #311 3:30 PM - 5:00 PM
Comparison of Various Body Condition Measurements to Air Displacement Plethysmography in Female Collegiate Athletes
Ryan Z. Lawless, Emily L. Langford, Michelle L. Eisenman, Ronald L. Snarr, Greg A. Ryan. Georgia Southern University, Statesboro, GA
(No relevant relationships reported)
**American College of Sports Medicine**

1078  Board #312  3:30 PM - 5:00 PM  
**The Association Between Sleep Quality On Quality Of Life Among Healthy High School Athletes**  
Morgan N. Potter, David R. Howell, Katherine S. Dahab, Emily A. Sweeney, Jay C. Albright, Aaron J. Provance. *Children’s Hospital Colorado, Aurora, CO*  
Email: morgan.potter@childrenscolorado.org  
(No relevant relationships reported)

1079  Board #313  3:30 PM - 5:00 PM  
**Examination of Athletic Identity and Quality of Life Related to Sport Participation**  
Heather E. Key, Toni M. Torres-McGehee, Samantha R. Weber, Rachel Sharpe, Eva Monsma, Mike McCall. *University of South Carolina, Columbia, SC*  
(No relevant relationships reported)

1080  Board #314  3:30 PM - 5:00 PM  
**Effect of Low Ph Magnesium-sulfate Foam on Night Leg Cramps: A Double-blind Randomized Trial**  
Toni Marie Torres-McGehee1, Scott M. Strayer2, Erin M. Moore3, Amber Williams4, James Hardin5, Samantha R. Weber6, Allison B. Smith7, Justin M. Goins8. *University of South Carolina, Columbia, SC. 2University of South Carolina School of Medicine, Columbia, SC. 3University of South Florida, Tampa, FL*  
Email: torresmc@mailbox.sc.edu  
(No relevant relationships reported)

1081  Board #315  3:30 PM - 5:00 PM  
**Difference Between USI Humeroulnar Medial Joint Space Measurements Using Gravity-induced Vs. 3kg External Load Valgus Forces**  
Arie J. van Duijnhoven1, Shawn D. Felton2, Jacqueline van Duijnhoven3. *Florida Gulf Coast University, Fort Myers, FL. 1Florida International University, Miami, FL*  
Email: avanduijnhoven@gmail.com  
(No relevant relationships reported)

**Free Communication/Poster - Diabetes**

Wednesday, May 29, 2019, 1:00 PM - 6:00 PM  
**Room: CC-Hall WA2**

1082  Board #316  3:30 PM - 5:00 PM  
**Comparison of Two Diabetic Education Programs Designed to Treat Adult-Onset Diabetes Mellitus**  
Judy R. Wilson, FACSM, Katelyn Wilson, Cynthia Trowbridge, Mark Ricard. *University of Texas at Arlington, Arlington, TX*  
Email: jrwilson@uta.edu  
(No relevant relationships reported)

1083  Board #317  3:30 PM - 5:00 PM  
**Post-Meal Walking Improves Postprandial Glaucemia in Women with Gestational Diabetes Mellitus**  
Hannah Christie, Robin Pezzutto, Julie Kinsey, Monique Francois. *University of Wollongong, Wollongong, Australia*  
Email: francois@uow.edu.au  
(No relevant relationships reported)

1084  Board #318  3:30 PM - 5:00 PM  
**Accuracy Of A Handheld Blood Glucose Monitor During Exercise And An Oral Glucose Tolerance Test**  
James R. Peterson, Davoncie M. Granderson, Clayton L. Camic, Peter J. Chomentowski, Steven M. Howell, Emerson Sebastian. *Northern Illinois University, DeKalb, IL*  
Email: jpeterson19@niu.edu  
(No relevant relationships reported)

1085  Board #319  3:30 PM - 5:00 PM  
**Effects of IT-based Interactive Exercise Education Program on Exercise Duration in Gestational Diabetes Mellitus Patients**  
Ah Reum Jung1, Yoon Hee Choi2, Dae Taek Lee3. *Kookmin university, Seoul, Korea, Republic of. 1The Catholic University of Korea Seoul St. Mary’s Hospital, Seoul, Korea, Republic of*  
Email: julio055@maver.com  
(No relevant relationships reported)

1086  Board #320  3:30 PM - 5:00 PM  
**Exercise Stress Echocardiography and Myocardial Perfusion Testing in Pediatric Patients with Coronary Artery Anomalies**  
Mallorie Rice, Wayne Mays, Sandy Knecht, Justine Shertzger, Andrea Grzeszczak, Devin Tinker, Adam Powell, Samuel Wittkind, Clifford Chin, Tom Kimball. *Cincinnati Childrens Hospital Medical Center, Cincinnati, OH*  
Email: Mallorie.Rice@gmail.com  
(No relevant relationships reported)

1087  Board #321  3:30 PM - 5:00 PM  
**Cardiopulmonary Exercise Testing in Pediatric Idiopathic Bronchectasis**  
Ronen Bar-Yoseph1, Michal Gur2, Merav Zucker-Toledano1, Gur Mainzer2, Veroel Nir1, Lea Bentur3. *1Ruth Children’s Hospital, Rambam Health Care Campus, Haifa, Israel. 2The Baruch Padeh Medical Center, Poriya, Israel, Poriya, Israel*  
Email: r_bar-yoseph@rambam.health.gov.il  
(No relevant relationships reported)

1088  Board #322  3:30 PM - 5:00 PM  
**Estimation of Ventilatory Thresholds in Physically Active Subjects During an Incremental Treadmill Test**  
Romeu C. Silva, Jr, Robson Spolara, Domingos R. Pandelo, Jr, Alexandre Correia Rocha. *FEFIS / CAP, Santos, Brazil*  
Email: romeuc7@gmail.com  
(No relevant relationships reported)

1089  Board #323  3:30 PM - 5:00 PM  
**Methodological Considerations for Calculating Ventilatory Efficiency from a Maximal Exercise Test in Apparently Healthy Adults**  
James E. Peterman, Adam Grim, Leonard A. Kaminsky, FACSM, Mitchell H. Whaley, Bradley S. Fleenor, Matthew P. Harber, FACSM. *Ball State University, Muncie, IN. (Sponsor: Matthew P Harber, FACSM)*  
(No relevant relationships reported)

1090  Board #324  3:30 PM - 5:00 PM  
**Comparison of Peak Cardiopulmonary Exercise Parameters in Recumbent Bicycle Versus Treadmill Exercise Testing**  
Julie C. Fernie, Sonali S. Patel, Roni M. Jacobsen, Christopher M. Rausch. *Children’s Hospital Colorado, Aurora, CO*  
(No relevant relationships reported)

1091  Board #325  3:30 PM - 5:00 PM  
**Twelve-lead Ecg And Echocardiography Evaluation In Division II College Athletes**  
Ludmila M. Cosio-Lima, Emily Grammer, Cameron Addic, Marisa Straughn, Lauren Adlof, Jeffrey Simpson, Youngil Lee, Amy Crawley. *University of West Florida, Pensacola, FL*  
Email: Icosiolima@uwf.edu  
(No relevant relationships reported)
B-72 Basic Science World Congress - Symposium -
Circadian Rhythms, Clocks and Metabolism

Wednesday, May 29, 2019, 3:15 PM - 5:15 PM
Room: CC-204

1098 3:15 PM - 3:20 PM
Chair: Katja Lamia. Scripps Research Institute, La Jolla, CA
(No relevant relationships reported)

1099 3:20 PM - 3:45 PM
Presenter
Karen Gamble. University of Alabama at Birmingham Medical Center, Birmingham, AL
(No relevant relationships reported)

1100 3:45 PM - 4:10 PM
Presenter
Clara Peek. Northwestern University, Chicago, IL
(No relevant relationships reported)

1101 4:10 PM - 4:35 PM
Circadian Regulation of Muscle Substrate Storage and Utilization
Katja Lamia. Scripps Research Institute, La Jolla, CA
(No relevant relationships reported)

4:35 PM - 5:00 PM
Epigenetic Control and the Circadian Clock: Turning Back Time on Diabetes Pathogenesis
Juleen R. Zierath. Karolinska Institutet, Stockholm, Sweden
(No relevant relationships reported)

5:00 PM - 5:15 PM
Overall Discussion

B-73 Basic Science World Congress - Symposium -
Does Sleep Promote Recovery in Athletes?

Wednesday, May 29, 2019, 3:15 PM - 5:15 PM
Room: CC-205

The symposium will address the theory and scientific evidence that sleep plays a role in recovery of cognitive, muscle and athletic performance cognitive recovery in athletes. Traditional theories about the function of sleep, such as body restitution and energy conservation theories, have led to speculation that athletes have a particular need for more sleep. Moreover, anecdotal accounts abound from athletes and coaches reporting the important of sleep for recovery from intensive exercise. Moreover, clearly athletes have disrupted sleep due to many factors, including travel, pre-racecompetition, anxiety and scheduling issues, etc. However, research that has addressed this hypothesis has been sparse. The symposium will begin with the theoretical rationales that sleep plays a role in recovery, followed by a review of sleep patterns in athletes, a review of factors affecting sleep in athletes and how studies that have examined sleep influences and recovery in athletes, before summarizing the current stateand a summary of research.

1103 3:15 PM - 3:25 PM
Chair: Marco Tulio de Mello. UFMG, Minas Gerais, YT, Brazil
(No relevant relationships reported)

1104 3:25 PM - 3:55 PM
Rationale and Background
Shawn Youngstedt. Arizona State University, Phoenix, AZ
(No relevant relationships reported)

1105 3:55 PM - 4:25 PM
Sleep and recovery in team-sport athletes; the effects of load, scheduling and travel
Rob Duiffield. Univ of Technology Sydney, Australia
(No relevant relationships reported)
1106  4:25 PM - 4:55 PM  
Relationship between sleep, muscle injury and recovery time  
Marco Tulio de Mello. UFMG, Belo Horizonte, MG, Brazil  
(No relevant relationships reported)  

4:55 PM - 5:15 PM  
Overall Discussion  

B-74  Student Colloquium - Career Manifesto: Thinking Outside the Box  
Wednesday, May 29, 2019, 5:30 PM - 7:00 PM  
Room: Hotel-Junior Ballroom G  
This session is designed to introduce students to careers in industry, scientific writing, and non-tenure track positions in academia.  

1107  Mary Yoke, FACSM. Indiana University, Bloomington, IN  
(No relevant relationships reported)  

1108  Jordan Moon. ImpediMed Inc., Lexington, KY  
(No relevant relationships reported)  

1109  Kerri L. Vasold. Michigan State University, East Lansing, MI  
(No relevant relationships reported)  

1110  Christie Aschwanden. FiveThirtyEight, New York, NY  
(No relevant relationships reported)
Musculoskeletal models have long been promoted as having revolutionary potential in clinical practice, with applications such as pre-operative prediction and optimization of surgical outcomes and fine-tuning athlete-specific equipment setups in sports.
This symposium offers a unique look back at the 2018 PyeongChang Winter Olympic and Paralympic Games, focusing on relevant experiences in sports medicine and sport science. Topics to be covered include strategies used to deal effectively with the H1N1 and H3N2 influenza viruses within the confines of the Olympic Village. Also, a case study will be presented of a World Champion speedskater’s return to play following a serious training-related concussion occurring approximately 1.5 years prior to the 2018 Winter Olympics. Finally, a very unique aspect of this symposium will be presentations from the athletes’ perspective. We believe that this symposium will be of great interest to ACSM members involved in the practical application of sports medicine and sport science among elite athletes, as well as those who have a general interest in the Olympics and Paralympics.
C-07  Thematic Poster - Clinical Exercise Physiology: Exercise and Type 2 Diabetes

Thursday, May 30, 2019, 9:30 AM - 11:30 AM
Room: CC-101B

1142 9:30 AM - 11:30 AM
Chair: R. Scott Rector, FACSM. University of Missouri, Columbia, MO

1143 9:30 AM - 11:30 AM
Impact Of A Clinical Exercise Program On Trajectories Of HbA1c And Weight In Older Veterans
Jamie Giffuni, Rebecca Melvin, Bethany Lyons, Odessa Addison, Alyssa Stookey, Leslie Katzel. Baltimore Veterans Affairs Medical Center, Baltimore, MD
Email: jamie.giffuni@va.gov

1144 9:30 AM - 11:30 AM
Long-term Changes On Bdnf And Igf-1 In Patients With T2dm - Training At Different Intensities
João P. Magalhães, Pedro B. Júdice, Megan Hetherington-Rauth, Duarte Neto, Catarina Matias, Luís B. Sardinha. Faculdade de Motricidade Humana, Universidade de Lisboa, Lisbon, Portugal

1145 9:30 AM - 11:30 AM
Vascular Changes In Patients With T2DM Following 1-year Of Exercise, Irrespective Of Cardiorespiratory Fitness Improvement
Megan Hetherington-Rauth1, João P. Magalhães1, Pedro B. Júdice1, Xavier Melo1, Luís B. Sardinha1. 1Faculty of Human Kinetics, University of Lisbon, Lisbon, Portugal, 2Ginásio Clube Português, Lisbon, Portugal

1146 9:30 AM - 11:30 AM
Influence Of High Intensity Body-Weight Circuit Training In Adults with Type II Diabetes
Brian Kliszczewicz, FACSM, Robert Buresh, FACSM, Emily Beechke. Kennesaw State University, Kennesaw, GA
Email: bkliszcz@kennesaw.edu

1147 9:30 AM - 11:30 AM
Effects of Novel Compression Exercise Technology on Glycemic Control In Patients with Type 2 Diabetes
Chloe Wernecke1, Richard Henderson2, Cristian Torres3. Vasper Systems, Moffett Field, CA. 2Covenant Medical, Lubbock, TX

1148 9:30 AM - 11:30 AM
Impact Of Short-term Exercise Training And Diet On Glycemic Control In Patients with Type 2 Diabetes
Kara C. Anderson, Natalie Z.M. Eichner, Nicole M. Gilbertson, Emily M. Heiston, Steven K. Malin, FACSM. University of Virginia, Charlottesville, VA. (Sponsor: Steven K. Malin, FACSM)

1149 9:30 AM - 11:30 AM
Effect of Weight Loss on Physical Function In Overweight and Obese Individuals
Jason M. Brown1, Gary D. Miller2. 1Wake Forest Baptist Health, Winston Salem, NC. 2Wake Forest University, Winston Salem, NC

1150 9:30 AM - 11:30 AM
Sex-Specific HbA1c Responses to Structured Exercise Among Patients with Type 2 Diabetes
Diana Devinskaya1, Cynthia Vailalobos1, J. Mark VanNess1, Paul D. Vosti2, Alexis C. King3, Courtney D. Jensen1. 1University of the Pacific, Stockton, CA. 2St. Joseph’s Medical Center, Stockton, CA. 3University of Illinois at Urbana-Champaign, Champaign, IL

C-08  Thematic Poster - Oxygen Uptake Kinetics

Thursday, May 30, 2019, 9:30 AM - 11:30 AM
Room: CC-102A

1151 9:30 AM - 11:30 AM
Chair: John M. Kowalchuk. University of Western Ontario, London, ON, Canada

1152 9:30 AM - 11:30 AM
Relationship Between Muscle Deoxygenation And Workload At Peak Exercise In Healthy Adults Using Near-infrared Spectroscopy
Ashley M. Goodwin1, Jacqueline Montes1, Ipek Ennari2, Feliz Marie Hernandez2, Kayla Coutts3, Ashwini K. Rao2, Carol Ewing Garber, FACSM1. 1Columbia University Irving Medical Center, New York, NY. 2Columbia University Data Science Institute, New York, NY. 3Teachers College, Columbia University, New York, NY. (Sponsor: Dr. Carol Ewing Garber, FACSM)
Email: ang2310@cumc.columbia.edu

1153 9:30 AM - 11:30 AM
The Oxygen Mean Response Time At Different Ramp-incremental Cycling Slopes
Rafael de Almeida Azevedo1, Danilo Iannetta1, Daniel Keir2, Juan Murias1. 1University of Calgary, Calgary, AB, Canada. 2University of Health Network, Toronto, ON, Canada

ACSM May 28 – June 1, 2019
Orlando, Florida
C-10  Thematic Poster - The Spine and Spinal Cord Injury
Thursday, May 30, 2019, 9:30 AM - 11:30 AM
Room: CC-104

1168  9:30 AM - 11:30 AM
Chair: Joshua F. Yarrow, VA Medical Center, Gainesville, FL
(No relevant relationships reported)

1169  Board #1  9:30 AM - 11:30 AM
Neuromuscular Impairment Following Chronic Moderate-Severe Contusion in Spinal Cord Injured Rats
Hui Jean Kok1, Jacob C. Oster2, Christine F. Conover2, Drew B. Fletcher2, Elisabeth R. Barton3.
1University of Florida; 2North Florida/South Georgia Veterans Health System, Gainesville, FL. 3University of Florida, Gainesville, FL. North Florida/South Georgia Veterans Health System, Gainesville, FL.
Email: jean.kok@ufl.edu
(No relevant relationships reported)

1170  Board #2  9:30 AM - 11:30 AM
Does Reduced Blood Flow Affect the Rate of Muscle Loss in Rats Post Spinal Cord Injury
Email: rw_nek@yahoo.com
(No relevant relationships reported)

1171  Board #3  9:30 AM - 11:30 AM
Effects of Activity-Based Rehabilitation on Cancellous Bone Loss Following Contusion Spinal Cord Injury in Rats
Russell D. Wnek, Christine F. Conover, Dana M. Otzel, Michael C. Reynolds, Kinley H. Buckley, Micah Flores, Ean G. Phillips, Joshua F. Yarrow. North Florida/South Georgia Veterans Health System, Gainesville, FL.
Email: rw_nek@yahoo.com
(No relevant relationships reported)

1172  Board #4  9:30 AM - 11:30 AM
Trabecular Bone Integrity at the Proximal Tibia Following a Contusion Spinal Cord Injury in Rats
Aaron S. Gomez, Christine F. Conover, Ean G. Phillips, Taylor E. Bassett, Micah Flores, Russell D. Wnek, Joshua F. Yarrow. Malcom Randall VA Medical Center, Gainesville, FL.
(No relevant relationships reported)

1173  Board #5  9:30 AM - 11:30 AM
Testosterone and Resistance Training Improves Muscle Quality Following Spinal Cord Injury
Matthew E. Holman, Ashraf S. Gorgey, FACSM. Hunter Holmes McGuire VA Medical Center, Richmond, VA. (Sponsor: Ashraf S. Gorgey, FACSM)
Email: holmanme@vcu.edu
(No relevant relationships reported)

1174  Board #6  9:30 AM - 11:30 AM
Intervertebral Disc And Vertebral Health In Long-term Runners
Ulrike H. Mitchell, Robert E. Larson, Jennifer A. Bowden, Bruce Bailey. Brigham Young University, Provo, UT. (Sponsor: Allen Parcell, FACSM)
Email: rike.mitchell@byu.edu
(No relevant relationships reported)

1175  Board #7  9:30 AM - 11:30 AM
Thorax and Spine Abnormalities in Health Sciences Students
Sergio Márquez-Gamito, Karla S. Vera-Delgado, Cipriana Caudillo-Cisneros, Fernando Sotelos-Barroso, Montserrat G. Vera-Delgado. Universidad de Guanajuato, León, Mexico
Email: smgamino@fisica.ugto.mx
(No relevant relationships reported)
1189 10:30 AM - 10:45 AM
Lower-Extremity Torque Capacity and Physical Function in Mobility-Limited Older Adults
Gregory J. Grosicki1, Davis A. Englund1, Lori Lyn Price2, Megumi Iwai2, Makoto Kashiwara3, Kieran F. Reid2, Roger A. Fielding2. 1Georgia Southern University, Savannah, GA. 2Tufts University, Boston, MA. 3Tufts Medical Center, Boston, MA. 4Astellas Pharma Inc, Osaka, Japan
(No relevant relationships reported)

1190 10:45 AM - 11:00 AM
Muscularity Of Non Sedentary Elderly Over Three Decades Trends
Rafael Benito Mancini1, João Pedro Da Silva Junior1, Carolina Gonzalez Beltran1, Tatiane Kosimenko Ferrari2, Timoteo Leandro Araujo1, Sandra Mahecha Matsudo2, Victor Keihan Rodrigues Matsudo1, José da Silva Guedes3, ‘Center of Studies of the Physical Fitness Research Laboratory from São Caetano do Sul (CELAPFCS), São Caetano do Sul - SP, Brazil. 4Universidade de São Paulo- USP, São Paulo, Brazil. 5Faculdades Metropolitanas Unidas - UNIFMU, São Paulo - SP, Brazil. 6School of Medicine – Universidad Mayor, Santiago, Chile. 7Santa Casa, São Paulo - SP, Brazil
Email: mancini.rafael@gmail.com
(No relevant relationships reported)

1191 11:00 AM - 11:15 AM
Health and Lifestyle Behaviors of U.S. Master’s World Cup Field Hockey Players
Karen A. Croteau, FACSM1, Nina Eduljee1, John Lamberth2, Yonjoong Ryuhl3, Poram Cho1, Morgan Hommel2, Zhujuan Pan1. 1Saint Joseph’ s College of Maine, Standish, ME. 2Plymouth State University, Plymouth, NH
Email: kcroteau@sjcm.edu
(No relevant relationships reported)

1192 11:15 AM - 11:30 AM
Effects of Tai Chi Exercise Versus BINGO on Fine Motor Functions in Older Adults
Saira Talwar1, Chih-Chia Chen2, John Lamberth3, Yojoong Ryuhl2, Poram Cho1, Morgan Hommel2, Zhujuan Pan1. 1University of Wisconsin - Milwaukee, Milwaukee, WI. 2Mississippi State University, Mississippi State, MS. (Sponsor: Scott Strath, FACSM)
Email: talwar@uwm.edu
(No relevant relationships reported)

1193 11:30 AM - 11:45 AM
Age-related Differences in Rectus Femoris Muscle Size and Hip Flexion Maximal and Rapid Torque Characteristics
Ty B. Palmer, Bailey M. Palmer. Texas Tech University, Lubbock, TX. (Sponsor: C. Roger James, FACSM)
(No relevant relationships reported)

1194 11:45 AM - 12:00 PM
The Effects Of 5-week Cup-tap Or Lower-limb-strength Exercise On Proprioception And Mobility In Community-dwelling Elderly
Xiaochun Tian1, Yujie Tong2, Yejun Wang1, Jia Han1, Gordon Waddington3, Roger Adams3, Jeremy Witchalls1, Doo El-Ansary3. 1Shanghai University of Sport, Shanghai, China. 2University of Manitoba, Winnipeg, Canada. 3University of Canterbury, Canterbury, Australia. 4Swinburne University of Technology, Melbourne, Australia
(No relevant relationships reported)
C-14  Clinical Case Slide - Neurologic Injuries

Thursday, May 30, 2019, 9:30 AM - 10:50 AM
Room: CC-304E

1201  9:30 AM - 10:50 AM
Chair: Cindy Y. Lin. University of Washington Medical Center, Seattle, WA
(No relevant relationships reported)

1202  9:30 AM - 10:50 AM
Discussant: David Olson, FACSM. University of Puerto Rico, San Juan, PR
(No relevant relationships reported)

1203  9:30 AM - 10:50 AM
Discussant: Andrew Alexander, FACSM. University of Minnesota, St. Paul, MN
(No relevant relationships reported)

1204  9:30 AM - 9:50 AM
Post-concussion Syndrome With Retrograde Amnesia in a Pediatric Patient
Andrew Alexander, Weston Northam, Kevin Cameiro, Jason Mihalik. University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Kevin Guskiewicz, FACSM)
Email: andrew.alexander@med.unc.edu
(No relevant relationships reported)

1205  9:50 AM - 10:10 AM
Headache, Vision Loss And Loss Of Consciousness-Wrestling
Jaron Santelli. University of Maryland School of Medicine, Baltimore, MD
(No relevant relationships reported)

1206  10:10 AM - 10:30 AM
After Lightening Strikes: A Case Of Anoxic Encephalopathy In A 30 Year Old Soccer Player
Michael Harbus, Miguel X. Escalon. Mount Sinai School of Medicine, New York, NY
(No relevant relationships reported)

1207  10:30 AM - 10:50 AM
She's Only Weak Because She Doesn't Play Sports
Brian Vernau. Children's Hospital of Philadelphia, Philadelphia, PA
(No relevant relationships reported)
Cardiorespiratory fitness (CRF), defined as an individual’s highest oxygen uptake (VO2 max) is closely linked to both human performance as well as an individual’s health trajectory and risk for chronic disease. Direct assessment of VO2 max is often cost-prohibitive, particularly for testing large populations. Thus, indirect methods have been developed to estimate CRF. However, the traditional equations for estimating VO2 max are highly inaccurate leading to a well-documented overestimation of CRF, especially at higher work rates. A parallel issue involves the optimal normal standard, or age-predicted method by which to express VO2 max. Existing normal standards are problematic because they tend to be population-specific, lack normal distribution and portability, and are poorly represented by women. The Wasserman equations are the most widely-used normal standards, but they were derived from a relatively limited sample and often do not function well in populations other than middle-aged normal weight males.

### C-17  Colloquium - Zebras Within the Herd: When Nerve Pain Presents like a Musculoskeletal Complaint

**Thursday, May 30, 2019, 9:30 AM - 10:20 AM**  
**Room: CC-300**

Patients are often frustrated when what began as a “common and simple” musculoskeletal injury turns into numerous medical appointments, hours of therapy and failed attempts at bracing, injections and potentially even surgery without relief. What began as a straightforward case transitions into a chronic injury with prolonged limitations in function and return to activity which becomes frustrating to both patients and clinicians alike. During this session the authors will demonstrate a comprehensive approach to ensure prompt and accurate diagnosis and treatment of nerve pain disguised as musculoskeletal pathology.

**1219**  
Adam J. Susmariski. United States Naval Academy, Annapolis, MD  
(No relevant relationships reported)

**1220**  
Adam J. Lewno. University of Michigan, Ann Arbor, MI  
(No relevant relationships reported)

### C-18  Clinical Workshop-Hands On Demonstration - The Physical Examination of the Potentially Unstable Hip

**Thursday, May 30, 2019, 9:30 AM - 10:20 AM**  
**Room: CC-304G**

This clinical workshop will be comprised of a didactic and hands on teaching session focusing on the comprehensive physical examination of athletes presenting with hip pain, with special focus on hip micro-instability.

**1221**  
Andrea Straccioli. FACSMM. Childrens Hospital Boston, Boston, MA  
(No relevant relationships reported)

### C-16  Colloquium - New Equations for Cardiorespiratory Fitness Assessment and Clinical Applications

**Thursday, May 30, 2019, 9:30 AM - 10:20 AM**  
**Room: CC-303**

We recently examined barriers to exercise and physical activity in various local community groups. Common responses included “There are so many other things for me to do, it’s easy to make excuses rather than be physically active.” Or, “Other things are more important and require my time and energy.” Does lack of time and/or time management really play a part in physical inactivity? What can we do about these perceptions and realities of life? Interestingly, most respondents thought there was a distinction between exercise and physical activity, but importantly, that lifestyle physical activity was an important way to meet current activity recommendations (150 minutes per week). Along with the attendees, this interactive session will discuss the lack of time and psychological barriers people often perceive or face within their daily lives in the hopes of improving our strategies to get more people moving!

**1222**  
Yi-Meng Yen. Boston Children’s Hospital - Harvard Medical School, Boston, MA  
(No relevant relationships reported)

### C-19  Exercise is Medicine® - Colloquium - Dealing With the Reality of Perceived Barriers to Exercise and Physical Activity: How Do We Get People Moving?

**Thursday, May 30, 2019, 9:30 AM - 10:20 AM**  
**Room: Hotel-Grand Ballroom A**

This presentation will provide a blueprint for merging academia, professional credentialing, corporate wellness, the medical community, state government, and the insurance industry to formally establish exercise physiologists as healthcare professionals.

**1223**  
M. Felicia Cavallini. Limestone College, Gaffney, SC  
(No relevant relationships reported)

**1224**  
David J. Dyck. University of Guelph, Guelph, ON, Canada  
(No relevant relationships reported)

### C-20  Exercise is Medicine® - Colloquium - If Exercise is Medicine, Should Exercise Physiologists be Recognized as Healthcare Professionals?

**Thursday, May 30, 2019, 9:30 AM - 10:20 AM**  
**Room: Hotel-Grand Ballroom B**

The session will discuss the “why” and present “how” the Exercise is Medicine (EIM) solution was integrated and implemented in a major South African Corporate’s wellness program. The integration of the EIM solution into a SA medical insurer scheme will also be presented. Outcomes of the programs will be discussed. These include the effects on Health Risk, Disease outcomes, Physiological parameters (such as cardio-respiratory fitness and strength) and on Productivity and Health Claims.

**1225**  
Byron L. Carter. Valdosta State University -- College of Nursing and Health Sciences, Valdosta, GA  
(No relevant relationships reported)

**1226**  
Mark J. Kasper. Valdosta State University, Valdosta, GA  
(No relevant relationships reported)

### C-21  Exercise is Medicine® - Colloquium - Implementing the EIM Solution in a South African Corporate Wellness Program and within a Medical Insurer Scheme

**Thursday, May 30, 2019, 9:30 AM - 10:20 AM**  
**Room: Hotel-Grand Ballroom D**

(Please see above for details on this session)
Whether obtained for screening or diagnostic purposes, an electrocardiogram (ECG) is difficult, and controversial. In this lecture a step by step logical approach to diagnosis, investigation and management of activity related chronic groin injury (non-hip) causes. Clinical Assessment, Investigation and Rehabilitation

Current Groin injury in Sport – Differentiating between intra-articular (hip) and extra-articular (Non-hip) Causes: Clinical Assessment

Thursday, May 30, 2019, 10:40 AM - 11:30 AM
Room: CC-303

Groin injury in Sport – Differentiating between intra-articular (hip) and extra-articular (non-hip) causes. Clinical Assessment, Investigation and Rehabilitation. Current diagnosis, investigation and management of activity related chronic groin injury is difficult, and controversial. In this lecture a step by step logical approach to identification and management will be presented allowing the participant to have a robust approach to this difficult but commonly encountered problem.

C-22 Tutorial Lecture - Acute Infections in Athletes - When can I go Back To Training, Doc? Thursday, May 30, 2019, 10:40 AM - 11:30 AM Room: CC-300

This clinical lecture will focus on one of the most common decisions that sports physicians face in day-to-day clinical practice - when is it safe for an athlete to return to training and competition following an acute infective illness? The aim of the lecture is to review the potential negative consequences of common acute infections on athlete health and performance, as well as the scientific evidence on which current clinical guidelines (“neck check”) for return to sport are based. In addition, the lecture new data to refine these guidelines will be presented and an up-to-date practical clinical decision-making pathway to best advise athletes on return-to-play following the most common acute infective illnesses will be proposed.

1228 Martin Schwellnus, FACSM, SEMLI, University of Pretoria, Pretoria, South Africa
(No relevant relationships reported)

C-23 Tutorial Lecture - Groin Injury in Sport – Differentiating between Intra-articular (Hip) and Extra-articular (Non-hip) Causes: Clinical Assessment Thursday, May 30, 2019, 10:40 AM - 11:30 AM Room: CC-303

Groin injury in Sport – Differentiating between intra-articular (hip) and extra-articular (non-hip) causes. Clinical Assessment, Investigation and Rehabilitation. Current diagnosis, investigation and management of activity related chronic groin injury is difficult, and controversial. In this lecture a step by step logical approach to identification and management will be presented allowing the participant to have a robust approach to this difficult but commonly encountered problem.

1229 Geoffrey Verrall, South Australian Sports Institute, Adelaide, Australia, Brighton, Australia
(No relevant relationships reported)

C-24 Tutorial Lecture - Moving the Needle on School Physical Activity: Targets for Intervention and Worthwhile Outcomes Thursday, May 30, 2019, 10:40 AM - 11:30 AM Room: CC-205

The vast majority of children do not achieve sufficient physical activity. There exists a host of opportunities to inject physical activity into the elementary school day, including both traditionally active times of PE and recess, along with traditionally inactive times of the regular education classroom and pre / post school. If we are going to advance this research, we must do a better job of intervening across these spaces and move beyond a reliance physical activity as an outcome and push the boundaries of research with children to explore direct indicators of health.

1230 John B. Bartholomew, FACSM. The University of Texas at Austin, Austin, TX
(No relevant relationships reported)

1231 Darla M. Castelli. The University of Texas at Austin, Austin, TX
(No relevant relationships reported)

1232 Jennifer Sacheck, FACSM. George Washington University, Washington, DC
(No relevant relationships reported)


Sudden cardiac death (SCD) is the leading cause of death in athletes during sport. Whether obtained for screening or diagnostic purposes, an electrocardiogram (ECG) increases the ability to detect underlying cardiovascular conditions at increased risk for SCD. The goal of this workshop is to help physicians distinguish normal, physiologic ECG adaptations in athletes from ECG findings suggestive of a pathologic cardiac disorder. The presentation will be based on the 2017 International Criteria for Electrocardiographic Interpretation in Athletes.

1233 Jonathan Drezer. University of Washington, Seattle, WA
(No relevant relationships reported)

C-26 Exercise is Medicine® - Colloquium - Prehabilitation - Current Evidence and Future Directions Thursday, May 30, 2019, 10:40 AM - 11:30 AM Room: Hotel-Grand Ballroom A

Prehabilitation programs aim to make medical treatments (surgery, chemotherapy, etc.) accessible, while simultaneously reducing the risk of a wide range of treatment-associated complications (e.g. wound healing, stroke, anastomosis, etc.) and long-term side effects (cognitive impairments, immobility). In fact, “prehabilitation” represents one of the fastest growing research fields and is covered by different scientific disciplines such as nutrition- and sports medicine. This session aims at providing an introduction to the topic of prehabilitation in the context of physical exercise. After giving an overview of the current state-of-the art, this session will highlight the clinical and economic relevance for different populations, aims and limitations (time frame, mobility, etc.) as well as on potential beneficial effects of exercise on the mechanistic level. The session should bring together researchers and clinicians who are interested to contribute to this field and share their ideas about future perspectives.

1234 Philipp Zinnere. German Sport University, Cologne, Germany
(No relevant relationships reported)

1235 Moritz Schumann. German Sport University, Cologne, Germany
(No relevant relationships reported)

C-27 Exercise is Medicine® - Tutorial Lecture - Working with University Recreational Sports Departments to Enhance Exercise is Medicine on Campus Efforts Thursday, May 30, 2019, 10:40 AM - 11:30 AM Room: Hotel-Grand Ballroom B

Exercise is Medicine on Campus (EIM-OC) efforts have been part of ACSM for nearly a decade. Most effective programs work with various University entities to achieve their goals. Recreational Sports Departments are key to this effort, and offer the exercise practitioner and scientist a way to enhance EIM-OC. This tutorial aims to show the attendees a) how to best work with the Recreational Sports staff, b) how to access previously collected Recreational Sports data to help “sell” the success of the program to University administrators, and c) some of the best ways to perform quality research on the role of Recreational Sports on student success and wellness. In addition, we will share results from a recently completed research study utilizing a national survey determining student recreational sports use and relevant academic and wellness outcomes.

1236 James M. Pivarnik, FACSM. Michigan State University, East Lansing, MI
(No relevant relationships reported)

1237 Kerri L. Vasold. Michigan State University, East Lansing, MI
(No relevant relationships reported)

C-28 Exercise is Medicine® - Tutorial Lecture - Yoga: Rx for Older Adults and a Good Night’s Sleep Thursday, May 30, 2019, 10:40 AM - 11:30 AM Room: Hotel-Grand Ballroom D

Relationships between yoga, exercise, and sleep in clinical research studies are emerging. Sleep disorders are common among older adults who generally require less but have poorer sleep quality than younger adults. We explore differences between yoga and other types of exercise on sleep parameters. Overview of recent research on yoga, exercise and sleep, specific to the older adult population will follow sleep physiology and research from past to present. In this tutorial, an expert yoga
researcher and practitioner will address study design and use of technologies that allow researchers to move forward in sleep research. Directions for professionals in clinical settings are explored.

1238 Paula R. Seffens. U. of North GA, Oakwood, GA
(No relevant relationships reported)

C-29 Free Communication/Poster - Energetics
Thursday, May 30, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

1239 Board #1 9:30 AM - 11:00 AM
Characteristics Of The Fecal Microbiota In Professional Martial Arts athletes: Comparison Between Different Competitive Levels
Ru Liang1, Xianglei Peng2, Jiangyu Zhou1. 1Beijing Sport University, Beijing, China. 2Peking University-Shenzhen Hospital, Shenzhen Peking University-The Hong Kong University of Science and Technology Medical Center, Shenzhen, China. Email: liangru126@126.com
(No relevant relationships reported)

1240 Board #2 9:30 AM - 11:00 AM
Relative Exercise Intensity And Energy Expenditure Of Exercising On The Freebounder™
Jared Hartung, Paul Mutch, John P. Porcari, FACSM, Kimberly Radtke, Abigail Ryskey, Carl Foster, FACSM, University of Wisconsin-La Crosse, La Crosse, WI. (Sponsor: John Porcari, FACSM)
(No relevant relationships reported)

1241 Board #3 9:30 AM - 11:00 AM
Can Intensity In Strength Training Promote Changes In Caloric Expenditure? Systematic Review And Meta-analysis
Ayton Figueira Junior1, Daniel Rodrigues1, Ruy Calheiros Neto1, Aquiles Yashe1, Thiago Ferreira2, Roberta L. Rea1, Nelson Cavas Jr1, Gustavo Allegritti João1, Danilo Sales Bocalini1. 1Universidade São Judas Tadeu, Sao Paulo, Brazil. 2Faculdades Metropolitanas Unidas - FMU, Sao Paulo, Brazil. 3Universidade Mayor, Santiago, Chile. 4Universidade do Espírito Santo, Espírito Santo, Brazil. Email: fernandolopes.fisio@gmail.com
(No relevant relationships reported)

1242 Board #4 9:30 AM - 11:00 AM
Net Energy Efficiency during Synchronous and Asynchronous Arm Cranking at Three different Body Postures
Haejung Jang1, Soni Yun1, Jaemyang Kim1, Eunjin Hwang1, Ah Reun Jung1, Hee Jin Lee2, Dae Taek Lee2, Ikjin Kwon2. 1Kookmin University, Seoul, Korea, Republic of. 2Chung-Ang University, Seoul, Korea, Republic of
(No relevant relationships reported)

1243 Board #5 9:30 AM - 11:00 AM
Urine Lactate after Continuous and Interval Cycling Exercise Bouts Eliciting Different Blood Lactate Concentrations
Gregory C. Bogdanis1, Spiros Tsirigkakis1, George Mastorakos2, Vassilis Mougiakos1. 1National and Kapodistrian University of Athens, Dafne, Greece. 2University of Thessaly, Trikala, Greece. 3National and Kapodistrian University of Athens, Athens, Greece. 4Aristotle University of Thessaloniki, Thessaloniki, Greece. Email: gbogdanis@phed.uoa.gr
(No relevant relationships reported)

1244 Board #6 9:30 AM - 11:00 AM
The Autonomic Balance Of Master Athlete During Stress Is Associated To Antioxidant Profile
Lysleine Alves Deus, Thiago Santos Rosa, Larissa Alves Maciel, José Moraes Souto Filho, Samuel Silva Aguair, Caio Victor Sousa, Rodrigo Vanerson Passos Neves, Herbert Gustavo Simões. Universidade Católica de Brasília, Brasília, Brazil. Email: lys.deus@gmail.com
(No relevant relationships reported)

1245 Board #7 9:30 AM - 11:00 AM
Effect Of Wearing Compression Tights On Muscle Oxygenation And Exogenous Glucose Utilization During Prolonged Cycling
Sahiro Mizuno1, Eri Yamada2, Fumihiko Todok1, Kazuhighe Goto1. 1Ritsumeikan University, Kusatsu, Japan. 2DESCENTE Ltd., Osaka, Japan. (Sponsor: Robert Kraemer, FACSM)
Email: sh0019hs@ed.ritsumei.ac.jp
(No relevant relationships reported)

1246 Board #8 9:30 AM - 11:00 AM
Seasonal Changes in Salivary Biomarkers and Psychomotor Function Among Elite Fencers
Valeriou Tomsucu1, David Bellar2. 1National Olympic Committee, Bukarest, Romania. 2University of Louisiana at Lafayette, Lafayette, LA. Email: olimpicus@yahoo.com
(No relevant relationships reported)

1247 Board #9 9:30 AM - 11:00 AM
Perceived Energy and Well Being in Collegiate Football Players with and without Sickle Cell Trait
Matt Martone1, Shelly Mullenis1, Nathan Lemoine, Jr1, Jack Marucci1, Derek Calvert1, Timothy S. Church2, Brian Harrell2, Guillaume Spielmann2, Brian Irving, FACSM1, Jennifer Rood2, LaKeetha Poole2, Neil Johannsen1. 1Louisiana State University, Baton Rouge, LA. 2Pennnington Biomedical Research Center, Baton Rouge, LA. (Sponsor: Brian Irving, FACSM)
(No relevant relationships reported)

1248 Board #10 9:30 AM - 11:00 AM
Effect of Gas Exchange Measurements on Critical Power and Determination of Peak Oxygen Uptake during 3 min Critical Power Tests
Alan D. Moore, FACSM1, Joshua M. Kern2, Shannon L. Jordan1, Daniel R. Chilek1. 1Lamar University, Beaumont, TX. 2Louisiana State University, Baton Rouge, LA. Email: alan.moore@lamar.edu
(No relevant relationships reported)

1249 Board #11 9:30 AM - 11:00 AM
Potential Benefit of Repeated Resting Metabolic Rate Measurements
Gregory Davis1, Mary Lavergne1, Derek Scott1, Benjamin Kern2, David Bellar1, Arnold Nelson, FACSM1. 1University of Louisiana at Lafayette, Lafayette, LA. 2Louisiana State University, Baton Rouge, LA. (Sponsor: Arnold Nelson, FACSM)
Email: grt4805@louisiana.edu
(No relevant relationships reported)

1250 Board #12 9:30 AM - 11:00 AM
Effects Of Eccentric Versus Concentric Exercise Of The Trunk Extensor On Muscle Function, Blood Lipid Profile And Glycemic Response
Ah-Ram Kim1, Ho-Seong Lee2. 1Namseoul University, Cheonan-si, Korea, Republic of. 2Dankook University, Cheonan-si, Korea, Republic of
Email: ptk@nsu.ac.kr
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Time</th>
<th>Board #</th>
<th>Title</th>
<th>Authors</th>
<th>Affiliations</th>
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<tr>
<td>9:30 AM</td>
<td>1251</td>
<td>Lactate Threshold Velocity At 4 mMol/l Does Not Maintain Blood Lactate Levels During Steady State Intensity</td>
<td>Juan C. Mazza1, Raúl L. Festa1, Sandra L. Prieto1, Patricia Cosolito1, Alvaro N. Gurovich, FACSM2, Biosystem Institute Sports Sciences, Rosario, Argentina. 2Colombia State University, Bogotá D.C., Colombia. 1The University of Texas at El Paso, El Paso, TX Email: <a href="mailto:juancmazza@wininternet.com">juancmazza@wininternet.com</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>9:30 AM</td>
<td>1252</td>
<td>Validation Of Gas Analysis Over Incremental Work Intensities - A Comparison Of Two Metabolic Measurement Systems</td>
<td>Leila A. Walker1, David P. Looney1, Heather M. Hansen1, Maxwell N. Rome2, William J. Tharion1, Alexander P. Welles3, Adam W. Potter1, Christopher R. Chalmers2, Reed W. Hoyt3, Holly L. McClung1, 1US Army Research Institute of Environmental Medicine, Natick, MA. 2Oak Ridge Institute for Science and Education, Oak Ridge, TN Email: <a href="mailto:awong@marymount.edu">awong@marymount.edu</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>9:30 AM</td>
<td>1253</td>
<td>Tissue Oxygen Index Response During Maximal On-Ice And Cycling Performances With Short Track Speed Skaters</td>
<td>Fanie St-Jean Miron1, Emily Waldh1, Bianca Marcot1, Gilles Gouaspilou1, Alain Steve Cornote1, 1University of Quebec in Montreal, Montreal, QC, Canada. 2Loyola University Chicago Stritch School of Medicine, Chicago, IL Email: <a href="mailto:glum@tulane.edu">glum@tulane.edu</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>9:30 AM</td>
<td>1254</td>
<td>Minimal Effects of Hypoxia on Energy System Contribution during Supramaximal Upper-Body Exercise in Women</td>
<td>Tristan Starling-Smith1, David Boffey2, Michael La Monica2, Jeffrey Stour1, David Fukuda3, 1University of Central Florida, Orlando, FL. 2Missouri State University, Springfield, MO Email: <a href="mailto:jmmthomp4@coastal.edu">jmmthomp4@coastal.edu</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>9:30 AM</td>
<td>1255</td>
<td>Dual Stress Warm-Up Protocol Does Not Significantly Alter Blood Glucose Concentration</td>
<td>Margaret M. Glick1, Matthew P. Sacco1, Eric C. Bredahl1, Michael T. Lane1, Jacob A. Siedlik2, 1Creighton University, Omaha, NE. 2Eastern Kentucky University, Richmond, KY. (Sponsor: Joan Eckerson, FACSM)</td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>9:30 AM</td>
<td>1256</td>
<td>Exercise Intensity, Energy Expenditure And Enjoyment During Variable High Intensity Exercise In Healthy Adults.</td>
<td>Jenna Thompson, Matthew Wolfe1, Meral Culver, Kelly E. Johnson, Justin P. Guilkey1, Coastal Carolina University, Conway, SC Email: <a href="mailto:jmthomp4@coastal.edu">jmthomp4@coastal.edu</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>9:30 AM</td>
<td>1257</td>
<td>Muscle Energy and Salivary Cytokine Response During a 100 Mile Trail Run: A Case Study</td>
<td>Taran Bailey1, Ellis Jensen2, Steven Namanny3, Andrew Creer3, 1allen parcell, Provo, UT. 2Utah Valley University, Orem, UT. 3University of Potsdam, Potsdam, Germany (Sponsor: Tongjian You, FACSM)</td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>9:30 AM</td>
<td>1258</td>
<td>Tissue Oxygen Recovery Time in Back and Front Squats</td>
<td>Patrick R. Davis, John P. Yake1, Matthew C. Wagner, Allison P. Glave1, Sam Houston State University, Huntsville, TX Email: <a href="mailto:davisp@shsu.edu">davisp@shsu.edu</a></td>
<td>(No relevant relationships reported)</td>
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</tbody>
</table>
1266  Board #28  9:30 AM - 11:00 AM
Reliability Of A Vagal Modulation Index In Different Conditions
Daniel A. Boullosa1, André R. Medeiros1, Scott Michael1, Anthony S. Leicht1. 1Universidade Católica de Brasília, Brasilia, Brazil. 2University of Wollongong, Wollongong, Australia. 3James Cook University, Townsville, Australia. (Sponsor: Carl Foster, FACSM)
Email: d_boullosa@yahoo.es
(No relevant relationships reported)

1267  Board #29  9:30 AM - 11:00 AM
Effects of Wheel Running on Health-Related Outcomes in Growth Restricted Mice.
Eric C. Leszcynski, Logan A. Pendergrast, David P. Ferguson. Michigan State University, East Lansing, MI
(No relevant relationships reported)

1268  Board #30  9:30 AM - 11:00 AM
Carnosine Essential For Cardiac Function. A Study With Knockout Rats For The Carnosine Synthase Gene
Lúvia S. Gonçalves, Lucas Sales, Alan Lins Fernandes, Tiemi Raquel saito, José Natali, Leonardo Jensen, Alexandre Arnold, Isis Correa, Diogo Sant’Anna, Juliane Campos, Lisley Ramalho, Maria Cláudia Iriygoen, Júlio Ferreira, Guilherme Giannini Artioli. University of São Paulo, São Paulo, Brazil
Email: livaonouaugoncalves@gmail.com
(No relevant relationships reported)

1269  Board #31  9:30 AM - 11:00 AM
Left Ventricular Morphology and Function of Recurrent Syncope Patients
Kazukuni Hinuki, Kyorin University, tokyo, Japan
Email: hirabuk0303@gmail.com
(No relevant relationships reported)

1270  Board #32  9:30 AM - 11:00 AM
The Impact Of Acute Hyperglycemia On Heart Rate Variability In Men And Women.
Jennifer S. Williams, Taylor Stimpson, Jacob T. Boruafgila, Joshua C. Tremblay, Alyssa M. Fenuta, Brendan J. Gurd, Kyra E. Pyke. Queen’s University, Kingston, ON, Canada
Email: willips3@mcmaster.ca
(No relevant relationships reported)

1271  Board #33  9:30 AM - 11:00 AM
Post exercise Heart Rate And Vagal Reactivation Correlates With Vagal Withdrawn After Orthostatic Maneuver In Men
Email: gmolina@unb.br
(No relevant relationships reported)

1272  Board #34  9:30 AM - 11:00 AM
Sympathetic Activity and Cardiovascular Risk Markers In Non-diabetic and Diabetic Mexican Older Adults
Patricia C. García Suárez1, Rebeca B. Fonseca-Viana1, Iván Rentería1, Ernimo Canton-Martínez1, Alberto Jiménez-Maldonado1, José Moncada-Jiménez. 1Universidad Autónoma de Baja California, Ensenada, Baja California, Mexico. 2Instituto Federal de Educación, Ciencia y Tecnología do Sul de Minas Gerais, Minas de Gerai, Brazil. 3Universidad de Costa Rica, San José, Costa Rica
Email: patricia.garcia@uabc.edu
(No relevant relationships reported)

1273  Board #35  9:30 AM - 11:00 AM
Effects of Maturational Development on Central Hemodynamics in Pre and Post Adolescent Children
Austin T. Lassiter, Katiein T. McShea, Hwan Kim, Nicholas D. Tocci, Marco Meucci. Appalachian State University, Boone, NC. (Sponsor: Scott R. Collier, FACSM)
Email:lassiterat@appstate.edu
(No relevant relationships reported)

1274  Board #36  9:30 AM - 11:00 AM
The Influence of Cardiovascular and Metabolic Variables on Autonomic Nervous System Activity
Michael Jarrett, Travis Anderson, Laurie Wideman, FACSM, Paul Davis, FACSM. University of North Carolina, Greensboro, Greensboro, NC. (Sponsor: Paul G. Davis, FACSM)
Email: msjarrett@uncg.edu
(No relevant relationships reported)

1275  Board #37  9:30 AM - 11:00 AM
Early Ovarian Hormone Deprivation Increases Cardiac Contractility In Old Female Rats - Role Of Physical Training
HUGO C.D. SOUZA, Ana Carolina S. Felix, Sabrina G.V. Dutra, Stella V. Philbois, Tábata F. Facioli. UNIVERSITY OF SÃO PAULO, Ribeirão Preto, Brazil.
Email: hugoods@nmp.usp.br
(No relevant relationships reported)

1276  Board #38  9:30 AM - 11:00 AM
Strength Training Attenuates Hypertension And Preserves The Diastolic Function Of Spontaneously Hypertensive Rats: Role Of Linear Periodization
Danilo S. Bocalini1, Roberta L. Rica1, Ariana A. Silva2, Adriano F. Maia1, Mauro S. Perilhão3. 1Federal University of Espirito Santo, Vitoria, Brazil. 2São Judas Tadeu University, São Paulo, Brazil. 3Federal University of São Paulo, São Paulo, Brazil
(No relevant relationships reported)

C-31 Free Communication/Poster - Imaging and Assessment in Skeletal Muscle, Bone and Connective Tissue
Thursday, May 30, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

1277  Board #39  9:30 AM - 11:00 AM
Dynamic Ultrasonography of Anterior Femoral Translation: Comparison to Ballet Turnout and Hip Symptoms in Dancers
Kristin E. Schwarz, Sarah Jackson, Dai Sugimoto, Rebeka Zwickert, Pierre A. d’Hemecourt, FACSM. Boston Children’s Hospital, Boston, MA
Email: kristin.schwarz@childrens.harvard.edu
(No relevant relationships reported)

1278  Board #40  9:30 AM - 11:00 AM
Effects Of Downhill Running On Muscle MRI T2 In Young mdx Mice
Email: zmoslemi@ufl.edu
(No relevant relationships reported)

1279  Board #41  9:30 AM - 11:00 AM
Interactions Among Age, Sex, and Scanning Location in the Assessment of Rectus Femoris Echo Intensity
Adam Burton, Matthew Stock. University of Central Florida, Orlando, FL
Email: aburton426@gmail.com
(No relevant relationships reported)

1280  Board #42  9:30 AM - 11:00 AM
Can Changes In Echo-intensity Be Used To Detect The Presence Of Muscle Swelling?
Noam Yitzchaki, Tayla E. Kuehne, Samuel L. Buckner. University of South Florida, Tampa, FL. (Sponsor: Marcus Kilpatrick, FACSM)
Email: noamyy@mail.usf.edu
(No relevant relationships reported)
P92  Final Program

1281 Board #43 9:30 AM - 11:00 AM
The Validity And Reproducibility Of A 5-minute Endurance Test Of The Diaphragm Muscle
Hallie R. Wachsmuth, Elizabeth K. Pryor, Kevin K. McCully, FACSM. University of Georgia, Athens, GA. (Sponsor: Dr. Kevin McCully, FACSM)
Email: hww89340@uga.edu
(No relevant relationships reported)

1282 Board #44 9:30 AM - 11:00 AM
Effects Of Downhill Running On Skeletal Muscle Of Dystrophic Mice Evaluated By 31Phosphorus magnetic resonance spectroscopy
Email: christopherlopez@phhp.ufl.edu
(No relevant relationships reported)

1283 Board #45 9:30 AM - 11:00 AM
Evaluation of Resistant Exercise-Induced Muscle Swelling Using Bioelectrical Impedance Analysis
Email: sb0141sh@ed.ritsumei.ac.jp
(No relevant relationships reported)

1284 Board #46 9:30 AM - 11:00 AM
The Assessment Of Muscular Characteristics Using Tensimongraphy In Hemiplegic Stroke Patients
Shin Who Park, M.D., Won Kim, M.D., Kyounghy Choi, M.D., Ph.D. Asan Medical Center, University of Ulsan College of Medicine, Seoul, Korea, Republic of
(No relevant relationships reported)

1285 Board #47 9:30 AM - 11:00 AM
Exercise-induced Changes In Muscle Thickness As Measured By Both A-mode And B-mode Ultrasound
Tayla E. Kuehne1, Noam Yitzchak1, B. Sue Graves, FACSM2, Samuel L. Buckner. 1University of South Florida, Tampa, FL. 2Florida Atlantic University, Boca Raton, FL
Email: tkuehne@mail.usf.edu
(No relevant relationships reported)

1286 Board #48 9:30 AM - 11:00 AM
Age-related Change In Cross Sectional Area Of The Psoas Major Muscle In Japanese
Mitsuharu KAYA1, Masanori Takeamura2, Junzo Tsujita3, Ken-ich Ichihashi2. 1Hyogo University of Health Sciences, Kobe, Japan. 2Ichihashi Clinic, Kobe, Japan. 3Institute of Health & Sports Medical Science, Hyogo, Japan
Email: kaya@huhls.acjp
(No relevant relationships reported)

1287 Board #49 9:30 AM - 11:00 AM
Skeletal Muscle VO2, Kinetics By Nirs “Repeated Occlusions Method” During Recovery From Cycle Ergometer Exercise
Lucrèzia Zuccarello. Università degli Studi Udine, Udine, Italy. (Sponsor: Bruno Grassi, FACSM)
(No relevant relationships reported)

1288 Board #50 9:30 AM - 11:00 AM
Pelvic Limbs Length And Knee Alterations In Health Sciences College Students.
Karla S. Vera-Delgado, Cipriana Caudillo-Cisneros, Fernando Sotelo-Harrouso, Sergio Marquez-Gamino, Montserrat Vera-Delgado. Universidad de Guanajuato, León, Mexico
Email: ksvera@ugto.mx
(No relevant relationships reported)
1296 Board #58  10:30 AM - 12:00 PM  
Sleep Restriction Negatively Influences Visually and Memory-Guided Force Control  
Sarah A. Brinkerhoff1, Stephen M. Strayer2, Jaimie A. Roper1, Anne-Marie Chang3, Kristina A. Needy4. 1Auburn University, Auburn, AL. 2The Pennsylvania State University, State College, PA. (Sponsor: Mark Tillman, FACSM)  
Email: sab0042@auburn.edu  
(No relevant relationships reported)

1297 Board #59  10:30 AM - 12:00 PM  
The Effect of Muscle Contraction Type on Neuromuscular Complexity in Trained Individuals  
Luis Hernandez, Peter Chomentowski, Clayton L. Camic. Northern Illinois University, DeKalb, IL.  
Email: L.Hernandez6@niu.edu  
(No relevant relationships reported)

1298 Board #60  10:30 AM - 12:00 PM  
Reliability of Motor Unit Behavior during a Maximal Voluntary Isometric Contraction of the Knee Extensors  
Ryan J. Colquhoun, Patrick M. Tomko, Mitchel A. Magrini, Syndie R. Fleming, Matthew C. Ferrell, Nile F. Banks, Trey Gradnigo, Nathaniel D.M. Jenkins. Oklahoma State University, Stillwater, OK.  
(No relevant relationships reported)

1299 Board #61  10:30 AM - 12:00 PM  
A Comparison of Motor Unit Control Strategies Between Two Different Isometric Muscle Actions  
Sungun Jeon, Xin Ye, William Miller. University of Mississippi, University, MS.  
Email: sjoon3@go.olemiss.edu  
(No relevant relationships reported)

1300 Board #62  10:30 AM - 12:00 PM  
Badminton Players Show A Lower Coactivation And Higher Beta Band Eog-eng Coupling Between Antagonist Muscles  
Lejun Wang1, Weixin Niu1, Jingyuan Chen1, Shengxian Zhang2, Li Li, FACSM3, Tianfeng Lu1. 1Tongji University, Shanghai, China. 2Shanghai University of Sport, Shanghai, China. 3Georgia Southern University, Statesboro, GA.  
(No relevant relationships reported)

1301 Board #63  10:30 AM - 12:00 PM  
Does Strict Validation Criteria for Individual Motor Units Alter Extrapolation Analyses of the Motor Unit Pool?  
Jesus A. Hernandez-Sarabia, Alejandra Barrera-Curiel, Ryan J. Colquhoun, Jason M. DeFreitas. Oklahoma State University, STILLWATER, OK.  
Email: jesusah@okstate.edu  
(No relevant relationships reported)

1302 Board #64  10:30 AM - 12:00 PM  
Differences In Biomechanical And Electromyographic Strategies Between Young And Old Persons During The Timed Up-and-go  
Lawrence Villaneua, Keri Strand, Jeonghoon Oh, Moataz Eltoukhy, Jordan Strnad, Kevin Posner, Nathaniel Strand, Lauren Catena, Joseph F. Signorile. University of Miami, Miami, FL. (Sponsor: Dr. Kevin Jacobs, FACSM)  
(No relevant relationships reported)

1303 Board #65  10:30 AM - 12:00 PM  
Knee Proprioception Measurement Reliability and its Relationship to Single Leg Reach Distance  
Megan M. Walters, Cody M. Ballay, Cruz A. Finnicum, Chelsea L. Jentsch, Orion J. Swanson, Daniel R. Richie, Ajit MW Chudhari, FACSM. The Ohio State University, Columbus, OH.  
(No relevant relationships reported)
### P94  Final Program

**1312 Board #74 10:30 AM - 12:00 PM**

**Neural And Contractile Determinants Of Rate Of Force Development: A Preliminary Analysis**

Mitchel A. Magrini, Ryan Coglohoun, Nathaniel Jenkins, Jason DeFreitas. Oklahoma State University, Stillwater, OK

(No relevant relationships reported)

**1313 Board #75 10:30 AM - 12:00 PM**

**Examining Quadriceps Muscle Excitability Throughout A Progressive Exercise Test: A Pilot Study**

Emily M. Adamic, Joel T. Greenshields, Jessica A. Freeman, Koichi Kitano, David M. Koceja, Timothy Mickleborough. Indiana University, Bloomington, IN

Email: emadamic@indiana.edu

(No relevant relationships reported)

### C-33 Free Communication/Poster - Movement Disorders

**Thursday, May 30, 2019, 7:30 AM - 12:30 PM**

**Room:** CC-Hall WA2

**1314 Board #76 10:30 AM - 12:00 PM**

**Optimizing Dance Interventions To Improve Motor Function In People With Parkinson’s Disease And Older Adults**

Angela L. Ridgell, FACSM, Jin Hyun Kim, Peter Gates, Robert Melezak, Fred Discenzo, Margaret Busch, Joan Meggitt. Kent State University, Kent, OH

Email: aridgell@kent.edu

(No relevant relationships reported)

**1315 Board #77 10:30 AM - 12:00 PM**

**Effects Of A Cooling Vest On Dual-task Performance And Fatigue In Persons With Multiple Sclerosis**

Samantha Everett, Chelsea Comeau, Virginia Thomas, Srikant Vallabhajosula. Elon University, Elon, NC. (Sponsor: Stephen Bailey, FACSM)

(No relevant relationships reported)

**1316 Board #78 10:30 AM - 12:00 PM**

**Comparing Turn Performance In Parkinsonism**

Sidney Baudendistel, Abigail Schmitt, Ashley Rodriguez, Chris Hass, FACSM, University of Florida, Gainesville, FL. (Sponsor: Chris J Hass, FACSM)

Email: sbaudendistel@ufl.edu

(No relevant relationships reported)

**1317 Board #79 10:30 AM - 12:00 PM**

**Neuromuscular Impairment of the Planter Flexors In Adults With and Without Prader-Willi Syndrome**

Eric J. Shumski, Skylar C. Holmes, Brett K. Post, Steven A. Garcia, Derrick Escano, Daniela A. Rubin, FACSM, Derek N. Pamukoff, California State University, Fullerton, Fullerton, CA. 1University of Michigan, Ann Arbor, MI

Email: ericshumski@csu.fullerton.edu

(No relevant relationships reported)

**1318 Board #80 10:30 AM - 12:00 PM**

**Impact Of Attention-deficit/hyperactivity Disorder On Gross Motor Skills Among A Group Of Girls Teens**

Laurie Simard, Julie Bouchard, Linda Paquette, Jacinthe Dion, Claudia Verret, Jacques R. Leroux, Alain-Steve Comtois, Tommy Chevrette. 1UQAC, Chicoutimi, QC, Canada. 2UQAM, Montréal, QC, Canada. 3HRDP, Montreal, QC, Canada

Email: laurie.simard@uqac.ca

(No relevant relationships reported)

**1319 Abstract Withdrawn**

### ACSM 66th Annual Meeting

**1320 Board #82 10:30 AM - 12:00 PM**

**Single-Arm Torque Perceptual Deficits in Individuals with Chronic Hemiparetic Stroke**

Angelica C. Alberto, Justin Drogo, Ninghe Cai, Neha Reddy, Julius Dewald, Netta Gurari. California State University, Northridge, Northridge, CA. 2Northwestern University, Chicago, IL

Email: Angelica.Alberto.736@my.csan.edu

(No relevant relationships reported)

**1321 Board #83 10:30 AM - 12:00 PM**

**Functional Motor Control Deficits In Fragile X Mental Retardation 1 Gene Premutation Carriers**


Email: shpark@ufl.edu

(No relevant relationships reported)

**1322 Board #84 10:30 AM - 12:00 PM**

**The Relationship Between Y Balance Performance & Hip Strength &; Recreationally Trained Women.**

HAROLDO SANTANA, Gabriel A. Paz, Antonio Brandão, Victor Dos SANTOS JÚNIOR, Kim HÉBERT-LOSIER, Humberto Miranda. 1UFRJ, Federal University of Rio de Janeiro, RIO DE JANEIRO, Brazil. 2Physical Assessment and Training Center – CAFT, RIO DE JANEIRO, Brazil. 1University of Wollongong, Wollongong, New Zealand

(No relevant relationships reported)

**1323 Board #85 10:30 AM - 12:00 PM**

**Effect of Treadmill vs. Recessed Curb Trainer on Gait and Leg Electromyography after Chronic Stroke**

Nicholas Siekirk, Qin Li, Victoria Pardo, Sujay Galen, Brad Kendall, Tamara Hew-Butler, FACSM. 1Georgia Southern University, Statesboro, GA. 2Wayne State University, Detroit, MI. 3Georgia State University, Atlanta, GA. 4Taylor University, Upland, IN. (Sponsor: Tamara Hew-Butler, FACSM)

Email: nsiekirk@georgiasouthern.edu

(No relevant relationships reported)

**1324 Board #86 10:30 AM - 12:00 PM**

**Acute Effects of Voked Prism Lenses on Gait in Individuals with Acquired Brain Injuries**

Nathan Bedel, Melissa McDonald, Susan Durham, Alma Privette, Srikant Vallabhajosula. 1Elon University, Elon, NC. 2Brier Creek Vision Care, Raleigh, NC. (Sponsor: Stephen Bailey, FACSM)

Email: nbedel@elon.edu

(No relevant relationships reported)

**1325 Board #87 10:30 AM - 12:00 PM**

**Effects of Activity-Based Physical Rehabilitation on Locomotor Recovery in Rats after Severe Spinal Cord Injury**

Kinye H. Buckley, Christine F. Conover, Russell D. Wnek, Michael C. Reynolds, Mica C. Flores, Ean G. Phillips, Dana M. Otzel, Joshua F. Yarrow. Malcom Randall VA Medical Center, Gainesville, FL

(No relevant relationships reported)

### C-34 Free Communication/Poster - Posture and Balance

**Thursday, May 30, 2019, 7:30 AM - 12:30 PM**

**Room:** CC-Hall WA2

**1326 Board #88 10:30 AM - 12:00 PM**

**Dry Needling Improves Static and Dynamic Balance in Individuals with Chronic Ankle Instability**


Email: jennifer.mullins@uky.edu

(No relevant relationships reported)
American College of Sports Medicine

Board #99 10:30 AM - 12:00 PM
The Effects of Cognitive Load and Postural Demand on Static Balance
Nathan Ward1, Kell Grandjean da Costa1, John Ransmay2, Lee Hancock2, Kari L. Lovernro2, Erika K. Hussey1, Aleya Menta1, Francesca Railheau1, Eduardo B. Fontes1, Elizabeth Maric1. 1Tufts University, Medford, MA. 2Natick Soldier Research, Development and Engineering Center, Natick, MA.
Email: nathan.ward@tufts.edu
(No relevant relationships reported)

Board #97 10:30 AM - 12:00 PM
Minimal Detectable Change Scores For Measures of Functional Balance in Adolescents With Chronic Ankle Instability
Mary Spencer Cain1, Benjamin M. Goerger1, Rebecca J. Ban2, Shelley W. Linens1. 1University of North Carolina at Chapel Hill, Chapel Hill, NC. 2Georgia State University, Atlanta, GA. 3University of Oregon, Eugene, OR. (Sponsor: Erik Wikstrom, FACSM)
Email: mscaim@email.unc.edu
(No relevant relationships reported)

Board #98 10:30 AM - 12:00 PM
Relationship Between Balance And Anterior Talofibular Ligament And Superior Extensor Ankle Retinaculum Thickness
Brooke Malloy, Adrian Aron, David Furrow, Haily Cook, Elizabeth Smoot, Lindsey Cash, Kristen Jagger, Brent Harper. Radford University, Radford, VA. (Sponsor: Lynn Millar, FACSM)
Email: hechmi.touni@univ-orleans.fr
(No relevant relationships reported)

Board #100 10:30 AM - 12:00 PM
Obesity and Falls in Older Women: Mediating Effects of Muscle Quality, Foot Loads and Balance
Silvia G. R. Neri1, Lara A. Harvey2, Anne Tiedemann1, André B. Gadelha1, Ricardo M. Lima1. 1Faculty of Physical Education, University of Brasilia, Brasilia, Brazil. 2Neuroscience Research Australia, University of New South Wales, Sydney, Australia, Australia. (Sponsor: Erik Wikstrom, FACSM)
Email: silvia_grn@hotmail.com
(No relevant relationships reported)

Board #101 10:30 AM - 12:00 PM
Does Movement Strategy Change Directional Balance Reach Test Performance Variability?
Yo-Rong Chen, Larry R. Munger, Troy Hooper, C. Roger James, Yo-Rong Chen, Larry R. Munger, Troy Hooper, C. Roger James, Yo-Rong Chen, Larry R. Munger, Troy Hooper, C. Roger James. 1Texas Tech University Health Sciences Center, Lubbock, TX. (No relevant relationships reported)

Board #102 10:30 AM - 12:00 PM
Automated Identification Of Postural Control For Individuals with Parkinson’s Disease Using a Machine Learning Approach
Yunpeng Li1, Shuqi Zhang2, Christina Odeh1, Li Guan1. 1Texas State University, San Marcos, TX. 2Northern Illinois University, DeKalb, IL. 3University of Georgia, Athens, GA
Email: yunpeng.li@txstate.edu
(No relevant relationships reported)
1341 Board #103 10:30 AM - 12:00 PM
Using A Kinect™ Sensor To Develop An Objective Quantification Of The 20s-march Test For Adl Assessment In Older Individuals
Nobuo Takeshima1, Takeshi Kohama2, Masanobu Kusunoki3, Soichi Okada1, Eiji Fujita1, William F. Brechue, FACSM1, 1Asahi University, Miki, Japan. 2Kindai University, Kinokawa, Japan. 3Kirkville College of Osteopathic Medicine, A.T. Still University of Health Science, Kirkville, MO. (Sponsor: William F. Brechue, FACSM)
Email: takeshima@alice.asahi-u.ac.jp
(No relevant relationships reported)

1342 Board #104 10:30 AM - 12:00 PM
Time-of-day Influence On The Stability Evaluation Test (set)
Jeff Pasley, Sara Camp, Kade Carrigan, Brandon Donan. Georgia Gwinnett College, Lawrenceville, GA. (Sponsor: Patrick O’Connor, FACSM)
Email: jpasley@ggc.edu
(No relevant relationships reported)

1343 Board #105 10:30 AM - 12:00 PM
Vestibular And Proprioceptive Alteration Influence Postural Instability During Dual Tasks In Adults Diagnosed With HIV
Leah Hamm1, Gabriel Gines1, Jonathan Marshall2, Martin Rosario3. 1Texas Woman’s University, Dallas, TX. 2Puerto Rico University, Ponce, PR
Email: lhammer@twu.edu
(No relevant relationships reported)

1344 Board #106 10:30 AM - 12:00 PM
Age-associated Decline In Dynamic Balance In Community-dwelling Older Women
Hidehito Yamamoto1, Nobuo Takeshima1, Nicole L. Rogers2, Michael E. Rogers, FACSM3. 1Asahi University, Miki, Japan. 2University of Pittsburgh, Pittsburgh, PA. 3University of Central Missouri, Warrensburg, MO. (Sponsor: Thomas Scott Lyons, FACSM)
(No relevant relationships reported)

1345 Board #107 10:30 AM - 12:00 PM
Is Wobbly Board Balance Performance Influenced by Sex and Anthropometric Characteristics?
Cristina Cortis1, Giuseppe F. Giancotti2, Filip X. Fuchs2, Herbert Wagner2, Rubens A. da Silva3, Andrea Fusco1. 1University of Caxino e Lazio Meridionale, Cassino, Italy. 2University of Salzburg, Austria. 3Université du Québec à Chicoutimi, Saguenay, QC, Canada. (Sponsor: Carl Foster, FACSM)
Email: c.cortis@unicas.it
(No relevant relationships reported)

1346 Board #108 10:30 AM - 12:00 PM
Adults Diagnosed with HIV Report Decreased Balance
Comparison Based On Non-Faller Older Adults
Gabriel Gines1, Leah Hammer1, Lauryn Deschamps2, Jonathan Marshall2, Flavia Bayron2, Martin G. Rosario1. 1Ponce Health Science University, Ponce, PR. 2Texas Woman’s University, Dallas, TX. 3University of Puerto Rico, San Juan, PR
Email: gabriel.gines7@gmail.com
(No relevant relationships reported)

1347 Board #109 10:30 AM - 12:00 PM
Effect Of The Modified Broström-Gould Surgery On Balance In Chronic Ankle Instability
Andrew S. Bartlett1, Brittney Mazzone2. 1Nazareth College, Penfield, NY. 2DOD-VA Extremity Trauma and Amputation Center of Excellence, San Diego, CA. 3Naval Medical Center San Diego, San Diego, CA. 4Naval Medical Center San Diego, San Diego, CA
Email: abartle1@naz.edu
(No relevant relationships reported)

1348 Board #110 10:30 AM - 12:00 PM
Validation Of The Tekscan Strideway Plantar Pressure Mat Compared To A Force Platform
Rachael A. Ard, Jake A. Melaro, Alex M. Carmall, Alexis K. Nelson, Sarah E. Blackmore, Victoria A. White, Max R. Paquette, Douglas W. Powell, FACSM. University of Memphis, Memphis, TN
Email: rachael.a.ard@gmail.com
(No relevant relationships reported)

C-35 Free Communication/Poster - Disability
Thursday, May 30, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

1349 Board #111 9:30 AM - 11:00 AM
Should We Stick with Step Counts after Incomplete Spinal Cord Injury? A Case-Control Investigation
(No relevant relationships reported)

1350 Board #112 9:30 AM - 11:00 AM
The Effects of 8-weeks Structural Exercise-Based Intervention on Autism Spectrum Disorders
Qiang Ye, Haoeli Xue, Yuqin Ji, Nanjing Sport Institute, Nanjing, China
Email: yeqiang@nysi.edu.cn
(No relevant relationships reported)

1351 Board #113 9:30 AM - 11:00 AM
Does The Severity Of Autistic Symptoms Influence The Effects Of An Exercise Intervention Program?
Sharon Kinsella1, Craig Coffey2, Damien Sheehan1, Averi Faigenbaum, FACSM3. 1Institute of Technology Carlow, Carlow, Ireland. 2Texas Woman’s University, Dallas, TX. 3Naval Medical Center San Diego, San Diego, CA; 2Naval Medical Center San Diego, San Diego, CA. (Sponsor: Professor Avery Faigenbaum, FACSM)
Email: sharon.kinsella@itcarlow.ie
(No relevant relationships reported)

1352 Board #114 9:30 AM - 11:00 AM
Wrist-worn Actigraph Cut-points For Classifying Activity Intensity In Spinal Cord Injury
Akhila Veerubiot, Dan Ding. University of Pittsburgh, Pittsburgh, PA
Email: ALV47@pitt.edu
(No relevant relationships reported)

1353 Board #115 9:30 AM - 11:00 AM
Acute Effects of Upper Limb Vibration Exercise on Physiological Measures for Wheelchair Users
Sarah Bass1, Theresa Crytzer, PT, DPT, ATP2, Alicia Konantz, Ph.D3. 1University of Pittsburgh, Pittsburgh, PA. 2Human Engineering Research Laboratory, Pittsburgh, PA
Email: srb94@pitt.edu
(No relevant relationships reported)

1354 Board #116 9:30 AM - 11:00 AM
Differences in Exercise Effects from Static versus Dynamic Standing in Non-ambulatory Children with Cerebral Palsy
Åsa B. Tornberg1, Damien Sheehan2, Andreas Jakobsson2, Katarina Lauruschus2, 1Department of Health Sciences, Lund University, Lund, Sweden. 2Centre for Mathematical Sciences, Lund University, Lund, Sweden
Email: asa.tornberg@med.lu.se
(No relevant relationships reported)
1355 Board #117 9:30 AM - 11:00 AM
Effects of Inpatient Multicomponent Occupational Rehabilitation on Physical Activity Levels
Marius S. Finland, Martin Skagseth, Tom IL Nilsen, Lene Aasdaal. Norwegian University of Science and Technology, Trondheim, Norway
Email: marius.finland@ntnu.no
(No relevant relationships reported)

1356 Board #118 9:30 AM - 11:00 AM
Sedentary And Physical Activity Patterns In Adults With Intellectual Disability
Guillermo R. Oviedo1, Nauris Tarnaveleivc2, Casimiro Javiviere1, Naira Masso-Ortigosa1, Myriam Guerra-Balic1. FPCEE-Blanquerna (URL), Barcelona, Spain. 1FPCEE-Blanquerna (URL), Barcelona, Spain. 2Facultat de Ciencies de la Salut-Blanquerna (URL), Barcelona, Spain
Email: guillermorobens@blanquerna.url.edu
(No relevant relationships reported)

1357 Board #119 9:30 AM - 11:00 AM
The Fitness Effects Of A School-based Exercise Program On Children With Autism.
Craig Coffey, Sharon Kinsella, Damien Sheehan. Institute of Technology Carlow, Carlow, Ireland. (Sponsor: Avery Faigenbaum, FACSM)
Email: Craig.Coffey@itcarlow.ie
(No relevant relationships reported)

1358 Board #120 9:30 AM - 11:00 AM
The Examination of Judo on Physical Activity and Sleep in Children with Autism Spectrum Disorder
Paola M. Riveral, Justine Renziehausen1, Kayla Baker1, Nicholas Leahy1, Jeanette Garcia1, Lei Xu1. 1University of Central Florida, Orlando, FL. 2East Carolina University, Greenville, SC
(No relevant relationships reported)

1359 Board #121 9:30 AM - 11:00 AM
A Community-based Running Program Enhances Gait Parameters in Children and Young Adults with Developmental Disabilities
Jilda Vargus-Adams, Jennifer Angeli, Micah Garcia, Ana Livecchi, Jason Long, Madison Peck, Sarah Schwab. Cincinnati Children’s Hospital Medical Center, Cincinnati, OH. (Sponsor: Kevin Ford, FACSM)
(No relevant relationships reported)

1360 Board #122 9:30 AM - 11:00 AM
Flourishing and Physical Activity in Adolescents With and Without Autism Spectrum Disorder
Stephanie M. McCoy, Kristen Morgan. University of Southern Mississippi, Hattiesburg, MS
(No relevant relationships reported)

1361 Board #123 9:30 AM - 11:00 AM
Age-related Changes In Para-athletes And Racing Wheelchair Performance
Julien Schipman, Pasquale Gallo, Andy Marc, Juliana Antero, Jean-francois Toussaint, Adrien Sedeaud, Adrien March. INSEP, France
(No relevant relationships reported)

1362 Board #124 9:30 AM - 11:00 AM
Comparison Of Physical Activity Levels During Therapeutic Camp Activities In Youth With Disabilities
Vincenzo G. Nocera, Tyler J. Kybartas, Angela J. Wozencroft, Dawn P. Coe, FACSM. The University of Tennessee, Knoxville, Knoxville, TN
Email: vnocera@vols.utk.edu
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board #</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1370</td>
<td>9:30 AM - 11:00 AM</td>
<td>Sleep Like a Baby: A Case Study Examining Objectively-Measured Newborn and Parental Sleep Patterns</td>
<td>Alexander H.K. Montoye, FACSM, Laura C.K. Montoye, Christopher P. Connolly, Alma College, Alma, MI. Washington State University, Pullman, WA</td>
</tr>
<tr>
<td>1371</td>
<td>9:30 AM - 11:00 AM</td>
<td>Assessment of Machine Learning Performance for the Detection of Activity Type in Military Training</td>
<td>Elliott Fullerton, Katherine Brooke-Wavel, Paul Sanderson, Dale Estiger, Masimiliano Zecca. Loughborough University, Leicestershire, United Kingdom</td>
</tr>
<tr>
<td>1372</td>
<td>9:30 AM - 11:00 AM</td>
<td>Cross-cultural Adaptation and Validation of the Arabic Version of the Rapid Assessment Of Physical Activity</td>
<td>Bader A. Alaqtanti, Aqel M. Alamezi, Prince Sattam Bin Abdulaziz University, Alkhobar, Saudi Arabia</td>
</tr>
<tr>
<td>1373</td>
<td>9:30 AM - 11:00 AM</td>
<td>A Comparison of Two Algorithms for Generating ActiLife Equivalent Activity Counts</td>
<td>John M. Schuna, Jr. Oregon State University, Corvallis, OR</td>
</tr>
<tr>
<td>1374</td>
<td>9:30 AM - 11:00 AM</td>
<td>Validity Of Self-report Methods For Measuring Physical Activity And Sitting Time In Chilean Workers</td>
<td>Pia Martin, Nicolas Aguilar. Universidad de La Frontera, Temuco, Chile. (Sponsor: Wendy J Brown, FACSM)</td>
</tr>
<tr>
<td>1375</td>
<td>9:30 AM - 11:00 AM</td>
<td>Rapid Assessment Of Physical Activity And Yale Physical Activity Survey Convergent Validity For Cancer Survivors.</td>
<td>Amerigo Rossi, Alyssa Graham, Carol Ewing Garber, FACSM, Dennis YS Kuo, Nicole Nevadansky. Long Island University Brooklyn, Brooklyn, NY. Teachers College, Columbia University, New York, NY. Montefiore Medical Center, Bronx, NY</td>
</tr>
<tr>
<td>1376</td>
<td>9:30 AM - 11:00 AM</td>
<td>Validation of Apple Watch for Estimating Moderate-to-Vigorous Physical Activity in Children</td>
<td>Sunku Kwon, Youngwon Kim, Wonwoo Byun. The University of Utah, Salt Lake City, UT</td>
</tr>
<tr>
<td>1377</td>
<td>9:30 AM - 11:00 AM</td>
<td>Multi-phased Step Detection Algorithm For A Wrist-worn Triaxial Accelerometer</td>
<td>Aston K. McCullough, Catrine Tudor-Locke, FACSM, University of Massachusetts Amherst, Amherst, MA. (Sponsor: Catrine Tudor-Locke, Ph.D., FACSM)</td>
</tr>
<tr>
<td>1378</td>
<td>9:30 AM - 11:00 AM</td>
<td>Using Heart Rate to Predict Energy Expenditure: A Validity Generalization Study</td>
<td>Zezhao Chen, Xiaofei Wang, Hai Yan, Xiong Qin, Jingyuan Zhu, Weimao Zhu, FACSM. University of Illinois at Urbana Champaign, Illinois, Tsinghua University, Beijing, China</td>
</tr>
<tr>
<td>1380</td>
<td>9:30 AM - 11:00 AM</td>
<td>Regression Equation To Predict Body Fat In Elderly Women Using Body Circumference Measures</td>
<td>ELIANE C. GONCALVES, Multivix and Unip. VITORIA, Brazil</td>
</tr>
<tr>
<td>1381</td>
<td>9:30 AM - 11:00 AM</td>
<td>Is Cadence A Better Predictor Of The Walk-to-run Transition Than Speed And/or The Froude Number?</td>
<td>Colleen J. Sands, Scott W. Ducharme, Elroy J. Aguir, Christopher C. Moore, Zachary R. Gould, Catrine Tudor-Locke, FACSM. University of Massachusetts Amherst, Amherst, MA. (Sponsor: Catrine Tudor-Locke, FACSM)</td>
</tr>
<tr>
<td>1382</td>
<td>9:30 AM - 11:00 AM</td>
<td>Validation Study of Inbody Band2 and Agreement Between Inbody Band2 and Omron 306 in Adults</td>
<td>Phoebe Monnier Manalang, Mr. Guy Danhoff, Dr. Robert T. Davidson, Dr. Andrew Elvington. Missouri Baptist University, St. Louis, MO. Logan University, St. Louis, MO</td>
</tr>
<tr>
<td>1383</td>
<td>9:30 AM - 11:00 AM</td>
<td>Comparing ActiGraph Data Processing Methods For Measuring Sedentary Behavior In Older Adults With COPD</td>
<td>Katelyn Webster, Ronald Dechert, Janet Larson. University of Michigan, Ann Arbor, MI</td>
</tr>
<tr>
<td>1384</td>
<td>9:30 AM - 11:00 AM</td>
<td>Accuracy of Activity Trackers during Treadmill Walking Versus Outdoor Walking</td>
<td>Merrill D. Funk, Ivan A. Figueroa, Jose L. Gamaz, Murat Karabulut, FACSM. Southern Utah University, Cedar City, UT. University of Texas Rio Grande Valley, Brownsville, TX</td>
</tr>
<tr>
<td>1385</td>
<td>9:30 AM - 11:00 AM</td>
<td>The Accuracy Of A Smartphone To Measure Laboratory And Free-living Physical Activity</td>
<td>Nicola K. Thomson, Lauren McMichael, Eilidh Macrae, Julien Baker, David Muggeridge, Chris Easton. University of the West of Scotland, South Lanarkshire, United Kingdom. University of Strathclyde, Glasgow, United Kingdom. University of the Highlands and Islands, Inverness, United Kingdom. (Sponsor: Professor Jason Allen, FACSM)</td>
</tr>
</tbody>
</table>
C-37 Free Communication/Poster - Carbohydrate Metabolism

Thursday, May 30, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

Board #152 10:30 AM - 12:00 PM
Muscle Glycogen Depletion And Body Water Status Assessed With Segmental Bioimpedance Spectroscopy
Keisuke Shiose1, Yosuke Yamada2, Keiko Motonaga3, Hideyuki Takahashi1, Fukuoka University, Fukuoka, Japan. 1National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan. 2Japan Institute of Sports Sciences, Tokyo, Japan. 3, 1University of Massachusetts Amherst, Amherst, MA. 2Oregon State University, Corvallis, OR. 3Syracuse University, Syracuse, NY. (No relevant relationships reported)
Email: hdx013@uark.edu

Board #153 10:30 AM - 12:00 PM
Circulating Lactate Is Elevated in Prediabetes Phenotypes Compared with Normal Glucose Tolerant Counterparts
Brielle L. Dotson, Emily M. Heiston, Stephanie L. Miller, Natalie Z.M Eichner, Nicole M. Gilbertson, Steven K. Malin, FACSM. University of Virginia, Charlottesville, VA. (Sponsor: Steven K. Malin, FACSM)
Email: bld2cm@virginia.edu

Board #154 10:30 AM - 12:00 PM
Acute Effects of Rotating Shift Work Paradigm on Activity and Metabolism
Vasavi Shabrish. University of Texas at Austin, Austin, TX
(No relevant relationships reported)
Email: vshabrish@uts.cc.utexas.edu

Board #155 10:30 AM - 12:00 PM
Impact of Reduced Carbohydrate Intake after Exercise on Breath Acetone Levels
naoki otta, hirotou ito, kazushige goto. ritumeikanuniversity, kyoto, Japan. (Sponsor: Robert Kraemer, FACSM)
Email: n.otta0820@gmail.com

Board #156 10:30 AM - 12:00 PM
Acute Effects of Rotating Shift Work Paradigm on Activity and Metabolism
Vasavi Shabrish. University of Texas at Austin, Austin, TX
(No relevant relationships reported)
Email: vshabrish@uts.cc.utexas.edu

Board #157 10:30 AM - 12:00 PM
The Effects of High-Versus Low-Intensity Resistance Exercise on Acute Hyperglycemia in Young Healthy Males
Brandon Beimborn, Luis Segura, Joshua Cotter, PhD, Evan Schick Ph.D. California State University, Long Beach, Long Beach, CA
(No relevant relationships reported)
Email: braimborn@calstate.edu

Board #158 10:30 AM - 12:00 PM
Acute Resistance Exercise Fails to Alter Post-Exercise Glycemic Control
William A. Braun, FACSM, Zach Rollar, Dan Hauck. Shippensburg University, Shippensburg, PA
Email: wbraun@shipp.edu

Board #159 10:30 AM - 12:00 PM
The Effects of High-Versus Low-Intensity Resistance Exercise on Acute Hyperglycemia in Young Healthy Males
Brandon Beimborn, Luis Segura, Joshua Cotter, PhD, Evan Schick Ph.D. California State University, Long Beach, Long Beach, CA
(No relevant relationships reported)
Email: braimborn@calstate.edu

Board #160 10:30 AM - 12:00 PM
Impact of Reduced Carbohydrate Intake after Exercise on Breath Acetone Levels
naoki otta, hirotou ito, kazushige goto. ritumeikanuniversity, kyoto, Japan. (Sponsor: Robert Kraemer, FACSM)
Email: n.otta0820@gmail.com

Board #161 10:30 AM - 12:00 PM
Effects of Acute Swimming Exercise on Pancreatic Enzyme Activity and Intestinal Glucose Transporters in Rats
Saki Kondo, Ayumi Fukazawa, Shin Terada. The University of Tokyo, Tokyo, Japan. (Sponsor: Mitsuru Higuchi, FACSM)
(No relevant relationships reported)

Board #162 10:30 AM - 12:00 PM
cDNA As A Metabolic Marker
David Ochmann, Charlotte Kreuz, Silvia Wenzel, Perikles Simon. Institution of Sports Science, Mainz, Germany
Email: ochmann@uni-mainz.de
(No relevant relationships reported)
### THURSDAY, MAY 30, 2019

#### 10:30 AM - 12:00 PM

**Board #163**

**Metabolic Responses of Pre-Exercise Carbohydrate Ingestion in Cycling and Running**


Email: alexmichaella@yahoo.gr

(No relevant relationships reported)

**Board #164**

**Electrolyte-based Carbohydrate Drink: Effect On Steady State Exercise Done Against Progressively Higher Workloads**


Email: john.caruso@louisville.edu

(No relevant relationships reported)

**Board #165**

**The Effects of a Carbohydrate Mouth Rinse on Central and Peripheral Fatigue Following High and Low Intensity Fatiguing Exercise**

Angelina Curiel, Kody Haskins, Michael G. Bembern, FACSM, Rebecca D. Larson, Christopher D. Black, FACSM. University of Oklahoma, Norman, OK

(No relevant relationships reported)

**Board #166**

**Influence of Chronic Carbohydrate Ingestion During High Intensity Exercise on Incidences of Gastrointestinal Distress**

Ben M. Krings, Hunter L. Paris, Timothy J. Fulton, Daniel P. Wilhite, Marissa M. Baranauskas, Robert F. Chapman, FACSM, Timothy D. Mickleborough. Pepperdine University, Malibu, CA. Indiana University, Bloomington, IN. ’Southwestern Medical Center, Dallas, TX

(No relevant relationships reported)

**Board #167**

**Carbohydrate Effects on Post-Exercise Performance in Prepubescent Girls**

C. Eric Heidom, Brandon J. Dykstra, Cori A. Conner, Anthony D. Mahon. Ball State University, Muncie, IN

(No relevant relationships reported)

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### C-38 Free Communication/Poster - Nutrition and Energy Metabolism

**Thursday, May 30, 2019, 7:30 AM - 12:30 PM**

**Room: CC-Hall WA2**

**Board #168**

**Influence Of Sports And Energy Intake On BMD In Female Athletes Compared To Sedentary Controls**

Adriana De la Parra Solomom, Hugues Plourde, Sebastien Beauregard, Ross E. Andersen, FACSM. McGill University, Montreal, QC. Canada

Email: adriana.delaparrasolomon@mail.mcgill.ca

(No relevant relationships reported)

**Board #169**

**The Role of Acute Fasting on Substrate Utilization During Submaximal Exercise**

Melaney Reichelt, Lauren Yanni, John Wygand, FACSM, John Petrizzo, Robert M. Otto, FACSM. Adelphi University, Garden City, NY. (Sponsor: John Wygand, FACSM)

Email: melaneyreichelt@mail.adelphi.edu

(No relevant relationships reported)

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### 10:30 AM - 12:00 PM}

**Board #170**

**Effects of Concussion on Whole-Body Energy Metabolism and Caloric Intake: A Preliminary Investigation**

Samuel R. Walton, Steven K. Malin, FACSM, Sibylle Kranz, Donna K. Broshke, Jay Hertel, FACSM, Jacob E. Resch. University of Virginia, Charlottesville, VA

Email: swaltonatc@gmail.com

(No relevant relationships reported)

**Board #171**

**Effects of Time Restricted Feeding on Peak VO2 and Substrate Utilization in Healthy Adults**

Corbyn R. Bendsen, Megan M. Coyle, Megan M. Lind, Nicole L. Schweitzer, Eric A. Normann, Lauren M. Kaniminski, Cassondra A. Ficelica, Marqued A. Fleischacker, Andrew L. Kezar, Emma P. Masilewicz, Justin R. Geijer. Winona State University, Winona, MN

(No relevant relationships reported)

**Board #172**

**The Impact of Energy Balance on Sleep Time and Recovery**

Andrew Jagim, Hannah Zabriake, Brad Currier, Patrick Hart, Richard Stecker, Chad M. Kerkwick, FACSM, Lindenwood University, St. Charles, MO. (Sponsor: Chad Kerkwick, FACSM)

Email: andrew.jagim@gmail.com

(No relevant relationships reported)

**Board #173**

**“Train-high Sleep-low” Dietary Periodization Does Not Alter Ventilatory Strategies During Cycling Exercise**

Hunter L. Paris, Timothy J. Fulton, Daniel P. Wilhite, Marissa N. Baranauskas, Robert F. Chapman, FACSM, Timothy D. Mickleborough. Pepperdine University, Malibu, CA. Indiana University, Bloomington, IN. ’Southwestern Medical Center, Dallas, TX

(No relevant relationships reported)

**Board #174**

**Low Carbohydrate Intake Is Related To Energy Deficiency And Hypometabolism In Physically Active Population**

Amanda Santos, Gisele Vaz, Cintia Oliveira, Daniel Lima. Iaiuna University, Iaiuna, Brazil

Email: dcarvalholima@gmail.com

(No relevant relationships reported)

**Board #175**

**Acute Carbohydrate Restriction During Recovery From Prolonged Exercise Enhances Intramuscular Triglyceride Resynthesis**

Sam Shepherd, Emily FP Jevons, Juliette A. Strauss, Kasper D. Geijf, Kurt Jenss, Lars G. Hvid, Ulrik Frandsen, Kent Sahlin, Niels Ottenbladt. Liverpool John Moores University, Liverpool, United Kingdom. ’University of Southern Denmark, Odense, Denmark. ’Stockholm University, Stockholm, Sweden

Email: s.shepherd@ljmu.ac.uk

(No relevant relationships reported)

**Board #176**

**Energy Availability In Physically Active Males And Females Across A 12- Week Tactical Training Programme**

Danielle M. Logue, Sharon M. Madigan, Sarah-Jane McDonnell. Liverpool John Moores University, Liverpool, United Kingdom. ’University of Southern Denmark, Odense, Denmark. ’Stockholm University, Stockholm, Sweden

Email: dcarvalholima@gmail.com

(No relevant relationships reported)
American College of Sports Medicine

1415 Board #177 10:30 AM - 12:00 PM
The Effects of Endurance Training Under Low Energy Availability on Muscle Glycogen Contents
Chihiro Kojima1, Aya Ishibashi2, Yoko Tanabe1, Kaito Iwayama1, Akiko Kamei2, Hideyuki Takahashi3, Kazushige Goto1. 1Ritsumeikan University, Shiga, Japan. 2Japan Institute of Sports Sciences, Tokyo, Japan. 3Teikyo University, Nara, Japan. (Sponsor: Robert Kraemer, FACSM)
Email: chii.2727@gmail.com
(No relevant relationships reported)

1416 Board #178 10:30 AM - 12:00 PM
Acute Effects of Exercise With and Without Energy Replacement on Energy Expenditure and Substrate Utilization
Jie Kang, FACSM, Saif B. Hassan, Nicole L. Ellis, Ira T. Vought, Nicholas A. Ratamess, Jill A. Bush, FACSM, Avery D. Faigenbaum, FACSM. The College of New Jersey, Ewing, NJ
Email: kang.08055@yahoo.com
(No relevant relationships reported)

1417 Board #179 10:30 AM - 12:00 PM
Comparing Liver and Skeletal Muscle Sensitivity In Response To Acute And Chronic Calorie Restriction
Erik Kirk, FACSM; Dominic Reeds2, Sam Klein2. 1Southern Illinois University Edwardsville, Edwardsville, IL. 2Washington University School of Medicine, Saint Louis, MO
Email: ekirk@siue.edu
(No relevant relationships reported)

1418 Board #180 10:30 AM - 12:00 PM
Neither Autophagy Inhibition Nor High Intensity Interval Training Alter Exercise Adaptations During High Fat Feeding
Email: mrosac@uark.edu
(No relevant relationships reported)

1419 Board #181 10:30 AM - 12:00 PM
Effects of Time Restricted Feeding on Resting Energy Expenditure and Respiratory Quotient
Lauren M. Kaminski1, Cassondra A. Fileccia2, Corbyrn R. Bender2, Megan M. Coyle3, Marquel A. Fleischacker3, Megan M. Lind4, Emma P. Masiulewicz5, Justin R. Geijer2. 1Winona State University, Winona, MN. 2Winona State, Winona, MN. 3University of Mississippi, University, MS. 4The College of New Jersey, Ewing, NJ. 5Sponsor: Dr. Matthew Ganio, FACSM.
Email: lkm@uwosh.edu
(No relevant relationships reported)

1420 Board #182 10:30 AM - 12:00 PM
Resistance Exercise-mediated Improvements In Post-postprandial Metabolic Responses Are Related To Exercise Volume And Muscle Mass
Patrick M. Tomko, Ryan J. Colquhoun, Nile F. Banks, Christina M. Sciarrillo, Nicholas A. Koenemel, Sam R. Emerson, Nathaniel D.M Jenkins. Oklahoma State University, Stillwater, OK
(No relevant relationships reported)

1421 Board #183 10:30 AM - 12:00 PM
Energy Expenditure and Load Carriage Exceeded Military Recommendations in Special Operations Forces Deployed to Afghanistan
William R. Conkright1, Nicholas D. Barringer2. 1University of Pittsburgh, Pittsburgh, PA. 2U.S. Army Research Institute of Environmental Medicine, Natick, MA
Email: we16@pitt.edu
(No relevant relationships reported)

THURSDAY, MAY 30, 2019

Final Program P101

1422 Board #184 10:30 AM - 12:00 PM
Effects Of Menstrual Cycle On Energy Utilization And Endurance Performance In Eumenorhemic Women
Tomoka Matsuda1, Mizuki Yamada2, Hazuki Ogata1, Kayoko Kamemoto1, Mikako Sakamaki-Sunaga1. 1Graduate School, Nippon Sport Science University, Tokyo, Japan. 2Nippon Sport Science University, Tokyo, Japan
(No relevant relationships reported)

1423 Board #185 10:30 AM - 12:00 PM
A Short-term Calorie Restricted Diet with High-fat on Inflammatory Biomarkers and Plasma Lipids
Yunsuk Koh. Baylor University, Waco, TX
Email: yunsuk_koh@baylor.edu
(No relevant relationships reported)

1424 Board #186 10:30 AM - 12:00 PM
Impact of Time Restricted Feeding on Muscular Strength Within a Healthy Adult Population.
Eric A. Norman, Nicole L. Schweitzer, Corbyrn R. Bender, Megan M. Coyle, Cassondra A. Fileccia, Marquel A. Fleischacker, Lauren M. Kaminski, Andrew L. Kezar, Megan M. Lind, Emma P. Masiulewicz, Justin R. Geijer. Winona State University, Winona, MN
(No relevant relationships reported)

1425 Board #187 10:30 AM - 12:00 PM
Effects Of Whole30 Dietary Programa On Resting Energy Expenditure, Oxygen Consumption And Heart Rate In Crossfit Athletes
Valden Capistrano Junior1, Renata Carnauba1, Natália Marques1, Ana Beatriz Baptista Alves2, Renata Sena3, Angela Furtado Martin4, Adriana Sampaio5, Diego Lacerda6. 1Clinica de Nutrição, Fortaleza, Brazil.
(No relevant relationships reported)

1426 Board #188 10:30 AM - 12:00 PM
A Short Term Paleolithic Dietary Intervention Does Not Alter Adipokines Implicated In Obesity
Rachel M. Graff1, Kristopher Jennings2, Natalie A. Davies3, Andres E. Carrillo3, Emily C. LaVoy4, Edward J. Ryan5, Melissa M. Markowski6. 1University of Houston, Houston, TX. 2University of Texas Medical Branch, Galveston, TX. 3Chatham University, Pittsburgh, PA
(No relevant relationships reported)

C-39 Free Communication/Poster - Pain, RPE, and Fatigue

Thursday, May 30, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

1427 Board #189 9:30 AM - 11:00 AM
Narrow Cuffs Decrease The Perceptual Of Discomfort With Blood Flow Restricted Exercise
Robert W. Spitz, Raksha N. Chatakondi, Zachary W. Bell, Vickie Wong, Scott J. Dankel, Takashi Abe, Jeremy P. Loenneke. The University of Mississippi, University, MS
(No relevant relationships reported)

1428 Board #190 9:30 AM - 11:00 AM
Session RPE Following a Six-minute Bout of Cardiopulmonary Resuscitation Training
Alex B. Shafer, Wyatt I. Witty, Dana A. Lubieniecki, Kasie D. Cooper. Montana State University Billings, Billings, MT. (Sponsor: Elizabeth Nagle, FACSM)
Email: alex.shafer@msubillings.edu
(No relevant relationships reported)

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Orlando, Florida

1431 Board #193 9:30 AM - 11:00 AM
Time Courses of Changes In Perceptual, Respiratory, and Neuromuscular Responses in the Severe Intensity Domain

1432 Board #194 9:30 AM - 11:00 AM
Mood Changes In Runners During An Ultra-marathon
Caleb B. Bockoras, Tracie Wilkins Zimmer, Steven B. Hammer. (No relevant relationships reported)

1433 Board #195 9:30 AM - 11:00 AM
Physical Aspects of Fatigue Throughout a Season
Jordan F. Norris, Nicholas F. Boér, Richard Henderson. (University of Tennessee at Chattanooga, Chattanooga, TN. McCollie School, Chattanooga, TN) (No relevant relationships reported)

1434 Board #196 9:30 AM - 11:00 AM
The Interactive Effect of DOMS and Topical Analgesic on Corticospinal Excitability of the Biceps Brachii
Evon J. Lockyer, Lucas Stefanelli, Brandon W. Collins, Nicholas J. Snow, Julie Crocker, Christopher Kent, Michael Holmes, Kevin E. Power, Duane C. Button. (Memorial University of Newfoundland, St. John's, NL, Canada, Brock University, St. Catharines, ON, Canada) (No relevant relationships reported)

1435 Board #197 9:30 AM - 11:00 AM
The Influence of Temperature on Prefrontal Cortex Activation and Performance During a Fatiguing Task
Kevin C. Phillips, Derek Verbrigghe, Alex Gabe, Brittany Jaquett, Claire Eischer, Steven Elmer, Tijn Yoont. (Michigan Technological University, Houghton, MI, Kangwon National University, Chunchon, Korea, Republic of) (No relevant relationships reported)

1436 Board #198 9:30 AM - 11:00 AM
Factors Affecting the Outcome of an Ultramarathon Before the Race Starts
Steven B. Hammer. (Indian River State College, Fort Pierce, FL) (No relevant relationships reported)

1437 Board #199 9:30 AM - 11:00 AM
Effects of Transspinal Direct Current Stimulation on Cycling Perception of Effort and Time to Exhaustion
Christopher A. De la Vega, Anthony B. Ciccone, Trent J. Herda, Andrew C. Fry, Dawn M. Emerson, Joseph P. Weir, FACSM. (Utah Valley University, Orem, UT, University of Kansas, Lawrence, KS. (Sponsor: Dr. Joseph Weir, FACSM) (No relevant relationships reported)

1438 Board #200 9:30 AM - 11:00 AM
Relationship Among Site Specific Fat, Lean Mass, And Pressure Pain Sensitivity
Ashley Dioguardi, Jessica Peterson, Cameron Lohman, Michael G. Heschle, FACSM, Rebecca Larson, Christopher D. Black, FACSM. (University of Oklahoma, Norman, OK. (Sponsor: Christopher Black, FACSM) (Email: ashley.j.diguardi-1@ou.edu) (No relevant relationships reported)

1439 Board #201 9:30 AM - 11:00 AM
Self-Efficacy for Changing Sedentary Behavior or Physical Activity: Comparisons in Healthy and Chronic Pain Populations
Jeni E. Lansing, Jacob D. Meyer, Maria Perez, Gabriel Cruz-Maldonado, Laura D. Ellingson, FACSM, Iowa State University, Ames, IA. (Sponsor: Laura Ellingson, FACSM) (No relevant relationships reported)

1440 Board #202 9:30 AM - 11:00 AM
Evaluation Of Perception And Tolerance To Acute Pain Thru Typological Groups Of Gender Schemas
Claudia Dias Leite, Isabela Almeida Ramos, Gislane Ferreira de Mello. (Uniprojeção, Brasília, Brazil, Catholic University of Brasilia, UniProjeção, Brasília, Brazil, Catholic University of Brasilia, Brasília, Brazil) (No relevant relationships reported)

1441 Board #203 9:30 AM - 11:00 AM
Grit, Fitness, And Goal Setting
Ethan E. Hull, Jason Vultaggio. (Slippery Rock University, Pittsburgh, PA) (Email: ethan.hull@gmail.com) (No relevant relationships reported)

1442 Board #204 9:30 AM - 11:00 AM
Firefighter Turnout Suit Weight Influences Simulated Exercise Performance
Stephanie Gipson, Meredith McQuerry, Margaret Morrissey, Jacob Kisloek, Michael Omsbee, FACSM, Florida State University, Tallahassee, FL. (Email: sdg13b@my.fsu.edu) (No relevant relationships reported)

1443 Board #205 9:30 AM - 11:00 AM
Pre-Exercise Perceptions of Energy and Fatigue are Significantly Related to Performance during Sprint Interval Cycling
Carly L. A. Wender, Sun Joo Ahn, Patrick J. O'Connor, FACSM. (University of Georgia, Athens, GA) (Email: carly.wender10@uga.edu) (No relevant relationships reported)

1444 Board #206 9:30 AM - 11:00 AM
Assessment of Performance Fatigability During Resistance Exercise Anchored to Ratings of Perceived Exertion
Joshua L. Keller, Terry J. Housh, FACSM, Ethan C. Hill, Cory M. Smith, Richard J. Schmidt, Glen O. Johnson, FACSM. (University of Nebraska - Lincoln, Lincoln, NE. (Sponsor: Terry Housh, FACSM) (No relevant relationships reported)
Board #207 9:30 AM - 11:00 AM
Association Between Dietary Quality and Fatigability among the Elderly in the Geisinger Rural Aging Study
Brett Davis1, James E. Stampley1, G. Craig Wood2, Diane C. Mitchell2, Gordon L. Jenson2, Yi-Hsuan Liu1, Xiang Gao1, Bethann Whildner1, Marianne Yohri2, Krysta Cunningham3, Megan Lockett2, Christopher D. Still2, Brian A. Irving, FACSM1. 1Louisiana State University, Baton Rouge, LA. 2Geisinger Medical Center, Danville, PA. 3Penn State University, University Park, PA. 4University of Vermont, Burlington, VT. 5Penn State University, University Park, PA. (Sponsor: Brian A Irving, PhD, FACSM) Email: bdav159@isu.edu (No relevant relationships reported)

Board #208 9:30 AM - 11:00 AM
The Effects of Music Tempo on an Exerciser's Experiences During Isometric Strength Task
Jason R. Kostma1, Robyn Feise2, Gershon Tenenbaum1. 1Florida International University, North Miami, FL. 2Auburn University, Auburn, FL. 3Florida University, Tallahassee, FL. Email: jkostma@fiu.edu (No relevant relationships reported)

Board #209 9:30 AM - 11:00 AM
Association Between Fatigability and Physical Function among the Elderly in the Geisinger Rural Aging Study
James E. Stampley1, Brett Davis1, G. Craig Wood2, Diane C. Mitchell2, Gordon L. Jenson2, Yi-Hsuan Liu1, Xiang Gao1, Bethann Whildner1, Marianne Yohri2, Krysta Cunningham3, Megan Lockett2, Christopher D. Still2, Brian A. Irving, FACSM1. 1Louisiana State University, Baton Rouge, LA. 2Geisinger Medical Center, Danville, PA. 3Penn State University, University Park, PA. 4University of Vermont, Burlington, VT. (Sponsor: Brian A Irving, PhD, FACSM) Email: jstamp5@lsu.edu (No relevant relationships reported)

Board #210 9:30 AM - 11:00 AM
Longitudinal Association Between Fatigability and Executive Function: Results from the Baltimore Longitudinal Study of Aging
Elizabeth Salerno1, Anila Wanigatunga1, Jaeck Urbaneck2, Eleanor Simonsick1, Susan Resnick3, Jennifer Schracker2. 1National Cancer Institute, Bethesda, MD. 2 Johns Hopkins Bloomberg School of Public Health, Baltimore, MD. 3National Institute on Aging, Baltimore, MD. (Sponsor: Charles Matthews, FACSM) (No relevant relationships reported)

Board #211 9:30 AM - 11:00 AM
The Perceptual Responses to Continuous vs Intermittent Blood Flow Restriction Exercise Resistance
Eduardo D. S. Freitas1, Ryan M. Miller1, Aaron D. Heishman1, Jajtner1, Arnoal Wanigatunga1, Brady S. Brown1, Julio C. G. Silva2, Rodrigo R. Aniceto2, Joao B. Ferreira-Junior1, Michael G. Bemben, FACSM. 1University of Oklahoma, Norman, OK. 2Federal University of Paraíba, João Pessoa, Brazil. 3Federal Institute of Rio Grande do Norte, Currais Novos, Brazil. 4Federal Institute of Southwest Minas Gerais, Rio Pomba, Brazil. (Sponsor: Michael G. Bemben, FACSM) (No relevant relationships reported)

Board #212 9:30 AM - 11:00 AM
Emotional Influence Of Music In Relation To The Effect Of Music On Exercise Performance
Kayla M. Baker, Jeanette Garcia, Tal Belay. University of Central Florida, Orlando, FL. (No relevant relationships reported)
### P104 Final Program

<table>
<thead>
<tr>
<th>1458</th>
<th>Board #220</th>
<th>9:30 AM - 11:00 AM</th>
<th>Whole-body Cryotherapy: Case Series Of Sleep, Pain And Anxiety In Healthy Individuals</th>
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</thead>
<tbody>
<tr>
<td></td>
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<td>Jennifer L. Scheid1, James W. Kenney2, Daniel H. Lang2, Nicole Chimnera. 1Daemen College, Amherst, NY. 2Cryo Wellness of America, Depew, NY. 3Brock University, St. Catharines, ON, Canada Email: <a href="mailto:jscheid@daemen.edu">jscheid@daemen.edu</a></td>
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<td>(No relevant relationships reported)</td>
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<td>1459</td>
<td>Board #221</td>
<td>9:30 AM - 11:00 AM</td>
<td>Human Physiologic Thermogenic Response To Resting Cold-Water Immersion: AThorough Calorimetric Inquiry</td>
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<td>James E. Campbell, Elizabeth R. Bergeron, Christopher D. Gallagher, John P. Florian. Navy Experimental Dive Unit, Panama City, FL.</td>
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<td>(No relevant relationships reported)</td>
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<tr>
<td>1460</td>
<td>Board #222</td>
<td>9:30 AM - 11:00 AM</td>
<td>Consecutive, Long-Duration Hyperoxic Immersions Effect On Skeletal Muscle Performance In Well Trained, Male Divers</td>
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<td>Christopher M. Myers1, Jeong-Su Kim1, FACSM1, John Florian, FACSM1, Florida State University, Tallahassee, FL. 2Navy Experimental Dive Unit, Panama City Beach, FL. (Sponsor: John Florian, FACSM)</td>
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<td>Email: <a href="mailto:cnmi3c@my.fsu.edu">cnmi3c@my.fsu.edu</a></td>
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<tr>
<td>1461</td>
<td>Board #223</td>
<td>9:30 AM - 11:00 AM</td>
<td>Carotid Body Chemosensitivity Is Not Attenuated During Hyperbaric Hypoxia</td>
</tr>
<tr>
<td></td>
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<td>Hayden W. Hess, Corey R. Carden, Brett A. Siders, Lindsey N. Russo, Brian M. Clemency, David Hostler, FACSM, Blair D. Johnson. University at Buffalo, BUFFALO, NY. (Sponsor: Dave Hostler, FACSM)</td>
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<td>Email: <a href="mailto:haydenbh@buffalo.edu">haydenbh@buffalo.edu</a></td>
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<td>(No relevant relationships reported)</td>
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<tr>
<td>1462</td>
<td>Board #224</td>
<td>9:30 AM - 11:00 AM</td>
<td>Prolonged Hyperbaric Exposure Alters Gut Mucus, Microbiota Composition And Intestinal Antimicrobial Defense In Mice</td>
</tr>
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<td>Dao Xiang1, Beibe Liu2, Yiqun Fang1, Ji Xu1, Jia He1, Peijie Chen2. 1Second Military Medical University, Shanghai, China. 2Shanghai University of Sport, Shanghai, China Email: <a href="mailto:x-ai@163.com">x-ai@163.com</a></td>
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<td>(No relevant relationships reported)</td>
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<tr>
<td>1463</td>
<td>Board #225</td>
<td>9:30 AM - 11:00 AM</td>
<td>Individual Differences In Effects Of Muscular Endurance Training Under Hyperoxic Condition</td>
</tr>
<tr>
<td></td>
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<td>Yuta Kojima1, Chihou Fukusaki1, Naokata Ishii2. 1The University of Tokyo, Chiba, Japan. 2The University of Tokyo, Tokyo, Japan Email: <a href="mailto:9302916162@edu.k-u.tokyo.ac.jp">9302916162@edu.k-u.tokyo.ac.jp</a></td>
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<td>(No relevant relationships reported)</td>
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</tbody>
</table>

### ACSM 66th Annual Meeting

| 1465 | Board #227 | 9:30 AM - 11:00 AM | The Effects Of Body Composition, Physical Finess On Time Of Useful Consciousness In Hypobaric Hypoxia |
|      |             |                   | Jungwoon Kim, Junskim Kim, Junjun Lim, Gunhee Kim, Yeonsoo Kim. Seoul National University, Seoul, Korea. Republic of (No relevant relationships reported) |
| 1466 | Board #228 | 9:30 AM - 11:00 AM | Influence Of Acetazolamide On Manual Dexterity During 30-hour Exposure To Hypobaric Hypoxia (3,500 M) |
|      |             |                   | (No relevant relationships reported)                                               |
| 1467 | Board #229 | 9:30 AM - 11:00 AM | Oxygen Consumption, Heart Rate and Work Rate During Maximal Exercise In Moderate Altitude Natives: Real versus Predicted Values |
|      |             |                   | Manuel Augusto Cárdenas-Romero, Juan Camilo Cardenas-Arciniegas, Manuela Zanolletti-Mannello, Julián Andrés Serrano-Giraldo, Julio César Bermúdez-Mañoz. Pontificia Universidad Javeriana, Bogota DC, Colombia Email: manuel.cardenas@javeriana.edu.co |
|      |             |                   | (No relevant relationships reported)                                               |
| 1468 | Board #230 | 9:30 AM - 11:00 AM | Accumulated Oxygen Deficit During Arm Cranking: Effects Of Hypoxia And Methodological Considerations |
|      |             |                   | David Boffey1, Michael B. La Monica2, Tristan M. Starling-Smith3, Jeffrey R. Stout1, David H. Fukada1. 1University of Central Florida, Orlando, FL. 2Missouri State University, Springfield, MO Email: dboffey@knights.ucf.edu |
|      |             |                   | (No relevant relationships reported)                                               |
| 1469 | Board #231 | 9:30 AM - 11:00 AM | The Effects Of Altitude Training Masks Worn During Low-Intensity Bouts on Performance |
|      |             |                   | (No relevant relationships reported)                                               |
| 1470 | Board #232 | 9:30 AM - 11:00 AM | Effect Of Intermittent Hypoxic Exercise Training On Improving Altitude Acclimatization |
|      |             |                   | Xinxin Hao, Dali W. Wang, Xiaofei Wang, Yubo Shen. National University of Defense Technology, Changsha, China Email: hxuoini016@163.com |
|      |             |                   | (No relevant relationships reported)                                               |
| 1471 | Board #233 | 9:30 AM - 11:00 AM | Lipolysis Mechanism By Down-regulating Mir-92a Activating Wnt/b-catenin Signaling Pathway In Hypoxic training Rats |
|      |             |                   | xuewen tian1, qijie song1, Yingli lu1, cui zhang1. 1Shandong institute of sport science, jinan,shandong, China. 2China Institute of Sport Science, beijing, China Email: xuewentian1978@163.com |
|      |             |                   | (No relevant relationships reported)                                               |
| 1472 | Board #234 | 9:30 AM - 11:00 AM | Effects Of Acute Intermittent Hypoxia (AIH) On Metabolism, Substrate Partitioning, And Dysglycemia In Obese Individuals With Spinal Cord Injury: A Case Series |
|      |             |                   | Jennifer L. Maher1, James L. Bilzor2, Mark S. Nash, FACSM1. 1University of Miami, Miami, FL. 2University of Bath, Bath, United Kingdom |
|      |             |                   | (No relevant relationships reported)                                               |

**C-41 Free Communication/Poster - Hypoxia/Altitude Physiology**

**Thursday, May 30, 2019, 7:30 AM - 12:30 PM**

**Room:** CC-Hall WA2

<table>
<thead>
<tr>
<th>1464</th>
<th>Board #226</th>
<th>9:30 AM - 11:00 AM</th>
<th>Vagal Withdrawal Is Not Dependent On Oxygen Availability Or Exercise Intensity During Upper-Body Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>Nicholas W. Clark1, Michael B. La Monica2, Valéria Panissa3, Tristan M. Starling-Smith, Jeffrey R. Stout1, David H. Fukada1. 1University of Central Florida, Orlando, FL. 2Missouri State University, Springfield, FL. 3University of São Paulo, São Paulo, Brazil Email: <a href="mailto:nicolas.clark@knights.ucf.edu">nicolas.clark@knights.ucf.edu</a></td>
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<td>(No relevant relationships reported)</td>
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ACSM May 28 – June 1, 2019

Orlando, Florida
American College of Sports Medicine

1473 Board #235 9:30 AM - 11:00 AM
Short-term Altitude Training Effects on Aerobic Performance Parameters in Collegiate Cross-country Runners
Nauris Tamulevicius1, Tanaj Wadhia1, Guillermo R. Oviedo2, Ashmeet S. Anand3, Fraser Houston1, Eric Vlahov1. 1The University of Tampa, Tampa, FL. 2University of Ramon Llull, Barcelona, Spain. Email: ntamulevicius@ut.edu (No relevant relationships reported)

1474 Board #236 9:30 AM - 11:00 AM
Exogenous Glucose Oxidation During Endurance Exercise in Hypoxia
Daichi Sumi, Nanako Hayashi, Haruka Yatsutani, Kazushige Goto. Ritsumeikan University, Kusatsu, Japan. Email: sh0034vr@ed.ritsumei.ac.jp (No relevant relationships reported)

1475 Board #237 9:30 AM - 11:00 AM
Effect of Sprint Exercise in Hypoxia on Muscle Glycogen Utilization
Nobukazu Kasa1, Fumiya Tanji2, Aya Ishibashi2, Hayato Ohnuma1, Hideyuki Takahashi1, Kazushige Goto1, Yasuhiro Suzuki3. 1Ritsumeikan University, Kusatsu, Japan. 2Japan Institute of Sports Sciences, Kitaka, Japan. (Sponsor: Robert Kraemer, FACSM) Email: nobunbun100@gmail.com (No relevant relationships reported)

1476 Board #238 9:30 AM - 11:00 AM
Effects Of Systemic Hypoxia-hyperoxia Preconditioning On Acute Heavy Resistance Exercise-induced Muscle Damage In Athletes
Szu-Hsien Yu1, Peng-Wen Chen2. 1National Ilan University, Yilan City, Taiwan. 2University of Taipei, Taipei City, Taiwan. (Sponsor: Chia-Hua Kuo, FACSM) Email: meek168@hotmail.com (No relevant relationships reported)

1477 Board #239 9:30 AM - 11:00 AM
The Integrative Physiological and Neuromuscular Effects of High Altitude Cycling In World Class Endurance Athletes
Craig E. Broeder, FACSM1, Dan Turner2, Per Lundstam1, Holden Macnab3. 1Exercising Nutritionally, LLC, Naperville, IL. 2Red-Bull Corporation, Santa Monica, CA. 3RedBull Corporation, Santa Monica, CA. (Sponsor: Pepperline University, Malibu, CA) Email: en.llc@me.com (No relevant relationships reported)

1478 Board #240 9:30 AM - 11:00 AM
Effect of Acetazolamide on Hand and Finger Strength During 30 Hours Exposure to 3500m Altitude
Beau R. Yurkevicius, Adam C. Nixon, Karleigh E. Bradbury, Katherine M. Mitchell, Billie K. Alba, Kirsten E. Coffman, Robert W. Kenefick, FACSM, Nisha Charkoudian, FACSM, USARIEM, Natick, MA. (Sponsor: Nisha Charkoudian, FACSM) Email: en.llc@me.com (No relevant relationships reported)

1479 Board #241 9:30 AM - 11:00 AM
The Effect Of Moderate Hypoxia On Skeletal Muscle Cell Growth And Related Protein Expression
Koki SAKUSHIMA1, Maki YOSHIIKAWA1, Takeshi HASHIMOTO, FACSM2. 1Ritsumeikan University, Kusatsu, Japan. 2Ritsumeikan University, Siga, Japan. (Sponsor: Takeshi Hashimoto, FACSM) Email: sakushima8812@gmail.com (No relevant relationships reported)
1487 Board #249 9:30 AM - 11:00 AM
Circulating MicroRNA Expression and Serum Biomarker Changes After 30 Days of Head-Down Bed Rest
Samuel R. Buchanan1, Carl Ade2, Breanne Baker2, Debra Bemben, FACSM3. 1The University of Oklahoma, Norman, OK. 2Kansas State University, Manhattan, KS (Sponsor: Debra Bemben, FACSM)
Email: samuel.r.buchanan-1@ou.edu
(No relevant relationships reported)

1488 Board #250 9:30 AM - 11:00 AM
Relationships Between Circulating MicroRNA and Muscular Performance Responses to a 30 Day Bed Rest Protocol
Cameron Combs1, Carl Ade2, Samuel Buchanan1, Debra Bemben, FACSM3. 1University of Oklahoma, Norman, OK. 2Kansas State University, Manhattan, KS (Sponsor: Dr. Debra Bemben, FACSM)
Email: cameron.s.combs-1@ou.edu
(No relevant relationships reported)

1489 Board #251 9:30 AM - 11:00 AM
Cerebral Blood Flow Responses To Long Term Head-down Bed Rest
Shigehiko Ogoh, FACSM1, Kohei Sato2, Steven de Abreu3, Pierre Denis4, Hervé Normand3. 1Toyo University, Kawaoge, Japan. 2Tokyo Gakugei University, Tokyo, Japan. 3Caen Normandie University, Caen, France
Email: ogoh@toyo.jp
(No relevant relationships reported)

1490 Board #252 9:30 AM - 11:00 AM
Sarcolab-3: Changes In Knee Flexor And Extensoir Torque Generation During A Six-month Space Flight Mission
Justin T. Reed1, Charles S. Layne1, Yuri Koryak2, Mark S. Clarke1, Elena Tomilovskaya1, Kirsten Albracht3, Boris Shenko2, Benjamin Stadler4, Jönn Rittweger3, Inessa Kozlovskaya2, and Mitzi S. Laughlin1. 1University of Houston, Houston, TX. 2IMBP, Moscow, Russian Federation. 3University of Applied Sciences, Aachen, Germany. 4German Aerospace Center (DLR), Cologne, Germany. (Sponsor: Richard Simpson, FACSM)
Email: jreed@uh.edu
(No relevant relationships reported)

1491 Board #253 9:30 AM - 11:00 AM
The Hypercapnic Ventilatory Response and Cerebrovascular Reactivity to CO2 during Waist Water Immersion with Acute Hypercapnia and Head Out Water Immersion
James R. Sackett1, Zachary J. Schlader, FACSM2, David Hostler, FACSM2, Blair D. Johnson2, FACSM2. 1Cornerstone University, Grand Rapids, MI. 2Cornerstone University, Grand Rapids, MI. (Sponsor: Richard Simpson, FACSM)
Email: jsackett@cornerstone.edu
(No relevant relationships reported)

1492 Board #254 10:30 AM - 12:00 PM
Inflamm-aging Is Associated With Impairing The Process Of Maintaining Telomere Length In LPS Stimulated PBMCs
Charles S. Schwartz1, Aaron Slusher2, Tiffany Zühiga1, Kesha Shah1, Edmund Acedo, FACSM3. 1Virginia Commonwealth University, Richmond, VA. 2University Of Michigan, Ann Arbor, MI. 3University of Arizona, Tucson, AZ (Sponsor: Edmund Acedo, FACSM)
Email: schwartzs@vcu.edu
(No relevant relationships reported)

1493 Board #255 10:30 AM - 12:00 PM
Effect Of Self control Exercise On Lymphocyte Subsets Of Lung Cancer Patients During Rehabilitation
JIBING WANG1, Weimo Zha, FACSM2, Renwei Wang3, Jiaying Lang4. 1Tongji University, Shanghai, China. 2University of Illinois at Urbana-Champaign, urbana, IL. 3Shanghai University of Sport, Shanghai, China
(No relevant relationships reported)

1494 Board #256 10:30 AM - 12:00 PM
Effects Of Endurance Exercise Under Heat And Hypoxia On Hepcidin Responses
Nanako Hayashi, Haruka Yatsutani, Hisashi Mori, Hiroto Ito, Kazuhisa Goto. Ritsumeikan University, Kusatsu, Japan
Email: sbh0108ths@ed.ritsumei.ac.jp
(No relevant relationships reported)

1495 Board #257 10:30 AM - 12:00 PM
Time-course Of Physiological Changes Following An Extreme Conditioning Competition
Ramires A. Tibana1, Nuno Manuel Frede de Sousa2, Matheus Baffi3, Gabriel Veloso Cunha4, Fabrício Azevedo Voltarelli5. 1Federal University of Mato Grosso, Cuiabá, Brazil. 2Faculty Estacio of Vitoria, Vitoria, Brazil. 3Laboratório de Corrêas, Río de Janeiro, Brazil. 4Catholic University of Brasilia, Brasilia, Brazil
(No relevant relationships reported)

1496 Board #258 10:30 AM - 12:00 PM
Impact Of Exercise Intensity And Resting Intervals During Resistance Exercise On Acute Sparc Secretion In Healthy Young Males: A Pilot Study
Shihue Doshishi, Masato Hashimoto, Toshihiko Kanoa, Daisuke Ando. University of Yamanashi, Kofu, Japan
(No relevant relationships reported)

1497 Board #259 10:30 AM - 12:00 PM
Serum Uric Acid Levels and Cardiometabolic Risk Among Adolescents
Jose R. Gabaldon1, Nate T. Berry1, Jessica Dollar1, Lilly Shanahan2, Susan Keane1, Lenka Shrivers1, Susan Calkins2, Laurie Wideman1. 1University of North Carolina at Greensboro, Greensboro, NC. 2University of Zurich, Zurich, Switzerland
Email: jrgabaldoni@uncg.edu
(No relevant relationships reported)

1498 Board #260 10:30 AM - 12:00 PM
Exercise-mediated Apoptotic And Autophagic Responses Are Differentially Modulated In Pbmcs Of Obese Individuals
Chun-Jung Huang, FACSM1, Alexandra L. Rodriguez2, Nishant P. Visavadiya1, Brandon G. Fico1, Aaron L. Slusher1, Peter J. Ferrand1, Michael Whitehurst, FACSM2. 1Florida Atlantic University, Boca Raton, FL. 2University of Texas, Austin, TX. (Sponsor: Debra Bemben, FACSM)
Email: chuang5@fla.edu
(No relevant relationships reported)

1499 Board #261 10:30 AM - 12:00 PM
Exercise Training Modulates Metabolic Inflammation In Kidney Of Diabetic Dv/db Mice
HUNG-WEN LIU. National Taiwan Normal University, Taipei, Taiwan
Email: hwliu@ntnu.edu.tw
(No relevant relationships reported)
### C-44  Free Communication/Poster - Concussion I

**Thursday, May 30, 2019, 7:30 AM - 12:30 PM**

**Room: CC-Hall WA2**

<table>
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<tr>
<th>Board #262</th>
<th>10:30 AM - 12:00 PM</th>
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| Static Cerebral Autoregulation is Not Altered in Symptomatic Concussed Athletes During Acute Central Hypervolemia | Morgan L. Worley, Morgan C. O’Leary, James R. Sackett, Zachary J. Schlader, FACSM, John J. Leddy, Blair D. Johnson. *University at Buffalo, Buffalo, NY*  
Email: mworley@buffalo.edu  
(No relevant relationships reported) |

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<tr>
<th>Board #263</th>
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| Whole-Body Reactive Agility Asymmetries among Athletes with Concussion History Are Modifiable | Gary B. Wilkerson1, Dustin C. Nabhan, FACSM1; William J. Moreau1.  
1University of Tennessee at Chattanooga, Chattanooga, TN.  
(No relevant relationships reported) |

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<tr>
<th>Board #264</th>
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| Normative Values on the King-Devick Screening Test in Wheelchair Basketball Players | J.P. Barfield1, Angela Mickel2, Laura Newsome2.  
1Emory & Henry College, Emory, VA.  
2Radford University, Radford, VA. (Sponsor: Hanek Williford, FACSM)  
Email: jpbarkfield@echo.edu  
(No relevant relationships reported) |

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<tr>
<th>Board #265</th>
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| Previous Concussion History Influences Health-related Quality Of Life Among Collegiate Student-athletes: Baseline Findings From The Active Rehab Study | John K. Register-Mihalik1, Shabbar Ranapurwala1, Kevin Guskiewicz, FACSM1, Paula Gildner1, Stephen Marshall1, Karen McCulloch1, Jason Mihalik1, Julianna Primm1, Christina Vander Vegt1, Michael McCrea2, The Active Rehab Study Consortium1.  
1University of North Carolina at Chapel Hill, Chapel Hill, NC.  
2Medical College of Wisconsin, Milwaukee, WI. (No relevant relationships reported) |

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<tr>
<th>Board #266</th>
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| Long Term Effects of Concussion on Eye Tracking Patterns | Lauren A. Dougherty, Kathryn L. Van Pelt, Andrew P. Lapointe, Griffin J. Feinberg, Allyssa K. Memmini, Katherine M. Breedlove, Steven P. Broglio, FACSM.  
University of Michigan, Ann Arbor, MI. (Sponsor: Steven Broglio, FACSM)  
(No relevant relationships reported) |

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<th>Board #267</th>
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| Examining Differences Between Patient and Clinician Measurements of Post-Concussion Near-Point of Convergence Distance | Nathan D'Amico1, Melissa Womble2, Katie Stephenson-Brown1, Anthony Kontos1, RJ Ellin1.  
1University of Arkansas, Fayetteville, AR.  
2Inova Sports Medicine, Fairfax, VA.  
3University of Pittsburgh Medical Center, Pittsburgh, PA. (Sponsor: Dr. Brendon McDermott, FACSM)  
Email: nrdamico@uark.edu  
(No relevant relationships reported) |
C-45 Free Communication/Poster - Clinical Populations

Thursday, May 30, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

1513 Board #275 10:30 AM - 12:00 PM
Agreement Between Segmental Bioimpedance Devices, Air Displacement Plethysmography, and Dual Energy X-Ray Absorptiometry in Obese Adults
Brett S. Nickerson1, Cherilyn N. McLester2, John R. McLester, FACSM1, Brian M. Klessczewicz, FACSM1, Texas A&M International University, Laredo, TX. 1Kennesaw State University, Kennesaw, GA
Email: brett.nickerson@tamu.edu
(No relevant relationships reported)

1514 Board #276 10:30 AM - 12:00 PM
The Effects of Swimming Training on Arterial Stiffness, Muscular Strength and Cardiorespiratory Endurance in Postmenopausal Women with Stage 2 Hypertension
Steven Scott1, Alexei Wong2, Yi-Su Kwak3, Won-Mok Son4, Jungjun Park4, Elizabeth Pekas5, Song Yong Park1. 1University of Nebraska at Omaha, Omaha, NE. 2Marymount University, Arlington, VA. 3Dong-eui University, Busan, Korea, Republic of. 4Pusan National University, Busan, Korea, Republic of.
Email: rffolher@gmail.com
(No relevant relationships reported)

1515 Board #277 10:30 AM - 12:00 PM
Improvement Of Redox Balance After Isometric Exercise Involving Large Muscle Mass In Hypertensive Adults
Email: rffolher@gmail.com
(No relevant relationships reported)

1516 Board #278 10:30 AM - 12:00 PM
Cardiac Rehabilitation Significantly Reduces Body Composition in Men Greater than Women
Anna R. Bonikowske, Jose R. Medina Inojosa, Maria Irene Barillas-Lara, Yaoshun Dun, Francisco Lopez Jimenez, Thomas P. Olson, FACSM, Mayo Clinic, Rochester, MN. (Sponsor: Thomas P. Olson, FACSM)
Email: bonikowske.amanda@mayo.edu
(No relevant relationships reported)

1517 Board #279 10:30 AM - 12:00 PM
A Novel 4 Pillar® Model Of Exercise Delivery Reduces Cardiovascular Risk Factors In Cardiac Patients
Yvonne Rumble, Matthew Thompson, Sam Olden, Gavinder Kandola, Ivor Cradock. CP+R London, United Kingdom
Email: yvonne.rumble@cpandr.co.uk
(No relevant relationships reported)

1518 Board #280 10:30 AM - 12:00 PM
The Inorganic Nitrate For eXercise In Heart Failure (INIX-HF) Trial: Rationale, Design, And Preliminary Data
Andrew R. Coggan, FACSM1, Derrick Gray1, Susan B. Racette2, W. Todd Cade1, Dáddkota Thies3, Kenneth B. Schechtman4, Linda R. Peterson4. 1Indiana University Purdue University Indianapolis, Indianapolis, IN. 2Washington University in St. Louis, St. Louis, MO
Email: acoggan@iupui.edu
(No relevant relationships reported)

1519 Board #281 10:30 AM - 12:00 PM
Body Mass Index and Exercise Performance in Patients with Single Ventricle Fontan Circulation
Sydney Bouressa, Michael Danduran. Marquette University, Milwaukee, WI
Email: sydney.bouressa@marquette.edu
(No relevant relationships reported)

1520 Board #282 10:30 AM - 12:00 PM
Dexametomidine is Improved in the Gastrocnemius of Patients with Peripheral Artery Disease after Revascularization Interventions
Panagiotis Koutakis1, Ahmed Ismaeil1, Evlampia Papoutsi1, Jeremiah Kid1, Robert S. Smith2, Robert Brumberg3, Jeffrey S. Kirk4, William T. Bohannan2. 1Florida State University, Tallahassee, FL. 2Baylor Scott and White, Temple, TX. 3Vascular Surgery Associates, Tallahassee, FL. 4Capital Regional Medical Center, Tallahassee, FL. (Sponsor: Lynn Panton, FACSM)
Email: pkoutakis@fsu.edu
(No relevant relationships reported)

1521 Board #283 10:30 AM - 12:00 PM
Metabolomic Profiling of Amino Acid Metabolism in Peripheral Artery Disease Patients
Ahmed Ismaiel1, Marco E. Franco2, Ramon Lavado2, Panagiotis Koutakis1. 1Florida State University, Tallahassee, FL. 2Baylor University, Waco, TX. (Sponsor: Lynn Panton, FACSM)
Email: a18@baylor.edu
(No relevant relationships reported)

C-46 Free Communication/Poster - Obesity

Thursday, May 30, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

1522 Board #284 10:30 AM - 12:00 PM
Exercise Mitigates The Loss In Muscle Mass And Functionality In Obese Women Undergoing Bariatric Surgery
Saulo Gil, Wagner Silva Dantas, Igor Hisashi Murai, Carlos Merege Filho, Marco Aurelio Santo, Roberto de Cleva, Rosa Maria Rodrigues Pereira, Samuel Katsuyuki Shinjo, John P. Kirwan, Bruno Guadano, Hamilton Roschel. University of Sao Paulo, Sao Paulo, Brazil
Email: saulosgil@hotmail.com
(No relevant relationships reported)

1523 Board #285 10:30 AM - 12:00 PM
The Role of Physical Activity on Abdominal Fat Patterning in Pre and Post-Menopausal Women
Emily W. Flanagan, Arlette C. Perry, FACSM, Wesley N. Smith. University of Miami, Coral Gables, FL
Email: e.white6@umiami.edu
(No relevant relationships reported)

1524 Board #286 10:30 AM - 12:00 PM
Obesity Further Impairs Neuromuscular and Functional Performance in Older Women
Ryan M. Miller, Eduardo D.S. Freitas, Aaron D. Heishman, Japneet Kaur, Brady S. Brown, Michael G. Bemben, FACSM. University of Oklahoma, Norman, OK. (Sponsor: Michael G Bemben, FACSM)
(No relevant relationships reported)

1525 Board #287 10:30 AM - 12:00 PM
Limiting Factors In Cycling And Knee Extension Exercise In Obese Subjects
Filippo Vaccari1, Mirco Floreani2, Alessandro Sartorio2, Stefano Lazzaret. 1Udine University, Udine, Italy. 2Istituto Auxologico Italiano, Verbania, Italy
Email: filippo.vaccari@live.com
(No relevant relationships reported)
1526  Board #288  10:30 AM - 12:00 PM  
12-week of Tai Chi Training Reduces Visceral Fat in Centrally Obese Older Adults  
Angus, P. Yu1, Doris S. Yu1, Stanley S. Hui, FACSM2, Jean Wow3, Parco M. Siu, FACSM1. 1The University of Hong Kong, Hong Kong, Hong Kong; 2The Chinese University of Hong Kong, Hong Kong, Hong Kong. (Sponsor: Dr. Parco M. Siu, FACSM)  
Email: aphysy@connect.hku.hk  
(No relevant relationships reported)

1527  Board #289  10:30 AM - 12:00 PM  
Functional Evaluation and VO2-kinetics in Obese Patients Before and After Sleeve Gastrectomy  
Daniel Neunhaeusser1, Sara Ortolani, Alessandro Patti1, Andrea Gasperetti1, Francesca Savall1, Francesca Battista1, Stefano Gobbo1, Silvia Bettini2, Anna Belligoli1, Andrea Ermolao1. 1Sport and Exercise Medicine Division, Padova, Italy; 2Internal Medicine 3, Padova, Italy  
Email: daniel.neunhaeusser@unipd.it  
(No relevant relationships reported)

1528  Board #290  10:30 AM - 12:00 PM  
Athletic Obesity and Long-Term Health  
Justin B. Ethington. Utah Valley University; Orem, UT  
Email: justin.ethington@hotmail.com  
(No relevant relationships reported)

1529  Board #291  10:30 AM - 12:00 PM  
Mechanical Assistance During Unloaded Pedaling Improves the Dynamic Range of the Metabolic Response in Obesity  
Tolulope Popoola1, William Stringer2, Tomohiko Kisaka1, Kathi Sietsem1. 1Los Angeles Biomedical Institute (LABIMED) at Harbor-UCLA Medical Center, Torrance, CA; 2Hiroshima University, Hiroshima, Japan. (Sponsor: Harry Rossiter, PhD, FACSM)  
Email: ttepopoola@yahoo.com  
Reported Relationships:  T. Popoola: Industry contracted research; MITSUBISHI ELECTRIC ENGINEERING Co., LTD.

C-47  Free Communication/Poster - Pulmonary/Respiratory  
Thursday, May 30, 2019, 7:30 AM - 12:30 PM  
Room: CC-Hall WA2

1530  Board #292  10:30 AM - 12:00 PM  
Using Rhythmic Auditory Stimulation to Increase Cadence in Individuals with Chronic Obstructive Pulmonary Disease  
Alison Hernandez1, Eileen Collins1, David X. Marquez, FACSM, Alana Steffen2, Cynthia Fritschi1, Lauren T. Quinn3, Ulf Bronasz4. 1Northwestern University, Chicago, IL; 2University of Illinois at Chicago, IL  
Email: alison.hernandez@northwestern.edu  
(No relevant relationships reported)

1531  Board #293  10:30 AM - 12:00 PM  
Ventilatory Efficiency Among Patients With Pulmonary Hypertension With Varying Levels Of Adaptation To Exercise Training  
Zoe Morris1, Lisa Chin1, Leighton Chan2, Randall Keyser, FACSM1. 1George Mason University, Fairfax, VA; 2National Institutes of Health, Bethesda, MD  
(No relevant relationships reported)

1532  Board #294  10:30 AM - 12:00 PM  
Is The EVH Test Best For Diagnosing Exercise Induced Bronchoconstriction In Swimmers?  
Michael G. Leahy, Caitlin M. Geary, Michael S. Koehle, Donald C. McKenzie, James Brotherhood, Carli M. Peters, Andrew W. Sheed, FACSM, University of British Columbia, Vancouver, BC, Canada. (Sponsor: Dr. Andrew William Sheed, FACSM)  
Email: mick.leaney@ubc.ca  
(No relevant relationships reported)
Board #301 10:30 AM - 12:00 PM
Selective Effectiveness Of 10wk-exercise Protocols On Mets Reduction
Roberto C. Burini, FACSM1, Mariana S. Nakagaki2, Hugo T. Kano1.
1São Paulo State University (UNESP), Botucatu, Brazil. 2Londrina State University, Londrina, Brazil.
Email: burini@fmb.unesp.br
(No relevant relationships reported)

Board #302 10:30 AM - 12:00 PM
Reason To Exercise In Diabetic Populations: Use Of Rapid-acting Insulin Predicts Falls In At-risk Patients
Saeed G. Mohan1, Tina Bhateja2, Kathy L. Leslie1, J. Mark VanNess1, Jonathan M. Sase2, Lewis E. Jacobson3, Courtney D. Jensen1. 1University of the Pacific, Stockton, CA. 2St. Vincent Hospital, Indianapolis, IN.
(No relevant relationships reported)

Board #303 10:30 AM - 12:00 PM
The Effects of Traditional Chinese Exercise on Sugar Metabolism And Physical Fitness
Mian Jia1, Jing Li1, Zhengzhen Wang, FACSM1, Tongtong Gao2.
1World Federation of Chinese Medicine Societies, Beijing, China. 2Dongzhimen Hospital of Beijing University of Chinese Medicine, Beijing, China.
(No relevant relationships reported)

Board #304 10:30 AM - 12:00 PM
Combined Metformin and Exercise Treatment Improves Glucose Control and Insulin Sensitivity in Type-2 Diabetes Patients.
Email: juanfernando.ortega@uclm.es
(No relevant relationships reported)

Board #305 10:30 AM - 12:00 PM
A Review Of Intervention Of Baduanjin For Diabetes And Complications
Shuxin Wu, Xiaohui Yang, Lu Sun, Hongfeng Sun, Shuli Cheng. Dongfeng Hospital Affiliated to Beijing University of Chinese Medicine, Beijing, China.
Email: 15120039753@163.com
(No relevant relationships reported)

Board #306 10:30 AM - 12:00 PM
Relationships Between Exercise Level, Beliefs About Exercise, And Exercise Promotion Among Cardiologists And Oncologists
Heather Leach1, Kalli LeBreton1, Barry Braun, FACSM1, Steven Schuster1, Patrick Green2. 1Colorado State University, Fort Collins, CO. 2University of Colorado Health, Aurora, CO. (Sponsor: Barry Braun, FACSM)
Email: heather.leach@colorado.edu
(No relevant relationships reported)

Board #307 10:30 AM - 12:00 PM
Effects of Exercise on Sexual Function in Men with Advanced Prostate Cancer.
Ciaran Fairman1, Dennis R. Taaffe, FACSM1, Robert U. Newton1, Suzanne Chambers1, Nigel Stry2, David Joseph1, Daniel A. Galvão, FACSM1. 1Edith Cowan University, West Perth, Australia. 2Genesis Cancer Care, West Perth, Australia. (Sponsor: Daniel Galvão, FACSM)
Email: c.fairman@ecu.edu.au
(No relevant relationships reported)

Board #308 10:30 AM - 12:00 PM
Baduanjin’s Impact on Quality of Life and Sleep Quality in Breast Cancer Survivors Receiving: An Intervention Study
XIAOHUI HOU. GUANGZHOU SPORT UNIVERSITY, GUANGZHOU, China.
Email: lilyhxh@163.com
(No relevant relationships reported)

Board #309 10:30 AM - 12:00 PM
Evaluating The Translation Of Dutch Exercise Oncology Trials Into Clinical Practice Using The RE-AIM Framework
Lauren M. Buffart1, Anne M. May2, Rosalie Hijmans3, Neil K. Aaronson1, Martijn M. Stuiver1. 1Amsterdam UMC, Amsterdam, Netherlands. 2UMC Utrecht, Utrecht, Netherlands. 3Netherlands Cancer Institute, Amsterdam, Netherlands. 4Netherlands Cancer Institute and Amsterdam University of Allied Sciences, Amsterdam, Netherlands.
Email: l.buffart@vumc.nl
(No relevant relationships reported)

Board #310 10:30 AM - 12:00 PM
Effects Of Different Volumes Of Combined Training in Breast Cancer Survivors: A Pilot Study
Stephanie Pinto1, Elisa Portella1, Cristine Alberton1, Rochele Pinheiro1, Gabriela David1, Pedro Lopez2, Maria Laura Brizol1, Gustavo Schau1, Daniel Umpierrez3. 1Federal University of Pelotas, Pelotas, Brazil. 2Federal University of Rio Grande do Sul, Porto Alegre, Brazil.
Email: tetisantana@yahoo.com.br
(No relevant relationships reported)

Board #311 10:30 AM - 12:00 PM
Feasibility Of Exercise Prehabilitation During Neo-adjuvant Chemotherapy In Oesophago-gastric Cancer Surgery
Janine Zylstra1, Andrew R. Davies1, Jim Paté2, Gemma Tham3, Nick Maisey1, Cara R. Baker1, Mark Kelly1, James Gossage1, Mike Browning1, Greg Whyte1. 1University of the Pacific, Stockton, CA. 2University Hospital of Copenhagen, Copenhagen, Denmark. 3Odense University Hospital, Odense, Denmark.
Email: ril@regionsjaelland.dk
(No relevant relationships reported)

Board #312 10:30 AM - 12:00 PM
Moving Cancer Care Ontario’s Exercise Guidelines Into Oncology Practice: Using The Theoretical Domains Framework To Validate A Questionnaire
Sarah Neil-Sztramko1, Michelle Nadler2. 1McMaster University, Hamilton, ON, Canada. 2University of Toronto, Toronto, ON, Canada.
Email: neilszts@mcmaster.ca
(No relevant relationships reported)

Board #313 10:30 AM - 12:00 PM
Exercise in Patients Newly Diagnosed with Multiple Myeloma - a Randomized Controlled Feasibility Study
Rikke F. Larsen1, Mary Jarden2, Lisbeth R. Minet1, Ulf C. Frølund1, Niels Abildgaard1. 1Zealand University Hospital, Roskilde, Denmark. 2University of Copenhagen, Copenhagen, Denmark. 3Odense University Hospital, Odense, Denmark.
Email: rlf@regionsjaelland.dk
(No relevant relationships reported)

Board #314 10:30 AM - 12:00 PM
Effects Of Exercise And Yoga On Sleep Problems In Women With Breast Cancer: A Meta-analysis
Charlotte Kreutz, Martina E. Schmidt, Karen Steindorf. DKFZ, Heidelberg, Germany. (Sponsor: Jürgen Scharhag, FACSM)
Email: charlotte.kreutz@dkfz-heidelberg.de
(No relevant relationships reported)
1553  Board #315  10:30 AM - 12:00 PM
Preventive Action Of Cardiorespiratory Fitness On Health Outcomes In Childhood Acute Lymphoblastic Leukemia Survivors
Maxime Caru1, Valérie Lemay1, Mariia Samoilenko1, Simon Drouin1, Nathalie Alos1, Geneviève Lefebvre2, Émile Levy1, Sarah Lippé1, Valérie Marcil1, Serge Sultan1, Laurence Bertout1, Maja Krajnović1, Caroline Laverdiere1, Marie-Josée Raboisson1, Daniel Sinnett2, Gregor Andelfinger1, Daniel Sinnett1, Daniel Curnier1. 1Sainte-Justine University Hospital, Montreal, QC, Canada. 2University of Quebec in Montreal, Montreal, QC, Canada
Email: maxime.caru@umontreal.ca
(No relevant relationships reported)

C-49  Basic Science World Congress/Poster - Circadian and Sleep Behavior in Adolescents
Thursday, May 30, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

1554  Board #316  10:30 AM - 12:00 PM
Descriptive Analysis of Objectively Measured Physical Activity and Sleep Activity in Adolescents: a Preliminary Analysis.
Sarah N. Brown, Sarah E. Domoff, Aubrey L. Borgen, Ryan Foley, Rachael K. Nelson. Central Michigan University, Mount Pleasant, MI
(No relevant relationships reported)

1555  Board #317  10:30 AM - 12:00 PM
24-hour Movement Behaviors, Body Composition And Cognitive Performance In Adolescents
Erin K. Howie, Marilou D. Shreve, Connie Lamm, Matthew S. Ganio, FACSM. University of Arkansas, Fayetteville, AR
Email: ekhowie@uark.edu
(No relevant relationships reported)

1556  Board #318  10:30 AM - 12:00 PM
What Affects the Sleep of Youth? Results from the 2017 Youth Risk Behavior Surveillance Survey
Hai Yan. University of Illinois at Urbana Champaign, Champaign, IL. (Sponsor: Weimo Zhu, FACSM)
Email: haiyan2@illinois.edu
(No relevant relationships reported)

C-50  Basic Science World Congress - Tutorial Lecture - Jet Lag and Major League Baseball
Thursday, May 30, 2019, 9:30 AM - 10:20 AM
Room: CC-205

1557  Ravi Allada. Northwestern University, Chicago, IL
(No relevant relationships reported)
Physical inactivity is associated with many chronic disease conditions and premature mortality. Additionally, increasing evidence suggests that high levels of sedentary time may increase the risk of chronic diseases and mortality. This lecture will discuss the joint and independent associations between physical activity and sedentary time with the risk for premature morbidity and mortality. Further, the talk will focus on the dose-response associations between different intensities of physical activity and sedentary time with mortality and how different assessment methods of physical activity may influence the magnitude of these dose-response associations.

1558
Ulf Ekelund, FACSM. Norwegian School of Sport Sciences, Oslo, Norway
(No relevant relationships reported)

D-02 President's Lecture - Weight Loss and Exercise as Breast Cancer Treatment: Could the Treadmill Ever Replace Taxol?
Thursday, May 30, 2019, 12:30 PM - 1:20 PM
Room: CC-Valencia B

Obesity and inactivity have been linked to an increased risk of breast cancer recurrence and related mortality in women with early-stage, potentially curable, malignancy. Less is known about the impact of weight loss and exercise interventions after cancer diagnosis on cancer-related outcomes. This talk will review the observational evidence linking obesity and inactivity to breast cancer, discuss the status of randomized trials testing the impact of weight loss interventions on cancer recurrence and mortality, and explore the biologic mechanisms through which exercise and weight loss could impact breast cancer risk and outcomes.

1559
Jennifer Ligibel. Dana-Farber Cancer Institute, Harvard Medical School, Boston, MA
(No relevant relationships reported)

D-03 Highlighted Symposium - Bank On It! New Insights From UK Biobank
Thursday, May 30, 2019, 1:30 PM - 3:30 PM
Room: CC-204

The United Kingdom (UK) Biobank is a next generation epidemiologic study that is poised to make landmark contributions to our understanding of physical activity, fitness and health over the next 20 years. The overarching goal of the study is to improve the prevention, diagnosis and treatment of a wide range of serious and life-threatening chronic diseases (www.ukbiobank.ac.uk). It is a prospective study of 500,000 adults (40-69 years) who were enrolled across the UK between 2006-10. UK Biobank is unique for its state-of-the-art measures of physical activity, social ecological risk factors, sleep, and cardiorespiratory fitness, as well as other health behaviors, body composition, blood and urinary biomarkers, and genotyping. Disease outcomes are assessed via record linkage with the UK’s National Health Service. Remarkably, the UK Biobank is an open resource and study data are available to all health researchers. The goal of this Symposium is to introduce the UK Biobank to American College of Sports Medicine members and to highlight the rationale for and development of the physical activity, built environment, sleep, and fitness measurements employed in the study. Initial findings for these exposures will also be presented.

1560
1:30 PM - 1:35 PM
Chair: Charles E. Matthews, FACSM. National Cancer Institute, Rockville, MD
(No relevant relationships reported)

1561
1:35 PM - 1:55 PM
Physical Activity, Fitness, and Health in the UK Biobank: Rationale, Opportunities, and Potential Pitfalls
Nicholas Wareham. University of Cambridge, Cambridge, United Kingdom
(No relevant relationships reported)

1562 1:55 PM - 2:15 PM
Accelerometer Measured Physical Activity Behaviours: Determinants and Health Consequences
Aiden Doherty. University of Oxford, Oxford, United Kingdom
(No relevant relationships reported)

1563 2:15 PM - 2:35 PM
Geospatial Correlates of Physical Activity and Health Risks
Chinmoy Sarkar. Hong Kong University, Hong Kong, Japan
(No relevant relationships reported)

1564 2:35 PM - 2:55 PM
Sleep, Circadian Disruption and Health
Michael Grandner. University of Arizona, Tucson, AZ
(No relevant relationships reported)

1565 2:55 PM - 3:15 PM
Cardiorespiratory Fitness: Methods Development and Initial Etiologic Results
Soren Brage. University of Cambridge, Cambridge, United Kingdom
(No relevant relationships reported)

3:15 PM - 3:30 PM
Overall Discussion
**D-05 Symposium - Expert Update on the 2018 International Association of Athletics Federations (IAAF) Nutrition Consensus**

Thursday, May 30, 2019, 1:30 PM - 3:30 PM  
Room: CC-Valencia B

Athletics (Track & Field) is a truly global sport, with 144 Olympic medals and more than 200 member countries. Furthermore, the various unique event group requirements span every single type of athlete—from large and powerful in the shot-put to slender and highly aerobic in the marathon. In 2018, the International Association of Athletics Federations (IAAF) have again supported and promoted its third nutrition consensus statement, through a series of scientific papers on the state-of-the-art in performance nutrition research, relevant to Athletics, through a collection of global authors to write 17 different papers. Indeed, given the wide range of Athletics events, the impact that performance nutrition interventions can have on health and performance is profound. This symposium through 5 international speakers, who were co-authors throughout the various papers, will present the critical novel and applied findings from this series of papers in this symposium.

1570 1:30 PM - 1:35 PM  
Co-Chair  
Trent Stellingwerff, FACSM. Canadian Sport Institute Pacific, Victoria, BC, Canada  
(No relevant relationships reported)

1571 1:30 PM - 1:35 PM  
Co-Chair  
Lindy Castell. Green Templeton College, University of Oxford, Oxford, United Kingdom  
(No relevant relationships reported)

1572 1:35 PM - 2:00 PM  
Contemporary sports nutrition for the speed/power and multi-event groups.  
Jennifer Sygo. Athletics Canada, Toronto, ON, Canada  
(No relevant relationships reported)

1573 2:00 PM - 2:25 PM  
From buffering to fueling – sports nutrition from middle-to long-distance running.  
Trent Stellingwerff, FACSM. Canadian Sport Institute Pacific, Victoria, BC, Canada  

1574 2:25 PM - 2:50 PM  
The emerging art and science of nutrition periodization as it pertains to Athletics.  
Louise M. Burke, FACSM. Australian Institute of Sport, Canberra, Australia, Australia  
(No relevant relationships reported)

1575 2:50 PM - 3:15 PM  
Nutrition considerations for heat and altitude – considerations for IAAF 2019 Doha World Champs and 2020 Tokyo Olympics  
Robert Chapman, FACSM. Indiana University / USA Track & Field, Indianapolis, IN  
(No relevant relationships reported)

3:15 PM - 3:30 PM  
Overall Discussion

**D-06 Symposium - Retrotransposons: Jumping from Cancer to Aging to Exercise**

Thursday, May 30, 2019, 1:30 PM - 3:30 PM  
Room: CC-304B

Transposable elements are widespread throughout the human genome, and the long interspersed nuclear element-1 (LINE-1) gene encodes for a retrotransposable element that can replicate through a “copy and paste” mechanism. Dr. Jef Boeke (Professor in the Department of Biochemistry and Molecular Pharmacology at NYU Langone Health, and a member of the National Academy of Sciences) will discuss landmark findings regarding LINE-1 in multiple species. Dr. Michael Roberts (Associate Professor at Auburn University) will discuss findings regarding LINE-1 and muscle aging. Dr. John McCarthy (Associate Professor, University of Kentucky Medical School) will discuss the unique phenotype of an inducible muscle-specific LINE-1 mouse. Finally, Matt Romero (PhD cand., Auburn University) will discuss skeletal muscle LINE-1 activity and exercise. Given that increased LINE-1 activity coincides with various cancers and skeletal muscle aging, this symposium will inform the ACSM community about this underappreciated mechanism, and discuss how exercise may mitigate skeletal muscle LINE-1 activity.

1576 1:30 PM - 1:35 PM  
Chair: Michael Roberts. Auburn University, Auburn, AL  
(No relevant relationships reported)

1577 1:35 PM - 2:00 PM  
LINE-1: mechanisms, key findings, and future directions  
Jef Boeke. NYU Langone Health, New York, NY  
(No relevant relationships reported)

1578 2:00 PM - 2:25 PM  
LINE-1 as a potential cause of skeletal muscle aging  
Michael Roberts. Auburn University, Auburn, AL  
Reported Relationships: M. Roberts: Industry contracted research; Metabolic Technologies, Inc., Ritual, Center for Applied Health Sciences, Auburn University’s Intramural Grant Program, Impedimed, Edward Via College of Osteopathic Medicine, Florida A&M University (Grant in Aid).

1579 2:25 PM - 2:50 PM  
Preliminary findings of the rtTA-tetORFeus mouse  
John McCarthy. University of Kentucky, College of Medicine, Lexington, KY  
(No relevant relationships reported)

1580 2:50 PM - 3:15 PM  
Skeletal muscle LINE-1 activity and exercise: current findings and future directions  
Matthew Romero. Auburn University, Auburn, AL  
(No relevant relationships reported)

3:15 PM - 3:30 PM  
Overall Discussion

**D-07 Symposium - The Diagnosis and Treatment of Rotator Cuff Pathology: From the Aging Weekend Warrior to the Elite Paralympic Athlete**

Thursday, May 30, 2019, 1:30 PM - 3:30 PM  
Room: CC-205

Rotator cuff pathology is one of the most commonly encountered diagnoses in clinical sports medicine practice. Factors related to intrinsic biomechanics, extrinsic load, and other risk factors such as medication use and chronic disease (e.g. hyperlipidemia, diabetes mellitus) all play a role in the development of symptoms. The literature is rapidly evolving regarding cutting edge mechanisms for the diagnosis and treatment of this common clinical problem. This symposium will offer a high yield, evidence-based clinical updates pertinent to sports medicine clinicians inclusive of physicians, physiotherapists, athletic trainers, and others.

1581 1:30 PM - 1:35 PM  
Chair: Cheri Blauwet. Harvard Medical School/Spaulding Rehabilitation Hospital, Charlestown, MA  
(No relevant relationships reported)

1582 1:35 PM - 2:00 PM  
Defining the problem – the epidemiology and risk factors of rotator cuff pathology  
Wayne Derman. The University of Stellenbosch, Stellenbosch, South Africa  
(No relevant relationships reported)
P114  Final Program

D-08  Thematic Poster - Female and Sex-Specific Physiology
Thursday, May 30, 2019, 1:30 PM - 3:30 PM
Room: CC-104B

1586  1:30 PM - 3:30 PM
Chair: Saori Hanaki. Weber State University, Ogden, UT
(No relevant relationships reported)

1587  Board #1  1:30 PM - 3:30 PM
Role Of Gender In Anti-oxidant Response To A Bout Of Aerobic Exercise In Healthy Adults
Anam Ahmad1, Zoe Morris1, Lisa M.K. Chin1, Rebekah Feng1, Leo Salijan1, Leighton Chan1, Randall Keyser, FACSM2, 3National Institutes of Health, Bethesda, MD. 2George Mason University, Fairfax, VA
Email: anam.ahmad@nih.gov
(No relevant relationships reported)

1588  Board #2  1:30 PM - 3:30 PM
Sex Differences in Anabolic Regulators during Development of Atrophic Pathology in Hindlimb-Unloading-Induced Diseuse
Lisa T. Jansen1, Megan E. Rosa-Caldwell1, Wesley S. Haynie1, Seongkyun Lim1, Kirsten Dunlap1, Jacob L. Brown1, David E. Lee1, Richard A. Perry1, Michael P. Wiggs1, Tyrone A. Washington1, Nicholas P. Greene1, 1University of Arkansas, Fayetteville, AR. 2University of Texas at Tyler, Tyler, TX. (Sponsor: Stavros A. Kavouras, FACSM)
Email: ljtansen@uark.edu, jliu@mailbox.sc.edu
(No relevant relationships reported)

1589  Board #3  1:30 PM - 3:30 PM
Similar Central and Peripheral Fatigue in Men and Women after Running
Beth W. Glace, Ian J. Kremenek, Malachy P. McHugh, FACSM, 1Nicholas Inst. of Sports Med. and Athletic Trauma, Lenox Hill Hosp., New York, NY. (Sponsor: Malachy P. McHugh, FACSM)
Email: lb@nismat.org
(No relevant relationships reported)

1590  Board #4  1:30 PM - 3:30 PM
The Effects Of Swimming On Bone Density In Female Collegiate SwimmersMargaret Miller, Sarah Kojetin, Lesley M. Scibora, University of St. Thomas, St. Paul, MN
(No relevant relationships reported)

ACSM 66th Annual Meeting

D-09  Thematic Poster - Physical Activity & Behavioral Science during Pregnancy and Motherhood
Thursday, May 30, 2019, 1:30 PM - 3:30 PM
Room: CC-102B

1595  1:30 PM - 3:30 PM
Chair: Sofiya Alhassan, FACSM. University of Massachusetts, Amherst, MA
(No relevant relationships reported)

1596  Board #1  1:30 PM - 3:30 PM
Baseline Correlates Of Sedentary Behavior In The Health In Pregnancy And Postpartum (HIPP) Study
Sara Wilcox, FACSM1, Jihong Liu1, Brent Hutto1, Ellen Wingard1, Gabrielle Turner-McGrievy1, Judith Burgis1, Alycia Boutte1, Lara Schneider1, 1University of South Carolina School of Medicine, Columbia, SC. 2University of South Carolina, Columbia, SC
Email: wilcoxe@mailbox.sc.edu
(No relevant relationships reported)

1597  Board #2  1:30 PM - 3:30 PM
Sensor-measured Physical Activity In Overweight And Obese Women In Early Pregnancy
Jihong Liu1, Sara Wilcox, FACSM1, Ellen Wingard1, Brent Hutto1, Gabrielle Turner-McGrievy1, Judith T. Burgis1, Alycia Boutte1, Lara Schneider1, 1University of South Carolina School of Medicine, Columbia, SC
Email: jliu@mailbox.sc.edu
(No relevant relationships reported)
1598 Board #3 1:30 PM - 3:30 PM
The Association Between Type and Intensity of Physical Activity on Cortisol Levels Among Low-Income, Ethnic-Minority Mothers
Wendy Miranda1, Guido Urizur, California State University, Long Beach, Long Beach, CA
Email: wmdmiranda@gmail.com
(No relevant relationships reported)

1599 Board #4 1:30 PM - 3:30 PM
Self-regulation Capacity Of low-income Mothers In Community-based Nutrition Program
Alyssa Abreu1, Eric J. Jones1, Dustin Joubert1, Mark D. Faries2.
1Stephen P. Austin State University, Nacogdoches, TX; 2Texas A&M AgriLife Extension, College Station, TX. (Sponsor: Thomas J. Pajol, FACSM)
(No relevant relationships reported)

1600 Board #5 1:30 PM - 3:30 PM
Physical Activity Does Not Moderate the Relationship Between Postpartum Body Satisfaction and Depressive Symptoms
Faith C. LaFranboise, Rebecca A. Schlaff, Samantha J. Deere, Meghan Baruth. Saginaw Valley State University, University Center, MI
(No relevant relationships reported)

1601 Board #6 1:30 PM - 3:30 PM
Impact of Weight Related Variables on Postpartum Depressive Symptoms
Samantha J. Deere, Meghan Baruth, Rebecca A. Schlaff. Saginaw Valley State University, University Center, MI
(No relevant relationships reported)

1602 Board #7 1:30 PM - 3:30 PM
Joint Influence Of Physical Activity And Quality Of Sleep On Pregnancy - Related Anxiety
Emma K. Wilsie1, Christopher P. Connolly1, Zoe Wright Osborn1, Maria Gartstein1, Sara Waters2, Washington State University, Pullman, WA; 2Washington State University, Vancouver, WA
(No relevant relationships reported)

D-10 Thematic Poster - Physical Activity Interventions in the Modern Age
Thursday, May 30, 2019, 1:30 PM - 3:30 PM
Room: CC-102A

1603 Board #8 1:30 PM - 3:30 PM
The Effects of Peer Health Coaching for Lifestyle Behavior Change Among College Students
Kathryn J. DeShaw, Gregory J. Welk, FACSM. Iowa State University, Ames, IA. (Sponsor: Gregory J. Welk, FACSM)
(No relevant relationships reported)
P116  Thematic Poster - Running Injuries

Thursday, May 30, 2019, 1:30 PM - 3:30 PM
Room: CC-101B

1612  1:30 PM - 3:30 PM
Chair: Allison H. Gruber, Indiana University Bloomington, Bloomington, IN
(No relevant relationships reported)

1613  Board #1  1:30 PM - 3:30 PM
Increased Ground Reaction Force Load Rates In Runners With Active Patellofemoral Pain
Caleb D. Johnson, Jerome Oosterley, Julia M. Reilly, Adam S. Tenforde, Irene S. Davis, FACSM, Harvard University, Cambridge, MA. (Sponsor: Dr. Irene Davis, FACSM)
Email: cj90s25@gmail.com
(No relevant relationships reported)

1614  Board #2  1:30 PM - 3:30 PM
Effects Of Running Biomechanics On The Occurrence Of Iliotibial Band Syndrome - A Prospective Study
Qiopeng Song, Peixin Shen. Shandong Sport University, Jinan, China
(No relevant relationships reported)

1615  Board #3  1:30 PM - 3:30 PM
Achilles Tendon Loading Patterns During A 30-minute Steady-state Run In Patients With Achilles Tendinopathy
Patrick Corrigan, Karin Grävare Silbernagel. University of Delaware, Newark, DE
Email: dpwc@udel.edu
(No relevant relationships reported)

1616  Board #4  1:30 PM - 3:30 PM
Flexor Hallucis Brevis Morphology is Associated with Visual Reliance While Balancing in Previously Injured Runners
Erik A. Wikstrom, FACSM, Aliza K. Nedimyer, Brittney A. Luc-Harkey, Brian G. Pietrosimone, FACSM. UNC - Chapel Hill, Chapel Hill, NC
Email: wikstrom@unc.edu
(No relevant relationships reported)

1617  Board #5  1:30 PM - 3:30 PM
Joint Moment Contributions During Flat, Incline and Decline Running in Individuals with ACLR
Hillary H. Holmes, Katie Corona, Randall Fawcett, Jaimie A. Roper. Auburn University, Auburn, AL. (Sponsor: Mark Tillman, FACSM)
(No relevant relationships reported)

1618  Board #6  1:30 PM - 3:30 PM
A Novel Approach to Investigate Running Kinematics in Achilles Tendinopathy Patients using Inertial Sensors
Jasper Reenaard1, Michiel Kraassen1, Marit Zandbergen1, Jelle Harbers2, Roland Haalman2, Gijs Lentjes3, Jaap Buurke1, Frank Backx2. 1Roessingh Research and Development, University of Twente, Enschede, Netherlands. 2Utrecht University, Utrecht, Netherlands. (Sponsor: Jos J. De Koning, FACSM)
Email: j.reenaard@rdr.nl
(No relevant relationships reported)

1619  Board #7  1:30 PM - 3:30 PM
Ankle Joint Kinetics in Runners with Medial Tibial Stress Syndrome
James Becker1, Louis Osternig, FACSM2, Stanley James2, Li-Shan Chou1. 1Montana State University, Bozeman, MT. 2University of Oregon, Eugene, OR. 3Slocum Center for Orthopedics and Sports Medicine, Eugene, OR. (Sponsor: Louis Osternig, FACSM)
(No relevant relationships reported)

1620  Board #8  1:30 PM - 3:30 PM
Does Y-Balance Test Performance Predict Injury-Related Running Mechanics?
Scott Wilson, James Becker. Montana State University, Bozeman, MT
(No relevant relationships reported)

1621  Board #1  1:30 PM - 3:30 PM
The Effect Of Acute Chronic Training Load Ratio On Daily Stress, Fatigue, And Soreness Level In A NCAA Division I Soccer Players
Yasuki Sekiguchi1, Ryan M. Curtis2, Robert A. Huggins3, Courtney L. Benjamin1, William M. Adams1, Shawn M. Arent, FACSM4, Rajat K. Jain1, John S. Miller3, Brian C. Armwald4, Jason M. Pullara5, Douglas J. Casa, FACSM1. 1University of Connecticut, Storrs, CT. 2University of North Carolina at Greensboro, Greensboro, NC. 3Rutgers University, New Brunswick, NJ. 4Northwestern University, Evanston, IL. 5Penn State University, University Park, PA. (Sponsor: Douglas Casa, FACSM)
Email: yasuki.sekiguchi@uconn.edu
(No relevant relationships reported)

1622  Board #2  1:30 PM - 3:30 PM
Sleep Quality Effects Mood, Anxiety And Disablement In Division I Collegiate Athletic Association Men's Soccer Players
Courtney L. Benjamin1, Ryan M. Curtis2, Robert A. Huggins3, Yasuki Sekiguchi4, William M. Adams5, Shawn M. Arent, FACSM5, Rajat K. Jain1, John S. Miller3, Brian C. Armwald4, Jason M. Pullara5, Douglas J. Casa, FACSM1. 1University of Connecticut, Storrs, CT. 2University of North Carolina at Greensboro, Greensboro, NC. 3Rutgers University, New Brunswick, NJ. 4Northwestern University, Evanston, IL. 5Penn State University, University Park, PA. (Sponsor: Douglas Casa, FACSM)
Email: courtney.mincy@uconn.edu
(No relevant relationships reported)

1623  Board #3  1:30 PM - 3:30 PM
The Influence of Match Congestion, Load and Wellness on Injury Risk in Collegiate Men's Soccer
Email: robert.huggins@uconn.edu
(No relevant relationships reported)

1624  Board #4  1:30 PM - 3:30 PM
Effect of Two Regimes of Sled Sprinting on 40m Sprint Performance in Collegiate Soccer Players
Patrick J. Mara, Erik Blikenberg, Dr. Todd Astorino. California State University San Marcos, San Marcos, CA
Email: man001@cougars.csusm.edu
(No relevant relationships reported)
1632 1:30 PM - 3:30 PM
The Dose-Response Relationship of Neuromuscular Training to Prevent Lower Extremity Injuries in Young Soccer Players: A Cluster Randomised Controlled Trial
Anna Lina Rahlf1, Astrid Zech1, 1Friedrich-Schiller-University Jena, Jena, Germany; 2Friedrich Schiller University Jena, Jena, Germany
Email: anna.lina.rahlfi@uni-jena.de
(No relevant relationships reported)

1633 2:00 PM - 2:15 PM
Leisure-time Physical Activity And TV Viewing Associations With Life Expectancy With And Without Cardiovascular Disease
Carmen C. Cuthbertson, Xianning Tan, Gerardo Heiss, Anna Kucharska-Newton, Hazel B. Nichols, Chirayath M. Suchindran, Kelly R. Evenson, FACSM. University of North Carolina at Chapel Hill, Chapel Hill, NC
Email: carmenc@email.unc.edu
(No relevant relationships reported)

1634 2:15 PM - 2:30 PM
Cardiorespiratory Fitness Incidence and Mortality from Lung Cancer in Male Smokers
Baruch Vainselboim1, Ricardo M. Lima2, Peter Kokkinos, FACSM, Jonathan Myers, FACSM1, 1Saint Francis University, Loretto, PA; 2University of Brasilia, Brasilia, Brazil. 3Washington DC Veterans Affairs Medical Center, Washington, DC. 4Veterans Affairs Palo Alto Health Care System/Stanford University, Palo Alto, CA
Email: baruch.v.1981@gmail.com
(No relevant relationships reported)

1635 2:30 PM - 2:45 PM
Is Leisure-time Physical Activity Before Pregnancy Associated With Risk Of Hyperemesis Gravidarum During Pregnancy?
Katrine M. Owse1, Nathalie Staer2, Borgny H. Wold3, Maria C. Magnus4, Wenche Nystrøm1, 1Aars, Nes, Norway. 2Oslo University Hospital, Oslo, Norway. 3Norwegian University of Science and Technology, Trondheim, Norway. 4Norwegian Institute of Public Health, Oslo, Norway
Email: owsekm@outlook.com
(No relevant relationships reported)

1636 2:45 PM - 3:00 PM
Is Midlife Quadriceps Muscular Strength Protective Against Later Life Osteoarthritis and Subsequent Total Joint Replacement?
Andjelka Pavlovic, Benjamin L. Willis, David S. Leonard, Stephen W. Farrell, FACSM, Carolyn E. Barlow, Laura F. DeFina. The Cooper Institute, Dallas, TX. (Sponsor: Stephen W. Farrell, FACSM)
Email: apavlovic@cooperinst.org
(No relevant relationships reported)

D-13 Free Communication/Slide - Physical Activity Epidemiology: New Insights
Thursday, May 30, 2019, 1:30 PM - 3:30 PM
Room: CC-202C

1630 1:30 PM - 3:00 PM
Chair: I-Min Lee, FACSM. Harvard Medical School, Boston, MA
(No relevant relationships reported)

1631 1:30 PM - 1:45 PM
Composition of Movement Behaviors and Risk of Weight Gain
Erika Rees-Punja, Ying Wang, Mark A. Guinter, Elizabeth A. Fallon, Susan M. Gapstur, Alpa V. Patel, FACSM, American Cancer Society; Atlanta, GA. (Sponsor: Alpa Patel, FACSM)
(No relevant relationships reported)

1632 1:45 PM - 2:00 PM
Cardiorespiratory Fitness and Years Lived Free of Cardiovascular Disease: Cardiovascular Lifetime Risk Pooling Project
Amalia E. Paluch, Hongyan Ning1, Mercedes R. Camethon1, Kelley Peteet Gabriel, FACSM, Norrina B. Allen1, Donald M. Lloyd-Jones1, John T. Wilt1. 1Northwestern University, Chicago, IL. 2University of Texas Health Science Center at Houston and School of Public Health – Austin Campus, Austin, TX. (Sponsor: Kelley Peteet Gabriel, FACSM)
Email: amanda.paluch@northwestern.edu
(No relevant relationships reported)

1633 2:00 PM - 2:15 PM
Leisure-time Physical Activity And TV Viewing Associations With Life Expectancy With And Without Cardiovascular Disease
Carmen C. Cuthbertson, Xianning Tan, Gerardo Heiss, Anna Kucharska-Newton, Hazel B. Nichols, Chirayath M. Suchindran, Kelly R. Evenson, FACSM. University of North Carolina at Chapel Hill, Chapel Hill, NC
Email: carmenc@email.unc.edu
(No relevant relationships reported)

1634 2:15 PM - 2:30 PM
Cardiorespiratory Fitness Incidence and Mortality from Lung Cancer in Male Smokers
Baruch Vainselboim1, Ricardo M. Lima2, Peter Kokkinos, FACSM, Jonathan Myers, FACSM1, 1Saint Francis University, Loretto, PA; 2University of Brasilia, Brasilia, Brazil. 3Washington DC Veterans Affairs Medical Center, Washington, DC. 4Veterans Affairs Palo Alto Health Care System/Stanford University, Palo Alto, CA
Email: baruch.v.1981@gmail.com
(No relevant relationships reported)

1635 2:30 PM - 2:45 PM
Is Leisure-time Physical Activity Before Pregnancy Associated With Risk Of Hyperemesis Gravidarum During Pregnancy?
Katrine M. Owse1, Nathalie Staer2, Borgny H. Wold3, Maria C. Magnus4, Wenche Nystrøm1, 1Aars, Nes, Norway. 2Oslo University Hospital, Oslo, Norway. 3Norwegian University of Science and Technology, Trondheim, Norway. 4Norwegian Institute of Public Health, Oslo, Norway
Email: owsekm@outlook.com
(No relevant relationships reported)

1636 2:45 PM - 3:00 PM
Is Midlife Quadriceps Muscular Strength Protective Against Later Life Osteoarthritis and Subsequent Total Joint Replacement?
Andjelka Pavlovic, Benjamin L. Willis, David S. Leonard, Stephen W. Farrell, FACSM, Carolyn E. Barlow, Laura F. DeFina. The Cooper Institute, Dallas, TX. (Sponsor: Stephen W. Farrell, FACSM)
Email: apavlovic@cooperinst.org
(No relevant relationships reported)

1637 3:00 PM - 3:15 PM
Measures Of Adiposity And Its Association To Physical Activity In Adults: The Tromso Study
Edvard H. Sagelv1, Ulf Ekelund, FACSM1, Jonas Johansson1, Boye Welde1, Sameline Grimsgaard1, Nina Emans1, Anna Nordstrom1, Soren Brage1, Alexander Horsch1, Laila A. Hopstock1, Bente Morstedi1. 1UiT the Arctic University of Norway, Tromsø, Norway. 2Norwegian School of Sport Sciences, Oslo, Norway. 3Umeå University, Umeå, Sweden. 4University of Cambridge, Cambridge, United Kingdom
Email: edvard.h.sagelv@uit.no
(No relevant relationships reported)

1638 3:15 PM - 3:30 PM
Associations Between Steps Per Day And Mortality In A Representative Sample Of US Adults
Pedro F. Saint-Maurice, Richard P. Troiano, Barry L. Graubard, Erik Willis, Charles E. Matthews, FACSM, National Cancer Institute, Rockville, MD. (Sponsor: Charles E. Matthews, FACSM)
Email: pedro.saintmaurice@nih.gov
(No relevant relationships reported)
<table>
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<tr>
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<th>Session Time 2</th>
<th>Session Title</th>
<th>Chair</th>
<th>Authors</th>
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<tr>
<td>D-14</td>
<td>1:30 PM - 3:30 PM</td>
<td>2:00 PM - 3:15 PM</td>
<td>Free Communication/Side - Physical Activity/Exercise in Clinical Populations</td>
<td>Cemal Ozemek, FACSM. University of Illinois Chicago, Chicago, IL.</td>
<td>(No relevant relationships reported)</td>
<td><a href="mailto:ichribl17@wfu.edu">ichribl17@wfu.edu</a></td>
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<td>1639</td>
<td>1:30 PM - 2:00 PM</td>
<td>1:30 PM - 2:00 PM</td>
<td>Examining the Impact of Obesity on Ventilatory Responses During Acute Exercise in Patients with HFpEF</td>
<td>Brittany L. Christensen, Peter H. Brubaker, FACSM, Georgina Triantinik, J Thomas Bector, Dulane Katzman. Wake Forest University, Winston-Salem, NC.</td>
<td>(No relevant relationships reported)</td>
<td><a href="mailto:chribl17@wfu.edu">chribl17@wfu.edu</a></td>
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<td>1640</td>
<td>1:30 PM - 2:15 PM</td>
<td>1:30 PM - 2:15 PM</td>
<td>Comparison of Two High-Intensity Interval Training Modalities on Cardiometabolic Health in Overweight/Obese Women</td>
<td>Ozgur Alan, Emily W. Flanagan, Lafayette T. Watson, Andrew N.L. Buskard, Demet Tekin, Arlette Perry, FACSM. University of Miami, Coral Gables, FL.</td>
<td>(No relevant relationships reported)</td>
<td><a href="mailto:garrett.ash@yale.edu">garrett.ash@yale.edu</a></td>
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<td>1641</td>
<td>2:00 PM - 2:15 PM</td>
<td>2:00 PM - 2:15 PM</td>
<td>Short and Long-term Effects of Exercise Intensity on Conduit Artery Function in Cardiac Rehabilitation Patients</td>
<td>Jenna Taylor, Jeff S. Coomes, FACSM, David J. Holland.</td>
<td>(No relevant relationships reported)</td>
<td><a href="mailto:k.richner@uq.edu.au">k.richner@uq.edu.au</a></td>
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<tr>
<td>1642</td>
<td>2:15 PM - 3:00 PM</td>
<td>2:15 PM - 3:00 PM</td>
<td>Optimizing Utilization Of A Cardiac Rehabilitation Facility For Chronic Disease Prevention</td>
<td>Jaini Patel, Ashish Contractor. Sir H.N. Reliance Foundation Hospital, Mumbai, India</td>
<td>(No relevant relationships reported)</td>
<td><a href="mailto:drjainipatel@gmail.com">drjainipatel@gmail.com</a></td>
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<td>1643</td>
<td>2:30 PM - 3:15 PM</td>
<td>2:30 PM - 3:15 PM</td>
<td>Bidirectional Relationships of Daily Physical Activity and Sleep Among Patients with Heart Failure and Insomnia</td>
<td>Garrett L. Ash, Sangchoon Jeon, Nancy S. Redeker. Yale University, New Haven, CT.</td>
<td>(No relevant relationships reported)</td>
<td><a href="mailto:garrett.ash@yale.edu">garrett.ash@yale.edu</a></td>
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<td>1644</td>
<td>2:45 PM - 3:30 PM</td>
<td>2:45 PM - 3:30 PM</td>
<td>Measuring Physical Activity in People with Heart Failure - An Accelerometer Calibration Study</td>
<td>Grace O. Dibben, Rod S. Taylor, Hasnain M. Dalal, Brad Metcalf, Manish M. Gandhi, Lars H. Tang, Patrick Doherty, Melvyn Hillsdon. University of Exeter, Exeter, United Kingdom.</td>
<td>(No relevant relationships reported)</td>
<td><a href="mailto:g.d318@exeter.ac.uk">g.d318@exeter.ac.uk</a></td>
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ACSM May 28 – June 1, 2019
Orlando, Florida
### D-16 Clinical Case Slide - Foot and Ankle

**Thursday, May 30, 2019, 1:30 PM - 3:10 PM**  
**Room: CC-305**

| 1655 | 1:30 PM - 3:10 PM  
Chair: Stephen M. Simons, FACSM. Saint Joseph Regional Medical Center, South Bend, IN  
(No relevant relationships reported) |
| 1656 | 1:30 PM - 3:10 PM  
Discussant: John Fraser. Naval Health Research Center, San Diego, CA  
(No relevant relationships reported) |
| 1657 | 1:30 PM - 3:10 PM  
Discussant: Kirk McCullough. Ortho Sports Medicine Kansas City, Kansas City, KS  
(No relevant relationships reported) |
| 1658 | 1:30 PM - 1:50 PM  
Recurrent Foot Pain - A Case Series of Two Division 1 College Football Athletes  
Elizabeth L. Albright. Penn State Health, State College, PA.  
(Sponsor: Peter Seidenberg, MD, FACSM)  
(No relevant relationships reported) |
| 1659 | 1:50 PM - 2:10 PM  
Heel Injury - Figure Skate  
Naoko Onizuka, Suzanne Hecht, FACSM. University of Minnesota, Minneapolis, MN.  
(Sponsor: Suzanne Hecht, FACSM)  
(No relevant relationships reported) |
| 1660 | 2:10 PM - 2:30 PM  
Ankle Pain - Basketball  
Mary Lynch, David Soma. Mayo Clinic, Rochester, MN.  
(Sponsor: Karen Newcomer, FACSM)  
(No relevant relationships reported) |
| 1661 | 2:30 PM - 2:50 PM  
Atypical Ankle Pain In A 10-year-old  
Robyn C. Knutson Bueling. TRIA Orthopedics, Woodbury, MN  
Email: robyn.knutsonbueling@parknicollet.com  
(No relevant relationships reported) |
| 1662 | 2:50 PM - 3:10 PM  
A Poorly Timed Slapshot To The Foot in a Hockey Player  
john gunel, Christopher Lutrzykowski. Maine Dartmouth Sports Medicine Fellowship, Augusta, ME.  
(Sponsor: James Dunlap, MD, FACSM)  
(No relevant relationships reported) |

### D-17 Clinical Case Slide - Running

**Thursday, May 30, 2019, 1:30 PM - 3:10 PM**  
**Room: CC-306**

| 1663 | 1:30 PM - 3:10 PM  
Chair: Adam S. Tenforde. Stanford University, Palo Alto, CA  
(No relevant relationships reported) |
| 1664 | 1:30 PM - 3:10 PM  
Discussant: Emily Kraus. Stanford University, Palo Alto, CA  
(No relevant relationships reported) |
| 1665 | 1:30 PM - 3:10 PM  
Discussant: Irene S. Davis, FACSM. Harvard Medical School Spaulding-Cambridge, Cambridge, MA  
(No relevant relationships reported) |

### D-18 Rapid Fire Platform - Acute Hypoxia and Aerobic Performance

**Thursday, May 30, 2019, 1:30 PM - 2:40 PM**  
**Room: CC-Hall WA2**

| 1671 | 1:30 PM - 2:40 PM  
Chair: Nisha Charkoudian, FACSM. USARIEM, Natick, MA  
(No relevant relationships reported) |
| 1672 | 1:30 PM - 1:40 PM  
The Role of Ventilatory Responsiveness During Exercise in Performance Impairment in Acute Hypoxia  
Keren Constantini, Anna C. Bouillet, Bruce J. Martin, Robert F. Chapman, FACSM. Indiana University, Bloomington, IN  
Email: keconsta@indiana.edu  
(No relevant relationships reported) |
| 1673 | 1:40 PM - 1:50 PM  
Sex Differences In Respiratory And Circulatory Cost And Arterial Oxygen Saturation During Hypoxic Walking  
Masahiro Horiuchi1, Yoko Handa Kirihara1, Yoshiyuki Fukuoka2, Herman Pontzer1. ‘Mt. Fuji Research Institute, Fuji-yoshida, Japan.  
2Doshisya University, Kyoutanabe, Japan.  
3Duke University, Durham, NC  
(No relevant relationships reported) |
| 1674 | 1:50 PM - 2:00 PM  
Hypoxia Reduces Steady State Cycling Workload  
Charli D. Aguilar. University of Nevada Las Vegas, Las Vegas, NV  
(Sponsor: James Navalta PhD., FACSM)  
Email: audrey.coffee@unlv.edu  
(No relevant relationships reported) |
### D-20 Colloquium - Journalists and Experts Forum - Sports Medicine and Exercise Science

**Thursday, May 30, 2019, 1:30 PM - 2:20 PM**  
**Room: CC-108**

This colloquium is for both established and aspiring journalists to meet with ACSM experts and explore the breadth of sports medicine and exercise science.

1680 Bonnie Berkowitz, Washington Post Reporter, Washington, DC  
(No relevant relationships reported)

1681 Gretchen Reynolds, New York Times Columnist, New York, NY  
(No relevant relationships reported)

1682 Dan Benardot, FACSM, Georgia State University, Atlanta, GA  
(No relevant relationships reported)

1683 Brian B. Part, University of South Carolina Aiken, Aiken, SC  
(No relevant relationships reported)

1684 Angela Smith, FACSM, Thomas Jefferson University, Bryn Mawr, PA  
(No relevant relationships reported)

### D-21 Clinical Workshop-Hands On Demonstration - Optimizing Use of Advanced Imaging in Athletic Imaging of the Lower Extremity: Indications and Findings

**Thursday, May 30, 2019, 1:30 PM - 2:20 PM**  
**Room: CC-304G**

This workshop will use a case-based learning format to discuss, learn, and optimize the use of advanced imaging techniques in the care of lower extremity injuries of the lower extremity. While ultrasound has become growingly popular as a point of care modality, both ultrasound and MRI have advantages and disadvantages regarding efficiency, cost, anatomic clarity, and dynamism that should be taken into account when caring for athletes with lower extremity injuries. Case challenges with experts in other fields with audience interaction will allow the attendee to leave with a clearer idea of benefits and hazards that they can implement into their clinical practice.

1685 Mark R. Hutchinson, FACSM, University of Illinois at Chicago, Chicago, IL  
(No relevant relationships reported)

1686 Michael Bresler, University of Illinois at Chicago, Chicago, IL  
(No relevant relationships reported)

1687 Dustin Nabhani, FACSM, United States Olympic Committee, Colorado Springs, CO  
(No relevant relationships reported)

### D-22 Tutorial Lecture - Beyond the Basics: Lifestyle Interventions for Minority Cancer Survivors

**Thursday, May 30, 2019, 1:30 PM - 2:20 PM**  
**Room: Hotel-Grand Ballroom A**

Lifestyle interventions for cancer survivors often fail to target or include those from vulnerable and medically underserved populations. This is despite data showing that many face physical function challenges, poor prognosis, and high rates of mortality when compared to non-Hispanic Whites, and subsequently represent at-risk populations for cancer mortality and recurrence. Environmental and social factors contribute to survivorship challenges. Thus, attention to the design and implementation of lifestyle interventions for minority cancer survivors is warranted. Innovative intervention designs that are culturally tailored for specific minority groups can increase the efficacy and uptake of interventions, improve health-related outcomes and survival, and reduce cancer disparities. This symposium will provide relevant information and data on: 1) the rationale for lifestyle interventions targeting minority cancer survivors; 2) culturally relevant clinical exercise approaches to impact health indicators such as comorbid conditions (i.e., diabetes, cardiovascular disease); 3) community-based lifestyle interventions. Recruitment, retention and tailoring will be discussed.

1688 Christina M. Dieli-Conwright, FACSM, University of Southern California, Los Angeles, CA  
(No relevant relationships reported)

### D-23 Tutorial Lecture - The 2018 Physical Activity Guidelines: What do ACSM-Certified Health and Fitness Professionals Need to Know?

**Thursday, May 30, 2019, 1:30 PM - 2:20 PM**  
**Room: Hotel-Grand Ballroom B**

The newly released Physical Activity Guidelines will have implications for ACSM-certified Health and Fitness Professionals. It is important that these professionals know how to incorporate the Guidelines into their work. The Guidelines are based upon studies and meta-analyses that examine the health benefits of physical activity and collectively encompass millions of people. How does this synthesis of population-level data translate into the exercise and lifestyle prescriptions that ACSM-certified health and fitness professionals make for individuals every day? How can they use the new evidence presented in the Guidelines to promote physical activity? The new guidelines will also impact public health professionals. How might the surveillance of physical activity change? Will physical activity promotion programs and research interventions change? The purpose of this tutorial is to provide needed information on incorporating the 2018 Guidelines into practice for a wide range of ACSM attendees.
In health science research, we transition between bench-top research to clinical practice and vice-versa. We are asking ourselves to do the same for education – to translate what we know from cognitive psychology, education, and physiology into our classrooms. In this session, the facilitator will translate research from a variety of areas into practical application. At the conclusion of this session you will have a better understanding on how to design courses with key elements to learning, discuss the future direction of curriculum design, and have a bit of fun in the process.

In an engaging discussion on the potential positive and negative implications of emerging technologies for physical activity and public health. They will also discuss strategies to mitigate threats and take advantage of opportunities posed by these innovations.
Nitric oxide (NO) is a signalling molecule which regulates an array of physiological functions essential for maintaining metabolic, neurological and cardiovascular health. Given that NO has an extremely short half-life in biological systems, there are several pathways to produce NO at the site of its action in various tissues. The objective of this symposium is to highlight trans-disciplinary approaches to promote health among cancer survivors that include, but are not limited to exercise. A number of other approaches will be discussed that have the potential for synergistic effects with exercise on various health outcomes, including dietary intake, yoga, psychotherapy or counseling, smoking cessation, stress management, technology, and cardiovascular risk factor management.

Exercise is one of several interventions that can be used to promote health. Thanks to accumulation of high quality evidence from randomized controlled trials and recent endorsements by several oncology and exercise governing bodies, exercise is a primary focus as a health promoting intervention utilized in cancer survivor populations. The goal of this symposium is to highlight trans-disciplinary approaches to promote health among cancer survivors that include, but are not limited to exercise. A number of other approaches will be discussed that have the potential for synergistic effects with exercise on various health outcomes, including dietary intake, yoga, psychotherapy or counseling, smoking cessation, stress management, technology, and cardiovascular risk factor management.
muscle mass and the force-generating capacity via electrically induced contractions. The influence of cyclic strain in situ. Resistance training has been shown to increase for restoring lean mass, basal metabolic rate (BMR) and improve bone health in both post-competitive athlete health guided by long-time team physicians from the NBA, musculoskeletal disorders, and mental health concerns. This symposium examines post-competitive athlete health guided by long-time team physicians from the NBA, NFL, and MLB. Joint and musculoskeletal health, cardiovascular risks, team physician challenges, and the role of “exit” physicals will be explored.

The long-term health of an athlete ideally begins during their competitive athletic years. However, there is little guidance regarding post-competitive athlete care and assisting the professional or elite athlete transition to a focus on long-term health and wellness. Retired professional athletes present unique risks for cardiovascular disease, musculoskeletal disorders, and mental health concerns. This symposium examines post-competitive athlete health guided by long-time team physicians from the NBA, NFL, and MLB. Joint and musculoskeletal health, cardiovascular risks, team physician challenges, and the role of “exit” physicals will be explored.

Spinal cord injury (SCI) results in considerable rapid and extensive sublesional muscle and bone loss that is precipitated by disuse subsequent to neurologic insult. Studies have shown that testosterone replacement therapy (TRT) may be a feasible approach for restoring lean mass, basal metabolic rate (BMR) and improve bone health in both marine and human models with SCI. TRT is reported to enhance the osteoregulatory influence of cyclic strain in situ. Resistance training has been shown to increase muscle mass and the force-generating capacity via electrically induced contractions.

This increase in musculotendinous forces progressively loads bone and likely plays a role in reducing bone loss. This symposium will discuss our recent preclinical work evaluating skeletal responses to locomotor training with and without testosterone treatment after SCI. We will also discuss the effects of TRT with and without resistance training on muscle size, torque generation capacity, BMR, and decreasing visceral fat following chronic SCI.
Exercise training provides substantive health benefits and is a feasible and effective lifestyle intervention. Conclusions about the beneficial effects of exercise are too often drawn based on average responses, and how exercise may benefit people with metabolic diseases, such as obesity and diabetes, is unclear. Moreover, little is known about those individuals who do not respond favorably to exercise. With the advent of personalized medicine, it is critical to determine: 1) the outcomes by which a “response” is determined; 2) the molecular mechanisms linked with exercise response variations and 3) populations which might be susceptible to variations in exercise “response”.

D-36 Symposium - Blood, Sweat, Tears and the Science of Exercise Response Variation: Is Exercise Always Beneficial for Obesity and Diabetes?

Thursday, May 30, 2019, 3:45 PM - 5:45 PM
Room: Hotel-Grand Ballroom A

Exercise training provides substantive health benefits and is a feasible and effective lifestyle intervention. Conclusions about the beneficial effects of exercise are too often drawn based on average responses, and how exercise may benefit people with metabolic diseases, such as obesity and diabetes, is unclear. Moreover, little is known about those individuals who do not respond favorably to exercise. With the advent of personalized medicine, it is critical to determine: 1) the outcomes by which a “response” is determined; 2) the molecular mechanisms linked with exercise response variations and 3) populations which might be susceptible to variations in exercise training responses. The purpose of this symposium is to present research that provides insight into the biological variations evident with exercise training in relation to brain variations and populations which might be susceptible to variations in exercise training responses. The symposium will involve four speakers who will discuss how the measurement of performance variability can inform us about the characteristics of the control signals generated by the nervous system to perform various voluntary actions.
American College of Sports Medicine

Board #3 3:45 PM - 5:45 PM
The Impact of a Functional Knee Brace on Sports Performance Following ACL Reconstruction.
William E. Garrett, Jr, FACSM1, Abigail C. Schmitz1, Robin M. Queen, FACSM. 1Duke University Medical Center; Durham, NC. 2Virginia Tech, Blacksburg, VA
Email: william.garrett@duke.edu
Reported Relationships: W.E. Garrett: Industry contracted research; Don Joy Orthopaedics.

Board #4 3:45 PM - 5:45 PM
Lower Extremity Kinetic and Kinematic Asymmetries 4, 6, and 9 Months Post-ACL Reconstruction In Elite Collegiate Athletes
Email: cobian@pt.wisc.edu
(No relevant relationships reported)

Board #5 3:45 PM - 5:45 PM
Physical Factors Differentiate Pain-free Return To Play And Return With Knee Symptoms 9 Months After ACL Reconstruction
Anly Franklin Miller1, Enka King2, Chris Richter3, Ray Moran4, Mark Jackson1, Siobhan Strike1. 1Sports Surgery Clinic, Dublin 9, Ireland. 2University of Roehampton, London, United Kingdom
Email: afranklinmiller@me.com
(No relevant relationships reported)

Board #6 3:45 PM - 5:45 PM
A Long-term Follow-up Of Patients With Physeal-Sparing Biotalar Band ACL Reconstruction: Kinetic Analyses
Dai Sugimoto1, Amy White2, Jeff Brodeur3, Kathryn Williams4, Kocher Mininder5, Lyle Micheli, FACSM5, Benton Heyworth5. 1Boston Children's Hospital, Waltham, MA. 2Boston Children's Hospital / The Micheli Center for Sports Injury Prevention, Waltham, MA. 3Boston Children's Hospital, Boston, MA (Sponsor: Lyle J. Micheli, MD, FACSM)
Email: Dai.Sugimoto@childrens.harvard.edu
(No relevant relationships reported)

Board #7 3:45 PM - 5:45 PM
Competing After ACL Injury: Profiles of Division I Athletes who Successfully Return to Sport
Darren Heam1, Darin Padua2, Courtney Chabaan3, Linghao Kong3, Ben Goergen3, Abbie Smith-Ryan4, FACSM4, Abby Verchick5. 1UNC-Chapel Hill, Chapel Hill, NC. 2NC State, Raleigh, NC
(No relevant relationships reported)

Board #8 3:45 PM - 5:45 PM
Altered Center of Pressure Dispersion and Regularity during Dual-Task Balance following Anterior Cruciate Ligament Reconstruction
Scott M. Monfort1, Sarah C. Miko2, Janet E. Simon2, Dustin R. Groome3. 1Montana State University; Bozeman, MT. 2Ohio University, Athens, OH
Email: scott.monfort@montana.edu
(No relevant relationships reported)

D-39 Thematic Poster - Blood Flow
Thursday, May 30, 2019, 3:45 PM - 5:45 PM
Room: CC-101A

Chair: Jamie Burr, FACSM. University of Guelph, Guelph, ON, Canada
(No relevant relationships reported)
## ACSM May 28 – June 1, 2019

Orlando, Florida

### P126 Final Program

<table>
<thead>
<tr>
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<tr>
<td>3:45 PM - 5:45 PM</td>
<td>1758</td>
<td>Living In Confinement Conditions: Physical Training Can Improve Muscular Oxygen Uptake and Heart Rate Kinetics</td>
<td>Uwe Hoffmann, Uwe Drescher, Lutz Thieschüfer, Jessica Koschate</td>
<td><a href="mailto:u.hoffmann@dsds-koeln.de">u.hoffmann@dsds-koeln.de</a></td>
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<td>3:45 PM - 5:45 PM</td>
<td>1759</td>
<td>Board #1: Erythropoietin Response to Endurance Exercise under Heat and Hypoxic Conditions</td>
<td>Haruka Yatsutani, Hisashi Mori, Hiroto Ito, Narako Hayashi, Kazanubu Otsuka, Kazushige Goto, Ritsumeikan University, Kusatsu, Japan, Osaka City University, Osaka, Japan</td>
<td><a href="mailto:sh0114ef@ed.ritsumei.ac.jp">sh0114ef@ed.ritsumei.ac.jp</a></td>
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<td>Board #2: Physiological Responses to Repeated Sprint Exercise under Combined Heat and Hypoxic Conditions</td>
<td>Keiichi Yamaguchi, Nobukazu Kasi, Nanako Hayashi, Haruka Yatsutani, Kazushige Goto, Ritsumeikan University, Kusatsu, Japan</td>
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<td>1761</td>
<td>Board #3: Downhill Running: An Effective Countermeasure To Limitations Of Exercise In Acute Hypoxia?</td>
<td>Trevor Gillum, Felipe Gorini Pereira, California Baptist University, Riverside, CA</td>
<td><a href="mailto:tgillum@calbaptist.edu">tgillum@calbaptist.edu</a></td>
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<td>1762</td>
<td>Board #4: Heat Acclimation Mediated Crosstolerance In C2C12 Myotubes</td>
<td>Garrett W. Hill, Ben J. Lee, Trevor L. Gillum, Roger A. Vaughan, Matthew R. Kuenen</td>
<td><a href="mailto:nca11@psu.edu">nca11@psu.edu</a></td>
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### D-40 Thematic Poster - Combined Environmental Stressors

**Thursday, May 30, 2019, 3:45 PM - 5:45 PM**

**Room: CC-102B**

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<th>Board #</th>
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<tr>
<td>1758</td>
<td>Living In Confinement Conditions: Physical Training Can Improve Muscular Oxygen Uptake and Heart Rate Kinetics</td>
<td>Uwe Hoffmann, Uwe Drescher, Lutz Thieschüfer, Jessica Koschate</td>
<td><a href="mailto:u.hoffmann@dsds-koeln.de">u.hoffmann@dsds-koeln.de</a></td>
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### D-41 Thematic Poster - Energy Metabolism and Health

**Thursday, May 30, 2019, 3:45 PM - 5:45 PM**

**Room: CC-104B**

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American College of Sports Medicine

D-42 Thematic Poster - Head Impacts and Concussion

Thursday, May 30, 2019, 3:45 PM - 5:45 PM
Room: CC-101B

1774 3:45 PM - 5:45 PM
Chair: James Onate, Ohio State University, Columbus, OH

1775 Board #1 3:45 PM - 5:45 PM
A Comparison of Head Impacts in Boys and Girls High School Lacrosse
Amanda Esquivel, Mirel Ajdaroski, Breana Cappuccilli. University of Michigan - Dearborn, Dearborn, MI.
Email: aoe@umich.edu
(No relevant relationships reported)

1776 Board #2 3:45 PM - 5:45 PM
Evaluation of Concussion Prediction with Head Impact Density by Receiver Operating Characteristic
Katherine M. Bredlove, Allyssa K. Memmini, Steven P. Broglio, FACSM. University of Michigan, Ann Arbor, MI. (Sponsor: Steven Broglio, FACSM)
(No relevant relationships reported)

1777 Board #3 3:45 PM - 5:45 PM
Head Impact biomechanics in Youth Flag Football: An Exploratory Analysis
Landon B. Lempke, Rachel S. Johnson, Melissa N. Anderson, Rachel K. Le, Julianne D. Schmidt, Robert C. Lynall. University of Georgia, Athens, GA.
Email: lblempk@uga.edu
(No relevant relationships reported)

1778 Board #4 3:45 PM - 5:45 PM
Effect Of A Dynamic Dual-Task Paradigm And Concussion History On Motor And Cognitive Performance
Maria Talarico, Christopher Ballance, Laura Boucher, James Onate. The Ohio State University, Columbus, OH.
(No relevant relationships reported)

1779 Board #5 3:45 PM - 5:45 PM
The Relationship of Nonlinear Metrics of Postural Control Following Sport Related Concussion
Brian Szekely1, Barry Munkasy2, Nicholas Murray1. 1University of Nevada, Reno, Reno, NV. 2Georgia Southern University, Statesboro, GA.
(No relevant relationships reported)

1780 Board #6 3:45 PM - 5:45 PM
Baseline Postural Control Measures: An Indicator For Increased Injury Frequency Following Sport-related Concussion
Nicholas G. Murray1, Brian Szekely2, Emily Belser2, Arthur Islas3, Jay Henke1, Jessica Gauthier2, Daniel Cipriani2, Barry Munkasy2, Douglas Powell, FACSM2. 1University of Nevada, Reno, Reno, NV. 2Georgia Southern University, Statesboro, GA. 3West Coast University, Los Angeles, CA.
(No relevant relationships reported)
1788 4:45 PM - 5:00 PM
Effects of Duration and Intensity of Aerobic Exercise on Cognitive Performance in Trained Individuals
Christopher Irwin, Ben Desbrow, Danielle McCartney, Griffith University, Gold Coast, Australia. (Sponsor: Prof. Louise Burke, FACSM)
Email: c.irwin@griffith.edu.au
(No relevant relationships reported)

1789 5:00 PM - 5:15 PM
Accelerometer-Measured Sustained MVPA Is Related To Higher Decision-Making Competence Among Young Adults
Dominika M. Pandu1, Christopher Zwilling1, Jennifer Jarret2, Hillary Schwarbi1, Charles H. Hillman3, Neal J. Cohen1, Arthur F. Kramer2, Aron K. Barbe1.1University of Illinois at Urbana-Champaign, Urbana, IL. 2Camilo Jose Cela University, Madrid, Spain. 3Technical University of Madrid, Madrid, Spain. (Sponsor: Steve Petruzzello, FACSM)
Email: pandu@illinois.edu
(No relevant relationships reported)

1790 5:15 PM - 5:30 PM
Alterations in Exercise-Affect between Those With Higher and Lower Intensity Preference and Tolerance
Allyson G. Box, Shelby E. Dietz, Ammarie Chizewski, Steven J. Petruzzello, FACSM1, University of Illinois Urbana-Champaign, Urbana, IL. 2Northeastern University, Boston, MA. (Sponsor: Steve Petruzzello, FACSM)
Email: knmhphd@ksu.edu
(No relevant relationships reported)

1791 5:30 PM - 5:45 PM
Training Modulation using Heart Rate Variability Improves Daily Training Cognitions for High Intensity Functional Training
Katie M. Heinrich1, Nicholas B. Drake2, Brady K. Kurtz2, Justin A. DeBlauw1, Derek A. Crawford1. 1Kansas State University, Manhattan, KS. 2University of Nevada, Las Vegas, Las Vegas, NV. 3Pittsburg State University, Pittsburg, KS. (Sponsor: Yuri Feito, FACSM)
Email: kmheinrich1@ksu.edu
(No relevant relationships reported)

D-44 Free Communication/Slide - Understanding the Health Effects of Sitting, Fitness, and Physical Activity
Thursday, May 30, 2019, 3:45 PM - 5:45 PM
Room: CC-202C

1792 3:45 PM - 5:45 PM
Chair: Sarah Keadle. California Polytechnic State University, San Luis Obispo, CA
(No relevant relationships reported)

1793 3:45 PM - 4:00 PM
Sedentary Behavior Across Pregnancy, Gestational Age at Delivery, and Birthweight
Melissa A. Jones1, Janet Cato1, Arun Jeyevalan1, John Jakicic, FACSM1, Kara Whitaker2, Bethany Barone Gibbs1. 1University of Pittsburgh, Pittsburgh, PA. 2University of Iowa, Iowa City, IA
Email: maj133@pitt.edu
(No relevant relationships reported)

1794 4:00 PM - 4:15 PM
Structured Exercise as a Potential Treatment Option for Prenatal Depression
Tanvi S. Nagpal1, Marina Vargas-Terrones2, Maria Perales1, Harry Prapavessis1, Ruben Barakar1, Michelle F. Motto1, FACSM1. 1University of Western Ontario, London, ON, Canada. 2Technical University of Madrid, Madrid, Spain. (Sponsor: Michelle F. Motto, FACSM)
Email: tnagpal@uwo.ca
(No relevant relationships reported)

1795 4:15 PM - 4:30 PM
Effects Of Breaking-up Prolonged Sitting With Stair-climbing On Vascular-metabolic Function After A High-fat Meal
Email: lovelynmg0816@naver.com
(No relevant relationships reported)

1796 4:30 PM - 4:45 PM
Associations of Fast Walking with Sleep Quality and Duration in Older Adults
Angelique Brelenthal, Duck-chul Lee, FACSM. Iowa State University, Ames, IA. (Sponsor: Duck-chul Lee, FACSM)
(No relevant relationships reported)

1797 4:45 PM - 5:00 PM
Differences of Plasma Metabolites in Prediabetes with Different Cardiorespiratory Fitness and the Effects of Exercise
Bowen Li1, Mian Jia1, Yan Wang1, Zhengzhen Wang2. 1Texas A&M University Kingsville, Kingsville, TX. 2University of Nevada, Las Vegas, Las Vegas, NV. 3Pittsburg State University, Pittsburg, KS. (Sponsor: Zhengzhen Wang, FACSM)
Email: libowen_sy@sina.com
(No relevant relationships reported)

1798 5:00 PM - 5:15 PM
Longitudinal Associations of Physical Activity and Blood Lipid Levels in Midlife Women in SWAN
Sylvia E. Badon1, Kelley Pettey Gabriel, FACSM1, Barbara Sternfeld, FACSM2, Ellen B. Gold1, L. Elaine Waetjen1, Monique M. Hederson1. 1Kaiser Permanente Northern California, Oakland, CA. 2University of Texas Health Science Center, Austin, TX. 3University of California Davis, Davis, CA
Email: sylvia.e.badon@kp.org
(No relevant relationships reported)

1799 5:15 PM - 5:30 PM
Who Is The Reference Group? An Examination Of The Involuntarily Inactive And Mortality
Eric J. Shiroma1, I-Min Lee, FACSM1, Lenore J. Launer2, Tamara B. Harris3. 1National Institute on Aging, Baltimore, MD. 2Brigham and Women’s Hospital / Harvard Medical School, Boston, MA. (Sponsor: I-Min Lee, FACSM)
Email: eric.shiroma@nih.gov
(No relevant relationships reported)

1800 5:30 PM - 5:45 PM
The Use Of Resistance Exercises To Interrupt Sitting: Acceptability And Impact On Sleepiness, Discomfort, And Fatigue
Robert J. Kowalsky1, John M. Jakicic, FACSM2, Andrea L. Hergenroeder1, Renee J. Rogers2, Bethany Barone Gibbs1. 1Texas A&M University Kingsville, Kingsville, TX. 2University of Pittsburgh, Pittsburgh, PA
Email: robert.kowalskyjr@tamuk.edu
(No relevant relationships reported)

D-45 Clinical Case Slide - Chest Pain and Medical Issues
Thursday, May 30, 2019, 3:45 PM - 5:25 PM
Room: CC-304E

1801 3:45 PM - 5:25 PM
Chair: Poonam P. Thaker, FACSM. Presence Resurrection Sports Medicine Fellowship, Chicago, IL
(No relevant relationships reported)
1802 3:45 PM - 5:25 PM  
Discussant: Philip F. Skiba. Advocate Lutheran General Hospital, Park Ridge, IL  
(No relevant relationships reported)

1803 3:45 PM - 5:25 PM  
Discussant: Aaron Lee. Loyola Medicine MacNeal Hospital, Bervyn, IL  
(No relevant relationships reported)

1804 3:45 PM - 4:05 PM  
Chest Injury - Horseback Riding  
Philipp J. Underwood, Bryan M. McCarty, Hillary Moss. North Shore University Hospital, Manhasset, NY  
(No relevant relationships reported)

1805 4:05 PM - 4:25 PM  
Extremity Paralysis After Boot Camp Workout  
Kulraj S. Dhah1, Roger Mortimer2, Robert Sallis, FACSM. 1Kaiser Permanente Fontana, Fontana, CA. 2University of California San Francisco, Fresno Medical Education Program, Fresno, CA  
(No relevant relationships reported)

1806 4:25 PM - 4:45 PM  
Muscle Weakness: Boxing  
Belmarie Rodriguez-Santiago, David Atkins, Brenda Deliz-Roldan, William Micheo, FACSM. University of Puerto Rico, San Juan, Puerto Rico  
(No relevant relationships reported)

1807 4:45 PM - 5:05 PM  
Syncopen On The Green - Golf  
Noor Alzarka, Mark Chassay, FACSM. University of Texas Health Science Center at Houston, Houston, TX  
(No relevant relationships reported)

1808 5:05 PM - 5:25 PM  
Assisted Breathing Manual Therapy for Soccer Chest-Trap Anterior Chest Wall Injury  
John C. Hannon, private practice, San Luis Obispo, CA  
Email: feldenkrais.slo@gmail.com  
(No relevant relationships reported)

D-46 Clinical Case Slide - Knee II  
Thursday, May 30, 2019, 3:45 PM - 5:25 PM  
Room: CC-105B

1809 3:45 PM - 5:25 PM  
Chair: Matthew R. Gammons. VT Ortho Clinic/Killington Medical Center, Rutland, VT  
(No relevant relationships reported)

1810 3:45 PM - 5:25 PM  
Discussant: Mary Lloyd Ireland, FACSM. University of Kentucky, Lexington, KY  
(No relevant relationships reported)

1811 3:45 PM - 5:25 PM  
Discussant: Pierre L. Viviers, FACSM. Stellenbosch University, Stellenbosch, South Africa  
(No relevant relationships reported)

1812 3:45 PM - 4:05 PM  
Knee Pain and Effusion in a Medically Complex Patient  
Aubrey Armento. University of Colorado Denver, Denver, CO  
(Sponsor: John Hill, FACSM)  
Email: aubrey.amerento@childrenscolorado.org  
(No relevant relationships reported)

1813 4:05 PM - 4:25 PM  
Knee Pain - Swimming in Dangerous Waters  
Lauren Nadkarni, Kate Quaint. 1Maine Medical Center, Portland, ME. 2Maine Medical Partners, Portland, ME. (Sponsor: Heather Gillespie, FACSM)  
(No relevant relationships reported)

1814 4:25 PM - 4:45 PM  
Osteochondritis Dissecans With Loose Body In A Golfer  
Krisha Israni, Daniel Montero. Mayo Clinic, Jacksonville, FL.  
(Sponsor: George Pujalte, FACSM)  
Email: israni.krishna@mayo.edu  
(No relevant relationships reported)

1815 4:45 PM - 5:05 PM  
Biologically Repaired, Neurologically Prepared? Rethinking Knee Injury and a Novel Rehabilitation Model - Soccer  
Corey Petersen, Kersten Schwanz, Sarah Wambhein. University of Minnesota, Minneapolis, MN. (Sponsor: Suzanne Hecht, FACSM)  
(No relevant relationships reported)

1816 5:05 PM - 5:25 PM  
Bilateral Knee Pain in Pregnancy  
Michelle Srivongtong. UCLA, Santa Monica, CA.  
(Sponsor: Aurelia Nattiv, FACSM)  
Email: m.srivongtong@mednet.ucla.edu  
(No relevant relationships reported)

D-47 Clinical Case Slide - Shoulder and Elbow  
Thursday, May 30, 2019, 3:45 PM - 5:45 PM  
Room: CC-306

1817 3:45 PM - 5:45 PM  
Chair: David Jewison. University of Minnesota Orthopaedics, Maple Grove, MN  
(No relevant relationships reported)

1818 3:45 PM - 5:45 PM  
Discussant: Jason Pothast. MedStar National Rehabilitation Network, Washington, DC  
(No relevant relationships reported)

1819 3:45 PM - 5:45 PM  
Discussant: Robert H. Lutz. Davidson College, Davidson, NC  
(No relevant relationships reported)

1820 3:45 PM - 4:05 PM  
Elbow Pain - Recreational Athlete  
Shawn D. Felton1, Arie J. van Duijn2. 1Florida International University, Miami, FL. 2Florida Gulf Coast University, Ft. Myers, FL.  
(Sponsor: Mitchell L. Cordova, FACSM)  
Email: sfelton@fiu.edu  
(No relevant relationships reported)

1821 4:05 PM - 4:25 PM  
Right Elbow Pain in a Teenage Softball Player  
Shelby E. Johnson, Edward R. Laskowski, FACSM. Mayo Clinic, Rochester, MN  
Email: johnson.shelby@mayo.edu  
(No relevant relationships reported)

1822 4:25 PM - 4:45 PM  
Arm Injury - Crossfit  
Jeremy Hreha, Mohammad K. Shaath, Joseph C. Tauro, Irfan H. Ahmed, Michael M. Vosbikian. Rutgers New Jersey Medical School, Newark, NJ  
Email: hrehajia@njms.rutgers.edu  
(No relevant relationships reported)
Alternative treatments may improve the outcome of your patients. The treatment of resistant and challenging stress fractures. Being open minded to provide invaluable experience to jump start your career. This tutorial will provide an overview of these opportunities and advice on how to apply. Are you interested in exploring training opportunities at the CDC and NIH to apply your exercise science knowledge? CDC and NIH offer a variety of fellowships that can provide invaluable experience to jump start your career. This tutorial will provide an overview of these opportunities and advice on how to apply. Are you interested in exploring training opportunities at the CDC and NIH to apply your exercise science knowledge? CDC and NIH offer a variety of fellowships that can provide invaluable experience to jump start your career. This tutorial will provide an overview of these opportunities and advice on how to apply.

D-48 Tutorial Lecture - Exercise Science at the CDC and NIH: Initiatives and Training Opportunities

Thursday, May 30, 2019, 3:45 PM - 4:35 PM
Room: CC-108

Are you interested in exploring training opportunities at the CDC and NIH to apply your exercise science knowledge? CDC and NIH offer a variety of fellowships that can provide invaluable experience to jump start your career. This tutorial will provide an overview of these opportunities and advice on how to apply.

D-49 Tutorial Lecture - Treating Challenging Stress Fractures from China to USA

Thursday, May 30, 2019, 3:45 PM - 4:35 PM
Room: CC-305

This interactive lecture will feature the American and Chinese perspective regarding the treatment of resistant and challenging stress fractures. Being open minded to alternative treatments may improve the outcome of your patients.

D-50 Clinical Workshop-Hands On Demonstration - Physical and Ultrasonographic Examination of the Ankle-Foot Complex Following Sports Injury

Thursday, May 30, 2019, 3:45 PM - 4:35 PM
Room: CC-304G

Lacrosse is among America’s fastest growing sports. While participation in the sport has increased in all age groups and sexes, the science of injury prevention and performance is still in its infancy. This session will present the newest evidence of lacrosse injury epidemiology, biomechanical stressors that contribute to injury in developing players and challenges of medical care on the field. Mechanisms underlying head impact injuries will be presented with potential solutions to mitigate the incidence and effects of concussion in boys and girls. Kinematic chains concepts will be discussed in relation to onset of chronic and acute musculoskeletal injuries in maturing players, and exercise pre-habilitation methods to prevent injury will be shared. From the athlete care standpoint, key challenges of diagnosing and managing acute injuries on the sideline will be presented, with future directions for improving clinical care for the lacrosse athlete.

D-51 Tutorial Lecture - Soccer, Exercise Physiology and Nutrition: Implications in Training and Competition

Thursday, May 30, 2019, 4:55 PM - 5:45 PM
Room: CC-108

This lecture tries to focus in an integrative vision of physiological aspects involved in soccer competition, during 90’, the development of 10-12 Km. of displacement, and the execution of 75-90 high-speed runs / maximal sprints, into the field. And the consequences over ATP-PC depletion and dynamics of resynthesis (involving aerobic endurance and aerobic power), glycogen depletion (implications of nutrition and hydration), during the match. Relationships with training development and adaptation of conditional capacities (endurance, strength-power, speed, etc.), during young and professional soccer players. How all these factors contribute over frequency and complexity of injuries.
D-53 Clinical Workshop-Hands On Demonstration - The Clinical and Ultrasound Examination of the Knee
Thursday, May 30, 2019, 4:55 PM - 5:45 PM
Room: CC-304G

This session will review the clinical and functional knee examination for the sports medicine provider. It will also review how to utilize musculoskeletal ultrasound to enhance a diagnostic clinical evaluation of the knee.

1843 David Hryniak. University of Virginia, Charlottesville, VA
(No relevant relationships reported)

1844 Siobhan M. Statuta. University of Virginia, Charlottesville, VA
(No relevant relationships reported)

D-54 Free Communication/Poster - Blood Flow
Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

1845 Board #1 2:00 PM - 3:30 PM
No Relationship Between Muscle Flexibility and Blood Flow in the Lower Legs of Competitive Runners
Megan Battles, Rachel Bowden, Cameron Greene, Justin Stanek, Arbin Thapaliya, Jeffrey Williams, Franklin College, Franklin, IN. (Sponsor: Kristen Lagally, FACSM)
(No relevant relationships reported)

1846 Board #2 2:00 PM - 3:30 PM
Effect of Increased Respiratory Muscle Activation on Blood Flow to Inactive and Active Limb Muscles
Kana Shiozawa, Kanako Goto, Kaori Shimizu, Mitsuru Saito, Koji Ishida, Luyu Zhang, William Sheel, FACSM, Keishi Katayama,1 Nagoya University, Nagoya-shi Chikusa-ku, Japan. 2Toyota Technological Institute, Nagoya-shi Tenpaku-ku, Japan. 3University of British Columbia, Vancouver, BC, Canada. (Sponsor: A. William Sheel, FACSM)
Email: shiozawa.kana@k.mbox.nagoya-u.ac.jp
(No relevant relationships reported)

1847 Board #3 2:00 PM - 3:30 PM
The Effects of Recumbent Angle on Cardiac Responses and Hemodynamics during Bicycle Ergometer Exercise in Patients with Atrial Fibrillation
Ilgyu Jeong, Hee-Hyeok Lee, Myungwha Kim, Jae-Hyun Lee, Seongdae Kim,1 Hannam University, Daejeon, Korea, Republic of. 2Wonsung University, Daejeon, Korea, Republic of. Email: jil1929@hanmail.net
(No relevant relationships reported)

1848 Board #4 2:00 PM - 3:30 PM
The Influence of EMG-based MVC Intensity on Middle Cerebral Artery Velocity, Cardiac Output and Respiratory Variables
Hee-Hyeok Lee, Seongdae Kim, Myungjin Oh, Jae-Hyun Lee, Ilgyu Jeong,1 Hannam University, Daejeon, Korea, Republic of. 2Baekseo University, Cheonan, Korea, Republic of. (No relevant relationships reported)

1849 Board #5 2:00 PM - 3:30 PM
Blood Flow Patterns during Flow-Mediated Dilation
Francisco Morales-Acuna, Carolina Valencia, Alvaro N. Gurovich, FACSM. The University of Texas at El Paso, El Paso, TX
Email: fmoralesac@miners.utep.edu
(No relevant relationships reported)

1850 Board #6 2:00 PM - 3:30 PM
Relationship Between Increased Resting Muscle Blood Flow And Muscle Force Loss After Repeated Eccentric Contractions
Hisashi MAEDA,1 Mitsuru SAITO, Koji ISHIDA, Hiroshi AKIMA,1 Nagoya University, Nagoya, Japan. 2Toyota Technological Institute, Nagoya, Japan. (Sponsor: Dr. Katsumi ASANO, FACSM)
Email: hisashi.gogo.tfi@gmail.com
(No relevant relationships reported)

1851 Board #7 2:00 PM - 3:30 PM
Effects of Capsaicin on Leg Blood Flow in Response to Passive Limb Movement
Robert M. Restaino, Gaia Giuriato, Alexis M. Matias, Edgard Soares,1 Stephen J. Ives,1 Skidmore College, Saratoga Springs, NY. 2University of Verona, Verona, Italy. 3University of Brasilia, Brasilia, Brazil. (Sponsor: Paul Anciello, FACSM)
(No relevant relationships reported)

1852 Board #8 2:00 PM - 3:30 PM
Does Capsaicin Ingestion Affect Functional Sympatholysis And Vascular Functions?
Gaia Giuriato, Meaghan Lynch, Brian Lora, Massimo Venturelli, Stephen J. Ives,1 Skidmore College, Saratoga Springs, NY
(No relevant relationships reported)

1853 Board #9 2:00 PM - 3:30 PM
The Effect Of The Speed And Range Of Motion Of Movement On The Hyperemic Response To Passive Leg Movement
Brady Hanson, Travis Bloomfield, Trevor Davis, Amy Addington, Erin McMullin, Taysom Wallace, Meagan Proffitt, Jayson Gifford, Brigham Young University, Provo, UT
(No relevant relationships reported)

1854 Board #10 2:00 PM - 3:30 PM
The Relationship Between Left Ventricular Systolic Function And Cerebral Blood Flow
Ai Hirasa,1 Tomoya Sada,1 Kazuaki Hirabuki, Noritaka Hata, Yuki Sano, Marina Fukuie, Takahiro Uechi, Takeaki Matsuda, Shigeki Shibata,1 Kyorin University, Tokyo, Japan. 2University of Tsukuba, Ibaraki, Japan
(No relevant relationships reported)

1855 Board #11 2:00 PM - 3:30 PM
Differential Cardiovascular Responses to Acute Exercise in Children with Autism Spectrum Disorder
Jacob A. Manriquez, Kauionalani P. Kekuawela, Romina Shafikhani, Areum K. Jensen, San Jose State University, San Jose, CA
(No relevant relationships reported)

1856 Board #12 2:00 PM - 3:30 PM
Altered Blood Flow in Lower Legs of Runners Over the Course of a Competitive Season
Rachel L. Bowden, Cameron Greene, Megan Battles, Arbin Thapaliya, Jennifer Austin, Jeffrey Williams, Franklin College, Franklin, IN
(No relevant relationships reported)

1857 Board #13 2:00 PM - 3:30 PM
The Temperature Surface Radiation Pattern - A non-invasive Insight into Skin Blood Flow Response to Exercise
Barlo Hillen, Perikles Simon. Johannes Gutenberg University Mainz, Mainz, Germany
Email: b.hillen@uni-mainz.de
(No relevant relationships reported)
D-56 Free Communication/Poster - Basic Science Applications in Skeletal Muscle

Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall W2

1868 Board #24 2:00 PM - 3:30 PM
Effect of Short-Term Concurrent Exercise Training on Skeletal Muscle Exosomal miRNAs in Lean and Obese Men
Brian P. Sullivan1, Yaohui Nie1, Sheelagh Evans1, Brian K. McFarlin, FACSM1, Zach R. Hettinger1, Monica J. Hubal2, Shihuan Kuang1, Julianne Stout1, Timothy P. Gavin, FACSM1, 1Purdue University, West Lafayette, IN, 2Indiana University-Purdue University Indianapolis, Indianapolis, IN. 3Indiana University School of Medicine- West Lafayette, West Lafayette, IN
(No relevant relationships reported)

1869 Board #25 2:00 PM - 3:30 PM
Acute Alcohol Ingestion After Resistance Exercise Does Not Alter Phosphorylation Of Upstream Proteins In The mTOR Signaling Pathway
Jakob L. Vingren, FACSM1, Danielle E. Levitt1, James C. Boyett1, Hui-Ying Liu2, Spencer A. Moses1, Brian K. McFarlin, FACSM1, 1Purdue University, West Lafayette, IN, 2University of New Mexico, Albuquerque, NM
(No relevant relationships reported)

D-55 Free Communication/Poster - Cardiorespiratory Disease

Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

1870 Board #26 2:00 PM - 3:30 PM
Autophagy is Stimulated by Acute High-Intensity Interval Training Exercise in Human Skeletal Muscle
Kurt A. Escobar1, Anna M. Welch2, Andrew Wells3, Zac Fennell1, Zidong Li4, Terence A. Moriarty1, Kaitlin Martinez5, Jessica Marrello2, Carlos H. Nitta2, Micah N. Zuhl2, Trisha A. Stout3, Timothy P. Gavin, FACSM1, 1Purdue University, West Lafayette, IN, 2Indiana University-Purdue University Indianapolis, Indianapolis, IN, 3Indiana University School of Medicine- West Lafayette, West Lafayette, IN
(No relevant relationships reported)

1884 Board #20 2:00 PM - 3:30 PM
An Exaggerated Muscle Metaboreflex In Diabetic Rats Is Mediated By Potentiated Skeletal Muscle Afferent Responsiveness
Rie Ishizawa1, Han Kyul Kim1, Norio Hotta2, Gary A. Iwamoto1, Wanpen Vongpatsanasin1, Jere H. Mitchell, FACSM1, Scott A. Smith4, Masaki Mizuno4, 1University of Texas Southwestern Medical Center, Dallas, TX, 2Chiba University, Chiba, Japan, 3University of California, Los Angeles, CA, 4University of North Carolina, Chapel Hill, NC
(No relevant relationships reported)
P134 Final Program

1886 Board #42 2:00 PM - 3:30 PM
PGC-1/ERR-Induced Regulator in Muscle (PERM1) Increases Mitochondrial Respiratory Capacity in Culture Muscle Cells
Email: trthome@ufl.edu
(No relevant relationships reported)

1887 Board #43 2:00 PM - 3:30 PM
Xbp1 Promotes Skeletal Muscle Regeneration And Growth In A Cell Non-autonomous Manner
Kyle R. Bohnert1, Ashok Kumar2. St. Ambrose University, Davenport, IA. University of Louisville, Louisville, KY
(No relevant relationships reported)

1888 Board #44 2:00 PM - 3:30 PM
Effects of Obesity and Acute Resistance Exercise on Skeletal Muscle Intercellular Communication Pathways
Ron T. Garner1, Yaohui Nie2, Shihuan Kuang3, Timothy P. Gavin, FACSM1. Husson University, Bangor, ME. Purdue University, West Lafayette, IN
Email: garnerrt@husson.edu
(No relevant relationships reported)

1889 Board #45 2:00 PM - 3:30 PM
Preliminary study: Leucine Supplementation Exacerbates Muscle Wasting Independent of the Ubiquitin-Proteasome System
University of Arkansas, Fayetteville, AR
Email: kabejarano@email.uark.edu
(No relevant relationships reported)

1890 Board #46 2:00 PM - 3:30 PM
Skeletal Muscle Antioxidant Antioxidant Capacity Correlates With Both Oxidative And Glycolytic Profile In Trained Women Athletes
Athanasios Z. Jamartas, FACSM1, Magni Mohr2, Ioannis Fatouros3, Georgios Ermidis3, Dimitrios Draganiolis, Martin Thomassen1, Morten B. Randers1, Peter Krustp3, Lars Nybo4. University Of Thessaly, Department Of Physical Education & Sport Science, Thriika, Greece. University of the Faroe Islands, Tórshavn, Faroe Islands. Università degli Studi di Napoli “Parthenope”, Naples, Italy. University of Copenhagen, Odense, Denmark. University of Southern Denmark, Odense, Denmark.
Email: ajamartas@upei.uah.gr
(No relevant relationships reported)

1891 Board #47 2:00 PM - 3:30 PM
Determining The Role Of Cellular Senescence In Skeletal Muscle Regeneration
Laura V. Young, Michel G. Arsenault, Craig S. Campbell, Kiera Rigby, Emma Moore, Alasdair Cameron, Adam P.W. Johnston. University of Prince Edward Island, Charlottetown, PE, Canada
Email: lvyoung@upei.ca
(No relevant relationships reported)

1892 Board #48 2:00 PM - 3:30 PM
Skeletal Muscle Stress Protein miRNA Response to Aerobic Exercise in Different Environmental Temperatures
Megan J. Johnson, Rebecca L. Cuthbert, Robert J. Shute, Dustin R. Slivka, FACSM. University of Nebraska Omaha, Omaha, NE. (Sponsor: Dustin R. Slivka, Ph.D., FACSM)
(No relevant relationships reported)

ACSM 66th Annual Meeting

1893 Board #49 2:00 PM - 3:30 PM
Elucidation for Underlying Mechanisms of Chronic Diseases and Potential Applications through Exercise-induced Autophagy
Ning Chen. Wuhan Sports University, Wuhan, China. (Sponsor: Yong Tai Wang, FACSM)
Email: nchen510@gmail.com
(No relevant relationships reported)

1894 Board #50 2:00 PM - 3:30 PM
Mitochondrial Ant2 And Ucp2 Expression In Mouse Liver During Colon-26 Tumor-induced Cachexia
Adriana J. Castro, Gabriel S. Pena, Hector G. Paez, Jessica L. Halle, Nishant P. Visavadnya, Michael C. Zournas, Michael A. Whitelhurst, FACSM, Andy V. Khamoui. Florida Atlantic University, Boca Raton, FL
(No relevant relationships reported)

1895 Board #51 2:00 PM - 3:30 PM
Leptin Gene Polymorphism, Plasma Leptin Levels And Aerobic Capacity In Response To Intense Exercise
Tamara P. Mancilha, Cyntia F. Oliveira, Magna C.F. Passos, Joseley C. Koury. RIO DE JANEIRO STATE UNIVERSITY, Rio de Janeiro, Brazil
Email: tamara.mancilha@hotmail.com
(No relevant relationships reported)

D-57 Free Communication/Poster - Body Composition and Integrative Physiology

1896 Board #52 2:00 PM - 3:30 PM
Agreement Between Dual-Energy X-Ray Absorptiometry and a New Standing Bioimpedance Spectroscopy Device for Detecting Changes in Fat-Free Tissue
Emily L. Grandprey1, Katelyn P. Joubert1, Cody T. Haun2, Christopher G. Vann1, Paul A. Roberson1, Peter W. Mumford1, Matthew A. Romero1, Shelby C. Osburn1, C Brooks Mobley1, Jordan R. Moon1, Michael D. Roberts1, Kaelin C. Young1. Edward Via College of Osteopathic Medicine-Auburn Campus, Auburn, AL. LaGrange College, LaGrange, GA. Auburn University, Auburn, AL. ImpediMed Inc, Carlsbad, CA
(No relevant relationships reported)

1897 Board #53 2:00 PM - 3:30 PM
Body Composition and Aerobic Capacity in NCAA Division I Cross-country Athletes Across a Season
Takudzwa A. Madzima, Svetlana Nepocatych, Daniel A. Baur, Kiruida Patel, Walter R. Bixby, FACSM. Elon University, Elon, NC
Email: tmadzima@elon.edu
(No relevant relationships reported)

1898 Board #54 2:00 PM - 3:30 PM
Low Carbohydrate Diet On Body Composition Of Trained Crossfit Individuals
Andrea Naves, Mariana Iori, Renata Camauba, Ana Beatriz Baptistella. VP Research Institute, São Paulo, São Paulo, Brasil, Brazil
Email: andreina.naves@vponline.com.br
(No relevant relationships reported)
1899 Board #55 2:00 PM - 3:30 PM
Body Composition and Muscle Contractile Properties in Male Professional Soccer Players
Ashley Jones1, Karen Hind2, Ian Entwistle1, Hannah V. Wilson1, Peter Francis1. 1Musculoskeletal Health Research Group, Leeds, United Kingdom. 2Wolfson Research Institute, Durham, United Kingdom
Email: Ashley.D.Jones@leedsbeckett.ac.uk
(No relevant relationships reported)
Francis Presenting

D-58 Free Communication/Poster - Musculoskeletal Mechanics and Modeling
Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

1900 Board #56 2:00 PM - 3:30 PM
Electromyographic Evidence of Excessive Achilles Tendon Elongation During Isometric Contractions After Achilles Tendon Repair
Malachy P. McHugh, FACSM, Karl F. Orihimo, Ian J. Kremenic, Julia Adelman, Stephen J. Nicholas, Nicholas Institute of Sports Medicine and Athletic Trauma, Lenox Hill Hospital, New York, NY
Email: mchugh@nismat.org
(No relevant relationships reported)

1901 Board #57 2:00 PM - 3:30 PM
Spatial Resolution Of The Medial Gastrocnemius Mechanomyograph Resolved By Time-frequency And Principle Pattern Analysis
William J. Armstrong. Western Oregon University, Monmouth, OR
(No relevant relationships reported)

1902 Board #58 2:00 PM - 3:30 PM
Effect Of Ballet Dance On Knee Joints Muscle Strength Based On The Isokinetic Research
Rou Wen1, Jingjing Xue2, Yanqing Ren1, Mi Zhang1, Jing Li1. 1Beijing Dance Academy, Beijing, China. 2China Institute of Sport Science, Beijing, China
Email: rouwen666@sina.com
(No relevant relationships reported)

1903 Board #59 2:00 PM - 3:30 PM
Ankle Related Musculotendinous Stiffness in Individuals With and Without Chronic Ankle Instability
Kyeyongtak Song, Troy Blackburn, Erik A. Wikstrom, FACSM. University of North Carolina at Chapel Hill, Chapel Hill, NC
Email: ktsong@email.unc.edu
(No relevant relationships reported)

1904 Board #60 2:00 PM - 3:30 PM
Influence Of Plyometric Training On Tendinous Tissue Elongation During Initial Phase Of Explosive Power Exertion
Chihiro Edamatsu, Tomiko Odagaki, Kazuki Kusumoto. Karashiki University of Science and the Arts, Karashiki, Japan
Email: edamatsu@kusa.ac.jp
(No relevant relationships reported)

1905 Board #61 2:00 PM - 3:30 PM
Reliability Of Isokinetic Eccentric Hamstring To Concentric Quadriceps Torque Ratio Between Velocities, Sexes, And Limbs
Sean P. Langan. Georgia Southern University-Armstrong, Savannah, GA
(No relevant relationships reported)
1913 Board #69  2:00 PM - 3:30 PM  
Effects Of An Exercise And Kinesiotape Intervention On 
Forward Head-Rounded Shoulder And Scapular Dyskinesia  
Michelle A. Sandrey, Luke Klawitter. West Virginia University, Morgantown, WV. (Sponsor: Jean L. McCrory, FACSM)  
Email: msandrey@mail.wvu.edu  
(No relevant relationships reported)  

1914 Board #70  2:00 PM - 3:30 PM  
Stimulation Techniques used to Assess Corticospinal 
Excitability Alters an Attentional Focus Maximal Voluntary 
Contraction of the Elbow Flexors.  
Shawn A. Wiseman, Behzad Lahouti, Israel Halperin, Duane Button.  
Memorial University of Newfoundland, St. John's, NL, Canada  
(No relevant relationships reported)  

1916 Board #72  3:30 PM - 5:00 PM  
Physical Activity, Sedentary Time, Body Composition and 
Cardiorespiratory Fitness In 4th Grade Hispanic Children  
Luis A. Torres-Villela1, Lucia del R Martinez2, Carmen Nevarez2,  
Mercedes Rivera1, Farah A. Ramirez-Marrero, FACSM1.  
1University of Puerto Rico - Rio Piedras Campus, San Juan, Puerto Rico.  
2University of Puerto Rico - Medical Sciences Campus, San Juan, Puerto Rico.  
(No relevant relationships reported)  

1917 Board #73  3:30 PM - 5:00 PM  
Effects of Exergaming on Motor Skill Competence, Perceived 
Competence, and Physical Activity in Preschool Children  
Zan Gao, FACSM1; Nan Zeng2, Zachary C. Pope2, Ru Wang1,  
Fang Yu1.  
1University of Minnesota, Minneapolis, MN.  
2University of Minnesota-Duluth, Duluth, MN.  
(No relevant relationships reported)  

1918 Board #74  3:30 PM - 5:00 PM  
The Effect of Extracurricular Coordinated Physical 
Education on the Development of Basic Motor Skills of 
Children aged 7-9 Years Old  
Yan Li1, Hanbing Song2, Jiandong Chang2, Ming Yang1.  
1Southwest University, Chongqing, China.  
2University of Missouri, Columbia, MO.  
(No relevant relationships reported)  

1919 Board #75  3:30 PM - 5:00 PM  
Comparisons Of In-school And Out-of-school Physical 
Activity Among Chinese Elementary School Children  
Zheng Zhu1, Chen Sun, Sheng Zhao, Zhen-Bo Cao.  
1Shanghai University of Sport, Shanghai, China  
(No relevant relationships reported)  

1920 Board #76  3:30 PM - 5:00 PM  
Predictors of Return to a Childhood Healthy Eating and 
Active Living Obesity Clinic  
Karissa L. Peyer1, Joani Jack2, Greg W. Heath, FACSM1.  
1University of Tennessee at Chattanooga, Chattanooga, TN.  
2University of Minnesota-Duluth, Duluth, MN.  
(No relevant relationships reported)  

1921 Board #77  3:30 PM - 5:00 PM  
Evidence for Compensation or Synergy of Children’s 
Activity During Outdoor and Indoor Preschool Time  
Michael J. Wierenga, Kimberly A. Clevenger, Karin A. Pfeiffer,  
FACSM.  
Michigan State University, East Lansing, MI  
(No relevant relationships reported)  

1922 Board #78  3:30 PM - 5:00 PM  
The Effectiveness Of High-intensity Interval Training 
Versus Moderate-intensity Continuous Training On 
Cardiometabolic Risk Factors In Childhood Obesity: A 
Meta-analysis  
Jing-xin Liu1, Lin Zhu2,  
1Shanghai University of Sport, Shanghai, China.  
2Guangzhou Sport University, Guangzhou, China  
Email: liuxi102@163.com  
(No relevant relationships reported)  

1923 Board #79  3:30 PM - 5:00 PM  
The Effects Of Active Video Games And SPARK PE On 
Children’s In-school Physical Activity  
Han Chen1, Haichun Sun2, Jiling Liu3, Peng Zhang4,  
1Vardosta State University, Vardosta, GA.  
2University of South Florida, Tampa, FL.  
3Texas A&M University, College Station, TX.  
4East Stroudsburg University, East Stroudsburg, PA  
Email: hanchen@vardsota.edu  
(No relevant relationships reported)  

1924 Board #80  3:30 PM - 5:00 PM  
Predictors and Acceptability of Shared Physical Activity in 
Parent-Child Dyads  
Patrick M. Filanowski1, Sarah M. Camhi, FACSM2, Jessica A.  
Whiteley3, Ronald J. Iannotti4, Laurie A. Milliken, FACSM.  
1Xavier University, Cincinnati, OH.  
2University of Massachusetts Boston, Boston, MA.  
3CDM Group, Inc., Bethesda, MD. (Sponsor: Laurie Milliken, FACSM)  
Email: FILANOWSKII@XAVIER.EDU  
(No relevant relationships reported)  

1925 Board #81  3:30 PM - 5:00 PM  
The Effects of Playground Zoning on Physical Activity 
During Recess in Elementary-Aged Children.  
Jillian Barnas, MS, Stephen Ball, PhD.  
University of Missouri, Columbia, MO. (Sponsor: Jill Kanaley, PhD, FACSM)  
(No relevant relationships reported)  

1926 Board #82  3:30 PM - 5:00 PM  
Influence of Parents' Physical Activity on Children’s Physical 
Activity And Cardiopulmonary Endurance  
Shousheng Xu, Yan Wang, Yu Jing, Zhengzhen Wang, FACSM,  
Juan Wang.  
Beijing Sport University, Beijing, China.  
(No relevant relationships reported)  

1927 Board #83  3:30 PM - 5:00 PM  
Preschool Children’s Cognition Is Associated With Motor 
Skill Competence and Cardiovascular Fitness  
Jung Eun Lee1, Nan Zeng2, Zachary C. Pope3, Daniel McDonough4,  
Wenxi Lui5, Nan Gao, FACSM.  
1University of Minnesota-Duluth, Duluth, MN.  
2University of Minnesota, Minneapolis, MN.  
3Texas A&M University, College Station, TX.  
4East Stroudsburg University, East Stroudsburg, PA.  
5Beijing Sport University, Beijing, China.  
(No relevant relationships reported)
American College of Sports Medicine

1928 Board #84 3:30 PM - 5:00 PM
Physical Literacy Competency Among Elementary and Middle School Children
Email: lindsay.distefano@uconn.edu
(No relevant relationships reported)

1929 Board #85 3:30 PM - 5:00 PM
Classroom-based Strategies to Reduce Disparities in Physical Activity Among Children with Asthma
Tiwatoluwa Ajibewa, Toby Lewis, Leslie R. Beerner, Lauren Allport, Shreya Bahl, Emma Weston, Mayas Dunen, Ben Ransier, Darin Stockdill, U. Sean Vance, Richard Dopp, Rebecca E. Hasson, FACSM. University of Michigan, Ann Arbor, MI. (Sponsor: Rebecca Hasson, FACSM)
(No relevant relationships reported)

1930 Board #86 3:30 PM - 5:00 PM
Wearable Activity Monitors as Part of a Childhood Obesity Treatment Program
Whitney M. Holeva-Eklund1, Taylor Lane2, Hendrik De Heer1, Timothy K. Behrens, FACSM3, Anthony Gobe2, Sherry Walters1. 1Northern Arizona University, Flagstaff, AZ. 2Northern Arizona Healthcare, Flagstaff, AZ. (Sponsor: Timothy K. Behrens, PhD, FACSM)
(No relevant relationships reported)

1931 Board #87 3:30 PM - 5:00 PM
Association of Sports Participation with Intake of Fast Food for Family Meals Among Rural Children
(No relevant relationships reported)

1932 Board #88 3:30 PM - 5:00 PM
The Association Between Sex and Directly Observed Physical Activity in Preschool-Age Children
Camille LeCompte, Sarah Burkart, Soliya Allhassan, FACSM. University of Massachusetts Amherst, Amherst, MA
Email: elecompte@umass.edu
(No relevant relationships reported)

1933 Board #89 3:30 PM - 5:00 PM
Patterns of Physical Activity Change during Playground and Gardening Activities in Young Children
Dawn P. Cooe, FACSM, Scott E. Crouter, FACSM, Ashlyn N. Schwartz. The University of Tennessee, Knoxville, TN
Email: dcoe@utk.edu
(No relevant relationships reported)

1934 Board #90 3:30 PM - 5:00 PM
Recess And Overweight And Obesity In Children 5-11 Years Of Age: 2013-2016 NHANES
Chakene D. Rogers, Michael R. Richardson, James R. Churilla, FACSM. University of North Florida, Jacksonville, FL. (Sponsor: James R. Churilla, FACSM)
(No relevant relationships reported)

1935 Board #91 3:30 PM - 5:00 PM
Game-Play Characteristics by Field Size in Boys Youth Lacrosse
Matthew Johnson1, Patricia M. Kelshaw2, Lisa H. Hepburn3, Andrew E. Lincoln1, Reginald E. Dunn2, Shane V. Caswell1. 1Colby College, Waterville, ME. 2George Mason University, Manassas, VA. 3MedStar Sports Medicine, Baltimore, MD
(No relevant relationships reported)

1936 Board #92 3:30 PM - 5:00 PM
Increased Acute-chronic Training Load Ratio Is Associated With Time-loss Injury In Elite-youth Female Soccer Athletes
Darin A. Padua, Barnett Frank, Megan Mathes. University of North Carolina at Chapel Hill, Chapel Hill, NC
(No relevant relationships reported)

1937 Board #93 3:30 PM - 5:00 PM
Physical Education Enrollment Trends of Youth with Obesity in a Large Midwestern Metropolitan Area
Amanda Gier, Philip Khoury, Shelley Kirk, Christopher Kist, Robert Siegel. Cincinnati Children’s, Cincinnati, OH
Email: amanda.gier@cchmc.org
(No relevant relationships reported)

1938 Board #94 3:30 PM - 5:00 PM
BMI, Body Composition and Race are Associated with Decreased Bicycling Ability in Youth with Obesity.
Christopher Kist, Amanda Gier, Phil Khoury, Shelley Kirk, Robert Siegel. Cincinnati Children’s Hospital, Cincinnati, OH
(No relevant relationships reported)

1939 Board #95 3:30 PM - 5:00 PM
Game-Play Characteristics by Field Size in Girls’ Youth Lacrosse
Patricia M. Kelshaw1, Matthew Johnson2, Lisa H. Hepburn3, Andrew E. Lincoln1, Reginald E. Dunn2, Shane V. Caswell1, Bruce D. Griffith2. 1Georgetown University School of Medicine, Washington DC. 2MedStar Sports Medicine, Baltimore, MD. 3George Mason University, Manassas, VA. 4Colby College, Waterville, ME. 5MedStar Sports Medicine, Baltimore, MD
(No relevant relationships reported)

1940 Board #96 3:30 PM - 5:00 PM
Physical Activity Among Youth Lacrosse Players: Full vs. Modified Field Play
Christopher Anderson1, Lisa H. Hepburn2, Andrew E. Lincoln2, Reginald E. Dunn2, Shane V. Caswell1, Patricia Kelshaw1, Bruce D. Griffith2. 1Georgetown University School of Medicine, Washington DC. 2MedStar Sports Medicine, Baltimore, MD. 3George Mason University, Manassas, VA. 4US Lacrosse, Sparks, MD
Email: cga31@georgetown.edu
(No relevant relationships reported)

1941 Board #97 3:30 PM - 5:00 PM
Serum Vitamin D, and Metabolic Risks In Obese Youth Involved In a Physical Activity Program
Jorge Mota1, Luisa Aires1, Gustavo Silva2, Caroline Brandt1, Aneleise Gaya1, Clarke Martins2. 1Research Centre in Physical Activity health and Leisure, Porto, Portugal. 2ISMAI, Porto, Portugal. 3UFGRS, Porto Alegre, Brazil. 4UFParaiba, João Pessoa, Brazil
Email: jmota@fade.up.pt
(No relevant relationships reported)

1942 Board #98 3:30 PM - 5:00 PM
Investigating the Impact of Daily Physical Education on Fitness Levels of Underserved Minority Youth
Molly C. Finnian, Julian A. Reed, Caroline Stanton. Furman University, Greenville, SC. (Sponsor: Anthony Catersiano, FACSM)
Email: molly.finnian@furman.edu
(No relevant relationships reported)

1943 Board #99 3:30 PM - 5:00 PM
Using Dance to Promote Physical Activity and Fitness Among Adolescent Girls with Intellectual Disabilities
Heidi Stanish1, Aviva Must2, Caroli Curtin3, David Tybor1, Linda Bandini1. 1University of Massachusetts Boston, Boston, MA. 2Tufts University School of Medicine, Boston, MA. 3University of Massachusetts Medical School, Worcester, MA
Email: heidi.stanish@umb.edu
(No relevant relationships reported)
P138 Final Program

1944 Board #100 3:30 PM - 5:00 PM
Relationship Between Physical Activity, Sedentary Time, Cardiorespiratory Fitness And Academic Achievement In Norwegian Adolescents.
Runar Solberg¹, Jostein Steene-Johannessen¹, Ulf Ekelund, FACSM², Geir Kare Resaland¹, Sindre M. Dyrstad¹, Tommy Haugen¹, Sveinung Berntsen¹, Elin Kolle¹. ¹Norwegian School of Sports Sciences, Oslo, Norway. ²Western Norway University of Applied Sciences, Sogndal, Norway. ³University of Stavanger, Stavanger, Norway. ⁴University of Agder, Kristiansand, Norway. (Sponsor: Ulf Ekelund, FACSM)
(No relevant relationships reported)

1945 Board #101 3:30 PM - 5:00 PM
Intervention With Exergames For Adolescents Promote Moderate To Vigorous Physical Activity
Catiana L. P. Romanzini, Milene C. M. de Freitas, Ruan F. de Morais, Jefferson G. da Silva, Sérgio M. C. Rocha, Marcelo Romanzini. Londrina State University, Londrina, Brazil
Email: cipossamai@uel.br
(No relevant relationships reported)

1946 Board #102 3:30 PM - 5:00 PM
Twelve Years Follow Up - Prevalence Trends Of Physical Inactivity And Overweight In Brazilian Adolescents
Fabio Ceschin¹, Sandra Mahecha¹, Erlainaldo Andrade¹, Gustavo Alegrti², Aylton Figueira Junior¹. ¹Sao Judas Tadeu University and Traveling Through Physiology, Sao Paulo, Brazil. ²Major University - Chile, Santiago, Chile. ³Uninove University, Sao Paulo, Brazil. ⁴Sao Judas Tadeu University, Sao Paulo, Brazil
Email: fabio.ceschin@hotmail.com
(No relevant relationships reported)

1947 Board #103 3:30 PM - 5:00 PM
Compliance With The 24-h Movement Guidelines In Hong Kong Adolescents: Associations With Body Mass Index
YAN SHI¹, Wendy Y. Huang², Jane J. Yu¹, Stephen H.S. Wong, FACSM². ¹The Chinese University of Hong Kong, Hong Kong, Hong Kong. ²Hong Kong Baptist University, Hong Kong, Hong Kong
(No relevant relationships reported)

1948 Board #104 3:30 PM - 5:00 PM
The Effects Of HIIT And LIT On Weight Loss In Obesity Children/adolescents: A Systematic Review And Meta-analysis
Zhao Xiaochen, Cao Chunmei, Li Qing. Tsinghua University, Beijing, China
Email: 18614222993@163.com
(No relevant relationships reported)

1949 Board #105 3:30 PM - 5:00 PM
Comparing a Body Image Assessment Scale with Anthropometric Measures in Chilean Adolescents
Maribel Parra-Saldias¹, Daniel Mayonga-Vega¹, Jesús Viciana¹, Farah Ramirez-Marrero, FACSM². ¹Pontifically Catholic University of Valparaiso, Chile. ²University of Jaen-Spain, Jaen, Spain. ³University of Granada, Spain, Granada, Spain. ⁴University of Puerto Rico, Rio Piedras, Rio Piedras, Puerto Rico. (Sponsor: Farah Ramirez-Marrero, FACSM)
Email: mparrasaldias@gmail.com
(No relevant relationships reported)

1950 Board #106 3:30 PM - 5:00 PM
Heavy TV Viewers Are The Heaviest Regardless Of Physical Activity: A Study Of 10,000 Preadolescents
Elina Engberg. University of Helsinki, Helsinki, Finland
Email: elina.engberg@helsinki.fi
(No relevant relationships reported)

1951 Board #107 3:30 PM - 5:00 PM
Body Composition Changes Associated With A Structured Exercise Program Among Children And Adolescents
Ashley Peart, Kameron Saire, Ali Venezia, Darby Winkler, Danielle Wadsworth. Auburn University, Auburn, AL
Email: azh0078@auburn.edu
(No relevant relationships reported)

1952 Board #108 3:30 PM - 5:00 PM
Multi-Component School-Based Weight-Management Program Improve Physical Fitness and Vascular Reactivity in Obese Adolescent
Napasakorn Chuensiri¹, Kanang Sribun¹, Saowalak Siripanya¹, Saowaluck Suntraluck², Tussana Jararch², Vijit Kanungsuksaem², Daronwan Sukson². ¹Chulalongkorn University, Bangkok, Thailand. ²Institute of Physical Education Sukhothai campus, Sukhothai, Thailand. ³Naresuan University, Phitsanulok, Thailand
Email: napas.ch@gmail.com
(No relevant relationships reported)

1953 Board #109 3:30 PM - 5:00 PM
Weekly Frequency Of Meeting The Physical Activity Guidelines And Cardiometabolic Risk In Youth: Nhanes 2003-2006
David A. White¹, Eric A. Willis². ¹The Children’s Mercy Hospital, Kansas City, MO. ²National Cancer Institute, Rockville, MD
Email: dawhite@cmh.edu
(No relevant relationships reported)

1954 Board #110 3:30 PM - 5:00 PM
Fitness In Pediatrics: Is It Adequately Carried Out?
JORGE FRANCHELLA, FACSM, LAURA ALVAREZ, NURIA SERRANO. HOSPITAL DE CLINICAS. UBA, Buenos Aires, Argentina
Email: jfranche19@icloud.com
(No relevant relationships reported)

1955 Board #111 3:30 PM - 5:00 PM
Contribution Of In-school And Out-of-school Physical Activity Towards Meeting The Daily Recommendations.
Neal C. Phifer, Dale D. Brown, FACSM, Susann Marcum, Emily Jones, Skip M. Williams, Dan Phelps. Illinois State University, Normal, IL. (Sponsor: David Q. Thomas, FACSM)
Email: ncpife@ilstu.edu
(No relevant relationships reported)

1956 Board #112 3:30 PM - 5:00 PM
The Effect of Increased Extracurricular Physical Activity on the Mathematics Achievements of Children aged 7-9 Years Old
Hanbing Song¹, Ming Yang¹, Yan Li¹, Jindong Chang². ¹Southwest University, Chongqing, China. ²The Branch of the Collaborative Innovation Center of Assessment toward Basic Education Quality at Southwest University, Chongqing, China
Email: songhanbing@126.com
(No relevant relationships reported)

1957 Board #113 3:30 PM - 5:00 PM
Influence Of Menarche On Perception, Dimension And Body Image Of Active And Insufficiently Active Girls
Roberta L. Rica¹, Eliane F. Gama¹, Danilo S. Bocalini². ¹Sao Judas Tadeu University, São Paulo, Brazil. ²Federal University of Espirito Santo, Vitória, Brazil
Email: robertarica@hotmail.com
(No relevant relationships reported)

1958 Board #114 3:30 PM - 5:00 PM
Habitual Physical Activity And Academic Achievements Among Undergraduate Adult Students
Daniel S. Moran, FACSM, Julianna Asiner, Tamam Younis, Oxana Rubinstein. Ariel University, Ariel, Israel
(No relevant relationships reported)
1959  Board #115  3:30 PM - 5:00 PM
Assessing Hispanic College Students Knowledge Related to Metabolic Syndrome Conditions
Ulku S. Karabulut, Lin Wang, Zasha Romero, Palorna Mendoza, Murat Karabulut, FACSMS. UTRGV, Brownsville, TX
Email: ulku.karabulut@utrgv.edu
(No relevant relationships reported)

1960  Board #116  3:30 PM - 5:00 PM
Comparison of School Meal Patterns in High School Athletes and Non-Athletes
Alison M. Redd, Jeannette M. Garcia. UCF, Orlando, FL
(No relevant relationships reported)

1961  Board #117  3:30 PM - 5:00 PM
Effects of Peer-Led Aerobic Training on the Physical and Psychological Health of Urban College Students
Olga G. Berwid1, Galila Werber-Zion1, Gregory Klimaytis2, Yesenia M. Echevarria1, Ricky Melendez1, Alana I. Johnson1. 1York College, City University of New York, Jamaica, NY. 2Queens College, City University of New York, Flushing, NY
Email: olga.g.berwid@gmail.com
(No relevant relationships reported)

1962  Board #118  3:30 PM - 5:00 PM
Relationship Between Duration and Quality of Sleep on College Student Health Behaviors and Outcomes
Anthony C. Rosso, Oliver W.A. Wilson, Zack Papalia, Michele Duffley, Melissa Bopp, FACSMS. The Pennsylvania State University, State College, PA. (Sponsor: Dr. Melissa Bopp, FACSMS)
Email: acr545@psu.edu
(No relevant relationships reported)

1963  Board #119  3:30 PM - 5:00 PM
Student Experiences in a Mandatory Health and Wellness Course, A Qualitative Investigation
Monica M. Malnar1, Michelle Scribner-MacLean2, David Rice1. 1Fitchburg State University, Fitchburg, MA. 2University of Massachusetts Lowell, Lowell, MA
Email: mmalnarl@fitchburgstate.edu
(No relevant relationships reported)

1964  Board #120  3:30 PM - 5:00 PM
Effects Of A 13-week Yoga Class On College Aged Student’s Flexibility, Body Image, And Mood
Suet Hon. The Chinese University of Hong Kong, Hong Kong, Hong Kong. (Sponsor: Professor Stanley Hui S.C., FACSMS)
Email: hnn102suet@gmail.com
(No relevant relationships reported)

1965  Board #121  3:30 PM - 5:00 PM
Associations between Parents’ Physical Activity and Young Children’s Health Outcomes
Nan Zeng1, Susan L. Johnson2, Richard E. Bole1, Laura L. Bellows1, 1Colorado State University, Fort Collins, CO. 2University of Colorado Anschutz Medical Campus, Aurora, CO
(No relevant relationships reported)

1966  Board #122  3:30 PM - 5:00 PM
Effects Of A Peer-led Aerobic Training Program On Physical Activity Behavior Of Urban College Students
Galila Werber-Zion1, Olga G. Berwid1, Gregory Klimaytis2, Ricky Melendez1, Yesenia M. Echevarria1, Alana I. Johnson1. 1York College, City University of New York, Jamaica, NY. 2Queens College, City University of New York, Queens, NY
Email: gwerber@york.cuny.edu
(No relevant relationships reported)

1967  Board #123  3:30 PM - 5:00 PM
Association of Sleep Quality and Physical Activity among Chinese College Students
Xiangyu Zhai, Qian Gu, Mei Ye, Tao Huang, Kun Wang, Xiang Fan. Shanghai Jiao Tong University, Shanghai, China
Email: zxy530@sjtu.edu.cn
(No relevant relationships reported)

1968  Board #124  3:30 PM - 5:00 PM
Associations Between Physical Activity, Diet, And Substance Use With Academic Performance
Peter J. Matthews, Oliver W.A. Wilson, Zack Papalia, Michele Duffley, Melissa Bopp, FACSMS. Pennsylvania State University, State College, PA. (Sponsor: Dr. Melissa Bopp, FACSMS)
Email: pmj5690@psu.edu
(No relevant relationships reported)

1969  Board #125  3:30 PM - 5:00 PM
Pilates Connect: A Program To Support The Transition Of Student-athletes To Lifetime Activity
Melinda B. Smith, Erin J. Reifsteck, Pam Kocher Brown, Diane L. Gill, FACSMS. University of North Carolina at Greensboro, Greensboro, NC
Email: mbsmith9@uncg.edu
(No relevant relationships reported)

1970  Board #126  3:30 PM - 5:00 PM
Gunter Submission
Evon Hilberg1, Katherine B. Gunter, FACSMS1, Patrick Abi Nader2. 1Oregon State University, Corvallis, OR. 2Universite de Moncton, Moncton, NB, Canada
Email: evan.hilberg@osegonstate.edu
(No relevant relationships reported)

1971  Board #127  3:30 PM - 5:00 PM
Effect Of 10-week Flag Football Intervention On Physical Activity Of Overweight And Obese Children
Jie Zhang1, Xinzhao Cao1, DongNing Liu1, Jun Wu1, JunYu Wang1, Yong Gao2, 1Shanghai University of Sport, Shanghai, China. 2Shanghai Liuyi elementary school, Shanghai, China. 3Boise State University, Boise, ID
Email: zhjungjie@sus.edu.cn
(No relevant relationships reported)

1972  Board #128  3:30 PM - 5:00 PM
The Effect Of Extracurricular Physical Activities In The Development Of Coordination Of Children Aged 7 To 9 Years
Yunsai Chen1, Ming Yang2, Jingdong Chang2. 1Shanghai University of Sport, Shanghai, China. 2Shanghai Liuyi elementary school, Shanghai, China
Email: yunsaimchen@163.com
(No relevant relationships reported)

1973  Board #129  3:30 PM - 5:00 PM
Effects of Eight-week Fundamental Motor Skills Intervention on Children’s Physical and Cognitive Health Outcomes
JoonYoung Lee1, Ping Zhu1, Tao Zhang2, Tsz Lun (Alan) Chu2. 1University of North Texas, Denton, TX. 2University of Wisconsin-Green Bay, Green Bay, WI
Email: joonyounglee@my.unt.edu
(No relevant relationships reported)

1974  Board #130  3:30 PM - 5:00 PM
Evaluation Of A Physical Activity Level And And Physical Fitness In Obese Children: Health Educational Program For Children (hepchild)
Henrique L. Ribeiro, Suliane B. Rauber, Carmen S. Campbell. Universidade Católica de Brasília, Águas Claras, Brazil
(No relevant relationships reported)
**P140 Final Program**

1975 Board #131 3:30 PM - 5:00 PM
Introducing Physically Active Lessons in a UK Secondary School: A Pilot Cluster-Randomised Controlled Trial
Catherine Gammon1, Katie Morton1, Andrew J. Atkin1, Kirsten Corder1, Andy Daly-Smith1, Thomas Quarnby2, Marc Suhreke3, David Turner4, Esther van Sluijs5.
1University of Cambridge, Cambridge, United Kingdom. 2University of East Anglia, Norwich, United Kingdom. 3Leeds Beckett University, Leeds, United Kingdom.
Email: egammon1@emich.edu
(No relevant relationships reported)

1976 Board #132 3:30 PM - 5:00 PM
SOFIT Studies of Physical Education in U. S. and International Schools
Nicole J. Smith1, Thomas L. McKenzie, FACSM1, CSU Fresno, Fresno, CA.
3San Diego State University, San Diego, CA.
Email: njsmith@csufresno.edu
(No relevant relationships reported)

**D-61 Free Communication/Poster - Physical Activity and Health II**

Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

1977 Board #133 3:30 PM - 5:00 PM
Accumulating 10,000 Steps/Day Using a Wristband Activity Monitor May Not Meet Step Guidelines.
Laramy S. Millen, Joshua P. Muench, Gavin Connolly, Kristina Hasanj, Rachael K. Nelson. Central Michigan University, Mt Pleasant, MI.
Email: mille31@cmich.edu
(No relevant relationships reported)

1978 Board #134 3:30 PM - 5:00 PM
Effects of Three Regular Activity Breaks on Postprandial Triglyceride Response in Healthy Young Adults
Sheng-Xia Ma, Xiao-Mei Liu, Yan-Yu Lin, Li-Qiong Ma, Sheng Zhao, Zheng Zhu, Zhen-Bo Cao. Shanghai University of Sport, Shanghai, China.
Email: mx-27@163.com
(No relevant relationships reported)

1979 Board #135 3:30 PM - 5:00 PM
Physical Activity Level And Prescription Pattern Of Physical Activity Among Physicians In Santiago de Chile.
Alejandro Quijada. Universidad Mayor, Santiago, Chile.
Email: doctoriquijada@gmail.com
(No relevant relationships reported)

1980 Board #136 3:30 PM - 5:00 PM
Large vs Small Skeletal Muscle Mass Training: a Pilot Study on Solid Organ Transplanted Recipients
Alessio del Torto1, Roberto Peressutti1, Umberto Baccarani2, Adriana De Silvestro3, Amici Giampaolo4, Stefano Lazzet5.
1University of Udine, Udine, Italy. 2Friuli-Venezia-Giulia Regional Transplant Coordination Center, Udine, Italy. 3General Surgery and Transplantation Unit, Department of Medicine, University of Udine, Udine, Italy. 4Nephrology Centre of AAS3, Gemona del Friuli, Gemonia del Friuli, Italy.
Email: lleonard@ccga.edu
(No relevant relationships reported)

1981 Board #137 3:30 PM - 5:00 PM
Recalled Age at Menarche from The Michigan State University Motor Performance Study
Shannon R. Siegel, FACSM1, Karin A. Pfeiffer, FACSM2, Larissa True3, Eric M. Martin3, Christine Pacewicz2, Crystal Branta2, Rebecca Battista, FACSM3.
1University of San Francisco, San Francisco, CA. 2Michigan State University, East Lansing, MI. 3SUNY-Cortland, Cortland, NY. 4Boise State University, Boise, ID.
5Appalachian State University, Boone, NC.
Email: ssiegel@usfca.edu
(No relevant relationships reported)

**1982 Board #138 3:30 PM - 5:00 PM**
Time Spent In Moderate- to Vigorous-intensity Physical Activity Is Associated With Intramuscular Adipose Tissue Content In Young Men
Madoka Ogawa1, Noriko Tanaka1, Akito Yoshikoi2, Hiroshi Akima1.
1Nagoya University, Nagoya, Japan. 2Chukyo University, Nagoya, Japan. (Sponsor: Katsumi Asano, FACSM)
Email: d0c0dem0.mad020@gmail.com
(No relevant relationships reported)

1983 Board #139 3:30 PM - 5:00 PM
Association Between BMI And Health Perceptions In Preservice Teachers
Lesley S. Leonard. College of Coastal Georgia, Brunswick, GA.
Email: ileonard@ccga.edu
(No relevant relationships reported)

1984 Board #140 3:30 PM - 5:00 PM
Physical Activity and Body Composition in Adults
Robert Buresh, FACSM, Brian Kiszczewicz, FACSM, Jennifer Julian, Katy Hayes. Kennesaw State University, Kennesaw, GA.
(No relevant relationships reported)

1985 Board #141 3:30 PM - 5:00 PM
What is the Effectiveness of HIIT Body Work on Energy Expenditure in Active Male Adults
Alexandre F. Machado1, Roberta L. Rica1, Fábio L. Ceschin1, Víctor M. Reis2, Aquiles Y. Silva3, Danilo S. Bocain4, Aylon F. Junior4.
1University São Judas Tadeu, São Paulo, Brazil. 2Research Center in Sports Sciences, Vila Real, Portugal. 3University Mayor, Santiago, Chile. 4University Federal de Espírito Santo, Vitória, Brazil.
Email: farah.ramirez1@upr.edu
(No relevant relationships reported)

1986 Board #142 3:30 PM - 5:00 PM
Mechanical Efficiency After High Intensity Interval Training In Hiv+ Hispanic Women
Farah A. Ramírez-Marrero, FACSM1, Marcos A. Amalbert-Birriel2, Jorge L. Santana-Bagur3, Valerie Wojna1, Walter Frontera, FACSM4.
1University of Puerto Rico, Rio Piedras, San Juan, Puerto Rico. 2University of Massachusetts, Amherst, MA. 3University of Puerto Rico, Medical Sciences, San Juan, Puerto Rico.
Email: farah.ramirez1@upr.edu
(No relevant relationships reported)

1987 Board #143 3:30 PM - 5:00 PM
Weight Loss Decreases Dyspnea on Exertion and Unpleasantness in Obese Adults
Vipa Bernhardt1, Dharini M. Bhammar2, Rubria Marines-Price1, Tony G. Babb, FACSM2.
1Texas A&M University-Commerce, Commerce, TX. 2Texas A&M University-Commerce, Commerce, TX. 3University of Nevada-Las Vegas, Las Vegas, NV. 4Parkland Health and Hospital System, Dallas, TX. 5Institute of Exercise and Environmental Medicine, Texas Health Presbyterian Hospital Dallas and UT Southwestern Medical Center, Dallas, TX.
(Sponsor: Tony G Babb, FACSM)
Email: vipa.bernhardt@tamucc.edu
(No relevant relationships reported)

1988 Board #144 3:30 PM - 5:00 PM
Prior Baby Jumper Use Is Correlated With Children’s Parent-Reported Physical Activity Level
Toyin Ajsaife, Poonam Mankar. Texas A&M University - Corpus Christi, Corpus Christi, TX.
Email: toyin.ajsaife@tamucc.edu
(No relevant relationships reported)
D-62 Free Communication/Poster - Protein Metabolism

Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

2012 Board #168 2:00 PM - 3:30 PM
Post-exercise Cooling Impairs Muscle Protein Synthesis
Rates In Healthy Young Males
Cas J. Fuchs, Imre W.K. Kouw, Tyler A. Churchward-Venne, Joey S.J. Smets, Joan M. Senden, Wouter D. van Marken Lichtenbelt, Lex B. Verdijk, Lue J.C. van Loon. Maastricht University, Maastricht, Netherlands. (Sponsor: Janice Lee Thompson, FACSM)
Email: cas.fuchs@maastrichtuniversity.nl
(No relevant relationships reported)

2013 Board #169 2:00 PM - 3:30 PM
High-Protein Diet in Combination with Resistance Training Improves Performance without Changing Blood Parameters in Rats
Fabrizio A. Voltarelli, FA V, Paula C. Almeida, PAC, Thiago R. Lima, TRL,1 Eudes Thiago P. Avila, ET PA,1 Geovane J. Tolazzi, GTJ,1 James W. Navalta, JWN, FACSM,2 Federal University of Mato Grosso, Cuiaba-MT, Brazil. 3University of Nevada, Las Vegas, Las Vegas, NV
Email: voltarelli@gmail.com
(No relevant relationships reported)

2014 Board #170 2:00 PM - 3:30 PM
Satiating Effect Of High Protein Diets On Resistance-trained Individuals In Energy Deficit
Justin Roberts,1 Anastasia Zinchenko,2 Krishnaa Mahbubani,3 James Johnstone,1 Lee Smith,4 Vivianne Merzbach,5 Miguel Blacut,6 Oscar Bandero,3 Luis Villasenor,4 Fredrik Vartå,6 Menna Henselmans,4 Anglia Ruskin University, Cambridge, United Kingdom. 2University of Cambridge, Cambridge, United Kingdom. 3Addenbrookes Hospital, Cambridge, United Kingdom. 4International Scientific Research Foundation for Fitness and Nutrition, Amsterdam, Netherlands
Email: justin.roberts@anglia.ac.uk
(No relevant relationships reported)

2015 Board #171 2:00 PM - 3:30 PM
Effect Of Branched-chain Amino Acid Plus Glucose Supplement Timing On DOMS And Related Indicators After Eccentric Exercise
Junqiang Qiu, Guoqiang Geng, Mengrou Panyang. Beijing Sport University, Beijing, China
Email: qiuqj001@sina.com
(No relevant relationships reported)

2016 Board #172 2:00 PM - 3:30 PM
Acute Effect Of The Order Of Resistance Exercise And Nutrient Intake On Muscle Breakdown
Wataru Kume, Jun Yasuda, Maki Yoshikawa, Takeshi Hashimoto, FACSM, Ritsumeikan university, Shiga, Japan. (Sponsor: Takeshi hashimoto, FACSM)
Email: sh0099@pced.ritsumei.ac.jp
(No relevant relationships reported)

2017 Board #173 2:00 PM - 3:30 PM
Different Amounts Of Protein Intake Influence Body Composition And Performance In Elite Cyclists
Antonio Paolì,1 Tatiana Moro,2 Giuseppe Marcolin1, Paul Marcolin1, Antonio Bianco4. 1University of Padova, Padova, Italy. 2University of Texas Medical Branch, Galveston, TX. 3Federal University of Goias, Goiana, Brazil. 4University of Pomer, Palermo, Italy
Email: antonio.pauli@unipd.it
(No relevant relationships reported)
American College of Sports Medicine

D-63 Free Communication/Poster - Cognition and Emotion

Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

2026 Board #182  2:00 PM - 3:30 PM
Semantic Memory fMRI in Healthy Older Adults After Acute Exercise and Rest
Junyeon Won¹, Alfonso Alfiniti², Lauren Weisz¹, Corey Michelle³, Daniel Callow¹, Sushant Ranadive¹, Rodolphe Gentilin¹, J. Carson Smith, FACSM. ¹University of Maryland at College Park, College Park, MD. ²John’s Hopkins University, Baltimore, MD. (Sponsor: J. Carson Smith, FACSM)
Email: won25@umd.edu
(No relevant relationships reported)

2027 Board #183  2:00 PM - 3:30 PM
The Effects of Continuous and Interval Exercise on Cognitive Performance in Young Adults
Emily Tagesen¹, David Bellarl², Ellen L. Glickman, FACSM. ¹Kent State University, Kent, OH. ²University of Louisiana Lafayette, Lafayette, LA
Email: (No relevant relationships reported)

2028 Board #184  2:00 PM - 3:30 PM
The Effects Of A 30-min Moderate Aerobic Exercise On Autonomic And Inhibitory Control - ERP Study
Yiu Man Lee, Stanley Sai-choen HUI, FACSM. Chinese University of Hong Kong, Hong Kong, Hong Kong. (Sponsor: Prof. Stanley Sai-choen HUI, FACSM)
(No relevant relationships reported)

2029 Board #185  2:00 PM - 3:30 PM
Aerobic and Muscular Fitness Associations with Adolescent Cognitive Control
Tatsuya T. Shigeta¹, Angus A. Leahy², Jordan J. Smith³, Narelle Ether¹, David R. Lubans², Charles H. Hillman. ¹Northeastern University, Boston, MA. ²University of Newcastle, Callaghan, New South Wales, Australia
Email: shigeta.t@husky.neu.edu
(No relevant relationships reported)

2030 Board #186  2:00 PM - 3:30 PM
Cortical Activation during Walking While Smartphone Texting: a Dual Task Based fNIRS Study
Kun Wang, Zhangyan Deng, Qian Gu, Jinmei Zhang, Tao Huang, Zuoqiong Chen. Shanghai Jiao Tong University, Shanghai, China
Email: wangkunzj@sjtu.edu.cn
(No relevant relationships reported)

2031 Board #187  2:00 PM - 3:30 PM
Can Repeated Bouts Of Exercise Improve Equally Post-exercise Inhibitory Control As Single Bout Of Exercise? Takeshi Sugimoto¹, Tadashi Suga¹, Hayato Tsukamoto², Tadao Isaka¹, Takeshi Hashimoto, FACSM. ²Ritsumeikan University, Kusatsu, Shiga, Japan. ¹University of South Wales, Pontypridd, United Kingdom. (Sponsor: Takeshi Hashimoto, FACSM)
Email: shb1508@ncl.letsunm.ac.jp
(No relevant relationships reported)

2032 Board #188  2:00 PM - 3:30 PM
The Differential Relationships Between Physical Activity and Adiposity with Cognitive Function in Preadolescent Children.
Nicole E. Logan¹, Lauren B. Rainê¹, Rebecca J. Shorin¹, Naiman A. Khan¹, Arthur F. Kramer¹, Charles H. Hillman¹. ¹Northeastern University, Boston, MA. ²University of Illinois, Champaign Urbana, IL
Email: logan.n@husky.neu.edu
(No relevant relationships reported)

www.acsm.org
Board #189 2:00 PM - 3:30 PM  
Association of School Day Segmented Physical Activity with Children’s Physical and Cognitive Health

Xiangli Gu1, Tao Zhang1, Priscella M. Caçola1, Xiaoxia Zhang1, Jing Wang1. 1University of Texas at Arlington, Arlington, TX. 2University of North Texas, Denton, TX

Email: xiangli.gu@uta.edu

(No relevant relationships reported)

Board #190 2:00 PM - 3:30 PM  
Relationship Between Fitness and Active-Sedentary Behavior with Cognitive and Emotional Recognition in Elderly: Core Study


Email: andresviv69@gmail.com

(No relevant relationships reported)

Board #191 2:00 PM - 3:30 PM  
Cardiovascular Risk Moderates Aerobic Training Efficacy on Executive Function in Older Adults

Lauren Marcotte, Cindy K. Barha, Robin Hsiung, Teresa Liu-Ambrose. University of British Columbia, Vancouver, BC, Canada

Email: lauren.marcotte@alumni.ubc.ca

(No relevant relationships reported)

Board #192 2:00 PM - 3:30 PM  
A Single Bout of Exercise Improves Accuracy in Video Gaming: a Pilot Study

Bernat de las Heras, Orville Li, Lynden Rodrigues, Jean-Francois Nepveu, Marc Roig. McGill University, Montreal, QC, Canada

Email: bernatde@gmail.com

(No relevant relationships reported)

Board #193 2:00 PM - 3:30 PM  
Association Between Cognitive Function And Handgrip Strength In Physical Education College Students

Héctor Reynaldo Triana Reina1, Kely Johana Bonilla Vargas2, Jesús Astolfo Romero1. 1Universidad Santo Tomas, Bogotá, Colombia. 2Universidad de Rosario, Bogotá, Colombia

Email: hectortriana@usantotomas.edu.co

(No relevant relationships reported)

Board #194 2:00 PM - 3:30 PM  
Exercise Intensity Influences Prefrontal Cortex Oxygenation During Cognitive Testing

Terence Moriarty, Kelsey Bourbeau, Bryanne Bellovary, Micah Zuhl. University of New Mexico, Albuquerque, NM

Email: moria1ta@unm.edu

(No relevant relationships reported)

Board #195 2:00 PM - 3:30 PM  
Exploring The Relationships Between Personality And High-intensity Exercise-affect In Men And Women

Shelby E. Dietz, Allyson G. Box, Anmarie Chizewski, Steven J. Petruzzello, FACSM. University of Illinois Urbana-Champaign, Urbana, IL. (Sponsor: Steven J. Petruzzello, FACSM)

(No relevant relationships reported)

Board #196 2:00 PM - 3:30 PM  
Acute After-School Screen Time in Children Decreases Impulse Control: A Randomized Crossover Trial

Bruce W. Bailey, Mary Erfaim, Chance McCutcheon, Hunter LaCouture, Harrison Marsh. Brigham Young University, Provo, UT

Email: bruce.bailey@byu.edu

(No relevant relationships reported)
American College of Sports Medicine

Board #204 2:00 PM - 3:30 PM
Affective and Perceptual Responses to High-Intensity Interval Training: Comparing Graded Walking to Ungraded Jogging
Abby Fleming, Nic Martinez, Maureen Chiodini-Rinaldo, Larry Collins, Candie Ashley, Marcus Kilpatrick, FACSM. University of South Florida, Tampa, FL. (Sponsor: Marcus Kilpatrick, FACSM)
Email: arlfleming@mail.usf.edu
(No relevant relationships reported)

Board #205 2:00 PM - 3:30 PM
The Impact of Qiqong Baduanjin on Cognitive Function & Mental State in Patients with type 2 Diabetes
YAN ZHAO. CHENGDU SPORT INSTITUTE, CHENGDU, China
(No relevant relationships reported)

Board #206 2:00 PM - 3:30 PM
Self-Reported Physical Activity and Memory Performance among Adolescent Cannabis Users
Ileana Pacheco-Colón, María J. Salamanca, Raul Gonzalez. Florida International University, Miami, FL
Email: ipach008@fiu.edu
(No relevant relationships reported)

Board #207 2:00 PM - 3:30 PM
Action Boundary Perception Across 30 Days in an Isolated and Confined Environment
Alice LaGoy1, Aaron Sinnott1, Kellen Krajewski2, Richard J. Simpson2, Joanne L. Bowser2, Candice A. Alfano3, Christopher Connaboy4. 1University of Pittsburgh, Pittsburgh, PA. 2University of Arizona, Tucson, AZ. 3 UniMontfort University, Leicester, United Kingdom. 4University of Houston, Houston, TX
Email: adel99@pitt.edu
(No relevant relationships reported)

Board #208 2:00 PM - 3:30 PM
Associations Of Cognition With Physical And Vascular Function In Patients With Chronic Kidney Disease
Ulfr G. Bronas1, Mary Hannan1, James P. Lash2, Joe X. Zhou3, Alana Steffen4, Melissa Lamar1. 1University of Illinois at Chicago, Chicago, IL. 2Rush University Medical Center, Chicago, IL. 3Rush University Medical Center, Chicago, IL. 4Rush University Medical Center, Chicago, IL
Email: Bronas@uic.edu
(No relevant relationships reported)

Board #209 2:00 PM - 3:30 PM
Effects Of Three Months Of A “Playing Actively And Learning” Program On Selective Attention Performance In Boys And Girls
Isabela A. Ramos1, Eduardo B. Fontes1, Claudia Dias1, Gustavo L. Guedes2, Carmen S G Campbell2, Rodrigo A V Browne2. 1University of Minas Gerais, Belo Horizonte, Brazil. 2University of New South Wales, Sydney, NSW, Australia.
(No relevant relationships reported)

Board #210 2:00 PM - 3:30 PM
Physical Activity from Childhood to Adulthood and Cognitive Performance in Midlife
Juuso O. Hakala1, Suvi P. Rovio1, Katja Pahkala1, Jaakko Nevalainen1, Markus Juonala1, Nina Hurri-Kähönen2, Olli J. Heinonen2, Mirja Hirvensalo3, Risto Tela4, Jorma SA Viikari1, Jeffery Collins2. 1University of Turku, Turku, Finland. 2University of Tampere, Tampere, Finland. 3Turku University Hospital, Turku, Finland. 4University of Jyväskylä, Jyväskylä, Finland. 5LIKES Research Centre for Physical Activity and Health, Jyväskylä, Finland
Email: juoohak@uta.fi
(No relevant relationships reported)

Board #211 2:00 PM - 3:30 PM
Patient Perceptions of a Cancer Rehabilitation Program Which Provides 12 Weeks Of Individualized Exercise Prescription
Travis Yahner1, Karen Wonders, FACSM2, Stephen LoRusso3. 1Saint Francis University, Loretto, PA. 2Maple Tree Cancer Alliance, Dayton, OH
Email: tpy100@francis.edu
(No relevant relationships reported)

Board #212 2:00 PM - 3:30 PM
Impact of Nutrient Intake During Exercise on Hydration Markers Following Exercise and Rehydration
Colleen X. Munoz1, Evan C. Johnson1, Laura J. Kunces2, Amy L. McKenzie2, Michael Winingerm2, Cory Butts2, Aaron Caldwell2, Adam Seal1, Brendon P. McDermott, FACSM3, Jakob L. Vingen, FACSM4, James Boyette1, Colin Melford1, Abigail Colburn1, Skylar Wright1, Ekow Dadzie2, Virgilio Lopez2, Lawrence E. Armstrong, FACSM5, Elaine C. Lee6, 1University of Hartford, West Hartford, CT. 2University of Wisconsin, La Crosse, WI. 3Thorne Research, Summerville, SC. 4Vita Health, San Francisco, CA. 5University of Arkansas, Fayetteville, AR. 6University of North Texas, Denton, TX
(No relevant relationships reported)

Board #213 2:00 PM - 3:30 PM
Effects of Caffeine Dose Timing on Total Urine Excretion during Sodium-Aided Hydration Protocols.
Shelby L. Greene1, Elizaveta Roslanova1, Phillip Wickenheiser1, David M. Morris1. 1University of Texas, Odessa, TX. 2University of Texas, Austin, TX. 3Rush University Medical Center, Chicago, IL
Email: shelbylgreene@outlook.com
(No relevant relationships reported)

Board #214 2:00 PM - 3:30 PM
Dehydration Impairs Accuracy and Increases Brain Activity During a Rhythmic Bimanual Choice Reaction Time Task
Matthew T. Wittbrodt1, Michael N. Sawkaw, FACSM2, J. C. Mizelle3, Regan R. Lawson1, Lewis A. Wheaton1, Mindy L. Millard-Stafford, FACSM2. 1Georgia Institute of Technology, Atlanta, GA. 2East Carolina University, Greenville, NC. 3University of South Carolina, Columbia, SC. (Sponsor: Mindy L. Millard-Stafford, FACSM)
(No relevant relationships reported)

Board #215 2:00 PM - 3:30 PM
Dehydration Has No Influence on Simulated Motor-Race Performance Despite Greater Cardiovascular and Thermoregulatory Demand
Justin J. Holland1, Christopher Irwin2, Tina L. Skinner1, Michael D. Leveritt3. 1Queensland University of Technology, Kelvin Grove, Australia. 2Griffith University, Gold Coast, Australia. 3The University of Queensland, St Lucia, Australia. (Sponsor: Professor Geoff Coombes, FACSM)
Email: justin.holland@qut.edu.au
(No relevant relationships reported)

Board #216 2:00 PM - 3:30 PM
Self-Reported Changes in Thirst and Alertness during Variable Prescribed Fluid Intake
Hillary A. Yoder1, Ainsley E. Huffman1, Carson L. Keeter1, Shane McCullough1, Erica T. Perrier2, Alberto Dolci2, Evan C. Johnson3. 1University of Wyoming, Laramie, WY. 2Danone Research, Palaiseau, France. 3University of Arkansas at Little Rock, AR. 4University of Connecticut, Storrs, CT. (Sponsor: Lawrence Armstrong, FACSM)
(No relevant relationships reported)

Free Communication/Poster - Hydration/Fluid Balance

Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

Board #217 2:00 PM - 3:30 PM
Impact of Qigong Baduanjin on Cognitive Function & Balance
Yan Zhao. CHENGDU SPORT INSTITUTE, CHENGDU, China
(No relevant relationships reported)
2061 Board #217 2:00 PM - 3:30 PM
Exercise Induced Hypohydration Reduces Subsequent Ad-libitum Food Intake
Lewis J. James1, Katie McMillian2, Emma Davies3, Ruth M. James3.
1Loughborough University, Loughborough, United Kingdom. 2National and Kapodistrian University of Athens, Greece. 3Biomedicine, Diagnostic and Research Laboratories, Martasia, Greece.
Email: chryssan@phed.uoa.gr
(Sponsor: Carl M. Maresh, FACSM)
Reported Relationships: No relevant relationships reported

2062 Board #218 2:00 PM - 3:30 PM
Influence Of Different Hydration Levels On Artistic Gymnastics Performance In Preadolescent And Adolescent Gymnasts
Costas Chryssanthopoulou1, Irini Charikleia Ragkousi1, Georgia Kapodistria1, Georgios Dallas1, Giannis Galeros1, Aikaterini Giannikopoulou1, Ionas Papassotiriou1, Ioannis Lamprovouli2, Maria Maridaki2. 1National and Kapodistrian University of Athens, Athens, Greece. 2Biomedicine, Diagnostic and Research Laboratories, Martasia, Greece.
Email: chryssan@phed.uoa.gr
(Sponsor: Carl M. Maresh, FACSM)
Reported Relationships: No relevant relationships reported

2063 Board #219 2:00 PM - 3:30 PM
The Effects of Mode of Rehydration on Subsequent Exercise-heat Challenge Performance
Linda Y. Yamamoto1, Elaine C. Lee1, Brendon P. McDermott1, Kathleen N. Beasley2, Holly Emmanuel2, Jeff S. Volek2, Douglas J. Casa, FACSM1, Lawrence E. Armstrong, FACSM2, William J. Kraemer, FACSM3, Carl M. Maresh, FACSM1. 1Central Connecticut State University, New Britain, CT. 2University of Connecticut, Storrs, CT. 3University of Arkansas, Fayetteville, AR. The Ohio State University, Columbus, OH. (Sponsor: Carl M. Maresh, FACSM)
Email: lindayamamoto@hotmail.com
(Sponsor: Carl M. Maresh, FACSM)
Reported Relationships: No relevant relationships reported

2064 Board #220 2:00 PM - 3:30 PM
Hydration And Gender Differences In Terms Of Non-oxidative Performance
Jessica Sudock1, Vincent Paolone, FACSM2, Cristina Winters2, Thomas Dodge1. 1Springfield College, Springfield, MA. 2International Institute for Athletic Development, Simsbury, CT. (Sponsor: Dr. Sam Headley, FACSM)
Email: jdudock@springfieldcollege.edu
(Sponsor: Dr. Sam Headley, FACSM)
Reported Relationships: No relevant relationships reported

2065 Board #221 2:00 PM - 3:30 PM
Effects Of Caffeine Dose Timing On The Time-course Of Diuresis During Sodium-augmented Hyperhydration.
David M. Morris1, Shelby Greene1, Elizaveta Roslanova2, Phillip Wickenheiser3. 1University of Texas, Odessa, TX. 2University of Texas, Odessa, TX. 3University of Texas, Odessa, TX. (Sponsor: Dr. Sam Headley, FACSM)
Email: morris_d@utpb.edu
(Sponsor: Dr. Sam Headley, FACSM)
Reported Relationships: No relevant relationships reported

2066 Board #222 2:00 PM - 3:30 PM
Racial Differences in 24 Hour Urinary Hydration Markers
Email: wmadams@uncg.edu
(Sponsor: Carl M. Maresh, FACSM)

2067 Board #223 2:00 PM - 3:30 PM
Hydration Knowledge and Behavior in Youth Mountain Bike Teams
Natasha A. Brand1, Stavros A. Kavouras, FACSM2, Erin K. Howie Hickey1, Dean R. Gorman1. 1University of Arkansas, Fayetteville, AR. 2Arizona State University, Phoenix, AZ. (Sponsor: Stavros Kavouras, FACSM)
Email: nbrand@uaark.edu
(No relevant relationships reported)

2068 Board #224 2:00 PM - 3:30 PM
Afternoon Urine Osmolality Is Equivalent To 24-h In Healthy 3-13 y Children
HyunGyu Suh1, LynnDee G. Summers2, Adam D. Seal1, Andy Mounromoutakos2, Jeanne H. Bottin1, Erica T. Perrier1, Stavros A. Kavouras, FACSM1, 2University of Arkansas, Fayetteville, AR. 3University of Arkansas, Phoenix, AZ. 4Danone Research, Palaiseau, France. (Sponsor: Stavros A. Kavouras, FACSM)
Email: haush5@asu.edu
(No relevant relationships reported)

D-65 Free Communication/Poster - Thermoregulation/Hyperthermia
Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

2069 Board #225 2:00 PM - 3:30 PM
Comparison of Skin Cleaning Methods for Measurement of Regional Sweat Electrolyte Concentrations
Shyretha D. Brown1, Kelly A. Barnes1, Ryan P. Nuccio1, Corey T. Ungaro1, Adam J. Reimel1, Peter D. De Chavez1, Lindsay B. Baker, FACSM. 1Gatorade Sports Science Institute, Barrington, IL. 2PepsiCo R&D, Barrington, IL.
Reported Relationships: S.D. Brown: Salary; Gatorade Sports Science Institute, PepsiCo Inc. The views expressed in this abstract are those of the authors and do not necessarily reflect the position or policy of PepsiCo, Inc.

2070 Board #226 2:00 PM - 3:30 PM
Epifluidic Colorimetric Patch for On-Skin Analysis of Regional Sweat Chloride Concentration during Laboratory-based Exercise
Lindsay B. Baker, FACSM1, Ryan P. Nuccio1, Corey T. Ungaro1, Shyretha D. Brown1, Adam J. Reimel1, Alexander J. Aranyosi2, Stephen P. Lee2, Jeffrey B. Model2, Roozbeh Ghaifari2, Kelly A. Barnes1, 1Gatorade Sports Science Institute, Barrington, IL. 2Epifluidic Biosystems Inc, Cambridge, MA. Email: lindsay.baker@pepsico.com
Reported Relationships: L.B. Baker: Salary; Gatorade Sports Science Institute, PepsiCo Inc. The views expressed in this abstract are those of the authors and do not necessarily reflect the position or policy of PepsiCo, Inc.

2071 Board #227 2:00 PM - 3:30 PM
Skin Tattoos Do Not Affect Exercise-induced Sweat Rate Or Sodium Concentration.
Ethan Rogers1, Gregory Cox2, Chris Irwin1, Danielle McCartney2, Ben Desbrow1. 1Griffith University, Gold Coast, Australia. 2Bond University, Gold Coast, Australia. (Sponsor: Louise Burke, FACSM)
Email: ethan.rogers@griffith.edu.au
(No relevant relationships reported)

2072 Board #228 2:00 PM - 3:30 PM
Comparison of Sports-Oriented Sweat Prediction Equation Performances During Running
Kurt J. Sollanek1, Mia Liu1, Andrei Carbollo1, Samuel N. Cheuvront, FACSM2. 1Sonoma State University, Rohnert Park, CA. 2Sports Science Synergy, LLC, Franklin, MA.
Email: sollanek@sonoma.edu
Reported Relationships: K.J. Sollanek: Other (please describe): Travel support for Dr. Sollanek provided by Sports Science Synergy, LLC.
Board #230  2:00 PM - 3:30 PM
Validity of Calculated Core Temperature From Heart Rate Measured by an Electronic Vest
James M. Pivarnik, FACSM, Montana L. Pruett, David P. Ferguson. Michigan State University, East Lansing, MI (No relevant relationships reported)

Board #231  2:00 PM - 3:30 PM
Physiological Strain Index Of Female Wheelchair Basketball Players During Competition
Heather M. Logan-Sprenger. UOIT, Oshawa, ON, Canada. (Sponsor: Lawrence Spriet, FACSM) Email: heather.sprenger@uoit.ca (No relevant relationships reported)

Board #232  2:00 PM - 3:30 PM
Effects of Passive Heating on Perfusion and Diffusive Microvascular Oxygen Delivery
Kaylin D. Didier, Lillie M. Huckaby, Andrew M. Alexander, Shane M. Hamner, Cannyn N. Webster, Thomas J. Barstow, FACSM. Kansas State University, Manhattan, KS (No relevant relationships reported)

Board #233  2:00 PM - 3:30 PM
Effect of Heat and Humidity on the Inflammatory Response During Aerobic Exercise
Kylene Boka1, Brandon M. Gibson1, Jeremiah A. Vaughn2, Brittany N. Followay3, Eliott Arroyo1, Joseph A. Laudato1, Ellen L. Glickman, FACSM1. (Sponsor: Ellen L. Glickman, FACSM) (No relevant relationships reported)

Board #234  2:00 PM - 3:30 PM
Examining the Impact of a Prospective WBGT Heat Policy on High School Football Practices
Rebecca M. Lopez, Patrick Gorrell, Gianluca Del Rossi. University of South Florida, Tampa, FL. (Sponsor: Douglas Casa, FACSM) Email: rlopez@health.usf.edu (No relevant relationships reported)

Board #235  2:00 PM - 3:30 PM
An Evaluation of Race Car Cockpit Temperature as an Indicator of Thermal Stress in Race Car Drivers
Samuel C. Barthel, David P. Ferguson. Michigan State University, East Lansing, MI Email: samuelbarthel45@gmail.com (No relevant relationships reported)

Board #236  2:00 PM - 3:30 PM
Relationships between Body Temperatures Changes with Exercise Performance
Adam R. Jajtner1, Brittany N. Followay2, Jeremiah A. Vaughan3, Eliott Arroyo1, Brandon M. Gibson3, Joseph A. Laudato1, Ellen L. Glickman, FACSM1. (Sponsor: Ellen Glickman, FACSM) (No relevant relationships reported)

Board #237  2:00 PM - 3:30 PM
Comparison of Physiological Strain Index and Core Temperature Rise for Classifying Heat Tolerance Among Warfighters
Jay H. Heaney1, Andrew J. Ordille2, Katherine M. Wilson3, Douglas M. Jones4.1 Naval Health Research Center, San Diego, CA. 2Innovative Employee Solutions, San Diego, CA. 3Leidos Inc., San Diego, CA (No relevant relationships reported)

Board #238  2:00 PM - 3:30 PM
Establishing a Physiological Strain Index Criterion During the Final Sixty Minutes of Heat Tolerance Testing
Douglas M. Jones1, Andrew J. Ordille2, Katherine M. Wilson1, Jay H. Heaney1. Leidos, Inc., San Diego, CA. (Sponsor: Innovative Employee Solutions, San Diego, CA) (No relevant relationships reported)

Board #239  2:00 PM - 3:30 PM
Interpretations of Physiological Strain Index During Heat Tolerance Testing
Andrew J. Ordille, Douglas M. Jones, Katherine M. Wilson, Jay H. Heaney. Naval Health Research Center, San Diego, CA Email: a.ordille94@gmail.com (No relevant relationships reported)

Board #240  2:00 PM - 3:30 PM
Thermal Behavior Does not Differ Between Sexes During and Following High Intensity Aerobic Exercise
Randi L. Snopkowski1, Nicole Vargas1, Christopher Chapman1, Blair Johnson1, Rob Gathercole2, Zachary Schlader, FACSM1. 1University at Buffalo, Buffalo, NY. 2lululemon athletica inc., Vancouver, BC, Canada. (Sponsor: Zachary Schlader, FACSM) (No relevant relationships reported)

Board #241  2:00 PM - 3:30 PM
Exercise Intensity Independently Modulates Thermal Behavior During Exercise Recovery, But Not During Exercise
Nicole T. Vargas1, Christopher L. Chapman1, Blair D. Johnson1, Rob Gathercole2, Zachary J. Schlader, FACSM1. 1University at Buffalo, Buffalo, NY. 2lululemon athletica inc., Vancouver, BC, Canada. (Sponsor: Zachary J. Schlader, FACSM) Email: ntvargas@buffalo.edu (No relevant relationships reported)

Board #242  2:00 PM - 3:30 PM
Circulating Mcp-1 Associated With Prolonged Cycling In Hot Temperature
Cody Daluane1, Eliott Arroyo2, Emily Tagesen3, Joseph Laudato1, Ellen Glickman, FACSM2, Adam Jajtner1, Brittany Followay2, Jeremiah Vaughan3. 1Kent State University, Kent, OH. 2Ripon College, Ripon, WI. 3Benidji State University, Bemidji, MN. (Sponsor: Ellen G. Glickman, FACSM) Email: cdulane1@kent.edu (No relevant relationships reported)

Board #243  2:00 PM - 3:30 PM
Heat Acclimation Causes Profound Post-Exercise Hypotension and Favorable Improvements in Lipid and Immune Profiles
Eric Rivas1, Oscar E. Suman, FACSM1. 1Texas Tech University, Lubbock, TX. 2University of Texas Medical Branch, Galveston, TX. 3Texas Woman’s University, Denton, TX. (Sponsor: Oscar E. Suman, FACSM) Email: eric.rivas@ttu.edu (No relevant relationships reported)
| Board #244 | 2:00 PM - 3:30 PM | Quantifying the Environmental Thermal Conditions that Exist During Summer Track Meets in South Texas  
Juan Gonzalez, The University of Texas Rio Grande Valley, Edinburg, TX. (Sponsor: Alexis Ortiz, FACSM)  
(No relevant relationships reported) |
| Board #245 | 2:00 PM - 3:30 PM | Metabolic Recovery Response During Seated Rest In Hot Environment  
Jeremiah A. Vaughan¹, Brittany N. Followay², Adam R. Jajtner¹, Ellen L. Glickman, FACSM³, ¹Bemidji State University, Bemidji, MN. ²Ripon College, Ripon, WI. ³Kent State University, Kent, OH. (Sponsor: Ellen L. Glickman, FACSM)  
Email: jvaughan@bemidjistate.edu  
(No relevant relationships reported) |
| Board #246 | 2:00 PM - 3:30 PM | Wireless Real-Time Transistor-Based Skin Temperature Data Acquisition System  
Audrey Johnson, Nisha Charkoudian, FACSM, USA. (Sponsor: Nisha Charkoudian, FACSM)  
(No relevant relationships reported) |
| Board #247 | 2:00 PM - 3:30 PM | Prefrontal Cortex Oxygenation and Haemodynamics during a Long Duration Incremental Exercise Protocol while wearing Personal Protective Equipment  
Lynneth Stuart-Hill¹, Cory Coehoorn¹, Patrick Neary², Olave Krigolson¹. ¹University of Victoria, Victoria, BC, Canada. ²University of Regina, Regina, SK, Canada  
(No relevant relationships reported) |
| Board #248 | 2:00 PM - 3:30 PM | The Effect of Rapid and Slow Heat Acquisition on Body Weight and Blood Glucose Levels  
Rozhin Mohammadrezaei, Cory Coehoorn, Lynneth Stuart-Hill, University of Victoria, Victoria, BC, Canada  
(No relevant relationships reported) |
| Board #249 | 2:00 PM - 3:30 PM | Effect of Dietary Nitrate Supplementation with Beet Root Juice on Thermoregulatory and Cardiovascular Responses to Extreme Heat in Aged Humans  
Matthew N. Cramer, Mu Huang, Michiarih Hieda, Gilbert Moralez, Craig G. Crandall, FACSM, Institute for Exercise and Environmental Medicine, Dallas, TX. (Sponsor: Craig Crandall, FACSM)  
Email: matthewcramer2@texashealth.org  
(No relevant relationships reported) |
| Board #250 | 2:00 PM - 3:30 PM | Effects On Skin Temperature of Marathon Running in a Hot Humid Environment  
Daniel Rojas-Valverde¹, Randall Gutierrez-Vargas¹, Braulio Sanchez-Ureña¹, Jeffrey M. Mjaanes². ¹National University, Heredia, Costa Rica. ²Kent State University, Kent, OH. (Sponsor: Jeffrey M. Mjaanes, FACSM)  
Email: drojasav@hotmail.com  
(No relevant relationships reported) |
| Board #251 | 3:30 PM - 5:00 PM | Myokine Responses To Resistance Exercise In Prader-willi Syndrome  
Naama W. Constantini, FACSM, Varda Gross-Tsur, Yanir Sabag, Yehuda Pollack, Shachar Nice, Harry J Hirsch. Shaula Zedek Medical Center, Jerusalem, Israel  
Email: naamacos@gmail.com  
(No relevant relationships reported) |
| Board #252 | 3:30 PM - 5:00 PM | Endocrine Responses After Acrobic Exercise Under Inhibition/ Stimulation Of Hpa Axis In Healthy Adult Males.  
Maria Douria Mitracahi. National and Kapodistrian University of Athens, Athens, Greece. (Sponsor: Kathryn Schmitz, FACSM, FACSM)  
Email: maria@mitracakis.gr  
(No relevant relationships reported) |
| Board #253 | 3:30 PM - 5:00 PM | Modeling Growth Hormone Dynamics through Indices of Cardiac Control at Rest and Exercise  
Nathaniel T. Berry, Chris K. Rhea, Laurie Wideman, FACSM. University of North Carolina at Greensboro, Greensboro, NC. (Sponsor: Laurie Wideman, FACSM)  
Email: nberry11@gmail.com  
(No relevant relationships reported) |
| Board #254 | 3:30 PM - 5:00 PM | The Effects of Acute Ultraviolet Light Exposure on Post-Resistance Exercise Serum Testosterone in Older Men  
Alec Wallace, Shayan Emanjomeh, Luis Segura, Josh A. Cotter, PhD, Evan E. Schick, PhD. California State University, Long Beach, Long Beach, CA  
(No relevant relationships reported) |
| Board #255 | 3:30 PM - 5:00 PM | Effects Of Exercise On The Expression Changes Of Kiss-1/ gpr54 In Testis Of Rats In Growth Phase  
JUNPENG FENG, YI YAN. BEIJING SPORT UNIVERSITY, BEIJING, China  
Email: bsfengjunpeng@163.com  
(No relevant relationships reported) |
| Board #256 | 3:30 PM - 5:00 PM | Effects Of Exercise On Hypothalamic Kisspeptin/gpr54 Signaling Pathway Of High-fat-diet-feeding Growing Rats  
Yi Yan, XU Rui. Beijing Sport University, Beijing, China. (Sponsor: Yanyi22@sina.com  
(No relevant relationships reported) |
| Board #257 | 3:30 PM - 5:00 PM | Salivary and Serum Cortisol Proportion Dynamics Are Impacted by High-Intensity Exercise  
Travis Anderson, Nathaniel T. Berry, Laurie Wideman, FACSM. University of North Carolina at Greensboro, Greensboro, NC  
Email: t_ander2@uncg.edu  
(No relevant relationships reported) |
| Board #258 | 3:30 PM - 5:00 PM | Effect of the Menopausal Transition on Physical Performance: A Longitudinal Study  
Dmitriy Bondarev¹, Taija Finni¹, Pauliina Aukece², Katja Kokko³, Urho M. Kujala¹, Vuokko Kovanen¹, Eija K. Laakkonen², Sarianna Sipilä³. ¹University of Jyvaskyla, Jyväskylä, Finland. ²Central Finland Central Hospital, Jyväskylä, Finland  
Email: dmitriy.d.bondarev@jyu.fi  
(No relevant relationships reported) |
2103 Board #259 3:30 PM - 5:00 PM
The Relationship Between Oral Contraceptive Use With Total Hydroxyvitamin D And Its Metabolites In Young Adult Women
Julie P. Greeves1, Jonathan CY Tang2, Sarah Jackson1, Neil P. Walsh, FACSMD, Rachel M. Izard2, William D. Fraser2. 1Army Headquarters, Andover, United Kingdom. 2University of East Anglia, Norwich, United Kingdom. 3Bangor University, Bangor, United Kingdom. 4Army Recruiting and Initial Training Command, Upavon, United Kingdom. (Sponsor: Professor Neil Walsh, FACSMD)
Email: julie.greeves143@mod.gov.uk (No relevant relationships reported)

2104 Board #260 3:30 PM - 5:00 PM
Changes in Salivary Cortisol and Iga Levels Are Associated with Fatigue after Acute Endurance Exercise
Natsuka Hashizume1, Natsuki Hasegawa1, Naoki Horii1, Maki Yoshikawa1, Katsunori Tsai1, Masataka Uchida1, Keiko Iemitsu1, Takeshi Hashimoto1, Kiyoshi Sarada1, Masao Kanamaru1, Kohei Watanabe1, Motoyuki Iemitsu1. 1Ritsumeikan University, Kusatsu, Japan. 2National Cancer Center Research Institute, Tokyo, Japan. 3Chukyo University, Aichi, Japan
Email: natsukah@nkm.ac.jp (No relevant relationships reported)

2105 Board #261 3:30 PM - 5:00 PM
Body Trajectory in Competitive Athletes
Gal Dubnov-Raz1, Ran Efrat1, Shiran Leib2, Amir Rimon2, Miki Gelbart1, Yoni Yaroul1, Tamer Ziv-Baran1. 1Sheba Medical Center, Tel Hashomer, Israel. 2Tel Aviv University, Tel Aviv, Israel. 3Medic Sport Medicine Center, Tel Aviv, Israel
Email: gal-d@bezeqint.net (No relevant relationships reported)

2106 Board #262 3:30 PM - 5:00 PM
Effects Of Collagen Gene Polymorphisms On Ligament Injury In Weight-lifting Athletes
Yusuke Sekimoto, Yota kедуaka, Yuto Mizutome, Shinohara1, Motoyuki Iemitsu1, Ayami Nun1, Keiko Iemitsu1, Shunpei Fujie1, Natsuki Hasegawa1, Naoki Horii1, Masataka Uchida1, Izumi Tabata, FACSMD, Yasushi Shinohara1, Motoyuki Iemitsu1. 1Ritsumeikan University, Kusatsu, Japan. 2National Cancer Center Research Institute, Tokyo, Japan. 3Chukyo University, Aichi, Japan
Email: alecsekaterina@gmail.com (No relevant relationships reported)

2107 Board #263 3:30 PM - 5:00 PM
The Effect Of FTO rs9969309 Polymorphism On Body Composition in Chinese adults
Chunbo Qin1, Xi Jin1, Ji Li1, Daizi Xie1, Xin Zhao1, Mark Loftin, FACSMD. 1Shenzhen University, Shenzhen, China. 2The University of Mississippi, University, MS. 3The Sixth Hospital of Shenzhen, Shenzhen, China. (Sponsor: Mark Loftin, FACSMD)
Email: 67696054@qq.com (No relevant relationships reported)

2108 Board #264 3:30 PM - 5:00 PM
The Association Between Met1 T1470A And Ace I/d Polymorphisms And Athletic Status In Climbing Athletes
Mika Saito, Jou Takahira, Sakura Daiku, Souichiro Miyaiuch, Naoki Kikuchi. 1, Ran Efrati2, Shiran Leib2, Amir Rimon2, Miki Gelbart1, Yoni Yaroul1, Tamer Ziv-Baran1. 1Sheba Medical Center, Tel Hashomer, Israel. 2Tel Aviv University, Tel Aviv, Israel. 3Medic Sport Medicine Center, Tel Aviv, Israel
Email: natsukah@nkm.ac.jp (No relevant relationships reported)

2109 Board #265 3:30 PM - 5:00 PM
Association Between Mitochondrial Dna Sequence, Heteroplasmyn, And Indels With Response To Aerobic Exercise Training
Heather L. Vellers1, Kirsten C. Verhein2, Steven R. Kleeberger2, Adam B. Burkholder2, J. Timothy Lightfoot, FACSMD, Jacqui Marze2, Claude Bouchard, FACSMD. 1Texas Tech University, Lubbock, TX. 2National Institute of Environmental Health Sciences, Research Triangle Park, NC. 3Texas AM University, College Station, TX. 4Pennington Biomedical Research Center, Baton Rouge, LA. (Sponsor: J. Timothy Lightfoot, Ph.D., FACSMD)
Email: Heather.Vellers@ttu.edu (No relevant relationships reported)

2110 Board #266 3:30 PM - 5:00 PM
Circulating DNA As A Monitoring Tool In Professional Soccer
Nils Haller, Tobias Ehler, Sebastian Schmidt, Perikles Simon. 1Sports Medicine, Mainz, Germany
Email: nhaller@uni-mainz.de (No relevant relationships reported)

2111 Board #267 3:30 PM - 5:00 PM
A Genome-wide Association Study For Muscle Fiber Composition
Ekaterina A. Semenova1, Eugenia A. Boudygin2, Elena V. Valeeva3, Elana S. Kostryukova1, Nickolay A. Kulemin4, Oleg V. Borisov4, Sofya A. Khabibova4, Andrey K. Larin1, Ekaterina V. Lyubaveva3, Danii V. Popov1, Evgeny A. Lysenko1, Tatiana F. Vepkhvadze4, Egor M. Lednev5, Edward V. Generozov4, Ildus I. Ahmetov4. 1Kazan Federal University; Federal Research and Clinical Center of Physical-Chemical Medicine; Kazan, Russian Federation. 2Kazan State Medical University, Kazan, Russian Federation. 3Federal Research and Clinical Center of Physical-Chemical Medicine, Moscow, Russia. 4Institute of Biomedical Problems of the Russian Academy of Sciences, Moscow, Russian Federation. 5Federal Research and Clinical Center of Physical-Chemical Medicine; Kazan State Medical University, Moscow, Russian Federation
Email: alesskaterina@gmail.com (No relevant relationships reported)

2112 Board #268 3:30 PM - 5:00 PM
Genetic Modulation of Hypothalamic Pituitary Adrenal Function in Specialized Military Men
Marcus K. Taylor, FACSMD, Lisa M. Hernández1, D Christine Laver2, Douglas A. Granger2. 1Naval Health Research Center, San Diego, CA. 2University of California, Irvine, Irvine, CA
Email: nhaller@uni-mainz.de (No relevant relationships reported)

2113 Board #269 3:30 PM - 5:00 PM
Effects of Collagen Gene Polymorphisms on Tendon And Ligament Inflammations in Japanese Male Endurance Athletes.
Ayami Numa1, Keiko Iemitsu1, Shunpei Fujie1, Natsuki Hasegawa1, Naoki Horii1, Masataka Uchida1, Izumi Tabata, FACSMD, Yasushi Shinohara1, Motoyuki Iemitsu1. 1Ritsumeikan University, Kusatsu, Japan. 2National Cancer Center Research Institute, Tokyo, Japan. 3Chukyo University, Aichi, Japan
Email: alecsekaterina@gmail.com (No relevant relationships reported)

2114 Board #270 3:30 PM - 5:00 PM
KCNAA4 Gene Variant is Auxiliary in the Complex Phenotype of Endurance Running Performance Level
Keven Flecha-Velazquez1, Thomas D. Fahey2, Juan L. Martinez-Barreda3, Juan R. Lopez-Taylor4, Miguel A. Rivera1. 1University of Puerto Rico, San Juan, Puerto Rico. 2California State University, Chico, Chico, CA. 3Hospital Civil de Culiacan, Culiacan, Mexico. 4University of Guadalajara, Guadalajara, Mexico
Email: sa123ka.v@gmail.com (No relevant relationships reported)
**P150 Final Program**

**2115 Board #271 3:30 PM - 5:00 PM**

**Association Of Circulating Cell-free DNA Released During Physical Exercise With Extracellular Vesicles**

Elmo Neuberger, Alexandra Bramer, Berin Boztepe, Eva-Maria Krämer-Albers, Perikles Simon. University of Mainz, Mainz, Germany

Email: neuberger@uni-mainz.de

(No relevant relationships reported)

**2116 Board #272 3:30 PM - 5:00 PM**

**Athletic Training Educator Concussion Symptomology Prioritization for Clinical Decision-Making Compared to Typical Symptom Presentation**

Melissa C. Kay, Bridget M. Sturch, Johna K. Register-Mihalik. University of North Carolina - Chapel Hill, Chapel Hill, NC. (Sponsor: Kevin Guskiewicz, FACSM)

Email: mckay@email.unc.edu

(No relevant relationships reported)

**2117 Board #273 3:30 PM - 5:00 PM**

**No Effect Of Randomizing Concussion Symptom Presentation On Symptom Number Or Severity Reporting**

Kathryn L. O’Connor, Lauren Dougherty, Griffin J. Feinberg, Andrew Lapointe, Steven Broglio, FACSM. University of Michigan, Ann Arbor, MI. (Sponsor: Steven P Broglio, FACSM)

Email: kloconn@umich.edu

(No relevant relationships reported)

**2118 Board #274 3:30 PM - 5:00 PM**

**Adult Perception of a Child’s Sport Concussion Risk**

Allyssa K. Memmin1, Kathryn L. Van Pelt1, Alissa H. Wicklund1, Steven P. Broglio, FACSM. University of Michigan, Ann Arbor, MI. (Sponsor: Orthopaedic and Spine Center of the Rockies, Fort Collins, CO.)

Email: akontos@pitt.edu

(No relevant relationships reported)

**2119 Board #275 3:30 PM - 5:00 PM**

**Changes in Fixational Eye Movements following Concussion**

Anthony P. Kontos1, Bianca T. Leonard1, Valerie C. Snyder1, Cyndi Holland2, Min Zhang1, Ethan S. Bensing2, Christy K. Sheely2, Michael W. Collins1. University of Pittsburgh, Pittsburgh, PA. (Sponsor: Orthopaedic and Spine Center of the Rockies, Fort Collins, CO.)

Email: akontos@pitt.edu

(No relevant relationships reported)

**2120 Board #276 3:30 PM - 5:00 PM**

**Examining Persistent Deficits in Gait Utilizing Inertial Measurement Units**

Griffin J. Feinberg, Andrew P. Lapointe, Kathryn L. Van Pelt, Lauren A. Dougherty, Allyssa Memmin1, Katherine M. Breedlove, Steven P. Broglio, FACSM. University of Michigan, Ann Arbor, MI. (Sponsor: Orthopaedic and Spine Center of the Rockies, Fort Collins, CO.)

Email: akontos@pitt.edu

(No relevant relationships reported)

**2121 Board #277 3:30 PM - 5:00 PM**

**Interater And Intrarater Reliability Of The Standard Assessment Of Tackling Technique (SATT) On Secondary School Football Athletes**

Scott Dietrich1, Braden Lawson2, Jane McDevitt3. Kansas State University, Manhattan, KS. (Sponsor: University of Maine, Maine, Germany)

Email: sdietchir@ksu.edu

(No relevant relationships reported)

**D-68 Free Communication/Poster - Concussion II**

**Thursday, May 30, 2019, 1:00 PM - 6:00 PM**

**Room: CC-Hall WA2**

**2122 Board #278 3:30 PM - 5:00 PM**

**Effects Of 3D Multiple Object Tracking On Head Impacts During A Collegiate Ice Hockey Season**

Anna Sessa, Daniel Antonoff, Jordan Goss, Taylor Langevin, Christina Renodin, Lee Spahr, John Rosene. University of New England, Biddeford, ME

Email: assessa@une.edu

(No relevant relationships reported)

**2123 Board #279 3:30 PM - 5:00 PM**

**Concurrent Validity and Reliability of the XLNTrain Balance Test with the Balance Error Scoring System**

Ashley Santo, Danielle Brown. Towson University, Towson, MD

(No relevant relationships reported)

**2124 Board #280 3:30 PM - 5:00 PM**

**Balance And Cognitive Recovery Following Concussion Injury Is Associated With Initial Symptom Severity**

Christopher G. Neville1, Michael VanNostrand1, Andrew Brindle2, Brian Rieger1. Upstate Medical University, Syracuse, NY. (Sponsor: Quadrant Biosciences Inc, Syracuse, NY)

Email: nevillecc@upstate.edu

(No relevant relationships reported)

**2125 Board #281 3:30 PM - 5:00 PM**

**Reliability of the Stability Evaluation Test Over Consecutive Annual Baseline Assessments**

Theresa L. Miyashita1, Eleni Diakogeorgiou1. Concordia University - Chicago, River Forest, IL. Southern Connecticut State University, New Haven, CT

Email: theresa.miyashita@cuchicago.edu

(No relevant relationships reported)

**2126 Board #282 3:30 PM - 5:00 PM**

**Relationship Of Vestibular/ocular Motor Symptoms And Impairment On State Anxiety In Athletes With Sport-related Concussion**


(No relevant relationships reported)

**D-69 Free Communication/Poster - Exercise Testing II**

**Thursday, May 30, 2019, 1:00 PM - 6:00 PM**

**Room: CC-Hall WA2**

**2127 Board #283 3:30 PM - 5:00 PM**

**Comparison of Whole and Regional Body Composition Testing Devices**

Rachel N. Tauber, Shuai Zhang, Clayton L. Camic, Peter J. Chomentowski III. Northern Illinois University, Dekalb, IL

Email: rtauber@niu.edu

(No relevant relationships reported)

**2128 Board #284 3:30 PM - 5:00 PM**

**Relationship Between Cardiorespiratory Fitness and Arterial Stiffness in Healthy Adults**

Hannah E. Remington, Daniel R. Elston, Bradley S. Fleenor, Matthew P. Harber, FACSM. Ball State University, Muncie, IN

(No relevant relationships reported)

**2129 Board #285 3:30 PM - 5:00 PM**

**Relationships Among Muscle Function, Skeletal Muscle Mass, and Arterial Stiffness**

Olivia E. Jones, Daniel E. Elston, Bradley S. Fleenor, Matthew P. Harber, FACSM. Ball State University, Muncie, IN. (Sponsor: Matthew P. Harber, FACSM)

(No relevant relationships reported)
2130 Board #286  3:30 PM - 5:00 PM  
*Effect Of Exercise On Reserve Of Repolarization And Blood Stress Markers*  
Allan H. Goldfarb, FACSM, Joseph Starobin, Blair Wisco, Kerry Martin, Alexis Slutsky, Kirsten Ward. Univ. of North Carolina Greensboro, Greensboro, NC.  
Email: ahgoldfa@uncg.edu  
(No relevant relationships reported)

2131 Board #287  3:30 PM - 5:00 PM  
*Poor Cardiorespiratory Fitness Is Associated With Higher Risk of Infectious Events in Kidney Transplant Recipients*  
Sara Ortolan, Daniel Neuhausaeuser, Alessandro Patti, Francesca Battista, Mattia Grassi, Andrea Gasperetti, Lucrezia Furian, Andrea Emolio. University of Padova, Padova, Italy.  
Email: sara.ortolan88@gmail.com  
(No relevant relationships reported)

2132 Board #288  3:30 PM - 5:00 PM  
*<Effect Of Menstrual Cycle On Resting, Exercise And Post-exercise Heart Rate In Healthy Women>*  
Email: giovannacunha@hotmail.com  
(No relevant relationships reported)

2133 Board #289  3:30 PM - 5:00 PM  
*A Pilot Observational Study Investigating The Impact Of Glycogen Storage Disease III On Aerobic Capacity*  
Philip J. Hennis1, David Tomlinson2, Gurinder Rayat1, Elaine Murphy1. 1Nottingham Trent University, Nottingham, United Kingdom. 2Manchester Metropolitan University, Manchester, United Kingdom.  
(No relevant relationships reported)

2134 Board #290  3:30 PM - 5:00 PM  
*Inflammation and Muscle Oxygen Saturation are Associated with Exercise Pressor Response in Peripheral Artery Disease*  
Polly Montgomery, Marcos Kurosi, Ming Wang, Danielle Jin-Kwong Kim, Andrew Gardner. Penn State University, Hershey, PA.  
(No relevant relationships reported)

2135 Board #291  3:30 PM - 5:00 PM  
*Effects of Combined Exercise on Vascular Inflammatory Markers and Arterial Stiffness in Elderly Women*  
Jung-Sook Kim1, Soo-Min Ha1, Soo-Hin Hyun1, Do-Yeon Kim1, Jong-Won Kim1. 1Pusan National University, Busan, Korea, Republic of.  
(No relevant relationships reported)

2136 Board #292  3:30 PM - 5:00 PM  
*Olympic Distance Amateur Triathlete Chromosome Profile*  
Paulo Puccinelli1, Vânia D’Almeida1, Giscard Lima1, Claudio Lima2, Moines Cohen1, Mariila Andrade1. 1UNIFESP, São Paulo, Brazil. 2UFG, Goiânia, Brazil.  
Email: paulopuccinelli@hotmail.com  
(No relevant relationships reported)

2137 Board #293  3:30 PM - 5:00 PM  
*The Effect Of Time Of Day On Jump Potentiation In Distance Runners*  
Email: elaine.vieira@ucb.br  
(No relevant relationships reported)

2138 Board #294  3:30 PM - 5:00 PM  
*Effects Of Time Restricted Feeding On Metabolism Depression And Circadian Rhythms*  
(No relevant relationships reported)

2139 Board #295  3:30 PM - 5:00 PM  
*Circadian Phase Is Associated With Self-reported Chronotype In Young, Sedentary Adults*  
J. Matthew Thomas, Julie S. Pendergast, W. Scott Black, Philip A. Kern, Jody L. Classay, FACSM. University of Kentucky, Lexington, KY.  
(No relevant relationships reported)

2140 Board #296  3:30 PM - 5:00 PM  
*Social Jetlag Is Associated With Higher Evenness Index*  
Stephanie Witze1 Esteses Alves, Olívia Francisco Antunes, Marcos Mônica-Neto, Hanna Karen Moreira Antunes. Universidade Federal de São Paulo, São Paulo, Brazil.  
Email: stephanie.witzel@gmail.com  
(No relevant relationships reported)

2141 Board #297  3:30 PM - 5:00 PM  
*Effects of Aerobic Physical Exercise Performed Under Hypoxic Conditions on Melatonin*  
Valdir A. Lemos1, Ronaldo Vagner Thomatieli Dos Santos1, Hanna Karen Moreira Antunes1, Claus Behri1, Gines Viscor2, Fabio Lira3, Aline Carisi4, Sergio Tudí1, Marco Tuílo De Mello. 1Federal University of São Paulo, São Paulo, Brazil. 2Faculty of Medicine, University of Chile, Santiago, Chile. 3University of Barcelona, Barcelona, Spain. 4University of the State of São Paulo, Presidente prudente, Brazil.  
Email: aquino.lemos@terra.com.br  
(No relevant relationships reported)

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D-71 Basic Science World Congress/Poster - Muscle, Movement and Sleep  
Thursday, May 30, 2019, 1:00 PM - 6:00 PM  
Room: CC-Hall WA2

2142 Board #298  3:30 PM - 5:00 PM  
*Investigations of Sleep Quality Disturbances and Its Associations with Respiratory Functions and Depression Level among Young Adults with Down’s Syndrome*  
Email: errugulsafran@hotmail.com  
(No relevant relationships reported)

2143 Board #299  3:30 PM - 5:00 PM  
*Elastic Band Resistance Training Effects on Strength and Sleep of Shift Workers*  
Marcio T. de Mello, Diego A. Borba, Lucas A. Facundo, Fernanda V. Narciso, Andressa Silva. Universidade Federal de Minas Gerais, Belo Horizonte, Brazil.  
Email: tmello@demello.net.br  
(No relevant relationships reported)

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P152 Final Program

Board #300 3:30 PM - 5:00 PM
Impact Of Sleep Deprivation On Flexibility Performance
Fernanda Veruska Narciso, Beatriz M. Pereira, Andressa Silva, Mauro H. Chagas, Matheus M. Reis,Carlos Amaro Costa, Valdenio M. Brant, Lucas A. Facundo, Aline A. Cruz, Marco Tulio de Mello. 
Universidade Federal de Minas Gerais, Belo Horizonte, Brazil.
(No relevant relationships reported)

Board #301 3:30 PM - 5:00 PM
Effects Of Sleep Deprivation On Histopathological Changes And Oxidative Damage In Different Type Muscle Fibers
Marcos Mônico-Neto1, Kil Sun Lee1, Daniel Araki Ribeiro2, Caroline Margonato Cardoso2, Luciana Le Suer Maluf2, Hanna Karen Moreira Antunes2,1Federal University of Sao Paulo, Sao Paulo, Brazil. 2 Federal University of Sao Paulo, Santos, Brazil.
Email: marcosmoniconeto@gmail.com
(No relevant relationships reported)

Board #302 3:30 PM - 5:00 PM
The Effect of Acute Sleep Restriction on Running Mechanics during an Exhaustive Run
Reiley T. Bergin, Nicholas R. Heebner, Cheyenne DeRaymond, Amanda C. Glueck, John Abt, FACSM, Stuart Best. University of Kentucky, Lexington, KY.
(Sponsor: John Abt, FACSM)
(No relevant relationships reported)

Board #303 3:30 PM - 5:00 PM
Landing Mechanics And Muscular Strength Are Not Altered Following Acute Sleep Restriction
Stuart Best, Reiley Bergin, Cheyenne DeRaymond, Nicholas R. Heebner, Amanda C. Glueck, John Abt, FACSM. University of Kentucky, Lexington, KY.
(Sponsor: John Abt, FACSM)
Email: stuart.best@uky.edu
(No relevant relationships reported)

D-71b Free Communication/Poster - Sports Medicine Fellow Research Abstracts

Thursday, May 30, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

Board #304 3:30 PM - 5:00 PM
Parameters Associated with Abnormal Cardiac Conditions in Adolescent Athletes: Analysis using Simon’s Heart Heartbytes Registry
Jacob Jones1, Dai Sugimoto1, Gregory Kobelski1, Prashant Rao2, Stanton Miller2, Chris Koilor2, Gian Corrado1, David Shipon2, 1Boston Children’s Hospital, Boston, MA. 2Jefferson University, Philadelphia, PA.
Email: jacobs.jones@childrens.harvard.edu
(No relevant relationships reported)

Board #305 3:30 PM - 5:00 PM
Evaluation of Shoulder Health of Collegiate Wheelchair Basketball Athletes
Matthew T. Santa Barbara, Jacqueline M. Spangenberg, Monica E. Rho. Shirley Ryan AbilityLab, Chicago, IL.
Email: santabarns@gmail.com
(No relevant relationships reported)

Board #306 3:30 PM - 5:00 PM
Descriptive Analysis of Youth American Football Quarterback Injuries: A 15-years of Retrospective Data Study
Email: luke.raedel@childrens.harvard.edu
(No relevant relationships reported)

Board #307 3:30 PM - 5:00 PM
Spine Injuries and Concussions among Figure Skaters
Kristen M. Lambrikanos-Raymond, Gregory Kobelski, Ellen Geminiani, Dai Sugimoto, William P. Meehan, III. Boston Children’s Hospital, Boston, MA.
(No relevant relationships reported)

Board #308 3:30 PM - 5:00 PM
Development and Evaluation of an Electronic Preparticipation Physical Evaluation System: A Pilot Feasibility Study
Jordan Knox1, Daniel Cushman1, Matthew Brobeck1, Masaru Teramoto2, Kimberly Harmon, FACSM3, Stuart Willick, FACSM4. University of Utah, Salt Lake City; UT. 2University of Washington, Seattle, WA. (Sponsor: Stuart Willick, FACSM)
Email: jordan.knox@hsc.utah.edu
(No relevant relationships reported)

Board #309 3:30 PM - 5:00 PM
Psychological Factors Related to Return to Sport After ACL Reconstruction in Adolescents
Aubrey Armento, David Howell, Alexia Gagliardi, Jay Albright, Stephanie Mayer. University of Colorado School of Medicine, Aurora, CO. (Sponsor: John Hill, FACSM)
Email: aubrey.armento@childrenscolorado.org
(No relevant relationships reported)

Board #310 3:30 PM - 5:00 PM
A Review of the Injury Pattern of the 2018 Chicago Marathon
Valerie Rygjel, Hallie Labrador, NorthShore/University of Chicago, Chicago, IL. (Sponsor: Carrie Jaworski, FACSM)
(No relevant relationships reported)

Board #311 3:30 PM - 5:00 PM
Iron and Vitamin D Deficiency in D1 Female Track & Field Athletes
Kristopher J. Paultre, William Cade, Hannah Ellis, Thomas M. Best, FACSM, University of Miami, Miami, FL. (Sponsor: Dr. Thomas Best, FACSM)
Email: kristopher.paultre@jhsmiami.org
(No relevant relationships reported)

Board #312 3:30 PM - 5:00 PM
The Impact of Clinical Factors in Physician and ATC Decision Making for Concussion Return to Play: To Return or Not To Return?
Darwin McKnight, Vicki Nelson, Franklin Sease, RG Gilliland, Greenville Health System, Greenville, SC. (Sponsor: Franklin Sease, FACSM)
(No relevant relationships reported)

Board #313 3:30 PM - 5:00 PM
Evaluating Patient Reported Outcomes in a Pediatric Sports Medicine Practice: A Look at the FAAM
Alissa Conde, MD, Adam Kiefer, PhD, Christy Reed, Katherine Cieslak, MAT, ATC, Paul Gubanich, MD, MPH, FACSM, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH. (Sponsor: Dr. Paul Gubanich, FACSM)
Email: alissa.conde@cchmc.org
(No relevant relationships reported)

Board #314 3:30 PM - 5:00 PM
Application of Quantitative Balance Testing to Office Based Concussion Care: A Feasibility Study
Brady Bowen, Ian D. Hutchinson, Kelly Russo, Hamish A. Kerr, FACSM, Albany Medical Center, Cohoes, NY. (Sponsor: Hamish Allister Kerr, FACSM)
(No relevant relationships reported)
### D-71c Free Communication/Poster - Sports Medicine

#### Fellow Clinical Cases

**Thursday, May 30, 2019, 1:00 PM - 6:00 PM**

**Room:** CC-Hall WA2

#### Board #315

**3:30 PM - 5:00 PM**

**Specific Dietary Practices In Female Athletes And Their Association With Disordered Eating**

Celina Francesca de Borja, Lauren M. McCall, Bryan Holtzman, Laura Moretti, Nicole Farnsworth, Kathryn E. Ackerman. *Boston Children's Hospital, Boston, MA.* (Sponsor: Kathryn Ackerman, FACSM)

Email: celina.deborja@childrens.harvard.edu

(No relevant relationships reported)

#### Board #316

**3:30 PM - 5:00 PM**

**Concussion Symptom Reporting Across Age Levels**

Eric M. Bankert, Franklin Sease, FACSM, Vicki Nelson. *Greenville Health System Steadman Hawkins Clinic of the Carolinas, Greenville, SC.* (Sponsor: Franklin Sease, FACSM)

Email: Ericbankert@gmail.com

(No relevant relationships reported)

#### Board #317

**3:30 PM - 5:00 PM**

**The Role of Resistance Training Dosing on Pain and Quality of Life in Individuals with Knee Osteoarthrosis: A Systematic Review**

Meredith N. Turner, Daniel O. Hernandez, Christopher P. Emerson, William Cade, John Reynolds, Thomas M. Best, FACSM. *University of Miami, Coral Gables, FL.*

(No relevant relationships reported)

#### Board #318

**3:30 PM - 5:00 PM**

**Distribution of Sonographically Guided Injections of the Subgluteus Minimus and Medius Bursae in Cadaveric Model**

Brittany J. Moore, Wade Johnson, Jonathan T. Finno, FACSM, Jay Smith, Jacob L. Sellon. *Mayo Clinic, Rochester, MN.*

(No relevant relationships reported)

### American College of Sports Medicine

#### Board #320

**3:30 PM - 5:00 PM**

**Field Of View: A Football Player With Acute Visual Changes**

Samantha Smith, James J. Kinderknecht. *Hospital for Special Surgery, New York, NY.*

(No relevant relationships reported)

#### Board #321

**3:30 PM - 5:00 PM**

**It's More Than A Headache**

Juan M. Guzman, Jr., Darin Rutherford, Dennys Maldonado. *Mercyhealth, Janesville, WI.*

Email: micajg@glink.drexel.edu

(No relevant relationships reported)

#### Board #322

**3:30 PM - 5:00 PM**

**When Leg Pain In A Runner Does Not Mean Stress Fracture Or Shin Splints**

Sayedmajid Reza Alavidehkordi, Carlos R. Rodriguez. *Bayfront Health System, St. Petersburg, FL.*

Email: alavidehkordi@hotmail.com

(No relevant relationships reported)

#### Board #323

**3:30 PM - 5:00 PM**

**“Not Just Another Ankle Sprain”–an Interesting Case Of Chronic Ankle Pain**

Cole C. Budinsky. *Nationwide Children's Hospital, Columbus, OH.*

(No relevant relationships reported)

#### Board #324

**3:30 PM - 5:00 PM**

**Tumbling Triceps in Gymnastics**

Alecia Gende, Mederic Hall. *University of Iowa, Iowa City, IA.*

Email: alecia-gende@uiowa.edu

(No relevant relationships reported)

#### Board #325

**3:30 PM - 5:00 PM**

**Knee Pain in a 7th Grade Runningback**

Michael Bradburn, E. Ray Stewart, E. Lyle Cain. *The University of Alabama, Tuscaloosa, AL.*

(No relevant relationships reported)

#### Board #326

**3:30 PM - 5:00 PM**

**Hurtling Humeri in a Teenage Fencer**

Jacob Jones, William Meehan. *Boston Children's Hospital, Boston, MA.*

Email: jacjones@childrens.harvard.edu

(No relevant relationships reported)

#### Board #327

**3:30 PM - 5:00 PM**

**Different Strokes for Different Folks**

Shannon Carroll. *Edward Via College of Osteopathic Medicine at Auburn University, Auburn, AL.*

(No relevant relationships reported)

#### Board #328

**3:30 PM - 5:00 PM**

**An Unusual Presentation of an Increasingly Common Infection**

Erica Martin. *The University of Michigan, Ann Arbor, MI.*

(Sponsor: Keri Denay, FACSM)

Email: emma@med.umich.edu

(No relevant relationships reported)

#### Board #329

**3:30 PM - 5:00 PM**

**A Narrow Wrestling Decision**

Tyler K. Drewry, Richard Okragly, Jaideep Chundhari. *TriHealth, Cincinnati, OH.*

(No relevant relationships reported)

#### Board #330

**3:30 PM - 5:00 PM**

**A Jaw Crushing Line Drive in a Baseball Pitcher**

Joshua I. Wilner, Michael Forg. *Kaiser Permanente, Los Angeles, CA.*

(Sponsor: Aaron Rubin, FACSM)

(No relevant relationships reported)

#### Board #331

**3:30 PM - 5:00 PM**

**A Real Pain in the Neck: A Football Player with Atypical Post-Traumatic Neck Pain**

James Suchy, Doug McKeg. *FACSM, OHSU, Portland, CA.*

Email: jsuchy@gmail.com

(No relevant relationships reported)

#### Board #332

**3:30 PM - 5:00 PM**

**Atypical Shortness of Breath in Division 1 Athlete**

David M. Baxter. *Crozer-Keystone Health System, Springfield, PA.*

(Sponsor: Thomas Kaminski, FACSM)

Email: david.baxter@crozer.org

(No relevant relationships reported)
Most research in exercise and nutrition focuses on the “what” with little attention paid to the “when”. Recent advances in circadian biology indicate that the timing of exercise and nutrient provision may have substantial impact on metabolism, with resultant effects on health and disease. In this symposium we will provide a state-of-the-art overview of circadian biology as it relates to metabolic health and present new research findings on how one might manipulate the timing of exercise and/or nutrients throughout the day in order to promote health or treat metabolic disease. Strategies including intermittent fasting, time-restricted feeding, and pre vs. post-meal exercise will be discussed by leaders in the field. This symposium will highlight the latest basic and applied research with direct relevance and practical application for individuals and practitioners.

**P154 Final Program**

**2177 Board #333 3:30 PM - 5:00 PM**
**Eosinophilic Fasciitis Presenting as Benign Subcutaneous Emphysema**
Karim Elghawly, Aditya Mehta, Karen Bovid, Robert Baker, FACSM. Western Michigan University, Homer Stryker MD School of Medicine, Kalamazoo, MI. (Sponsor: Robert J. Baker, FACSM) (No relevant relationships reported)

**2178 Board #334 3:30 PM - 5:00 PM**
**Tunneling Away Lateral Ankle Pain**
Geoffrey Dreher, David Webner, Kevin DuPrey. Crozer-Keystone Health Newtown, Springfield, PA. (Sponsor: Thomas Kaminski, FACSM) Email: geoffrey.dreher@gmail.com (No relevant relationships reported)

**2179 Board #335 3:30 PM - 5:00 PM**
**Shoulder Pain in a Weightlifter**
Kelly Joy Vailignota, Terry Nicola, FACSM, Melody Hrubes, UIC Sports Medicine, Chicago, IL. (Sponsor: Dr. Terry Nicola, FACSM) Email: kj.vailignota@gmail.com (No relevant relationships reported)

**2180 Board #336 3:30 PM - 5:00 PM**
**Is it Friction? A Rare cause of Medial Knee Pain**
Wade Johnson, Jeffrey Payne. Mayo Clinic, Minneapolis, MN. (Sponsor: Jonathan Finnoff, FACSM) (No relevant relationships reported)

**2181 Board #337 3:30 PM - 5:00 PM**
**Osteitis Pubis: A Career Ending Diagnosis?**
Stephen Sanker, DO, Amanda Goodale, DO. TriHealth, Cincinnati, OH. (Sponsor: Henry Stiene, MD, FACSM) (No relevant relationships reported)

**2182 Board #338 3:30 PM - 5:00 PM**
**Left Knee Pain In A 9-year-old Female**
Branden Turner. Kaiser Los Angeles Sports Medicine, Los Angeles, CA. (Sponsor: Aaron Rubins, FACSM) Email: branden.turner@kp.org (No relevant relationships reported)

**D-72 Basic Science World Congress - Symposium - It’s about Time: Timing of Exercise and Nutrition to Influence Circadian Biology**
Thursday, May 30, 2019, 1:30 PM - 3:30 PM
Room: CC-Valencia A

**2185 2:10 PM - 2:40 PM**
When Should I Eat? Manipulating Nutrients and Meal Timing to Match and Reset Circadian Rhythm
Evelyn B. Carr, Australian Catholic University, Melbourne, Australia (No relevant relationships reported)

**2186 2:40 PM - 3:10 PM**
Is Timing Everything? Syncing Exercise with Meals
John A. Kanaley, FACSM. University of Missouri, Columbia, MO (No relevant relationships reported)

**3:10 PM - 3:30 PM**
Overall Discussion

**D-73 Basic Science World Congress - Symposium - Clocks, Insufficient Sleep and Muscle**
Thursday, May 30, 2019, 3:45 PM - 5:45 PM
Room: CC-304B

**2187 3:45 PM - 3:50 PM**
Chair: Kenneth Wright. University of Colorado, Boulder, CO (No relevant relationships reported)

**2188 3:50 PM - 4:15 PM**
Presenter
Allison Brager. Walter Reed Army Institute of Research, Silver Spring, MD (No relevant relationships reported)

**2189 4:15 PM - 4:40 PM**
Presenter
Jonathan Cedernaes. Uppsala University, Uppsala, Sweden (No relevant relationships reported)

**2190 4:40 PM - 5:05 PM**
Presenter
Josiane L. Broussard. Colorado State University, Fort Collins, CO (No relevant relationships reported)

**2191 5:05 PM - 5:30 PM**
Presenter
David Bishop, FACSM. Victoria University, Melbourne, Australia (No relevant relationships reported)

**5:30 PM - 5:45 PM**
Overall Discussion

**D-74 Basic Science World Congress - Symposium - The Dynamic Relationships of Physical Activity and Sleep Quality with Cognitive Health**
Thursday, May 30, 2019, 3:45 PM - 5:45 PM
Room: CC-Valencia A

**2192 3:45 PM - 3:50 PM**
Chair: Teresa Lue-Ambrose. University of British Columbia, Vancouver, BC, Canada (No relevant relationships reported)

Maintaining sleep quality and cognitive health are critical for healthy ageing. Specifically, poor sleep quality is linked to impaired cognitive performance across the lifespan and with dementia in late life. Thus, effective lifestyle strategies which can positively impact both are greatly needed. One potential strategy is promoting physical activity (PA). Strong empirical evidence suggests PA promotes cognitive health, and there is increasing evidence PA may maintain cognitive health by promoting better sleep. In addition, preliminary evidence suggests PA may help maintain circadian rhythm alignment, which weakens with age leading to declines in sleep quality and cognitive function. Thus, this symposium will provide a summary of the current evidence for 1) the implications of poor sleep on cognitive health; 2) how PA and sleep are linked to cognitive function and each other; and 3) how PA may be useful in circadian re-alignment (i.e., chronotherapy) to promote sleep and cognitive health.
THURSDAY, MAY 30, 2019
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2193 3:50 PM - 4:15 PM
Sleep and its Impact on Executive Functions: Evidence from Correlational and Experimental Investigations
Peter A. Hall, University of Waterloo, Waterloo, ON, Canada
(No relevant relationships reported)

2194 4:15 PM - 4:40 PM
The Moderating Role of Sleep on Brain Function and Cognition After Acute Exercise in Older Adults
J Carson Smith, FACSM. University of Maryland, College Park, MD
(No relevant relationships reported)

2195 4:40 PM - 5:05 PM
Associations between Physical Activity, Sleep Quality, and Cognitive Function
Kirk I. Erickson. University of Pittsburgh, Pittsburgh, PA
(No relevant relationships reported)

2196 5:05 PM - 5:30 PM
Improving Sleep Quality and Cognitive Function in Mild Cognitive Impairment through Chronotherapy and Physical Activity
Ryan S. Falck. University of British Columbia, Vancouver, BC, Canada
(No relevant relationships reported)

2197 Board #1 6:00 PM - 7:00 PM
The Relationship between Bone Mineral Accrual and Changes of Body Composition in Competitive Girl Runners
Norimitsu Kinoshita1, Eriko Uchiyama1, Kenta Okuyama2. 1Hosei University, Tokyo, Japan. 2Shimane University, Shimane, Japan
(No relevant relationships reported)

2198 Board #2 6:00 PM - 7:00 PM
Pre-Race Risk Screening and Stratification Predicts Adverse Events - SAFER Study In 76654 Distance Runners
Martin Schwellnus1, Sonja Swanevelder2, Esme Jordaan2. 1SEMLI, University of Pretoria, Pretoria, South Africa. 2South African Medical Research Council, Capetown, South Africa
(No relevant relationships reported)

2199 Board #3 6:00 PM - 7:00 PM
Impact of Silver Ion Laundry Treatment on Athletic Gear and Environmental Pathogens and Athlete Health
Priya Balachandran1, John J. Openshaw1. 1Applied Silver, Hayward, CA. 2Stanford University, Palo Alto, CA
(No relevant relationships reported)

2200 Board #4 6:00 PM - 7:00 PM
Association Between Sport Specialization and Low BMD Among Female High School Distance Runners
Mitchell J. Raub1, Michelle T. Rackack2, Adam S. Tenforde1, Michael D. Rosenthal1, Jeannine F. Nichols, FACSM. 1San Diego State University, San Diego, CA. 2California State University Long Beach, Long Beach, CA. 3Spaulding Rehabilitation Hospital/Harvard Medical School, Charlestown, MA. 4University of California San Diego, La Jolla, CA
(No relevant relationships reported)

2201 Board #5 6:00 PM - 7:00 PM
The Effects Of Subconcussive Impacts On The Neurocognitive Function Of Men’s Collegiate Lacrosse Players From Pre-season To Post-season
Caroline Varlotta (Sponsor: Dr. Gerard P Varlotta, FACSM), Joshua Giordano, Joseph Miceli, Brandon Burg, Hailie Zwibel, Matthew VarlottaHeller. NYIT-COM, Old Westbury, NY
(No relevant relationships reported)

2202 Board #6 6:00 PM - 7:00 PM
International Clinical Scholar Award - Effects of Mistletoe Extract Supplementation on Inflammation Markers after Strenuous Exercise in Rowers
Soo-Min Ha1, Jung-Sook Kim1, Bo-Sung Kim1, Jeong-Ah Lee2, Yoon-Jung Choi1, Do-Yeon Kim1. 1Pusan National University, Busan, Korea. 2Republic of Korea
(No relevant relationships reported)

2203 Board #7 6:00 PM - 7:00 PM
Specific Dietary Practices In Female Athletes And Their Association With Disordered Eating
Celina Francesca de Borja, Lauren M. McCall, Bryan Holtzman, Laura Moretti, Nicole Farnsworth, Kathryn E. Ackerman, FACSM. Boston Children’s Hospital, Boston, MA
(No relationships reported)

2204 Board #8 6:00 PM - 7:00 PM
The Impact of Clinical Factors in Physician and ATC Decision Making for Concussion Return to Play: Insight froma Policy Capturing Study
Darwin McKnight, Vicki Nelson, Franklin Sease, FACSM, Rg Gilliland. Greenville Health System, Greenville, SC
(No relationships reported)

D-75 Clinical Poster/Reception - Clinicians’ Reception with Poster Presentations
Thursday, May 30, 2019, 6:00 PM - 7:00 PM
Room: Hotel-Signature 1 Meeting Room

2205 Board #9 6:00 PM - 7:00 PM
Spine Injuries and Concussions among Figure Skaters
Kristen M. Lambrinakos-Raymond, Gregory Kobelski, Ellen Geminiani, Dai Sugimoto, William P. Meehan, III. Boston Children’s Hospital, Boston, MA
(No relationships reported)

2206 Board #10 6:00 PM - 7:00 PM
Lisa S. Krivickas Clinician/Scholar Travel Award: Characterizing the Prevalence of Cam-Type Hip Impingement in Women’s Professional Ice Hockey Players
Cordelia W. Carter, Darryl Whitney, Matthew Kipergy, Samuel Baron, Guillem Gonzalez-Lomas. NYU-Langone Medical Center, New York, NY
(No relationships reported)

2207 Board #11 6:30 PM - 7:30 PM
The Effects Of Subconcussive Impacts On The Neurocognitive Function Of Men’s Collegiate Lacrosse Players From Pre-season To Post-season
Caroline Varlotta (Sponsor: Dr. Gerard P Varlotta, FACSM), Joshua Giordano, Joseph Miceli, Brandon Burg, Hailie Zwibel, Matthew VarlottaHeller. NYIT-COM, Old Westbury, NY
(No relevant relationships reported)

2208 Board #12 6:30 PM - 7:30 PM
International Clinical Scholar Award - Effects of Mistletoe Extract Supplementation on Inflammation Markers after Strenuous Exercise in Rowers
Soo-Min Ha1, Jung-Sook Kim1, Bo-Sung Kim1, Jeong-Ah Lee2, Yoon-Jung Choi1, Do-Yeon Kim1. 1Pusan National University, Busan, Korea. 2Republic of Korea
(No relevant relationships reported)

2209 Board #13 6:30 PM - 7:30 PM
Specific Dietary Practices In Female Athletes And Their Association With Disordered Eating
Celina Francesca de Borja, Lauren M. McCall, Bryan Holtzman, Laura Moretti, Nicole Farnsworth, Kathryn E. Ackerman, FACSM. Boston Children’s Hospital, Boston, MA
(No relationships reported)
catabolic signaling is filled with unique interactions and redundancies in the struggle when studying exercise stress and adaptations. The integration of both anabolic and super families surrounding some of them set the stage for integrated signaling complex targeting in cellular function shows that multiple signaling pathways exist these major anabolic hormones from their biosynthesis and secretory origins to their of cells and tissues from the brain to skeletal muscle. Recent advances in the study of these three major hormones all play important roles in molecular signaling in all types of cells and tissues from the brain to skeletal muscle. Recent advances in the study of these major anabolic hormones from their biosynthesis and secretory origins to their complex targeting in cellular function shows that multiple signaling pathways exist and super families surrounding some of them set the stage for integrated signaling when studying exercise stress and adaptations. The integration of both anabolic and catabolic signaling is filled with unique interactions and redundancies in the struggle for predominance in molecular messaging. This highlighted symposium will examine some of the hormonal signaling complexities scientists now face in studying exercise.
the-job behaviors that reduce or mitigate career-ending outcomes.

cardiac events are the single leading category of death. During this symposium,
injuries, vehicular accidents, burns, carcinogenic agents and diseases of lifestyle.
Cardiac incidents are the single leading category of death. During this symposium,
more than 1 million career and volunteer firefighters who, on a daily basis go in
professional athletes. Of particular interest, and the focus of this Symposium is the
There are many more individuals who use their body for gainful employment than

E-04b Symposium - Structural Firefighting: The Industrial Strength Athlete
Friday, May 31, 2019, 9:30 AM - 11:30 AM
Room: Hotel-Grand Ballroom A

There are many more individuals who use their body for gainful employment than
professional athletes. Of particular interest, and the focus of this Symposium is the
more than 1 million career and volunteer firefighters who, on a daily basis go in
harm’s way. As a public health concern, these public safety servants are exposed
to a wide array of threats, including collapse, blunt force trauma, musculoskeletal
injuries, vehicular accidents, burns, carcinogenic agents and diseases of lifestyle.
Cardiac incidents are the single leading category of death. During this symposium,
 presentations will demonstrate linkages between proactive fitness initiatives and on-
the-job behaviors that reduce or mitigate career-ending outcomes.

2219 9:40 AM - 10:10 AM
The Role of Physical Activity in Disease Progression, Pain, Fatigue and Mental Health in Rheumatoid Arthritis
Patricia Katzf. UCSE San Francisco, CA
(No relevant relationships reported)

2220 10:10 AM - 10:40 AM
The Pathogenesis of Sarcopenic Obesity and Cardiovascular Disease in Rheumatoid Arthritis and the Molecular Physiological Benefits of Exercise
Brian Andonian. Duke University School of Medicine, Durham, NC
(No relevant relationships reported)

2221 10:40 AM - 11:10 AM
Exercise Prescription in Rheumatoid Arthritis: A Practical Guide to Incorporating Physical Activity with Current Disease Management Strategies
Kim Huffman. Duke University School of Medicine, Durham, NC
(No relevant relationships reported)

11:10 AM - 11:30 AM
Overall Discussion

E-05 Thematic Poster - Cardiac
Friday, May 31, 2019, 9:30 AM - 11:30 AM
Room: CC-101A

2227 9:30 AM - 11:30 AM
Chair: Daniel A. Boullosa. Universidade Católica de Brasília, Brasilia, Brazil
(No relevant relationships reported)

2228 Board #1 9:30 AM - 11:30 AM
Cardiac Adaptation In Sprint Athletes: A New Phenotype Of ‘Athlete’s Heart’?
Jake Samuel1, Samuel Cooke2, Martin Schultz1, Jason Z. Apostolakis1, Koichi Akiyama1, Marie-Jeanne Buscot2, Eric J. Stöhr4.
1University of Texas At Arlington, Arlington, TX. 2University of Lincoln, Lincoln, United Kingdom. 3University of Tasmania, Hobart, Australia. 4Columbia University Irving Medical Center, New York City, NY. 5Kyoto Prefectural University of Medicine, Kyoto, Japan. 6Cardiff Metropolitan University, Cardiff, United Kingdom
Email: Thomas.Samuel@uta.edu
(No relevant relationships reported)

2229 Board #2 9:30 AM - 11:30 AM
Exercise-Induced Cardiac Fatigue is Similar Across Increasing Trail-Running Race Distances
Alexandra M. Coates1, Katharine D. Currie1, Trevor J. King1, Philip J. Millar1, Jamie F. Burr1. 1University of Guelph, Guelph, ON, Canada. 2Michigan State University, East Lansing, MI.
(No relevant relationships reported)

2230 Board #3 9:30 AM - 11:30 AM
Cardiovascular Adaptations During the Hormonal Transition of a Male-to-Female Transgender Athlete
Shannon L. Wilson1, Andrew C. D’Lugos2, Nathan Serrano3, Theresa M. Jorgensen1, Joanna Harper1, Glenn A. Gaesser, FACSM4, Jared M. Dekker1, FACSM5, M. S. Angadi, FACSM6, 1Arizona State University, Phoenix, AZ. 2Providence Portland Medical Center, Portland, OR.
(No relevant relationships reported)

2231 Board #4 9:30 AM - 11:30 AM
Cardiovascular Disease Risk In Middle-Aged Ultra-Endurance Athletes
Nate P. Bachman1, Janée D. Terwoord1, Jennifer C. Richards, Barry Braun, FACSM2, C Patrick Green3, Gary J. Luckasen4, Frank A. Dineno5. 1Colorado State University, Fort Collins, CO. 2Medical Center of the Rockies Foundation, Loveland, CO.
(No relevant relationships reported)

2232 Board #5 9:30 AM - 11:30 AM
Can Marathon Running Induce Myocardial Microdamage?
Vincent L. Aengevaeren1, Adrianus J. Bakermans2, Martijn Froeling1, Maria T.E. Hopman, FACSM3, Melissa T. Hooijmans1, Jithsa R. Monte1, Gustav J. Strijkers2, Aart J. Nederveen1, Thijs M.H. Eijsvogels1. 1Radboud University Medical Center, Nijmegen, Netherlands. 2Amsterdam University Medical Centers, Amsterdam, Netherlands. 3University Medical Center Utrecht, Netherlands.
(No relevant relationships reported)
Board #6 9:30 AM - 11:30 AM
Right Ventricle Systolic And Diastolic Function In Renal Transplant Recipients after 12 Months Of Unsupervised Exercise Training
Laura Stefani1, Beatrice Leon1, Elena Zappelli1, Gianni Pedrizzetti1, Giorgio Galanti1, Pietro Amodeo Modesti2. 1Sports Medicine-FISM (Italian Federation of Sport Medicine), Florence, Italy; 2Sports Medicine, Florence, Italy. Engineering and Architectural department - University of Trieste, Italy. 3Sports Medicine-Center University of Florence, Florence, Italy.
Email: laura-stefani@tiscal.it
(No relevant relationships reported)

Board #7 9:30 AM - 11:30 AM
Cardiac Reinnervation Affects Blood Pressure and Cardiorespiratory Adaptation To Exercise after Heart Transplant
Emmanuel G. Ciocla1, Rafael E. Castro2, Awassi Y. Ggomane1, Ariane A. Viana1, Fernando Bacal1, Edimar A. Bocchi1, Guilherme V. Guita1, and Rafael E. Castro1. 1São Paulo State University - UNESP, Bauru, Brazil. 2University of São Paulo - USP, São Paulo, Brazil.
Email: (No relevant relationships reported)

E-06 Thematic Poster - Jumping and Landing
Friday, May 31, 2019, 9:30 AM - 11:30 AM
Room: CC-101B

9:30 AM - 11:30 AM
Chair: Nelson Cortes. George Mason University, Manassas, VA
(No relevant relationships reported)

Board #1 9:30 AM - 11:30 AM
The Effect Of Cold-water Immersion On Joint Power During Drop-landings
Henry Wang, Yuiri Nomoto, D. Clark Dickin. Ball State University, Muncie, IN
Email: hwang2@bsu.edu
(No relevant relationships reported)

Board #2 9:30 AM - 11:30 AM
Landing Mechanics Differences between the Drop Vertical Jump and Stop Jump
Robin M. Queen, FACSM, Kristen Remmer, Alexander Peebles. Virginia Tech, Blacksburg, VA
Email: rmqueen@vt.edu
(No relevant relationships reported)

Board #3 9:30 AM - 11:30 AM
Biomechanical Loading Magnitude Differences During Landing in Male Athletes with and without Patellar Tendinopathy
Laura S. Pietrosimone1, J Troy Blackburn1, Erik Wikstrom, FACSM2, David Berkoff2, Sean Docking1, Jill Cook1, Darin Padua2. 1Duke University, Durham, NC. 2University of North Carolina at Chapel Hill, Chapel Hill, NC. 3LaTrobe University, Bendigo, Australia. (Sponsor: Erik Wikstrom PhD, ATC, FACSM)
Email: laura.pietrosimone@duke.edu
(No relevant relationships reported)

Board #4 9:30 AM - 11:30 AM
Is Visual-Cognitive Loading During Jumping A Potential Risk Factor For Sports Injuries?
Jan Wille, Florian Giesche, Daniel Niederer, Tobias Egeroff, Sebastian Barabas, Saskia Trölller, Lutz Vogt, Winfried Banzer, FACSM. Goethe University Frankfurt, Frankfurt am Main, Germany.
Email: wilke@sport.uni-frankfurt.de
(No relevant relationships reported)

Board #5 9:30 AM - 11:30 AM
Effects of Arm Swing and Overhead Target on Vertical Jump Performance in Children and Adolescents
Zachary M. Gillen, Marni E. Shoemaker, Briania D. McKay, Nicholas A. Bohannon, Alegra I. Mendez, Lacey E. Jahn, Joel T. Cramer, FACSM. University of Nebraska-Lincoln, Lincoln, NE. (Sponsor: Joel T. Cramer, FACSM)
(No relevant relationships reported)

Board #6 9:30 AM - 11:30 AM
Physical and Psychological Predictors of Single-leg Drop Landing Biomechanics ACL Reconstruction.
Christopher Kuenze, Thomas Brachmeier, Jeffrey Kovan, Caroline Lisee. Michigan State University, East Lansing, MI
Email: kuenzech@msu.edu
(No relevant relationships reported)

Board #7 9:30 AM - 11:30 AM
Static Loading of the Knee Joint Results in Modified Single Leg Landing Biomechanics
Michael W. Olson, FACSM. Southern Illinois University Carbondale, Carbondale, IL
Email: mwolson@siu.edu
(No relevant relationships reported)

Board #8 9:30 AM - 11:30 AM
Relationship Between Fear Of Reinjury And Single-Leg Landings In ACL Reconstructed Individuals
Elisabeth C. Holt1, Anh-Dung Nguyen1, Brooke A. Smith1, David R. Bell1, Stephanie M. Trigsted2. 1High Point University, High Point, NC. 2University of Wisconsin Madison, Madison, WI
Email: cholt1@highpoint.edu
(No relevant relationships reported)

E-07 Thematic Poster - Muscle Physiology
Friday, May 31, 2019, 9:30 AM - 11:30 AM
Room: CC-102A

9:30 AM - 11:30 AM
Chair: Hayden Hyatt. University of Florida, Gainesville, FL
(No relevant relationships reported)

Board #1 9:30 AM - 11:30 AM
The Effects of Resistance Training On Cardiac Muscle Function During Cancer Cachexia
Ashton Legenza1, Chase Reyes1, Matthew Dovgan2, Allison Tigner1, Wisam Najdawi1, Eric Brodahl1, Jacob Siedlik2, Joan Eckerson, FACSM3, Kristen Drescher2. 1Creighton University, Omaha, NE. 2Creighton University School of Medicine, Omaha, NE. (Sponsor: Joan Eckerson, FACSM)
Email: ashtonlegenza@creighton.edu
(No relevant relationships reported)

Board #2 9:30 AM - 11:30 AM
Repetitive Activation Compromises Motoneuron Excitability During Fatiguing Exercise
Vincent P. Georgescu, Joshua C. Weavil, Taylor S. Thurston, Hsuan-Yu Wan, Russell S. Richardson, Markus Amann. University of Utah, Salt Lake City, UT
Email: vincent.georgescu@hsc.utah.edu
(No relevant relationships reported)

Board #3 9:30 AM - 11:30 AM
Dietary Nitrate Supplementation Attenuates Fatigue in Rat Skeletal Muscle
Email: sa199610@atsu.edu
(No relevant relationships reported)
Board #4  
9:30 AM - 11:30 AM  
Exercise Type And Intensity In Older Women: Preliminary Results Of Community-based Interventions On Functional Capacity  
Gabriel de Souza Zanini, Guilherme Moreno Falcão, Isabela Roque Marçal, Vanessa Teixeira Amaral, Emmanuel Gomes Ciocla.  
Universidade Estadual Paulista, Bauru, Brazil  
Email: gbzanini@hotmail.com  
(No relevant relationships reported)

Board #6  
9:30 AM - 11:30 AM  
Skeletal Muscle Fatigue: Mechanisms And Mitigation At The Cellular And Molecular Levels In Older Adults  
Aurora D. Foster, Chad R. Straight, Edward P. Debold, Mark S. Millet.  
University of Massachusetts, Amherst, MA  
Email: argouea@umass.edu  
(No relevant relationships reported)

Board #7  
9:30 AM - 11:30 AM  
Eccentric Overload During Strength Training: A Stimulus for Enhanced Satellite Cell Activation  
Michaela Wehrstein1, Axel Schöffel1, Nadine Weiber1, Theresa Betz1, Thonas Gwechenberger2, Mareike Rittweg1, Helmut Müller1, Birgit Friedmann-Bette1.  
1University Hospital Heidelberg, Heidelberg, Germany.  
2Heidelberg, Germany.  
(No relevant relationships reported)

Board #8  
9:30 AM - 11:30 AM  
Doublets Initiating Low Frequency Stimulation Improve Dynamic Contractility Without Exacerbating Fatigue  
Kristian Overgaard, Katja K. Pedersen, Ole B. Nielsen.  
Aarhus University, Aarhus, Denmark  
Email: overgaard@ph.au.dk  
(No relevant relationships reported)

Thematic Poster - Physical Activity and Health in Older Adults  
Friday, May 31, 2019, 9:30 AM - 11:30 AM  
Room: CC-102B  

Board #1  
9:30 AM - 11:30 AM  
Walking Efficiency as a Predictor of Brain Atrophy with Aging  
Jennifer A. Schrack1, Annal A. Wanigatunga1, Vadim Zipunikov1, Yang An1, Adam P. Spira1, Christos Davatzikos2, Brian F. McCullough3, Gergely Simonick1, Susan M. Resnick1, Jennifer A. Schrack1.  
1Johns Hopkins University, Baltimore, MD.  
2National Institute on Aging.  
3Johns Hopkins Bloomberg School of Public Health, Baltimore, MD.  
(No relevant relationships reported)

Thematic Poster - Resistance Training  
Friday, May 31, 2019, 9:30 AM - 11:30 AM  
Room: CC-104B  

Board #2  
9:30 AM - 11:30 AM  
Device Measured Physical Activity and Sedentary Behavior in Chilean Older Adults: The Latin American Cities For Healthy Aging Study  
Nicolas Aguilar-Farias1, Damian Chanda-Poblete1, Pia Martins-Fuentealba.  
1Universidad de La Frontera, Temuco, Chile.  
(Sponsor: Wend J Brown, FACSM)  
Email: nicolas.aguilarrufontera@ufrontera.cl  
(No relevant relationships reported)

Board #3  
9:30 AM - 11:30 AM  
Moderate Intensity Walking Cadence (Steps/min) in 61-85 Year Old Adults  
University of Massachusetts Amherst, Amherst, MA  
Email: elisa.ogawa001@umb.edu  
(No relevant relationships reported)

Board #4  
9:30 AM - 11:30 AM  
Effects Of Exergaming On Cognition And Dual-task Mobility In Older Adults At Risk For Falling  
University of Massachusetts Boston, Boston, MA.  
(Sponsor: Tongjian You, FACSM)  
Email: elisa.ogawa001@umb.edu  
(No relevant relationships reported)

Board #5  
9:30 AM - 11:30 AM  
Associations of Accelerometer and Questionnaire Measured Physical Activity and Sedentary Behavior with All-cause Mortality in Older Multiethnic Women  
Michael J. LaMonte, FACSM, John Bellettiere1, Kelly R. Eveson, FACSM2, Eileen Rillamas-Sun2, J-Min Lee, FACSM3, Chonzhi Di4, Andrea Z. LaCroix2.  
1University at Buffalo - SUNY, Buffalo, NY.  
2University of California, San Diego, CA.  
3University of North Carolina, Chapel Hill, Chapel Hill, NC.  
4Fred Hutchinson Cancer Research Center, Seattle, WA.  
(Sponsor: J-Min Lee, FACSM)  
Email: mlamonte@buffalo.edu  
(No relevant relationships reported)

Board #6  
9:30 AM - 11:30 AM  
Thematic Poster - Resistance Training  
Friday, May 31, 2019, 9:30 AM - 11:30 AM  
Room: CC-104B  

Board #7  
9:30 AM - 11:30 AM  
Final Program  
P159
E-10 Free Communication/Slide - Pediatric Exercise Science

Friday, May 31, 2019, 9:30 AM - 11:15 AM
Room: CC-105A

2270 9:30 AM - 11:15 AM
Chair: Karin A. Pfeiffer, FACSM. Michigan State University, East Lansing, MI
(No relevant relationships reported)

2271 9:30 AM - 9:45 AM
Testosterone Determines Erythropoiesis And Changes In Hemoglobin Mass During Adolescence
Erica Mabel Mancera1, Edgar Cristancho2, Diana Ramos2, Walter Schmidt2, Lohover Duque3, Joel Rojas1
1Universidad Nacional de Colombia, Bogotá, Colombia. 2Bayreuth University, Bayreuth, Germany. 3Unidad Central del Valle, Tulúa, Colombia. (Sponsor: William Byrnes, FACSM)
Email: emnemceras@unal.edu.co
(No relevant relationships reported)

9:45 AM - 10:00 AM
Modeling The Dose-Response Rate Associations Between VO2max And Self-reported Physical Activity In Children
Alan M. Nevill1, Michael J. Duncan2, Gavin Sandrock3
1University of Wolverhampton, Walsall, United Kingdom. 2University of Coventry, Coventry, United Kingdom. 3University of Essex, Colchester, United Kingdom. (Sponsor: Giles Warrington, FACSM)
Email: a.m.nevill@wlv.ac.uk
(No relevant relationships reported)

10:00 AM - 10:15 AM
Skeletal Muscle Oxidation During an Incremental Exercise Test in Younger and Middle-aged Individuals
Rachel Dykstra1, Nicholas Hanson1, Panagiotis Koutakis1, Collin Garner1, Cody Diehl1, Western Michigan University, Kalamazoo, MI. 2Florida State University, Tallahassee, FL. 3Oklahoma State University, Stillwater, OK
Email: rachel.m.macerri@wmich.edu
(No relevant relationships reported)

10:15 AM - 10:30 AM
High Intensity Exercise Training for High Functioning Children with Autism Spectrum Disorder Improves Physical Performance
Karl F. Kozlowski, Clancy Seymour, James P. Donnelly, Marcus L. Thomner, Christopher Lopata, Canisius College, Buffalo, NY. (Sponsor: Frank J. Cerny, FACSM)
Email: kozlowski13@canisius.edu
(No relevant relationships reported)

10:30 AM - 10:45 AM
Talent Identification in Elite Youth Sports
Kewei Zhao1, Andreas Hohmann2, Binghong Gao1, Shanghai University of Sport, Shanghai, China. 2University of Bayreuth, Bayreuth, Germany
Email: zhao_kw@hotmail.com
(No relevant relationships reported)
E-11 Clinical Case Slide - Knee III
Friday, May 31, 2019, 9:30 AM - 11:10 AM
Room: CC-105B

2279 9:30 AM - 11:10 AM
Chair: Ashley Zapf, University of Texas, Austin, TX
(No relevant relationships reported)

2280 9:30 AM - 11:10 AM
Discussant: Brian A. Davis, FACSM. University of California-Davis, Sacramento, CA
(No relevant relationships reported)

2281 9:30 AM - 11:10 AM
Discussant: Daryl Osbahr, Orlando Health, Orlando, FL
(No relevant relationships reported)

2282 9:30 AM - 11:10 AM
Knee Injury - Football
Kevin Huang, Samuel Chu. Northwestern/Shirley Ryan AbilityLab, Chicago, IL. (Sponsor: Joseph Ihm, FACSM)
(No relevant relationships reported)

2283 9:50 AM - 10:10 AM
Knee Injury - Soccer
Ankur Verma1, Jeremy Burnham2, Vincent Shaw1, Jerrica Watson2. 1Baton Rouge General, Baton Rouge, LA. 2Bone & Joint Clinic of Baton Rouge, Baton Rouge, LA. (Sponsor: Mary Lloyd Ireland, FACSM)
Email: ankur2222@gmail.com
(No relevant relationships reported)

2284 10:10 AM - 10:30 AM
Athlete - Soccer
Darwin R. McKnight, Vicki R. Nelson, Wayne F. Sease. Greenville Health System, Greenville, SC. (Sponsor: Wayne Sease, FACSM)
Email: dmcKnight@ghs.org
(No relevant relationships reported)

2285 10:30 AM - 10:50 AM
Atraumatic Recurrent Knee Effusion in a Collegiate Athlete
Brian Hill, Stephen Spadafore, Kyle Knierim, Morteza Khodaee, FACSM. University of Colorado, Denver, CO
(No relevant relationships reported)
E-13 Clinical Case Slide - Wrist and Hand
Friday, May 31, 2019, 9:30 AM - 11:10 AM
Room: CC-202C

2295 9:30 AM - 11:10 AM
Chair: Pierre Rouzier, FACSM. University of Massachusetts, Amherst, MA
(No relevant relationships reported)

2296 9:30 AM - 11:10 AM
Discussant: Kaleigh Suhs, Advocate Lutheran General Hospital, Park Ridge, IL
(No relevant relationships reported)

2297 9:30 AM - 11:10 AM
Discussant: Brian M. Babka, FACSM. Northwestern Medicine Sports Medicine, Warrenville, IL
(No relevant relationships reported)

2298 9:30 AM - 9:50 AM
Forearm Pain - Ice Hockey
Melissa Lau, William Pease. Ohio State University, Columbus, OH
(No relevant relationships reported)

2299 9:50 AM - 10:10 AM
Little Finger Injury - Football
Andre A. Abadin1, Raul A. Rosario-Concepcion1, John Ciccio2, George Pujalte, FACSM3, Kristina DeMatas1, 1Mayo Clinic, Jacksonville, FL. 2University of St. Augustine for Health Sciences, St. Augustine, FL
(No relevant relationships reported)

2300 10:10 AM - 10:30 AM
Musculoskeletal Injury - Weightlifting - More Than Just a Hand Injury in a World Champion
Joseph Medellin1, Ryan Rompola2, Mark E. Lavallee, FACSM3. 1WellSpan York Hospital Sports Medicine, York, PA. 3Franciscan Health Sports Medicine, Lafayette, IN. (Sponsor: Mark E. Lavallee, MD, CSCS, FACSM)
Email: joemedellinmd@gmail.com
(No relevant relationships reported)

2301 10:30 AM - 10:50 AM
Sports-Related Wrist Pain In A Musician
Svetlana Dani. University of Maryland, Baltimore, MD
Email: lana.pustilnikova@gmail.com
(No relevant relationships reported)

2302 10:50 AM - 11:10 AM
Fifth Metacarpal Pain With Extensor Lag In An 18 Year Old Football Player
Ryan Robin, Brittany Moore, Karen Newcomer, FACSM. Mayo Clinic, Rochester, MN. (Sponsor: Karen Newcomer, FACSM)
(No relevant relationships reported)

E-14 Rapid Fire Platform - Biomechanics in Fatigue
Friday, May 31, 2019, 9:30 AM - 10:40 AM
Room: CC-Hall WA2

2303 9:30 AM - 10:40 AM
Chair: Roger Enoka, University of Colorado, Boulder, CO
(No relevant relationships reported)

2304 9:30 AM - 9:40 AM
The Biomechanical Effects of Fatigue on Drop-Jump Performance in Basketball Athletes
Warren C. Ondatje, Guillermo J. Noffal, Pablo B. Costa, Jared W. Coburn, FACSM. California State University Fullerton, Fullerton, CA
(No relevant relationships reported)

Friday, May 31, 2019, 9:30 AM - 10:20 AM
Room: CC-202C

2305 9:40 AM - 9:50 AM
Dynamic Postural Stability During Rested and Fatigued Backwards Single-Leg Jump-Landings
Colin W. Bond, Benjamin C. Noonan. Sanford Health, Fargo, ND
Email: colin.bond@sanfordhealth.org
(No relevant relationships reported)

2306 9:50 AM - 10:00 AM
Fatigue Increases Center of Pressure Sway
Gustavo Sandri Heidner, Caitlin O’Connell, Nicholas Murray, J C. Mizelle, Patrick Rider, Zachary J. Domire. East Carolina University, Greenville, NC
Email: sandrheidnergl17@students.ecu.edu
(No relevant relationships reported)

2307 10:00 AM - 10:10 AM
Effect of Sex on Neural Excitability and Central Fatigue for a Submaximal Elbow Extensor Task
Alexandra F. Yacyshyn, Chris J. McNeil. The University of British Columbia, Kelowna, BC, Canada. (Sponsor: Charles L. Rice, FACSM)
(No relevant relationships reported)

2308 10:10 AM - 10:20 AM
The Impact of Mental Fatigue on Force and Motor Unit Firing Variability in Young Adults
Katie L. Kowalski, Anita D. Christie. University of Western Ontario, London, ON, Canada
Email: kkwalski7@uwo.ca
(No relevant relationships reported)

2309 10:20 AM - 10:30 AM
Impact Mechanics in Female Runners with Single and Multiple Stress Fractures Following Fatigue
Jerome Outerleys1, Kristin L. Popp2, Sara E. G. Rudolph2, Signe Caska1, Kathryn E. Ackerman, FACSM2, Mary L. Bouxsein2, Irene S. Davis, FACSM2. 1Spaulding National Running Center; Harvard Medical School, Cambridge, MA. 2Massachusetts General Hospital, Boston, MA. (Sponsor: Dr. Irene Davis, FACSM)
Email: jouterleys@partners.org
(No relevant relationships reported)

2310 10:30 AM - 10:40 AM
The Effects Of Running Form On Hip Kinetics During Running Fatigue On An Instrumented Treadmill
Michael Bohne, Tamarie Wagstaff, Kainalu Nitta, Kirsten Howe, Kristen Terry, Jason Thomas. Utah Valley University, Orem, UT. (Sponsor: Scott Drum, FACSM)
Email: michael.bohne@uvu.edu
(No relevant relationships reported)

2311 10:40 AM - 11:00 AM
Firing Variability in Young Adults
Katie L. Kowalski, Anita D. Christie. University of Western Ontario, London, ON, Canada
Email: kkwalski7@uwo.ca
(No relevant relationships reported)

2312 11:00 AM - 11:10 AM
Fifth Metacarpal Pain With Extensor Lag In An 18 Year Old Football Player
Ryan Robin, Brittany Moore, Karen Newcomer, FACSM. Mayo Clinic, Rochester, MN. (Sponsor: Karen Newcomer, FACSM)
(No relevant relationships reported)

Friday, May 31, 2019, 9:30 AM - 10:20 AM
Room: CC-202C

2310 10:30 AM - 10:40 AM
The Effects Of Running Form On Hip Kinetics During Running Fatigue On An Instrumented Treadmill
Michael Bohne, Tamarie Wagstaff, Kainalu Nitta, Kirsten Howe, Kristen Terry, Jason Thomas. Utah Valley University, Orem, UT. (Sponsor: Scott Drum, FACSM)
Email: michael.bohne@uvu.edu
(No relevant relationships reported)
The fitness and exercise professions are evolving in transformative ways. As individual states in America and in countries worldwide are becoming more focused on quality, consistency, and potentially regulation, new priorities are emerging. This session will overview the systems approach that is evolving in the United States and will give a special focus on ACSM certifications and the enhance value of graduating from accredited university and college programs. The role of the Commission on Accreditation of Allied Health Education Programs or CAHEDP will be highlighted, with its pathway to accreditation of academic preparation programs. Attendees will leave with a better understanding of this dynamic period of change and progress, and the opportunities to be a key part of these developments.

2312  Meir Magal, FACSM. North Carolina Wesleyan College, Rocky Mount, NC
(No relevant relationships reported)

2313  Francis B. Neric. ACSM, Indianapolis, IN
(No relevant relationships reported)

2314  Ben Thompson, FACSM. MSU Denver, Denver, CO
(No relevant relationships reported)

This symposium addresses several of the less-frequently recognized psychological and social factors that influence exercise participation and the effectiveness of physical activity interventions. While many studies measure and assess potential physiological, biological and genetic modifiers of exercise adherence and efficacy, fewer studies routinely collect data on psychosocial modifiers that influence an individual’s participation in routine physical activity. Consequently, this symposium will provide examples by which factors such as family, ethnicity, music and perception may alter exercise outcomes.

2317  Christie L. Ward-Ritacco. University of Rhode Island, Kingston, RI
(No relevant relationships reported)

2318  Sofiya Alhassan, FACSM. University of Massachusetts, Amherst, MA
(No relevant relationships reported)
Lower back pain is a common symptom presenting to the sports medical practice. The reasons may include mechanical, inflammatory or both. Without a proper diagnosis, management is set up to fail. An approach to differentiate between mechanical and inflammatory lower back pain will be discussed, including the clinical picture and applicable special investigations.

**E-23** Tutorial Lecture - Accelerometer Physical Activity Data from NHANES 2011 - 2014

Friday, May 31, 2019, 10:40 AM - 11:30 AM  
Room: CC-304B

The nationally representative 2011-2014 National Health and Nutrition Examination Survey (NHANES) included device-based assessment of physical activity on more than 15,000 participants. This component allowed for up to seven days of 24-hour raw (80Hz) data capture from a triaxial wrist-worn accelerometer. This tutorial will discuss the NHANES physical activity assessment methodology and cloud-based analytical processing applied to the NHANES accelerometer data. The tutorial will also provide an overview of population-level physical activity estimates of adults and children by age and gender.

2327 Richard Troiano. National Cancer Institute, Bethesda, MD  
(No relevant relationships reported)

2328 Stephen S. Intille. Northeastern University, Boston, MA  
(No relevant relationships reported)

2329 Britni Belcher. University of Southern California, Los Angeles, CA  
(No relevant relationships reported)

**E-24** Tutorial Lecture - Clinical Implementation of Evidence-Based Orthobiologics

Friday, May 31, 2019, 10:40 AM - 11:30 AM  
Room: CC-203

The goal of this session is to provide an introductory, evidenced-based approach to orthobiologics, specifically platelet-rich plasma (PRP), for treating osteoarthritis and tendinopathy. Through a critical assessment of peer-reviewed data, we will analyze the basic scientific and clinical outcomes of PRP. We will discuss PRP content differences between 3 common preparation techniques, how cellular and growth factor content impacts cartilage and tendon health, and the clinical outcomes specific to the different preparations. Finally, we will synthesize this information into a user-friendly, evidenced-based framework to guide orthobiologic applications in patient care settings.

2330 Michael Baria. Ohio State University, Columbus, OH  
(No relevant relationships reported)

2331 James Borchers, FACSM. Ohio State University, Columbus, OH  
(No relevant relationships reported)

**E-25** Tutorial Lecture - Does Sleep Really Influence Sport Performance?

Friday, May 31, 2019, 10:40 AM - 11:30 AM  
Room: CC-300

The purpose of the proposed tutorial is to engage and inform the audience by critically reviewing research that has examined the influence of sleep on sport performance. Audience members will be exposed to relevant correlational and experimental studies, including sleep restriction, sleep extension and travel across time zone experiments. Implications for accurately interpreting this body of research will be discussed in light of the strengths and weaknesses of different methods for assessing sleep and sport performance. The audience will be asked to consider potential moderating effects of study duration (acute vs. chronic sleep changes; full night vs. partial night sleep changes) and study participant characteristics such as age, biological sex, health (e.g., absence or presence of sleep pathology), level of sport performer (e.g., college, elite) and sport type. The audience will be asked to contemplate potential mechanisms by which sleep could plausibly influence sport performance.

2332 Patrick J. O’Connor, FACSM. University of Georgia, Athens, GA  
Reported Relationships: P.J. O’Connor: Industry contracted research; PepsiCo.

**E-26** Colloquium - The Maze of Lower Back Pain

Friday, May 31, 2019, 10:40 AM - 11:30 AM  
Room: CC-303

Lower back pain is a common symptom presenting to the sports medical practice. The reasons may include mechanical, inflammatory or both. Without a proper diagnosis, overtraining syndrome. Sports medicine providers have similar issues with stress and burnout and may not consider wellness and life balance as part of career development. The advice we give to athletes regarding family, exercise, sleep, nutrition, and time away from training applies to providers with respect to career and life success. The stress of career development in practice and academic life is real. Having a plan to reduce stress and to make time for family and self is essential to navigating the various career demands.

2334 William O. Roberts, FACSM. University of Minnesota, Minneapolis, MN  
(No relevant relationships reported)

**E-27** Tutorial Lecture - Wellness and Life Balance for Sports Medicine Providers

Friday, May 31, 2019, 10:40 AM - 11:30 AM  
Room: CC-305

Overtraining and optimizing performance are common topics for sports medicine providers. Athletes in training have to balance training work load and rest to maximize the physical performance enhancement and minimize the risk of overuse injury and overtraining syndrome. Sports medicine providers have similar issues with stress and burnout and may not consider wellness and life balance as part of career development. The advice we give to athletes regarding family, exercise, sleep, nutrition, and time away from training applies to providers with respect to career and life success. The stress of career development in practice and academic life is real. Having a plan to reduce stress and to make time for family and self is essential to navigating the various career demands.

2335 Peter Brukner. University of Melbourne, University of Melbourne, Australia  
(No relevant relationships reported)

2336 Melody Hrubes. University of Illinois Chicago, Chicago, IL  
(No relevant relationships reported)

**E-28** Clinical Workshop-Hands On Demonstration - Dry Needling

Friday, May 31, 2019, 10:40 AM - 11:30 AM  
Room: CC-304G

2337 Peter Brukner. University of Melbourne, University of Melbourne, Australia  
(No relevant relationships reported)

2338 Melody Hrubes. University of Illinois Chicago, Chicago, IL  
(No relevant relationships reported)

**E-29** Free Communication/Poster - Performance

Friday, May 31, 2019, 7:30 AM - 12:30 PM  
Room: CC-Hall WA2

2337 Board #1 Mild Dehydration Protocol Impairs Lightweight Rowing Performance: Exploring Differences In Dehydration Technique  
Dayton J. Kelly, Liana E. Brown. Trent University, Peterborough, ON, Canada  
Email: daytonkelly@trentu.ca  
(No relevant relationships reported)

2338 Board #2 Progression of World Records in Master Swimming  
Tiago M. Barbosa1, Henrique P. Neiva2, Flavio A.S. Castro3, Daniel A. Marinho3. 1Nanyang Technological University, Research Centre in Sports, Health and Human Development, Polytechnic Institute of Bragança, Singapore, Singapore; 2University of Beira Interior, Research Centre in Sports, Health and Human Development, Covilhã, Portugal; 3University Federal Rio Grande do Sul, Porto Alegre, Brazil  
(No relevant relationships reported)

2339 Board #3 Are Changes in Physical Work Capacity Related to Changes in Associated Physiologic Measures?  
Derek Crawford. Pittsburg State University, Pittsburg, KS  
Email: dcr Crawford@pittstate.edu  
(No relevant relationships reported)
American College of Sports Medicine

Board #4  9:30 AM - 11:00 AM  Athletic Profile Of Elite Alpine Skir Racers: A Systematic Review And Meta-analysis
Pierre-Marc Ferland, Alain Steve Comtois. UQÀM, Montreal, QC, Canada
Email: pm.ferland@hotmail.com
(No relevant relationships reported)

Board #5  9:30 AM - 11:00 AM  Are Conditional Abilities Related To ATP Rank in Tennis Players?
(No relevant relationships reported)

Board #6  9:30 AM - 11:00 AM  The Influence of Bout Duration and Rule Modification in Small-Sided Games
Richard Hauer1, Antonio Tessitore2, Harald Tschan1. 1Vrije Universiteit Brussel, Brussels, Belgium. 2Northumbria University, Newcastle upon Tyne, United Kingdom. 3Northumbria University, Newcastle upon Tyne, United Kingdom. (Sponsor: Dr. Craig Meyer, FACSM)
Email: bart.roelands@vub.be
(No relevant relationships reported)

Board #7  9:30 AM - 11:00 AM  Training Level Does Not Affect The Negative Effect Of Mental Fatigue On Visuomotor Performance.
Bart Roelands1, Jeroen Van Cutsem1, Samuele Marcora2, Romain Meeusen, FACSM3. 1Vrije Universiteit Brussel, Brussels, Belgium. 2Kent University, Kent, United Kingdom. 3University of Bath, Bath, United Kingdom. (Sponsor: Romain Meeusen, FACSM)
Email: bart.roelands@vub.be
(No relevant relationships reported)

Board #8  9:30 AM - 11:00 AM  Physiological Determinants of Peak Power Output in Elite Cyclists
Glyn Howatson, FACSM1, Mehdi Kordi1, Stuart Goodall2, Nicos Haralabidis3, Tejal Patel1, Tom Maden-Wilkinson1, Jonathan Folland, FACSM1. 1University of Bath, Bath, United Kingdom. 2Kent University, Kent, United Kingdom. 3Sheffield Hallam University, Sheffield, United Kingdom. ‘Loughborough University, Loughborough, United Kingdom. (Sponsor: Romain Meeusen, FACSM)
Email: glynhowatson@hotmail.com
(No relevant relationships reported)

Board #9  9:30 AM - 11:00 AM  The Influence of Fatiguing Exercise on Power Output
Email: l_perry2@u.pacific.edu
(No relevant relationships reported)

Board #10  9:30 AM - 11:00 AM  Variations in Athletic Profiles Between Division I All-Girl and Co-Ed Competition Cheerleaders
Nia Y. Hicks, Michelle L. Eisenman, Emily L. Langford, Barry Munkasy, Ronald L. Snarr, Greg A. Ryan. Georgia Southern University, Statesboro, GA
(No relevant relationships reported)

Board #11  9:30 AM - 11:00 AM  Relationship Between Bone Mineral Density and Vertical Jump Performance In Collegiate Athletes
Sarah N. Lanham, Michelle L. Eisenman, Emily L. Langford, Ronald L. Snarr. Georgia Southern University, Statesboro, GA
Email: sl03888@georgiasouthern.edu
(No relevant relationships reported)

Board #12  9:30 AM - 11:00 AM  Variations In Physiological Fitness Of Starters Vs Non-starters During A Collegiate Women’S Basketball Season
Monica Taylor1, Erica Thomas2. 1University of the Sciences, Philadelphia, PA. 2St. Ambrose University, Davenport, IA. (Sponsor: Patrick Davitt, FACSM)
Email: m.taylor@uscience.edu
(No relevant relationships reported)

Board #13  9:30 AM - 11:00 AM  Confirming The Coach’S Bias: Power Begets Performance At The Plate
Email: k. moriguchi@u.pacific.edu
(No relevant relationships reported)

Board #14  9:30 AM - 11:00 AM  Intervention Of Cordyceps Sinensis On Exercise Fatigue
wenjuan zhen. Chengdu Sport University, CHENGDU, China
Email: 1286245074@qq.com
(No relevant relationships reported)

Board #15  9:30 AM - 11:00 AM  No Changes in Depth Jump Height but Longer Ground Contact Times as Box Height Increases
Cameron D. Addie1, Emily E. Grammer2, Marisa K. Straughn2, Giovanna C. Ramos1, Tyler J. Nelten2, Jeffrey D. Simpson2, Ludmila Cosio Lima1, Eric K. Greska1, Lee E. Brown, FACSM1. 1University of West Florida, Pensacola, FL. 2University of Delaware, Newark, DE
(No relevant relationships reported)

Board #16  9:30 AM - 11:00 AM  Effect Of Sex on Pacing Behaviour in Elite 1500m Short-Track Speed Skating Competitions
Lars van Leeuwen1, Marco J. Konings2, Florentina J. hettinga, FACSM1. 1Rijksuniversiteit Groningen, Groningen, Netherlands. 2University of Essex, Colchester, United Kingdom. ‘Northumbria University, Newcastle upon Tyne, United Kingdom. (Sponsor: Dr. Nicos Haralabidis)
Email: xfeng@springbokanalytics.com
Reported Relationships: X. Feng: Ownership/interest/stock; Springbok, Inc.

Board #17  9:30 AM - 11:00 AM  Quantitative Impact Of Individual Lower Limb Muscle Volumes On Athletic Performances
Xue Feng1, Tianyuan Xie1, Craig Meyer2, Silvia Blemker2, Joseph M. Hart, FACSM1. 1Springbok, Inc, Charlottesville, VA. 2University of Virginia, Charlottesville, VA. (Sponsor: Joe Hart, FACSM)
Email: xfeng@springbokanalytics.com
Reported Relationships: X. Feng: Ownership/interest/stock; Springbok, Inc.

Board #18  9:30 AM - 11:00 AM  The Acute Effects of Different Squat Intensities on Vertical Jump Performance
Andrew R. Hill1, Daniel L. Lademill2, Soon-Mi Choi1. 1Enduramoox Strength & Conditioning, Wichita Falls, TX. 2Midwestern State University, Wichita Falls, TX. (Sponsor: Dr. Craig Meyer, FACSM)
Email: enduramoox@gmail.com
(No relevant relationships reported)

Board #19  9:30 AM - 11:00 AM  Comparison Of Exercise Intensity Between Folk Dance And Walking In Healthy Female
Kumiyo Kai. Nihon Fukushi University, Mihama, Japan
Email: kumiyo@n-fukushi.ac.jp
(No relevant relationships reported)
P166 Final Program

2356 Board #20 9:30 AM - 11:00 AM
Non-Occupational Physical Activity and Mortality Risk: A Longitudinal Cohort Study

2357 Board #21 9:30 AM - 11:00 AM
Shoulder Range Of Motion: Comparison Between Dominant and Non-dominant Sides In Elite Young Swimmers

2358 Board #22 9:30 AM - 11:00 AM
Performance Across Quarters In An International Field Hockey Tournament

2359 Board #23 9:30 AM - 11:00 AM
Performance-Related Variables That Are Associated With Finish Time in an Olympic Distance Triathlon

2360 Board #24 9:30 AM - 11:00 AM
Assessing the Differences Between a Governed and Non-Controllable Focal Point on Male Broad Jump Performance

2361 Board #25 9:30 AM - 11:00 AM
Relationship of Lumbo-pelvic-hip Stability on Ball Speed in Female Windmill Softball Pitchers

2362 Board #26 9:30 AM - 11:00 AM
Effects of Optimizing the Respiratory Pump on Performance During a Simulated Ice Hockey Period

2363 Board #27 9:30 AM - 11:00 AM
Influence of Loaded Lunge Performance on Functional Movement Screen Deep Squat Performance in Physically Active Individuals

ACSM 66th Annual Meeting

2364 Board #28 9:30 AM - 11:00 AM
Could Hip Joint Position Induce Different Metabolic and Muscular Responses After Knee Extension?

2365 Board #29 9:30 AM - 11:00 AM
Cardiorespiratory Assessment of Professional Brazilian Surfers

E-30 Free Communication/Poster - Recovery

2366 Board #30 9:30 AM - 11:00 AM
Effective Stretching Position for the Tightness of Posterior Shoulder Capsule Determined by Shear Wave Elastography

2367 Board #31 9:30 AM - 11:00 AM
Phase Change Material Cooling Reduces Indices of Muscle Damage and Does Not Inhibit Acute Adaptation

2368 Board #32 9:30 AM - 11:00 AM
Effects Of Photobiomodulation Therapy On Fatigue And Muscle Damage In Judo Athletes

2369 Board #33 9:30 AM - 11:00 AM
Heart Rate Recovery Assessment in Elderly and Young Men: a Comparison Between Types of Exercise

2370 Board #34 9:30 AM - 11:00 AM
The Effects of Sport Massage and Foam Rolling on Running Efficiency in Female Collegiate Distance Runners
American College of Sports Medicine

Board #35  9:30 AM - 11:00 AM  Accelerated Recovery of Muscle Function in Baseball Pitchers Using Post-Game Phase Change Material Cooling
Michael J. Mullaney1, Susan Y. Kwiecień1, Andrew Fink1, Malachy P. McHugh1. 1Nicholas Institute of Sports Medicine and Athletic Trauma, Lenox Hill Hospital, New York, NY. 2McHugh & Associates Physical Therapy, Matawan, NJ. (Sponsor: Malachy P. McHugh, FACSM) Email: mchugh@nismat.org (No relevant relationships reported)

Board #36  9:30 AM - 11:00 AM  Sports Compression Garments Enhance Recovery Hemodynamics and Subsequent Time-Trial Performance
Daniel Chi Wo Lee. The Chinese University of Hong Kong, Hong Kong, Hong Kong Email: dwlee@cuhk.edu.hk (No relevant relationships reported)

Board #37  9:30 AM - 11:00 AM  Exercise Recovery with Cold and Thermoneural Water Immersion and Performance in Athletes
Hana Marmura, Matthew Palmar. St. Francis Xavier University, Antigonish, NS, Canada Email: hmanmura90@gmail.com (No relevant relationships reported)

Board #38  9:30 AM - 11:00 AM  Effect Of Electromagnetic Treated Water Combined With Infrared Radiation On Post-exercise Recovery Of Elite Gymnasts
Tienan Wu1, Xin Wang2, Zhang Song1, Chi Zhang2, Bing Hu2, Yahua Zi2, Huiping Yan1, Yifan Lu1. 1Heihe University, Heihe, China. 2Guangdong Junfeng BFS Technology Co., Ltd., Guangzhou, China. *Beijing University of Posts and Telecommunications, Beijing, China. *General Administration of Sport of China, Beijing, China. *Yantai Sport Research Center, Yantai, China. *Shanghai University of Sport, Shanghai, China. *Beijing Sport University, Beijing, China Email: tienan_wu@hotmail.com (No relevant relationships reported)

Board #39  9:30 AM - 11:00 AM  Impact of a Chronic Foam Rolling Protocol on Bunkie Test Scores
Elizabeth O’Neill, Maura Bergan, Tracey Matthews. Springfield College, Springfield, MA Email: oneill@springfieldcollege.edu (No relevant relationships reported)

Board #40  9:30 AM - 11:00 AM  Recovery From Unaccustomed Strenuous Exercise In Young And Older Endurance-trained Adults
Koichiro Hayashi1, Miriam E. Leary2, Stephen J. Roy2, Jitanaa Laosiriapisan2, Evan P. Pasha1, Hirofumi Tanaka1, FACSM. 1Kokugakuin University, Yokohama, Japan. 2The University of Texas at Austin, Austin, TX. (Sponsor: Hirofumi Tanaka, FACSM) Email: k-hayashi@kokugakuin.ac.jp (No relevant relationships reported)

Board #41  9:30 AM - 11:00 AM  Enhanced Recovery of Cycling Performance with High Compression Garment Wear
Ewan R. Williams1, James McKendry2, Leigh Breen1. 1University of Georgia, Athens, GA. 2University of Birmingham, Birmingham, United Kingdom. (Sponsor: Dr Ellen Evans, FACSM) Email: erw201@me.com (No relevant relationships reported)
**E-31** Free Communication/Poster - Cellular/ Molecular

**Friday, May 31, 2019, 7:30 AM - 12:30 PM**

**Room:** CC-Hall WA2

### 2387 Board #51

9:30 AM - 11:00 AM

**Post-Natal Moderate Exercise Reduces the Harms of Protein Deprivation on the Cardiac Oxidative Stress Biomarkers**

Dori Giovanni, S. Ferreira1, Anderson Pedrozo2, Diego Araújo2, Cristiane Freitas3, Talita Lima4, Mariana Fernandes5, Claudia Lagranha1.

1. Federal University of São Francisco Valley, Petrolina, Brazil. 2. Federal University of Pernambuco, Recife, Brazil. 3. Centro Académico de Vitória, VITÓRIA DE SANTO ANTÔ, Brazil.

Email: diorgio@鲐rine@5mail.com

(No relevant relationships reported)

### 2388 Board #52

9:30 AM - 11:00 AM

**Circulating Angiogenic Cell and Microparticle Response to Prolonged Sitting**


Email: wsevans@terpmail.umd.edu

(No relevant relationships reported)

### 2389 Board #53

9:30 AM - 11:00 AM

**Differences in CD31+ Circulating Angiogenic Cell Subtypes Between Endurance Trained and Sedentary Younger Adults**

Rian Q. Landers-Ramos1, Ryan M. Sapp2, Daniel D. Shill2, James M. Hagberg, FACSM2, Steven J. Prior3. 1. Towson University, Towson, MD. 2. University of Maryland, College Park, MD.

Email: rhandersramos@towson.edu

(No relevant relationships reported)

### 2390 Board #54

9:30 AM - 11:00 AM

**Differential Cardiovascular and Mitochondrial Adaptations in Humanized P53 R72P Knock-In Mice**

Junchul Shin1, Soo-Young Choi1, Soon-Gook Hong1, Jacqueline Sayoc1, Meghan Rath2, Minsoo Kang, FACSM2, Michael D. Brown, FACSM2, Maureen Murphy3, Joon-Young Park1. 1. Temple University; Philadelphia, PA. 2. University of Mississippi, Mississippi, MS. 3. Auburn University, Auburn, AL. 4. The Wistar Institute, Philadelphia, PA.

Email: rhandersramos@towson.edu

(No relevant relationships reported)

### 2391 Board #55

9:30 AM - 11:00 AM

**Origin of Extracellular Vesicles Released During Exercise**

Perikles Simon1, Alexandra Brahm1, Nils Hailer2, Leona Esch-Heiss3, Elmo W. Neuberger1, Ewa-Maria Krümer-Albers1. 1. Institute for Sports Science, Johannes Gutenberg-University Mainz, Mainz, Germany. 2. Institute of Developmental Biology and Neurobiology, Johannes Gutenberg-University Mainz, Mainz, Germany.

Email: simonpe@uni-mainz.de

(No relevant relationships reported)
E-34 Free Communication/Poster - Vascular Function
Friday, May 31, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

2406 Board #70 11:00 AM - 12:30 PM
High Blood Flow Restriction Pressure is Necessary to Induce Vascular Adaptations with Very Low-Load Training
Kevin T. Mattocks1, J Grant Mousser2, Matthew B. Jesse2, Samuel L. Buckner2, Scott J. Dankel2, Samuel L. Buckner1, Zachary W. Bell1, Takashi Abe2, John P. Bentley2, Jeremy P. Loenneke1. 1Lindenwood University - Belleville, Belleville, IL. 2Troy University, Troy, AL. 3University of Southern Mississippi, Hattiesburg, MS. 4University of Mississippi, University, MS. 5University of South Florida, Tampa, FL
(No relevant relationships reported)

2407 Board #71 11:00 AM - 12:30 PM
High Pressure Blood Flow Restriction Is Necessary For Peripheral Vascular Adaptations With Very Low Loads
J G. Mousser1, Kevin T. Mattocks2, Matthew B. Jesse1, Samuel L. Buckner2, Scott J. Dankel2, Zachary W. Bell1, Takashi Abe2, John P. Bentley2, Jeremy P. Loenneke1. 1Troy University, Troy, AL. 2Lindenwood University - Belleville, Belleville, IL. 3University of Southern Mississippi, Hattiesburg, MS. 4University of South Florida, Tampa, FL. 5University of Mississippi, University, MS
Email: jmousser@troy.edu
(No relevant relationships reported)

2408 Board #72 11:00 AM - 12:30 PM
Effects of Jump Rope Exercise on Adiposity & Vascular Function in Prehypertensive Adolescent Girls
Liz Pekas1, Ki-Dong Sung2, Won-Mok Son2, Kook-Eun Soo3, Jung-Jun Park4, Song-Young Park1. 1The University of Nebraska at Omaha, Omaha, NE. 2Pusan National University, Busan, Korea, Republic of
Email: lizpekas@unomaha.edu
(No relevant relationships reported)

2409 Board #73 11:00 AM - 12:30 PM
Muscle Blood Flow is not Dependent upon Conduit Artery Diameter following Prior Vasodilation
Timothy R. Rotarais1, Jakob D. Lauver2, John R. Thistlethwaite2, Barry W. Scheuermann2. 1Adrian College, Adrian, MI. 2Coastal Carolina University, Conway, SC. 3Ohio Dominican University, Columbus, OH. 4University of Toledo, Toledo, OH
(No relevant relationships reported)

2410 Board #74 11:00 AM - 12:30 PM
Lower Extremity Venous Compliance in Newly Injured Individuals with Spinal Cord Injury
Matthew T. Maher, MS, CEP1, James M. LiMonta, BS1, Andrew D. Delgado, MS2, Kristell Taylor, BS2, Thomas N. Bryce, MD2, Miguel Escalon, MD2, Vincent Huang, MD2, Jill M. Wecht, EdD1. 1The University of Nebraska at Omaha, Omaha, NE. 2Peters VA Medical Center, Bronx, NY
(No relevant relationships reported)

2411 Board #75 11:00 AM - 12:30 PM
Prolonged Sitting Increases Arterial Stiffness in Healthy Adults
Lauren C. Bates1, William S. Evans2, Quentin Willey1, Daniel P. Cledeur1, Lee Stoner, FACSM1, Erik D. Hanson1. 1University of North Carolina Chapel Hill, Chapel Hill, NC. 2University of Southen Mississippi, Hattiesburg, MS. (Sponsor: Lee Stoner, FACSM)
Email: Bates15@live.unc.edu
(No relevant relationships reported)
P170 Final Program

2412 Board #86 11:00 AM - 12:30 PM
Acute Effects Of Oral Ascorbic Acid On The Vascular Endothelial Function Under Heat-not-burn Tobacco Smoking
Ayako Azuma, Hajime Miura, Mizuki Ishikawa, Yasuaki Tamura. Institute of Socio-Arts & Science, Tokushima University, Tokushima, Japan
Email: ayakkuma32@gmail.com
(No relevant relationships reported)

2413 Board #87 11:00 AM - 12:30 PM
Limb Specificity And Near-infrared Spectroscopy Assessment Of Reactive Hyperemia: The Potential Impact Of Oral Capsaicin
Alexs A. Matias, Meghan Lynch, Brian Lora, Gaia Giuriato, Massimo Venturelli, Stephen J. Ives. Skidmore College, Saratoga Springs, NY. 1University of Verona, Verona, Italy
Email: amatias1@skidmore.edu
(No relevant relationships reported)

2414 Board #88 11:00 AM - 12:30 PM
Changes in Arterial Adropin Levels by Age and Aerobic Training Is Related to Arterial Vasodilation
Shumpei Fujie, Natsuki Hasegawa, Naoki Horii, Masataka Uchida, Seiji Maeda, Jaume Padilla, Luis A. Martinez-Lemus, Motoyuki Iemitsu. 1University of Tsukuba, Tsukuba, Ibaraki, Japan.
2Ritsumeikan University, Kusatsu, Shiga, Japan. 1University of Missouri, Columbia, MO
(No relevant relationships reported)

2415 Board #89 11:00 AM - 12:30 PM
Nocturnal Hypertension Status and C-Reactive Protein Levels Before and After AEXT
Adelola O. Adeyemo, Michael D. Brown, FACSM. Auburn University, Auburn, AL.
Email: aoa0005@auburn.edu
(No relevant relationships reported)

2416 Board #90 11:00 AM - 12:30 PM
Integrated Effects of Sympathetic Vasconstriction and Local Vasodilation in Human Skeletal Muscle and Skin Microvasculature
Masashi Ichinose, Mikie Nakabayashi, Yumie Ono. 1Meiji University, Tokyo, Japan. 2Meiji University, Kanagawa, Japan.
(No relevant relationships reported)

2417 Board #91 11:00 AM - 12:30 PM
Influence Of Arm cranking Exercise With Electrical Stimulation On The Vascular Endothelial Function
Mizuki Ishikawa, Hajime Miura, Ayako Azuma, Yasuaki Tamura. Tokushima university, Tokushima city, Japan
Email: miduki_0609@yahoo.co.jp
(No relevant relationships reported)

2418 Board #92 11:00 AM - 12:30 PM
The Age-dependent Changes In Cardiovascular Risk Factors Associated With Endothelial Function In Women Of Han Nationality With Ace D/I Polymorphism In Beijing
Yuanyuan LYU, Lingxiao HE, Kaiyu XIONG, Li ZHAO*. 1Beijing Sport University, Beijing, China. 2KU Leuven Faculty of Kinesiology and Rehabilitation Sciences, Leuven, Belgium
Email: ivylyuynyan2938@alilyun.com
(No relevant relationships reported)

ACSM 66th Annual Meeting

2419 Board #83 11:00 AM - 12:30 PM
The Effects Of Pilates Training On Vascular Function In Obese Premenopausal Women With Elevated Blood Pressure
Michelle Walters-Edwards, Alexei Wong, Song-Young Park, Javad Mehrabani, Majid Koozechian, Arturo Figueroa, FACSM*. 1Marymount University, Arlington, VA. 2University of Nebraska, Omaha, NE. 3University of Guilan, Rasht, Iran, Islamic Republic of. 4Jacksonville State University, Jacksonville, AL. 5Texas Tech University, Lubbock, TX. (Sponsor: Arturo Figueroa, FACSM)
Email: michelle.walters-edwards@mmarymount.edu
(No relevant relationships reported)

2420 Board #84 11:00 AM - 12:30 PM
Effects Of Acute Cycling With Electric Muscle Stimulations Of Lower Limb On The Endothelial Function
Hajime Miura, Miduki Ishikawa, Ayako Azuma, Yasuaki Tamura. Tokushima University, Tokushima, Japan
Email: hajime-mi@tokushima-u.ac.jp
(No relevant relationships reported)

2421 Board #85 11:00 AM - 12:30 PM
Effect of Heating Duration on Brachial Artery Endothelial Function in Humans
Jen Cheng, Maureen MacDonald. McMaster University, Hamilton, ON, Canada.
Email: chengji2@mcmaster.ca
(No relevant relationships reported)

2422 Board #86 11:00 AM - 12:30 PM
Passive Leg Movement Technique for Assessing Vascular Function: Further Defining the Distribution of Blood Flow Katherine L. Shields, Ryan M. Broxterman, Catherine L. Jarrett, Angela V. Bisconti, Soung Hun Park, Russell S. Richardson. 1University of Utah, Salt Lake City, UT. 2University of Milan, Milan, Italy.
Email: Katherine.Shields@hsc.utah.edu
(No relevant relationships reported)

2423 Board #87 11:00 AM - 12:30 PM
Vasodilatory And Metabolic Capacity With Advancing Age: Evidence Of Interdependence In The Human Vasculature
Soung Hun Park, Oh Sang Kwon, Song-Young Park, Joshua C. Weavil, Jay R. Hydren, Robert H. I. Andtbacka, John R. Hyngristrom, Van Reese, Russell S. Richardson. 1University of Utah, Salt Lake City, UT. 2University of Nebraska, Omaha, NE.
Email: soung hun.park@utah.edu
(No relevant relationships reported)

2424 Board #88 11:00 AM - 12:30 PM
Comparison Of Endothelial-dependent Vasodilatory And Vasoconstrictor Responses Between Upper- And Lower-Limb Arteries In Older Adults
Myles O’Brien, Myles W. O’Brien, Jarrett A. Johns, Susan A. Robinson, Said Mekary, Derek S. Kimmerly. Dalhousie University, Halifax, NS, Canada. 2Acadia University, Wolfville, NS, Canada.
Email: my594690@dal.ca
(No relevant relationships reported)

2425 Board #89 11:00 AM - 12:30 PM
Physical Activity Ameliorates Endothelial NLRP3 Inflammasome in Obese Mice Aorta
Yoonjung Park, Jonghae Lee, Junyoung Hong, Michihisa Umetani, Emily LaVoy. University of Houston, Houston, TX.
Email: ypark10@uh.edu
(No relevant relationships reported)
American College of Sports Medicine

2426 Board #90 11:00 AM - 12:30 PM
Exploring the Associations Between Habitual Sedentary Behavior and Endothelial Cell Health
Andrea T. Duran1, Carol Ewing Garber, FACSM1, Ipek Ensari2, Daichi Shimb01, Keith M. Diaz1. 1Teachers College, Columbia University, New York, NY. 2Columbia University Data Science Institute, New York, NY. (Sponsor: Behavioral Cardiovascular Health, Columbia University Medical Center, New York, NY. (Sponsor: Carol Ewing Garber, FACSM)
Email: atl2172@columbia.edu
(No relevant relationships reported)

2427 Board #91 11:00 AM - 12:30 PM
Short-term Cycling Restores Endothelial Dysfunction After Resistance Exercise
Takuma Morishima1, Motoyuki Iemitsu2, Eiuke Ochi1. 1Hosei University, Tokyo, Japan. 2Ritsumeikan University, Kusatsu, Japan. (Sponsor: Jil Kanaley, FACSM)
(No relevant relationships reported)

2428 Board #92 11:00 AM - 12:30 PM
Application Of A Tourniquet During Venous Blood Collection From The Forearm Reduces Plasma Nitrite Concentration
Chris Easton1, Luke Liddle2, Mia C. Burleigh1, Chris Monaghan1, David J. Mugggeridge1. 1University of the West of Scotland, Blantyre, Scotland, United Kingdom. 2University of the Highlands and Islands, Inverness, United Kingdom. (Sponsor: Professor Jason Allen, FACSM)
Email: chris.easton@uws.ac.uk
(No relevant relationships reported)

2429 Board #93 11:00 AM - 12:30 PM
Associations Among Indices of Insulin Resistance and Vascular Reactivity in Older, Obese Adults
Matthew D. Doyle, Vincent M. Simth, Gabrielle A. Volk, Kevin D. Ballard, FACSM, Kyle L. Timmerman, FACSM, Miami University, Oxford, OH
Email: ballardk@MiamiOH.edu
(No relevant relationships reported)

2430 Board #94 11:00 AM - 12:30 PM
Muscle Oxygen Saturation In Patients With Deep Venous Thrombosis In The Lower Limbs
Mayara F. Ferreira1, Karen R. Riganii, Antonio Z. Zeratti1, Nelson L. Lucena1, Raphael D. Dias1. 1Universidade Nove de Julho, Sao Paulo, Brazil. 2Faculdade de Medicina de Sao Paulo, Sao Paulo, Brazil
Email: mayaraferreirag4352@gmail.com
(No relevant relationships reported)

2431 Board #95 11:00 AM - 12:30 PM
Does 24-hour Ambulatory Blood Pressure Monitoring Act as Ischemia Preconditioning and Influence Endothelial Function?
Brandon G. Fico, WeiLi Zhu, Hirofumi Tanaka, FACSM. The University of Texas at Austin, Austin, TX. (Sponsor: Dr. Hirofumi Tanaka, FACSM)
Email: bfico@utexas.edu
(No relevant relationships reported)

2432 Board #96 11:00 AM - 12:30 PM
Peripheral Vascular Function in Individuals with Posttraumatic Stress Disorder
Jennifer Weggen, Austin Hogwood, Brandon Imthurn, Ashley Darling, Kevin Decker, Ryan Garten. Virginia Commonwealth University, Richmond, VA
Email: weggenj@vcu.edu
(No relevant relationships reported)

Final Program P171

2433 Board #97 11:00 AM - 12:30 PM
Measurement of Peripheral Pulse Wave Velocity Responses to Prolonged Sitting: Influence of Posture
Abdullah Bandar Alansare1, Robert J. Kowalsky2, Sophy Perdorno3, Lee Stoner, FACSM4, Bethany Barone Gibbs1. 1University of Pittsburgh, Pittsburgh, PA. 2Texas A&M University-Kingsville, Kingsville, TX. 3University of Kansas Medical Center, Kansas City, KS. 4University of North Carolina, Chapel Hill, NC. (Sponsor: Dr. Lee Stoner, FACSM)
Email: abdul28@outlook.sa
(No relevant relationships reported)

2434 Board #98 11:00 AM - 12:30 PM
The Acute Effects of Aerobic, Resistance, and Integrated Concurrent Exercise on Blood Pressure and Arterial Stiffness
Gregory Spicer, Susan Sotir, Kristen Oullette, Tracey Matthews, Garrett Abel, Samuel Headley. Springfield College, Springfield, MA. (Sponsor: Vincent Paolone, FACSM)
Email: gp Spicer@springfieldcollege.edu
(No relevant relationships reported)

2435 Board #101 11:00 AM - 12:30 PM
Application Of A Tourniquet During Venous Blood Collection From The Forearm Reduces Plasma Nitrite Concentration
Chris Easton1, Luke Liddle2, Mia C. Burleigh1, Chris Monaghan1, David J. Mugggeridge1. 1University of the West of Scotland, Blantyre, Scotland, United Kingdom. 2University of the Highlands and Islands, Inverness, United Kingdom. (Sponsor: Professor Jason Allen, FACSM)
Email: chris.easton@uws.ac.uk
(No relevant relationships reported)

2436 Board #102 11:00 AM - 12:30 PM
Influence Of Acute Inflammation On Central Hemodynamics During A Mild Sympathoexcitatory Stimulus.
Neil J. McMillan, Elizabeth C. Schroeder, Wesley K. Jefferts, Thessa I.M. Hilgenkamp, Bo Fernhall, FACSM. University of Illinois at Chicago, Chicago, IL. (Sponsor: Bo Fernhall, FACSM)
(No relevant relationships reported)

2437 Board #103 11:00 AM - 12:30 PM
Greater Reliance On Carbohydrates During Single Leg Versus Double Leg Cycling
Sarah G. Kearney, Shane Draper, John McDaniel. Kent State University, Kent, OH
Email: s k e a r n e 5 @ k e n t . e d u
(No relevant relationships reported)

2438 Board #104 11:00 AM - 12:30 PM
Attenuated Pulsatile Load During Metaboreflex Activation Is Associated with Excess Adiposity in Dynapenic Postmenopausal Women
Arun Maharaj1, Salvador J. Jaime2, Stephen M. Fischer1, Arturo Figueroa, FACSM1. 1Texas Tech University, Lubbock, TX. 2University of Wisconsin - La Crosse, La Crosse, WI. (Sponsor: Dr. Arturo Figueroa, FACSM)
Email: arun.maharaj@ttu.edu
(No relevant relationships reported)

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<table>
<thead>
<tr>
<th>Board #105</th>
<th>11:00 AM - 12:30 PM</th>
<th>Board #108</th>
<th>11:00 AM - 12:30 PM</th>
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</thead>
<tbody>
<tr>
<td>Lower Leg Lean Mass Is Associated With Reduced Pulse Pressure Amplification In Postmenopausal Women&lt;br&gt;Stephen M. Fischer¹, Arun Maharaj, Salvador J. Jaime, Arturo Figueroa, FACSM.¹ Texas Tech University, Lubbock, TX. ¹University of Wisconsin-La Crosse, La Crosse, WI. (Sponsor: Arturo Figueroa, FACSM) (No relevant relationships reported)</td>
<td>Relationship Between Arterial Stiffness And Cardiac Function In Athletes&lt;br&gt;Yuto Hashimoto, Takano Okamoto. ¹Graduate school of Nippon Sport Science University, Tokyo, Japan. ²Nippon Sport Science University, Tokyo, Japan Email: ¹<a href="mailto:spdayo06@nitta.ac.jp">spdayo06@nitta.ac.jp</a> (No relevant relationships reported)</td>
<td>Board #107</td>
<td>11:00 AM - 12:30 PM</td>
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<td>Board #109</td>
<td>11:00 AM - 12:30 PM</td>
<td>Effects Of Isometric Handgrip Exercise On Arterial Function &amp; Cognitive Function In Older Adults&lt;br&gt;Takanobu Okamoto, Yuto Hashimoto. Nippon Sport Science University, Tokyo, Japan Email: <a href="mailto:tokamoto@nitta.ac.jp">tokamoto@nitta.ac.jp</a> (No relevant relationships reported)</td>
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<td>Board #111</td>
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<td>Board #112</td>
<td>11:00 AM - 12:30 PM</td>
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<td>Impact Of Isometric Handgrip Exercise On Hypercapnia-induced Shear-mediated Dilation In The Internal Carotid Artery&lt;br&gt;Takuro Washio¹, Kazuyu Suzuki, Takashi Yamagata, Soichi Ando¹, Shigehiko Ogoh, FACSM.¹ Tottori university, kawagoe, Japan. ²Japan Women's University, Tokyo, Japan. ³The University of Electro-Communications, Tokyo, Japan Email: <a href="mailto:t.washio@gmail.com">t.washio@gmail.com</a> (No relevant relationships reported)</td>
<td>Effect Of Isometric Handgrip Exercise On Hypercapnia-induced Shear-mediated Dilation In The Internal Carotid Artery&lt;br&gt;Takuro Washio¹, Kazuyu Suzuki, Takashi Yamagata, Soichi Ando¹, Shigehiko Ogoh, FACSM.¹ Tottori university, kawagoe, Japan. ²Japan Women's University, Tokyo, Japan. ³The University of Electro-Communications, Tokyo, Japan Email: <a href="mailto:t.washio@gmail.com">t.washio@gmail.com</a></td>
<td>Board #113</td>
<td>11:00 AM - 12:30 PM</td>
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<td>The Impact Of Pulsed Electromagnetic Field Therapy On Blood Pressure And Circulating Nitric Oxide Levels: A Double-blind, Randomized Study In Subjects With Metabolic Syndrome.&lt;br&gt;Dongwook Yeo¹, Courtney Wheatley², Glenn Stewart, Win-Kung Shen, Jesse Schwartz³, Bruce Johnson³, Chul-Ho Kim³. ¹Mayo Clinic, Rochester, MN. ²Mayo Clinic, Phoenix, AZ Email: <a href="mailto:ekatulka@udel.edu">ekatulka@udel.edu</a> (No relevant relationships reported)</td>
<td>Investigating the Effect of a High Fat Meal and Prolonged Sitting on Executive Function: A Pilot Study&lt;br&gt;Craig Paterson¹, Keeron J. Stone¹, Lee Stoner, FACSM, Daniel P. Creede², Aitor MartinezAguirre-Betolaza³, Joseph Festa³, Meghan A. Brown¹, John K. Parker¹, Simon Fryer¹. ¹University of Gloucestershire, Gloucester, United Kingdom. ²University of South Carolina at Chapel Hill, Chapel Hill, NC. ³University of Southern Mississippi, Hattiesburg, MS. ⁴University of Basque Country (UPV/EHU), vitoria-gasteiz, Spain. ⁵Loughborough University, Loughborough, United Kingdom. (Sponsor: Dr Lee Stoner, FACSM) (No relevant relationships reported)</td>
<td>Board #114</td>
<td>11:00 AM - 12:30 PM</td>
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<td>Sleep Metrics are Associated with Markers of Cardiovascular Disease Risk In Youth&lt;br&gt;Elissa K. Katulka, Alexandra E. Hirt, Michele N. D’Agata, Felicia R. Berube, Melissa A. H. Witman. University of Delaware, Newark, DE Email: <a href="mailto:akatulka@udel.edu">akatulka@udel.edu</a></td>
<td>Board #115</td>
<td>11:00 AM - 12:30 PM</td>
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<tr>
<td>Investigating the Effect of a High Fat Meal and Prolonged Sitting on Executive Function: A Pilot Study&lt;br&gt;Craig Paterson¹, Keeron J. Stone¹, Lee Stoner, FACSM, Daniel P. Creede², Aitor MartinezAguirre-Betolaza³, Joseph Festa³, Meghan A. Brown¹, John K. Parker¹, Simon Fryer¹. ¹University of Gloucestershire, Gloucester, United Kingdom. ²University of South Carolina at Chapel Hill, Chapel Hill, NC. ³University of Southern Mississippi, Hattiesburg, MS. ⁴University of Basque Country (UPV/EHU), vitoria-gasteiz, Spain. ⁵Loughborough University, Loughborough, United Kingdom. (Sponsor: Dr Lee Stoner, FACSM) (No relevant relationships reported)</td>
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<td>Board #116</td>
<td>11:00 AM - 12:30 PM</td>
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<td>Serial Lower Limb Occlusion and Reperfusion Augments Muscle Oxygen Saturation despite Attenuated Cardiac Hemodynamics&lt;br&gt;Afton D. Seeley, Natasha Cruz, Jesse S. Brennan, Kevin A. Jacobs, FACSM. University of Miami, Miami, FL. (Sponsor: Kevin Jacobs, FACSM) Email: <a href="mailto:ads129@miami.edu">ads129@miami.edu</a></td>
<td>Board #117</td>
<td>11:00 AM - 12:30 PM</td>
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<td>Arterial Smooth Muscle Cell PAQR7 Activation Attenuates Myogenic Tone In Pressurized Cerebral Arteries&lt;br&gt;Jacob A. Goldsmith, Kirk W. Evanson. Florida State University, Tallahassee, FL. (Sponsor: Heidi Kluess, FACSM) Email: <a href="mailto:jgoldsmith@fsu.edu">jgoldsmith@fsu.edu</a></td>
<td>Arterial Smooth Muscle Cell PAQR7 Activation Attenuates Myogenic Tone In Pressurized Cerebral Arteries&lt;br&gt;Jacob A. Goldsmith, Kirk W. Evanson. Florida State University, Tallahassee, FL. (Sponsor: Heidi Kluess, FACSM) Email: <a href="mailto:jgoldsmith@fsu.edu">jgoldsmith@fsu.edu</a></td>
<td>Board #118</td>
<td>11:00 AM - 12:30 PM</td>
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<td>Modification Of Vascular Function after Acute Handgrip Exercise Training In College Students&lt;br&gt;Arturo A. Arce-Esquiel, Ashley N. Tulloch, Joyce E. Ballard, FACSM. The University of Texas at Tyler, Tyler, TX. (Sponsor: Joyce E. Ballard, FACSM) Email: <a href="mailto:arce@utttyler.edu">arce@utttyler.edu</a></td>
<td>Modification Of Vascular Function after Acute Handgrip Exercise Training In College Students&lt;br&gt;Arturo A. Arce-Esquiel, Ashley N. Tulloch, Joyce E. Ballard, FACSM. The University of Texas at Tyler, Tyler, TX. (Sponsor: Joyce E. Ballard, FACSM) Email: <a href="mailto:arce@utttyler.edu">arce@utttyler.edu</a></td>
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2455  Board #119  11:00 AM - 12:30 PM  
Sex Differences in the Central Arterial Stiffness Response to Prolonged Uninterrupted Sitting  
Daniel Paul Credeur1, Sabina M. Miller2, Raymond Jones1, Stephanie M. McCoy1, David R. Dillow3, Lee Stoner, FACSM4.  
1University of Southern Mississippi, Hattiesburg, MS. 2George Mason University, Fairfax, VA. 3William Carey University, Hattiesburg, MS. 4University of North Carolina, Chapel Hill, NC. (Sponsor: Lee Stoner, FACSM)  
Email: daniel.credeur@usm.edu  
(No relevant relationships reported)

2456  Board #120  11:00 AM - 12:30 PM  
The Reliability of Lower-Limb Pulse-Wave Velocity Assessments Using an Oscillometric Technique  
Jake C. Diana1, Elizabeth Kesch1, Katie Burnet1, Daniel Creuder2, Simon Fryer3, Keeron Stone1, Lee Stoner, FACSM4.  
1University of North Carolina at Chapel Hill, Chapel Hill, NC. 2University of Gloucestershire, Gloucester, United Kingdom. 3University of Southern Mississippi, Hattiesburg, MS. (Sponsor: Lee Stoner, FACSM)  
(No relevant relationships reported)

2457  Board #121  11:00 AM - 12:30 PM  
Effects of Acute Capsaicin on the Central and Peripheral Hemodynamic Response to Passive Leg Movement  
Stephen J. Ives1, Gaia Giuriato1, Massimo Venturelli2, Meaghan Lynch1.  
1Skidmore College, Saratoga Springs, NY. 2University of Verona, Verona, Italy  
Email: sives@skidmore.edu  
(No relevant relationships reported)

2458  Board #122  11:00 AM - 12:30 PM  
Arterial Stiffness Is Unaffected By Acute Hyperglycemia And Menstrual Cycle Phase In Premenopausal Women.  
Queen's University, Kingston, ON, Canada  
Email: kaitlyn.liu@queensu.ca  
(No relevant relationships reported)

2459  Board #123  11:00 AM - 12:30 PM  
Effects of Resistance Training with Blood Restriction on Flow-Mediated Dilatation of Iraqual Artery in Elderly  
RAFAEL DURANS PEREIRA, Leandro Moraes Pinto, Antonio Woodson Santos Maciel, Jerdiany Silva Serejo, José Ribamar Pereira Beckman, Beatriz Ferreira de Souza, Antonio de Paula Pereira, Alessandra de Magalhães Campos Garcia, Ana Eugenia Furtado, Janaina de Oliveira Brito-Monzani, Cristiano Texeira Mostarda.  
Universidade Federal Do Maranhão, Sao Luis, Brazil  
Email: rafaeldurrans@gmail.com  
(No relevant relationships reported)

2460  Board #124  11:00 AM - 12:30 PM  
Effect Of A Two-week Exercise Intervention On Postprandial Extracellular Vesicles In Adults With Prediabetes  
Natalie ZM Eichner, Nicole M. Gilbertson, Emily M. Heiston, Luca Musante, Sabrina LaSalvia, Arthur L. Weltman, FACSM, Uta Ernstrüger, Steven K. Malin, FACSM.  
University of Virginia, Charlottesville, VA. (Sponsor: Steven Malin, FACSM)  
Email: nze8bz@virginia.edu  
(No relevant relationships reported)

2461  Board #125  11:00 AM - 12:30 PM  
Cardiorespiratory And Cerebrovascular Function Of Long-neck Karen Women In Thailand  
Pattawan Lapo.  
Chulalongkorn University, Bangkok, Thailand  
Email: pattawanlapo@hotmail.com  
(No relevant relationships reported)

2462  Board #126  11:00 AM - 12:30 PM  
Examination of Underlying Mechanisms Contributing to the Enhanced Post-Exercise Blood Pressure Response.  
Central Michigan University, Mount pleasant, MI  
Email: power3g@cwmich.edu  
(No relevant relationships reported)

2463  Board #127  11:00 AM - 12:30 PM  
Sex Differences In Sitting-induced Vascular Dysfunction: Evidence Of Augmented Antioxidant Defense.  
Kevin Decker, Patrick Feliciano, Morgan Kimmel, Austin Hogwood, Jennifer Weggen, Ashley Darling, Austin Michael, Ryan Garten.  
Virginia Commonwealth University, Richmond, VA  
Email: deckerp@vcu.edu  
(No relevant relationships reported)

2464  Board #128  11:00 AM - 12:30 PM  
The Relationship Between Body Mass Index and Aortic Stiffness in Females Across the Lifespan  
Allison P. Keller1, Wesley K. Lefferts2, Jaqueline A. Augustine1, Jacob P. DeBlois1, Qiu Wang1, Kevin S. Heffernan1.  
Syracuse University, Syracuse, NY. 2University of Illinois at Chicago, Chicago, IL. 2The State University of New York at Cortland, Cortland, NY. (Sponsor: Bo Fernhall, FACSM)  
(No relevant relationships reported)

2465  Board #129  11:00 AM - 12:30 PM  
Differing Impact of Weight Cycling on Ambulatory Blood Pressure Versus Conventional Blood Pressure Assessment: A Possible Explanation to Controversy  
Zachary Zeigler, Danielle Akin, Trevor Nordin.  
Grand Canyon University, mesa, AZ  
Email: zachary.ziegler@geu.edu  
(No relevant relationships reported)

2466  Board #130  11:00 AM - 12:30 PM  
Vascular Response to Submaximal Intensity Aerobic Exercise in Individuals with Down Syndrome  
Sang Ouk Wee1, Elizabeth C. Schroeder2, Georgios O. Grigoriadis3, Alexander J. Rosenberg1, Kanokvan Bunsawat1, Tracy Baynard, FACSM, Bo Fernhall, FACSM.  
1California State University San Bernardino, San Bernardino, CA. 2University of Illinois at Chicago, Chicago, IL. 3University of North Texas. Fort Worth, TX. 4University of Utah, Salt Lake City, UT. (Sponsor: Bo Fernhall, FACSM)  
Email: sangouk.wee@csusb.edu  
(No relevant relationships reported)

2467  Board #131  11:00 AM - 12:30 PM  
The Influence of Habitual Physical Activity on Arterial Baroreflex Sensitivity in Healthy Young Adults  
University of Delaware, Newark, DE. (Sponsor: William Farquhar, FACSM)  
Email: jwatsou@udel.edu  
(No relevant relationships reported)

2468  Board #132  11:00 AM - 12:30 PM  
Association Among Bone-loading Physical Activity, Arterial Stiffness, And Body Composition In Healthy College-aged Students  
So Jung Kim, Eliana Casamassima, Karen Ruo, Julie Ballo, Theresa Poon.  
University of Massachusetts, Lowell, MA  
Email: sojung_kim@uml.edu  
(No relevant relationships reported)
E-35  Free Communication/Poster - Bone and Bone Mineral Density

Friday, May 31, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

2471 Board #135 11:00 AM - 12:30 PM
Bone Health in Elite Norwegian Endurance Cyclists and Runners: A Cross-Sectional Study
Oddbjørn Klosten Andersen1, Benjamin Claesen2, Iga Garb2, Morten Mørland3, Trine Stensdal4, 1Norwegian School of Sport Sciences, Oslo, Norway. 2Norwegian Olympic Training Centre, Oslo, Norway.
Email: o.k.andersen@nih.no
(No relevant relationships reported)

2472 Board #136 11:00 AM - 12:30 PM
Relationship of Bone Mineral Density and Body Composition in Student Athletes and College Aged Students
Amanda Pinheiro1, Kelly Johnson2, Marissa Baranaukas2, Jordan T. Olson1, Michael Robinson3, Rachelle Kappler3, Rolando Ramirez4, Ronald Ottesteder, FACSM5, 1University of Akron, Akron, OH. 2Coastal Carolina University, Conway, SC. 3Indiana University, Bloomington, IN. 4Ohio University, Athens, OH.
Email: aep42@zips.uakron.edu
(No relevant relationships reported)

2473 Board #137 11:00 AM - 12:30 PM
Regional Lumbar Bone Mineral Density Differs In Cricket Fast Bowlers With Lumbar Bone Stress Injury
Peter Alway1, Nicholas Peirce2, Robert Kerslake1, Mark King1, Katherine Brooke-Wavell1, 1Loughborough University, Loughborough, United Kingdom. 2University of Miskolc, Budapest, Hungary.
Email: PAIAlway@lboro.ac.uk
(No relevant relationships reported)

2474 Board #138 11:00 AM - 12:30 PM
Biometric, Dietary And Training Influences On Bone Mineral Content In Competitive Triathletes
Barbara S. McClanahan1, Michelle B. Stockton2, Christopher M. Vukadinovich2, 1University of Memphis, Memphis, TN. 2St. Jude Children’s Research Hospital, Memphis, TN. (Sponsor: Lawrence Weiss, FACSM).
Email: bmclchnn@memphis.edu
(No relevant relationships reported)

2475 Board #139 11:00 AM - 12:30 PM
Development of Skeletal System on Young Elite Basketball Players Between 10-19 Years
Irina Kalabiska1, Tamás Szabó2, Zsófia Trózna3, Katinka Utczás4, Gergő Pálnik5, Leonidas Petridis6, László Molnár1, 1University of Physical Education, Budapest, Hungary. 2University of Miskolc, Budapest, Hungary.
Email: kalabiska@gmail.com
(No relevant relationships reported)
Board #150 11:00 AM - 12:30 PM
Hip Structural Analyses Characteristics Based on Physical Activity Status in Young and Middle-aged Premenopausal Women
Pragya Sharma-Ghimire, Michael Bemben, FACSM, Debra Bemben, FACSM. 1Lander University, Greenwood, SC. 1The University of Oklahoma, Norman, OK. (Sponsor: Dr. Debra Bemben, FACSM)
Email: prsharma69@gmail.com (No relevant relationships reported)

Board #151 11:00 AM - 12:30 PM
Six-month Assessment Of Biomarkers, Skeletal Attributes, Body Composition, And Performance In Collegiate ROTC Members
Breanne S. Baker, Samuel R. Buchanan, Alison Balderas, Hoang Van M. Nguyen, Camron S. Combs, Christopher D. Black, FACSM, Michael G. Bemben, FACSM, Debra A. Bemben, FACSM, University of Oklahoma, Norman, OK, (Sponsor: Dr. Debra Bemben, FACSM)
Email: bakber@health.missouri.edu (No relevant relationships reported)

Board #152 11:00 AM - 12:30 PM
Sex Differences in Muscle-Bone Interactions in Chinese Men and Women
Alison Balderas, Zhaojing Chen, Meihua Su, Samuel R. Buchanan, Breanne Baker, Michael Bemben, FACSM, Debra A. Bemben, FACSM, 1University of Oklahoma, Norman, OK. 2California State University San Bernardino, San Bernardino, CA. 1University of Missouri, Columbia, MO. (Sponsor: Dr. Debra A. Bemben, FACSM)
Email: alison.kelley@ou.edu (No relevant relationships reported)

Board #153 9:30 AM - 11:00 AM
Added Load Alters Ankle And Knee Joint Moments During Stair Ascent
William G. Robinson, Alexis K. Nelson, Jake A. Melaro, Reka, Alex, R. And, Victoria White, Derek Beeler, Spring Glover, Cris Stickle, Douglas W. Powell, FACSM, 1University of Memphis, Memphis, TN. 2University of Mississippi, Oxford, MS. 3LaGrange College, LaGrange, GA. 4University of West Florida, Pensacola, FL. 5Mississippi State University, Starkville, MS. 6Auburn University, Auburn, AL. 7Troy University, Troy, AL. (Sponsor: Dr. Debra Bemben, FACSM)
Email: sjwilson@georgiasouthern.edu (No relevant relationships reported)

Board #154 9:30 AM - 11:00 AM
Examination of the Influence of Lead Leg Recovery Mechanics on Slip Induced Outcomes
Andrew L. Crawford, Tyler Donahue, Chris Hill, Caleb Williams, Jeff Simpson, Harish Chander, Chip Wade, Sydni Willhoite, Kristen Neitz, Josh Pascal, Ariana Haynes, Kelsey Lewis, Abigail Johnson, Barry Munkasy, Li Li, FACSM, John Garner, Dwight Waddell, Sam Wilson. 1Georgia Southern University, Statesboro, GA. 2University of Mississippi, Oxford, MS. 3LaGrange College, LaGrange, GA. 4University of West Florida, Pensacola, FL. 5Mississippi State University, Starkville, MS. 6Auburn University, Auburn, AL. 7Troy University, Troy, AL. (Sponsor: Dr. Li Li, FACSM)
Email: aco8610@georgiasouthern.edu (No relevant relationships reported)

Board #155 9:30 AM - 11:00 AM
Lead Leg Corrective Responses to Varying Slip Severity
Joshua Pascal. Georgia Southern University, Statesboro, GA. (Sponsor: Dr. Li Li, FACSM)
Email: jp26238@georgiasouthern.edu (No relevant relationships reported)

Board #156 9:30 AM - 11:00 AM
Added Load Alters Ankle And Knee Joint Moments During Stair Descent
Jake A. Melaro, Alexis K. Nelson, William G. Robinson, Alex M. Carnall, Rachael A. Arif, Rachael A. Arwin, Victoria White, Derek Beeler, Spring Glover, Cris Stickle, Douglas W. Powell, FACSM. 1University of Memphis, Memphis, TN. 2University of Hawaii at Manoa, Honolulu, HI. (Sponsor: Douglas W Powell, FACSM)
Email: bakber@health.missouri.edu (No relevant relationships reported)

Board #157 9:30 AM - 11:00 AM
Dual Tasking Using a Treadmill Desk Affects Middle-Aged but Not Young Adults
Rebecca R. Rogers, Mallory R. Marshall. Samford University, Birmingham, AL (No relevant relationships reported)

Board #158 9:30 AM - 11:00 AM
The Effects of Postural Control Measures on Induced Slip Outcomes
Ariana Haynes, Tyler Donahue, Chris Hill, Caleb Williams, Jeff Simpson, Harish Chander, Chip Wade, Abigail Johnson, Sydni Willhoite, Kristen Neitz, Kelsey Lewis, Joshua Pascal, Andrew Crawford, Barry Munkasy, Li Li, FACSM, John Garner, Dwight Waddell, Sam Wilson. 1Georgia Southern University, Statesboro, GA. 2University of Mississippi, Oxford, MS. 3LaGrange College, LaGrange, GA. 4University of West Florida, Pensacola, FL. 5Mississippi State University, Starkville, MS. 6Auburn University, Auburn, AL. 7Troy University, Troy, AL. (Sponsor: Dr. Li Li, FACSM)
Email: abh07573@georgiasouthern.edu (No relevant relationships reported)

Board #159 9:30 AM - 11:00 AM
Novel Evidence Of Cortical Control In Severe Slip Responses
Sam Wilson, Tyler Donahue, Chris Hill, Caleb Williams, Jeffrey Simpson, Harish Chander, Chip Wade, Sydni Willhoite, Kristen Neitz, Ariana Haynes, Josh Pascal, Kelsey Lewis, Andrew Crawford, Barry Munkasy, Li Li, FACSM, John Garner, Dwight Waddell. 1Georgia Southern University, Statesboro, GA. 2University of Mississippi, Oxford, MS. 3LaGrange College, LaGrange, GA. 4University of West Florida, Pensacola, FL. 5Mississippi State University, Starkville, MS. 6Auburn University, Auburn, AL. 7Troy University, Troy, AL. (Sponsor: Dr. Li Li, FACSM)
Email: sjwilson@georgiasouthern.edu (No relevant relationships reported)

Final Program P175

E-36 Free Communication/Poster - Activities of Daily Living
Friday, May 31, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2
### P176 Final Program

**Board #160** 9:30 AM - 11:00 AM
**Influence Of Prediction Equations On The Produced Power In The Sit To Stand Movement**

Christopher Marang, Robert Gregory, Marc Robertson, Robert Axell, FACSM, Southern Connecticut State University, New Haven, CT. (Sponsor: Robert Axell, FACSM)  
(No relevant relationships reported)

**Board #161** 9:30 AM - 11:00 AM
**The Relationship between Cervical Tilt Angle and Upper Body Position in Upright and Slump Sitting**

Sicong Ren¹, Ming Zhang², Weimo Zhu, FACSM. ¹University of Illinois Urbana-Champaign, Champaign, IL. ²The Hong Kong Polytechnic University, Hong Kong, Hong Kong  
(No relevant relationships reported)

**Board #162** 9:30 AM - 11:00 AM
**The Effects of Shoe Type on Muscle Activity During Step Up and Step Down Motions**

Shayla Manitowabi-Huebner, Ashley VanSumeren, Sarah Breen. Northern Michigan University, Marquette, MI  
(No relevant relationships reported)

**Board #163** 9:30 AM - 11:00 AM
**Influence of Lower Extremity Strength on Chair Rise Functional Demand in Older Female Cancer Survivors**

Victoria M. Bandera, Dain P. LaRoche, FACSM. University of New Hampshire, Durham, NH  
Email: vmb1005@wildcats.unh.edu  
(No relevant relationships reported)

### E-37 Free Communication/Poster - Biomechanics of Running

**Friday, May 31, 2019, 7:30 AM - 12:30 PM**  
**Room: CC-Hall WA2**

**Board #164** 9:30 AM - 11:00 AM
**Reliability and Minimum Detectable Difference of Tibial Acceleration during Running**

Clare E. Milner, FACSM, Jillian L. Hawkins, Kevin Aubol. Drexel University, Philadelphia, PA  
Email: clare.e.milner@drexel.edu  
(No relevant relationships reported)

**Board #165** 9:30 AM - 11:00 AM
**Running For Two: A Case Study On Running Throughout Pregnancy**

Kara N. Radzak, Jessica Tom, Brianne Borgia. University of Nevada, Las Vegas, Las Vegas, NV  
Email: kara.radzak@unlv.edu  
(No relevant relationships reported)

**Board #166** 9:30 AM - 11:00 AM
**Altered Lower Extremity Joint Work Profiles During Inclined Running At Iso-efficiency Speeds**

Douglas W. Powell, FACSM, Tyler Standifird, Andrew Creer², Lauren Williams², Joseph Christensen², Max R. Paquette². ¹University of Memphis, Memphis, TN. ²Utah Valley University, Orem, UT  
(No relevant relationships reported)

**Board #167** 9:30 AM - 11:00 AM  
**The Association Between Trunk Lean and Running Kinetics in Competitive Distance Runners**

Tyler J. Moffitt¹, Derek N. Pamukoff². ¹California State University, Bakersfield, Bakersfield, CA. ²California State University, Fullerton, Fullerton, CA  
Email: tmoffitt@csub.edu  
(No relevant relationships reported)
2513 Board #177 9:30 AM - 11:00 AM
An Investigation of Factors Affecting Dynamic Postural Stability in Collegiate Cross Country Runners
Emily A. Fonke1, David A. Guthrie1, Andrew C. Montvayoh1, Srikant Vallabhajosula1, Timothy C. Sell, FACSM1, Mallory Flaherty1, Shefali M. Christopher1. 1Elon University, Elon, NC. 2Duke University, Durham, NC. 3Duke University, Durham, NC. (Sponsor: Dr. Timothy Sell, FACSM)
Email: efonke@elon.edu (No relevant relationships reported)

Board #178 9:30 AM - 11:00 AM
Relationship between Stance Frontal Plane Kinematics and Initial Impact forces in Runners: Asymmetry Implications
Deborah Fortino, Amanda Leon, Monique Mokha. Nova Southeastern University, Ft. Lauderdale, FL
Email: df1021@mynsu.nova.edu (No relevant relationships reported)

Board #179 9:30 AM - 11:00 AM
Effect Of Arch Characteristics On Pain In Minimally-shod vs Traditionally Shod Runners
Jean L. McCrory, FACSM1, Lauren E. Davis1, Lauren K. Cline1, Erica M. Casto1. 1West Virginia University, Morgantown, WV. 2University of Massachusetts Amherst, Amherst, MA
Email: jmcrcrory@bsc.wvu.edu (No relevant relationships reported)

Board #180 9:30 AM - 11:00 AM
Impact of Progression Run on Sagittal Plane Stance Phase Kinematics
Jordon Garman1, Jeff T. Wight1, Jaclyn A. O'Loughlin1, David R. Hooper1, Michelle C. Boling2, Ryan S. Sloan1. 1Jacksonville University, Jacksonville, FL. 2University of North Florida, Jacksonville, FL
Email: ranjordonaldrun@gmail.com (No relevant relationships reported)

Board #181 9:30 AM - 11:00 AM
Effects Of Assistance And Resistance Elastic Bands On Short Distance Sprinting In Women
Kailey Goins, Bryan Riemann. Georgia Southern University, Savannah, GA
Email: kgoins5@gmail.com (No relevant relationships reported)

Board #182 9:30 AM - 11:00 AM
Physiological and Biomechanical Differences Between a Traditional Treadmill and a 360 Degree Virtual Reality Treadmill
Jessica L. Kutz, Alyssa Carter, Austin McCarron, Andrew Sartain. Shenandoah University, Winchester, VA. (Sponsor: Jody Greaney, FACSM)
Email: jkutz21@gmail.com (No relevant relationships reported)

Board #183 9:30 AM - 11:00 AM
Not All Forefoot Striking Is Equal
Alessandra Matias1, Jerome Outerleys1, Isabel Sacco2, Irene Davis, FACSM1. 1Spaulding Running National Center, Cambridge, MA. 2Faculdade de Medicina FMUSP, Universidade de Sao Paulo, Sao Paulo, Brazil. (Sponsor: Irene Davis, FACSM)
Email: alessandra.matias@usp.br (No relevant relationships reported)

Board #184 9:30 AM - 11:00 AM
Interaction Of Footwear And Strike Pattern Alter Skeletal And Muscular Contributions To Leg Stiffness
Alexis K. Nelson1, DS Blaise Williams, FACSM1, Douglas W. Powell, FACSM1. 1University of Memphis, Memphis, TN. 2Nike Sport Research Lab, Portland, OR. (Sponsor: Douglas W Powell, FACSM)
Email: efonke@elon.edu (No relevant relationships reported)
P178 Final Program

2528 Board #192 9:30 AM - 11:00 AM

The Effect Of Stride Length Training On Muscular Activity And Energy Cost During Walking

Hae Ryong Chung1, Travet Witherspoon1, Moroni DeMoors1, Jin Hee Jeong1, Chris Pitsikoulis1, 1Clayton State University, Morrow, GA. 2Augusta University, Augusta, GA. 3Aurora University, Aurora, IL

Email: hchung@clayton.edu

(No relevant relationships reported)

2529 Board #193 9:30 AM - 11:00 AM

Effects of Percent Body Fat on Foot Pressure Characteristics during Walking in Weight-Matched Male Adults

Hyeyoung Choi, Jongil Lim, Sukho Lee. Texas A&M University - San Antonio, San Antonio, TX

Email: stevenfp@email.unc.edu

(No relevant relationships reported)

2530 Board #194 9:30 AM - 11:00 AM

Response of Femoral Articular Cartilage Throughout a 5,000 Step Walking Protocol Using Ultrasound

Steven J. Pfeiffer, Hope C. Davis, Brett Pexa, Jessica Szymczak, Catherine Wistreich, Rachel Sorensen, Erik A. Wikstrom, FACSM, Troy Blackburn, Brian Pietrosimone, FACSM. University of North Carolina at Chapel Hill, Chapel Hill, NC

Email: stevenfp@email.unc.edu

(No relevant relationships reported)

2531 Board #195 9:30 AM - 11:00 AM

Preliminary Analysis: The Effects of Gait Interventions on Knee Joint Contact forces in Healthy Adults

Matthew Prebble, Qi Wei, Oladipo Eedo, Bryndan Lindsey, Shane V. Caswell, Nelson Cortes. George Mason University, Manassas, VA

Email: nctores@gmu.edu

(No relevant relationships reported)

2532 Board #196 9:30 AM - 11:00 AM

Gait Analysis Of Patients With Distal Radius Fracture Using A Novel Laser-tag System

Koji Fujita1, Hirotaka Iijima2, Atushi Okumura1, Yosuke Yano1, Akimoto Nimura1, Ryuchi Kato3, Atsushi Okawa3, Masaki Takahashi3. 1Tokyo Medical and Dental University, Tokyo, Japan. 2Keio University, Kanagawa, Japan. 3Kawaguchi General Hospital, Saitama, Japan. 

Email: t.fujithre@ms.ac.jp

(No relevant relationships reported)

2533 Board #197 9:30 AM - 11:00 AM

Single-Parameter Gait Modifications Cause Involuntary Secondary Gait Changes

Bryndan Lindsey, Oladipo Eedo, Matthew Prebble, Shane V. Caswell, Ana M. Azevedo, Nelson Cortes. George Mason University, Manassas, VA

Email: nctores@gmu.edu

(No relevant relationships reported)

2534 Board #198 9:30 AM - 11:00 AM

Case-Control Investigation Of Speed And Gait After An Incomplete Spinal Cord Injury

Amanda J. Wakeman, Whitley J. Stone, Braden A. Younkin, Dustin W. Davis, Matthew J. Garver, H Scott Strohmeier. University of Central Missouri, Warrensburg, MO (Sponsor: Scott Lyons, FACSM)

(No relevant relationships reported)

2535 Board #199 9:30 AM - 11:00 AM

Hip Mechanics during Gait in Sedentary Adults

Devin K. Kelly, Kristyne Wiegand, Janet S. Dufek, FACSM, Julia Freedman Silvermail. UNLV, Las Vegas, NV (Sponsor: Janet S. Dufek, FACSM)

Email: devinkelly@unlv.edu

(No relevant relationships reported)

2536 Board #200 9:30 AM - 11:00 AM

Gait Mechanics between a Lower Body Positive Pressure and Regular Treadmill

Pedro Migliano1, Rebecca Greenwood1, Alexis Ortiz, FACSM. 1TWU - Houston, Houston, TX. 2UT Health - San Antonio, San Antonio, TX

Email: pmigliano@twu.edu

(No relevant relationships reported)

2537 Board #201 9:30 AM - 11:00 AM

Validation of a Built-In Gait Analytics System for Lower Body Positive Pressure Treadmills

Alexis Ortiz, FACSM, Pedro Migliano1. Rebecca Greenwood1. 1UT Health San Antonio, San Antonio, TX. 2Texas Woman's University, Houston, TX

Email: ortiza7@uthscsa.edu

(No relevant relationships reported)

2538 Effects Of Arm Weight On Gait Performance In Hemiparetic Stroke And Healthy Subjects

Hyung Suk Yang1, C. Roger James, FACSM, Lee T. Atkins2, Steven F. Sawyer2, Phillip S. Sizer, Jr., Neeraj A. Kumar3, Jongyeol Kim2. 1University of South Dakota, Vermillion, SD. 2Tech University Health Sciences Center, Lubbock, TX 3Angelo State University, San Angelo, TX

Email: marina.g.carboni.civ@mail.mil

(No relevant relationships reported)

2539 Application of the Cervical Flexion Relaxation Ratio to Investigate the Impact of Torso-borne Load Redistribution

Marina Carboni, John Ramsay, Jonathan Kaplan. Natick Soldier Research Development and Engineering Center, Natick, MA

Email: marina.g.carboni.civ@mail.mil

(No relevant relationships reported)

2540 Functional Sarcopenia Biomarkers In 56 To 80 -Yr Old- Men And Women

Jhon F. Ramirez-Villada1, Leonardo Rodriguez-Perdomo2, Annie Tibaduiza-Romero1, Jorge-Jaime Márquez-Arabia1, Jaime Ortiz-Silva1, Nery C. Molina-Restrepo1, Carlos Mario Arango-Paternina1. 1University of Antioquia, Medellín, Colombia. 2SEN, Bogotá, Colombia

Email: jhonramirezvillada@gmail.com

(No relevant relationships reported)

E-39 Free Communication/Poster - Sports Injury

Friday, May 31, 2019, 7:30 AM - 12:30 PM

Room: CC-Hall WA2

2541 Board #205 11:00 AM - 12:30 PM

Comparison of Injury in Male and Female Amateur Rugby Union

Ian C. Kenny, Caitirhiona Yeomans, Rosin Cahanan, Giles Warrington, FACSM, Lian Li Glynn, Mark J. Campbell, Mark Lyons, Andrew J. Harrison, Kevin Hayes, Thomas M. Cornyns. University of Limerick, Limerick, Ireland. (Sponsor: Giles Warrington, FACSM)

Email: ian.kenny@ul.ie

(No relevant relationships reported)

2542 Board #206 11:00 AM - 12:30 PM

The Prevalence of Sickle Cell Trait in a Division I University Athletic Program

Rebecca M. Hirschhorn1, Danielle A. Cadet1, Rodain DeLuas1, Jessica L. Phillips2, Tenley Murphy2, Clint Haggard2, Susan W. Yeagin1. 1University of South Carolina, Columbia, SC. 2Clemson University, Clemson, SC. (Sponsor: Douglas Casa, FACSM)

Email: hirschhr@email.sc.edu

(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board</th>
<th>11:00 AM - 12:30 PM</th>
<th>Abstract Title and Authors</th>
</tr>
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<tbody>
<tr>
<td>2543</td>
<td>11:00 AM - 12:30 PM</td>
<td>Seasonal Incidence of Game-Related High School Football Trauma on Artificial Turf and Natural Grass Michael C. Meyers, FACSM. Idaho State University, Pocatello, ID Email: <a href="mailto:meyersgroupinc@gmail.com">meyersgroupinc@gmail.com</a> Reported Relationships: M.C. Meyers: Industry contracted research; Partial funding by FieldTurf USA.</td>
</tr>
<tr>
<td>2544</td>
<td>11:00 AM - 12:30 PM</td>
<td>Injury Surveillance in Amateur Rugby Union in Ireland Tom M. Comyns, Caitiriona Yeomans, Roisin Cahalan, Giles Warrington, FACSM, Liam G. Glynn, Mark Campbell, Mark Lyons, Andrew Harrison, Kevin Hayes, Ian Kenny. University of Limerick, Limerick, Ireland. (Sponsor: Dr Giles Warrington FACSM, FACSM) Email: <a href="mailto:tom.comyns@ul.ie">tom.comyns@ul.ie</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2545</td>
<td>11:00 AM - 12:30 PM</td>
<td>Relationship between Physical and Wellness Baseline Screening Measures and Seasonal Amateur Rugby Injury Caitiriona Yeomans, Ian C. Kenny, Roisin Cahalan, Victoria Costello, Giles D. Warrington, FACSM, Liam G. Glynn, Andrew J. Harrison, Kevin Hayes, Mark Lyons, Mark J. Campbell, Thomas M. Comyns. University of Limerick, Limerick, Ireland. (Sponsor: Dr. Giles D. Warrington, FACSM) Email: <a href="mailto:caithriona.yeomans@ul.ie">caithriona.yeomans@ul.ie</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2546</td>
<td>11:00 AM - 12:30 PM</td>
<td>Resiliency In Collegiate Athletes: A Cross-sectional Study Katherine Rizzone1, Molly McCann1, Gwen Haffenden2, Jorie Freitag2. 1University of Rochester Medical Center, Rochester, NY 2University of Rochester, Rochester, NY Email: <a href="mailto:katherine_rizzone@urmc.rochester.edu">katherine_rizzone@urmc.rochester.edu</a> (No relevant relationships reported)</td>
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<tr>
<td>2547</td>
<td>11:00 AM - 12:30 PM</td>
<td>Developing a Rugby-Specific Injury Surveillance System Giles D. Warrington, FACSM, Caitiriona Yeomans, Thomas M. Comyns, Roisin Cahalan, Liam G. Glynn, Andrew J. Harrison, Kevin Hayes, Mark Lyons, Mark J. Campbell, Ian C. Kenny. University of Limerick, Limerick, Ireland (No relevant relationships reported)</td>
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<tr>
<td>2548</td>
<td>11:00 AM - 12:30 PM</td>
<td>A Systematic Review And Meta-analysis Of The Incidence Of Injury In Professional Female Soccer Lawrence Mayhew1,2,3, Jamie McPhee2, Peter Francis1, Gareth Jones1. 1Leeds Beckett University, Leeds, United Kingdom 2Manchester Metropolitan University, Manchester, United Kingdom Email: <a href="mailto:l.mayhew@leedsbeckett.ac.uk">l.mayhew@leedsbeckett.ac.uk</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2549</td>
<td>11:00 AM - 12:30 PM</td>
<td>Head Impacts In Women’S Collegiate Rugby: Incidence And Force Application Erin Tuttle, Taylor Langevin, Daniel Antonoff, Christina Renodin, Ashley Potvin-Fulford, Erin Shelliene, Lee Spaugh, John Rosene. University of New England, Biddeford, ME Email: <a href="mailto:etuttle2@unce.edu">etuttle2@unce.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2550</td>
<td>11:00 AM - 12:30 PM</td>
<td>One-year Test-retest Properties Of Binocular Vision Tests Ian Shrier, FACSM1, Suzanne Leclerc2, Stephanie Long3, Guowei Zhong1. 1McGill University, Montreal, QC, Canada 2Institut National du Sport du Quebec, Montreal, QC, Canada 3None, Montreal, QC, Canada Email: <a href="mailto:ian.shrier@mcgill.ca">ian.shrier@mcgill.ca</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

**2551 Board #215** 11:00 AM - 12:30 PM The Epidemiology of Sports Related Dislocations among Collegiate and High School Athletes Christy Collins, Sara Quetant, Sarah N. Morris, Erin B. Wasserman. Datalyx Center for Sports Injury Research and Prevention, Inc., Indianapolis, IN (No relevant relationships reported) |

**2552 Board #216** 11:00 AM - 12:30 PM Evaluation Of Rule Modifications On The Reduction Of Injuries In High School Boys’ Lacrosse Stanley Guillaume1, Andrew Lincoln2, Lisa Hepburn1, Shane Caswell1, Zachary Kerr3. 1Orange Park Medical Center, Jacksonville, FL 2MeStar Memorial Hospital, Baltimore, MD. 3George Mason University, Fairfax, VA. 4University of North Carolina, Chapel Hill, NC Email: stangui16@gmail.com (No relevant relationships reported) |

**2553 Board #217** 11:00 AM - 12:30 PM Gastrointestinal Illness Accounts for Most Days Lost per Single Illness During the Super Rugby Tournament Audrey Jansen van Rensburg1, Martijn P. Schwellnus, FACSM2, Dina C. Janse van Rensburg, FACSM2, Esme Jordaan1, Charli Janse van Rensburg1. 1Sports Medicine, University of Pretoria, Pretoria, South Africa. 2SEMLI, University of Pretoria, Pretoria, South Africa. 3South African Medical Research Council, Cape Town, South Africa. 4South African Medical Research Council, Pretoria, South Africa (No relevant relationships reported) |

**2554 Board #218** 11:00 AM - 12:30 PM The Prevalence of Obesity and its Association with Previous Musculoskeletal Injury in Probation Officers Jacob A. Mota, Zachary Y. Kerr, Gena R. Gerstner, Hayden K. Giuliani, Eric D. Ryan. University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Abbie Smith-Ryan, FACSM) Email: jamota@unc.edu (No relevant relationships reported) |

**2555 Board #219** 11:00 AM - 12:30 PM Graft Type And Previous ACL Injury Influence Re-rupture Rates In 1478 ACL Reconstructions With 95% 2 Year Follow-up Ray Moran1, Enda King1, Chris Richter1, Eanna Falvey1, Siobhan Strike1, Andy Franklyn Miller1. 1Sports Surgery Clinic, Dublin 9, Ireland. 2University of Roehampton, London, United Kingdom (No relevant relationships reported) |

**2556 Board #220** 11:00 AM - 12:30 PM Frequency, Magnitude, And Location of Head Impacts In Collegiate Water Polo Jenna J. Phreaner, Derek C. Monroe, Nicholas J. Cecchi, Steven L. Small, James W. Hicks. University of California, Irvine, Irvine, CA (No relevant relationships reported) |

**2557 Board #221** 11:00 AM - 12:30 PM The Epidemiology Of Ankle Sprains In Youth, High School, And College Lacrosse Aliza K. Nedinmyer1, Awinash Chandran1, Andrew E. Lincoln2, Shane V. Caswell1, Thomas P. Dompier2, Erik A. Wikstrom, FACSM3, Zachary Y. Kerr1. 1University of North Carolina at Chapel Hill, Chapel Hill, NC. 2MedStar Sports Medicine Research Center, Baltimore, MD. 3George Mason University, Manassas, VA. 4Lebanon Valley College, Annville, PA. (Sponsor: Erik A. Wikstrom, FACSM) (No relevant relationships reported) |
E-40 Free Communication/Poster - Caffeine Supplementation

Friday, May 31, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

2561 Board #225 11:00 AM - 12:30 PM
Effects of Pre-exercise Caffeinated Energy Drink Consumption on Running Performance.
Angela Huber, Joe Adams, Kerri De Jonge, Adam Gist, Lesly Jeanpois, Benjamin Stayton, Kimberly Wasielewski, Wick Colchagoff, Scott Van Zant. University of Findlay, Findlay, OH
Email: hubera@findlay.edu
(No relevant relationships reported)

2562 Board #226 11:00 AM - 12:30 PM
Effects of Acute Consumption of Caffeinated Gum on Anaerobic Exercise Performance
Ryan Fiddler¹, Larissa Trae¹, Jeff Bauer¹, Katherine Monson¹, Matthew Martone¹, Angelica Butler³, Philip J. Buckenmeyer¹, Gary H. Kamimori, FACSM.¹ ¹SUNY-Cortland, Cortland, NY. ²Baylor University, Waco, TX. ³Northern Illinois University, DeKalb, IL
Email: ryan.fiddler@cortland.edu
(No relevant relationships reported)

2563 Board #227 11:00 AM - 12:30 PM
Effects of Caffeined Chewing Gum on Repeated Sprint Performance in Recreationally Active Individuals
Melissa A. Whidden, FACSM, Matthew D. Simcox¹, Brooke R. Berridge¹, Peter S. Greenland¹, Elizabeth D. Schultz¹, James J. Hauser¹, Matthew B. Hudson¹, Kenneth P. Clark¹.¹ ¹West Chester University, West Chester, PA. ²University of Delaware, University of Delaware, DE
Email: mwwhidden@wcupa.edu
(No relevant relationships reported)

2564 Board #228 11:00 AM - 12:30 PM
Effect of Caffeinated Gum on Choice Reaction Time
Philip J. Buckenmeyer¹, Ryan Fiddler¹, Larissa Trae¹, Jeff Bauer¹, Katherine Monson¹, Angelica Butler³, Matthew Martone¹, Gary H. Kamimori, FACSM.¹ ¹SUNY-Cortland, Cortland, NY. ²Baylor University, Waco, TX. ³Northern Illinois University, DeKalb, IL
Email: buckenmeyerp@cortland.edu
(No relevant relationships reported)

2565 Board #229 11:00 AM - 12:30 PM
Efficacy of Caffeine Supplementation for Supporting Exercise Performance During Delayed Onset Soreness
Lawrence Judge¹, Ali M. Al-Nawais², Philip R. Pritchett², Kelly K. Pritchett², Mo’ath F. Bataineh², Akef M. Taifour³, Makenzie Scherr², Justin Studler², David M. Bellar².² Ball State University, Muncie, IN. ¹The Hashemite University, Amman, Jordan. ²Central Washington University, Ellensburg, WA. ³University of Louisiana at Lafayette, Lafayette, LA. (Sponsor: Mathew Harber, FACSM)
Email: lwjudge@bsu.edu
(No relevant relationships reported)

2566 Board #230 11:00 AM - 12:30 PM
Effects of 8 Weeks of Caffeine Supplementation on Protein Metabolism Markers in Resistance-Trained Men
William R. Lunn, FACSM, James Gerosa. Southern Connecticut State University, New Haven, CT
Email: lunnw1@southernct.edu
(No relevant relationships reported)

2567 Board #231 11:00 AM - 12:30 PM
The Effect of Ingestion of Caffeine, Creatine, and Amino Acids On Anaerobic Performance
Lauren Yanni, Glen Reid, Melhaney Reichelt, John Petrizzo, Robert M. Otto, FACSM, John Wygand, FACSM. Adelphi University, Garden City, NY. (Sponsor: John Wygand, FACSM)
Email: lauren.yanni@gmail.com
(No relevant relationships reported)

2568 Board #232 11:00 AM - 12:30 PM
The Physiological Responses of Caffeine Supplementation During Repeated-Sprint Activity
Michael D. Belbis, Peter J. Chomentowski 3rd, Clayton L. Camic, Steven M. Howell, Shiqi Zhang. Northern Illinois University, Dekalb, IL
Email: belbismichael@gmail.com
(No relevant relationships reported)

2569 Board #233 11:00 AM - 12:30 PM
Effects Of Caffeine On High-intensity Functional Training Performance In High- Vs. Low-caffeine Users
Jesse A. Stein, Melitza R. Ramirez, Katie M. Heinrich. Kansas State University, Manhattan, KS
Email: jesse.stein.2@gmail.com
(No relevant relationships reported)
2570 Board #234 11:00 AM - 12:30 PM
Low Dose of Carbohydrate Do Not Affect Torque and Rate of Torque Development
Lucas Ugliara1, Martim Bottaro2, Sávio Alex1, Valdirnun Junior2, Douglas Pinheiro3, João Paulo Telo Pimenta1, Aramil Vieira1
1University of Brasilia, Brasilia, Brazil. 2National Academy of Police of Brazil, Brasilia, Brazil. 3University Center of the Federal District, Brasilia, Brazil.
Email: lucasugliaraunb@gmail.com
(No relevant relationships reported)

2571 Board #235 11:00 AM - 12:30 PM
The Effects of Carbohydrate and Caffeine Mouth Rinse on Upper Body Muscular Strength and Endurance
Raci Karayigit, Gülfem Ersöz. Ankara University Sport Sciences Faculty, Ankara, Turkey.
Email: raikarayigiti@hotmail.com
(No relevant relationships reported)

2572 Board #236 11:00 AM - 12:30 PM
Effects of Caffeine on High-Intensity Functional Training Performance
Melita R. Ramírez, Jesse A. Stein, Katie M. Heinrich. Kansas State University, Manhattan, KS.
(No relevant relationships reported)

2573 Board #237 11:00 AM - 12:30 PM
Effect Of Caffeine On Muscular Strength And Endurance In Resistance-trained College-aged Males
Nicholas Taylor, Christi Brewer. Eastern Washington University, Cheney, WA.
(No relevant relationships reported)

2574 Board #238 11:00 AM - 12:30 PM
ADORA2A, but Not CYP1A2, Genotype Influences Caffeine’s Effect On Glucose Responses To A Carbohydrate Feeding
Nile Banks, Patrick Tomko, Ryan Colquhoun, Tyler Muddie, Mitchel Magrini, Sam Emerson, Nathaniel Jenkins. Oklahoma State University, Stillwater, OK.
(No relevant relationships reported)

2575 Board #239 11:00 AM - 12:30 PM
Electromyostimulation Induced Changes In Intramyocellular Lipid Of Vastus Lateralis In Older Adults
Maya Hioki1, Nana Kanehira2, Teruhiko Koike1, Akira Saito2, Hideyuki Takahashi1, Kiyoshi Shimaoka2, Hisataka Sakakibara1, Yoshinari Oshida1, Hiroshi Akima1. 1Nagoya University, Nagoya, Japan. 2University of Tokyo, Tokyo, Japan. 3University of Science and Technology, Tokyo, Japan. 4Japan Institute of Sports Sciences, Tokyo, Japan.
Email: maya@mri.biglobe.ne.jp
(No relevant relationships reported)

2576 Board #240 11:00 AM - 12:30 PM
The Effect Of Eleutherococcus Senticosus On Metabolism-associated Protein Expressions In C2C12 Cells
Misaki MIKUMO1, Yoko OKADA1, Maki YOSHITAKA1, Natsuhiko ONO1, Keisuke URYU2, Takeshi HASHIMOTO, FACSM3, RITSUMEIKAN UNIVERSITY, Shiga, Japan. 2Bizen Chemical Co., LTD, Okayama, Japan. (Sponsor: Takeshi HASHIMOTO, FACSM)
Email: shi0136os@ed.ritsumei.ac.jp
(No relevant relationships reported)

2577 Board #241 11:00 AM - 12:30 PM
The Effect Of Eleutherococcus Senticosus On Adipocyte Differentiation And Lipid Accumulation In 3T3-L1 Cells
Maki YOSHITAKA1, Yoko OKADA1, Misaki MIKUMO1, Natsuhiko ONO1, Keisuke URYU2, Takeshi HASHIMOTO, FACSM3, RITSUMEIKAN UNIVERSITY, Shiga, Japan. 2Bizen Chemical Co., LTD, Okayama, Japan. (Sponsor: Takeshi HASHIMOTO, FACSM)
Email: milktea.maki@gmail.com
(No relevant relationships reported)

2578 Board #242 11:00 AM - 12:30 PM
Effect Of Aerobic and Resistance Exercise on Fatty Liver in Mice Model
Linlin Zhao, Xin Xu. Shanghai University of Sport, Shanghai, China.
(No relevant relationships reported)

2579 Board #243 11:00 AM - 12:30 PM
Aerobic Interval Training Improve Effect of Liraglutide on Hepatic Lipid Steatosis in Diabetic Rats with NASH
Yuxiu He, Xun Li, Huan Cai. Hebei Normal University, Shijiazhuang, China.
(No relevant relationships reported)

2580 Board #244 11:00 AM - 12:30 PM
The Effect Of Exercise On Hypothalamic Kiss-1 Of Rats With Post-weaning High Fat Diet
RUI XU1, Yi Yuan2, Minhao Xie2, Biao Sun1. 1Nanjing Sport Institute, Nanjing, China. 2Beijin Sport University, BEIJING, China.
(No relevant relationships reported)

2581 Board #245 11:00 AM - 12:30 PM
Effects Of Dietary And Hiit On Lipid Metabolism Of The Liver Tissue In Obese Rats
Yuan Zhang, Juan Wei, Nianyun Zhang, Lei Sheng. Nanjing Sports Institute, Nanjing, China.
Email: beibei82356@gmail.com
(No relevant relationships reported)

2582 Board #246 11:00 AM - 12:30 PM
Bodipy Is Superior To Oil-red-O For Detecting And Quantifying Intramuscular Triglyceride In Human Skeletal Muscle
Juliette A. Strauss1, Daisy A. Shepherd2, Emily F.P. Jevons1, Myfanwy Macey1, Sam O. Shepherd1, Liverpool John Moores University, Liverpool, United Kingdom. 2University of Auckland, Auckland, New Zealand.
Email: j.a.strauss@ljmu.ac.uk
(No relevant relationships reported)

2583 Board #247 11:00 AM - 12:30 PM
Pre-Exercise Ingestion of Isomaltulose Increases Energy Expenditure with Enhancing Fat Oxidation in Healthy Young Adults
Naoko Onuma1, Daisuke Shindo1, Miki Sakazaki1, Yukie Nagai2, Kentaro Yamanaka1. 1Nihon Univ, Fanahashi, Japan. 2Mitsui Sugar Co., Ltd, Tokyo, Japan. 3Showa Women’s Univ, Tokyo, Japan.
(No relevant relationships reported)

2584 Board #248 11:00 AM - 12:30 PM
The Effects Of 8-weeks Moderate Intensity Exercise In Skeletal Muscle Autophagy Of Obese Sd Rats
Youxiang Cao1, Rui Xu2, Yi Yuan2, Minhao Xie1, Beijing Sport University, Nanjing coooperantics Co., Ltd., Nanjing, China. 2Nanjing Sport Institute, Nanjing, China. 3Beijing Sport University, Beijing, China. 4Sports Medicine Institute, General Administration of Sport of China, Beijing, China.
Email: 715708019@qq.com
(No relevant relationships reported)
June 22 – June 25, 2019 Orlando, Florida

FRIDAY, MAY 31, 2019

P182 Final Program

2585 Board #249 11:00 AM - 12:30 PM
High Intensity Interval Training Activates Specific Site HSL Phosphorylation and Reduces Visceral Fat
Yang Liu, Jiashun Mei, Yuxiu He. Hebei Normal University, Shijiazhuang, China
Email: billy_ox@163.com
(No relevant relationships reported)

2586 Board #250 11:00 AM - 12:30 PM
Concurrent Training Induces Remodeling Of Subcutaneous Fat In People Living With HIV
Bruno Ferrari Silva1, Gustavo Gilio2, Caroline C. Picoli1, Rafael Evangelista Pedro1, Luzmaira Hernandez1, Solange Marta Franzozi de Moraes1, Sidney Barnabé Peres1. 1State University of Maringá, Maringá, Brazil. 2University of São Paulo, São Paulo, Brazil. 3Federal Minas Gerais University, Maringá, Brazil
Email: brunoferrarisilva@live.com
(No relevant relationships reported)

2587 Board #251 11:00 AM - 12:30 PM
Differences In Energy Expenditure During Constant Speed And Interval Walking In Healthy Sedentary Adults
Myung Dong Choi, Andary Esho, Christian Maron. Oakland University, Rochester, MI
Email: choi@oakland.edu
(No relevant relationships reported)

2588 Board #252 11:00 AM - 12:30 PM
One-hour Of Moderate Intensity Exercise Does Not Attenuate DNA Single Strand Breaks And Base Oxidation Following High-fat Meal Consumption.
Conor M. McClean1, Malcolm Brown1, Marie H. Murphy, FACSM1, Gareth W. Davison1. 1Ulster University, Newtownabbey, United Kingdom. 2Queen’s University, Belfast, United Kingdom
Email: cm.mcclean@ulster.ac.uk
(No relevant relationships reported)

Free Communication/Poster - Behavioral Aspects of Exercise

Friday, May 31, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

2589 Board #253 9:30 AM - 11:00 AM
Correlates Of Workout Adherence: Golf Skill, Exercise Enjoyment, Life Satisfaction, And Mood Of Senior Golfers
Lynn A. Darby, FACSM1, Bonnie G. Berger1, David R. Owen2. 1Bowling Green State University, Bowling Green, OH. 2Brooklyn College of the City University of New York, Brooklyn, NY
Email: ldarby@bgsu.edu
(No relevant relationships reported)

2590 Board #254 9:30 AM - 11:00 AM
Physical Activity Is Associated With Grit And Resilience In College Students: Is Intensity The Answer?
Emily R. Dunston, Martin Waldrip, Shelby Christe, Amber Skillingstad, Annika Vahk, Katrina Taylor. Eastern Washington University, Cheney, WA. (Sponsor: Chantal A. Vella, FACSM)
(No relevant relationships reported)

2591 Board #255 9:30 AM - 11:00 AM
Examining Intra-Individual Variability of Perceived Physical Discomfort In Young Adults: A Potential Exercise Antecedent
Cory Thomas Beaumont, Kelley Strohacker, FACSM. The University of Tennessee, Knoxville, Knoxville, TN
Email: cebeanmol@vols.utk.edu
(No relevant relationships reported)

ACSM 66th Annual Meeting

2592 Board #256 9:30 AM - 11:00 AM
Association Of Asian/Asian-American Immigrants' Physical Activity Behavior And Time Spent Living In The U.S.
Zi Yan1, Bradley J. Cardinal, FACSM1, 2Merrimack College, north andover, MA. 3Oregon State University, Corvallis, OR. (Sponsor: Brad Cardinal, FACSM)
Email: yanz@merrimack.edu
(No relevant relationships reported)

2593 Board #257 9:30 AM - 11:00 AM
Mental Toughness As A Moderator Of The Physical Exercise - Exports Performance Relationship: A Pilot Study.
Andreas Starnatis1, Thomas Leif Andre2, Robert Noah Padgett1, Silvio Polly Valladao1. 1SUNY Plattsburgh, Plattsburgh, NY. 2University of Mississippi, University, MS. 3Baylor University, Waco, TX. (Sponsor: Peter W. Grandjean, FACSM)
Email: stamaand@yahoo.gr
(No relevant relationships reported)

2594 Board #258 9:30 AM - 11:00 AM
The Effects Of Aerobic, Resistance, And Combination Training On Satisfaction With Physical Function And Appearance
Liezl Mae B. Fos1, Leanna M. Ross2, Cris A. Slentz2, Lucy W. Finer3, Leslie H. Willie2, Lori A. Bateman1. 1Baylor College of Medicine, Houston, TX. 2University of North Carolina at Greensboro, Greensboro, NC. 3Duke University Medical Center, Durham, NC. 4East Carolina University, Greenville, NC
(No relevant relationships reported)

2595 Board #259 9:30 AM - 11:00 AM
Exercise-Induced Upregulation of M1 Excitability Following Motor Practice Does Not Predict Procedural Consolidation Jing Chen1, Jiling Liu1, David L. Wright2. 1Texas A&M University, Texarkana, TX. 2Texas A&M University, College Station, TX
Email: jchentamu@gmail.com
(No relevant relationships reported)

2596 Board #260 9:30 AM - 11:00 AM
Effects Of Regular Sport Activities On Stress Level In Athletic And Non-athletic University Students
Márta Szmodis1, Annamária Zsákai1, Gergely Blaskó2, Piroska Fehér1, Dorina Anuar1. 1University of Boston, Boston, MA. 2University of Physical Education, Budapest, Hungary.
Email: szmodis.marta@t.bthu
(No relevant relationships reported)

2597 Board #261 9:30 AM - 11:00 AM
The Importance Of ‘Time’ Prescription To Exercise Adherence: A Meta-analysis
Elizabeth Kelsch1, Kathryn Burnet1, Justin Moore, FACSM, Lee Stoner, FACSM1, 2University of North Carolina at Chapel Hill, Chapel Hill, NC. 3Wake Forest School of Medicine, Winston Salem, NC
(No relevant relationships reported)

2598 Board #262 9:30 AM - 11:00 AM
Association Between Parenting Style And Adherence To The 24-hour Movement Guidelines In Adolescents
Stephen H.S. Wong, FACSM, Yan Shi1, Wendy Y. Huang2. 1The Chinese University of Hong Kong, Hong Kong, China. 2Hong Kong Baptist University, Hong Kong, China
Email: hsowong@cuhk.edu.hk
(No relevant relationships reported)

2599 Board #263 9:30 AM - 11:00 AM
Comparison Of Affective, Perceptual, And Heart Rate Responses To Self-paced Treadmill Versus Trail Running
Luke Haile1, Sarah Galbraith2, Curt B. Dixon, FACSM1. 1Bloomburg University, Bloomsburg, PA. 2Lock Haven University, Lock Haven, PA
Email: lhaile@bloomu.edu
(No relevant relationships reported)
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<tr>
<th>Page Number</th>
<th>Title</th>
<th>Authors</th>
<th>Institution</th>
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<tbody>
<tr>
<td>2600</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Aerobic Fitness and Cardiac Autonomic Control Related to Better Cognitive Performance in Young Adults</strong></td>
<td>Arilson Fernandes Mendonça de Sousa, Samuel Estevam Vidal, Daniel Tavares de Andrade, Igor Marcio Correa Fernandes da Cunha. FICCIPLAC, Brasilia, Brazil</td>
<td>Email: <a href="mailto:arilsonf@hotmail.com">arilsonf@hotmail.com</a></td>
<td>(No relevant relationships reported)</td>
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<td>2601</td>
<td><strong>Abstract Withdrawn</strong></td>
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<td>2602</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Association Between Binge Watching TV and Physical Activity in College Students</strong></td>
<td>Julie M. Cousins, Heather H. Betz. Albion College, Albion, MI. (Sponsor: Helaine Alessio, FACSM)</td>
<td>Email: <a href="mailto:julielmcousins@gmail.com">julielmcousins@gmail.com</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>2603</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Exploring the Relationship Between Planned and Performed Physical Activity: the Utility of a Smartphone App</strong></td>
<td>Matthew T. Stewart, Taylor Nezich, Joyce Lee, Rebecca Hasson, FACSM, Natalie Colabianchi. University of Michigan, Ann Arbor, MI. (Sponsor: Rebecca Hasson, FACSM)</td>
<td>Email: <a href="mailto:stewm@umich.edu">stewm@umich.edu</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>2604</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>The Effects Of A Six-week Boot Camp Program On Exercise-related Affects And Perceptions</strong></td>
<td>Selen Razon1, Jared M. James1, Anna K. Schade1, Antonia L. Battaglino1, Alexis N. Trumbetti1, Jamie M. Blose1, Katie M. Cooper1, Paul K. Stickles1, Umar Tokac1, Melissa A. Reed1, Melissa A. Whidden, FACSM1, West Chester University, West Chester, PA1. (Sponsor: Melissa A. Whidden, FACSM)</td>
<td>Email: <a href="mailto:selenrazon@gmail.com">selenrazon@gmail.com</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>2605</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Sedentary Adult Characteristics and Exercise Benefits and Barriers: Associations in an Interactive Voice Response Study</strong></td>
<td>Matthew C. Ainsworth, Suzanne E. Perumean-Chaney, Kevin R. Fontaine, Mohanraj Thirumalai, Laura Q. Rogers, FACSM, Dori Pekmezic. University of Alabama at Birmingham, Birmingham, AL. (Sponsor: Laura Q. Rogers, FACSM)</td>
<td>Email: <a href="mailto:ainsworth@uab.edu">ainsworth@uab.edu</a></td>
<td>(No relevant relationships reported)</td>
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<td>2606</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Mirror Mirror On The Wall: Who Prefers You Most Of All? Individual Preferences In The Context Of Mirrored-exercise Environment</strong></td>
<td>Hila Sharon David, Yonatan Sarig, Gershon Tenenbaum. Florida State University, Tallahassee, FL</td>
<td>Email: <a href="mailto:hs17@fsu.edu">hs17@fsu.edu</a></td>
<td>(No relevant relationships reported)</td>
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<td>2607</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Sedentary Behavior in 6-10 Year Old Children and Associations to Portable Device Use and Parental Influence</strong></td>
<td>Jonathan B. Naylor1, Jacob E. Barkley1. 1Ashland University. Ashland, OH. 2Kent State University, Kent, OH. (Sponsor: Ellen Glickman, PhD, FACSM, FACDS)</td>
<td>Email: <a href="mailto:jnaylor2@ashland.edu">jnaylor2@ashland.edu</a></td>
<td>(No relevant relationships reported)</td>
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<td>2608</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Exercise Intensity as a Predictor of Mood States During a Group Cycling Class</strong></td>
<td>Debra A. Stroiney1, John D. Ranney2, Navid Ghoddossi1, George Mason University, Manassas, VA. 2Gannon University, Erie, PA</td>
<td>Email: <a href="mailto:dstroine@gmu.edu">dstroine@gmu.edu</a></td>
<td>(No relevant relationships reported)</td>
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<td>2609</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>What Parental Correlates Predict Children's Active Transportation to School in the Southeast USA?</strong></td>
<td>Eugene C. Fitzhugh1, Jerry Everett2, Linda Daugherty1, University of Tennessee, Knoxville, TN. 2University of Tennessee, Knoxville, Knoxville, TN</td>
<td>Email: <a href="mailto:fitzhugh@utk.edu">fitzhugh@utk.edu</a></td>
<td>(No relevant relationships reported)</td>
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<td>2610</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Determinants of Change in Sedentary Behaviour In Young Children: a Systematic Review</strong></td>
<td>Liane B. Azevedo1, Esther M.F. van Sluij2, Helen J. Moore1, Kathryn Heskeht1. 1Free University, Middlesbrough, United Kingdom. 2University of Cambridge, Cambridge, United Kingdom.</td>
<td>Email: <a href="mailto:aot@nexs.ku.dk">aot@nexs.ku.dk</a></td>
<td>(No relevant relationships reported)</td>
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<td>2611</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Exercise Dependence, Eating Disorder Symptoms and Biomarkers of Relative Energy Deficiency among Male Endurance Athletes</strong></td>
<td>Anna K. Melin1, Ida L. Fahrenholzt2, Mia Lichtenstein1, Monika K. Torstveit1. 1University of Copenhagen, Copenhagen, Denmark. 2University of Agder, Kristiansand, Norway.</td>
<td>Email: <a href="mailto:aot@nexs.ku.dk">aot@nexs.ku.dk</a></td>
<td>(No relevant relationships reported)</td>
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<td>2612</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Parental Rewards for Children's Physical Activity: A Quantitative and Qualitative Analysis</strong></td>
<td>Tyler J. Kybartas, Paula-Marie M. Ferrara, Dawn P. Coe, FACSM, Kelley Strohacker, FACSM. University of Tennessee, Knoxville, TN</td>
<td>Email: <a href="mailto:cmarangop@gmail.com">cmarangop@gmail.com</a></td>
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<td>2613</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Social Network of Friends and Physical Activity in University Students</strong></td>
<td>Carlos M. Arango1, Jason Cardona1, Diana I. Muñoz2, Victor H. Arboleda1, Sandra M. Hincapie1, Fredy A. Patiño1. 1University of Antioquia, Medellin, Colombia. 2Universidad del Rosario, Medellin, Colombia</td>
<td>Email: <a href="mailto:cmarangop@gmail.com">cmarangop@gmail.com</a></td>
<td>(No relevant relationships reported)</td>
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<td>2614</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Mood Response To Aerobic Exercise In The Tiger Study</strong></td>
<td>Graham D. Salmon1, Molly S. Bray1, Rodney K. Dishman1. 1University of Texas at Austin, Austin, TX. 2University of Georgia, Athens, GA</td>
<td>Email: <a href="mailto:gsalmon@utexas.edu">gsalmon@utexas.edu</a></td>
<td>(No relevant relationships reported)</td>
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<td>2615</td>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Sedentary Behavior &amp; Health Variables in People with Type 2 Diabetes</strong></td>
<td>Shaima Alothman, Agel Alenazi, Mohammed Alshehri, Jason Rucker, Patricia Khading. The University of Kansas Medical center, Kansas city, KS</td>
<td>Email: <a href="mailto:jmarangop@gmail.com">jmarangop@gmail.com</a></td>
<td>(No relevant relationships reported)</td>
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2616 Board #280 9:30 AM - 11:00 AM
Psychometric Evaluation of the Physical Activity Appraisal Inventory: Adolescence and Young Adult Version
Barbara Haas1, Shazhu Rinicker2, Belinda Deal1, Zhaoxin He1, Dennis O’Connell, FACSM. 1University of Texas at Tyler, Tyler, TX. 2Hardin-Simmons University, Abilene, TX. (Sponsor: Dennis O’Connell, FACSM)
Email: bhaas@uttyler.edu
(No relevant relationships reported)

2617 Board #281 9:30 AM - 11:00 AM
The Effects Of A Low-dose Mindfulness-based Intervention On Psychological/physiological Health And Acute Food Choices.
Liam A. Beasley, Francesca Cavallerio, Justin Roberts. Anglia Ruskin University, Cambridge, United Kingdom
Email: liam.beasley@student.anglia.ac.uk
(No relevant relationships reported)

2618 Board #282 9:30 AM - 11:00 AM
SPLASH (Swimming, Positive Perceptions, Lifestyle, Activity, Strength, Healthy Habits.) Into Fitness: An Intervention for Girls
Eydie N. Kramer, Daheia J. Barr-Anderson, FACSM. University of Minnesota, Minneapolis, MN
Email: kramen60@umn.edu
(No relevant relationships reported)

2619 Board #283 9:30 AM - 11:00 AM
Investigating the Role of Perceived Willpower in Predicting Exercise Behavior: A Longitudinal Analysis on Gym Members
Navin Kaushal1, Béatrice Bérubé1, Martin S. Hagger2, Louis Bherer1. 1University of Montreal, Montreal, QC, Canada. 2Curtin University, Perth, Australia
Email: nkaushal@umontreal.ca
(No relevant relationships reported)

2620 Board #284 9:30 AM - 11:00 AM
Correlates of Light Physical Activity Among Cancer Survivors
Elizabeth Fallon1, Rakhiyah Johnson2, Carla Berg1. 1American Cancer Society, Atlanta, GA. 2Emory University, Atlanta, GA. (Sponsor: Melissa Bopp, FACSM)
Email: Elizabeth.Fallon@cancer.org
(No relevant relationships reported)

2621 Board #285 9:30 AM - 11:00 AM
Investigating the Effect of Competition Level on Penalties and Injuries in Youth Soccer
Nicole C. Walden, Stephanie D. Walsh, Christopher P. Tomczyk, Tamerah N. Hunt, FACSM. Georgia Southern University, Statesboro, GA. (Sponsor: Tamerah Hunt, FACSM)
Email: mw06347@georgiasouthern.edu
(No relevant relationships reported)

2622 Board #286 9:30 AM - 11:00 AM
An Exploratory Study of Mood States and Transient Emotions in Amateur Dressage Riders
Collin Pursley, Texas Christian University, Fort Worth, TX
(No relevant relationships reported)
American College of Sports Medicine

2630 Board #294 9:30 AM - 11:00 AM
Association Between Menstrual Dysfunction, Bone Stress Injuries and Risk for Disordered Eating in Female Collegiate Athletes
Michelle Bugbee, MS, Stephanie Wilson, MS, Rachele Pojednic, PhD, EdM. Simmons College, Boston, MA
(No relevant relationships reported)

2631 Board #295 9:30 AM - 11:00 AM
Risk Of Burnout Syndrome In College Athletes As A Predictor Of Anxiety And Depression
Victor Hugo Montojo-Lambaren, Sara Ramirez-Hernandez, Alejandro Gaytan-Gonzalez, Juan R. Lopez-Taylor. Universidad de Guadalajara, Guadalajara, Mexico
(No relevant relationships reported)

2632 Board #296 9:30 AM - 11:00 AM
Relationships between Perceived Coaching Behaviors, Competitive Anxiety, and Athlete Burnout
Seongkwan Cho1, Kyung-Shin Park1, Brett Nickerson1, Youngsook Kim1, Hun-Hyuck Cho1,2. Texas A&M International University, Laredo, TX 1Korea Institute of Sport science, Seoul, Korea, Republic of. 2Korea National University of Education, Cheongju, Korea, Republic of
Email: scho@tamiu.edu
(No relevant relationships reported)

2633 Board #297 9:30 AM - 11:00 AM
Psychophysiological Stress Indicators In College Athletes: Comparison Of Physiological Responses With Different Types Of Stressors
Sara Ramirez-Hernandez, Victor Hugo Montojo-Lambaren, Alejandro Gaytan-Gonzalez, Juan R. Lopez-Taylor. Universidad de Guadalajara, Guadalajara, Mexico
(No relevant relationships reported)

2634 Board #298 9:30 AM - 11:00 AM
The Effect Of Crossfit On Self-talk And Goal Setting In At-risk Youth: A Pilot Study.
Mia D. Hannah, Christina Gipson, Nicole Walden, Stephanie Walsh, Tamerah Hunt, FACSM. Georgia Southern University, Statesboro, GA. (Sponsor: Tamerah N. Hunt, FACSM)
Email: mh12150@georgiasouthern.edu
(No relevant relationships reported)

2635 Board #299 9:30 AM - 11:00 AM
Preliminary Evidence Of A Relationship Between Injury And Sport Camera Use In Winter Sliding Sports
Linda Paquette, Elie Truchon, Martin Lavallière, Daniel Lalande. Université de Québec à Chicoutimi, Saguenay, QC, Canada
Email: linda_paquette@uqac.ca
(No relevant relationships reported)

2636 Board #300 9:30 AM - 11:00 AM
Cross-cultural Invariance Of The Mental Toughness Index Among American And Mexican Athletes
Grant B. Morgan1, Andreas Stamatis2, Pedro Julian Flores Moreno2, Leni Tlamatinari Barajas Pineda2, Adriana Isabel Andrade Sánchez2. 1Baylor University, Waco, TX. 2State University of New York at Plattsburgh, Plattsburgh, NY. "University of Colima, Colima, Mexico. (Sponsor: Peter Walter Grandjean, FACSM)
Email: grant_morgan@baylor.edu
(No relevant relationships reported)

2637 Board #301 9:30 AM - 11:00 AM
Relationships between Aggression and Head Impact Kinematics in Ice Hockey
Melissa S. DiFabio1, Katherine M. Broedlove1, Thomas A. Buckley1. 1University of Delaware, Newark, DE. 2University of Michigan, Ann Arbor, MI
Email: m.s.diffabio@gmail.com
(No relevant relationships reported)

2638 Board #302 9:30 AM - 11:00 AM
Iron Supplementation and the Female Athlete Triad in High School Distance Runners
Paige Skorseth1, Aleksie Dingle1, Katie Hastings1, Nicole Segovia2, Emily Kraus3. 1University of Wisconsin, Madison, WI. 2Stanford University, Stanford, CA
Email: skorseth@stanford.edu
(No relevant relationships reported)

E-44 Free Communication/Poster - Immunology III
Friday, May 31, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

2639 Board #303 11:00 AM - 12:30 PM
Effect of Competitive Training on Antiviral Immune Activity in Collegiate Gymnasts
Jessica Alley, Hilary Green, Laurel Smeins, Matt Jefferson, Ruth Littlefield, Marian Kohut. Iowa State University, Ames, IA. (Sponsor: Warren Franke, FACSM)
(No relevant relationships reported)

2640 Board #304 11:00 AM - 12:30 PM
Treadmill Running Attenuates Experimental Colitis in Wild-Type Mice Fed High-Fat Diet and Dextran Sulfate Sodium
Jinkyung Cho, Donghyun Kim, Inhwan Lee, Youngyun Jin, Minjung Kang, Kwoseok Han, Taewan Kim, Hyunsik Kang. Sungkyunkwan University, suwon, Korea, Republic of
(No relevant relationships reported)

2641 Board #305 11:00 AM - 12:30 PM
Effect of MCT-1 Polymorphism on Lactic Acid Clearance in Resistance Trained Females
Lauren M. Branon. University of Southern Indiana, Evansville, IN
Email: lbranon@eagles.usi.edu
(No relevant relationships reported)

2642 Board #306 11:00 AM - 12:30 PM
Exercise Preconditioning-Induced Modification of Gut Microbiota Increases Survival in Cecal Ligation and Perforation (CLP)-Induced Sepsis
Hyun-Sik Kang, Donghyun Kim, Jinkyung Cho, Youngyun Jin, Minjung Kang, Inhwan Lee, Haeryun Hong. Sungkyunkwan University, suwon, Korea, Republic of
(No relevant relationships reported)

2643 Board #307 11:00 AM - 12:30 PM
Impact of Fitness on Receptor Expression of Monocytes Cultured with Palmitate Following Acute Exercise
Lindsay M. LaFratta, Lauren N. Pedersen, Natalie J. Bohmke, Anson M. Blanks, Virginia L. Mihalick, Morgan B. Senter, R. Lee Franco. Virginia Commonwealth University, Richmond, VA
(No relevant relationships reported)

2644 Board #308 11:00 AM - 12:30 PM
Immunoregulatory Effects of Oat Avenanthramides during Downhill Running in Young Men and Women
Tianou Zhang1, Tong Zhao1, Yuzi Zhang1, Tao Liu1, Gilles Gagnon1, Jacqueline Ebrahim1, Li Li Ji, FACSM. 1University of Texas at San Antonio, San Antonio, TX. 2The Second Military Medical University, Shanghai, China. 3University of Minnesota, Minneapolis, MN. 4Ceapro Inc., Edmonton, AB, Canada. (Sponsor: Li Li Ji, FACSM)
Email: tianou.zhang@utsa.edu
Reported Relationships: T. Zhang: Industry contracted research; PepsiCo & Ceapro Inc.

www.acsm.org
### Board #309 11:00 AM - 12:30 PM

**Differential Natural Killer Cell Cytotoxicity Response To Post-Exercise Autologous Serum Based On Cytomegalovirus Serostatus**

Priti Gupta, University of Houston, Houston, TX

Email: tanug3110@gmail.com

(No relevant relationships reported)

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### Board #310 11:00 AM - 12:30 PM

**Carbohydrate Intake Attenuates Post-Exercise Plasma Levels of Cytochrome P450-Generated Oxylipsins**

David C. Nieman, FACSM, Nicholas D. Gillitt, Guan-Yuan Chen, Qibin Zhang, Camila Sakaguchi, Ella H. Stephan, Appalachian State University, Boone, NC. 1Dole Nutrition Research Laboratory, Kannapolis, NC. 2UNC-Greensboro, Kannapolis, NC. 3Federal University of São Carlos, São Carlos, Brazil. 4UNC-Chapel Hill, Chapel Hill, NC

Email: niemandc@appstate.edu

(No relevant relationships reported)

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### Board #311 11:00 AM - 12:30 PM

**Effects of Exercise in Different Environmental Conditions on Leukocyte Counts and Subsets**

Tricia L. Hart, Elliott Arroyo, Brittany N. Followay, Jeremiah A. Vaughan, Ellen L. Glickman, FACSM, Adam R. Jajtner, Kent State University, Kent, OH. 2Ripon College, Ripon, WI. 3Bemidji State University, Bemidji, MN

Email: echo3@lsu.edu

(No relevant relationships reported)

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### Board #312 11:00 AM - 12:30 PM

**Identification Of Blood Biomarkers Of Mild Traumatic Brain Injury In Collegiate Football Players**

Eunhan Cho, Nathan Lemoine, Bailey Theall, Amy Turner, Brian Irving, FACSM, 1Louisiana State University, Baton Rouge, LA. 2University of Prince Edward Island, Charlottetown, PE, Canada.

Email: echo3@lsu.edu

(No relevant relationships reported)

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### Board #313 11:00 AM - 12:30 PM

**Evaluating Acute Sport-related Concussion In The Primary Care Setting: Are We Dropping The Ball?**

Weston T. Northam, Michael J. Cools, Michael Boyd, Jason P. Mihalik, Kevin M. Guskiewicz, FACSM, Kevin A. Carneiro, University of North Carolina, Chapel Hill, NC. (Sponsor: Kevin Guskiewicz, FACSM)

Email: weston.northam@unchealth.unc.edu

(No relevant relationships reported)

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### Board #314 11:00 AM - 12:30 PM

**Single Versus Dual-Task Performance Using A Novel Dual-Task Assessment in a Healthy Sample**

Nicholas K. Erdman, Juliana Jimenez, David R. Howell, Thomas A. Buckley, Jacob E. Reschi, 1University of Virginia, Charlottesville, VA. 2University of Colorado at Denver, Denver, CO. 3University of Delaware, Newark, DE. (Sponsor: Joe Hart, FACSM)

(No relevant relationships reported)
American College of Sports Medicine

2658 Board #322 11:00 AM - 12:30 PM
The Reliability of a Companion KEMS Concussion Test
Douglas M. Kleiner, FACSM. The Center for Sports Concussion, Jacksonville Beach, FL.
Email: kleiner@tacmedics.com
(No relevant relationships reported)

2666 Board #330 11:00 AM - 12:30 PM
The Ability of Internal and External Workload to Predict Injuries in College Female Soccer Players
Ai Ishida, Pamela D. Swan, FACSM, Joshua S. Beaumont, Jesse Vezina. Arizona State University, Downtown Phoenix, AZ. (Sponsor: Pamela D. Swan, FACSM)
(No relevant relationships reported)

E-46 Free Communication/Poster - Injury Risk Assessment
Friday, May 31, 2019, 7:30 AM - 12:30 PM
Room: CC-Hall WA2

2659 Board #323 11:00 AM - 12:30 PM
Lifestyle Behaviors and Common Injuries Among Collegiate eSport Athletes
Hallie Zwiebel, Ravi Chinsky, Joanne DiFrancisco-Donoghue. NYITCOM, Old Westbury, NY. (Sponsor: Gordon Schmidt, FACSM)
Email: hzwibel85@gmail.com
(No relevant relationships reported)

2667 Board #331 11:00 AM - 12:30 PM
Samantha E. Scarmo1, William M. Adams2, Yuki Murata1, Rebecca L. Stearns1, Douglas J. Casa, FACSM1. 1University of Connecticut, Storrs, CT. 2University of North Carolina at Greensboro, Greensboro, NC. (Sponsor: Douglas J. Casa, FACSM)
Email: samantha.scarmo@uconn.edu
(No relevant relationships reported)

2660 Board #324 11:00 AM - 12:30 PM
Varsity Swimming Programs in China and U.S.: A Comparison Study
Fan Guo1, Xiaobo Cai1, Hai Yan2, Weimo Zhu, FACSM1. 1Southeast University, Nanjing, China. 2University of Illinois at Urbana-Champaign, Urbana, IL. (Sponsor: Weimo Zhu, FACSM)
Email: fanfan12334@126.com
(No relevant relationships reported)

2668 Board #332 11:00 AM - 12:30 PM
Relative Age And Sports Performance In Elite Athletes According To Gender And Sport Modality
Maria A. Ríffo1, Francisco Verdugo2, Sandra Mahecha-Matsudo3. 1Universidad Mayor, Santiago, Chile. 2Centro de Alto Rendimiento Santiago, Santiago, Chile
(No relevant relationships reported)

2661 Board #325 11:00 AM - 12:30 PM
Pre-Race Risk Screening and Stratification Predicts Adverse Events - SAFER Study In 76654 Distance Runners
Martin Schwellnus, FACSM1, Sonja Swanevelder2, Esme Jordaan2. 1SEMLI, University of Pretoria, Pretoria, South Africa. 2South African Medical Research Council, Cape Town, South Africa
(No relevant relationships reported)

2669 Board #333 11:00 AM - 12:30 PM
Muscular Strength and Lean Mass Development of Young Male and Female Swimmers Throughout Adolescence
Taline Santos da Costa, Pedro Murara, Rodrigo Vancini, Claudio Barbosa de Lira, Marilia Santos Andrade. Federal University of São Paulo, São Paulo, Brazil
Email: costa.taline@gmail.com
(No relevant relationships reported)

2662 Board #326 11:00 AM - 12:30 PM
High School Sport Specialization and Prior Injury in Collegiate Football Players
Lace E. Luedke1, Turner W. Geisthardt1, Mitchell J. Rauh, FACSM1. 1University of Wisconsin - Oshkosh, Oshkosh, WI. 2San Diego State University, San Diego, CA. (Sponsor: Mitchell J Rauh, FACSM)
(No relevant relationships reported)

2670 Board #334 11:00 AM - 12:30 PM
Knowledge about Sports Injuries, Their Risk Factors and Prevention Among University Football players, 2018
Abubakr O. Ali. University of Khartoum, Faculty of Medicine, Khartoum, Sudan
Email: abkan7@gmail.com
(No relevant relationships reported)

2663 Board #327 11:00 AM - 12:30 PM
Classification of Collegiate Athletes Based on Their Injury History
Heather L. Shirley,泰yeon Oh, Minsoo Kang, FACSM, Minjung Kim, Heonta Kim, Joshua Hogg, Shannon Singletery, Melinda Valliant. University of Mississippi, University, MS
(No relevant relationships reported)
Hogg Presenting

2671 Board #335 11:00 AM - 12:30 PM
Effect of Exercise Mode and Intensity on Subsequent Postprandial Carbohydrate and Fat Metabolism in Persons with Spinal Cord Injury
David W. McMillan1, Jennifer Maher1, James Bilzon2, Kevin Jacobs, FACSM1, Mark Nash, FACSM2. 1The University of Miami, Miami, FL. 2The University of Bath, Bath, United Kingdom. 3The University of Miami, Coral Gables, FL. (Sponsor: Kevin Jacobs, FACSM)
Email: dcmillan@med.miami.edu
(No relevant relationships reported)

2664 Board #328 11:00 AM - 12:30 PM
Ready To Tri: Characteristics Of Recreational Triathletes
Carolyn M. Kienstra, William H. Cade, II, Thomas M. Best, FACSM. University of Miami, Miami, FL.
Email: ekienstra@med.miami.edu
(No relevant relationships reported)

2672 Board #336 11:00 AM - 12:30 PM
Blood Pressure In Response To Hand Grip Exercise In Individuals With Intellectual Disabilities
Thessa I. Hilgenkamp, Elizabeth C. Schroeder, Tracy Baynard, FACSM, Bo Fernhall, FACSM. University of Illinois at Chicago, Chicago, IL
Email: thessa@uic.edu
(No relevant relationships reported)

2665 Board #329 11:00 AM - 12:30 PM
Caregiver Awareness of Safe Pitching Recommendations in Youth Fastpitch Softball Pitchers
Michael Smith, Giorgio Zeppeiri, Bryan Prine, Kevin Farmer, Stephanie Brombacher, Heather K. Vincent, FACSM, Jason L. Zaremski, FACSM, Michelle Bruner. University of Florida College of Medicine, Gainesville, FL. (Sponsor: Heather K Vincent, FACSM)
Email: smithms@ortho.ufl.edu
(No relevant relationships reported)
2673 Board #337 11:00 AM - 12:30 PM
Hematological Biomarkers are Associated With Cardiorespiratory Fitness and Level of Lesion in Individuals With Spinal Cord Injury
Tom E. Nightingale, Gurjeet S. Bhangu, James LJ Bilzon, Andrei V. Krassioukov. 1University of British Columbia, Vancouver, BC, Canada. 2University of Bath, Bath, United Kingdom
Email: Tnightingale@icord.org
(No relevant relationships reported)

2674 Board #338 11:00 AM - 12:30 PM
Attenuated Cardiac Autonomic Function in Response to Hand Grip Exercise Among Individuals with Intellectual Disability
Sara R. Sherman, Theesa L.M. Hilgenkamp, Elizabeth C. Schroeder, Bo Fembell, FACSM, Tracy Baynard, FACSM. The University of Illinois-Chicago, Chicago, IL
Email: ssherm5@uic.edu
(No relevant relationships reported)

2675 Board #339 11:00 AM - 12:30 PM
Over-ground Walking Economy In Hemiparetic Stroke
Alyssa D. Stookey, Fredrick M. Ivey, Leslie I. Katzel. Baltimore VA Medical Center, Baltimore, MD
Email: alyssa.stookey@va.gov
(No relevant relationships reported)

2676 Board #340 11:00 AM - 12:30 PM
Cardiac Autonomic Function and Sleep Duration Changes Due to Time-of-Day Practices/Conditioning in College Football Players
Portia B. Resnick, William D. Hale. The University of Tulsa, Tulsa, OK
Email: portia-resnick@utulsa.edu
(No relevant relationships reported)

2677 Board #341 11:00 AM - 12:30 PM
Immediate and Residual Effects of Sleep Extension on Performance and Motivation in Tactical Athletes
Bradley Ritland, Guido Simonelli, Rodolphe Gentili, J. Carson Smith, FACSM, Xin He, Janna Mantua, Thomas Balkin, Bradley Hattfield, FACSM. 1United States Army Institute of Environmental Medicine, Natick, MA. 2Walter Reed Army Institute of Research, Silver Spring, MD. 3University of Maryland, College Park, MD
Email: bradley.ritland@gmail.com
(No relevant relationships reported)

2678 Board #342 11:00 AM - 12:30 PM
Sleep Quality and Psychosocial Variables Predict Common Cold in Marathon Runners
Sophie E. Harrison, Jason P. Edwards, Ross Roberts, Neil P. Walsh, FACSM, Bangor University; Bangor, United Kingdom. (Sponsor: Neil P. Walsh, FACSM)
Email: s.harrison@bangor.ac.uk
(No relevant relationships reported)

2679 Board #343 11:00 AM - 12:30 PM
Effects of Nap After Morning Exercise on Afternoon Performance and Overnight Sleep in Athletes
Karina Ando, Hiroyuki Sagayama, Masako Hoshikawa, Masaki Takahashi, Shigenobu Shibata, Hideyuki Takahashi. 1Japan Institute of Sports Sciences, Tokyo, Japan. 2Japan Society for the Promotion of Sciences, Tokyo, Japan. 3Waseda University, Tokyo, Japan
Email: karina.ando@ipnsporit.go.jp
(No relevant relationships reported)
### F-01 Highlighted Symposium - You’re Doing it Wrong: Training and Nutrition for Physique vs. for Function

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Chair</th>
<th>Reported Relationships</th>
<th>Summary</th>
</tr>
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<tbody>
<tr>
<td>1:00 PM</td>
<td>Training for Hypertrophy vs. Training for Strength</td>
<td>Jeremy Loometne, The University of Mississippi, Oxford, MS</td>
<td>(No relevant relationships reported)</td>
<td>Training and nutrition programs must be evidence based and context specific to successfully achieve peak athletic performance. However, athletes and practitioners are exposed to a large volume of misinformation. In particular, programs better suited for success in physique or pure strength sports may be inadequate substitutes for programs intended to improve sports performance. This session will highlight best practices, myths, and misinterpretations in exercise and nutrition programming for peak athletic performance.</td>
</tr>
<tr>
<td>1:05 PM</td>
<td>Training for Strength vs. Training for Sport Performance</td>
<td>James Steele, ukactive Research Institute and Solent University, London/Southampton, United Kingdom</td>
<td>(No relevant relationships reported)</td>
<td>Cardiopulmonary exercise testing (CPET) now has an established place in clinical medical practice. Worldwide, this investigation modality is predominantly utilized by anesthesiologists and cardiologists and remains under-valued with respect to its potential to detect, assess and prognosticate on pulmonary conditions. This session will highlight and discuss the latest advances in the utility of CPET when interrogating clinical pulmonary disorders.</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>Physique vs. Function: Nutrition for the Strength and Power Athlete</td>
<td>Eric Rawson, FACSM, Messiah College, Mechanicsburg, PA</td>
<td>(No relevant relationships reported)</td>
<td>Cardiopulmonary exercise testing (CPET) now has an established place in clinical medical practice. Worldwide, this investigation modality is predominantly utilized by anesthesiologists and cardiologists and remains under-valued with respect to its potential to detect, assess and prognosticate on pulmonary conditions. This session will highlight and discuss the latest advances in the utility of CPET when interrogating clinical pulmonary disorders.</td>
</tr>
<tr>
<td>1:55 PM</td>
<td>Physique vs. Function: Nutrition for Weight Management in Athletes</td>
<td>Louise M. Burke, FACSM, Australian Institute of Sport, Canberra, Australia</td>
<td>(No relevant relationships reported)</td>
<td>Cardiopulmonary exercise testing (CPET) now has an established place in clinical medical practice. Worldwide, this investigation modality is predominantly utilized by anesthesiologists and cardiologists and remains under-valued with respect to its potential to detect, assess and prognosticate on pulmonary conditions. This session will highlight and discuss the latest advances in the utility of CPET when interrogating clinical pulmonary disorders.</td>
</tr>
<tr>
<td>2:45 PM</td>
<td>Overall Discussion</td>
<td></td>
<td></td>
<td>Cardiopulmonary exercise testing (CPET) now has an established place in clinical medical practice. Worldwide, this investigation modality is predominantly utilized by anesthesiologists and cardiologists and remains under-valued with respect to its potential to detect, assess and prognosticate on pulmonary conditions. This session will highlight and discuss the latest advances in the utility of CPET when interrogating clinical pulmonary disorders.</td>
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### F-02 Symposium - Athletic Hearts: A Comparative Perspective

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<th>Time</th>
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<th>Chair</th>
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<th>Summary</th>
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<tbody>
<tr>
<td>1:00 PM</td>
<td>Athletic Remodeling in the Human Heart</td>
<td>Aaron L. Baggish, FACSM, Massachusetts General Hospital, Boston, MA</td>
<td>(No relevant relationships reported)</td>
<td>Cardiac remodeling and the athlete’s heart is a common theme of discussion at the annual ACSM meeting, however, little consideration has been given to cardiac remodeling in other athletic species. In this session, colleagues from across the world will specifically discuss what is known about cardiac remodeling in other athletic species and importantly what we might be able to learn from these animals in relation to overall cardiac structure, function and plasticity in the human heart.</td>
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### F-03 Symposium - Cardio-pulmonary Exercise Testing or Pulmonary-cardio Testing - Time to Focus on the Lungs?

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<tr>
<th>Time</th>
<th>Event</th>
<th>Chair</th>
<th>Reported Relationships</th>
<th>Summary</th>
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</thead>
<tbody>
<tr>
<td>1:00 PM</td>
<td>The Pulmonary System and CPET</td>
<td>Harry Rossiter, FACSM, UCLA, TORRANCE, CA</td>
<td>(No relevant relationships reported)</td>
<td>Cardiopulmonary exercise testing (CPET) now has an established place in clinical medical practice. Worldwide, this investigation modality is predominantly utilized by anesthesiologists and cardiologists and remains under-valued with respect to its potential to detect, assess and prognosticate on pulmonary conditions. This session will highlight and discuss the latest advances in the utility of CPET when interrogating clinical pulmonary disorders.</td>
</tr>
<tr>
<td>1:05 PM</td>
<td>The Breathless Child- What Can CPET Tell us about the Pediatric Lung?</td>
<td>James T. Olin, National Jewish Hospital, Denver, CO</td>
<td>(No relevant relationships reported)</td>
<td>Cardiopulmonary exercise testing (CPET) now has an established place in clinical medical practice. Worldwide, this investigation modality is predominantly utilized by anesthesiologists and cardiologists and remains under-valued with respect to its potential to detect, assess and prognosticate on pulmonary conditions. This session will highlight and discuss the latest advances in the utility of CPET when interrogating clinical pulmonary disorders.</td>
</tr>
<tr>
<td>1:30 PM</td>
<td>The Pulmonary Vasculature - More than a Cardiac Condition</td>
<td>Luke Howard, Hammersmith Hospital, London, United Kingdom</td>
<td>(No relevant relationships reported)</td>
<td>Cardiopulmonary exercise testing (CPET) now has an established place in clinical medical practice. Worldwide, this investigation modality is predominantly utilized by anesthesiologists and cardiologists and remains under-valued with respect to its potential to detect, assess and prognosticate on pulmonary conditions. This session will highlight and discuss the latest advances in the utility of CPET when interrogating clinical pulmonary disorders.</td>
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<tr>
<td>1:55 PM</td>
<td>CPET and the Pulmonary Vasculature - More than a Cardiac Condition</td>
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<td>Cardiopulmonary exercise testing (CPET) now has an established place in clinical medical practice. Worldwide, this investigation modality is predominantly utilized by anesthesiologists and cardiologists and remains under-valued with respect to its potential to detect, assess and prognosticate on pulmonary conditions. This session will highlight and discuss the latest advances in the utility of CPET when interrogating clinical pulmonary disorders.</td>
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### F-04 Symposium - ¡Muévase! Novel Approaches to Promoting Physical Activity in Latinos

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<tr>
<th>Time</th>
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<th>Summary</th>
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<tbody>
<tr>
<td>1:20 PM</td>
<td>Unexplained Breathlessness and CPET: Time for the Pulmonologist to Lead?</td>
<td>James H. Hull, FACSM, Royal Brompton Hospital, London, United Kingdom</td>
<td>(No relevant relationships reported)</td>
<td>The U.S. Latino population has reached nearly 58 million and has accounted for nearly half of U.S. population growth since 2000. On average, Latinos engage in insufficient physical activity and are disproportionately burdened by obesity and type 2 diabetes. Thus, effective, culturally-oriented physical activity interventions are needed promote</td>
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<tr>
<td>1:45 PM</td>
<td>Overall Discussion</td>
<td></td>
<td></td>
<td>Cardiopulmonary exercise testing (CPET) now has an established place in clinical medical practice. Worldwide, this investigation modality is predominantly utilized by anesthesiologists and cardiologists and remains under-valued with respect to its potential to detect, assess and prognosticate on pulmonary conditions. This session will highlight and discuss the latest advances in the utility of CPET when interrogating clinical pulmonary disorders.</td>
</tr>
</tbody>
</table>
Practical and Successful Application of Altitude Training Methods for Olympic Medal Performance

Robert Chapman, FACSM, Indiana University, Bloomington, IN

(No relevant relationships reported)

IT’S NOT ONLY MORE RED BLOOD CELLS: THE INDIVIDUAL TRAINING RESPONSE TO ALTITUDE

Robert Chapman, FACSM, Indiana University, Bloomington, IN

(No relevant relationships reported)

BONE MARROW PATHWAYS IN RESPONSE TO OXYGEN DEPRIVATION

Olivier Girard

(No relevant relationships reported)

Groth and Destruction: Bone Marrow Edema Pathways

Matthew P. Golden, FACSM, South Georgia Veterans Healthcare System, Milledgeville, GA

(No relevant relationships reported)

Exercise and a Ketogenic Diet

Cortical and Trabecular Bone Morphology in Response to Exercise and Low Calorie Diet

Matthew C. Scott, PhD, Biomedical Research Center, Baton Rouge, LA.

(Sponsor: Brian A. Irving, FACSM)

Historically, altitude training emerged in the 1960s and was limited to the “Live High Train Low” method for the endurance athletes looking for increasing their oxygen transport. This “classical” method was completed in 1990s by the “Live High Train High” method for the endurance athletes looking for increasing their oxygen transport. The symposium aims to present the recent updates on altitude training methods and discuss critical considerations and intervention strategies for promoting physical activity among Latino men, Dr. Joseph will discuss current and emerging trends for promoting physical activity in Latinas, Dr. Noland will discuss family-based approaches for promoting physical activity for Latino children. Dr. Marquez will discuss interventions to promote physical activity in older Latinos and lead an overarching discussion surrounding successes and directions for future research.

Current and emerging trends for promoting physical activity in Latinas

Rodney P. Joseph, Arizona State University, Tempe, AZ

(No relevant relationships reported)

Three Months of Ballistic Training

Alexis A. Pihoker, FACSM, United States Olympic Committee, Colorado Springs, CO

(No relevant relationships reported)
American College of Sports Medicine

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<thead>
<tr>
<th>Board #5</th>
<th>1:00 PM - 3:00 PM</th>
<th>Board #3</th>
<th>1:00 PM - 3:00 PM</th>
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<tbody>
<tr>
<td>The Association between Quantified Training Load and Bone Adaptation</td>
<td>Prefrontal Cortex Neural Function and Decision-making Performance Following a Long Duration Incremental Exercise Protocol in the Heat while Wearing Personal Protective Equipment</td>
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<tr>
<td>Ian Varley¹, Chris Saward¹, Julie Greeser³, Craig Sale, FACSM². ¹Nottingham Trent University, Nottingham, United Kingdom. ²Women Ground Close Combat Review, Upavon, United Kingdom. (Sponsor: Prof. Craig Sale, FACSM) Email: <a href="mailto:ian.varley@ntu.ac.uk">ian.varley@ntu.ac.uk</a> (No relevant relationships reported)</td>
<td>Cory Coelho¹, Lynneth Stuart-Hill¹, Olave Krigolson¹, Patrick Neary². ¹University of Victoria, Victoria, BC, Canada. ²University of Regina, Regina, SK, Canada (No relevant relationships reported)</td>
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<th>Board #6</th>
<th>1:00 PM - 3:00 PM</th>
<th>Board #4</th>
<th>1:00 PM - 3:00 PM</th>
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<tbody>
<tr>
<td>Zhaqing Chen¹, Samuel R. Buchanan¹, Michael G. Bernben, FACSM², Debra A. Bernben, FACSM². ¹California State University, San Bernardino, CA. ²University of Oklahoma, Norman, OK. (Sponsor: Debra Bernben, FACSM) Email: <a href="mailto:zjchen@csusb.edu">zjchen@csusb.edu</a> (No relevant relationships reported)</td>
<td>Christina B. Vander Veg¹, Cassie B. Ford¹, Johna K. Register-Mihalik¹, Stephen M. DeLellis², Marshall L. Healy², Shawn F. Kane, FACSM², James H. Lynch, FACSM², Gary E. Means², Jason P. Mihalik¹. ¹The University of North Carolina at Chapel Hill, Chapel Hill, NC. ²United States Army Special Operations Command, Fort Bragg, NC Email: <a href="mailto:cbv33@email.unc.edu">cbv33@email.unc.edu</a> (No relevant relationships reported)</td>
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<th>1:00 PM - 3:00 PM</th>
<th>Board #5</th>
<th>1:00 PM - 3:00 PM</th>
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<tbody>
<tr>
<td>The Effect of Running Vs Cycling on Bone Markers Response</td>
<td>Development of a Lower Body Negative Pressure Device to Reduce Intracranial Pressure in Hospitalized Patients with Traumatic Brain Injury</td>
<td></td>
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<tr>
<td>Nitsan Dror¹, Joseph Carbone¹, Fadia Haddad¹, Bareket Falk, FACSM¹, Panagiota Klentrou¹, Shilomi Ronad-Aziz¹. ¹Pediatric Exercise and Genomics Research Center (PEGRC), University of California Irvine (UCI), Irvine, CA. ²Centre for Bone and Muscle Health, Brock University, St. Catharines, ON, Canada Email: <a href="mailto:nitsand@uci.edu">nitsand@uci.edu</a> (No relevant relationships reported)</td>
<td>Dean Palmer¹, Justin Lawley¹, Tony Whitworth¹, Bert Vargas¹. ¹IEEM, Dallas, TX. ²Parkland Hospital, Dallas, TX. (Sponsor: Benjamin D. Levine, FACSM) Email: <a href="mailto:mihalik1@live.unc.edu">mihalik1@live.unc.edu</a> (No relevant relationships reported)</td>
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<th>Board #6</th>
<th>1:00 PM - 3:00 PM</th>
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<tbody>
<tr>
<td>Bone Mineral Density Comparisons Between Contact and Non-Contact Male and Female Collegiate Athletes</td>
<td>Locus of Control Ratings do not Predict Concussion Reporting Intentions in Intercollegiate Athletes</td>
<td></td>
<td></td>
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<tr>
<td>Dalton E. Cousin, Michelle L. Eisenman, Emily L. Langford, Ronald L. Snarr, Greg A. Ryan. Georgia Southern University, Statesboro, GA. (Sponsor: Dane B. Cook, FACSM) Email: <a href="mailto:dc08163@georgiasouthern.edu">dc08163@georgiasouthern.edu</a> (No relevant relationships reported)</td>
<td>Melissa Anderson, L. Stephen Miller, Michelle L. Weber, Julianne D. Schmidt. University of Georgia, Athens, GA Email: <a href="mailto:melissa.anderson@uga.edu">melissa.anderson@uga.edu</a> (No relevant relationships reported)</td>
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F-07 Thematic Poster - Brain, Performance and Concussions

Friday, May 31, 2019, 1:00 PM - 3:00 PM
Room: CC-101B

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<thead>
<tr>
<th>Board #1</th>
<th>1:00 PM - 3:00 PM</th>
<th>Board #7</th>
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</thead>
<tbody>
<tr>
<td>Head Impact Exposure Alters Neural Synchrony and Complexity in Collegiate Athletes</td>
<td>Acute Exercise Effects on Fatigue in Individuals Living With Post-Traumatic Stress</td>
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</tr>
<tr>
<td>Derek C. Monroe, Nicholas C. Cecchi, James W. Hicks, Steven L. Small. University of California, Irvine, Irvine, CA Email: <a href="mailto:dcmono@uci.edu">dcmono@uci.edu</a> (No relevant relationships reported)</td>
<td>Daniel R. Greene¹, Steven J. Petruzzello, FACSM¹. ¹Augusta University, Augusta, Ga. ²University of Illinois at Urbana-Champaign, Urbana, IL. (Sponsor: Steven J. Petruzzello, FACSM) (No relevant relationships reported)</td>
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<tr>
<th>Board #2</th>
<th>1:00 PM - 3:00 PM</th>
<th>Board #8</th>
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<tbody>
<tr>
<td>Concussion History Impairs Cerebrovascular Reactivity in Special Operations Forces Personnel</td>
<td>Feasibility of Resistance Exercise Training in Gulf War Veterans with Widespread Pain</td>
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<tr>
<td>Patricia R. Combs¹, Avinashi S. Chandran¹, Nikki E. Barczak¹, Stephen M. DeLellis¹, Cassie B. Ford¹, Marshall L. Healy¹, Shawn F. Kane, FACSM¹, James H. Lynch, FACSM¹, Gary E. Means¹, Jason P. Mihalik¹. ¹University of North Carolina at Chapel Hill, Chapel Hill, NC. ²United States Army Special Operations Command, Fort Bragg, NC Email: <a href="mailto:pcombs@live.unc.edu">pcombs@live.unc.edu</a> (No relevant relationships reported)</td>
<td>Jacob Nineman¹, Aaron J. Steger¹, Patrick J. O’Connor, FACSM¹, Jacob B. Lindheimer¹, Neda E. Almassi, Nicholas P. Gretzon¹, Ryan J. Dougherty¹, Kevin M. Cronbie¹, Stephanie M. Van Riper¹, Dane B. Cook, FACSM¹. ¹University of Wisconsin-Madison, Madison, WI. ²University of Georgia, Athens, GA. ³William S. Middleton Memorial Veterans Hospital, Madison, WI. (Sponsor: Dane B. Cook, FACSM) (No relevant relationships reported)</td>
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F-08 Thematic Poster - Physiological Responses in Firefighters

Friday, May 31, 2019, 1:00 PM - 3:00 PM
Room: CC-102A

<table>
<thead>
<tr>
<th>Board #9</th>
<th>1:00 PM - 3:00 PM</th>
<th>Board #10</th>
<th>1:00 PM - 3:00 PM</th>
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<tbody>
<tr>
<td>Final Program P191</td>
<td><a href="http://www.acsm.org">www.acsm.org</a></td>
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</tbody>
</table>
2727 Board #1 1:00 PM - 3:00 PM
Exploring Factors Related To Blood Pressure Increase After A 12-hour Shift-Work in Firefighters
Rosenkranz M. Nogueira1, Edgard Soares1, Eugénio Cesar Nogueira1, Janssen Gomes1, Guilherme E. Molina1, Keila E. Fontana1, Maria Korre2, Denise Smith3, Stefanos N. Kales4, Luiz Fernando Junqueira Jr., Luiz Guilherme G Porto1. 1UNB, BRASILIA, Brazil. 2HAVARD, SARATOGA SPRINGS, NY. 3Skidmore College, Saratoga Springs, New York. 4Harvard T. H. Chan School of Public Health, Boston, MA, BOSTON, MA, MA
(No relevant relationships reported)

2728 Board #2 1:00 PM - 3:00 PM
Heart Rate Response Relative to Body Weight/Body Fat and Fire Gear During Walking Protocol
John P. Isaacs. eastern kentucky university, richmond, KY
(No relevant relationships reported)

2729 Board #3 1:00 PM - 3:00 PM
Physiologic Strain of SCBA (Maze) Training Compared to Circuit Training and Live Fire Training
Andrea F. Wilkinson1, Alexis A. Matias1, Cassandra I.K. Eddy1, Jeffrey L. King1, Edgard MKVK Soares2, Denise L. Smith, FACSM3. 1Skidmore College, Saratoga Springs, NY. 2Houston Fire Department, Houston, TX. 3University of Brasilia, Brasilia-DF, Brazil. (Sponsor: Denise L. Smith, FACSM)
Email: awilkins@skidmore.edu
(No relevant relationships reported)

2730 Board #4 1:00 PM - 3:00 PM
Effects of Wearing a Self-Contained Breathing Apparatus on Blood Oxygen Saturation During Exercise in Firefighters
Brandon S. Pollock1, Jason Springer2, Tom Burgasser2, Tim Berczik2, Keith Burns3, Jackie Novak4, 1Walsh University, North Canton, OH. 2Cleveland Clinic - South Pointe Hospital, Cleveland, OH. 3Massillon Fire Department, Stark County, OH. 4Jackson Fire Department, Stark County, OH
Email: bpollock@walsh.edu
(No relevant relationships reported)

2731 Board #5 1:00 PM - 3:00 PM
Exertional Strain and Task Performance Consequences of a Reduction in Protection in Structural Fire Fighter PPE - A Pilot Study
Emil A. DenHartog. North Carolina State University, Textile Protection and Comfort Center, Raleigh, NC. (Sponsor: Dr Lacy Alexander, FACSM)
Email: edenhart@ncsu.edu
(No relevant relationships reported)

2732 Board #6 1:00 PM - 3:00 PM
Firefighters Do Not Exhibit Postexercise Hypotension Following a Bout of Vigorous Exercise
Paul M. Parducci1, Beth A. Taylor, FACSM1, Amanda L. Zaleski1, Adam R. Blanchard1, Yeongjin Gwon2, Ming-Hui Chen2, Burak T. Cilhoroz2, Paul D. Thompson, FACSM1, Linda S. Pescatello, FACSM1. 1University of Connecticut, Storrs, CT. 2Hartford Hospital, Hartford, CT. (Sponsor: Beth A. Taylor, PhD, FACSM)
(No relevant relationships reported)

2733 Board #7 1:00 PM - 3:00 PM
The Effect of Rapid and Slow Heat Acquisition on Heart Rate Variability
Brandon Cotton, Cory Cochoorn, Lynneth Stuart-Hill. University of Victoria, Victoria, BC, Canada
(No relevant relationships reported)
Board #7 1:00 PM - 3:00 PM
Differences in Determining Exercise Intensity in Males and Females
Jozelyn Rascon, Elizabeth Trujillo, Francisco J. Morales Acuna, Alvaro N. Guirvich, FACSM. The University of Texas at El Paso, El Paso, TX
Email: jrnsc03@miners.utep.edu
(No relevant relationships reported)

Board #8 1:00 PM - 3:00 PM
The Relationship Between Maternal Physical Activity during Late Pregnancy and Infant Motor Development
Nikitha Rajendra1, Karen Furgal1, Lauren Miller1, Kolbi Edens2, Kristin Yoho3, Jill M. Maples3, Rachel A. Timios4. Western Kentucky University, Bowling Green, KY. 1University of Tennessee, Knoxville, TN. 2San Diego State University, San Diego, CA. 3University of Missouri - Missouri Orthopaedic Institute. 4Hospital for Special Surgery, New York, NY
Email: nikitah.rajendra028@topper.wku.edu
(No relevant relationships reported)

F-10 Thematic Poster - Sports Injury: New Epidemiological Insights
Friday, May 31, 2019, 1:00 PM - 3:00 PM
Room: CC-104B

Board #1 1:00 PM - 3:00 PM
Sport-Specific Associations of Sport Specialization and Sport Volume with Overuse Injury in Youth Athletes
Eric G. Post1, Kevin M. Biese2, Daniel A. Schaefer2, Andrew M. Watson1, Timothy A. McGuine1, M. Alison Brooks1, David R. Bell1. 1San Diego State University, San Diego, CA. 2University of Wisconsin-Madison, Madison, WI
Email: ep4ost@sdsu.edu
(No relevant relationships reported)

Board #2 1:00 PM - 3:00 PM
A Seven-year Epidemiological Analysis Of Ankle Injuries In U.S. Rugby-7s
Email: drctorlopezjr@gmail.com
Reported Relationships: V. Lopez Jr: Industry contracted research; Grant National Operating Committee on Standards for Athletic Equipment (ID 44-16), Chapel Hill, NC, USA., Grant USA Rugby’s Empire and New England Geographic Union Rugby Football Unions.

Board #3 1:00 PM - 3:00 PM
Prospective Injury Surveillance during the Wheelchair Basketball World Championships 2018
Karsten Hollander1, Sascha Kluge2, Franziska Glier3, Astrid Zech1, Astrid Junge1. 1University of Hamburg, Hamburg, Germany. 2BG Trauma Hospital of Hamburg, Hamburg, Germany. 3Friedrich-Schiller-University of Jena, Jena, Germany. 4Medical School Hamburg, Hamburg, Germany. (Sponsor: Irene S. Davis, FACSM)
Email: karsten.hollander@uni-hamburg.de
(No relevant relationships reported)

Board #4 1:00 PM - 3:00 PM
Gender Differences In The Risk Of Head, Neck & Face Injuries In US Rugby-7s
Christian Victoria1, Victor Lopez, Jr.2, Danielle C. Ompad2, Richard Ma1, Meryle G. Weinstein2, Answorth A. Allen2, Robert C. Cantu, FACSM1. 1New York University, New York, NY. 2Rugby Research and Injury Prevention Group at Hospital for Special Surgery, New York, NY. 3Missouri Orthopaedic Institute & Thompson Laboratory for Regenerative Orthopaedics, Columbia, MO. 4Hospital for Special Surgery, New York, NY. 5CTE Center at Boston University School of Medicine, Boston, MA. (Sponsor: Robert C. Cantu, FACSM)
Email: cv985@nyu.edu
(No relevant relationships reported)

Board #5 1:00 PM - 3:00 PM
Gender Differences In Match Contact Injuries In U.S. Rugby-7s.
Richard Ma1, Victor Lopez, Jr.2, Christian Victoria3, Meryle G. Weinstein1, Martena Mettry4, Samuel Halem5, Jessica Delallo1, Answorth A. Allen1. 1University of Missouri - Missouri Orthopaedic Institute, Columbia, MO. 2Rugby Research and Injury Prevention Group - Hospital for Special Surgery, New York, NY. 3University of Michigan, Ann Arbor, MI. (Sponsor: Steve Broglio, FACSM)
Email: richarmande@gmail.com
(No relevant relationships reported)

Board #6 1:00 PM - 3:00 PM
Evaluation Of The Rate Of Orthopedic Injuries Of Concussed And Non-concussed Players In The NFL
Emily M. Wittrup, Lucas A. Fox, Katherine M. Breedlove, Andrew P. Lapointe, Steven P. Broglio, FACSM. University of Michigan, Ann Arbor, MI. (Sponsor: Steve Broglio, FACSM)
Email: waseige@ortho.ufl.edu
(No relevant relationships reported)

Board #7 1:00 PM - 3:00 PM
Volleyball-Related Injuries in Adolescent Female Players
Email: avinashc@email.unc.edu
(No relevant relationships reported)

Board #8 1:00 PM - 3:00 PM
Determinants of Concussion Symptomology and Resolution Time in US High School Soccer Players
Avinash Chandran1, Zachary V. Kerr1, Angelo Elmi2, Heather Young2, Loretta DiPietro, FACSM2. 1University of North Carolina at Chapel Hill, Chapel Hill, NC. 2The George Washington University, Washington DC, DC. (Sponsor: Dr. Loretta DiPietro, FACSM)
Email: avinashc@email.unc.edu
(No relevant relationships reported)

F-11 Free Communication/Slide - Carbohydrate Metabolism
Friday, May 31, 2019, 1:00 PM - 3:00 PM
Room: CC-105A

Board #1 1:00 PM - 3:00 PM
Carbohydrate Metabolism in Exercise and Training
Richard A. Tinius1, M. Alison Brooks2, David R. Bell1, Richard Ma1, Meryle G. Weinstein1. 1Rugby Research and Injury Prevention Group, Hospital for Special Surgery, New York, NY. 2Rugby Research and Injury Prevention Group - Hospital for Special Surgery, New York, NY. 3University of Michigan, Ann Arbor, MI. (Sponsor: Steve Broglio, FACSM)
Email: karsten.hollander@uni-hamburg.de
(No relevant relationships reported)
2753 1:00 PM - 1:15 PM
Sport Specific Substrate Utilization During a Maximal Oxygen Consumption Test
Joseph R. Stanzione, Michael Bruneau, Jr., Stella L. Volpe, FACSM.
Drexel University, Philadelphia, PA. (Sponsor: Stella L. Volpe, FACSM)
Email: jrs484@drexel.edu
(No relevant relationships reported)

2754 1:15 PM - 1:30 PM
Transcriptional Regulation Of Substrate Metabolism Following Carbohydrate Ingestion During Exercise Initiated With Different Glycogen Concentrations
Stefan M. Pasiakos, FACSM, Maquesa A. Wilson, Claire C. Whitney, Christopher T. Carrigan, Nancy E. Murphy, Adrienne M. Hatch, Scott J. Montain, Lee M. Margolis.
United States Army Research Institute of Environmental Medicine, Natick, MA.
Email: stefan.m.pasiakos.civ@mail.mil
(No relevant relationships reported)

2755 1:30 PM - 1:45 PM
Effect Of Breaking-up Sedentary Activity On Metabolic Flexibility And Glycemia In Free-living Overweight/obese Adults
Laura Schreck, Nathan Dejong, Andrew Lange, Carlos Mendez, Thomas Glazer, David A. Gold stroh, Edward L. Melanson, FACSM, Corey Rynders, Josiane Broussard, Daniel Bessesen, Audrey Bergouignan.
University of Colorado, Anschutz Medical Campus, Aurora, CO. (Sponsor: Edward L. Melanson, FACSM)
Email: laura.schreck@colorado.edu
(No relevant relationships reported)

2756 1:45 PM - 2:00 PM
Low Muscle Glycogen Content Does Not Alter Exogenous Carbohydrate Oxidation During Aerobic Exercise
Lee M. Margolis, Maquesa A. Wilson, Claire C. Whitney, Christopher T. Carrigan, Nancy E. Murphy, Adrienne M. Hatch, Scott J. Montain, FACSM, Stefan M. Pasiakos, FACSM.
United States Army Research Institute of Environmental Medicine, Natick, MA. (Sponsor: Stefan M Pasiakos, FACSM)
Email: lee.m.margolis.ctr@mail.mil
(No relevant relationships reported)

2757 2:00 PM - 2:15 PM
Energy Metabolism With Or Without Slow Or Rapid Absorption Carbohydrate In Trained Endurance Runners
Patrick Davitt, FACSM.
University of the Sciences, Philadelphia, PA.
Email: pdavitt@uscsciences.edu
(No relevant relationships reported)

2758 2:15 PM - 2:30 PM
The Addition Of A Sodium Alginate-pectin Hydrogel To A Carbohydrate Beverage Significantly Enhancesgastric Emptying In Humans
Shaun Sutehall1, Stuart Galloway2, Andrew Bosch1, Yannis Pitsiladis, FACSM.
1 University of Cape Town, Cape Town, South Africa. 2University of Stirling, Stirling, United Kingdom. 3University of Brighton, Brighton, United Kingdom. (Sponsor: Prof Yannis Pitsiladis, FACSM)
Email: STHSHA011@myuct.ac.za
(No relevant relationships reported)

2759 2:30 PM - 2:45 PM
Acute Carbohydrate Consumption On The Iron-regulatory Response To Exercise In Elite Keto-adapted Endurance Athletes
Alannah K.A McKay1, Peter Peeling1, David B. Pyne, FACSM, Marijke Welvaert2, Nicolin Tee3, Jill J. Leckey4, Avish P. Sharma5, Megan L.R. Ross1, Laura A. Garvic-an-Lewis6, Rachel P.L van Swelm6, Coby M. Laarakkers7, Louise M. Burke, FACSM.
1 University of Western Australia, Perth, Australia. 2University of Toronto, Ontario, Canada. 3University of Canberra, Canberra, Australia. 4Australian Institute of Sport, Canberra, Australia. 5Australia Catholic University, Melbourne, Australia. 6Australia Institute of Sport, Canberra, Australia. 7Radboud University Medical Center, Nijmegen, Netherlands. (Sponsor: Barbara Ainsworth, FACSM)
Email: alannah.mckay@ausport.gov.au
(No relevant relationships reported)

F-12 Free Communication/Slide - Changing Physical Activity Behaviors Across the Life-Course
Friday, May 31, 2019, 1:00 PM - 3:00 PM
Room: CC-105B

2761 1:00 PM - 3:00 PM
Chair: Eric C. Conchola. Oklahoma State University, Stillwater, OK.
(No relevant relationships reported)

2762 1:00 PM - 1:15 PM
Are Lower-leg and Thigh Muscle Resistance Training Methods Equally Effective to Dynamic Balance for Community-Dwelling Elderly Females?
Hiroshi Kohno. Toyo University, Asaka-Shi, Japan.
Email: kohno@toyo.jp
(No relevant relationships reported)

2763 1:15 PM - 1:30 PM
Using Gamification to Enhance Student Participation in Classroom Activity Breaks
Lexie R. Beemer, Lauren Allport, Tiwaloluwa A. Ajibews, Shreya Bahl, Emma Weston, Maysa Domen, Ben Ransier, Darin Stockdill, U. Sean Vance, Rebecca E. Hasson, FACSM.
University of Michigan, Ann Arbor, MI. (Sponsor: Rebecca E. Hasson, FACSM)
Email: abeemer@umich.edu
(No relevant relationships reported)

2764 1:30 PM - 1:45 PM
Comparing Health Improvements Achieved Through Different Pathways Of A Community-based Motivational Interviewing Physical Activity Programme
Matthew Wade1, Nicola Brown1, James Steele1, Bernadette Daney2, Anne Majumdar2. 1ukactive Research Institute, London, United Kingdom. 2St Mary’s University, London, United Kingdom.
Email: matthewwade@ukactive.org.uk
(No relevant relationships reported)
American College of Sports Medicine

F-13 Free Communication/Slide - Foot and Ankle

Room: CC-202C

Friday, May 31, 2019, 1:00 PM - 3:00 PM

2770 1:00 PM - 3:00 PM

Chair: Robert Gregory, Southern Connecticut State University, New Haven, CT

(No relevant relationships reported)

2771 1:00 PM - 1:15 PM

Differences In Foot Kinematics Between Forefoot Strikers In Minimalist And Conventional Running Shoes

Trynntje Fokkema1, Jerome Outerléys2, Alessandra Bento Matias2, Adam C. Clancy2, Irene S. Davis, FACSM1. “Erasmus MC University Medical Center, Rotterdam, Netherlands.” Harvard Medical School, Cambridge, MA

Email: tfokkema@erasmusmc.nl

(No relevant relationships reported)

2772 1:15 PM - 1:30 PM

Foot Contact Identification Using A Tibial Mounted Accelerometer During Running

Kevin Aubol, Jillian L. Hawkins, Clare E. Milner, FACSM. Drexel University, Philadelphia, PA. (Sponsor: Clare Milner, FACSM)

Email: kga43@drexel.edu

(No relevant relationships reported)

2773 1:30 PM - 1:45 PM

Impact Of Reduced Plantar Sensation On Balance Control

Caitlin O’Connell, Gustavo Sandri Heidner, Nicholas Murray, J. Chris Mizelle, Patrick Rider, Zachary Domire. East Carolina University, Greenville, NC

Email: cormellic17@ecu.edu

(No relevant relationships reported)

2774 1:45 PM - 2:00 PM

The Effects of Ankle Taping on Double Leg Balance after Plyometric Exercises

Russell Lowell1, Jackson Roper1, Madeline Phillips1, Abby McCarthy1, Hannah Nelson2, Anna Blackley1, Abraham Frech1, Moroni de Moors1, Branded Ziebell1, Jared Hornby1, Will Peveler1, Jeff Simpson1, David Titcomb1, Andy Bosak1. ‘Liberty University, Lynchburg, VA.’ ‘University of West Florida, Pensacola, FL.

(Sponsor: Dr. James Schoffstall, FACSM)

(No relevant relationships reported)

2775 2:00 PM - 2:15 PM

Effects of Shock Pad and Synthetic Turf on Ankle Biomechanics in a 90º Cutting Movement

Songning Zhang, FACSM1, Thomas Elvidge1, Kevin Valenzuela2. ‘The University of Tennessee, Knoxville, TN.’ ‘University of Wisconsin-Milwaukee, Milwaukee, WI.

(Sponsor: Jay Hertel, FACSM)

Email: szhang@utk.edu

(No relevant relationships reported)

2776 2:15 PM - 2:30 PM

Gluteus Medius Activation During Gait Is Altered With Chronic Ankle Instability: An Ultrasound Imaging Study

Alexandra F. DeJong1, L. Colby Mangum2, Jay Hertel, FACSM1. ‘University of Virginia, Charlottesville, VA.’ ‘University of Central Florida, Orlando, FL.

(Sponsor: Jay Hertel, FACSM)

Email: afd4au@virginia.edu

(No relevant relationships reported)

2777 2:30 PM - 2:45 PM

The Effect Of Persistent Pain Following Ankle Sprain On Lower Extremity Kinematics During Walking

Kazandra M. Rodriguez1, Stephen C. Cobb1. ‘University of Michigan, Ann Arbor, MI.’ ‘University of Wisconsin-Milwaukee, Milwaukee, WI.

Email: kazandra@umich.edu

(No relevant relationships reported)

2778 2:45 PM - 3:00 PM

Subjects with Chronic Ankle Instability Exhibit Less Loading Absorption After Drop Jump and Drop Landing

Oscar Achiardi, Tomás Castillo, Jaime Hernández, Josefa Robert, Catalina Sepúlveda. Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile

Email: oscar.achiardi@gmail.com

(No relevant relationships reported)

2779 1:00 PM - 2:20 PM

Chair: Aaron J. Stegner. Univ. of Wisconsin, Madison, WI

(No relevant relationships reported)
**P196 Final Program**

**2780 1:00 PM - 1:10 PM**

**Changing the Tide: Psychological Outcomes Among Active Duty Service Members Following a Surf Therapy Program**

Kristen H. Walter, Nicholas P. Otis, Travis N. Ray, Lisa H. Glassman, Alexandra L. Powell, Matthew A. Humphreys, Betty Michalewicz-Kragh, Cynthia J. Thomsen. Naval Health Research Center, San Diego, CA

Email: kristen.h.walter.ctr@mail.mil

(No relevant relationships reported)

**2781 1:10 PM - 1:20 PM**

**Resilience and Mental Health Screening in Collegiate Athletes**

Vicki Nelson, Franklin Sease, FACSM. Greenville Health System, Greenville, SC

Email: vnelson2@ghs.org

(No relevant relationships reported)

**2782 1:20 PM - 1:30 PM**

**Examination of Anger Prevalence In NCAA Division I Student-athletes**

Robert M. Madden, Samantha R. Weber, Toni M. Torres-McGehee, Allison Smith. University of South Carolina, Columbia, SC

(No relevant relationships reported)

**2783 1:30 PM - 1:40 PM**

**Examination of Mental Health Risks and Injury Prevalence in NCAA Division I Collegiate Athletes**

Jane Sweeney, Toni M. Torres-McGehee, Samantha R. Weber, Robert Davis Moore, Jacob Kay. University of South Carolina, Columbia, SC

(No relevant relationships reported)

**2784 1:40 PM - 1:50 PM**

**Examination of Eating Disorder Risk among Recreational Athletes**

Nancy A. Uriegas1, Toni M. Torres-McGehee1, Allison B. Smith1, Dawn M. Emerson2, Kelly Pritchett2. University of South Carolina, Columbia, SC. University of Kansas, Lawrence, KS. Central Washington University, Ellensburg, WA

(No relevant relationships reported)

**2785 1:50 PM - 2:00 PM**

**Sport Differences In Resiliency Development Of Men’s NCAA Football And Basketball Athletes**

Justin R. Geijer, Connie A. Mettلة. Winona State University, Winona, MN

(No relevant relationships reported)

**2786 2:00 PM - 2:10 PM**

**A Comparison Of Depression, Anxiety, And Stress Levels Of Basketball Athletes In Different Collegiate Divisions**

Jessica E. Jochum, Lauren Blyly, Kendall Beckstein, Mallory Meyers. University of Indianapolis, Indianapolis, IN. (Sponsor: Amy Jo Sutterley, FACSM)

Email: jochumj@uindy.edu

(No relevant relationships reported)

**2787 2:10 PM - 2:20 PM**

**Screening Athletes For Disordered Eating: Are We Asking The Right Questions?**

Franklin Sease, FACSM, Vicki Nelson. Greenville Health System, Greenville, SC

(No relevant relationships reported)

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**ACSM 66th Annual Meeting**

**F-15 John R. Sutton Clinical Lecture - Sports Docs Without Borders: Lessons Learned from Implementing Change in the International Fields of Play**

Friday, May 31, 2019, 1:00 PM - 1:50 PM

Room: CC-205

Working with athletes in your own region and country is a rewarding experience. Traveling with your athletes to support them internationally is a career highlight and a privilege. However, there are can be medical and political challenges that are inherent in different sport, societal, and medical cultures. To be on top of your game, and to ensure success of your athletes, are you prepared for the different rules of the international sport medicine game? Using the inspiration of Dr John Sutton, this presentation will discuss “why”, “what”, and “how” of the international sport medicine.

**2788 1:00 PM - 1:50 PM**

**Margo Mountjoy, FACSM. McMaster University, Guelp, ON, Canada**

(No relevant relationships reported)

**F-16 Tutorial Lecture - Exercise-induced Preconditioning of Skeletal Muscle**

Friday, May 31, 2019, 1:00 PM - 1:50 PM

Room: CC-203

This tutorial lecture will provide a state-of-the-art overview of exercise-induced preconditioning of skeletal muscle. Specifically, it is established that repeated bouts of endurance exercise results in numerous biochemical adaptations in skeletal muscle fibers; these exercise-induced alterations in muscle phenotype are often referred to as “exercise-induced preconditioning”. Importantly, exercise-induced preconditioning has been shown to provide significant protection against several threats to skeletal muscle health including doxorubicin-induced muscle wasting and disuse muscle atrophy. Indeed, exercise pre-conditioning protects skeletal muscle against doxorubicin-induced muscle wasting, myonuclear apoptosis, and mitochondrial damage. Further, emerging evidence suggests that exercise-induced preconditioning can also protect skeletal muscles against disuse muscle atrophy. This tutorial lecture will summarize our current knowledge of exercise-induced protection of skeletal muscle and discuss the putative mechanisms responsible for this protection.

**2789 1:00 PM - 1:50 PM**

**Scott K. Powers, FACSM. University of Florida, Gainesville, FL**

(No relevant relationships reported)

**F-17 Colloquium - The Future of Physical Activity Monitoring: Debate over Research-grade vs. Consumer Devices**

Friday, May 31, 2019, 1:00 PM - 1:50 PM

Room: CC-303

Traditionally, scientists interested in quantifying human physical activity have elected to use research grade devices (ActiGraph, Actiwatch, activPAL, GENEActiv, etc.) that store raw, fine-grained acceleration data that are later downloaded and reduced to yield outcome variables. However, many scientists are now choosing to use research grade devices (ActiGraph, Actiwatch, activPAL, GENEActiv, etc.) that use proprietary algorithms and display outcomes in real-time. For example, there are now more than 280 studies in Clinicaltrials.gov that use a Fitbit device, and Fitbit was chosen for the pilot of NIH’s “All of Us” study. In this session, two physical activity measurement experts will debate the pros and cons of these two general categories of devices for conducting research. Validity of outcome measures (steps, calories, heart rate, and MVPA) will be covered. In addition, issues such as cost, standardization, ease of use, data management, battery life, and generational turnover will be debated.

**2790 1:00 PM - 1:50 PM**

**Dinesh John. Northeastern University, Boston, MA**

(No relevant relationships reported)

**2791 1:00 PM - 1:50 PM**

**Patty S. Freedson, FACSM. University of Massachusetts, Amherst, MA**

Reported Relationships: P.S. Freedson: Consulting Fee; Actigraph Inc, Bristows, LLP.

Reported Relationships: D.R. Bassett: Consulting Fee; Actigraph LLC. Other (please describe): Travel expenses-Actigraph LLC.
F-18 Exchange Lecture - American Medical Society for Sports Medicine Exchange Lecture - If Exercise is Medicine, Why Aren’t More People Prescribing It?
Friday, May 31, 2019, 2:10 PM - 3:00 PM
Room: CC-205

It is apparent that exercise prevents or ameliorates many medical conditions while improving health, and is indeed medicine. This session will outline the roadblocks and challenges for more widespread prescription of exercise. Following this session, we should have a road map or plan to operationalize exercise is medicine across a wider clinical spectrum.

2793 Chad Asplund, FACSM. Georgia Southern University, Statesboro, GA
(No relevant relationships reported)

F-19 Colloquium - A Physical Activity Paradox. Is Occupational Physical Activity Bad for You?
Friday, May 31, 2019, 2:10 PM - 3:00 PM
Room: CC-303

Regular participation in physical activity is associated with improved quality and length of life. Yet, evidence published in 2018 - including a meta-analysis of ~200,000 people in the British Journal of Sports Medicine - suggests that high physical activity performed in an occupational setting is associated with an increased risk of mortality. This colloquium will integrate research from two disciplines. First, an occupational epidemiologist will review evidence that high physical activity at work increases mortality. Next, an exercise scientist will discuss the research quality and plausibility of the mechanisms by which high occupational activity might lead to poorer health and increased mortality. The overarching goal would be to come to a consensus about whether a paradox between health effects of occupational vs. leisure time physical activity is biologically plausible, and the potential mechanisms at play in producing these mixed findings, as well as future research directions in this area.

2794 Peter Smith. Institute for Work & Health, Toronto, ON, Canada
(No relevant relationships reported)

2795 Bethany Barone Gibbs. University of Pittsburgh, Pittsburgh, PA
(No relevant relationships reported)

F-20 Tutorial Lecture - Disruption of the Circadian Rhythm in Athletes: How to Cope
Friday, May 31, 2019, 2:10 PM - 3:00 PM
Room: CC-204

For the modern day elite athlete intercontinental travel is a frequent occurrence. As opportunities for international competition and training increase, travel is also the reality of many recreational level or sub-elite athletes. A high-volume of travel and transcontinental crossing can result in a complicated set of physiologic disturbances and physical symptoms. Jet lag and travel fatigue hold challenging problems to the athlete, and rapid eastward or westward travel may negatively affect the body in many ways as well as hamper athletic performance. The human circadian phase that guides the jet lag effect is elusive and thus limits evidence-based therapeutic advice. A better understanding of pre-flight, in-flight, and post-flight management possibilities is of importance for the sports physician, the coach and the athlete. This session will critically review available literature and then provide practical suggestions of implementing a travel management program for athletes and teams.

2796 Dina Christina Janse van Rensburg, FACSM. University of Pretoria, Pretoria, South Africa
(No relevant relationships reported)

2797 Audrey Jansen van Rensburg. University of Pretoria, Pretoria, South Africa
(No relevant relationships reported)

F-21 Tutorial Lecture - Exercise for Stronger Bones: Fact or Fiction
Friday, May 31, 2019, 2:10 PM - 3:00 PM
Room: CC-203

Ageing results in a loss of bone mass and strength, which predisposes an individual to osteoporosis and fragility fracture. Whilst pharmacological therapies are available to combat osteoporosis, these are accompanied by concerns over long-term efficacy and side-effects, leading some to consider alternative options. Exercise has long been touted as a potential treatment for osteoporosis, although this has recently been contested in the media. Certain exercise interventions only seem capable of inducing relative modest effects on the bone that are not comparable with age-associated and site-specific bone losses. This might be explained by the ‘types’ of exercise being prescribed and there is a greater need to understand how different exercise modalities and intensities could improve exercise efficacy. This tutorial lecture will cover arguments for and against exercise to promote bone strength and will finish with future recommendations on how to develop future research in this area for a more efficacious outcome.

2798 Craig Sale, FACSM. Nottingham Trent University, Nottingham, United Kingdom
(No relevant relationships reported)

2799 Wendy M. Kohrt, FACSM. University of Colorado Anschutz Medical Campus, Denver, CO
(No relevant relationships reported)

F-22 Tutorial Lecture - MicroRNAs In Cardiovascular Disease and Health
Friday, May 31, 2019, 2:10 PM - 3:00 PM
Room: CC-108

MicroRNAs (miRNAs) are short, non-coding RNAs that regulate the expression of genes, thus potentially influencing cellular signaling and cellular physiology. Mounting evidence has shown that miRNAs play important roles in the development of atherosclerotic plaque and cardiovascular disease. This tutorial will provide a brief introduction of microRNAs, their biogenesis, and the mechanisms of action (Dr. Hubal). The role of microRNAs in the regulation of cholesterol metabolism, fatty-acid oxidation, and foam cell formation will then be discussed by Dr. Barberio, with an emphasis on adipocyte-derived exosomal miRNA effects on cardiovascular health. Studies from animals, cell lines, and humans will be highlighted to show how adipocyte-derived exosomal miRNAs influence reverse cholesterol transport, macrophage polarization, foam cell formation, and plaque deposits. Lastly, the relationship between circulating miRNAs and CVD risk will highlight the potential for clinical applicability.

2800 Monica J. Hubal, FACSM. Indiana University Purdue University - Indianapolis, Indianapolis, IN
(No relevant relationships reported)

2801 Matthew D. Barberio. George Washington University, Washington, VA
(No relevant relationships reported)

F-22b Tutorial Lecture - Optimizing Nutritional Interventions to Treat the Female Athlete Triad: Mechanisms and Strategies
Friday, May 31, 2019, 2:10 PM - 3:00 PM
Room: CC-300

The Female Athlete Triad is a syndrome consisting of low energy availability (EA), menstrual cycle disturbances, and poor bone health. A consensus statement written by the Female Athlete Triad Coalition in 2014 emphasized that initial treatment of this syndrome should include reversal of the low EA via an increase in caloric intake and/ or a decrease in exercise energy expenditure. This session will focus on the current state of knowledge regarding mechanisms and optimal strategies for increasing caloric intake to treat the Triad. Results from a randomized controlled trial (RCT), REFUEL, and the current literature will be the basis for this symposium. To date, the REFUEL study is the only completed RCT that has explored the efficacy of a non-pharmacological treatment on all three components of the Triad simultaneously. Also, due to the novelty of the study design, lessons learned while conducting an RCT of this type will be discussed.

2796 Dina Christina Janse van Rensburg, FACSM. University of Pretoria, Pretoria, South Africa
(No relevant relationships reported)

2797 Audrey Jansen van Rensburg. University of Pretoria, Pretoria, South Africa
(No relevant relationships reported)
F-25 Highlighted Symposium - Lost in Translation: Promoting Physical Activity vs Cardiorespiratory Fitness?

Friday, May 31, 2019, 3:15 PM - 5:15 PM
Room: CC-Valencia A

A moderated conversational forum group of 3 MDs and 3 Clinical Exercise Physiologists. Topics to be discussed are the importance of Physical Activity (PA) vs. Cardiorespiratory Fitness (CRF) or PA and CRF as a key health factor; approaches used to communicate to individual patients/clients related to PA vs CRF for health benefits; how does the approach differ depending on the audience?; the sources of confusion that individuals or the public deal with in understanding the importance of PA vs CRF and how to address them; what can/should we do in the future to communicate and promote the importance of PA and CRF for health?

Chair: Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

Physician
Aaron L. Baggish, FACSM. Massachusetts General Hospital, Boston, MA
(No relevant relationships reported)

Physician
Chip Lavie, John Ochsner Heart and Vascular Institute, New Orleans, LA
(No relevant relationships reported)

Physician
Robert E. Sallis, FACSM. Kaiser Permanente Medical Center, Fontana, CA
(No relevant relationships reported)

Physician
Jonathan N. Myers, FACSM. VA Palo Alto Health Care System, Palo Alto, CA
(No relevant relationships reported)

Physician
Robert Ross, FACSM. Queen’s University, Kingston, ON, Canada
(No relevant relationships reported)

Physician
Ulik Wisløff, FACSM. Queen’s University, Trondheim, Norway
(No relevant relationships reported)

4:10 PM - 4:15 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:20 PM - 4:25 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:30 PM - 4:35 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:40 PM - 4:45 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:50 PM - 4:55 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:55 PM - 5:15 PM
Overall Discussion
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

F-24 Clinical Workshop-Hands On Demonstration - Grassroots Changemakers: How to Put Exercise is Medicine into Action

Friday, May 31, 2019, 2:10 PM - 3:00 PM
Room: CC-304E

This workshop will initially consist of educating sports medicine practitioners about current assessment methods and practices in managing mental health issues in sports medicine. This will include updates of prevalence of mental health issues in various sports and settings as well current methods and measures for screening mental health concerns. Following this update, 3 models of screening mental health issues in athletes will be presented that will include the University of Pennsylvania, Drexel University and University of Missouri sports medicine programs. Each model will include the logistical arrangements of how screenings are done within the sports medicine department (space, timing, confidentiality, etc), measures, personnel, and how follow-up of positively screened mental health issues are managed. Each model will also present areas in which they believe the model is effective as well as areas that face challenges and barriers to effective care. Discussion will include a summary of proposed necessary elements for effective mental health screening in sport medicine barriers and challenges, as well supplemental elements that may be implemented based on the needs of a particular sports medicine practice. Question and answer will be interactive with the audience with opportunities for discussion and problem solving of unique issues relevant to attendees.

Chair:
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

Physician
Aaron L. Baggish, FACSM. Massachusetts General Hospital, Boston, MA
(No relevant relationships reported)

Physician
Chip Lavie, John Ochsner Heart and Vascular Institute, New Orleans, LA
(No relevant relationships reported)

Physician
Robert E. Sallis, FACSM. Kaiser Permanente Medical Center, Fontana, CA
(No relevant relationships reported)

Physician
Jonathan N. Myers, FACSM. VA Palo Alto Health Care System, Palo Alto, CA
(No relevant relationships reported)

Physician
Robert Ross, FACSM. Queen’s University, Kingston, ON, Canada
(No relevant relationships reported)

Physician
Ulik Wisløff, FACSM. Queen’s University, Trondheim, Norway
(No relevant relationships reported)

4:10 PM - 4:15 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:20 PM - 4:25 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:30 PM - 4:35 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:40 PM - 4:45 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:50 PM - 4:55 PM
Exercise Physiologist
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

4:55 PM - 5:15 PM
Overall Discussion
Matthew Harber, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)
2824 4:10 PM - 4:35 PM  
**Motor unit activity in leg muscles of people with Type 2 diabetes**  
Sandra Hunter, FACSM. Marquette University, Milwaukee, WI  
(No relevant relationships reported)

2825 4:35 PM - 5:00 PM  
**Validation of motor unit signals**  
Roger M. Enoka. University of Colorado, Boulder, CO  
(No relevant relationships reported)

5:00 PM - 5:15 PM  
**Overall Discussion**

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**F-27 Symposium - High-Density Electromyography**

Friday, May 31, 2019, 3:15 PM - 5:15 PM  
**Room:** CC-303

The symposium will involve four speakers who will discuss the recording and interpretation of high-density surface electromyography (EMG) signals. High-density recordings are obtained with grid electrodes that often comprise multiple columns and rows of electrodes (e.g., $4 \times 8$ or $5 \times 13$). These electrodes provide a spatial map of the underlying muscle activation and the resulting interference signals can be decomposed with automated algorithms that identify the discharge times of action potentials by multiple motor units. The plan for the symposium is to provide an introduction to this new technology, discuss the assessment of EMG amplitude and spatial maps, present an example of a clinical application, and describe how the output should be compared with fine-wire recordings of single motor unit activation.

2822 3:15 PM - 3:20 PM  
**Chair:** Kevin G. Keenan. University of Wisconsin Milwaukee, Milwaukee, WI  
(No relevant relationships reported)

2823 3:20 PM - 3:45 PM  
**Introduction to high-density EMG**  
Kevin G. Keenan. University of Wisconsin Milwaukee, Milwaukee, WI  
(No relevant relationships reported)

2824 3:45 PM - 4:10 PM  
**EMG amplitude and spatial maps**  
Jeffrey J. Peterson. University of Wisconsin Milwaukee, Milwaukee, WI  
(No relevant relationships reported)

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John O. Holloszy’s 50+ yr career coincided with the ‘golden age’ of exercise physiology. An early notable discovery by Holloszy in 1967 was that prolonged exercise training in rodents resulted in a two-fold increase in skeletal muscle mitochondria content and his lab described the metabolic consequences that resulted in improved endurance. These findings ushered in an era of research in the exercise-induced biochemical plasticity of skeletal muscle. Holloszy in 1965 was also the first to show that muscle contraction increases glucose transport independent of insulin and he pioneered the search for the molecular mechanisms underlying this response for his entire career. Turning to human studies, he observed that the elevated insulin sensitivity characteristic of trained muscle is quickly lost with inactivity and regained with acute exercise. Relative to human translational studies, Holloszy demonstrated in Type 2 diabetes that short-term or prolonged exercise training can improve insulin sensitivity and responsiveness. Early in his career he established that endurance exercise training in middle-aged men improved risk factors for heart disease and in 1980 he demonstrated that prolonged and intense exercise training can actually reverse myocardial ischemia in patients with coronary heart disease. To investigate aging and exercise, Holloszy first performed experiments in rodents showing that exercise does not have negative effects on aging, exercise does not interfere with the beneficial effect of caloric restriction on lifespan, and that the effects of caloric restriction on improving primary aging are not mediated by low energy availability or low body weight. He also showed generally the same results in human cross-sectional and short-term caloric restriction studies. Holloszy was also very influential in the discipline of cardiovascular exercise physiology, especially related to aging. His laboratory described the attenuated decline in VO2max with aging in master’s athletes compared to untrained healthy adults and that the latter group retain the ability to adapt robustly to endurance training. The outstanding productivity of the Holloszy laboratory (ISI h-index 118) was made possible by his mentoring of ~100 postdoctoral research fellows.
Intervention studies intended to attenuate or reverse losses in skeletal mass/quality with increased age (sarcopenia) usually focus on physical activity/exercise, nutritional, or endocrine-related mechanisms underlying sarcopenia. Emerging literature suggest that fundamental mechanisms of aging, such as changes in stem/progenitor cell number and function, mitochondrial dysfunction, dysregulation of nutrient-sensing pathways, cell senescence and inflammation can adversely impact skeletal muscle remodeling and its metabolic properties. Yet the biology of aging underlying sarcopenia and the extent to which age-related changes in skeletal muscle physiology may limit the anabolic response or make individuals “resistant” to exercise remain to be fully explored. A greater understanding of these important scientific issues could lead to new opportunities for translational research, not only for the identification of new therapeutic targets for sarcopenia, but also for the development of agents that could be used in combination with training to optimize exercise-induced skeletal muscle remodeling and metabolic adaptations in older adults.
2855 Board #3 3:15 PM - 5:15 PM
Kinematic Factors that Contribute to Batting Performance in Collegiate Baseball
Email: 1_amoe@u.pacific.edu
(No relevant relationships reported)

2851 Board #8 3:15 PM - 5:15 PM
Relationship Between Ground Reaction Force and Wrist Velocity in Skilled and Novice Baseball Pitchers
Kurt Kornatz, Christopher Wendt, Kevin Ritsche. Winston-Salem State University, Winston-Salem, NC. (Sponsor: Mike McKenzie, FACSM)
(No relevant relationships reported)

F-32 Thematic Poster - Exercise and Neuroscience
Friday, May 31, 2019, 3:15 PM - 5:15 PM
Room: CC-101B

2852 3:15 PM - 5:15 PM
Chair: J. Carson Smith, FACSM. University of Maryland, College Park, MD
(No relevant relationships reported)

2853 Board #1 3:15 PM - 5:15 PM
The Impact of Varying Exercise Protocols on Neurogenesis and Angiogenesis in the Dentate Gyrus
Darrin Lenhart. East Stroudsburg University, Seton Hall University.
East Stroudsburg, PA. (Sponsor: Shala Davis, FACSM)
Email: dlenhart@esu.edu
(No relevant relationships reported)

2854 Board #2 3:15 PM - 5:15 PM
Not Just for Joints: Physical Activity is Associated with Greater Cortical Thickness among Adults with Osteoarthritis
Email: ryan.falck@hiphealth.ca
(No relevant relationships reported)

2855 Board #3 3:15 PM - 5:15 PM
Fitness Trumps Fatness: An Examination of Cognition and Cerebral Volume
Julian M. Gaitán, Sarah R. Lose, Ryan J. Dougherty, Jennifer M. Oh, Catherine L. Gallagher, Cynthia M. Carlson, Howard A. Rowley, Yue Ma, Sanjaya Asthana, Mark A. Sager, Bruce P. Hermann, Sterling C. Johnson, Barbara B. Bendlin, Dane B. Cook, FACSM, Ozioma C. Okonkwo. University of Wisconsin - Madison, Madison, WI.
(No relevant relationships reported)

2856 Board #4 3:15 PM - 5:15 PM
Brain Activity For Food Inhibition In Children With Higher Cardiorespiratory Fitness: An FMRI Study
Kell Grandjean da Costa1, Henrique Bortolotti1, Kaline Brito1, Galtieri Medeiros1, Fernanda Palhano-Fontes1, Daniel Aranha Cabral1, Maria Luiza Medeiros1, Gleydiane Fernandes1, Menna Price1, Eduardo Bodnaruci Fontes1, Carolina M. Golaszewski, Vanessa L. Errisuriz, Reem Ghaddar, Hoover Amy, Matthew J. Landry, Erfan Khazaee, Sara-Khanzadeh, LaShana P. Johnson, Jaimie N. Davis. University of Texas at Austin, Austin, TX.
Email: 1_kellgrandjean@gmail.com
(No relevant relationships reported)

2857 Board #5 3:15 PM - 5:15 PM
Prefrontal Hemodynamics And Affective Responses To Incremental Exercise
Mark E. Hartman, Matthew Ladwig, Panteleimon Ekkokakis, FACSM. Iowa State University, Ames, IA. (Sponsor: Panteleimon Ekkokakis, FACSM)
Email: mhartman@iastate.edu
(No relevant relationships reported)

2858 Board #6 3:15 PM - 5:15 PM
Acute Exercise Alters Brain Activation In Older Adults: What Is The Role Of Sleep?
Alfonso J. Alfini1, Adam P. Spira1, Lauren R. Weiss2, Junyeon Won3, Casandra Nyhuys4, Corey S. Michelson1, Caroline Simon1, Daniel D. Callow1, Adam P. Spira1, J. Carson Smith, FACSM. 1Johns Hopkins University, Baltimore, MD. 2University of Maryland, College Park, MD. (Sponsor: J. Carson Smith, FACSM)
(No relevant relationships reported)

2859 Board #7 3:15 PM - 5:15 PM
The Effect of Exercise on Neural Activation in Older Adults
Alexis B. Slutsy, Jarod Vance, Laurie Wideman, FACSM, Jennifer L. Etnier, FACSM. University of North Carolina at Greensboro, Greensboro, NC. (Sponsor: Jennifer L. Etnier, FACSM)
Email: absolutsj@uncg.edu
(No relevant relationships reported)

2860 Board #8 3:15 PM - 5:15 PM
Association of Sleep Duration with Exercise-Induced Reductions in Default Mode Network Connectivity in Healthy Older Adults
Lauren R. Weiss1, Alfonso J. Alfini2, Junyeon Won3, Casandra Nyhuys4, Corey S. Michelson1, Caroline Simon1, Daniel D. Callow1, Adam P. Spira1, J. Carson Smith, FACSM. 1University of Maryland, College Park, MD. 2University of Maryland, College Park, MD. (Sponsor: J. Carson Smith, FACSM)
Email: lweiss@termpmail.umd.edu
(No relevant relationships reported)

F-33 Thematic Poster - New Findings in Children and Youth
Friday, May 31, 2019, 3:15 PM - 5:15 PM
Room: CC-104B

2861 3:15 PM - 5:15 PM
Chair: Russell R. Pate, FACSM. University of South Carolina, Columbia, SC
(No relevant relationships reported)

2862 Board #1 3:15 PM - 5:15 PM
Neighborhood Resources Supporting Physical Activity: Perceived Access and Weight-Related Health Status in Youth
Elizabeth Ackley, Peyton Rohrbaugh, Hannah Kolcz. Roanoke College, Salem, VA
Email: ackley@roanoke.edu
(No relevant relationships reported)

2863 Board #2 3:15 PM - 5:15 PM
The Association Between School Gardens and Physical Activity: A Way to Increase Youth Physical Activity
Email: fiona.asigbee@utexas.edu
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board #3</th>
<th>3:15 PM - 5:15 PM</th>
<th>Independent And Combined Associations Of Sedentary Time And Physical Activity With Executive Function Among Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xia Zeng1, Li Cai1, Nianqing Wan1, Stephen Heung-sang Wong2, Minyi Tian1, Lijuan Lai1, Yuejie Lv1, Weiqing Tan1, Jiewen Yang1, Wenyi Huang2, Jin Jing1, Yajun Chen1.1 Sun Yat-sen University, Guangzhou, China. 2The Chinese University of Hong Kong, Hong Kong, China.</td>
<td>Email: <a href="mailto:zengx26@mail2.sysu.edu.cn">zengx26@mail2.sysu.edu.cn</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<th>Board #4</th>
<th>3:15 PM - 5:15 PM</th>
<th>Age for Onset of Walking May Predict Physical Activity in Childhood: The Norwegian Mother and Child Cohort-Study</th>
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<tbody>
<tr>
<td>Guro Paulk Bernhardsen1, Trine Stensrud1, Wenche Nystrø1, Ulf Ekelund1, FACSM1, Norwegian School of Sport Sciences, Oslo, Norway. 2Norwegian Institute of Public Health, Oslo, Norway</td>
<td>Email: <a href="mailto:g.p.bernhardsen@nh.no">g.p.bernhardsen@nh.no</a></td>
<td>(No relevant relationships reported)</td>
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<th>Board #5</th>
<th>3:15 PM - 5:15 PM</th>
<th>An 8-week Fundamental Motor Skill Program Improves Skill Proficiency and Reduces Sedentary Time in Preschoolers</th>
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<tbody>
<tr>
<td>Alexander Engel1, Carolyn Broderick1, Rachel Ward1, Nancy Van Doorn1, Karine Perreaud1, Abbey Van Capelle1, Belinda Parmenter1. 1University of NSW, Sydney, Australia. 2Université de Sherbrooke, Sherbrooke, QC, Canada</td>
<td>Email: <a href="mailto:alexander.engel@unsw.edu.au">alexander.engel@unsw.edu.au</a></td>
<td>(No relevant relationships reported)</td>
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<tr>
<th>Board #6</th>
<th>3:15 PM - 5:15 PM</th>
<th>The Effect Of Exercise In Addition To A Lifestyle-intervention On Hepatic Fat In Overweight Children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maria Medrano Echeverria1, Lide Arenalaz1, Cristina Cadenas-Sanchez1, Maddi Oses1, Beatriz Rodriguez-Vigil1, Francisco B Ortega1, Idiota Labayen1. 1Institute for Innovation &amp; Sustainable Development in Food Chain (IS-FOOD), Public University of Navarra, Pamplona, Spain. 2PROFITH &quot;PROmoting FITness and Health through physical activity&quot; Research Group, University of Granada, Granada, Spain. 3Quételet, University Hospital of Hava (HUA), Vitoria-Gasteiz, Spain. 4PROFITH &quot;PROmoting FITness and Health through physical activity&quot; Research Group, University of Granada, Granada, Spain</td>
<td>Email: <a href="mailto:alexander.engel@unsw.edu.au">alexander.engel@unsw.edu.au</a></td>
<td>(No relevant relationships reported)</td>
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<table>
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<tr>
<th>Board #7</th>
<th>3:15 PM - 5:15 PM</th>
<th>Parental Perceptions of Their Children's Physical Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emily R. Shull1, Chelsea L. Richard1, Marshaw Dowda1, FACSM1, Russell R. Pate1, FACSM1, University of South Carolina, Columbia, SC</td>
<td>Email: <a href="mailto:ershull@email.sc.edu">ershull@email.sc.edu</a></td>
<td>(No relevant relationships reported)</td>
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</table>

<table>
<thead>
<tr>
<th>Board #8</th>
<th>3:15 PM - 5:15 PM</th>
<th>Association Between Meeting Physical Activity, Sleep, And Dietary Guidelines And Cardiometabolic Risk Factors And Adiposity In Adolescents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chelsea L. Kracht1, Peter T. Katzmarzyk1, FACSM1, Amanda E. Staiano1, Chelsea L. Kracht1. Pennington Biomedical Research Center, Baton Rouge, LA. (Sponsor: Peter T. Katzmarzyk, FACSM)</td>
<td>Email: <a href="mailto:chelsea.kracht@pbr.edu">chelsea.kracht@pbr.edu</a></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #9</th>
<th>3:15 PM - 5:15 PM</th>
<th>Protein Supplementation Does Not Further Augment Physiological Adaptations to Prolonged Endurance Exercise Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kristin L. Jonvik1, Kevin J. M. Paulussen2, Shannah L. Danen1, Astrid M. H. Horstman3, Floris C. Wardenaar1, Luc J. C. van Loon1, Jan-Willem van Dijk1. 1Maastricht University, Maastricht, Netherlands. 2Virginia Tech, Blacksburg, VA. 3Florida State University, Tallahassee, FL. 4Roanoke College, Salem, VA</td>
<td>Email: <a href="mailto:kristin.jonvik@han.nl">kristin.jonvik@han.nl</a></td>
<td>(No relevant relationships reported)</td>
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</table>
2877 Board #7 3:15 PM - 5:15 PM
Higher Protein Intake does Not Potentiate Resistance Training-Induced Muscular Adaptations in Middle-aged Adults
Rafael A. Alamilla, Colleen F. McKenna, Amado F. Salvador, Susanah Scaroni, Isabel G. Martinez, Joseph W. Beals, Scott A. Paluska, FACSM, Nicholas A. Burd. University of Illinois at Urbana/Champaign, Urbana, IL. (Sponsor: Scott A. Paluska, FACSM)
(No relevant relationships reported)

F-35 Thematic Poster - Running
Friday, May 31, 2019, 3:15 PM - 5:15 PM
Room: CC-102B

2878 3:15 PM - 5:15 PM
Chair: Christopher J. Lundstrom. University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

2879 Board #1 3:15 PM - 5:15 PM
Are Changes In Running Economy Associated With Changes In Performance In Runners? A Systematic Review and Meta Analysis
Ian J. O Sullivan¹, Mark I. Johnson¹, Sarah B. Clarke², Peter Francis³. ¹Leeds Beckett University, Leeds, United Kingdom, ²Northern Michigan University, Marquette, MI
Email: i.osullivan7595@student.leedsbeckett.ac.uk (No relevant relationships reported)

2880 Board #2 3:15 PM - 5:15 PM
Running Economy Strongly Related to Ground Contact Time Imbalances
Dustin P. Joubert, Nicholas A. Guerra, Eric J. Jones, Erica G. Knowles, Aaron D. Piper. Stephen F. Austin State University, Nacogdoches, TX. (Sponsor: Stephen F. Crouse, FACSM)
Email: jouberdt@lsasu.edu (No relevant relationships reported)

2881 Board #3 3:15 PM - 5:15 PM
Reactive Strength And Leg Stiffness Correlates Running Economy In Well-Trained Long Distance Runners
Fei Li, Yue Shi, Haiyong Ding. ShangHai University of Sport, ShangHai, China
Email: felix_2008@foxmail.com (No relevant relationships reported)

2882 Board #4 3:15 PM - 5:15 PM
Cardiometabolic and Perceptual Responses to Maximal Exercise: Comparing Graded Walking to Ungraded Running
Marcus Kilpatrick, FACSM, Abby Fleming, Taylor Smith, Balea Schumacher, Brian Waddell, A’Naja Newsome, Amber D’Oliveira. University of South Florida, Tampa, FL
Email: mkilpatrick@usf.edu (No relevant relationships reported)

2883 Board #5 3:15 PM - 5:15 PM
Effects of Marathon Training on Maximal Aerobic Capacity and Running Economy in Experienced Marathon Runners
Emma J. Lee, Eric M. Snyder, FACSM, Christopher J. Lundstrom. University of Minnesota, Minneapolis, MN. (Sponsor: Eric M. Snyder, FACSM)
Email: leee4357@umn.edu (No relevant relationships reported)

2884 Board #6 3:15 PM - 5:15 PM
The Influence of AlterG Treadmill Training on Cardiorespiratory Performance in Cross Country Runners
Tracy A. Dierks¹, Trent E. Cayot¹, Vincent C. Nittoli¹, Todd W. Arnold¹, Joseph Stiemler¹. ¹Indiana University, Indianapolis, IN
²University of Indianapolis, Indianapolis, IN. (Sponsor: Robyn Fuchs, FACSM)
Email: tdierks@iu.edu (No relevant relationships reported)

2885 Board #7 3:15 PM - 5:15 PM
High-Speed Treadmill vs Ground-Based Training for Sprint Speed Among College Athletes
Keith A. Coury, Monica O’Rourke. California Baptist University, Riverside, CA
Email: keith@questspeed.com (No relevant relationships reported)

2886 Board #8 3:15 PM - 5:15 PM
Correction Factor to Improve the Accuracy of Iso-Efficient Treadmill Velocity During Inclined Treadmill Running
Lauren Williams¹, Michael Dial¹, Joseph Christensen¹, Tyler Standifird¹, Andrew Creer³, Douglas Powell, FACSM. ¹Utah Valley University, Orem, UT, ²The University of Memphis, Memphis, TN. (Sponsor: Douglas Powell, FACSM)
Email: lauren.williams523@gmail.com (No relevant relationships reported)

F-36 Free Communication/Slide - Energy Balance-Weight Control
Friday, May 31, 2019, 3:15 PM - 5:15 PM
Room: CC-105A

2887 3:15 PM - 5:15 PM
Chair: Edward L. Melanson, FACSM. University of Colorado Denver, Denver, CO
(No relevant relationships reported)

2888 3:15 PM - 3:30 PM
Randomized Trial Examining the Effect of a 12-week Exercise Program on Eating Behaviors
Jessica L. Unick¹, Shira Dansiger¹, Tiffany Leblond¹, Korina Hahn¹, J. Graham Thomas¹, Ana M. Abrantes², Elissa Epel¹, Laura Stroud¹, Rena R. Wing¹. ¹The Miriam Hospital and Brown Medical School, Providence, RI, ²University of California San Francisco, San Francisco, CA. (Sponsor: David Garcia, FACSM)
Email: juniqc@lifespan.org (No relevant relationships reported)

2889 3:30 PM - 3:45 PM
Compensatory Reduction in Non-Exercise Energy Expenditure Among Weight-Stable Overweight and Obese Adults
Gregory A. Hand, FACSM¹, Daniel P. O’Connor, FACSM², Robin P. Shook², Stephanie Burgess³, Steven N. Blair, FACSM³. ¹West Virginia University, Morgantown, WV, ²University of Houston, Houston, TX. ³Children’s Mercy, Kansas City, MO. ⁴University of South Carolina, Columbia, SC
(No relevant relationships reported)

2890 3:45 PM - 4:00 PM
The Effects of Steady State and High Intensity Exercise on Compensatory Eating Behaviors and Appetite
Emily J. Sauer, Sarah E. Myles, Chad A. Wittmer, Shawn N. Munford, Shala E. Davis, FACSM, East Stroudsburg University, East Stroudsburg, PA. (Sponsor: Shala Davis, FACSM)
Email: esauers@esu.edu (No relevant relationships reported)
Jakicic, FACSM

Smith

Email: glgrieve@valdosta.edu

Javier Gonzalez

Bath, United Kingdom. 2University of Roehampton, London,

Email: r.j.rogers@pitt.edu

(Sponsor: John M. Jakicic, FACSM)

Jonathan M. Oliver3, James C. Boyett

1University of North Texas, Denton, TX. 2George Mason University,

Sungwon Chae

Resistance-trained Women

(No relevant relationships reported)

Jakob L. Vingren, FACSM)

L. Nicholson

(No relevant relationships reported)

1University of Pittsburgh, Pittsburgh, PA. 2Temple

Katherine A. Collins, Renee J. Rogers, John M. Jakicic, FACSM.

Study

Behavioral Weight Loss Intervention: The Heart Health Study

Changes In Health-related Quality Of Life In A 12-month Behavioral Weight Loss Intervention: The Heart Health Study

Katherine A. Collins, Renee J. Rogers, John M. Jakicic, FACSM. University of Pittsburgh, Pittsburgh, PA. (Sponsor: John Jakicic, FACSM)

(No relevant relationships reported)

5:00 PM - 5:15 PM

Reductions in Energy Expenditure After Aerobic and Resistance Exercise in Resistance-trained Males

George L. Grievei, J. Mark Davis, FACSM2, J. Larry Durstine, FACSM2, Marco Geraci2, Xuewen Wang2, Jackson S. Ritchey3, Clemens Drenowatz2, Mark A. Sarzynski, FACSM. 1Valdosta State University, Valdosta, GA. 2The University of South Carolina, Columbia, SC. 3University of Education Upper Austria, Linz, Austria

Email: glgrieve@valdosta.edu

(No relevant relationships reported)

F-37 Free Communication/Slide - Immunology

Friday, May 31, 2019, 3:15 PM - 4:45 PM

Room: CC-105B

2896 3:15 PM - 4:45 PM

Chair: Kyle Timmerman, FACSM. Miami University, Oxford, OH

(No relevant relationships reported)

2897 3:15 PM - 3:30 PM

Cytokine Response to Traditional and Cluster Sets in Resistance-trained Women

Sungwon Chae1, Margaret T. Jones, FACSM; Jennifer B. Fields2, Jonathan M. Oliver1, James C. Boyett2, Felipe C. Vechi1, Jonathan L. Nicholson2, Spencer A. Moses1, Jakob L. Vingen, FACSM1

1University of North Texas, Denton, TX. 2Texas Christian University, Fort Worth, TX. (Sponsor: Jakob L. Vingen, FACSM)

Email: chaescool89@snaver.com

(No relevant relationships reported)

F-38 Clinical Case Slide - Rehabilitation Issues: Older Adults

Friday, May 31, 2019, 3:15 PM - 4:55 PM

Room: CC-306

2903 3:15 PM - 4:55 PM

Chair: Kenneth Vitale. University of California San Diego, San Diego, CA

(No relevant relationships reported)

2904 3:15 PM - 4:55 PM

Discussant: Arthur Jason De Luigi. MedStar NRH/Georgetown University Hospital, Olney, MD

(No relevant relationships reported)

2905 3:15 PM - 4:55 PM

Discussant: Wayne Elton Derman. Stellenbosch University, Cape Town, South Africa

(No relevant relationships reported)
American College of Sports Medicine

FRIDAY, MAY 31, 2019

F-39 Clinical Case Slide - Spine II
Friday, May 31, 2019, 3:15 PM - 4:55 PM
Room: CC-202C

2914 3:15 PM - 3:35 PM
Progressive Asymmetric Low Back Pain in a Young Basketball Player
Marianne Lueter, Edward Laskowski, FACSM. Mayo Clinic, Rochester, MN.
Email: lueterman.marianne@mayo.edu
(No relevant relationships reported)

2915 3:35 PM - 3:55 PM
Back Pain in a Multi-Sport High School Athlete
John Diefenderfer, Rob Stevens. Maine General Sports Medicine, Augusta, ME. (Sponsor: James Dunlap, FACSM)
(No relevant relationships reported)

2916 3:55 PM - 4:15 PM
Fragile Bones in a Horseback Rider
Jacob Wessels. University of Minnesota, Minneapolis, MN. (Sponsor: Suzanne Hecht, FACSM)
Email: wesse074@umn.edu
(No relevant relationships reported)

2917 4:15 PM - 4:35 PM
Back Pain - Swimming and Lacrosse
McKayla Schmitt. University of Minnesota, Minneapolis, MN. (Sponsor: Suzanne Hecht, FACSM)
(No relevant relationships reported)

F-40 Tutorial Lecture - The Effect of TBI and Combat Role in Special Operations Forces (SOF) Soldiers
Friday, May 31, 2019, 3:15 PM - 4:05 PM
Room: CC-300

2919a Jason P. Mihalik, FACSM. The University of North Carolina at Chapel Hill, Chapel Hill, NC. (No relevant relationships reported)

2919b Patricia Combs. The University of North Carolina at Chapel Hill, Chapel Hill, NC. (No relevant relationships reported)

2919c Cassie Ford. The University of North Carolina at Chapel Hill, Chapel Hill, NC. (No relevant relationships reported)

2919d Shawn F. Kane, FACSM. The University of North Carolina at Chapel Hill, Chapel Hill, NC. (No relevant relationships reported)

F-41 Rapid Fire Platform - Vascular Function
Friday, May 31, 2019, 3:15 PM - 4:35 PM
Room: CC-Hall WA2

2920 3:15 PM - 4:35 PM
Chair: J. Derek Kingsley, FACSM. Kent State University, Kent, OH
(No relevant relationships reported)

2921 3:15 PM - 3:25 PM
Alterations in Vagal Tone After Acute Resistance Exercise in Resistance-Trained and Untrained Individuals
Stacie M. Humm, Erica M. Marshall, Jason C. Parks, J. Derek Kingsley, FACSM. Kent State University, Kent, OH. (Sponsor: J. Derek Kingsley, FACSM)
(No relevant relationships reported)
2922 3:25 PM - 3:35 PM
Influence of Cardiorespiratory Fitness on Central and Local Arterial Stiffness During Acute Inflammation
Elizabeth C. Schroeder1, Thessa IM Hilgenkamp1, Wesley K. Lefferts1, Amanda V. Sandef1, Tracy Arriola1, Tracy Baynard, FACSMM, Bo Fernhall, FACSMM. 1University of Illinois at Chicago, Chicago, IL. 2Campinas University, Campinas-SP, Brazil. (Sponsor: Bo Fernhall, FACSMM)
Email: eschroer7@uiuc.edu
(No relevant relationships reported)

2923 3:35 PM - 3:45 PM
The Influence Of Habitual Moderate-Vigorous Physical Activity Levels Versus Aerobic Fitness On Age-Related Endothelial Function
Jarrett A. Johns1, Myles W. O’Brien1, Amanda Bungary1, Said Mekary2, Derek S. Kinimyer1. 1Dalhousie University, Halifax, NS, Canada. 2Acadia University, Wolfville, NS, Canada
Email: j.johns@dal.ca
(No relevant relationships reported)

2924 3:45 PM - 3:55 PM
Vascular Responses To Acute Exercise Following Catheterization-induced Damage In Humans
Andrea Tryfonos1, Rafaela Rodighiero1, Matt Cocks2, Joseph Mills3, Daniel J. Green3, Ellen A. Dawson1. 1Liverpool John Moores University, Liverpool, United Kingdom. 2Liverpool Heart and Chest Hospital, University of Liverpool, United Kingdom. 3The University of Western Australia, Perth, Australia
Email: andrea.1212.10@hotmail.com
(No relevant relationships reported)

2925 3:55 PM - 4:05 PM
Effect of Acute Hyperglycemia on Microvascular Hemodynamics and Tissue Oxygenation during Handgrip Exercise
Shane M. Hammer, Andrew M. Alexander, Kaylin D. Didier, Lillie M. Huckaby, Camryn N. Webster, Thomas J. Barstow, FACSMM. Kansas State University, Manhattan, KS
Email: bacauaj@mcmaster.ca
(No relevant relationships reported)

2926 4:05 PM - 4:15 PM
A Longitudinal Investigation On The Effect Of Age And Sex On Flow-mediated Dilation In Children
Joey P. Bacaauan1, Katharine D. Currie2, Nicole A. Proudfoot1, Brian W. Timmons1, Maureen J. MacDonald1. 1McMaster University, Hamilton, ON, Canada. 2Michigan State University, East Lansing, MI
Email: bacauan1@mcmaster.ca
(No relevant relationships reported)

2927 4:15 PM - 4:25 PM
HIITing The Brain Enhances Cerebrovascular Shear Stress; The Link To Neuroprotection?
Damian M. Bailey1, Takuro Washio1, Kazuya Suzuki1, Shigehiko Ogoh, FACSMM. 1University of South Wales, Pontypridd, United Kingdom. 2Toyo University, Kawagoe, Japan
Email: damian.bailey@southwales.ac.uk
(No relevant relationships reported)

2928 4:25 PM - 4:35 PM
Impairments In Lower Limb Microvascular Function Associated With Cycle Phases In Young Healthy Women.
Rogério N. Soares, Anmol T. Mattu, Juan M. Murias. University of Calgary, Calgary, AB, Canada
Email: rogerio.soares@ucalgary.ca
(No relevant relationships reported)

2929 4:35 PM - 4:45 PM
Injuries to the anterior cruciate ligament (ACL) of the knee are common athletic injuries, typically requiring harvest of healthy tendons from elsewhere in the knee to surgically replace the torn ligament. This is a terrific operation for restoring knee stability, but can also result in pain and weakness from the graft site, and this surgery does not slow the development of early arthritis of the knee. In this talk, we will review the preclinical, translational and clinical trials of a new ACL treatment method, bridge-enhanced® ACL repair or BEAR®, where a suture repair of the ligament is combined with a bioengineered scaffold placed in the gap of the torn ACL to stimulate healing of the ligament, thus avoiding the need for use of a graft.

2930 4:45 PM - 4:55 PM
Colloquium - How to Approach the Extreme Athlete

2931 4:55 PM - 5:05 PM
Sodium intake is essential for normal physiological function, but excess sodium can elevate blood pressure in salt sensitive individuals. In addition, excess dietary sodium can adversely affect several target organs, including the heart, kidneys, blood vessels, and brain. This presentation will focus on the adverse effects of dietary sodium in those with “salt resistant” blood pressure.

2932 5:05 PM - 5:15 PM
The Influence Of Habitual Moderate-Vigorous Physical Activity Levels Versus Aerobic Fitness On Age-Related Endothelial Function
Jarrett A. Johns1, Myles W. O’Brien1, Amanda Bungary1, Said Mekary2, Derek S. Kinimyer1. 1Dalhousie University, Halifax, NS, Canada. 2Acadia University, Wolfville, NS, Canada
Email: j.johns@dal.ca
(No relevant relationships reported)

2933 5:15 PM - 5:25 PM
High prevalence of disordered eating, mood disorders and appearance pressure amongst adolescents raises concerns about their health, and health proactive action is requested. Interest for lifestyle interventions as part of treatment of mental illnesses has increased. However, there has been skepticism towards use of exercise and physical activity in treatment of eating disorders due to compulsive exercise being a core symptom. Inadequate knowledge about the mechanisms for this compulsive exercise, and fear of triggering such compulsivity has resulted in ignorance of the potential benefits of adapted exercise as an integrated part of treatment. In this symposium, we will summarize the scientific literature and report on results from trials in our research group focusing on: 1) prevention and treatment of eating disorders 2) the experiences from implementation of exercise and physical activity in treatment of eating disorders and 3) specifically the effect of guided, progressive physical activity exercise and dietary therapy.

2934 5:25 PM - 5:35 PM
Colloquium - How to Approach the Extreme Athlete

2935 5:35 PM - 5:45 PM
Treatment of Eating Disorders
Colloquium - How to Approach the Extreme Athlete

2936 5:45 PM - 5:55 PM
F-42 Elsworth R. Buskirk Tutorial Lecture - Shaking out the Link between Salt, BP, and Vascular Function
Friday, May 31, 2019, 3:15 PM - 4:05 PM
Room: CC-204
Sodium intake is essential for normal physiological function, but excess sodium can elevate blood pressure in salt sensitive individuals. In addition, excess dietary sodium can adversely affect several target organs, including the heart, kidneys, blood vessels, and brain. This presentation will focus on the adverse effects of dietary sodium in those with “salt resistant” blood pressure.

2937 5:55 PM - 6:05 PM
Friday, May 31, 2019, 3:15 PM - 4:05 PM
Room: CC-203
Injuries to the anterior cruciate ligament (ACL) of the knee are common athletic injuries, typically requiring harvest of healthy tendons from elsewhere in the knee to surgically replace the torn ligament. This is a terrific operation for restoring knee stability, but can also result in pain and weakness from the graft site, and this surgery does not slow the development of early arthritis of the knee. In this talk, we will review the preclinical, translational and clinical trials of a new ACL treatment method, bridge-enhanced® ACL repair or BEAR®, where a suture repair of the ligament is combined with a bioengineered scaffold placed in the gap of the torn ACL to stimulate healing of the ligament, thus avoiding the need for use of a graft.

2938 6:05 PM - 6:15 PM
Colloquium - How to Approach the Extreme Athlete

2939 6:15 PM - 6:25 PM
Colloquium - How to Approach the Extreme Athlete

2940 6:25 PM - 6:35 PM
Colloquium - How to Approach the Extreme Athlete

2941 6:35 PM - 6:45 PM
Colloquium - How to Approach the Extreme Athlete

2942 6:45 PM - 6:55 PM
Colloquium - How to Approach the Extreme Athlete

2943 6:55 PM - 7:05 PM
Colloquium - How to Approach the Extreme Athlete

2944 7:05 PM - 7:15 PM
Colloquium - How to Approach the Extreme Athlete
There are over 1.4 million transgender adults in the US population. Transgender individuals undergo gender-affirming treatments including sex hormone inhibition and replacement, and gender-affirming surgery. Increasing numbers of trans people are participating in sports and presenting to sports medicine clinics with injuries, yet there is little research about this athlete population. In this lecture we will be discuss the hormonal transition process and the unique musculoskeletal injuries within this population. This lecture will allow sports medicine providers to learn about the unique issues and concerns of trans athletes, understand rules regarding transgender athlete participation, as well as learn how to best provide competent care to transgender athletes.

F-49 Tutorial Lecture - Exercise Training Individuals with Spinal Cord Injuries: The Role of Functional Electrical Stimulation
Friday, May 31, 2019, 4:25 PM - 5:15 PM
Room: CC-108
Paralysis due to spinal cord injuries result in a wide range of physical and mental health complications, most of which are related to decreased ability to perform physical activity. Functional electrical stimulation (FES) provides a means to stimulate the paralyzed skeletal muscles to perform work that may provide assistance with activities of daily living and provide a means for exercise. Recently our laboratory has had success with utilizing FES to train individuals with SCI for an overground bike race. This tutorial lecture will present the benefits and complications to utilizing FES as an exercise modality and discuss the optimal strategies to achieve overground cycling in this population.

F-50 Tutorial Lecture - Overhead Throwing Injuries in Baseball and Workload: Volume, Velocity, and Finding the Missing Link
Friday, May 31, 2019, 4:25 PM - 5:15 PM
Room: CC-203
There are millions of overhead throwing athletes in a variety of sports worldwide. Current literature suggests that chronic overuse injuries account for anywhere from approximately 40-60% of these injuries in high school baseball players, particularly in the dominant shoulder and elbow. However, even with robust research in risk factors for overhead throwing injury, the volume of overhead throwing injuries does not appear to be declining. There is an emerging body of evidence that the concept of workload and the acute to chronic workload ratio might be a solution to solve this challenging problem. However, the literature is more exhaustive with the workload concept in the lower extremities than the upper extremity. The purpose of this tutorial session is to highlight factors suggestive of overuse throwing injuries researched independently and attempt to link them as a possible missing link to the overuse throwing injury concern.

F-51 Tutorial Lecture - Toddlers to Teenagers: Opportunities to Get Youth Moving
Friday, May 31, 2019, 4:25 PM - 5:15 PM
Room: CC-204
Physical activity is important for healthy growth and development in children of all ages (toddlers to adolescents). Unfortunately, many engage in too little physical activity to receive these benefits, thus negatively impacting their development and increasing the likelihood for chronic diseases. While many public health strategies focus on increasing physical activity in this population, practical solutions for increasing physical activity are diverse and often challenging. This session will focus on a variety of approaches to increase physical activity throughout childhood and among specific subpopulations. Specific approaches include the use of the natural environment to increase physical activity in preschool children, changes to the family environment at home, in schools, and in communities, and traditional and novel workplace strategies to support accrual of daily physical activity.
Friday, May 31, 2019, 4:25 PM - 5:15 PM  
Room: CC-304E

This case-based, interactive work-shop uses a small group format with video projection to optimize exam skills. After each case challenge each small group will discuss clinical pearls both from the master instructors but also from the participants.

2949  Kathryn E. Ackerman, FACSM. Children’s Hospital Boston, Cambridge, MA  
(No relevant relationships reported)  
2950  Bryan Holtzman. University of Pennsylvania, Philadelphia, PA  
(No relevant relationships reported)  
2951  Kristin Whitney. Boston Children’s Hospital, Boston, MA  
(No relevant relationships reported)

F-53  Clinical Workshop-Hands On Demonstration - Lower Extremity Examarama  
Friday, May 31, 2019, 4:25 PM - 5:15 PM  
Room: CC-304G

This case-based, interactive work-shop uses a small group format with video projection to optimize exam skills. After each case challenge each small group will discuss clinical pearls both from the master instructors but also from the participants.

2952  Melody Hrubes. University of Illinois at Chicago, Chicago, IL  
(No relevant relationships reported)  
2953  Terry Nicola, FACSM. University of Illinois at Chicago, Chicago, IL  
(No relevant relationships reported)  
2954  Philip F. Skiba. AdvocateAurora Health, Chicago, IL  
(No relevant relationships reported)

F-54  Free Communication/Poster - Youth  
Friday, May 31, 2019, 1:00 PM - 6:00 PM  
Room: CC-Hall WA2

2955  Board #1  2:00 PM - 3:30 PM  
Vertical Jump and Agility Performance Improves After 8-week Conditioning Program in Youth Female Volleyball Athletes  
William D. Hale¹, Roger O. Kollock¹, Jeff Pace². ¹The University of Tulsa, Tulsa, OK. ²Titan Sports and Performance Center, Tulsa, OK  
Email: wdh1231@utulsa.edu  
(No relevant relationships reported)

2956  Board #2  2:00 PM - 3:30 PM  
The Talk as a Measure of Exercise Intensity in Children  
Peter T. Gittings, Carl Foster, FACSM, Debra Szama, Cristina Cortis, Andrea Fusco, John P. Porcari, FACSM. University of Wisconsin-La Crosse, La Crosse, WI  
Email: cflister@uwla.ac.edu  
(No relevant relationships reported)
American College of Sports Medicine

Board #10 2:00 PM - 3:30 PM
Comparison Of Adolescents’ Fitness Between Hong Kong, Taipei And Shanghai
Peggy Boey1, Govindasamy Balasekaran, FACSM1, Stanley Sai-Chuen Hui, FACSM2, Yining Mei Liou3, Dajiang Lu4, Visvasuresh Victor Govindaswamy5, Ng Yew Cheo1, Jolene Ziyuan Lim1.
1.Nanyang Technological University, Singapore; 2.National Yang-Ming University, Taipei, China; 3.Shanghai University of Sport, Shanghai, China; 4.Concordia University Chicago, Chicago, IL.
Email: peggy_boey@hotmail.com
(No relevant relationships reported)

Board #11 2:00 PM - 3:30 PM
The Effects of Plyometric or Combined Training on Kicking Time in Teenager Taekwondo Athletes
Email: pedro.carazo@uac.cr
(No relevant relationships reported)

Board #12 2:00 PM - 3:30 PM
Which Is Better In Physical fitness Between Obese And Lean Young Children?
Kosho Kasuga1, Takahiro Nakano2, Tornooaki Sakai2. 1.Gifu University Graduate School, Gifu, Japan. 2.Gifu University, Gifu, Japan. (Sponsor: Kiyoji Tanaka, FACSM)
Email: kasuga@gifu-u.ac.jp
(No relevant relationships reported)

Board #13 2:00 PM - 3:30 PM
Unit Characteristics Of Physical Activity Intensity In Physical Education Lesson Among Elementary School Students
Kenta Osubo1, Kosho Kasuga2. 1.Gifu University, Gifu, Japan. 2.Gifu University Graduate School, Gifu, Japan. (Sponsor: Kiyoji Tanaka, FACSM)
Email: kiyoji_tanaka@facs.org
(No relevant relationships reported)

Board #14 2:00 PM - 3:30 PM
Physical Fitness Level And Personality Traits At Age Six: Longitudinal Relationship With The Big Five
Hiromu Nozuka1, Kosho Kasuga2. 1.Gifu University Graduate School, Gifu, Japan. 2.Gifu University, Gifu, Japan. (Sponsor: Kiyoji Tanaka, FACSM)
(No relevant relationships reported)

Board #15 2:00 PM - 3:30 PM
Relationship Between Physical Fitness Characteristics Of Girls And Attitudes And Preference For Exercise
Azuma Hamaguchi1, Kosho Kasuga2. 1.Gifu University Graduate School, Gifu, Japan. 2.Gifu University, Gifu, Japan. (Sponsor: Kiyoji Tanaka, FACSM)
(No relevant relationships reported)

Board #16 2:00 PM - 3:30 PM
Physical Activity And Physical Fitness Characteristics Of Young Children With Extended-hours Childcare
Kirana Minami. Gifu University Graduate School, Gifu, Japan. (Sponsor: Kiyoji Tanaka, FACSM)
(No relevant relationships reported)

Board #17 2:00 PM - 3:30 PM
Seasonal Variation In Physical Activity Levels Among Elementary School Children In The Arctic Areas.
Email: karhni.danielsen@uit.no
(No relevant relationships reported)

Final Program P209

Board #18 2:00 PM - 3:30 PM
Associated Factors To Health Risk Behaviors in Adolescent’s Athletes
Jhonatan Gritten Campos, Michael Pereira da Silva, Thiago Silva Piola, Ana Beatriz Pacifico, Nicolu Augusto Malta Neto, Wagner de Campos. Universidade Federal do Paraná, Curitiba - Paraná, Brazil. (Sponsor: Carlo Baldari, FACSM)
Email: jhonatantec@yahoo.com
(No relevant relationships reported)

Board #19 2:00 PM - 3:30 PM
Comparison Of Physical Activity, Cardiovascular Endurance And Perception Of Quality Of Life Between Adolescents Engaged And Non-engaged In After School Sports Program
Ana Beatriz Pacifico1, Edna Maria De Camargo1, Thiago Silva Piola1, Jhonatan Gritten Campos1, Gislaine Cristina Vagetti1, Valdorino De Oliveira1, Wagner De Campos1. 1.Universidade Federal do Paraná, Curitiba - Paraná, Brazil. 2.Universidade Estadual do Paraná, Curitiba - Paraná, Brazil. (Sponsor: Carlo Baldari, FACSM)
Email: ana.pacifico@hotmail.com
(No relevant relationships reported)

Board #20 2:00 PM - 3:30 PM
Relationship Between Physical Fitness Level At Age 6 And Motivation And Perseverance
Río Kojima1, Kosho Kasuga2. 1.Gifu University graduate school, Gifu, Japan. 2.Gifu University, Gifu, Japan. (Sponsor: Kiyoji Tanaka, FACSM)
(No relevant relationships reported)

Board #21 2:00 PM - 3:30 PM
Acute Cardiometabolic Responses to Integrative Neuromuscular Training in Children
Avery D. Faigenbaum, FACSM, Jie Kang, FACSM, Nicholas A. Ratamess, Anne Farrell, Mina Belfert, Sean Duffy, Cara Jenson, Jill A. Bush, FACSM. The College of New Jersey, Ewing, NJ
Email: faigenba@tcnj.edu
(No relevant relationships reported)

Board #22 2:00 PM - 3:30 PM
Longitudinal Assessment of Peak Power During Childhood
Email: jose.santodomingo1@sapr.edu
(No relevant relationships reported)

Board #23 2:00 PM - 3:30 PM
Criterion-related Validity Of A Cadence Rope Skipping Test For Estimating VO2peak In Adolescents
Stanley Sai-chuen Hui, FACSM, Weidong Gao. The Chinese University of Hong Kong, Shatin, Hong Kong, Hong Kong
Email: hui2162@cuhk.edu.hk
(No relevant relationships reported)

Board #24 2:00 PM - 3:30 PM
Acute PhysiologicaL And Perceptual Responses To Body-weight Circuit And Treadmills-based High-Intensity Interval Exercise In Children
Jeanette M. Ricci1, Rami Stanbouly4, Emily L. Krysko1, Todd A. Astorino2. 1.Michigan State University, East Lansing, MI. 2.California State University - San Marcos, San Marcos, CA. (Sponsor: Karin A Pfeiffer, FACSM)
(No relevant relationships reported)

www.acsm.org
<table>
<thead>
<tr>
<th>Board #25</th>
<th>2:00 PM - 3:30 PM</th>
<th>The Effect Of Comprehensive Coordination Training On Children's Cognitive Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xin Liu1, Yang Li1, Yi Liu1, Xiao lei Liu2, Jindong Chang3, 1Southwest University, Chongqing, China. 2High School Affiliated to Southwest University, Chongqing, China. 3The Branch of the Collaborative Innovation Center of Assessment toward Basic Education Quality at Southwest University, Chongqing, China. Email: <a href="mailto:959754247@qq.com">959754247@qq.com</a></td>
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<td>(No relevant relationships reported)</td>
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<tr>
<th>Board #26</th>
<th>2:00 PM - 3:30 PM</th>
<th>Clarify The Influence Of Changing Parental Consciousness On Opportunities Of Children’s Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shintaro Furuta, Gifu University Graduate Student, Gifu, Japan. (Sponsor: Kiyoyi Tanaka, FACSM)</td>
<td></td>
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<td>(No relevant relationships reported)</td>
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<tr>
<th>Board #27</th>
<th>2:00 PM - 3:30 PM</th>
<th>Body Mass Index and Physical Fitness Measures of 6th, 7th, and 8th Grade Boys and Girls</th>
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<tbody>
<tr>
<td>Emily M. Post1, Lydia C. Caldwell1, Matthew K. Beeler1, William H. Dufont1, Disa L. Hatfield1, Ana L. Gornez2, Michael C. Gaudioso1, William J. Kraemer, FACSM1, 1The Ohio State University, Columbus, OH. 2The College at Brockport, Brockport, NY. 3University of Rhode Island, Kingston, RI. 4Chambersburg Area School District, Chambersburg, PA. (Sponsor: William Kraemer, FACSM) Email: <a href="mailto:philips.1649@osu.edu">philips.1649@osu.edu</a></td>
<td></td>
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<td>(No relevant relationships reported)</td>
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<th>Board #28</th>
<th>2:00 PM - 3:30 PM</th>
<th>The Role of Growth and Maturation During Adolescence on Team Selection and Short-Term Sports Participation</th>
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</thead>
<tbody>
<tr>
<td>Adam Baxter-Jones, Donovan Dale, Leah Ferguson, Kent Kowalski, Louise Humbert, University of Saskatchewan, Saskatoon, SK, Canada</td>
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<td>(No relevant relationships reported)</td>
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<table>
<thead>
<tr>
<th>Board #29</th>
<th>2:00 PM - 3:30 PM</th>
<th>An Evaluation of the Irish Life Schools Fitness Challenge</th>
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<tbody>
<tr>
<td>Kevin D. O’Brien, Sarah M. Kelly, Mark Roantree, Andrew McCarron, Brona Furlong, Niall M. Moyna, Dublin City University, Dublin 9, Ireland. (Sponsor: Michael Harrison, FACSM) Email: <a href="mailto:kevin.obrien7@mail.dcu.ie">kevin.obrien7@mail.dcu.ie</a></td>
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<thead>
<tr>
<th>Board #30</th>
<th>2:00 PM - 3:30 PM</th>
<th>Presence Of The Pediatric Inactivity Triad (PIT) In 4th And 5th Graders.</th>
</tr>
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<tbody>
<tr>
<td>Kristofer C. Grant, Jeremy Davis, Carlie Pierce, Alexis Moore, Elizabeth Bailey, Stephen Bailey, FACSM, Elon University, Elon, NC</td>
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<tr>
<th>Board #31</th>
<th>2:00 PM - 3:30 PM</th>
<th>Sex-Based Differences in the Upper Body Musculature May Influence Rate of Force Development in High School Students</th>
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<tr>
<td>Erica R. Goldstein1, Michael J. Redf1, Tristan M. Starling-Smith2, Alison M. Redf1, Jeffrey R. Stout1, David H. Fukuda3, 1University of Central Florida, Oviedo, FL. 2University of Central Florida, Orlando, FL. 3Keiser University, Orlando, FL Email: <a href="mailto:egoldstein@knights.ucf.edu">egoldstein@knights.ucf.edu</a></td>
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<tr>
<th>Board #32</th>
<th>2:00 PM - 3:30 PM</th>
<th>Physiological and Perceptual Responses to Step-Wise and Ramp Graded Exercise Tests in Children</th>
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<tbody>
<tr>
<td>Meral Culver, Thomas Hill, Kelly E. Johnson, Jakob D. Lauver, Justin P. Guilkey, Coastal Carolina University, Conway, SC Email: <a href="mailto:mculver@coastal.edu">mculver@coastal.edu</a></td>
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<tr>
<th>Board #33</th>
<th>2:00 PM - 3:30 PM</th>
<th>Determinant Factors of Cellular Health Among Adolescent Girls and Boys</th>
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<tbody>
<tr>
<td>Raquel David Langer1, Anderson M. Marques2, Erika K. Hussey3, Gil Guerra-Junior1, Ezequiel M. Goncalves1, 1University of Campinas, Campinas, Brazil. 2Pontifical Catholic University of Campinas, Campinas, Brazil. 3US Army, NSRDEC, Medford, MA Email: <a href="mailto:raquelilanger@gmail.com">raquelilanger@gmail.com</a></td>
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<tr>
<th>Board #34</th>
<th>2:00 PM - 3:30 PM</th>
<th>Resting Energy Expenditure and Metabolic Equivalents in Youth: Impact of Inconsistent Operational Definitions</th>
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<tbody>
<tr>
<td>Paul Hibbing, Scott Croeter, FACSM, University of Tennessee, Knoxville, Knoxville, TN Email: <a href="mailto:phibbing@vols.utk.edu">phibbing@vols.utk.edu</a></td>
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<tr>
<th>Board #35</th>
<th>2:00 PM - 3:30 PM</th>
<th>Comparative Study On Body Composition Distribution Between Obese And Normal Children In China</th>
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<tbody>
<tr>
<td>Zhenygan Tang, Jingmin Liu, Yuji Liu, Xiao Hou, Tsinghua University, Beijing, China Email: <a href="mailto:zty0565@sina.com">zty0565@sina.com</a></td>
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<tr>
<th>Board #36</th>
<th>2:00 PM - 3:30 PM</th>
<th>Systolic Blood Pressure Mediates the Relationship Between Body Mass Index and Inhibitory Control in Children</th>
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<tr>
<td>Maria Luiza M. Rego1, Daniel Aranha R. Cabrál1, Henrique Bortolotti1, Kellig Da Costa2, Gleydiane A. Fernandes2, Menna J. Price1, Eduardo B. Fontes3, 1Federal University of Rio Grande do Norte, Natal, Brazil. 2Swansea University, Swansea, United Kingdom</td>
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<tr>
<th>Board #37</th>
<th>2:00 PM - 3:30 PM</th>
<th>Examining the Relationship Between Physical Activity and Cardiometabolic Biomarkers in Youth with Overweight or Obesity</th>
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<tr>
<td>Justin B. Moore, FACSM1, M. Rosa Bernal López2, Joseph A. Skelton1, Andrew M. South1, Antonio Vargas-Candelá3, Ricardo Gómez-Huelgas4, Javier Benitez-Porres5, 1Wake Forest School of Medicine, Winston-Salem, NC. 2Institute of Biomedical Research in Malaga (IBIMA), University Hospital of Malaga (Regional Hospital), Malaga, Spain. 3Institute of Biomedical Research in Malaga (IBIMA), University Hospital of Malaga (Regional Hospital), Malaga, Spain, Malaga, Spain. 4University of Malaga, Malaga, Spain Email: <a href="mailto:jasmoore@wakehealth.edu">jasmoore@wakehealth.edu</a></td>
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<tr>
<th>Board #38</th>
<th>2:00 PM - 3:30 PM</th>
<th>Negative Impact of Icing Treatment on Qualitative Recovery of Injured Soleus Muscle in Rats</th>
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<tbody>
<tr>
<td>Tsubasu Shibaguchi1, Claudia Pérez-López1, Takao Sugiuara2, Kazumi Masuda3, 1Kanazawa University, Kanazawa, Japan. 2Yamaguchi University, Yamaguchi, Japan</td>
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<tr>
<th>Board #39</th>
<th>2:00 PM - 3:30 PM</th>
<th>Stressed Outover Stress Fractures? Potential Predictive Model To Determinethose At Risk</th>
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<tbody>
<tr>
<td>Timothy M. Dekker, Mayo Clinic, Jacksonville, FL. (Sponsor: George Pujalte, FACSM) Email: <a href="mailto:dekker.timothy@mayo.edu">dekker.timothy@mayo.edu</a></td>
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<td>(No relevant relationships reported)</td>
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2994 Board #40
Association Between Femoral Cartilage Deformation and Pain Following Running
Hyunjae Jeon, Abbey Thomas. University of North Carolina at Charlotte, Charlotte, NC
Email: hjeon2@unc.edu
(No relevant relationships reported)

2995 Board #41
Early Microfractures Of Talus And Calcaneus As A Predictor Of The Foot Injuries
Djordje Antonjevic1, Ruining Li2, Yaming Li3, Yuxuan Fan1, Marija Djuric2, Zhiyu Li2, Yilang Fan2. 1Laboratory for Foot Research, School of Physical Education and Sports Science, Fujian Normal University, Fuzhou, China. 2Laboratory for anthropology, University of Belgrade, Serbia, 3Laboratory for anthropology, University of the State of Rio de Janeiro, Rio de Janeiro, Brazil.
Email: djordje.aas@email.ru
(No relevant relationships reported)

2996 Board #42
Intratendinous Distribution Of Achilles tendinosis, A retrospective Study.
michael bultheel. ku Leuven, Leuven, Belgium
Email: michaelbultheel@gmail.com
(No relevant relationships reported)

2997 Board #43
Side Differences in the Y-Balance Test Performance in Patients with Unilateral Low Back Pain
Yousef M. Alshehre, Khalid Alkhathami, Kelli Brizzolara, Sharon Wang-Price. Texas Woman’s University, Dallas, TX
Email: yalshehre@twu.edu
(No relevant relationships reported)

2998 Board #44
Skeletal Muscle Size, Quality And Function In Patients With Several Years After Total Hip Arthroplasty
Akito Yoshiko1, Kohei Watanabe2, Toshih Moritani, FACSM, Moroe Beppu1, Ryochi Izumida1, Takuya Otani1, Hideaki Shiratsuchi1, Naonobu Takahira2. 1Chukyo University, Nagoya, Japan. 2Kyoto Sangyo University, Kyoto, Japan. 3Japan Hip Joint Foundation, Tokyo, Japan. 4Edogawa Hospital, Tokyo, Japan. 5The Jikei University, Tokyo, Japan. 6Famahashi Orthopedic Hospital, Chiba, Japan. 7Kumamoto University, Kumamoto, Japan. (Sponsor: Toshih Moritani, FACSM)
Email: yoshiko@iits.chukyo-u.ac.jp
(No relevant relationships reported)

2999 Board #45
Effects of Deep Oscillation Therapy on Symptoms Associated with Eccentric Exercise-Induced Delayed Onset Soreness
Kacey Ohlemeyer1, Steele Morris1, Heniberto Zamora Jr2, Allison B. Smith1, Dawn M. Emerson2, Toni M. Torres-McGehee1. 1University of South Carolina, Columbia, SC. 2University of Kansas, Lawrence, KS
(No relevant relationships reported)

3000 Board #46
Effects of Testosterone and Resistance Training on Anabolic and Inflammatory Biomarkers Following Spinal Cord Injury
Ashraf S. Gorgey, FACSM, Retka E. Khalil1, Ranjodh Gill2, Christopher P. Cardozo2, Robert A. Adler1. 1Hunter Holmes McGuire VA Medical Center, Richmond, VA. 2James J. Peters VA Medical Center, Bronx, NY
Email: ashraf.gorgey@va.gov
(No relevant relationships reported)

3001 Board #47
Effectiveness of One-Year FMS Based Training on Physica Function and Fitness of College Pilot Trainees
Heng Li1, WEIMO ZHU, FACSM, 2Nanjing University of Aeronautics and Astronautics, Nanjing, China. 3Nanjing University of Aeronautics and AstronauticsUniversity of Illinois at Urbana-Champaign, URBANA, IL. (Sponsor: WEIMO ZHU, FACSM)
(No relevant relationships reported)

3002 Board #48
Low-volume High-intensity Interval Training On Cardio-metabolic Health And Adherence-related Psycho-perceptual Responses In Overweight/obese Middle-aged Adults
Eric Tsz Chun Poon1, Jane Jie Yu1, Sinead Sheridan1, Ka Wing Chan1, Stephen H.S. Wong, FACSM. 1The Chinese University of Hong Kong, Hong Kong, Hong Kong. 2The University of Hong Kong, Hong Kong, Hong Kong
Email: ericpoonetc@gmail.com
(No relevant relationships reported)

3003 Board #49
Features of Gaseous Metabolism during Exercise Tolerance Testing in Overweight Women
Peizhen Zhang. Beijing Sport University, Beijing, China. (Sponsor: Xiangrong Shi, FACSM)
(No relevant relationships reported)

3004 Board #50
Effects of two Different Stretching Methods Program on Range of Motion in Militaries
Paula Paraguassu Brandão1, Carlos José Nogueira1, Adriane Oliveira Sampaio2, Alisson Gomes Da Silva2, Mário César Conceição2, Gilmar Weber Senna1, Estelio Henrique Martin Dantas1, Celso Lisboa University, Rio de Janeiro, Brazil. 2Air Force – F AB - Air Cadets Preparatory School, Barbacena, Brazil. 3Federal University of the State of Rio de Janeiro, Rio de Janeiro, Brazil. 4Catholic of Petropolis University, Petrópolis, Brazil. 5Tiradentes University, Aracaju, Brazil
Email: ericpoontc@gmail.com
(No relevant relationships reported)

3005 Board #51
Step Count Targets Corresponding to China Physical Activity Guidelines for the Preschool Children
Kai Xu, Nianyuan Zhang, Wexian Yang, Yihan Liu, Yunkun Zhang. Nanjing Sport Institute, Nanjing, China
Email: xkaon@msn.com
(No relevant relationships reported)

3006 Board #52
Online Walking- Really? Comparing Online Activity Courses With Traditional Face To Face Courses.
Keith Randazzo, Suzanne McDonough, Christopher Washam. Mississippi College, Clinton, MS
Email: kdrandazzo@mc.edu
(No relevant relationships reported)

3007 Board #53
Health-Related Fitness Knowledge, Physical Activity, and Instructional Practices Among Male and Female Physical Educators
Ben D. Kern, Stacy Imagbe, James M. Clemons, David Bellar. University of Louisiana at Lafayette, Lafayette, LA
Email: benkern@louisiana.edu
(No relevant relationships reported)
P212 Final Program

3008 Board #54 3:30 PM - 5:00 PM
An Educational Intervention Expands Sports Nutrition Knowledge in Division II Athletic Staff
Rachel L. Durr, Savannah Feldpausch, Jeremy Glaser. Saginaw Valley State University, University Center, MI.
Email: rldurr@svsu.edu
(No relevant relationships reported)

3009 Board #55 3:30 PM - 5:00 PM
Gender Differences in Golf Performance After Various Warm-ups
Andrea Fradkin, FACSM. Bloomsburg University, Bloomsburg, PA.
Email: afradkin@bloomu.edu
(No relevant relationships reported)

3010 Board #56 3:30 PM - 5:00 PM
Actions of The Nas-fab In a City of The Extreme North of Brazil
Ana Paula de Azevedo Albaqueque, Paula Paraguassu Brandão, Valderi Nascimento Viana, Thiago Santos Cardoso, Isadora Canto, Rodrigo Gomes de Souza Vale. 1Universidade Federal do Amapá, Faculdade de Macapá-FAMA, Macapá, Brazil. 2Universidade Federal do Estado do Rio de Janeiro, Rio de Janeiro, Brazil.
(No relevant relationships reported)

3011 Board #57 3:30 PM - 5:00 PM
A Seven Day Healthy Summer Camp Improved Body Composition And Lipid Profile In Obese Children
Carmen S.G. Campbell, 1Maria C.F. Macedo, 2Alisson L. Aquino, Jéssica M.S. Barbosa, 3Isabella R. Pracã, Jessica A. Bezerra, Liliane R. Silva, Laila I.J. Lemos, André L. L., Araújo, Karen J.S. Sarmento, 1Leandro O. Araújo, 2Gustavo L. Guedes, 3Rebeca C.S. Sena, 1Eliza R.D. Duarte, 2William P.A. Dias, 3Hanna S. Messias, 1Leandro L. Souza, 2Suliane B. Rauber, 1Catholic University of Brasilia, Taguatinga, Brazil. 2Institute of Higher Education of Brasilia, Asa Sul, Brazil. 3University Center UDF, Taguatinga, Brazil. 4University of South American Nations, Brazil/landia, Brazil.
Email: campbellcsg@gmail.com
(No relevant relationships reported)

3012 Board #58 3:30 PM - 5:00 PM
Recommendations for the Implementation of Physical Activity Intervention Evaluations in Leisure Centres
Carmen S.G. Campbell, Maria C.F. Macedo, Alisson L. Aquino, Jessica M.S. Barbosa, 3Isabella R. Pracã, Jessica A. Bezerra, 2Liliane R. Silva, Laila I.J. Lemos, André L. L., Araújo, Karen J.S. Sarmento, Leandro O. Araújo, Gustavo L. Guedes, 3Rebeca C.S. Sena, 1Eliza R.D. Duarte, 2William P.A. Dias, 3Hanna S. Messias, 1Leandro L. Souza, 2Suliane B. Rauber, 1Catholic University of Brasilia, Taguatinga, Brazil. 2Institute of Higher Education of Brasilia, Asa Sul, Brazil. 3University Center UDF, Taguatinga, Brazil.
(No relevant relationships reported)

3013 Board #59 3:30 PM - 5:00 PM
The Effect of Foam Rolling and Vibrating Foam Rolling on Exercise-Induced Muscle Fatigue
Yuanpeng Liao, Yihua Ying, Yinhong Ying. ChengDu Sports Institute, ChengDu, China.
Email: lyppercy@163.com
(No relevant relationships reported)

3014 Board #60 3:30 PM - 5:00 PM
Moving Beyond Healthcare To Health: A Preliminary And Descriptive Statistical Report On The Health Peers Programme In The War On Diabetes In Singapore In 2017
Jadzil Hanzah, Loh Win Nie, Michelle Lauw, Felicia Kua, Valencia Lim. Chungi General Hospital, Singapore, Singapore.
Email: Jadzil_hanzah@cgh.com.sg
(No relevant relationships reported)

ACSM 66th Annual Meeting

3015 Board #61 3:30 PM - 5:00 PM
Effect of 6-week Hypoxic Training on Plasma Metabolites in Overweight Females
Ge Hu, Hui Cao, Jianmin Cao, liwen Lian, Kunshun Guo. Beijing Sport University, Beijing, China.
Email: wizardhugue@outlook.com
(No relevant relationships reported)

3016 Board #62 3:30 PM - 5:00 PM
Top Down 1RM Testing May Facilitate Higher and More Reliable Maximal Strength Values Than Traditional “Bottom Up” Methodologies
Andrew N. Buskard, Joseph F. Signorile. University of Miami, Coral Gables, FL. (Sponsor: Dr. Kevin Jacobs, FACSM)
Email: andrewbuskard@miami.edu
(No relevant relationships reported)

3017 Board #63 3:30 PM - 5:00 PM
Comparison between Caloric Expenditure Sitting on a Standard Chair, Stability Ball, and Balanced Active Sitting
Emily L. Langford, Ronald L. Snarr. Georgia Southern University, Statesboro, GA.
Email: el02241@georgiasouthern.edu
(No relevant relationships reported)

3018 Board #64 3:30 PM - 5:00 PM
Different Frequencies Of High-intensity Interval Training On Aerobic Fitness And Fatness In Overweight/obese Young Adults
Edwin C. Chin, Parco M. Siu, FACSM. The University of Hong Kong, Hong Kong, Hong Kong. (Sponsor: Parco M Siu, FACSM)
Email: edwinycyc@connect.hku.hk
(No relevant relationships reported)

3019 Board #65 3:30 PM - 5:00 PM
The Experiences of College Students Enrolled in a Fitness Walking Class with Shelter Dogs
Melanie L. Sartore-Baldwin, Bhithna M. Das, Stacey R. Altman. East Carolina University, Greenville, NC. (Sponsor: Katrin DuBose, FACSM)
Email: sartorem@ecu.edu
(No relevant relationships reported)

3020 Board #66 3:30 PM - 5:00 PM
A Survey of HBCU Nutritional Habits, Attitudes About Health and Risk Perception
Jennifer J. Brown, Trevian D. Long, Jonquin L. Elliott, Kelly N. Brewer, Demond L. Holley, Samarara D. Hauser. Elizabeth City State University, Elizabeth City, NC.
Email: jjbrown@ecsu.edu
(No relevant relationships reported)

3021 Board #67 3:30 PM - 5:00 PM
Differences In Strategic Constructs Of The Transtheoretical Model Across The Levels Of Sitting Time
Ho Han1, Heontaee Kim2, Harold W. Kohl, FACSM1, 2Oklahoma State University, Stillwater, OK. 3University of Mississippi, University, MS. 4University of Texas Health Science Center at Houston, Austin, TX. (Sponsor: Harold W. Kohl III, FACSM)
Email: hohan@okstate.edu
(No relevant relationships reported)

3022 Board #68 3:30 PM - 5:00 PM
Influence Of Non-cognitive Ability Scores On Physical Fitness Improvement: An Examination Using Longitudinal Data
Takahiro Nakano1, Tomoaki Sakai2, Kosho Kasuga2. 1Nagoya Gakuen University, Nagoya, Japan. 2Gifu University, Gifu, Japan. (Sponsor: Kiyoji Tanaka, FACSM)
Email: taka@nuu.ac.jp
(No relevant relationships reported)
3023 Board #69 3:30 PM - 5:00 PM
Breaking Up Prolonged Sitting Improves Cognitive Function In Qatari Females
Bryna C.R. Chrismas1, Lee Taylor, FACSM2, Anissa Cherif1, Suzan Sayegh2, Daniel P. Bailey1, 1Qatar University, Doha, Qatar, 2ASPETAR - Orthopaedic and Sports Medicine Hospital, Doha, Qatar, 3University of Bedfordshire, Bedford, United Kingdom. (Sponsor: Dr Lee Taylor, FACSM)
Email: bcchrisma@qau.edu.qa (No relevant relationships reported)

3024 Board #70 3:30 PM - 5:00 PM
The Effect Of Regenerative Injection Therapy Compared To Corticosteroids For The Treatment Of Lateral Epicondylitis
Julie B. Barnett1, Madison N. Bernacki2, Jessica L. Kainer1, Hannah N. Smith1, Annette M. Zaharoff3, Sandeep Subramanian1, 1UT Health San Antonio Texas, San Antonio, TX, 2The Non-Surgical Center of Texas, San Antonio, TX
Email: BarnettJ@uthscsa.edu (No relevant relationships reported)

3025 Board #71 3:30 PM - 5:00 PM
Evaluation of Intervention Effects of Different Exercise Modes on Non-alcoholic Fatty Liver Disease
Zhijing Zhen1, Chao Luo1, Liangyi Hu1, Hanran Li2, Yuhan Cao1, Qinxin Chen1, Qingjia Song1, Dan Xu1, Yiqing Lan1, Chenlin Zhao1, 1Beijing normal university, beijing, China, 2China University of Mining and Technology, beijing, China
Email: zzpxt@bnu.edu.cn (No relevant relationships reported)

3026 Board #72 3:30 PM - 5:00 PM
Visualization Analysis of International Research of Physical Activity Promoted built environment
zhenduo Liu1, Liping Jiang1, Yuning Jia1, Penghui Xie1, Yanan Wang1, Jooyoung Lee2, Brooke Doherty1, 1East China Normal University, Shanghai, China, 2Tongji University, Shanghai, China, 3University of North Texas, Denton, TX
Email: (No relevant relationships reported)

3027 Board #73 3:30 PM - 5:00 PM
Health and Wellness Coaching as a Promising Strategy to Better Health and Quality Of Life
Paula Helena Dayan, Luciana Oqaudo Pereira-Lancha, Antonio Herbert Lancha Junior. University of São Paulo, São Paulo, Brazil
Email: paulinha.dayan@gmail.com (No relevant relationships reported)

3028 Board #74 3:30 PM - 5:00 PM
Power Outputs During Performance of a Simple Transfer Task
Jessica Elise Kuhn, Jeonghoon Oh, Keri Strand, Moataz Eltoukhly, Joseph Signorelli. University of Miami, Coral Gables, FL
(No relevant relationships reported)

3029 Board #75 3:30 PM - 5:00 PM
Differences In Male Vs Female Regional Body Composition Changes With Resistance Training
Cory Mahan1, Bhirathar Selvaprav2, Amy Givan1, Adam Doedtman3, Jaclyn McComb, FACSM4, Eneco Larumbe-Zahala5, Maria Fernandez-del-Valle4, 1Southern Illinois University Edwardsville, Edwardsville, Edwardsville, IL, 2Southern Illinois University Carbondale, Carbondale, IL, 3Texas Tech University, Lubbock, TX, 4Texas Tech University Health Sciences Center, Lubbock, TX
(No relevant relationships reported)

3030 Board #76 3:30 PM - 5:00 PM
Impact Of Sit-to-stand And Treadmill Work-station Use On Self-reported Musculoskeletal Pain
Gregory Cloutier1, Diego Arguello1, Alvin Mortan1, Dinesh John1, 1Northeastern University, Boston, MA, 2Northeastern University, Knoxville, TN
(No relevant relationships reported)
P214 Final Program

3039 Board #85 3:30 PM - 5:00 PM
The Effects of a Pilot Translational Health In-School Program on Physical Fitness and Health Outcomes
Natasha Cruz, Emily W. Flanagan, Gina Zito, Arlette Perry, FACSM.
University of Miami, Miami, FL. (Sponsor: Arlette Perry, FACSM)
Email: nc220@umiami.edu
(No relevant relationships reported)

3040 Board #86 3:30 PM - 5:00 PM
Perceived Quantity of Physical Activity as a Reflective Measure in Muscle and Bone Strength
Kirstie Huynh1, Karen Serrano Vides1, Kimberly Espartero1, Rebekkah Reichert1, Maria Alvarez1, Priscilla Franson1, Arianne Mazzarini1, Andrew Denys1, Vanessa Yingling, FACSM2.1California State University, East Bay, Garden Grove, CA.2California State University, East Bay, Hayward, CA. (Sponsor: Vanessa Yingling, FACSM)
(No relevant relationships reported)

3041 Board #87 3:30 PM - 5:00 PM
Investigating the Relationship Between Social Media Use and Reported Rates of Exercise
Lauren Pritting, Anton-Luigi Picazo, Milagro JeanMarie-Tucker, Zakkoyya H. Lewis. Loyola Marymount University, Los Angeles, CA
Email: lauren.pritting@gmail.com
(No relevant relationships reported)

3042 Board #88 3:30 PM - 5:00 PM
Incarcerated Young Women’s Exercise and Sleep Behaviors: A Needs and Feasibility Study
Diane L. Elliot, FACSM1, Kristi Racer2, Wendy McGinnis3, Carol Defranchesco4, Leslie Leve4, Kerry Kuehl4.1Oregon Health & Science University, Portland, OR.2Oregon Youth Authority, Salem, OR.3University of Oregon, Eugene, OR.4Banzer, FACSM
Email: elliotd@ohsu.edu
(No relevant relationships reported)

3043 Board #89 3:30 PM - 5:00 PM
Listening To Music While Exercising Increases The Risk For Noise-Induced Hearing Loss
Gabriella Messina, Alicia Stannard, Jamie Marotto. Sacred Heart University, Fairfield, CT
Email: messina@email.sacredheart.edu
(No relevant relationships reported)

3044 Board #90 3:30 PM - 5:00 PM
Connected Health Exercise Consultation Case Study: A Weight Management Strategy Post Gastric Bypass Surgery
Frank Paul1, Regis Fernandes1, Minako Katayama1, Matthew Burs1, Donna Cataldo1, Robert Scales1.1Mayo Clinic, Scottsdale, AZ.
(No relevant relationships reported)

3045 Board #91 3:30 PM - 5:00 PM
University Staff Physical Activity Inventory (USPAI)
Kristianna M. Altamirano, Brent M. Peterson, Kelsey L. Miller, Jacob K. Gardner. Biola University, La Mirada, CA
Email: kristianna.altamirano@biola.edu
(No relevant relationships reported)

3046 Board #92 3:30 PM - 5:00 PM
Physical Therapy Students Knowledge And Attitudes of Nutrition
Jordan D. Day, MS, Eric Jones, PhD, Dustin Joubert, PhD, Sarah Drake, MS, RD, LD, Todd Whitehead, PhD. Stephen F. Austin State University, Nacogdoches, TX. (Sponsor: Thomas J. Pujol, FACSM)
(No relevant relationships reported)

3047 Board #93 3:30 PM - 5:00 PM
Relationship Between Socialization and Weight Changes Using Among Individuals That Use Wearable devices
Milagro JeanMarie-Tucker, Anton-Luigi Picazo, Lauren Pritting, Zakkoyya H. Lewis. Loyola Marymount University, Los Angeles, CA
Email: mjneeanmar@lion.lmu.edu
(No relevant relationships reported)

3048 Board #94 3:30 PM - 5:00 PM
Exercise is Medicine Programs: Public versus Private Healthcare Provider Interest and Needs
Aydan M. Murray1, Emi B. Hayashi1, Richard W. Christiana2, Gina M. Besenyi2.1Kansas State University, Manhattan, KS.2Appalachian State University, Boone, NC. (Sponsor: Craig A. Harms, FACSM)
(No relevant relationships reported)

3049 Board #95 3:30 PM - 5:00 PM
The Effects of Sit To Stand Workstations on Perceived Leisure
Constance Haynes, Cara Daniels, Larissa Boyd, Melissa Powers. University of Central Oklahoma, Edmond, OK
(No relevant relationships reported)

3050 Board #96 3:30 PM - 5:00 PM
Associations Between Neighborhood-level Measures Of Socioeconomic Status And School-reported Health-related Physical Fitness.
Noe DeAnda, Toyin Ajisafe. Texas A&M University - Corpus Christi, Corpus Christi, TX
Email: toyin.ajisafe@tamucc.edu
(No relevant relationships reported)

3051 Board #97 3:30 PM - 5:00 PM
Medical Students’ Knowledge and Attitudes to Physical Activity and Health and to Physical Activity Counseling
Eszter Fuzeké, Winfried Banzer, FACSM. Goethe University Frankfurt, Frankfurt am Main, Germany. (Sponsor: Prof. Winfried Banzer, FACSM)
Email: fuezke@sport.uni-frankfurt.de
(No relevant relationships reported)

3052 Board #98 3:30 PM - 5:00 PM
Comparison Of Energy Expenditure Of Overground And Motorized Treadmill Running In Healthy Chinese Young Adults
Shuo Li1, Jingjing Xue1, Zhong He2, Shuai Jiang3, Xu’nan Tan4, Ping Hong4.1Shanghai University of Sport, Shanghai, China.2China Institute of Sports Science, Beijing, China.3Beijing Sport University, Beijing, China.4Winter sports management center of the general administration of sport of China, Beijing, China
Email: liushu1018@126.com
(No relevant relationships reported)

3053 Board #99 3:30 PM - 5:00 PM
Comparison Of Progressive Single and Multiple Sets of Resistance Training on Muscle Strength and Power
kyoungho seo, Male, Jyeon Kim, Female, Joungho Ko, Male, Jonathon Martinez, Male, Sukho Lee, Male. Texas A&M University San Antonio, San antonio, TX. (Sponsor: Minsoo Kang, FACSM)
Email: kseo@tamusa.edu
(No relevant relationships reported)

3054 Board #100 3:30 PM - 5:00 PM
Effects of a Multifactorial Exercise Intervention on Falls Risk Factors: Comparing Age and Falls History
Jessica Pope1, Steven Morrison2, Amanda Estep3, Jatin P. Ambegaonkar4, Shane V. Caswell, Nelson Cortes.1George Mason University, Manassas, VA.2Old Dominion University, Norfolk, VA.3Austin Peay State University, Clarksville, TN
Email: ncortes@amu.edu
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board #</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
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<tbody>
<tr>
<td>3055</td>
<td>3:30 PM - 5:00 PM</td>
<td>Virtual Reality Exercise on College Students’ Mood and Rating of Perceived Exertion</td>
<td>Wenxi Liu¹, Nan Zeng², Zachary C. Pope³, Daniel McDonough¹, Zan Gao, FACSM⁴. ¹University of Minnesota Twin Cities, Minneapolis, MN. ²Colorado State University, Fort Collins, CO. (Sponsor: Zan Gao, FACSM)</td>
</tr>
<tr>
<td>3056</td>
<td>3:30 PM - 5:00 PM</td>
<td>High Intensity Interval Training in a Natural Setting: An Intrapersonal Perspective</td>
<td>Maureen W. Howard, Debra M. Vinci. University of West Florida, Pensacola, FL. Email: <a href="mailto:mhoward4@uwf.edu">mhoward4@uwf.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>3057</td>
<td>3:30 PM - 5:00 PM</td>
<td>The Effect of a Behavioral Weight Loss Intervention With or Without Exercise on Depressive Symptoms</td>
<td>Kelliann Davis, FACSM, Renee Rogers, John Jalicic, FACSM. University of Pittsburgh, Pittsburgh, PA. Email: <a href="mailto:kkd2@pitt.edu">kkd2@pitt.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>3058</td>
<td>3:30 PM - 5:00 PM</td>
<td>Cardiorespiratory Effects Of A Multicomponent Exercise Program On Individuals Diagnosed With Alzheimer’s Disease: Pilot Study</td>
<td>Flavia B. Machado, Oscar Ribeiro, Joane Meireles, Arnaldina Sampaio, Joana Carvalho. University of Porto, Porto, Portugal. Email: <a href="mailto:f.93_machado@live.com.pt">f.93_machado@live.com.pt</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>3059</td>
<td>3:30 PM - 5:00 PM</td>
<td>Sedentary Time and Physical Activity Pattern in Women after an Interdisciplinary Program to Treat Obesity</td>
<td>Camila A M de Oliveira, Mariana C. Villani, Caio B. Messias, Amanda S. Moraes, Silvandro S. Gil, Maria Gabriela S. Cuesta, Luiz Henrique L. Afonso, Suzana M R Teixeira, Caui V. La Scala Teixeira, Ricardo J. Gomes, Danielle A. Caranti. Universidade Federal de São Paulo, Santos, Brazil</td>
</tr>
</tbody>
</table>
| 3060   | 3:30 PM - 5:00 PM | Water Intake During Resistance Training Affects Arterial Stiffness In Normotensive Healthy Adults | Daniel Rodrigues¹, Nakazato Koshi², Naoki Kikuchi³, Gustavo Allegretti¹, Francisco Luciano Pontes Jr., Aylton Figueira Jr.¹. ¹São Judas Tadeu University, São Paulo, Brazil. ²Nippon Sports Science University, Tokyo, Japan. ³University of São Paulo, São Paulo, Brazil  
Email: d-rodrigues@uel.com.br (No relevant relationships reported) |
| 3061   | 3:30 PM - 5:00 PM | Outcomes On Physical Activity Levels By Minimal Contact Intervention At A University Setting: Preliminary Results | Cristina Ascacio-Sandoval, Edna Elvira Jauregui-Ulloa, Juan Antonio Jimenez-Alvarado, Aldo Rene Palacios-Renteria, Marisol Villagas-Balcazar, Juan R. Lopez-Taylor. Universidad de Guadalajara, Guadalajara, Mexico (No relevant relationships reported) |
| 3062   | 3:30 PM - 5:00 PM | Using the Immediate Blood Pressure Benefits of Exercise to Improve Exercise Adherence       | Amanda L. Zaleski¹, Beth A. Taylor, FACSM², Crystal Park³, Lucas Porto Santos⁴, Gregory Panza⁵, Melody Kramarz⁶, Kyle McCormick⁷, Paul D. Thompson, FACSM⁸, Antonio Fernandez⁹, Ming Hui-Chen¹⁰, Bryan Blissett¹¹, Kim Deluca¹², Linda S. Pescatello, FACSM¹³. ¹University of Connecticut, Hartford Hospital, Hartford, CT. ²University of Connecticut, Hartford, CT. ³Hospital de Clínicas de Porto Alegre, Federal University of Rio Grande do Sul, Porto Alegre, Brazil. ⁴University of Connecticut, Storrs, CT. ⁵Hartford Hospital, Hartford, CT. ⁶University of Rhode Island, Kingston, RI. (Sponsor: Linda S. Pescatello, PhD, FACSM, FACSM) Email: amanda.zaleski@hhchealth.org (No relevant relationships reported) |
| 3063   | 3:30 PM - 5:00 PM | Health and Fitness Improvements in Deconditioned Firefighters                          | Christina Day¹, Thomas Andre, Ph.D.², Hae Ryoung Chung, Ph.D.³, Xavier Slaw⁴, Mathew Smith⁵, Melanie Poudrvenige, Ph.D., CMPC, FACSM⁶. ¹Clayton State University, Morrow, GA. ²The University of Mississippi, University, MS. (Sponsor: Melanie Poudrvenige, Ph.D, CMPC, FACSM) Email: cdday4@student.clayton.edu (No relevant relationships reported) |
| 3064   | 3:30 PM - 5:00 PM | Effects of a Weight Management Intervention on Holiday Weight Change And Body Image In Inactive Overweight Midlife Postmenopausal Women | Isaura M. Castillo-Hernández, Megha Vishwanath, Ellen M. Evans, FACSM. University of Georgia, Athens, GA. (Sponsor: Ellen M. Evans, FACSM) Email: imc28001@uga.edu (No relevant relationships reported) |
| 3065   | 3:30 PM - 5:00 PM | Association between Quadriceps Strength and Self-Reported Physical Activity in Individuals with Knee Osteoarthritis | Malia N. M. Blue, Abbie E. Smith-Ryan, FACSM, Hope C. Davis, Troy Blackburn, Brian Pietrosimone, FACSM. University of North Carolina, Chapel Hill, NC. (Sponsor: Abbie Smith-Ryan, FACSM) Email: mmm3303@email.unc.edu (No relevant relationships reported) |
| 3066   | 3:30 PM - 5:00 PM | Effect Of Hiit On Bmd And Body Composition For College Female Students With Eating Disorder | Shan-Shan MAO, Su-Hang XIE. Beijing Sport University, Beijing, China Email: ss.mao@163.com (No relevant relationships reported) |
| 3067   | 3:30 PM - 5:00 PM | Impact Versus Resistance Training For Bone In Young Women: Preliminary Findings Of The OPTIMA-Ex Trial | Conor Lambert, Belinda R. Beck, FACSM, Amy T. Harding, Steven L. Watson, Benjamin K. Weeks. Griffith University, Gold Coast, Australia (No relevant relationships reported) |
| 3068   | 3:30 PM - 5:00 PM | The Feasibility and Efficacy of a Behavioral Intervention to Promote Appropriate Gestational Weight Gain | Rebecca A. Schlaff, Meghan Baruth, Samantha J. Deere. Saginaw Valley State University, University Center, MI Email: raschla@svsu.edu (No relevant relationships reported) |
Board #115 3:30 PM - 5:00 PM
Blood Lipid Profile Differences After a 12-Month Sit-to-Stand Workstation Intervention
Cara Daniels, Constance Haynes, Larissa Boyd, Jaclyn Olson, Melissa Powers. The University of Central Oklahoma, Edmond, OK
(No relevant relationships reported)

Board #116 3:30 PM - 5:00 PM
Effects of a Brief Lifestyle Intervention for Office Workers
Cassandra M. Beattie, Lucas J. Dudgeon, Sarah J. Cosgrove, Katie M. Heinrich. Kansas State University, Manhattan, KS
Email: cbeattie@ksu.edu
(No relevant relationships reported)

Board #117 3:30 PM - 5:00 PM
Muscle Damage and Inflammatory Response from Volume-Equated Resistance Exercise with Short vs Long Rest Interval
Gilmar W. Senna1, Paula P. Brandão2, Estevão Scudese3, Matheus Baffi4, Luiz Claudio P. Ribeiro1, Estélio H.M. Dantas1. 1Catholic of Petrópolis University, Petrópolis, Brazil. 2Catholic University of Rio de Janeiro, Brazil. 3Federal University of State of Rio de Janeiro, Rio de Janeiro, Brazil. 4, Catholic of Petrópolis University, Petrópolis, Brazil. 5Tridores University, Araçatuba, Brazil
(No relevant relationships reported)

Board #118 3:30 PM - 5:00 PM
Exergaming Intervention in Sedentary Middle-Aged Adults Improves Cardiovascular Endurance, Balance and Lower Extremity Functional Fitness
Daniel Rosney, Sr1, Peter Horvath2. 1Temple University, Philadelphia, PA. 2State University of New York at Buffalo, Buffalo, NY
(No relevant relationships reported)

Board #119 3:30 PM - 5:00 PM
Effects Of Yoga And Tai Chi On Mental Health, Pain, And Balance In College Students
shiqi Wang, Jingle Xu, Tara Bridgeman, Cecile Craft, Gloria Duke, Sarah Sass, Xuanliang Dong, Yong Tai Wang, FACSM, Danita Alfred. University of Texas at Tyler, Tyler, TX.
(No relevant relationships reported)

Board #120 3:30 PM - 5:00 PM
The Impact of Text Messaging on Baccalaureate Nursing Students' Physical Activity: Single Case Design
Ashley Shuizhu He-Rincker, Hardim Simmons University, Abilene, TX. (Sponsor: Dennis G O'Connell, FACSM)
Email: sx0105@acu.edu
(No relevant relationships reported)

Board #121 3:30 PM - 5:00 PM
Effects Of Sit-to-stand Desk And Treadmill Workstations On Sedentary Behavior And Physical Activity
Diego J. Arguello1, Gregory Cloutier1, Alvin Morton2, Dinesh John3, Elise Nelton4. 1Northeastern University, Boston, MA. 2University of Tennessee Knoxville, Knoxville, TN
Email: arguello.d@husky.neu.edu
(No relevant relationships reported)

Board #122 3:30 PM - 5:00 PM
Impact Of 12 Week Pedometer Based Intervention on Long Term Increase In Physical Activity Inpreviously Sedentary Adults
Venkata K. Puppala1, Elise Nelton2, Amberly Brunauer2, Kwang Woo Ahn3, Scott J. Strath1, Mobin Malik1, Michael E. Widlansky4. 1Medical College of Wisconsin, Milwaukee, WI. 2University of Wisconsin, Milwaukee, WI. 3Cleveland Clinic, Cleveland, OH
E. Nelton Presenting
(No relevant relationships reported)

Board #123 3:30 PM - 5:00 PM
Exergaming Intervention in Sedentary Middle-Aged Adults
Cassandra M. Beattie, Lucas J. Dudgeon, Sarah J. Cosgrove, Katie M. Heinrich. Kansas State University, Manhattan, KS
Email: cbeattie@ksu.edu
(No relevant relationships reported)

Board #124 3:30 PM - 5:00 PM
Aquatic High Intensity Interval Training Improves Cardiorespiratory Fitness of Sedentary Adults
Brittany B. McDaniel, Mildred R. Naquin, Bovom Sirtkul, Robert R. Kraemer, FACSM, Southeastern Louisiana University, Hammond, LA. (Sponsor: Dr. Robert R. Kraemer, FACSM)
Email: rakraemer@selu.edu
(No relevant relationships reported)

Board #125 3:30 PM - 5:00 PM
Active Video Gaming: Appropriate Tool to Improve Fitness in Pediatric Renal Transplant Recipients?
Sandra Weigmann-Fassbender1, Kathrin Pfeil2, Burkhard Tönshoff2, Gerhard Huber3, Klaus Weiß4, Therese Betz5, Birgit Friedman Bette6. 1University Hospital Heidelberg, Heidelberg, Germany. 2University of Heidelberg, Heidelberg, Germany
(No relevant relationships reported)

Board #126 3:30 PM - 5:00 PM
Effect of Dual-Task Performance Among Young Adults
Yeonnah Jung, Brett Baker, Preeti Chopra, Darla M. Castelli. University of Texas at Austin, AUSTIN, TX
Email: yeonnah.jung@utexas.edu
(No relevant relationships reported)

Board #127 3:30 PM - 5:00 PM
Implementation of Exercise Training Programs in Dialysis Patients
Spela Bogataj1, Jenej Pajek1, Jadranka Buturovic Ponikvar2, Maja Pajek2. 1UMC Ljubljana, Ljubljana, Slovenia. 2University of Ljubljana, Ljubljana, Slovenia
Email: sspebagataj@gmail.com
(No relevant relationships reported)

Board #128 3:30 PM - 5:00 PM
Maximal Oxygen Uptake Responders Versus Non-responders Show Differing Cognitive Responses to Movement-based Video Game Training
Christian Thompson1, Brigid Larkin1, Josh Volponi2, Alexander Simon1, Joaquin Anguera1, Adam Gazzaley2. 1University of California - San Francisco Medical Center, San Francisco, CA
(No relevant relationships reported)

Board #129 3:30 PM - 5:00 PM
Sex Differences In The Acute Effect Of Stair-climbing On Postprandial Blood Glucose Levels
Jeff Moore, Hannah Salmon, Cameron Vinoskey, Jochen Kressler. San Diego State University, San Diego, CA. (Sponsor: Michael J. Buono, FACSM)
Email: Jmoore714@gmail.com
(No relevant relationships reported)

Board #130 3:30 PM - 5:00 PM
Club Fit!: A Physical Activity, Education, and Mentoring Service Learning Program
Erika Kenley, Christine Galvan. California State University, Long Beach, Long Beach, CA
Email: erika.kenley@gmail.com
(No relevant relationships reported)
American College of Sports Medicine

Board #131 3:30 PM - 5:00 PM
The Effect of Multimodal Training on Mobility in MCI Patients: A Pilot Randomized Controlled Trial
Felipe de Oliveira Silva1, José Vinicius Ferreira1, Jéssica Plácido1, Paula Sant'Anna1, Valeska Marinho1, Jerson Laks2, Andrea Deslandes3. UFRJ, Rio de Janeiro, Brazil; 1Unigranrio, Rio de Janeiro, Brazil
Email: prof.felipedoleiveira@gmail.com
(No relevant relationships reported)

Board #132 3:30 PM - 5:00 PM
The Role Of A Sit-to-stand Workstation And Its Effects On Work Productivity
Alexander J. London, Matthew Green, Jamie Clark, Melissa Powers, Jacelyn Olson, Larissa Boyd. University of Central Oklahoma, Edmond, OK
Email: abondon3@uco.edu
(No relevant relationships reported)

Board #133 3:30 PM - 5:00 PM
College Students’ Acute Sedentary Behavior, Step Counts, and Situational Interest during Virtual Reality
Daniel J. McDonough1, Zachary C. Pope1, Nan Zeng2, Wenxi Liu1, Zan Gao, FACSM1. 1University of Minnesota - Twin Cities, Minneapolis, MN; 2Colorado State University, Fort Collins, CO
(Sponsor: Zan Gao, FACSM)
Email: medc0785@umn.edu
(No relevant relationships reported)

Board #134 3:30 PM - 5:00 PM
Effects of Resistance Training on Physical Fitness and Arterial Compliance in Normotensive Obese Women
Caitlyn Harweger1, Paige Davis1, Cory Mahan1, Bryan Smith1, Amy Givan1, Bharath Sagar Selvaraj1, Mason Plater1, Cassidy Stout1, Eneko Larumbe-Zabala2, Maria Fernandez-del-Valle2. Southern Illinois University Edwardsville, Edwardsville, IL; 2Texas Tech University Health Science Center, Lubbock, TX
Email: medc0785@umn.edu
(No relevant relationships reported)

Board #135 3:30 PM - 5:00 PM
Weekly Activity Maintained While Adding Training Among Post Bariatric and Obese Participants
David L. Weno1, Kristen Byrne1, Brittany Rood1, Elizabeth Edwards1, Jeremy Akers1, Trent Hargens2, FACSM1, James Madison University, Harrisonburg, VA
(Sponsor: James Madison University)
(No relevant relationships reported)

Board #136 3:30 PM - 5:00 PM
Efficacy of a Virtual Reality Fitness Program for Enhancing Muscular Fitness and Body Composition
Kenneth Delcastillo, Andrew Alto1, Ramon Belliard1, Brad Schoenfeld. Lehman College, Bronx, NY
Reported Relationships: K. Delcastillo: Industry contracted research; The study was funded by an industry grant.

Board #137 3:30 PM - 5:00 PM
Student Engagement in Classroom Physical Activity Breaks
Jeanne Barcelona1, Yen Chen1, Darla Castelli1. Wayne State University, Detroit, MI; 1University of Texas at Austin, Austin, TX
(No relevant relationships reported)

Board #138 3:30 PM - 5:00 PM
Osteogenic Response After Six Months of High-Intensity, Low-Impact Exercise
Malcolm Jones, Alberto F. Vallejo, E. Todd Schroeder, FACSM. University of Southern California, Los Angeles, CA
(No relevant relationships reported)

Board #139 3:30 PM - 5:00 PM
Physical Activity Breaks in the College Classroom: Student Engagement Factors
Maria del Mar Chavarria-Soto1, Megan Babkes Stellino1, Lyndsie M. Koon2, B. B. Kirby1, Taylor Polson1. University of Northern Colorado, GREELEY, CO; 1University of Illinois, Champaign, IL
Email: mariadelfmc@yahoo.com
(No relevant relationships reported)

Board #140 3:30 PM - 5:00 PM
Effects Of Exercise Intensity Provided In The Exercise Classes On The Establishing Exercise Habits
Yasunori Katayama, Kenta Kitamura. Kagakkan University, Ise, Japan. (Sponsor: Kiyoji TANAKA, FACSM)
Email: katayama@kogakkan-u.ac.jp
(No relevant relationships reported)

Board #141 3:30 PM - 5:00 PM
Accuracy Of Dual Task To Distinguish Elderly With Alzheimer’s From Healthy Controls
Juliana L. Araujo, Jéssica Plácido, José Vinicius Ferreira, Felipe Oliveira, Renato Sobral Monteiro-Junior, Jerson Laks, Andrea C. Deslandes. UFRJ, Rio de Janeiro, Brazil
(No relevant relationships reported)

Board #142 3:30 PM - 5:00 PM
Effects Of BingoCize® On Quality Of Life, Fall Risk, And Health Knowledge In Community-Dwelling Older Adults
Alyssa Kathryn Dispennette1, Brian Focht, FACSM2, Brian Clark2, Mark Schafer2, Matthew Shake2, Gretchen Macy2, Jason Crandall2. 1The Ohio State University, Columbus, OH; 2Western Kentucky University, Bowling Green, KY
(Sponsor: Brian Focht, FACSM)
(No relevant relationships reported)

Board #143 3:30 PM - 5:00 PM
Tailored Domain-Specific Sedentary Behavior Intervention on Reducing Sedentary Time
Heo-tac Kim, Minsoo Kang, FACSM. The University of Mississippi, University, MS
Email: hkim35@olemiss.edu
(No relevant relationships reported)

Board #144 3:30 PM - 5:00 PM
Stage Ofbehavior Change In Regards Of Physical Activity, Health And Quality Of Life Among Health Professionals
Arnauri dos Santos, Carolina Gonzalez Beltran, João Pedro da Silva Júnior, Victor Keihan Matsudo. CELAFISCS, Brazil
(No relevant relationships reported)

Board #145 3:30 PM - 5:00 PM
The Effect of a Foot Exercise Protocol on Intrinsic Muscle Volume
Ulisses T. Taddei1, Zan Gao, FACSM1. 1Universidade de Sao Paulo - Faculdade de Medicina, Sao Paulo, Brazil; 2Spaulding National Running Center, Cambridge, MA
(Sponsor: Ulisses T. Taddei, Zan Gao, FACSM)
Email: utaddei@gmail.com
(No relevant relationships reported)

Board #146 3:30 PM - 5:00 PM
The Effect Of Exercise Training And Increasing Non-exercise Physical Activity On Glyca Levels
Damon L. Swift1, Joshua E. McGee1, Lesley D. Lutes2. 1Wayne State University, Detroit, MI; 2University of British Columbia, Kelowna, BC, Canada
Email: swiftd@ecu.edu
(No relevant relationships reported)
P218 Final Program

3101 Board #147  3:30 PM - 5:00 PM
Power and Strength Training Produce Similar Improvements in Performance in Individuals with Parkinson’s Disease
Nicholas P. Cherup, Kirk B. Roberson, Andrew N. Livingston, Keri L. Strand, Emma R. Michiels, Jessica Kuhn, Francisco A. Lopez, Joseph F. Signorel. University of Miami, Miami, FL. (Sponsor: Kevin Jacobs, FACSMD) (No relevant relationships reported)

3102 Board #148  3:30 PM - 5:00 PM
The Impact Of A Workplace Wellness Program On Employees In A University Setting
Bhriba M. Das1, Thomas M. Halloran2, Charles D. Kemble1, Melanie Sartore-Baldwin1, Katrina D. DuBoise, FACSM1. 1East Carolina University, Greenville, NC. 2Architech Sport & Physical Therapy, Charlotte, NC. (Sponsor: Katrina D. DuBoise, FACSM) Email: dasb@ecu.edu (No relevant relationships reported)

3103 Board #149  3:30 PM - 5:00 PM
Efficacy Of A Recess-based Intervention On Academic And Health Outcomes In Elementary School Children
Christine St Laurent, Sarah Burkart, Sofiya Alhassan, FACSM. University of Massachusetts Amherst, Amherst, MA. (Sponsor: Sofiya Alhassan, FACSM) Email: cstlaurent@umass.edu (No relevant relationships reported)

F-57 Free Communication/Poster - Maternal and Child Health

3104 Board #150  2:00 PM - 3:30 PM
The Associations between Maternal Body Mass Measures and Macronutrient Intake on Insulin Sensitivity Measures during Late Pregnancy
Brittany R. Allman, Aline R. Andres, Eva C. Diaz Fuentes, Elisabet Borsheim. Arkansas Children’s Nutrition Center, Little Rock, AR Email: ballman@uams.edu (No relevant relationships reported)

3105 Board #151  2:00 PM - 3:30 PM
Maternal Exercise and DHA Levels During Pregnancy Influences Infant Body Composition
Cody J. Strom, Christy Isler, Kelley Haven, Ed Newton, Kimberly Kew, Blake R. Rushing, Samantha McDonald, Linda E. May. East Carolina University, GREENVILLE, NC Email: stromc17@students.ecu.edu (No relevant relationships reported)

3106 Board #152  2:00 PM - 3:30 PM
The Effects of Exercise Mode During Pregnancy on Maternal Metabolism
Samantha Michelle McDonald, Christy Isler, Kelly Haven, Edward Newton, Linda E. May, Cody Strom. East Carolina University, GREENVILLE, NC Email: mcdonaldsal8@ecu.edu (No relevant relationships reported)

3107 Board #153  2:00 PM - 3:30 PM
Effects of Evidence-Based Materials and Local Resources on Knowledge/Beliefs and Physical Activity Levels During Pregnancy
Rachel A. Tinius1, Kolbi Edens2, Bailey Pitts2, Kristin Yoho3, Jill M. Maples4, T. Scott Lyons, FACSM5, Kim Link1, M. Susan Jones2, Kevin J. Pearson1. 1Western Kentucky University, Bowling Green, KY. 2University of Tennessee, Knoxville, TN. 3University of Kentucky, Lexington, KY. (Sponsor: T. Scott Lyons, FACSM) Email: rachel.tinius@wku.edu (No relevant relationships reported)

ACSM 66th Annual Meeting

3108 Board #154  2:00 PM - 3:30 PM
Strategies And Challenges In Recruiting Overweight/Obese Pregnant Women For A Behavioral Lifestyle Intervention Program
Lara Schneider, Jihong Liu, Ellen Wingard, Sara Wilcox, Judith Burgis, Alicia Dahl. University of South Carolina, Columbia, SC (No relevant relationships reported)

3109 Board #155  2:00 PM - 3:30 PM
Evidence-based Educational Brochures Influenced Beliefs And Improved Knowledge Regarding The Benefits Of Exercise During Pregnancy
Mark A. Schafer1, Madison Alvis2, Cody Morris3, Tiana Garrard4, Abigail Hughes1, Laura Hunt1, Megan Koester1, India Yocum1, Rachel Tinius1. Western Kentucky University, Bowling Green, KY. 2The University of Alabama at Birmingham, Birmingham, AL. (Sponsor: Scott Lyons, FACSM) Email: mark.schafer@wku.edu (No relevant relationships reported)

3110 Board #156  2:00 PM - 3:30 PM
Maternal Water Exercise And Its Effects On Weight Gain And Fetal Outcomes: A Meta-analysis
Roberta Begginsi, Taniya S. Nagpal, Michelle F. Mottola, FACSM. The University of Western Ontario, London, ON, Canada. (Sponsor: Michelle F. Mottola, FACSM) Email: robertahy@gmail.com (No relevant relationships reported)

3111 Board #157  2:00 PM - 3:30 PM
Ripple Effect Of Lifestyle Interventions During Pregnancy On Untreated Partners’ Weight
Todd Hagopian, FACSM1, Suzanne Phelan1, Andrew Schaffner1, Anna Brannen1, Angelica McHugh1, Maxine Ashby-Thompson1, Amy Gorin1, Xavier Pi-Sunyer1, Dympra Gallagher1, Rena Wing1. 1California Polytechnic State University, San Luis Obispo, CA. (Sponsor: Katrina D. DuBose, FACSM) Email: thagobia@calpoly.edu (No relevant relationships reported)

3112 Board #158  2:00 PM - 3:30 PM
The Effectiveness Of Tai Chi For Rehabilitation Of Post-stroke Patients: A Meta-analysis
Jiao Lu, Lin Liu, Ya Wei Song, Yan Chen, Juan Wei. Nanjing Sport Institute, Nanjing, China Email: lj_sus@163.com (No relevant relationships reported)

3113 Board #159  2:00 PM - 3:30 PM
Exercise Effects On Cognitive Function And Aids In Alzheimer’S Disease: A Meta-analysis
Alex Angeli, Catherine G. R. Jackson, FACSM, Dawn K. Lewis, Stephanie D. Moore. California State University, Fresno, CA. (Sponsor: Catherine G. R. Jackson, FACSM) Email: alex.alli@gmail.com (No relevant relationships reported)
P220 Final Program

3130 Board #176  2:00 PM - 3:30 PM
The Exercise Microbiome Project: An 8 week Cardiovascular Intervention on the Human Gut Microbiome
Arron M. Shiffer, Anthony Santos, Kyle Winfree, Shari Kyman, Emily Cope, J. Gregory Caporaso, Dierdra Bycura. Northern Arizona University, Flagstaff, AZ (Sponsor: Dr. Timothy Behrens, FACSM)
Email: shiffy35@gmail.com
(No relevant relationships reported)

F-60 Free Communication/Poster - Micronutrients
Friday, May 31, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

3131 Board #177  2:00 PM - 3:30 PM
Oral Calcium Loading Before Exercise Influences PTH and CTX Responses
Sarah J. Wherry1, Meryl Wastney2, Christine M. Swanson1, Toby Wellington1, Rebecca S. Boxer3, Connie M. Weaver1, Wendy M. Kohrt, FACSM1. 1University of Colorado Anschutz Medical Campus, Aurora, CO. 2Purdue University, West Lafayette, IN. 3Sponsor: Wendy Kohrt, FACSM
Email: sarah.wherry@ucedenver.edu
(No relevant relationships reported)

3132 Board #178  2:00 PM - 3:30 PM
Short-Term Low Choline Intake May Not Negatively Affect Strength Gains in Older Adults
Chang Woock Lee1, Vincent CW Chen2, Steve Bui3, Teak V. Lee4, Steven E. Riechman, FACSM4. 1University of Houston-Victoria, Victoria, TX. 2Georgian Court University, Lakewood, NJ. 3Texas A&M University, College Station, TX. 4Texas, College Station, TX
Email: vcheri@georgian.edu
(No relevant relationships reported)

3133 Board #179  2:00 PM - 3:30 PM
Vitamin D Status and Biobehavioral Health in U.S. Navy Explosive Ordnance Disposal Operators
Email: lisa.m.hernandez75.ctr@mail.mil
(No relevant relationships reported)

3134 Board #180  2:00 PM - 3:30 PM
Influence Of Vitamin D Status On The Post-exercise Hicpicon And Interleukin-6 Response In Trained Athletes
Alexandra L. Shill1, Molly Collinson1, Mark Palmer1, William D. Fraser2, Jonathan Tang2, Richard J. Burden1, Nicolette C. Bishop2. 1Loughborough University, Loughborough, United Kingdom. 2University of East Anglia, Norwich, United Kingdom. 3English Institute of Sport, Loughborough, United Kingdom
(No relevant relationships reported)

3135 Board #181  2:00 PM - 3:30 PM
Evaluation Of Vitamin K Intake And Its Relation To Bone Mineral Density
Julia M. Rovera, Joseph R. Stanzione, Sinclair A. Smith, Stella L. Volpe, FACSM. Drexel University, Philadelphia, PA. (Sponsor: Stella L. Volpe, FACSM)
Email: jm863@drexel.edu
(No relevant relationships reported)

3136 Board #182  2:00 PM - 3:30 PM
Short Term High Intensity Resistance Exercise-induced Muscle Soreness Is Attenuated with Dietary Cholesterol
Vincent C. Chen1, Chang Woock Lee2, James D. Fluckey3, Steven E. Riechman, FACSM4. 1Georgian Court University, Lakewood, NJ. 2University of Houston-Victoria, Victoria, TX. 3Texas A&M University, College Station, TX. 4Texas, College Station, TX
Email: vcheri@georgian.edu
(No relevant relationships reported)

F-61 Free Communication/Poster - Nutrition and Children
Friday, May 31, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

3137 Board #183  2:00 PM - 3:30 PM
Effects of Fruit and Vegetable Consumption on Physical Activity Levels in Elementary School-Aged Children
Megan Reynolds. University of Central Florida, Orlando, FL
(No relevant relationships reported)

3138 Board #184  2:00 PM - 3:30 PM
Preschool Children in Childcare Settings Do Not Consume Healthy Snacks Despite Menus That Meet Recommended Dietary Standards
Stacie M. Kirk, Erik P. Kirk, FACSM. Southern Illinois University Edwardsville, Edwardsville, IL
Email: skirk@siue.edu
(No relevant relationships reported)

3139 Board #185  2:00 PM - 3:30 PM
Construction And Validation Of a Digital Instrument For The Evaluation Of Children Nutritional Status
Elisa P. Ferrari1, Silvana dos Santos1, Larissa A. Maciel2, Fernando L. Cardoso2. 1Catholic university of Brasilia, Brasilia, Brazil. 2Catholic university of Brasilia, Brasilia, Brazil. 3Santa Catarina State University, Florianópolis, Brazil
Email: elisa.ferrari@uacb.br
(No relevant relationships reported)

3140 Board #186  2:00 PM - 3:30 PM
Low Cruciferous Vegetable Intake is Associated with Elevated Inflammation in Preadolescent Girls
Jennifer W. Bea1, Lindsay Kohler2, Megan Hetherington-Rauth1, Janet Funk1, Nora Carranza2, Vinson Lee3, Robert Blew4, Scott B. Going1. 1University of Arizona, Tucson, AZ. 2University of Lisbon, Lisbon, Portugal
Email: jbea@uac.e.arizona.edu
(No relevant relationships reported)

F-62 Free Communication/Poster - Education and Funk
Friday, May 31, 2019, 1:00 PM - 6:00 PM
Room: CC-Hall WA2

3141 Board #187  2:00 PM - 3:30 PM
Pathology Classification And Exercise Adherence: A JTA Educational Approach To Providing Community-Based Exercise Programs
Dr. Gregory J. Ledoux. Northern Vermont University - Lyndon, Lyndonville, VT. (Sponsor: Dr. Samuel A. E. Headley, FACSM)
Email: gregory.ledoux@northernvermont.edu
(No relevant relationships reported)
American College of Sports Medicine

Board #188  2:00 PM - 3:30 PM
Program Directors' Perspectives On Coaes-mediated Caahep Accreditation For The Exercise Sciences
Carlton R. Insley, III1, Susan M. Muller1, Sidney R. Schneider1, William Coale2, 1Salisbury University, Salisbury, MD. 2Committee on Accreditation for the Exercise Sciences, Indianapolis, IN. (Sponsor: Walt Thompson, FACS, FACSMD)
Email: crinsley@salisbury.edu
(No relevant relationships reported)

Board #189  2:00 PM - 3:30 PM
Retrieval Practice Improves the Recall and Transfer of Learning of Physiology Information.
John L. Dobson. Georgia Southern University; Statesboro, GA
Email: jdobson@georgiasouthern.edu
(No relevant relationships reported)

Board #190  2:00 PM - 3:30 PM
Effects Of A Situated Environment On Classroom Community, Connectedness, And Learning In Exercise Science Students
Amy A. Crawley, Ludmila Costo-Lima, Byron Havard, Nancy B. Hastings. University of West Florida, Pensacola, FL
Email: acrawley@uwf.edu
(No relevant relationships reported)

Board #191  2:00 PM - 3:30 PM
Contemporary Conflict Management in the Sports Medicine Setting
Rodiel Kirby Baloy1, Katelyn Davenport1, Charles Lindberg2, Elizabeth Tinelt1. 1The College of St. Scholastica, Fort Hays State University, Duluth, MN. 2Fort Hays State University, Hays, KS
Email: rkbaloy@css.edu
(No relevant relationships reported)

Board #192  2:00 PM - 3:30 PM
The Promotion Of Physical Activity By Craft Breweries In Knoxville, Tennessee
Email: kstrohac@utk.edu
(No relevant relationships reported)

Board #193  2:00 PM - 3:30 PM
Effects of Exercise Habits on Working Memory of College Students
Yuan Yang1, Tian Li1, Shoufu Yan1, 1Capital University of Physical Education and Sports, Beijing, China. 2YueZhiJian Education Institute, Beijing, China
Email: yangyuan.0115@foxmail.com
(No relevant relationships reported)

Board #194  3:30 PM - 5:00 PM
Reduced Cardiorespiratory Fitness and Greater Body FatnessWill Develop As A Consequence of Chronic Ankle Instability
Michael J. Turner, FACSMD, Aregash Theodros, Anyea King, James Joyner, Tricia Hubbard-Turner, FACSMD. UNC Charlotte, Charlotte, NC
Email: miturner@unc.edu
(No relevant relationships reported)

Board #195  3:30 PM - 5:00 PM
Early Brace Progression Following Anterior Cruciate Ligament Reconstruction Leads to Improved Knee Range of Motion
Lauren N. Erickson, Kathryn C. Lucas, Cale A. Jacobs, Darren L. Johnson, Mary L. Ireland, FACSMD, Brian Noehren, FACSMD. University of Kentucky, Lexington, KY
Email: Lauren.Erickson@uky.edu
(No relevant relationships reported)

Board #196  3:30 PM - 5:00 PM
The Detection of Knee Joint Sounds under Different Loading Conditions using Vibroarthrography
Kristin Kalo1, Rainer Sus2, Daniel Niederer1, Volker Gross2, Winfried Banzer, FACSMD, Lutz Vogl1. 1Goethe University Frankfurt, Frankfurt am Main, Germany. 2University of Applied Sciences, Giessen, Germany
Email: kalo@rz.uni-frankfurt.de
(No relevant relationships reported)

Board #197  3:30 PM - 5:00 PM
Glenohumeral And Hip Range Of Motion Are Associated In Softball: Implications For Performance And Injury
Mallory Faherty, Carolyn Killelea, Morgan Skidmore, Robert Zarzour, Timothy Sell, FACSMD, Duke University, Durham, NC. (Sponsor: Timothy Sell, FACSMD)
Email: sgbd3@virginia.edu
(No relevant relationships reported)

Board #198  3:30 PM - 5:00 PM
Return To Play Testing In Individuals With ACL- Reconstructed Knees: Does Timing Of The Assessment Matter?
Stephan G. Bodkin, Margaret H. Rutherford, Stephen F. Brockmeier, David R. Didach, Joseph M. Hart, FACSMD. University of Virginia, Charlottesville, VA. (Sponsor: Joseph Hart, FACSMD)
Email: stbd3@virginia.edu
(No relevant relationships reported)

Board #199  3:30 PM - 5:00 PM
The Effect of Icing with Varying Degrees of Compression on Quadriceps Intramuscular Temperature
Stephen Mathew1, Susan Y. Kwiecien2, Glynn Howatson, FACSMD1, Malachy P. McHugh, FACSMD2, 1Nicholas Institute of Sports Medicine and Athletic Trauma, Lenox Hill Hospital, New York, NY. 2Northumbria University, Newcastle upon Tyne, United Kingdom. (Sponsor: Malachy P McHugh, FACSMD)
Email: susan@nismat.org
(No relevant relationships reported)

Board #200  3:30 PM - 5:00 PM
Impact of Musculoskeletal Injury and Pain in Lacrosse Officials: Implications for Clinical Care and Preparedness
Heather K. Vincent, FACSMD1, Michelle Bruner1, Charlie Obermayer2, Bruce Griffin3, Kevin R. Vincent, FACSMD. 1University of Florida, Gainesville, FL. 2US Lacrosse, Officials Development Program, Sparks, MD. 3US Lacrosse, Center for Sport Science, Sparks, MD
Email: vincelk@ortho.ufl.edu
(No relevant relationships reported)

Board #201  3:30 PM - 5:00 PM
Age Related Error of the Measurement of the Tibialis Posterior Muscle via Ultrasound Imaging
Victoria A. Violette, Keisha V. Perkins, Christopher L. Thompson, A. W. Johnson, Brigham Young University; Provo, UT. (Sponsor: Pat Vehrs, FACSMD)
Email: victor.violette@bys.edu
(No relevant relationships reported)
P222 Final Program

3156 Board #202 3:30 PM - 5:00 PM
No Differences in Sub-Cortical Motor Region Activity for Knee Motor Control Following Anterior Cruciate Ligament Reconstruction
Christopher Ballance1, Dustin Grooms2, James Onate3. 1The Ohio State University, Columbus, OH. 2Ohio University, Athens, OH
Email: ballance.4@osu.edu
(No relevant relationships reported)

3157 Board #203 3:30 PM - 5:00 PM
Performance and Return to Sport Following Latissimus Dorsi and Teres Major Tears in Professional Baseball Pitchers
Kevin Ma1, Brandon Erickson2, Peter Chalmers3, John D’Angelo1, Anthony Romeo1. 1MLB, New York, NY. 2Rothman Orthopaedic Institute, Tarrytown, NY. 3University of Utah, Salt Lake City, UT
Email: Brandon.Erickson@rothmanortho.com
(No relevant relationships reported)

3158 Board #204 3:30 PM - 5:00 PM
Characterizing the Prevalence of Cam-Type Hip Impingement in Women’s Professional Ice Hockey Players
Cordelia W. Carter, Darryl Whitney, Matthew Kingerly, Samuel Baron, Guillaume Gonzalez-Lornas. NYU-Langone Medical Center; New York, NY
Email: cordelia.w.carter@gmail.com
(No relevant relationships reported)

3159 Board #205 3:30 PM - 5:00 PM
Clinical Outcomes of Ultrasound-Guided Percutaneous Patellar Tendon Scraping
Evan Plunkett, Michael Baria, Meghan Miller, Robert Magnusson. Ohio State University, Columbus, OH
(No relevant relationships reported)

3160 Board #206 3:30 PM - 5:00 PM
Initial/Repeat Triamcinolone Acetonide Extended-Release (TA-ER) Reduces Osteoarthritis Knee Pain Regardless of Prior Intra-Articular Corticosteroids (IACS)
Kim M. Huffman1, John Richmond1, Andrew Spitzer1, Andreas Gomoll2, Deryk G. Jones1, Virginia B. Kraus1, Amy Cinar6, Joelle Luftkin1, Scott Kelley6. 1Duke University School of Medicine, Durham, NC. 2New England Baptist Hospital, Dedham, MA. 3Cedars-Sinai Orthopaedic Center, Los Angeles, CA. 4Hospital for Special Surgery, New York, NY. 5Ochsner Sports Medicine Institute, Harahan, LA. 6Flexion Therapeutics, Inc., Burlington, MA.
Email: kim.huffman@duke.edu
(No relevant relationships reported)

3161 Board #207 3:30 PM - 5:00 PM
Acute and Longitudinal Effects of Pitching on Passive Range of Motion in Division I Athletes
Jacob D. Jelmini, Michael P. Price, Casey J. Meyer, Lori D. Greenwood. Texas A&M University, College Station, TX
Email: jelmini@tamu.edu
(No relevant relationships reported)

3162 Board #208 3:30 PM - 5:00 PM
Long-Term Characteristics of Injured Shoulders in Overhead Sports: A Gender Comparison
Youngwook Kim1, Adam B. Rosen2. 1Duke University School of Medicine, Durham, NC. 2Rothman Orthopaedic Institute, Tarrytown, NY.
Email: ywk1814@med.unc.edu
(No relevant relationships reported)

3163 Board #209 3:30 PM - 5:00 PM
Skin Combatibility with 3d Printed Splints And Casts
Diana Hall1, Dean Miller1, Suprit Singh2, Yue Li3, Bill Bentley4, Lex Schultheis5. 1ActivArmor, Pueblo, CO. 2University of Central Florida School of Medicine, Orlando, FL. 3University of Maryland, College Park, MD
Email: diana.hall@activarmor.com
(No relevant relationships reported)

ACSM May 28 – June 1, 2019
Orlando, Florida
Board #216 3:30 PM - 5:00 PM
Community-Based Exercise Improves Cancer-Related Fatigue and Physical Fitness In Breast Cancer Survivors: A Preliminary Analysis
Chad W. Wagoner, Jordan T. Lee, Stephanie A. Sullivan, Erik D. Hanson, Brian C. Jensen, Lee Stoner, FACSM, Aaron Piepmeier, Kirsten A. Nyrop, Hyman B. Muss, Claudio L. Battaglini, FACSM. University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Claudio Battaglini, FACSM) (No relevant relationships reported)

Board #217 3:30 PM - 5:00 PM
The 24-Month Follow-up Of The OptiTrain Exercise Ret For Women With Breast Cancer Undergoing Chemotherapy
Kate A. Bolam, Sara Mijwel, Natalie Holowko, Jonas Bergh, Helene Rundqvist, Yvonne Wengström. Karolinska Institutet, Stockholm, Sweden
Email: kate.bolam@ki.se (No relevant relationships reported)

Board #218 3:30 PM - 5:00 PM
Effects Of Exercise Training During Breast Cancer Chemotherapy On Fitness Outcomes At 1-year Follow-up
Andria R. Morìelli1, Ki Yong Au1, Dong-Woo Kang1, Christine M. Friedenreich1, Donald C. McKenzie1, Karen Gelmon2, John R. Mackay2, Robert D. Reid2, Kerry S. Courneya1. 1 University of Alberta, Edmonton, AB, Canada. 2 Alberta Health Services, Calgary, AB, Canada. 3 University of British Columbia, Vancouver, BC, Canada. 4 University of British Columbia & British Columbia Cancer Agency, Vancouver, BC, Canada. 5 Cross Cancer Institute, Edmonton, AB, Canada. 6 University of Ottawa Heart Institute, Ottawa, ON, Canada. (No relevant relationships reported)

Board #219 3:30 PM - 5:00 PM
Effects Of Exercise During Chemotherapy On Hospitalization And Chemotherapy Completion: The OptiTrain Breast Cancer Trial
Sara Mijwel, Kate A. Bolam, Yvonne Wengström, Helene Rundqvist. Karolinska Institutet, Stockholm, Sweden
Email: saramijwel@gmail.com (No relevant relationships reported)

Board #220 3:30 PM - 5:00 PM
Inflammatory and Affective Responses to Acute Resistance Exercise of Varying Loads in Postmenopausal Women.
Ciaran M. Fairman1, Maryam B. Lustberg1, Michael C. Meyers1, Mark L. Niebylski2, James C. Sterling2, Shad K. Robinson1. 1 Idaho State University, Pocatello, ID. 2 World Hypertension League, Corvallis, MT. (Sponsor: Michael C. Meyers, FACSM) (No relevant relationships reported)

Board #221 3:30 PM - 5:00 PM
Blood Pressure Abnormalities Among NCAA Athletes
Hannah M. Wright1, Michael C. Meyers1, FACSM1, Mark L. Niebylski2, James C. Sterling2, Shad K. Robinson1. 1 Idaho State University, Pocatello, ID. 2 World Hypertension League, Corvallis, MT. (Sponsor: Michael C. Meyers, FACSM) (No relevant relationships reported)

Board #222 3:30 PM - 5:00 PM
Cardiac Etiology of Exercise Induced Hypoxemia within Elite Athletes
Jiri Dostal1, Josef Stasek1, Radka Kockova1, Viktor Kocka1. 1 Faculty of Medicine, Charles University, Hradec Kralove, Czech Republic. 2 University Hospital Hradec Kralove, Hradec Kralove, Czech Republic. 3 University Hospital Kralovske Vinohrady, Prague, Czech Republic
Email: dostaljiri@fhk.cuni.cz (No relevant relationships reported)

Board #223 3:30 PM - 5:00 PM
Metabolic And Cardiovascular Effects Of Body Weight Support Treadmill Walking In Healthy Older Adults.
Robert S. Van Zant, Wick Colchagoff, Ana Cox, Benjamin Eggleston, Andrea Griffith, Linda Harrison, Amie Newberry, Blake Price. The University of Findlay, Findlay, OH
Email: vanzant@findlay.edu (No relevant relationships reported)

Board #224 3:30 PM - 5:00 PM
The Combined Effects of Whey Protein and Aerobic Exercise on Glycemic Responses
Todd Castileberry1, Ryan Gordon2, Matthew Sokoloski2, Emily Zumbo3, Christopher Irvine3, Aubrienn Henderson2, Matthew Brissebois2, Vic Ben-Ezra2. 1 Texas Christian University, Fort Worth, TX. 2 Texas Woman's University, Denton, TX. Email: t.castileberry@tcu.edu (No relevant relationships reported)

Board #225 3:30 PM - 5:00 PM
 Associations Among Objectively and Subjectively Measured Physical Activity in Older Adults
Gabrielle Volk. Miami University, Oxford, OH
(No relevant relationships reported)

Board #226 3:30 PM - 5:00 PM
Assessment of Bilateral Asymmetry in Cycling Peak Torque in Multiple Sclerosis Patients vs Controls
Brian A. Pribble1, John W. Farrell, IIIf, Daniel J. Larson1, Christopher D. Black, FACSM2, Debra A. Bemben, FACSM1, Rebecca D. Larson1. 1 University of Oklahoma, Norman, OK. 2 University of Ottawa, Ottawa, ON, Canada. Email: brian.a.pribble-1@ou.edu (No relevant relationships reported)

Board #227 3:30 PM - 5:00 PM
The Effects of Fatigue on Peak Torque During Dorsiflexion Between Limbs in Multiple Sclerosis Patients
David J. Lantis1, Gregory S. Cantrell2, John P. Hintz3, Cameron D. Owens1, Debra A. Bemben, FACSM1, Christopher D. Black, FACSM2, Daniel J. Larson3, Rebecca D. Larson1. 1 St. Ambrose University, Davenport, IA. 2 Northern State University, Aberdeen, SD. 3 University of Oklahoma, Norman, OK. (Sponsor: Christopher D. Black, FACSM) Email: lantisdavidj@sau.edu (No relevant relationships reported)

Board #228 3:30 PM - 5:00 PM
Benefits Of Whole Body Vibration Exercise For Non-specific Chronic Low Back Pain: An Assessor-blind, Randomized Controlled Trial
Xueqiang Wang, Peijie Chen. Shanghai University of Sport, Shanghai, China
Email: qiang897@163.com (No relevant relationships reported)
3183 Board #230 3:30 PM - 5:00 PM
Effect of Resistance Training on Muscular Function and Functional Mobility in Adults with Cerebral Palsy
Tiffany N. Raczynski, Victoria B. Kott, Pooja Pal, Areum K. Jensen. San Jose State University, San Jose, CA
(No relevant relationships reported)

3185 Board #231 3:30 PM - 5:00 PM
Differential Effect of Obesity on Muscular Strength in Adults with Cerebral Palsy
Bjorn L. Mulintatang, Pooja Pal, Cory E. Low, Areum K. Jensen. San Jose State University, San Jose, CA
(No relevant relationships reported)

3186 Board #232 3:30 PM - 5:00 PM
Effects Of Fatigue On Isometric And Isokinetic Dorsiflexion Strength Asymmetry In Multiple Sclerosis
Cameron Owens1, Davis Lantis1, Gregory Cantrell1, Debra Bemben1, Christopher Black2, FACSMB, Daniel Larson1, Rebecca Larson1, Lu, Fei, 3121 University of Oklahoma, Norman, OK. 2St. Ambrose University, Davenport, IA. 3Northern State University, Aberdeen, SD
Email: cdowens@ou.edu
(No relevant relationships reported)

3187 Board #233 3:30 PM - 5:00 PM
Safety And Feasibility Of Strength Training In Patients With Duchenne Muscular Dystrophy
Donovan J. Lott1, Tanja Taivassalo2, Hyun J. Park2, Korey D. Cook2, Zahra Moslemi2, Abhinandan Batra1, Sean C. Forbes2, Barry J. Byrne2, Glenn A. Walter2, Krista Vandenborne1. 1Chengdu Sport Institute, Chengdu, China. 2University of Florida, Newberry, FL 3University of Florida, Gainesville, FL. Email: dlottpt@phhp.ufl.edu
(No relevant relationships reported)

3188 Board #234 3:30 PM - 5:00 PM
The Characteristics of Muscle Tone and Stiffness in Young Adults with Chronic Low Back Pain
Mijnia Wang1, Bin Yang2, Guohao Wang1, Peijie Liu3, Yaozheng Wang1, Jie Jing1. 1Chengdu Sport Institute, Chengdu, China. 2Gamma Performance, Beijing, China. (Sponsor: Tongjian You, SCU). Email: 3495752717@qq.com

3189 Board #235 3:30 PM - 5:00 PM
Differential Effect of Resistance Training on Musculoskeletal Architecture and Strength in Adults with Cerebral Palsy
Ramón C. Ronquillo, Mac G. Damoullos, Cory E. Low, Alan L. De Vera, Areum K. Jensen. San Jose State University, San Jose, CA
(No relevant relationships reported)

3190 Board #236 3:30 PM - 5:00 PM
Effects Of Eccentric Training Combined To Neuromuscular Electrical Stimulation On Electromechanical Delay Of Peroneal Muscles In Individuals With Functional Ankle Instability
Ziwen Pei, Jian Chen, Danyang Li. Wuhan Sports University, Wuhan, China
(No relevant relationships reported)

3191 Board #237 3:30 PM - 5:00 PM
Passive Hallux Adduction Decreases Lateral Plantar Artery Blood Flow In Low Arch Feet
Aaron W. Johnson1, Julia L. Dunbar1, Sarah T. Ridge1, Dustin Bruening1, Kathryn Brewerton1, Jayson Gifford1, Daniel Hoopes2. 1Brigham Young University, Provo, UT. 2Revere Health Orthopaedic Surgery, Provo, UT. (Sponsor: Pat Velas, FACSMB)
(No relevant relationships reported)

3192 Board #238 3:30 PM - 5:00 PM
A Randomized Controlled Trial Comparing Physiotherapy And Extracorporeal Shockwave Therapy In Treatment Of Plantar Fasciitis
Jade Chee1, Charles Koor2. 1Singhealth, Singapore, Singapore. 2Changi General Hospital, Singapore, Singapore
(No relevant relationships reported)

3193 Board #239 3:30 PM - 5:00 PM
Effect Of A Virtual-exercise Program On Physical Function And Activity: Findings From The VERITAS Trial
Janet P. Betiger1, Cynthia L. Green1, Daianaicu Holmes2, Anang Chokshi2, Bryan T. Hoch3, Arthur J. Deleur4, Laura Webb5, Vincent Miller1, Joseph M. Smith1, Eric D. Peterson1. 1Duke University, Durham, NC. 2Duke Clinical Research Institute, Durham, NC. 3Reflexion Health, San Diego, CA. 4Duke Health, Durham, NC Email: janet.betiger@duke.edu
Reported Relationships: J.P. Betiger: Industry contracted research; Reflexion Health.

F-67 Basic Science World Congress/Poster - Sleep and Cardiometabolic Effect

3194 Board #240 3:30 PM - 5:00 PM
Impact Of Anxiety-state On Moderate Continuous And 3-km Time-trial Exercise After 36h Of Sleep Deprivation
Carina Faggiani Dias, Marcos Mônico Neto, Sérgio Tufik, Hanna Karen Moreira Antunes. UNIFESP, Santos, Brazil.
Email: carinafaggiani@hotmail.com
(No relevant relationships reported)

3195 Board #241 3:30 PM - 5:00 PM
Effects Of Bariatric Surgery On Cardiac Autonomic Parameters During Sleep
Roger Peixoto1, Marilia Correia1, Raphael Dias1, Luis Vicente1. 1UNIVERSIDADE NOVE DE JULHO, São Paulo, Brazil. 2CENTRO UNIVERSITÁRIO DE ANAPOLIS, Anapolis, Brazil.
Email: roger.peixoto@fisio43@gmail.com
(No relevant relationships reported)

3196 Board #242 3:30 PM - 5:00 PM
Oxygen Desaturation in Sleep Apnea is Inversely Associated with Vascular Changes Following Exercise Training
Devon A. Dobroselski1, Huynejong Park1, Susheel Patil2, Christopher Papandreou3. 1Towson University, Towson, MD. 2Johns Hopkins School of Medicine, Baltimore, MD. 3Rovira I Virgili University, Reus, Spain.
Email: ddobroselski@towson.edu
(No relevant relationships reported)

3197 Board #243 3:30 PM - 5:00 PM
Shorter Sleep Duration Is Associated With Increased Sedentary Duration In Lean, But Not Overweight Or Obese, Individuals
Saurabh S. Thosar, Isabel Katlaps, Nicole P. Bowles, Andrew W. McHill, Steven A. Shea. Oregon Health & Science University, Portland, OR.
Email: thosar@ohsu.edu
(No relevant relationships reported)
3198  Board #244  3:30 PM - 5:00 PM
Associations Of Sleep Metrics, Body Composition, And Cardiorespiratory Fitness In Older Women
Erin E. Kishman, Joshua R. Sparks, Charity B. Breneman, Xuewen Wang. University of South Carolina, Columbia, SC
Email: ekishman@email.sc.edu
(No relevant relationships reported)

3199  Board #245  3:30 PM - 5:00 PM
Sleep Restriction during 8-Week Calorie Restriction on Physical Activity and Lipoprotein Particle Concentrations and Sizes
Joshua R. Sparks1, J. Larry Durstine, FACSM1, Shawn D. Youngstedt2, Ryan R. Porter2, Mark A. Sarzynski, FACSM1, Xuewen Wang1.1 University of South Carolina, Columbia, SC. 2 Arizona State University, Tempe, AZ. "University of South Carolina School of Medicine, Greenville, SC. (Sponsor: J. Larry Durstine, FACSM)
Email: jrsparks@email.sc.edu
(No relevant relationships reported)

3200  Board #246  3:30 PM - 5:00 PM
Relationships Among BMI, Estradiol, And Sleep-wake Behavior In Women
Shannon K. Crowley, Julia Rebellon, Abigail J. Leonard, Christina Huber, Lyndsay Wolfe, Andrea Tobar, Sierra Hayden, Daniel Henderson, Meir Magal, FACSM. North Carolina Wesleyan College, Rocky Mount, NC
Email: scrowley@ncwc.edu
(No relevant relationships reported)

3201  Board #247  3:30 PM - 5:00 PM
Associations Among Sedentary Time, Feeding Duration, And Sleep Duration In Adults With Overweight And Obesity
Corey A. Rynders1, Sheila Steinke2, Elizabeth Kealey1, Emma Tussey1, Isaac Debache2, Audrey Bergouignan1, Adnin Zaman1, Elizabeth Thomas1. 1 University of Colorado - Anschutz Medical Campus, Aurora, CO. 2 CNRS IPHC UMR7178, Strasbourg, France. (Sponsor: Edward Melanson, PhD, FACSM)
Email: corey.rynders@ucdenver.edu
(No relevant relationships reported)
**Sat, June 1, 2019**

**G-01** Tutorial Lecture - *Cardiopulmonary Exercise Testing and Rehabilitation in Pediatric and Young Adult Patients with Congenital Heart Disease*

*Saturday, June 1, 2019, 8:00 AM - 8:50 AM*
*Room: CC-203*

The tutorial will focus on the translation of acquired clinical findings from cardiopulmonary exercise testing in pediatric and adult patients with congenital heart disease to an appropriate exercise prescription, nutritional recommendations and patient education during cardiac rehabilitation. Comparison and contrast will be made to national position papers on Clinical Cardiopulmonary Exercise Testing and Cardiac Rehabilitation programming. Parameters acquired during a cardiopulmonary exercise test (CPET) will be evaluated and their utility in prognosticating future outcomes will be presented. Additionally, the utility of these same parameters in cardiac rehabilitation programming for this patient population will be illustrated.

- **3202** Adam W. Powell, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH
  (No relevant relationships reported)
- **3203** Samuel G. Wittekind, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH
  (No relevant relationships reported)

**G-02** Tutorial Lecture - *Epigenetics: We Inherit More than Just Genes*

*Saturday, June 1, 2019, 8:00 AM - 8:50 AM*
*Room: CC-108*

Epigenetics describes the effect of the environment on how the body reads one’s genetic code and epigenetic changes can significantly affect health and performance. There has been evolving interest in epigenetic mechanisms driving health risks across a variety of conditions such as obesity and type 2 diabetes. Some of the most significant links between epigenetics and health relate to maternal health during pregnancy, which often leads to lifelong alterations of the child’s health. Classic studies have demonstrated increased lifetime risk for obesity and diabetes in children of mothers malnourished during pregnancy. However, positive changes are related to children of mothers that were physically active during pregnancy. This tutorial will have two speakers – Dr. Hubal will present a basic tutorial about epigenetics and how it is studied, followed by Dr. May presenting work that links maternal health and physical activity to infant and child health in offspring.

- **3204** Monica Hubal, FACSM, IUPUI, Indianapolis, IN
  (No relevant relationships reported)
- **3205** Linda May, FACSM, East Carolina University, Greenville, NC
  (No relevant relationships reported)

**G-03** Tutorial Lecture - *Exercise in the Prevention and Treatment of Mental Health Disorders: Translating Research into Real-World Settings*

*Saturday, June 1, 2019, 8:00 AM - 8:50 AM*
*Room: CC-105A*

Substantial evidence supports the use of exercise in the prevention and treatment of many mental health disorders. Despite this evidence, exercise is rarely used to prevent or treat mental health disorders. This tutorial will include presentations on community engagement strategies and provide examples of recent efforts to translate research findings into a variety of real-world settings (primary care clinics, schools, parks, and refugee camps).

- **3206** Chad Rethorst, UT Southwestern Medical Center, Dallas, TX
  (No relevant relationships reported)

**G-04** Colloquium - *Integrating Mobile Health into Sports Medicine Practice: Making Sense of Sensors*

*Saturday, June 1, 2019, 8:00 AM - 8:50 AM*
*Room: CC-303*

Sports medicine and rehabilitation clinicians typically employ performance-based outcome measures (PBOM) to determine risk for injury and to determine when a patient has completed rehabilitation. Common PBOM includes hopping, running, and balance test items. While the identification of gross movements as measured through these PBOM is important, mobility and balance PBOMs lack the sensitivity to identify joint instability and/or range of motion impairment of the knee. In addition, balance impairment may not be clinically observable at time of return to sport and often go undetected putting the individual at risk for re-injury. This session will discuss how mobile apps and sensor technology in combination with PBOMs have been implemented for the Division I Collegiate Athletes at the University of Miami to help identify those at risk for musculoskeletal injury, tracking of rehabilitation progress following concussion, and assist with exercise prescription.

- **3207** Ignacio Guanaud, University of Miami, Coral Gables, FL
  (No relevant relationships reported)
- **3208** Luis Feigenbaum, University of Miami, Coral Gables, FL
  (No relevant relationships reported)
- **3209** Thomas Best, FACSIM, University of Miami, Coral Gables, FL
  (No relevant relationships reported)

**G-05** Tutorial Lecture - *Medicine Year in Review*

*Saturday, June 1, 2019, 8:00 AM - 8:50 AM*
*Room: CC-305*

- **3210** Shawn F. Kane, FACSM, US Army, Carthage, NC
  (No relevant relationships reported)

**G-06** Tutorial Lecture - *New Developments in Cancer Prevention and Control: The Importance of Moving More and Sitting Less*

*Saturday, June 1, 2019, 8:00 AM - 8:50 AM*
*Room: CC-205*

In March 2018, ACSM hosted an International, Multidisciplinary Roundtable meeting on Cancer Prevention and Control. The first ACSM Roundtable on Exercise and Cancer was held in 2010 and focused on cancer survivorship. This second Roundtable was expanded to also include a focus on primary cancer prevention and the growing evidence that exercise before and after a cancer diagnosis may enhance survival. This Tutorial Lecture will present evidence examined at the 2018 Roundtable—particularly new developments from epidemiologic studies examining sedentary behavior as a distinct risk factor for incident cancer, and studies of physical activity and survival following a diagnosis of cancer.

- **3211** Alpa Patel, FACSM, American Cancer Society, Atlanta, GA
  (No relevant relationships reported)
- **3212** Chelsea Stone, Alberta Health Services, Calgary, AB, Canada
  (No relevant relationships reported)

**G-07** Tutorial Lecture - *Optimizing Diagnosis of Challenging Shoulder Problems*

*Saturday, June 1, 2019, 8:00 AM - 8:50 AM*
*Room: CC-306*

This interactive colloquia presented by two global leaders in shoulder exam skills will use a series of case-based challenges to optimize the attendee’s evaluation and diagnosis of challenging and difficult shoulder pathologies.

- **3213** Mark R. Hutchinson, FACSM, University of Illinois at Chicago, Chicago, IL
  (No relevant relationships reported)
Complaints of hip and groin pain are common in athletes of all levels. Yet, there are many potential causes of the pain, making the hip and pelvis the “black box” of sports medicine. Armed with a functional assessment of the hip and pelvis, the astute sports medicine provider can accurately diagnose both the victim and culprit – the presenting pathology and its cause. This hands-on workshop will teach attendees how to perform a functional evaluation of the hip and pelvis and provide opportunity for them to practice the examination on each other.

Infections are inherent to athletic activity, particularly sports with skin-to-skin contact. No differences exist between the causal organisms in athletes and non-athletes; however, the clinical presentation may vary. By incorporating their knowledge of the sporting activities, the clinician can best identify the diagnosis, treatment and prevention strategy. Epidemics of tinea, herpes and MRSA have occurred at the high school, collegiate, and professional level throughout the world. Sports-related skin infections caused by fungus, bacteria, and viruses will be illustrated and discussed. Specific NCAA guidelines regarding skin infections and return to play issues will also be discussed.

The skeleton adapts to repetitive mechanical loading. The same loading based measurements and how to collect data in a real-time setting. All speakers have importances of field research for both science and practice, the pros and cons of field-translation: bringing the lab to the field applied studies and case studies in the field and importance of field research for both science and practice, the pros and cons of field-based measurements and how to collect data in a real-time setting. All speakers have abundant experience in working with elite and Olympic athletes in different countries.

This in-depth, scientific and state-of-the-art session focuses on the value and importance of field research for both science and practice, the pros and cons of field-based measurements and how to collect data in a real-time setting. All speakers have abundant experience in working with elite and Olympic athletes in different countries.

Changes in Tibial Microarchitecture in Response to 8 Weeks of US Army Basic Combat Training in Men and Women: A Preliminary Analysis from a Large Field Study
Julie M. Hughes1, Katelyn L. Bouxsein, FACSM2,3, Kristin L. Popp1, Ronal W. Matheny, Jr.1, Stephen A. Foulis2, Mary L. Greiwasser, FACSM1, Matthew S. Pappas2,4,5, Julie M. Hughes1, Katelyn L. Bouxsein, FACSM2,3, Kristin L. Popp1, Ronal W. Matheny, Jr.1, Stephen A. Foulis2, Mary L. Greiwasser, FACSM1, Matthew S. Pappas2,4,5, 1Massachusetts General Hospital, Harvard Medical School, Boston, MA. 2United States Army Research Institute of Environmental Medicine, Boston, MA. 3Massachusetts General Hospital, Boston, MA. 4United States Army Research Institute of Environmental Medicine, Massachusetts General Hospital, Boston, MA. 5United States Army Research Institute of Environmental Medicine, Massachusetts General Hospital, Boston, MA. (No relevant relationships reported)
P228 Final Program

3226 9:55 AM - 10:20 AM
Evaluation of food and fluid intake in athletes and the limitations of self-reporting
Floris Wardenaar. Arizona State University, Phoenix, AZ
(No relevant relationships reported)

3227 10:20 AM - 10:45 AM
Performance Assessment Data and Interpretation for Recovery and Nutrition from Team Sports
Jon K. Davis. Gatorade Sports Science Institute, Barrington, IL
(No relevant relationships reported)

10:45 AM - 11:00 AM
Overall Discussion

G-13 Symposium - CAQ Review Session (Part 2)
Saturday, June 1, 2019, 9:00 AM - 11:00 AM
Room: CC-305

The CAQ review sessions are an ongoing series of symposia developed in conjunction with the American Medical Society for Sports Medicine and presented at both the ACSM and AMSSM Annual Meetings, presented by content experts, that are designed to provide, over several years, a comprehensive review for the Primary Care Sports Medicine CAQ exam.

3228 9:00 AM - 9:05 AM
Chair: Jason L. Zaremski, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)

3229 9:05 AM - 9:25 AM
Facial Fractures
Heather Gillespie, FACSM. Maine Medical Center, Portland, ME
(No relevant relationships reported)

3230 9:25 AM - 9:45 AM
Sports Psychology/Mental Health
Eugene Hong. Medical University of South Carolina, Charleston, SC
(No relevant relationships reported)

3231 9:45 AM - 10:05 AM
Concussion: Diagnosis and Return to Play
Jason L. Zaremski, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)

3232 10:05 AM - 10:25 AM
Performance Enhancing Drugs
Kathryn E. Ackerman, FACSM. Boston Children's Hospital, Boston, MA
(No relevant relationships reported)

3233 10:25 AM - 10:45 AM
Exercise and Pregnancy
Carrie A. Jaworski, FACSM. NorthShore University HealthSystems, Chicago, IL
(No relevant relationships reported)

10:45 AM - 11:00 AM
Overall Discussion

G-14 Symposium - Optimizing Exercise to Enhance Immune Cell Function and Bioenergetics in Age- and Cardiometabolic Related Disorders
Saturday, June 1, 2019, 9:00 AM - 11:00 AM
Room: CC-108

Age- and inactivity-related elevations in inflammation, oxidative stress, and immunosenescence increase the risk for developing cardiometabolic disorders, such as insulin resistance, type 2 diabetes, and cardiovascular disease. We will discuss the impact of exercise on systemic inflammation in cardiometabolic disorders. We will present emerging evidence that impairments in immune cell mitochondrial bioenergetics contribute to the development of systemic inflammation, oxidative stress, immunosenescence, and related cardiometabolic disorders. We will also discuss state-of-the-art methodologies for assessing immune cell bioenergetics, in PBMCs, isolated T cells, and neutrophils. We will emphasize the importance of integrating comprehensive immune cell phenotyping when characterizing the changes in immune cells energetic demands. Finally, we will discuss preliminary evidence that both acute and chronic exercise can enhance immune cell bioenergetics, and contribute to the salutary effects of exercise on systemic inflammation, oxidative stress, and immune function in older adults with and without cardiometabolic disorders.

3234 9:00 AM - 9:10 AM
Chair: Kim M. Huffman. Duke University, Durham, NC
(No relevant relationships reported)

3235 9:10 AM - 9:30 AM
Beyond Circulating Cytokines: Exploring the Impact of Exercise on Anti-inflammatory Cytokine Function
Jonathan P. Little, FACSM. The University of British Columbia, Kelowna, BC, Canada
Reported Relationships: J.P. Little: Ownership/interest/stock: Shares in Metabolic Insights Inc. Other (please describe): Co-Chief Scientific Officer for Institute for Personalized Therapeutic Nutrition (IPTN).

3236 9:30 AM - 9:50 AM
Relationships between Immune Function, Inflammation and Metabolism Following Exercise Training in Disease Populations
David Bartlett. Duke University, Durham, NC
(No relevant relationships reported)

3237 9:50 AM - 10:10 AM
Impact of Exercise on Immune Competency in Older Adults and Populations with Poor Cardiometabolic Health
Guillaume Spielmann. Louisiana State University, Baton Rouge, LA
(No relevant relationships reported)

10:30 AM - 11:00 AM
Overall Discussion

G-15 Symposium - Prehospital Care of Exertional Heat Stroke- Improving Policies to Improve Outcomes
Saturday, June 1, 2019, 9:00 AM - 11:00 AM
Room: CC-203

Exertional heat stroke is an emergency that requires quick coordination between medical professionals to ensure appropriate outcomes. On-site medical care, emergency services and receiving hospitals have limited time to recognize and treat patients, minimizing the risk of mortality. Based upon a recent consensus statement, this symposium will focus on providing clinicians tools to work within their communities and prepare for exertional heat stroke. The latest evidence-based practice considerations for recognition, treatment and return-to-play will be discussed. Special attention will be paid to the circumstances sports medicine professionals are likely to encounter with examples of success in reforming exertional heat stroke care to improve patient outcomes.

3239 9:00 AM - 9:10 AM
Chair: Shawn Kane, FACSM. University of North Carolina-Chapel Hill, Chapel Hill, NC
(No relevant relationships reported)
Cardiometabolic disorders (CMD) are the leading cause of morbidity and mortality after spinal cord injury (SCI). Given that physical activity is widely accepted to reduce the risk of developing CMD in the general population, it seems intuitive to infer that it may play a similar protective role in SCI. However, the lack of high quality randomized controlled trials (RCT) has led to conclusions that the evidence for the effect of exercise on CMD outcomes in SCI is insufficient. Recommendations for low intensity interval training (HIIT) and continuous resistance training (CRT) provide a tolerated and necessary approach to reduce CMD component risks. Data suggest that both high intensity and high volumes and intensities of aerobic exercise are substantially less able-bodied. The lack of high quality randomized controlled trials (RCT) has led to conclusions that the evidence for the effect of exercise on CMD outcomes in SCI is insufficient. Recommendations for low intensity interval training (HIIT) and continuous resistance training (CRT) provide a tolerated and necessary approach to reduce CMD component risks. Data suggest that both high intensity and high volumes and intensities of aerobic exercise are substantially less than able-bodied.
3255 Board #7 9:00 AM - 11:00 AM
Evidence Of A Relationship Between Dietary Fat Intake And Inflammation Among Professional Soccer Players
Diarmaid Daniels1, Nathan Lewis1, Paul Catterson1, John Newell1, Georgie Bruinvels1, Michael Newell1, Andrew Simpson1, Andrew Barr2, Charles R. Pedlar3. 1National University of Ireland Galway, Galway, Ireland. 2St Mary’s University, Twickenham, United Kingdom. 3Newcastle United Football Club, Newcastle, United Kingdom. (No relevant relationships reported)

3256 Board #8 9:00 AM - 11:00 AM
Sex Differences in Nutrition Knowledge of Division I College Athletes
Alyssa J. Guadagni, Emily N. Werner, James M. Pivarnik, FACSM. Michigan State University, EAST LANSING, MI. (Sponsor: JAMES M. PIVARNIK, FACSM)
Email: guadagni2@msu.edu
(No relevant relationships reported)

3262 Board #5 9:00 AM - 11:00 AM
Creativity In Children With Different Level Of Cardiorespiratory Fitness And Fat Mass: A Cross-Sectional Study
Gleydiane A. Fernandes1, Kell Grandjean da Costa1, Kaline Brito1, Karina da Silva Oliveira2, Tatiana de Cássia Nakano3, Eduardo Bodniuri Fo1. 1UFPR, Natal, Brazil. 2PUC-Campinas, Campinas, Brazil
Email: ciane_al@hotmail.com
(No relevant relationships reported)

3263 Board #6 9:00 AM - 11:00 AM
The Relationships between Cell Phone Use and Sedentary Behavior in Samples of Japanese and American College Students
Jacob E. Barkley1, Andrew Lepp1, Takahiro Sato2, Koji Yamatsu3, Ellen L. Glickman, FACSM. 1Kent State University, Kent, OH. 2Saga University, Saga, Japan. (Sponsor: Ellen Glickman, FACSM)
Email: jbarkle1@kent.edu
(No relevant relationships reported)

3265 Board #8 9:00 AM - 11:00 AM
The Individual and Combined Effect of Hypoxia and Music on Physical Performance
Kate O’Keeffe, Jacob Dean, Dr. Simon Hodder, Dr. Alex Lloyd. Loughborough University, Loughborough, United Kingdom. (Sponsor: Prof. George Havenith, FACSM)
Email: k.e.okeeffe@lboro.ac.uk
(No relevant relationships reported)

3266 Board #7 9:00 AM - 11:00 AM
Investigating the Impact of Acute Exercise and Brain Stimulation on Cognitive Control in Healthy Adults
Erika K. Hussey1, Eduardo B. Fontes1, Nathan Ward1, Daniel R. Westfall1, Shih-Chun Kaou2, Arthur F. Kramer1, Charles H. Hillman1. 1US Army, NSRDEC, Natick, MA. 2Tufts University, Medford, MA. 3Northeastern University, Boston, MA. (Sponsor: Marcus Taylor, PhD, FACSM)
Email: mktaylor@northeastern.edu
(No relevant relationships reported)

3267 Board #1 9:00 AM - 11:00 AM
Coping of Adrenal and Gonadal Hormones: Potential Relationship to Occupational Demand
Matthew R. Schoenherr, Lisa M. Hernandez, Marcus K. Taylor, Ph.D., FACSM, Naval Health Research Center, San Diego, CA. (Sponsor: Marcus Taylor, PhD, FACSM)
Email: matthew.r.schoenherr.ctr@mail.mil
(No relevant relationships reported)

3268 Board #2 9:00 AM - 11:00 AM
Testosterone Status Following Short-term, Severe Negative Energy Balance Predicts Fat-free Mass Loss in U.S. Marines
Caire E. Berryma, John J. Sepowitz, Holly L. McCung, Stefan M. Pasiakos, FACSM, US Army Research Institute of Environmental Medicine, Natick, MA. (Sponsor: Stefan M. Pasiakos, FACSM)
(No relevant relationships reported)
American College of Sports Medicine

Muscle Function And Cancer Related Fatigue In Prostate Cancer Survivors Receiving Different Treatment Regimens
Sandro Nobre Chaves1, Filipe Dinato de Lima1, Martim Bottaro1, Claudio L. Battaglini, FACSFM, Ricardo Jaco de Oliveira1.
1University of Brasilia, Brasilia, Brazil. 2University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Claudio L. Battaglini, FACSFM)
Email: sandronobres@gmail.com
(No relevant relationships reported)

Inflammation Mediates The Effects Of Exercise On Fatigue In Patients With Breast Cancer Undergoing Chemotherapy
Anouk E. Hienk1, Sara Mijio1, Yvonne Wengström2, Anne M. May1, Helene Rundqvist2, 1University Medical Center Utrecht, Julius Center for Health Sciences and Primary Care, Utrecht, Netherlands. 2Karolinska Institutet, Stockholm, Sweden
Email: a.e.hienck-2@umcutrecht.nl
(No relevant relationships reported)

Effects Of Exercise On QoL And Fatigue of Inactive Breast Cancer Survivors, A TwiCs study
Anne M. May1, Roxanne Gai1, Carla H. van Gils1, Rolf IH Groenwold2, Desiree HUG van den Bongard1, Petra HM Peeters1, Helena M. Verkooyien1, Evelyn M. Monninkhof2, 1University Medical Center Utrecht, Utrecht, Netherlands. 2Leiden University Medical Center, Leiden, Netherlands
Email: a.m.may@umcutrecht.nl
(No relevant relationships reported)

G-20 Thematic Poster - Exercise and Physical Activity in Cancer Survivors
Saturday, June 1, 2019, 9:00 AM - 11:00 AM
Room: CC-102B

Muscle Function And Cancer Related Fatigue In Prostate Cancer Survivors Receiving Different Treatment Regimens
Sandro Nobre Chaves1, Filipe Dinato de Lima1, Martim Bottaro1, Claudio L. Battaglini, FACSFM, Ricardo Jaco de Oliveira1.
1University of Brasilia, Brasilia, Brazil. 2University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Claudio L. Battaglini, FACSFM)
Email: sandronobres@gmail.com
(No relevant relationships reported)

Inflammation Mediates The Effects Of Exercise On Fatigue In Patients With Breast Cancer Undergoing Chemotherapy
Anouk E. Hienk1, Sara Mijio1, Yvonne Wengström2, Anne M. May1, Helene Rundqvist2, 1University Medical Center Utrecht, Julius Center for Health Sciences and Primary Care, Utrecht, Netherlands. 2Karolinska Institutet, Stockholm, Sweden
Email: a.e.hienck-2@umcutrecht.nl
(No relevant relationships reported)

G-20 Thematic Poster - Exercise and Physical Activity in Cancer Survivors
Saturday, June 1, 2019, 9:00 AM - 11:00 AM
Room: CC-102B

9:00 AM - 11:00 AM

Board #3
9:00 AM - 11:00 AM
Salivary Stress Biomarkers During the Lake Placid Ironman® Ultraendurance Event
Email: aidan.fiol@uconn.edu
(No relevant relationships reported)

Board #4
9:00 AM - 11:00 AM
Daily Cortisol Patterns in Specialized Military Men: Replication and Refinement in a Novel Population
Genieleah A. Padilla1, Lisa M. Hernández2, Marcus K. Taylor, FACSFM, 1Leidos, San Diego, CA. 2Naval Health Research Center, San Diego, CA
(No relevant relationships reported)

Board #5
9:00 AM - 11:00 AM
Cortisol Responses During a Long Duration Incremental Exercise Protocol in the Heat while Wearing Personal Protective Equipment
Thomas Service1, Cory Cochoom1, Lynneth Stuart-Hill1, Olave Krigolson1, Patrick Neary2, 1University of Victoria, Victoria, BC, Canada. 2University of Regina, Regina, SK, Canada
(No relevant relationships reported)

Board #6
9:00 AM - 11:00 AM
Exercising Together©for Couples during Radiation Therapy for Prostate Cancer: A Pilot Feasibility Study
Mary E. Medysky, Jessica C. Sitemba, Kimi Daniel, Arthur Hung, Kerri M. Winters-Stone, FACSFM, Oregon Health & Science University, Portland, OR. (Sponsor: Kerri Winters-Stone, FACSFM)
Email: hwang5@health.usf.edu
(No relevant relationships reported)

Board #7
9:00 AM - 11:00 AM
Community-based Soccer Improves Hip BMD, Mental Health, And Reduces Hospital Admissions In Prostate Cancer Patients
Eik D. Bjerve1, Klaus Brass1, Julie Midgaard2, Rigshospitalet, Copenhagen, Denmark. 2University of Copenhagen, Copenhagen, Denmark
Email: eb@ucsf.dk
(No relevant relationships reported)

Board #8
9:00 AM - 11:00 AM
Overcoming Fitness, Symptom, And Behavior Barriers After A Physical Activity Intervention With Fitness Graded Motion Exergames (PAfitME) Among Head And Neck Cancer Patients
Hsiao-Lan Wang1, Harleah Back1, Tapan Padhya1, Kristine Donovan1, Laura Szalacha1, Ellen Smith2, Srinivas Katkooi1, Barbara Smith, FACSFM, 1University of South Florida, Tampa, FL. 2 Moffitt Cancer Center, Tampa, FL. 3University of Michigan. Ann Arbor, MI. (Sponsor: Barbara Smith, Member® 126904, FACSFM)
Email: hwang5@health.usf.edu
**G-22  Tutorial Lecture - Applied Science Year in Review**

**Saturday, June 1, 2019, 9:00 AM - 9:50 AM**  
**Room: CC-105B**

Charles E. Matthews, FACSM, National Cancer Institute, Rockville, MD  
(No relevant relationships reported)

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**G-23  Colloquium - Educator's Colloquium: Standing on the Shoulders of Giants**

**Saturday, June 1, 2019, 9:00 AM - 9:50 AM**  
**Room: CO-105A**

How do we continue to ensure our future generation of ACSM professionals know and appreciate the individuals that have helped shape ACSM as we know it today? This participatory session will highlight innovative ways to teach students about the legacy of the organization and the rich history within the field of exercise science.

**3291  Katie M. Smith, Simpson College, Indianola, IA**  
(No relevant relationships reported)

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**G-24  Tutorial Lecture - Exercise Oncology: Evidence-based Practice and Practice-based Evidence**

**Saturday, June 1, 2019, 9:00 AM - 9:50 AM**  
**Room: CC-205**

Extensive research supports the benefits of regular physical activity, and/or structured exercise for improving fitness, quality of life and survival outcomes in cancer survivors. Based on this evidence, organizations such as the American College of Sports Medicine, American Cancer Society, and the National Comprehensive Cancer Network have established exercise guidelines and physical activity recommendations for cancer survivors. However, a gap remains in translating this research into sustainable exercise oncology programs and cancer-specific physical activity resources available in the clinic and community. This symposium will discuss research which focuses on the dissemination of research-based interventions into practice, the implementation of exercise programs in various settings and cancer survivor populations, and pathways by which accessibility to, and engagement in physical activity and exercise programs can be increased for cancer survivors.

**3293  Nicole Culos-Reed, University of Calgary, Calgary, AB, Canada**  
(No relevant relationships reported)

**3294  Heather J. Leach, Colorado State University, Fort Collins, CO**  
(No relevant relationships reported)

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**G-25  Tutorial Lecture - Practical Approach to Monitoring Training**

**Saturday, June 1, 2019, 9:00 AM - 9:50 AM**  
**Room: CC-306**

Various techniques for monitoring training in athletes have been developed. Although many have been scientifically validated as surrogates of physiological ability or responses to training, little is known about how to apply training monitoring in the hands of coaches. This session is designed to show how training monitoring can be used to help in day to day decision making.

**3295  Carl Foster, FACSM. University of Wisconsin-La Crosse, La Crosse, WI**  
(No relevant relationships reported)

**3296  Jos J. de Koning, FACSM. Vrije Universiteit Amsterdam, Amsterdam, Netherlands**  
(No relevant relationships reported)

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**G-26  Clinical Workshop-Hands On Demonstration - Head Trauma-When it is not a Concussion**

**Saturday, June 1, 2019, 9:00 AM - 9:50 AM**  
**Room: CC-304E**

Session will review the differential diagnosis of symptoms after a head injury with a focus on non-concussive causes.

**3297  Matthew Gammons, Vermont Orthopaedic Clinic, Rutland, VT**  
(No relevant relationships reported)
American College of Sports Medicine

Saturday, June 1, 2019, 9:00 AM - 9:50 AM
Room: CC-304G

We will provide an overview for management of acute sports injuries for the upper extremity and trunk for both adult and pediatric patients. This will include fractures, dislocations, muscle/tendon tears, ligament ruptures, and other injuries encountered in sports medicine. Many of these problems can be managed by the primary care clinician on the sideline or in the office, however, many training programs are not able to offer a large volume of formal instruction in this area. We will provide an overview of common injuries encountered, fundamentals of acute care, general rules for initial management, and teaching pearls with pitfalls to avoid. We will use radiographs/pictures to visualize fractures and videos/demonstrations to show techniques to reduce displaced fractures and dislocations or splint unstable injuries.

3298 Jack Spittler, University of Colorado, Denver, CO
(No relevant relationships reported)

3299 Mark Riederer, University of Michigan, Ann Arbor, MI
(No relevant relationships reported)

3300 Mortaza Khodaei, FACSM. University of Colorado School of Medicine, Denver, CO
(No relevant relationships reported)

G-28 Tutorial Lecture - Cardioprotective Exercise-pharma Interactions: An Effective One-two Punch
Saturday, June 1, 2019, 10:10 AM - 11:00 AM
Room: CC-105B

Exercise and pharmacologic interventions to prevent and treat ischemic heart disease have advanced largely in parallel over recent decades. Pharmacotherapies for cardiovascular diseases mimic or often parallel the biological mechanisms of exercise, sometimes with contraindications that can complicate exercise testing and prescription. Novel translational perspectives from clinical and basic science approaches to better understand the synergy, and contraindications of exercise-pharma interactions will be discussed in this tutorial. Tutorial themes will focus on where exercise-pharma interactions are benign, additive, and potentially deleterious. Additional discussion will address how future exercise interventions may be directed at elucidating novel pharmacologic approaches to treat ischemic and other major forms of heart disease.

3301 Barry A. Franklin, FACSM. William Beaumont Hospital, Royal Oak, MI
(No relevant relationships reported)

3302 John C. Quindry, FACSM. University of Montana, Missoula, MT
(No relevant relationships reported)

G-29 Tutorial Lecture - Stimulant Use in Sport: The Challenges of Caring for the Adderall and Red Bull Generation
Saturday, June 1, 2019, 10:10 AM - 11:00 AM
Room: CC-306

Stimulant use has become a cultural norm in the sporting world. Rising levels of use and abuse each year result from an increased frequency of attention deficit hyperactivity disorder (ADHD) diagnoses coupled with the ready availability of a myriad of over-the-counter stimulant sources in energy drinks and supplements. Sports medicine providers are tasked with balancing the potential value of these stimulants with the presumed risks of use in highly active athletes. From physical and psychological dependence to serious stimulant-mediated complications such as hyperthermia, hypertension, and precipitation of potentially lethal arrhythmias, the widespread use of stimulants poses unique challenges to athletes and their care providers. This tutorial lecture will focus on the limited data that we actually have regarding the safety and efficacy of stimulant use in athletes, the potentially serious pathophysiology associated with stimulant use and abuse, the concerning societal trends in stimulant use, and a discussion of whether our concerns about their use are valid.

3303 John M. MacKnight, FACSM. University of Virginia Sports Medicine, Charlottesville, VA
(No relevant relationships reported)

G-30 Tutorial Lecture - The Truth about Physical Activity in the Black Community: What’s Known, What’s Needed, What’s Next
Saturday, June 1, 2019, 10:10 AM - 11:00 AM
Room: CC-105A

The benefits of physical activity for preventing and treating chronic diseases, including diabetes, are well established. Self-report instruments suggest that African Americans engage in less leisure-time physical activity than other population subgroups; however, objective measures suggest that African Americans may be more active, overall. Regardless, data indicate a constant decline in physical activity levels among African Americans across the lifespan and, consequently, a high rate of preventable chronic disease beginning in young adulthood. Identifying characteristics of African Americans who are engaged in regular physical activity may help to address low levels of physical activity in this high risk group. During this symposium we will review positive physical activity behaviors among African Americans, short- and long-term successes of physical activity interventions across the lifespan in this population, and will offer assets-based approaches to filling the gaps in knowledge about potential ways to successfully intervene.

3304 Olivia Affuso, FACSM. University of Alabama at Birmingham, Birmingham, AL
(No relevant relationships reported)

3305 Sheila A. Ward, FACSM. Norfolk State University, Norfolk, VA
(No relevant relationships reported)

G-31 Tutorial Lecture - Weight Bench to Bedside: The Importance of Muscle Mass in Cancer Outcomes & Side Effects
Saturday, June 1, 2019, 10:10 AM - 11:00 AM
Room: CC-205

The importance of skeletal muscle mass in cancer outcomes has gained substantial attention in recent years. The preservation of and/or increase of muscle mass can have profound effects on physical function, quality of life, and survival in cancer survivors. Resistance training is a highly effective strategy to target gains in muscle mass, which has been used under various prescription parameters for breast, prostate, and colorectal cancer survivors. This symposium will include the following topics related to muscle mass and cancer outcomes: 1) the importance of maintaining muscle mass and various mechanisms underlying muscle atrophy during chronic disease; 2) commonly used tools to measure muscle mass in this population; 3) clinical importance of muscle mass and cancer treatment; 4) supervised interventions targeting muscle mass in cancer survivors.

3306 Christina M. Dieli-Conwright, FACSM. University of Southern California, Los Angeles, CA
(No relevant relationships reported)

3307 Kristin Campbell, FACSM. University of British Columbia, Vancouver, BC, Canada
(No relevant relationships reported)

G-32 Clinical Workshop-Hands On Demonstration - Medical Retirement From Sport After Concussion
Saturday, June 1, 2019, 10:10 AM - 11:00 AM
Room: CC-304E

We will review the difficulties facing physicians that evaluate and treat concussion in clinical practice approaching the question, “when is enough, enough when it comes to TBI in sport?” It combines the experience of a team neurologist, two primary sports medicine physicians, a team orthopedist, and a head ATC covering professional, collegiate, high school and community athletics. We will present the latest evidence and our algorithm to provide guidance to practicing physicians that treat sports related concussion. The introduction will review the algorithm we developed titled, “Medical Retirement From Sport After Conussions: A practical guide for difficult conversation.” published in Neurology: Clinical Practice, February 2018 vol. 8 no. 1: 40-47; PMID: 29517059. The algorithm will be presented against real world cases,
### G-33 Clinical Workshop-Hands On Demonstration - Shoulder Examination: A Case Based Approach

**Saturday, June 1, 2019, 10:10 AM - 11:00 AM**  
**Room:** CC-304G

This workshop will teach hands on examination skills of the shoulder through a case-based approach.

<table>
<thead>
<tr>
<th>Board #</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
<th>Affiliations</th>
</tr>
</thead>
<tbody>
<tr>
<td>3308</td>
<td>8:00 AM - 9:30 AM</td>
<td>Thomas Bottiglieri, Columbia Presbyterian, Englewood, NJ</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>3309</td>
<td>8:00 AM - 9:30 AM</td>
<td>James Noble, Columbia Presbyterian, Englewood, NJ</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
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### G-34 Free Communication/Poster - Body Composition

**Saturday, June 1, 2019, 7:30 AM - 11:00 AM**  
**Room:** CC-Hall WA2

<table>
<thead>
<tr>
<th>Board #</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
<th>Affiliations</th>
</tr>
</thead>
<tbody>
<tr>
<td>3310</td>
<td>8:00 AM - 9:30 AM</td>
<td>Daniel C. Herman, FACSM. University of Florida, Gainesville, FL</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>3311</td>
<td>8:00 AM - 9:30 AM</td>
<td>Melody Hubbs, University of Illinois at Chicago, Chicago, IL</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>3312</td>
<td>8:00 AM - 9:30 AM</td>
<td>Ashley Zapf, University of Texas, Austin, TX</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

### Board #5 8:00 AM - 9:30 AM

**Impact of Body Fat Percent on Heart Rate of Moderate-Intensity Aerobic Activity**

Wenhao Liu, FACSM, Istvan Kovacs, Austin McClinton, Slippery Rock University, Slippery Rock, PA  
Email: wenhao.liu@srwu.edu  
(No relevant relationships reported)

### Board #6 8:00 AM - 9:30 AM

**Anthropometric Characteristics Of NCAA Division III Swimmers**

Heather Milton, Susan Edmond. NYU Langone Health, New York, NY  
Email: heather.milton@nyumc.org  
(No relevant relationships reported)

### Board #7 8:00 AM - 9:30 AM

**Body Composition Changes Following NFL Combine Preparation Training**

(No relevant relationships reported)

### Board #8 8:00 AM - 9:30 AM

**Skinfold Thickness As A Predictor Of 3200m Performance For Trained, Male Runners**

Jake Till, Nathan Goslin-Klement, Preston Kauder, Elaina Biechler. Loras College, Dubuque, IA. (Sponsor: Vincent Paolone, FACSM)  
Email: jacob.till@loras.edu  
(No relevant relationships reported)

### Board #9 8:00 AM - 9:30 AM

**Bilateral Lean Mass and Dynamic Balance Asymmetry in Collegiate Athletes**

Guadalupe Herrera, Vipa Bernhardt. Texas A&M University-Commerce, Commerce, TX  
(No relevant relationships reported)

### Board #10 8:00 AM - 9:30 AM

**Effects Of Oral-contraceptive Use On Strength, Power And Body Composition In Trained Women**

Vargas Salvador, Romance Ramóz, Petro Jorge L., Espinar Sergio, Bonilla Diego A., Schoenfeld Brad J., Kreider Richard B., FACSM, Benitez-Porres Javier, EADE-University of Wales Trinity Saint David, Málaga, Spain, University of Málaga, Málaga, Spain, Universidad de Córdoba, Monteria, Colombia. BetterbyScience, Málaga, Spain, Universidad Distrital Francisco José de Caldas, Bogotá, Colombia. CUNY Lehman College, New York, NY. Texas A&M University, Texas, TX  
Email: salvadorvargasmolina@gmail.com  
(No relevant relationships reported)

### Board #11 8:00 AM - 9:30 AM

**Relationships Of Waist Circumferences Measured At Different Anatomical Sites With Body Fat In Chinese Adults**

Lin Wang, Chaoan Yang. Shanghai University of Sport, Shanghai, China. (Sponsor: Stanley Sai-chuen HUI, FACSM)  
Email: wanglin.sus@gmail.com  
(No relevant relationships reported)

### Board #12 8:00 AM - 9:30 AM

**Association Between Body Composition and Bone Mineral Density in Elite Collegiate Athletes**

Jordan N. Brown. Georgia Southern University, Statesboro, GA  
Email: jib17162@georgiasouthern.edu  
(No relevant relationships reported)
3325 Board #13 8:00 AM - 9:30 AM
Comparison of Air Displacement Plethysmography and Multi-Frequency Bioelectrical Impedance Analysis for Body Composition Assessment
Benjamin T. Gordon¹, Andrea Y. Arikawa², Kristin Gerkens², Andriana Gonzalez², Sara Boyd³, Amber Baskin², Michele Bednarzyk⁴.
Radford University, Radford, VA. ²University of North Florida, Jacksonville, FL. (Sponsor: Larry Durstine, FACSM)
(No relevant relationships reported)

3326 Board #14 8:00 AM - 9:30 AM
Comparing a 3-Compartment Model to Criterion Measures for Estimating Body Composition in Athletes
Nicole C. Dahlenburg, Bryce Willian, Emily L. Langford, Ronald L. Snarr, Greg A. Ryan.
Georgia Southern University, Statesboro, GA
(No relevant relationships reported)

3327 Board #15 8:00 AM - 9:30 AM
Body Composition Comparisons Via Dual Energy X-Ray Absorptiometry and Air Displacement Plethysmography in College Athletes
Greg A. Ryan, Stephanie A. Gibson, Michelle L. Eisenman, Emily L. Langford, Ronald L. Snarr.
Georgia Southern University, Statesboro, GA
Email: gryan@georgiasouthern.edu
(No relevant relationships reported)

3328 Board #16 8:00 AM - 9:30 AM
Resting Energy Expenditure And Body Composition In Crossfit
Marcio Souza¹, Maraline SENA², Andressa Lima², Valden Capistrano Junior³, Monica Pinheiro³, Ana Paula Abdon³.
¹Federal University Of Minas Gerais, Belo Horizonte, Brazil. ²Clinica De Nutricao, Fortaleza, Brazil. ³University Of Ceara, Fortaleza, Brazil
Email: marcionutricionista@yahoo.com.br
(No relevant relationships reported)

3329 Board #17 8:00 AM - 9:30 AM
An Examination Of Upper Body Power And Fat-free Mass In Division-I Cheerleaders
Abigail C. Johnson, Michelle L. Eisenman, Emily L. Langford, Ronald L. Snarr, Gregory A. Ryan.
Georgia Southern University, Statesboro, GA
(No relevant relationships reported)

3330 Board #18 8:00 AM - 9:30 AM
Body Composition and Muscle Characteristics of Junior Track and Field Athletes
Janel S. Bailey, Rachael Irving, Eon Campbell. University of the West Indies, Mona, Kingston, Jamaica. (Sponsor: Melanie Poudevigne, FACSM)
Email: Janel_bailey@yahoo.com
(No relevant relationships reported)

3331 Board #19 8:00 AM - 9:30 AM
Seasonal Body Composition Changes in Division I Cross Country Runners
Katie R. Hirsch, Malia N.M. Blue, Gabrielle J. Brewer, Austin M. Peterjohn, Abbie E. Smith-Ryan, FACSM. University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Abbie Smith-Ryan, FACSM)
Email: ktrosee25@live.unc.edu
(No relevant relationships reported)

3332 Board #20 8:00 AM - 9:30 AM
Multi-Frequency Bioimpedance Reliability and Validity for Assessing Total and Segmental Body Composition in College-Aged Males
Saori Braun¹, Alexa Hayes¹, Garrett Stadler¹, Tucker Goesch³, Morgan Goldammer¹, Steven Fleck, FACSM. ¹University of Wisconsin-Eau Claire, Eau Claire, WI. ²Andrews Research and Education Foundation, Gulf Breeze, FL
Email: brauns1@uwec.edu
(No relevant relationships reported)

3333 Board #21 8:00 AM - 9:30 AM
Test-retest Reliability Of Bioimpedance Spectroscopy For The Analysis Of Body Composition In Physically Active Males
Oklahoma State University, Stillwater, OK
(No relevant relationships reported)

3334 Board #22 8:00 AM - 9:30 AM
Comparison of Bioelectric Impedance Analysis for Tracking Body Composition Changes Across a Basketball Season
Jana L. Arbas¹, Liz Jorn¹, Monica L. Hunter¹, Jerry L. Mayhew¹, William F. Brechue, FACSM. ¹Truman State University, Kirkville, MO. ²A. T. Still University, Kirksville, MO
Email: jlarbas@truman.edu
(No relevant relationships reported)

3335 Board #23 8:00 AM - 9:30 AM
Using Skinfolds and Bioelectrical Impedance for Tracking Body Composition across a Soccer Season
Liz Jorn¹, Jacob Gun¹, Ian McCluskey¹, Jerry L. Mayhew¹, William F. Brechue, FACSM. ¹Truman State University, Kirkville, MO. ²A. T. Still University, Kirksville, MO
Email: ljorn@truman.edu
(No relevant relationships reported)

3336 Board #24 8:00 AM - 9:30 AM
A Matter Of Fat? Body Composition In Relation To Vo2max Improvements In Division II Female Athletes
Kallie LaValle, Joseph D. Ostrem. Concordia University - St. Paul, St. Paul, MN
(No relevant relationships reported)

3337 Board #25 8:00 AM - 9:30 AM
Comparison of Regional and Global Bone Mineral Densities in Male and Female College Athletes
Monica L. Hunter¹, Jana L. Arbas¹, Liz Jorn¹, Brianne R. Morgan¹, Jerry L. Mayhew¹, William F. Brechue, FACSM. ¹Truman State University, Kirksville, MO. ²A. T. Still University, Kirksville, MO
Email: mnh7428@truman.edu
(No relevant relationships reported)

3338 Board #26 8:00 AM - 9:30 AM
Comparison of Abdominal Fat among Positions and Ethnicities in College Football Players
Brianne R. Morgan¹, Monica L. Hunter¹, Richard M. Schumacher¹, Laurel M. Wentz², Jerry L. Mayhew¹, William F. Brechue, FACSM. ¹Truman State University, Kirksville, MO. ²Appalachian State University, Boone, NC
Email: brm7215@truman.edu
(No relevant relationships reported)

3339 Board #27 8:00 AM - 9:30 AM
Comparison of Various Body Composition Measures for Division-I Collegiate Male Athletes
Georgia Southern University, Statesboro, GA
(No relevant relationships reported)
<table>
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<th>Authors</th>
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<tr>
<td>3340</td>
<td>Board #28 Utility of Anthropometric Indices to Estimate Changes in Adiposity in Response to an Exercise Intervention</td>
<td>Jacob E. Erickson¹, Michael Fedewa², Elizabeth Hathaway¹, Simon Higgins¹, Ellen Evans, FACSM¹, Michael Schmidt¹</td>
<td>University of Georgia, Athens, GA.  ¹University of Alabama, Tuscaloosa, AL.  ²University of Tennessee-Chattanooga, Chattanooga, TN.  ³Elon University, Elon, NC</td>
<td><a href="mailto:jerick219@gmail.com">jerick219@gmail.com</a> (No relevant relationships reported)</td>
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<tr>
<td>3341</td>
<td>Board #29 Body Composition Characteristics and Knee Injury Prevalence of NCAA Division I Women’s Soccer and Lacrosse</td>
<td>Gabrielle J. Brewer, Malia N.M. Blue, Katie R. Hirsch, Austin M. Peterjohn, Samantha A. Kelchner, Darin A. Padua, Abbie E. Smith-Ryan, FACSM</td>
<td>University of North Carolina - Chapel Hill, Chapel Hill, NC.  (Sponsor: Dr. Abbie E. Smith-Ryan, FACSM)</td>
<td><a href="mailto:gbrewer@live.unc.edu">gbrewer@live.unc.edu</a> (No relevant relationships reported)</td>
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<tr>
<td>3342</td>
<td>Board #30 Parental Socioeconomic Status and Skeletal Muscle Mass among Chinese College Students</td>
<td>Cong Huang¹, Cheng Li¹, Yung Tian¹, Qiang Wang¹, Zhaoyue Song¹, Zhejiang University, Hangzhou, China.  ²Chunnam National University, Gwangju, Korea.  ³Shenyang Normal University, Shenyang, China.  ⁴University of Nebraska-Lincoln, Lincoln, NE.</td>
<td>Email: <a href="mailto:hcongman@yahoo.com">hcongman@yahoo.com</a> (No relevant relationships reported)</td>
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<tr>
<td>3343</td>
<td>Board #31 Diagnostic Accuracy of Adipose Evaluation Indexes to Identify Obesity and Predict Osteoporosis in Chinese Adults</td>
<td>Wei Luo¹, Lei Ai¹, Yue Zhou², Biao Sun³, Nanjing Sport Institute, Nanjing, China.  ²Jiangsu Institute of Sports Science, Nanjing, China.  ³Beijing Sport University, Beijing, China.  ⁴Nanjing Sport Institute, Nanjing, China.</td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>3344</td>
<td>Board #32 The Relationship Between Body Composition with Peak Force and Anaerobic Power in Collegiate Baseball Players</td>
<td>Jeremy R. Pearson, Tanuj Wiadih, Jacob T. Rauch, Justin Thiel, Jody C. Andersen, Jay O’Sullivan, Eduardo O. De Souza. The University of Tampa, Tampa, FL.</td>
<td>Email: <a href="mailto:jeremy.pearson@spartans.ut.edu">jeremy.pearson@spartans.ut.edu</a> (No relevant relationships reported)</td>
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<tr>
<td>3345</td>
<td>Board #33 Weight Change and Hydration Status in Elite Puerto Rican Wrestlers in Preparation for the National Championship</td>
<td>Enid C. Rivera-Velázquez¹, Carmen Nevárez-Alonso², Farah A. Ramírez-Marrero, FACSM³, Lucia del R. Martínez-Colón³, ¹University of Puerto Rico, Rio Piedras Campus, San Juan, Puerto Rico.  ²University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.  ³Florida International University, Miami, FL.</td>
<td>(No relevant relationships reported)</td>
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<td>3346</td>
<td>Board #34 Predicting Percent Body Fat from Waist-to-Height Ratio Using a Regression Model</td>
<td>Stephanie Gerlach, Ann Gibson, FACSM. University of New Mexico, Albuquerque, NM.</td>
<td>(No relevant relationships reported)</td>
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**ACSM 66th Annual Meeting**

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<tr>
<td>3347</td>
<td>Board #35 The Relationship Between BMI, Lean Mass, and Body Fat Percentage with Balance in Collegiate Archers</td>
<td>Branden Ziebell, Jared Feister, Andy Bosak, Russel Lowell, Madeline Phillips, Hannah Nelson, Taylor Sanders. Liberty University, Lynchburg, VA.  (Sponsor: Dr. James Schoffstall, FACSM)</td>
<td>(No relevant relationships reported)</td>
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<td>3348</td>
<td>Board #36 Relationship Between Physical Activity Level With Body Composition And Physical Fitness Of Students From Iihabela, Brazil</td>
<td>José Matheus O. Estivaleti¹, Carolina González², Tatiana Figueiredo², Maurício dos Santos², Luís Oliveira¹, José D.S. Guedes¹, Victor K. R. Matsudo¹. ¹Nove de Julio University (UNNOVE), São Paulo, SP, Brazil.  ²Center of Studies of the Physical Fitness Research Laboratory from Sao Caetano do Sul (CELAFISC), São Caetano do Sul, SP, Brazil.  ³School of Medical Sciences of Santa Casa de São Paulo (FCMSCSP), São Paulo, SP, Brazil.</td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>3349</td>
<td>Board #37 Anthropometry Among Non-sedentary Elderly Tendency Analysis Of Adiposity Over Three Decades</td>
<td>Jão da Silva Junior¹, Rafael Benito Mancini¹, Carolina Gonzalez Beltrão¹, Tatiana Kosimenko Ferrari², Timoteo Leandro Araújo², Sandra M. Matsudo¹, José da Silva Guedes¹, Victor K. Matsudo¹. ¹CELAFISC, São Paulo, Brazil.  ²Universidade de São Paulo-USP, São Paulo, Brazil.  ³UNIFIVM Faculdades Metropolitaneas Unidas, São Paulo, Brazil.  ⁴Universidad Mayor, Santiago, Chile.  ⁵University of Southampton, Southampton, UK.</td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>3350</td>
<td>Board #38 V̇O₂max and Dual Energy X-Ray Absorptiometry Results in NCAA Division I Tennis Players</td>
<td>Karina L. Wilson, Jason R. Lytle, Steven E. Martin, Stephen F. Crous, FACSM. Texas A&amp;M University, College Station, TX.  (Sponsor: Stephen F. Crous, FACSM)</td>
<td>(No relevant relationships reported)</td>
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<tr>
<td>3351</td>
<td>Board #39 Effect of Moderate Intensity Physical Activity and Modality on Measures of Body Composition in Males</td>
<td>Brian Tyo, Kate Early, Clayton Nicks, James Davis, Cory Gibson. Columbus State University, Columbus, GA.</td>
<td>Email: <a href="mailto:tyo_brian@columbusstate.edu">tyo_brian@columbusstate.edu</a> (No relevant relationships reported)</td>
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<tr>
<td>3352</td>
<td>Board #40 Comparison of Different Methods Used to Assess Body Composition in College Aged Athletes</td>
<td>Parker Nally, Heath Pierce, Jared Hall, Colin Shaw, Holley Sirois, Erica Blodgett, Megan Janard-Howell, Christopher Gourley, Jacob Covello, Taylor Littlefield, MacKenzie Dwyer, Hana Laramie, Erin Tuttle, Paul Visich. University of New England, Biddeford, ME.</td>
<td>Email: <a href="mailto:pjnally@une.edu">pjnally@une.edu</a> (No relevant relationships reported)</td>
<td></td>
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<tr>
<td>3353</td>
<td>Board #41 Agreement Between Two Bioimpedance Spectroscopy Devices and DXA for Body Composition</td>
<td>Bjorn Hornikel¹, Zachary S. Cicone¹, Clifton J. Holmes¹, Bailey A. Welborn¹, Michael R. Esco, FACSM², Jordan R. Moon², Todd Freeborn². ¹University of Alabama, Tuscaloosa, AL.  ²Impedimed Inc., Carlisle, CA.  (Sponsor: Michael R. Esco, FACSM)</td>
<td>Email: <a href="mailto:bhornikel@crimson.ua.edu">bhornikel@crimson.ua.edu</a> (No relevant relationships reported)</td>
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**American College of Sports Medicine**

**G-35**

Free Communication/Poster - **Fitness Assessment**

**Saturday, June 1, 2019, 7:30 AM - 11:00 AM**

**Room:** CC-Hall WA2

3361 Board #49 9:30 AM - 11:00 AM

Health and Fitness Differences Between Urban and Rural Costa Rican Older Adults


1National University, Heredia, Costa Rica. 2University of Costa Rica, San José, Costa Rica. 3University of Kansas, Lawrence, KS. 4University of California, Davis, CA

Email: jose.moncada@ucr.ac.cr

(No relevant relationships reported)

3362 Board #50 9:30 AM - 11:00 AM

A Comparison of Back Squat & Safety Squat Bar on Measures of Strength, Speed, and Power in NCAA Division I Baseball Players

Richard Meldrum, Mark DeBeliso, FACSM. Southern Utah University, Cedar City, UT. (Sponsor: Mark DeBeliso, FACSM)

Email: rmeldrum09@gmail.com

(No relevant relationships reported)

3363 Board #51 9:30 AM - 11:00 AM

Assessment of Bilateral Glenohumeral Posterior Capsule Tightness in Recreational Golfers

Andrew Cannon, PT, SCS, MHS, CSCS, Jessica Wagner, Kevin Finn, FACSM. Merrimack College, North Andover, MA

Email: cannona@merrimack.edu

(No relevant relationships reported)

3364 Board #52 9:30 AM - 11:00 AM

Adjusted Muscle Strength Evaluation Using Directional and Continuous Jump Motion Test by 3D Motion Analysis

Tamotsu Kitabayashi1, Kosho Kasuga2. 1Tokyo University of Science, Tokyo, Japan. 2Gifu university, Gifu, Japan.

Email: k.m.0906@gmail.com

(No relevant relationships reported)

3365 Board #53 9:30 AM - 11:00 AM

Comparison Of RPE Rating Scales For Session RPE

Blaine E. Arney, Reese Glover, Andrea Fusco, Cristina Cortis, Jos J. de Koning, FACSM, Tean van Erp, Salvador Jaime, Richard P. Mikat, FACSM, John P. Porcari, FACSM, Carl Foster, FACSM. University of Wisconsin-La Crosse, La Crosse, WI

Email: b.arney@uwec.edu

(No relevant relationships reported)

3366 Board #54 9:30 AM - 11:00 AM

Reliability and Validity of Hip Rotation Strength Tests: Systematic Error Due to Tester Hand Dominance

Conor Fedge1, Tim Tyler2. 1PRO Sports Physical Therapy of Westchester, Scarsdale, NY. 2Nicholas Institute of Sports Medicine and Athletic Trauma, Lenox Hill Hospital, New York, NY. (Sponsor: Dr. James Navalwa, FACSM)

Email: conor.fedge@gmail.com

(No relevant relationships reported)

3367 Abstract Withdrawn

3368 Board #56 9:30 AM - 11:00 AM

Handgrip Fatigue and Forearm Girth in Intermediate Sport Rock Climbers

Grace MacDonald1, Jacob W. Manning2, Szu-Ping Lee1, Charli Aguilar1, Nathaniel G. Bodell1, Jack Young1, Brian Schilling2, James W. Navalwa, FACSM. 1University of Nevada Las Vegas, Las Vegas, NV. 2Southern Utah University, Cedar City, UT. (Sponsor: Dr. James Navalwa, FACSM)

Email: grace.macdonald@duke.edu

(No relevant relationships reported)
ACSM May 28 – June 1, 2019
Orlando, Florida

P238 Final Program

3376 Board #64  9:30 AM - 11:00 AM
Effect of Treadmill Protocol on Attainment of VO2max Criteria in College Women Athletes
Lauren M. Biscardi, Margaret T. Jones, FACSM, Jennifer B. Fields, Justin J. Merrigan, Jason B. White. George Mason University; Fairfax, VA. (Sponsor: Margaret T. Jones, FACSM)
Email: lbscardi@gmu.edu
(No relevant relationships reported)

3377 Board #65  9:30 AM - 11:00 AM
Evolution Of Exercise-related Dyspnea In Response To Anxiety-provoking Or Relaxing Situations In Healthy Subjects
Elise Piraux, Sarah Rouas, Jennifer Camel-Toueg, Gilles Caty, Grégory Reyecher. Institut de Recherche Expérimentale et Clinique; Brussels, Belgium
(No relevant relationships reported)

3378 Board #66  9:30 AM - 11:00 AM
Oro-nasal Mask Versus Two-way Non-rebreathing Valves For Maximal Aerobic Capacity Testing In Astronauts
Roxanne E. Buxton1, Meghan Downs2, Richard Schuering2, Staci Latham3, James Crowell4, Elizabeth Goetchius1, Andrew FJ Abercromby1. 1University of Houston, Houston, TX, 2KBRWyle, Houston, TX, 3National Aeronautics Space Administration, Houston, TX, 4MEI Technologies, Houston, TX
Email: roxanne.e.buxton@nasa.gov
(No relevant relationships reported)

3379 Board #67  9:30 AM - 11:00 AM
What Type Of Exercise Is Appropriate For An Optimistic Affective Mind-set?
Yusuke ITAYA1, Sinji SATO2, Cgang Hsiao Yun1, Shingo OTUKI1. 1Nakazaki Tokushukai Hospital, Daito, Japan, 2Osaka Sangyo University, Daito, Japan
Email: itaya515@outlook.com
(No relevant relationships reported)

3380 Board #68  9:30 AM - 11:00 AM
Test-retest Reliability Of An Isokinetic Fatigue Test
Giovanna C. Ramos1, Tyler J. Neftner2, Emily E. Grammer1, Cameron J. Addie2, Marisa K. Straughn1, Jordan M. Glenn1, Michelle Gray2, Nicole E. Moyen1, Jennifer L. Vincenzo1, Kylie K. Harmon1, Lee E. Brown, FACSM3. 1University of West Florida, Pensacola, FL, 2University of Central Florida, Orlando, FL
(No relevant relationships reported)

3381 Board #69  9:30 AM - 11:00 AM
Forearm Circumference as a Sarcopeic Indicator in Older Mexican Population. A Preliminary Study
Ermilo Canton-Martinez1, Juan R. Gallegos-Ramírez2, Iván Rentería1, Patricia C. García-Suárez1, José Moncada-Jiménez2, Alberto Jiménez-Maldonado1. 1Universidad Autónoma de Baja California, Campus Ensenada, Mexico, 2Universidad Autónoma de Baja California, Campus Ensenada, Mexico
Email: jose.moncada@uac.baja.mx
(No relevant relationships reported)

3382 Board #70  9:30 AM - 11:00 AM
Aerobic Fitness And Body Composition Of Individuals With Anterior Cruciate Ligament Reconstruction
Ashley N. Triplett, Christopher M. Kuenze. Michigan State University, East Lansing, MI. (Sponsor: James M. Pivarnik, FACSM)
Email: triple18@msu.edu
(No relevant relationships reported)

3369 Board #57  9:30 AM - 11:00 AM
Biomechanical Comparison of Court Shoes for Indoor Sports Performance
Jolene Lim1, Govindasamy Balasekaran, FACSM, Dianna Thor1, Anthony Bert2, Davy Lim2, Jia Bin Fang2. 1Nanyang Technological University, Singapore, Singapore; 2Institute for Sports Research, Singapore, Singapore
(No relevant relationships reported)

3370 Board #58  9:30 AM - 11:00 AM
Characterization Of The Fitness In The Military Personnel Of The Colombian Army Training Schools
Daniel F. Aparicio Gomez, Rodrigo Cuello1, Rosalía Laura E Castro1, Angela M. Puentes, Ana I. García Muñoz, Camilo Lozada Gutierrez, Paula Melo Buitrago, Ivan D. Chavarro Castañeda. Escuela Militar de Cadetes - Ejercito Nacional de Colombia, Bogotá, Colombia
Email: danapago@gmail.com
(No relevant relationships reported)

3371 Board #59  9:30 AM - 11:00 AM
A Comparison Of Physiological And Anthropometric Characteristics Among Senior And Young Elite Endurance Athletes
Ferenc Báns1, Eliza Tóth1, Lili Kós1, Kriszina Szabó1, Eötvös Loránd University, Budapest, Hungary; 2University of Pécs, Pécs, Hungary. (Sponsor: Kevin J. Finn, FACSM)
(No relevant relationships reported)

3372 Board #60  9:30 AM - 11:00 AM
A Longitudinal Study of Muscular Fitness in Korean National Firefighters
Hyunjoo Kang1, Kyoungmin Noh2, Wook Song2, Chungkun Lee2, Seiyoung Park2, Jungjun Park1, Hanjoon Lee1, Dongil Seo1, Yeonsoon Ahn1, Soonchunhyang University, Asan, Korea, Republic of; 2Seoul National University, Seoul, Korea, Republic of; 3Pusan National University, Pusan, Korea, Republic of; 4University of Pécs, Pécs, Hungary. (Sponsor: Kevin J. Finn, FACSM)
(No relevant relationships reported)

3373 Board #61  9:30 AM - 11:00 AM
Convergent Validity and Relative Reliability of Hexoskin during a Maximal Field Test
Monoem Haddad, Feryel Dalansi, Mariam Kharbach, Azam Mohamed, Zlatan Aganovic. Qatar University, Doha, Qatar
Email: mhaddad@cu.edu.qa
(No relevant relationships reported)

3374 Board #62  9:30 AM - 11:00 AM
Cardiovascular Fitness In Recreational Athletes Prior To And After Anterior Cruciate Ligament Reconstruction
Dean M. Cordingley1, Sheila McRae2, Jeff Leiter2, Greg Stranges2, Peter MacDonald2. 1Pan Am Clinic Foundation, Winnipeg, MB, Canada; 2Pan Am Clinic, Winnipeg, MB, Canada
(No relevant relationships reported)

3375 Board #63  9:30 AM - 11:00 AM
Effects of a Psyching Up Technique on Maximum Deadlift Ability: A Pilot Study
Barbara N. Sanchez1, Matthew K. Beeler1, Carl M. Mareh, FACSM, William J. Kraemer, FACSM, Brett A. Comstock2. 1Ohio State University, Columbus, OH; 2Bloomburg University, Bloomburg, PA
Email: sanchez.109@osu.edu
(No relevant relationships reported)

3376 Board #64  9:30 AM - 11:00 AM
Effect of Treadmill Protocol on Attainment of VO2max Criteria in College Women Athletes
Lauren M. Biscardi, Margaret T. Jones, FACSM, Jennifer B. Fields, Justin J. Merrigan, Jason B. White. George Mason University; Fairfax, VA. (Sponsor: Margaret T. Jones, FACSM)
Email: lbscardi@gmu.edu
(No relevant relationships reported)

3377 Board #65  9:30 AM - 11:00 AM
Evolution Of Exercise-related Dyspnea In Response To Anxiety-provoking Or Relaxing Situations In Healthy Subjects
Elise Piraux, Sarah Rouas, Jennifer Camel-Toueg, Gilles Caty, Grégory Reyecher. Institut de Recherche Expérimentale et Clinique; Brussels, Belgium
(No relevant relationships reported)

3378 Board #66  9:30 AM - 11:00 AM
Oro-nasal Mask Versus Two-way Non-rebreathing Valves For Maximal Aerobic Capacity Testing In Astronauts
Roxanne E. Buxton1, Meghan Downs2, Richard Schuering2, Staci Latham3, James Crowell4, Elizabeth Goetchius1, Andrew FJ Abercromby1. 1University of Houston, Houston, TX, 2KBRWyle, Houston, TX, 3National Aeronautics Space Administration, Houston, TX, 4MEI Technologies, Houston, TX
Email: roxanne.e.buxton@nasa.gov
(No relevant relationships reported)

3379 Board #67  9:30 AM - 11:00 AM
What Type Of Exercise Is Appropriate For An Optimistic Affective Mind-set?
Yusuke ITAYA1, Sinji SATO2, Cgang Hsiao Yun1, Shingo OTUKI1. 1Nakazaki Tokushukai Hospital, Daito, Japan, 2Osaka Sangyo University, Daito, Japan
Email: itaya515@outlook.com
(No relevant relationships reported)

3380 Board #68  9:30 AM - 11:00 AM
Test-retest Reliability Of An Isokinetic Fatigue Test
Giovanna C. Ramos1, Tyler J. Neftner2, Emily E. Grammer1, Cameron J. Addie2, Marisa K. Straughn1, Jordan M. Glenn1, Michelle Gray2, Nicole E. Moyen1, Jennifer L. Vincenzo1, Kylie K. Harmon1, Lee E. Brown, FACSM3. 1University of West Florida, Pensacola, FL, 2University of Central Florida, Orlando, FL
(No relevant relationships reported)

3381 Board #69  9:30 AM - 11:00 AM
Forearm Circumference as a Sarcopeic Indicator in Older Mexican Population. A Preliminary Study
Ermilo Canton-Martinez1, Juan R. Gallegos-Ramírez2, Iván Rentería1, Patricia C. García-Suárez1, José Moncada-Jiménez2, Alberto Jiménez-Maldonado1. 1Universidad Autónoma de Baja California, Campus Ensenada, Mexico, 2Universidad Autónoma de Baja California, Campus Ensenada, Mexico
Email: jose.moncada@uac.baja.mx
(No relevant relationships reported)

3382 Board #70  9:30 AM - 11:00 AM
Aerobic Fitness And Body Composition Of Individuals With Anterior Cruciate Ligament Reconstruction
Ashley N. Triplett, Christopher M. Kuenze. Michigan State University, East Lansing, MI. (Sponsor: James M. Pivarnik, FACSM)
Email: triple18@msu.edu
(No relevant relationships reported)
American College of Sports Medicine

Board #71 9:30 AM - 11:00 AM
Achievement of Healthy Fitness Zone by Academic Major in College Students from Puerto Rico
Lucia del R. Martinez-Colón1, Maniliz Segarra1, Mairym Villalobos1, Israel Almodovar-Rivera2, Maritza J. Ruiz-Nieves1, Farah A. Ramirez-Marrero, FACSM. 1University of Puerto Rico, Rio Piedras Campus, San Juan, PR. 2University of Puerto Rico, Medical Sciences Campus, San Juan, PR.
Email: lucia.martinez1@upr.edu
(No relevant relationships reported)

Board #72 9:30 AM - 11:00 AM
Fitness Fights Fires: Examining the Relationship between Physical Fitness and Firefighting Ability
Ammarie Chizewski1, Richard Kesler1, Allyson G. Box1, Steven J. Petruzello, FACSM. 1University of Illinois Urbana-Champaign, Urbana, IL. 2Illinois Fire Service Institute, Champaign, IL. (Sponsor: Steven J. Petruzello, FACSM)
(No relevant relationships reported)

Board #73 9:30 AM - 11:00 AM
Developing Criterion-Referenced Standards for Cardiorespiratory Fitness Among Canadian Adults Aged 18-69 Years
Justin J. Lang1, Emily Wolfe Phillips2, Heather Orpana2, Deepa Rao3, Leonard A. Kaminsky, FACSM2, Robert Ross, FACSM2, Grant R. Tomkinson4. 1Public Health Agency of Canada, Ottawa, ON, Canada. 2Ball State University, Muncie, IN. 3Queen’s University, Kingston, ON, Canada. 4University of North Dakota, Grand Forks, ND. (Sponsor: Dr. Robert Ross, FACSM)
Email: justin.lang@canada.ca
(No relevant relationships reported)

Board #74 9:30 AM - 11:00 AM
Relationship Between Maximal Respiratory Muscle Pressure and Strength and Anthropometric Variables in Healthy Young Adults
Andreu P. González, Francisco J. Pizarro, Oscar Achiardi. Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile.
Email: andreaucm@gmail.com
(No relevant relationships reported)

Board #75 9:30 AM - 11:00 AM
Health Related Fitness Comparison between 1st Year and 4th-6th Year College Students in Puerto Rico
Emmanuel Hernández-Torres1, Maniliz Segarra1, Mairym Villalobos1, Israel Almodovar-Rivera2, Farah A. Ramirez-Marrero, FACSM2, Lucia del R. Martinez-Colón1. 1University of Puerto Rico, Rio Piedras Campus, San Juan, Puerto Rico. 2University of Puerto Rico, Medical Sciences Campus, San Juan, Puerto Rico.
Email: emmanuel.hernandez2@upr.edu
(No relevant relationships reported)

Board #76 9:30 AM - 11:00 AM
Acute Effect of Ischemic Preconditioning on Special Judo Fitness Test
Jeferson Vianna1, Aline Aparecida de Souza Ribeiro1, Jefferson Da Silva Novaes1, Daniel Godoy Martinez1, Luiz Guilherme Da Silva Telles1, Mateus Camaroti Laterza1, Leandro Raider2, Patrícia Parza1, Victor Machado Reis1. 1Universidade Federal de Juiz de Fora, Juiz de Fora, Brazil. 2Center of Higher Education of Valença / Dom André Arcorevedo Educational Foundation, Brazil. (Sponsor: Jeferson Vianna1)
Email: jeferson.vianna1@uffj.edu.br
(No relevant relationships reported)

Board #77 9:30 AM - 11:00 AM
Does Dynamic Stretching Warm-up Influence Hockey Players’ Anaerobic Performance During A Wingate Anaerobic Test?
Rodrigo Villar1, Alexander Schleper1, Robert Anzalone2. 1University of Manitoba, Winnipeg, MB, Canada. 2Franklin Pierce University, Rindge, NH.
Email: rodrigo.villar@umanitoba.ca
(No relevant relationships reported)

Board #78 9:30 AM - 11:00 AM
Validation of an 8-minute Self-Paced Graded Exercise Testing Protocol to Elicit Maximal Responses
Nicholas M. Beltz, Bo Orton, Nicole Fraser, Dawnell Franklin, Jake Johnson. University of Wisconsin-Eau Claire, Eau Claire, WI.
Email: beltzm@uwec.edu
(No relevant relationships reported)

Board #79 9:30 AM - 11:00 AM
Thirty Years Aerobic Power Secular Trend in an Epidemiological Transition Community
Victor K. Matsudo1, Wesley Dornelas1, Timoteo L. Araujo1, José da Silva Guedes2, João da Silva Junior1. 1CELAFISCS, São Paulo, Brazil. 2Santa Casa, São Paulo, Brazil.
(No relevant relationships reported)

Board #80 9:30 AM - 11:00 AM
Physical Activity Characteristics of Recreational Doubles Pickleball
Benjamin D. Boudreaux, Michael D. Schmidt. University of Georgia, Athens, GA. (Sponsor: Robert R. Kraemer, FACSM)
(No relevant relationships reported)

Board #81 9:30 AM - 11:00 AM
Relationship Between Bone Mineral Density & Grip Strength in Collegiate Athletes
Connor J. Collum, Ron L. Snarr, Greg A. Ryan, Emily L. Langford, Michelle L. Eisenman. Georgia Southern University, Statesboro, GA.
(No relevant relationships reported)

Board #82 9:30 AM - 11:00 AM
Correlation Between Activity-type Heart Rate Estimated Energy Expenditure and Indirect Calorimetry
Tony P. Nuñez1, Nicholas M. Beltz2, Benjamin C. Thompson, FACSM. 1Metropolitan State University of Denver, Denver, CO. 2University of Wisconsin—Eau Claire, Eau Claire, WI. (Sponsor: Benjamin C. Thompson, FACSM)
Email: nunez1@msudenver.edu
(No relevant relationships reported)

Board #83 9:30 AM - 11:00 AM
Comparison of Student Administered vs Computerized Test Results in the Wingate Anaerobic Test
Nathan Hammon1, Adam Keith1, Jacob Cooper1, Jennifer Bossi2. 1Anderson University, Anderson, SC. 2Winthrop University, Rock Hill, SC. (Sponsor: Janet Wojcik, FACSM)
Email: nhammon@andersonuniversity.edu
(No relevant relationships reported)

Board #84 9:30 AM - 11:00 AM
Physiological Responses of Arena Polo Players during Simulated Game Play
Abby Pritchard, Samuel Barthel, David Ferguson. Michigan State University, East Lansing, MI.
(No relevant relationships reported)

Board #85 9:30 AM - 11:00 AM
Exploring Upper Quarter Y-Balance Test Biomechanical Strategies in Active College Students
Kevin Masson, Tal Amasay, Alissa Bello, Parry Meredith, Jessica Aquino. Barry University, Miami, FL.
(No relevant relationships reported)
3398  Board #86  9:30 AM - 11:00 AM
The Role of Asymmetrical Strength Deficit on Balance and Fall Risk in a Mature Population.
Glen Reid, John Wygand, FACSM, Robert M. Otto, FACSM, John Petrizzo. Adelphi University, Garden City, NY. (Sponsor: Robert M. Otto, FACSM)
Email: glenreid@mail.adelphi.edu
(No relevant relationships reported)

3399  Board #87  9:30 AM - 11:00 AM
Alpha And Beta Wave EEG Activity During A Self-paced VO2Max Test In Middle-aged Adults
Nicholas J. Hanson1, Rachel Dykstra1, Collin Garner2, Timothy Michael, FACSM1, Michael Miller1, Cory Scheadler1. Western Michigan University; Kalamazoo, MI. (Sponsor: Northern Kentucky University, Highland Heights, KY)
Email: nhanson@gmail.com
(No relevant relationships reported)

3400  Board #88  9:30 AM - 11:00 AM
Bilateral Weight Distribution Asymmetry in the Functional Movement Screen Deep Squat
Mary C. Hemmer, Louis R. Castro, Eric P. Schibek, Matthew F. Moran. Sacred Heart University, Fairfield, CT
(No relevant relationships reported)

3401  Board #89  9:30 AM - 11:00 AM
Effect of a Suspension Training Certification Curriculum on Health Related Fitness and Functional Movement
Emily G. Hilliard1, Megan Jackson1, Alexander McDaniel1, Ann T. Shields1, Rachel E. Williams1, Ryan Swiezy1, Courtney K. Milleson1, Adrian Gonzalez1, Andrew Ortiz1, Brad Hollingsworth1, Sarah Noland1, Raechel Santee1, Phillip Morie1, Lauren Ackerman1, Emma Schmidt1, Kelsey Bryan1, Frances M. Livingston1, Tiago Barreira1, Wayland Tseh1. University of North Carolina Wilmington, Wilmington, NC. (Sponsor: Syracuse University, Syracuse, NY. (Sponsor: Dr. Robert Boyce, FACSM)
(No relevant relationships reported)

3402  Board #90  9:30 AM - 11:00 AM
Physiological Differences Between Motorized and Non-Motorized Treadmill Running
Mary Stenson. College of St. Benedict/St. John’s University, St. Joseph, MN
Email: mcterson@csbsju.edu
(No relevant relationships reported)

3403  Board #91  9:30 AM - 11:00 AM
Functional Assessment of the Upper Limb: Support for Isotonic Measurement Devices
(No relevant relationships reported)

3404  Board #92  9:30 AM - 11:00 AM
Special Fitness Judo Index Test to Evaluate Sports Performance According to the Training Stage In Athletes
Luis Del Valle, Calvin Iiicscas, FACSM. Confederacion Deportiva Autonoma De Guatemala, Guatemala, Ciudad, Guatemala. (Sponsor: Dr. Calvin Iiicscas, FACSM)
Email: calviniii9@gmail.com
(No relevant relationships reported)

3405  Board #93  9:30 AM - 11:00 AM
Physiological Demands of Hard Shoe and Soft Shoe Irish Dancing: A Pilot Study
Madison P. Trebour, Jo P. Morrison, Laura Q. Jimenez, Tim G. Coffey, Madison M. Cutten. Longwood University; Farmville, VA
Email: madison.trebour@live.longwood.edu
(No relevant relationships reported)
American College of Sports Medicine

3413 Board #107 8:00 AM - 9:30 AM
Positional Difference in Linear Momentum During Vertical Jump in Division II College Football Players
Marquez R. Norford, Meghan K. Magee, Justine E. Fox, Scott E. Williams, Jonathan M. Kollars, Allison N. McCracken, Brett A. Comstock, Joseph L. Andreacci, FACSM, KSU, Media. (Sponsor: Joseph L. Andreacci, FACSM) Email: mnl031@huskies.bloomu.edu (No relevant relationships reported)

3414 Board #102 8:00 AM - 9:30 AM
Validity And Reliability Of The Ymca Submaximal Cycle Test Using An Electrically-braked Ergometer
Justin Kidd, Nicholas D. Luden, Michael J. Saunders, FACSM, Christopher J. Womack, FACSM. James Madison University; Harrisonburg, VA. (Sponsor: Christopher Womack, FACSM) Email: kiddjm@dukes.jmu.edu (No relevant relationships reported)

3415 Board #103 8:00 AM - 9:30 AM
A New Functional Screening Tool For Lower Limb Injury Risk: A Retrospective Cohort Study
Liping Jiang1, Shimeng Shi2, Xiaojian Shi3, Zonghan Yang4, Gordon Waddington5, Jeremy Witchalls1, Roger Adams1, Dou El-Asmary2, Jia Han2, Tongji University, Shanghai, China. 1University of Sydney, Sydney, Australia. 2University of Technology, Melbourne, Australia. (No relevant relationships reported)

3416 Board #104 8:00 AM - 9:30 AM
Comparison of Functional Tests of Leg Power in Collegiate Athletes
Spencer Sullivan, Niles Fleet, Peter Brubaker, FACSM. Wake Forest University, Winston-Salem, NC. (Sponsor: Peter Brubaker, FACSM) (No relevant relationships reported)

3417 Board #105 8:00 AM - 9:30 AM
Investigation of Optimal Depth Jump Box Height for Reactive Strength Index
Marias K. Straughn1, Cameron D. Addie1, Giovanna C. Ramos1, Tyler J. Nehmer2, Emily E. Grammer1, Jeffrey D. Simpson1, Ludmila Cosio Lima1, Eric K. Greska1, Lee E. Brown, FACSM1. 1University of Delaware, Newark, DE. 2University of West Florida, Pensacola, FL. 3University of Delaware. Newark, DE. (No relevant relationships reported)

3418 Board #106 8:00 AM - 9:30 AM
The Effects Of Different Local Muscular Endurance Training Protocols In Muscle Activity And Fatigue
Christos Paizis, Carole Corretti, Thomas Danic, Nicolas Babault. INSERM U1093-CAPS, Centre d’Expertise de la Performance, DIJON, France. Email: Christos.paizis@u-bourgogne.fr (No relevant relationships reported)

3419 Board #107 8:00 AM - 9:30 AM
Cyclists’ Brain Cycling: An fMRI Study
Eduardo B. Fontes1, Keli G. Costa1, Henrique Bortolotti2, Daniel A. Cabrall3, Andres Vivas4, Erika Hussey4, Nathan Ward2, Bruno M. Campos1, Timothy D. Noakes5, Li M. Li1, 1Federal University of Rio Grande do Norte, Natal, Brazil. 2Tafts University, Boston, MA. 3University of Campinas, Campinas, Brazil. 4University of Cape Town, Cape Town, South Africa. Email: eduardobfontes@gmail.com (No relevant relationships reported)

3420 Board #108 8:00 AM - 9:30 AM
Comparison of Maximal Aerobic Capacity Between the Treadmill and a Skiing Ergometer
Hannah Nelson, Andy Bosak, Madeline Phillips, Russell Lowell, Branden Ziebell, Moroni de Moors, Anna Blackley, Adriel Lau, Abraham Frech, Abby McCarty. Liberty University, Lynchburg, VA. (Sponsor: Dr. James Schoffstall, FACSM) (No relevant relationships reported)

3421 Board #109 8:00 AM - 9:30 AM
Short-Term Back Squat Protocol Effect on 5km Run Performance
Matthew Barenie1, Jordan Dornenick2, George Schweitzer3, Jason Bennett4, Paula Shetty1, Edward Weiss2. Indiana University, Bloomington, IN. 1Saint Louis University, & Louis, MO. 2Washington University, St. Louis, MO. 3Carroll University, Waukesha, WI. 4Johnson County Community College, Overland Park, KS Email: matbaren@iu.edu (No relevant relationships reported)

3422 Board #110 8:00 AM - 9:30 AM
Proximity To Failure And Repetitions Per Set Effect Rpe Accuracy In The Squat, Bench Press, And Deadlift
Nicholas M. Sautter1, Colby A. Sousa1, Daniel J. Belcher1, Joseph P. Carroll2, Trevor K. Johnson1, Rebecca M. Cermiano1, Eric R. Helms3, Chun-Jung Huang, FACSM1, Michael Whitehurst, FACSM1, Michael C. Zourdos1. 1Florida Atlantic University, Boca Raton, FL. 2Auckland University of Technology, Auckland, New Zealand Email: mzourdos@fau.edu (No relevant relationships reported)

3423 Board #111 8:00 AM - 9:30 AM
Standardization of the Technique for a Medicine Ball Throw Test
Mark G. Cullum, Kenneth R. Turley, FACSM. Harding University, Scary, AR. (Sponsor: Kenneth R. Turley, FACSM) Email: mcullum@harding.edu (No relevant relationships reported)

3424 Board #112 8:00 AM - 9:30 AM
Effects of an Acute Strength and Conditioning Training Session on Dual Energy X-ray Absorptiometry Results
Sean T. Stanelle, Jason R. Lytle, Steven E. Martin, John S. Green, FACSM, Stephen F. Crouse, FACSM. Texas A&M University, College Station, TX. (Sponsor: Stephen F. Crouse, FACSM) (No relevant relationships reported)

3425 Board #113 8:00 AM - 9:30 AM
Effects Of A Short-term Core Stability Exercise On Functional Movement And Balance
Jiyeon Kim, Jungbo Ko, Jongil Lim, Hyejung Choi, Kyoungho Seo, Sukho Lee. Texas A&M-San Antonio, San Antonio, TX. 4Carroll University, Waukesha, WI. (Sponsor: Dr. James Schoffstall, FACSM) (No relevant relationships reported)

3426 Board #114 8:00 AM - 9:30 AM
Validity And Reliability Of The Computrainer® During 40 km And 100 km Time-trials
David Jeker, Eric DB Goulet, Jonathan Gosselin, Jean M. Drouet, Jeff Beliveau. University of Sherbrooke, Sherbrooke, QC, Canada. Email: david.jeker@usherbrooke.ca (No relevant relationships reported)

3427 Board #115 8:00 AM - 9:30 AM
Exercise and Non-Exercise Methods for Determining Cardiorespiratory Fitness
Kelley Phillips, Elizabeth Yost, Amelia Wagenknecht, Sarah Heesacker. University of Minnesota Duluth, Duluth, MN. (Sponsor: Charles Fountaine, FACSM) (No relevant relationships reported)
### ACSM 66th Annual Meeting

<table>
<thead>
<tr>
<th>Board #123</th>
<th>8:00 AM - 9:30 AM</th>
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<tbody>
<tr>
<td>A New Equation to Estimate VO2max for a Racquet Sport Modality</td>
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<tr>
<td>Jesus Barrera-Exposito1, Elvis Alvarez Carnero2, 1Vergen de la Victoria-Martiricos Institute, Malaga, Spain, 2Florida Hospital Translational Research Institute, Orlando, FL</td>
<td></td>
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<tr>
<td>Email: <a href="mailto:jesusbarreraexposito@gmail.com">jesusbarreraexposito@gmail.com</a></td>
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<th>Board #124</th>
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<tr>
<td>Dual Stress Warm-Up Protocol Does Not Significantly Improve Anaerobic Performance</td>
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<tr>
<td>Matthew P. Sacco1, Margaret M. Glick1, Eric C. Bredahl1, Michael T. Lane1, Jacob A. Siedlik1, Creighton University, Omaha, NE, 1Eastern Kentucky University, Richmond, KY, 2Eastern Michigan University, Ypsilanti, MI</td>
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<td>Email: <a href="mailto:mbristow@u.pacific.edu">mbristow@u.pacific.edu</a></td>
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<th>Board #125</th>
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<tr>
<td>Vertical Jump Versus Kinematic Sequencing: Advanced Technology Doesn’t Always Enhance Appraisal</td>
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<tr>
<td>Margaret E. Bristow, Nathaniel J. Holmgren, Johnathon H. Moore1, Cody T. Haur2, Emily L. Grandprey1, Petey W. Mumford1, Matthew A. Romero1, Shelby C. Osburn1, C Brooks A New Equation to Estimate VO2max for a Racquet Sport Modality</td>
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<tr>
<td>1University of North Carolina Wilmington, Wilmington, NC, 2Liberty University, Lynchburg, VA, 3Indiana University, Bloomington, IN, 4Indiana University, Bloomington, IN, 5Indiana University, Bloomington, IN, 6American University, Washington, DC, 7University of Nebraska, Lincoln, NE, 8Liberty University, Lynchburg, VA, 9Creighton University, Omaha, NE, 10University of Nebraska, Lincoln, NE, 11University of the Pacific, Stockton, CA, 12University of Nebraska, Lincoln, NE, 13University of Nebraska, Lincoln, NE</td>
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<tr>
<td>Differences In Performance Traits In Interrupted Versus Continuous Exercise Testing Of Handball Players and Triathletes</td>
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<tr>
<td>Bjorn Sterzing, Tobias Ehler, Sarah Breitbach, Pericles Simon, Johannes Gutenberg University, Mainz, Germany</td>
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<td>Email: <a href="mailto:sterzing@uni-mainz.de">sterzing@uni-mainz.de</a></td>
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<tr>
<td>A Comparison of Techniques for Estimating and Detecting Changes in Skeletal Muscle Cross-Sectional Area</td>
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<tr>
<td>Johnathon H. Moore1, Cody T. Haur2, Emily L. Grandprey1, Katelyn P. Joubert1, Christopher G. Varan1, Paul A. Roberson1, Petey W. Mumford1, Matthew A. Romero1, Shelby C. Osburn1, C Brooks A New Equation to Estimate VO2max for a Racquet Sport Modality</td>
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<tr>
<td>1Auburn University, Auburn, AL, 2LaGrange College, LaGrange, GA, 3Gonzaga University, Spokane, WA, 4Indiana University, Bloomington, IN, 5Indiana University, Bloomington, IN, 6American University, Washington, DC, 7University of Nebraska, Lincoln, NE, 8Liberty University, Lynchburg, VA, 9Creighton University, Omaha, NE, 10University of Nebraska, Lincoln, NE, 11University of the Pacific, Stockton, CA, 12University of Nebraska, Lincoln, NE, 13University of Nebraska, Lincoln, NE</td>
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<tr>
<td>Is Core Temperature Influenced by Triathlon Wet Suit Models When Swimming in Warm Water?</td>
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<tr>
<td>Melissa J. Aure, Gabriela Guzman, Boram Lim, Cordero Roche, John A. Mercer, FACSM, University of Nevada, Las Vegas, Las Vegas, NV</td>
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<td>Email: <a href="mailto:aurem1@unlv.nevada.edu">aurem1@unlv.nevada.edu</a></td>
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<tr>
<td>Synchronous Music Does Not Appear to Change YMCA Bench Press Results</td>
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<tr>
<td>Rhiannon M. Seneli, Samantha R. Lang, Abigail C. Hammer, Alyssa M. Tompkins, Sandra Tecklenburg-Lund, St. Ambrose University, Davenport, IA</td>
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<tr>
<td>Email: <a href="mailto:rhamm1@u.wisc.edu">rhamm1@u.wisc.edu</a></td>
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American College of Sports Medicine

Board #130 8:00 AM - 9:30 AM
Validity of a New Portable Metabolic Gas Exchange System
Holly L. McClung1, Leila A. Walker2, David P. Looney3, William J. Tharion4, Alexander P. Welles5, Heather M. Hansen6, Adam W. Potter7, Maxwell N. Rome8, Christopher R. Chalmers9, Reed W. Hoyt10. 1US Army Research Institute of Environmental Medicine, Natick, MA. 2Oak Ridge Institute for Science and Education, Oak Ridge, TN. (Sponsor: Scott Montain, FACSM)
Email: holly.l.mclung.civ@mail.mil
(No relevant relationships reported)

Board #131 8:30 AM - 9:30 AM
Relationship of OMNI Scale of Perceived Exertion to Heart Rate and RER During Incremental Exercise
Christopher R. Chalmers1, David P. Looney2, Reed W. Hoyt3, Alex P. Welles4, William J. Tharion5, Heather M. Hansen6, Leila A. Walker7, Maxwell N. Rome8, Holly L. McClung9. 1Oak Ridge Associate Universities, Natick, MA. 2United States Army Research Institute of Environmental Medicine, Natick, MA. (Sponsor: Dr. Scott Montain, FACSM)
Email: cchalmers@worcester.edu
(No relevant relationships reported)

Board #132 8:00 AM - 9:30 AM
A Comparison of Waist-to-Height Circumference Ratios to Standardized Measures of Overweight and Obesity
David Q. Thomas, FACSM, Marin McElroy, Ayunna Moore, Jennifer Spring. Illinois State University, Normal, IL
(No relevant relationships reported)

G-37 Free Communication/Poster - Predictive
Saturday, June 1, 2019, 7:30 AM - 11:00 AM
Room: CC-Hall WA2

Board #133 9:30 AM - 11:00 AM
Can the Talk Test Be Used to Predict Training Induced Changes in Ventilatory Threshold?
Carl Foster, FACSM, Kristen M. Deal, John P. Porcari, FACSM, Richard P. Mikat, FACSM, Cristina Cortis, Andrea Fusco. University of Wisconsin-La Crosse, La Crosse, WI
(No relevant relationships reported)

Board #134 9:30 AM - 11:00 AM
U.S. Navy Physical Readiness Test Modality Pilot Study
Rebecca S. Weller1, Douglas M. Jones2, Katherine M. Wilson3, Andrew J. Ordille4, Dale A. Hirsch5, John J. Fraser4, Trevor B. Viboh1, Aaron J. Wolf1, Valerie M. Costantini1, Heath Clifford2, Jay W. Heaney1, Melissa D. Laird3. 1Naval Health Research Center, San Diego, CA. 21st Century Sailor, Millington, TN
Email: rweller223@gmail.com
(No relevant relationships reported)

Board #135 9:30 AM - 11:00 AM
Trauma Exposure Predicts Functional Movement
Stephanie Coffin. Leidos/NHRC, San Diego, CA
Email: stephaniecoffin95@gmail.com
(No relevant relationships reported)

Board #136 9:30 AM - 11:00 AM
A New and Simple Prediction Equation For Health-Related Fitness: Use of Honest Assessment Predictive Modeling
Peter D. Hart. Montana State University - Northern; Havre, MT
Email: peter.hart@msun.edu
(No relevant relationships reported)

Board #137 9:30 AM - 11:00 AM
Ability to Predict Impending Volitional Exhaustion Based on Aerobic Capacity
Dustin W. Davis1, Jenna L. Carducci2, Matthew J. Garver3, Whitley J. Stone4, Meera Penumetula5, Nicolas M. Philipp2, Josie H. Hair1, Jordan R. Elledge1, Haley R. Williams5, Matthew T. Oliphant1, Zachariasia S. Hopkins. University of Central Missouri, Warrensburg, MO
Email: dwdavis@acsm.edu
(No relevant relationships reported)

Board #138 9:30 AM - 11:00 AM
Bilateral And Split Stance Isometric Mid thigh Pulls Can Equally Predict Change Of Direction Ability
Brandon J. Richards1, Mark Gifford2, James K. Morrison1, Ken Seaman. University of New Brunswick, Fredericton, NB, Canada
Email: brandon.richards@unb.ca
(No relevant relationships reported)

Board #139 9:30 AM - 11:00 AM
Use Of A Clinic-Based ACL Prediction Algorithm In Division III Female Soccer And Basketball Players
Charles Ruot1, Rachel Holick2, Lindsay Edwards. Hardin-Simmons University, Abilene, TX. (Sponsor: Dr. Dennis O’Connell, FACSM)
Email: cruot@hsutx.edu
(No relevant relationships reported)

Board #140 9:30 AM - 11:00 AM
Can a Field Based Neuromuscular Test Determine Readiness to Train in Female Team Sport Athletes?
Joel Prowting1, Nick Hodgson1, Rebecca Larson1, Christopher Black2, FACSM, Jason Campbell1. University of Oklahoma, Norman, OK. (Sponsor: Christopher Black, FACSM)
Email: joel.prowting@ou.edu
(No relevant relationships reported)

Board #141 9:30 AM - 11:00 AM
Predict Failure: Muscle Oxygen Dynamics in Elite Climbers During Finger Hang Tests
Andri Feldmann, Daniel Erlacher, Sandro Pfister. University of Bern, Bern, Switzerland
Email: andri.feldmann@ispw.unibe.ch

Board #142 9:30 AM - 11:00 AM
Prediction Of 1rm Bench Press From Repetitions To Fatigue In Untrained, Trained, And Athletic Men
Jerry L. Mayhew1, William F. Brechue, FACSM2, Richard M. Schumacher1, Monica L. Hunter2, Jana L. Arahas3, Bryan Mann4. 1Truman State University, Kirksville, MO. 2A. T. Still University, Kirksville, MO. 3Miami University, Miami, FL
Email: jmjayhew@truman.edu
(No relevant relationships reported)

Board #143 9:30 AM - 11:00 AM
Lower Limb Kinematic Assessment to Predict Water Polo Performance
Cameron A. Williams1, J. Mark VanNess1, Joey Ross1, John Mayberry2, Courtney D. Jensen, University of the Pacific, Stockton, CA
Email: c_williams29@u.pacific.edu
(No relevant relationships reported)

Board #144 9:30 AM - 11:00 AM
Use of Traditional and Modified Functional Movement Screening to Predict Balance with Military Load
Eric M. Scudamore1, Sandra L. Stevens2, Dana K. Fuller3, John M. Coons4, Don W. Morgan, FACSM5. 1Arkansas State University, Jonesboro, AR. 2Middle Tennessee State University, Murfreesbro, TN. (Sponsor: Don W. Morgan, FACSM)
(No relevant relationships reported)
Board #145  9:30 AM - 11:00 AM  
A Fitness Field Test to Predict VO2max in Female Collegiate Field Hockey Players  
Jennifer Morton, Ian Klein. Ohio University, Athens, OH  
(No relevant relationships reported)

Board #146  9:30 AM - 11:00 AM  
Prediction of Lower Extremity Injuries From Vertical Jump  
Kinetic Data in Collegiate Athletes  
Marisa Pontillo, Brian Sennett. University of Pennsylvania Health System, Philadelphia, PA  
Email: marisa.pontillo@uphs.upenn.edu  
(No relevant relationships reported)

Board #147  9:30 AM - 11:00 AM  
Validation Of A Cycle Ergometer Protocol In The Prediction Of VO2  
Alyssa A. Feher, Ashley L. Heffelfinger, Cassidy A. Barrett, Emily A. DeDonna, Alissa Rusbarsky. Cedar Crest College, Allentown, PA  
(Sponsor: Michael D. Brown, FACSM)  
(No relevant relationships reported)

Board #148  9:30 AM - 11:00 AM  
Can A Simple Transfer Task Predict Lower-extremity Function As Measured By Standardized Clinical Measures?  
Rachel Salyer1, Gimmy Fredrick1, Rachelle Reed1, Alison Berg2, Chad Straight3, Anne Brady2, Lauren Higgins3, Ellen Evans, FACSM.  
1The University of Georgia, Athens, GA.  
2University of Massachusetts, Amherst, MA.  
3University of North Carolina Greensboro, Greensboro, NC.  
(Sponsor: Ellen Evans, FACSM)  
Email: red69159@uga.edu  
(No relevant relationships reported)

Board #149  9:30 AM - 11:00 AM  
The Association Between Step Frequency Test, Sprint And Agility Performance  
Terje Dalen, Truls V. Roaas, Håvard Lørås, Morten A. Aune, Tore K. Aune. Nord University, Levanger, Norway  
Email: terje.dalen@nord.no  
(No relevant relationships reported)

Board #150  9:30 AM - 11:00 AM  
Do Physical Activity Behaviors Predict Fitness Gains To An Aerobic Exercise Trial?  
Ryan J. Doughtery1, Elizabeth A. Boots2, Ozioma C. Okonkwo2, Dane B. Cook, FACSM.  
1University of Wisconsin - Madison, Madison, WI.  
2University of Illinois at Chicago, Chicago, IL.  
(Sponsor: Dane B. Cook, FACSM)  
(No relevant relationships reported)

Board #151  9:30 AM - 11:00 AM  
Body Composition Assessment Does Not Improve Prediction of VO2max Using a Yo-Yo Intermittent Shuttle Test  
Sherry Barkley, FACSM, Brooke Bleeker. Augustana University, Sioux Falls, SD  
Email: sherry.barkley@augie.edu  
(No relevant relationships reported)

Board #152  9:30 AM - 11:00 AM  
Ability Of Oddvar-holton Diagram To Predict Repetitions Achieved At 60% And 80% Loads In Females.  
Peter M. Magyari, FACSM1, Caleb Williams2, Jeff T. Wight3, Mike Anton4.  
1University of North Florida, Jacksonville, FL.  
2LaGrange College, LaGrange, GA.  
3Jacksonville University, Jacksonville, FL.  
4Airrosti Rehab Centers, San Antonio, TX  
(No relevant relationships reported)

Board #153  9:30 AM - 11:00 AM  
Maximal Oxygen Consumption Prediction Equation For Athletes Undergoing Cardiopulmonary Exercise Testing On A Treadmill Ramp Protocol  
Rodrigo P. Silva1, Camila Duarte2, Cássia Campi3, Alan Barbosa3, Bárbara Gonçalvez4, Evandro Sperandio5, Marcello Romiti6, Antônio Gagliardi7, Rodolfo Arantes7, Victor Dourado7.  
1Federal University of São Paulo (UNIFESP), Santos, Brazil.  
2Instituto Federal do Estado de São Paulo (IFSP), São Paulo, SP.  
3Southern University of São Paulo (UNIME), Santos, Brazil.  
4Angiogenesis Institute of Cardiovascular Medicine, Santos, Brazil  
(No relevant relationships reported)

Board #154  9:30 AM - 11:00 AM  
Predicting Metabolic Costs Of Heavy Backpacking  
(No relevant relationships reported)

Board #155  9:30 AM - 11:00 AM  
Accuracy Of Indirect Calorimetry And Predictive Equations For The Measurement Of Resting Metabolic Rate  
Jason D. Wagganer. Southeast Missouri State University, Cape Girardeau, MO  
(Sponsor: Thomas J. Pujol, FACSM)  
Email: jwagganer@semo.edu  
(No relevant relationships reported)

Board #156  8:00 AM - 9:30 AM  
Effects Of A Pre-season Intervention On Hydration In Female Collegiate Volleyball Athletes  
Alyssa M. Pollard-McGrandy1, Brian C. Rider2, Adam M. Coughlin3.  
1Saginaw Valley State University, University Center, MI.  
2Hope College, Holland, MI.  
3University of Wisconsin-La Crosse, La Crosse, WI  
(No relevant relationships reported)

Board #157  8:00 AM - 9:30 AM  
The Effects Of Back Squats And Front Squats On Sprint Speed And Vertical Jump within Active Individuals  
Afton Shahiedi Balderree, Mark DeBeliso, FACSM.  
Southern Utah University, Cedar City, UT  
(No relevant relationships reported)

Board #158  8:00 AM - 9:30 AM  
Impact Forces When Exercising On The Freebounder™  
John Porcari, FACSM, Megan Thiels, Nagmeh Gheidi, Susan Brannwell, Ahigail Ryskey, Carl Foster, FACSM.  
University of Wisconsin-La Crosse, La Crosse, WI  
(No relevant relationships reported)

Board #159  8:00 AM - 9:30 AM  
Effects Of Whole Body Vibration Training on Muscular Strength and Balance Ability of Elderly Men  
Li Peng, Jie Zeng, Li Huang. South-West University, Chongqing, China.  
(No relevant relationships reported)

Board #160  8:00 AM - 9:30 AM  
Energy Contributions of Short-distance Running with Change of Direction in Tennis Baseline Practice  
Bo Li, Xiaotian Li, Lu Jin, Yuhaocao, Xinbin Wang, Lv Miao, Wei Yang, Yongming Li. Shanghai University of Sport, Shanghai, China.  
(Sponsor: Carl Foster, FACSM)  
Email: 412001625@qq.com  
(No relevant relationships reported)
Board #161 8:00 AM - 9:30 AM  The Effects Of Leg-drive On Bench Press Performance: Results Of A 5-week Training Study
Jacob K. Gardner1, Kelsey L. Miller1, Justin T. Chizm, Bront Peterson1. 1Bolina University, La Mirada, CA. 2Western Washington University, Bellingham, WA
Email: jake.gardner@biola.edu
(No relevant relationships reported)

Board #162 8:00 AM - 9:30 AM  Effect of Vibration Intervention on Balance, Core Stability and Muscle Strength in Martial Arts Athletes
Kun Wang, Junzhi Sun. Chengdu Sport Institute, Chengdu, China
Email: 464535162@qq.com
(No relevant relationships reported)

Board #163 8:00 AM - 9:30 AM  Quantifying Training Loads During High-Intensity Functional Training: Session-RPE Method
Justin DeBlauw. Kansas State University, Manhattan, KS
Email: jdebblauw@ksu.edu
(No relevant relationships reported)

Board #164 8:00 AM - 9:30 AM  Training Intensity Distribution In A Chinese Top-level Women’s Single Sculls Rower Preparing For 2008 Olympic Games Season
Hongjun Yu1, Xiaoping Chen2, Wei Zi1. 1Tsinghua University, Beijing, China. 2China Institute of Sport Science, Beijing, China. 3He Nan University, Kai Feng, China. (Sponsor: Carl Foster, FACSM)
Email: yuhj12@gmail.tsinghua.edu.cn
(No relevant relationships reported)

Board #165 8:00 AM - 9:30 AM  Impact of Workload on Time-Loss Incidence Rates in Elite Rugby Union Players.
Ben E. W. Cousins1, John G. Morris2, Caroline Sunderland3, Mary E. Nevill1, Anthony M. Bennett4, Simon B. Cooper1. 1Nottingham Trent University, Nottingham, United Kingdom. 2Swansea University, Swansea, United Kingdom. 3University of the West Indies, Trinidad, United Kingdom.
Email: mjohnes1@mail.lipscomb.edu
(No relevant relationships reported)

Board #166 8:00 AM - 9:30 AM  The Influence Of Combine Preparation Training Duration On NFL Combine Or Pro Day Performance
Megan D. Jones1, Jeremy Townsend1, Jordan Luallen1, William Vantress1, Jan Hunter1, Ann Toy1, Kent Johnson, FACSM1. 1Lipscomb University, Nashville, TN. 2Ignition Athletic Performance Group, Nashville, TN. (Sponsor: Dr. Kent Johnson, FACSM)
Email: mdjones1@mail.lipscomb.edu
(No relevant relationships reported)

Board #167 8:00 AM - 9:30 AM  Table Tennis Training Results with Robot: Spin Rate and Hitting Speed in Forehand Loop-Drives
Istvan Kovaes, Austin McClintion, Catherine Rauenrath, Wenhao Liu, FACSM. Slippery Rock University, Slippery Rock, PA. (Sponsor: Wenhao Liu, FACSM)
Email: istvan.kovaes@srnu.edu
(No relevant relationships reported)

Board #168 8:00 AM - 9:30 AM  The Effects of Suspension Training in Lower Body Strength and Balance in Sedentary
Aksel Celik1, Murat Tutar2. 1Indiana University Bloomington, Bloomington, IN. 2Isanasi University, Istanbul, Turkey
Email: aksel.celik@deu.edu.tr
(No relevant relationships reported)

Board #169 8:00 AM - 9:30 AM  Effects of Suspension Training and Unstable Surface on the Lower Limb
Joan Aguilera-Castells1, Bernet Buscal1, Javier Peña2, Mónica Solana-Tramunt1, José Morales1, Azahara Fort-Vanmeerhaeghe1, Aimhoa Nieto2. 1FPCEE Blanquerna, Ramon Llull University, Barcelona, Spain. 2University of Vic-Central University of Catalonia, Vic, Spain
Email: Joanac1@blanquerna.uch.uib.es
(No relevant relationships reported)

Board #170 8:00 AM - 9:30 AM  Developing Muscular Power vs. Muscular Endurance: Results from Two Different Push-ups Training Programs
Austin McClintion, Istvan Kovacs, Wenhao Liu, FACSM. Slippery Rock University, Slippery Rock, PA. (Sponsor: Wenhao Liu, FACSM)
(No relevant relationships reported)

Board #171 8:00 AM - 9:30 AM  Actinin 3 Genotypes and Altitude Training
Orville Byfield, Rachael Irving. University of the West Indies, Kingston, Jamaica. (Sponsor: Melanie Poudevigne, FACSM)
Email: obyfield@gmail.com
(No relevant relationships reported)

Board #172 8:00 AM - 9:30 AM  Effect of Progressive Unilateral Eccentric versus Concentric Training on Muscle Damage of the Contralateral Limb
Trevor C. Chen1, Jian-Han Lai2, Kuo-Wei Tseng3, Wei-Chin Tseng2, Tai-Ying Chou1, Kazunori Nosaka4. 1National Taiwan Normal University, Taipei City, Taiwan. 2University of Taipei, Taipei City, Taiwan. 3Edith Cowan University, Joondalup, Australia
Email: tcchen@ntnu.edu.tw
(No relevant relationships reported)

Board #173 8:00 AM - 9:30 AM  Comparison of Eccentric Utilization Ratio and Reactive Strength Index between Football Linemen and Backs
Taylor J. Manes1, Eric G. Yake1, Jacob D. Morris1, Jerry L. Mayhew1, Bryan Mann2. 1Truman State University, Kirksville, MO. 2University of North Alabama, Muscle Shoals, AL. 3University of the West Florida, Pensacola, FL. (Sponsor: Dr. James Green, FACSM)
Email: jmayhew@truman.edu
(No relevant relationships reported)

Board #174 8:00 AM - 9:30 AM  Minimalist Style Military Boot Does Not Improve Walking Economy Under Load In Trained Males
Dylan W. Sharp1, Montia T. Pace1, Jonathan C. Swain1, Ryan T. Albino1, James M. Green1, Lauren G. Killen1, Harish Chandler1, Jeff D. Simpson1, Eric K. O’Neal2. 1University of North Alabama, Florence, AL. 2Mississippi State University, Mississippi State, MS. 3University of West Florida, Pensacola, FL. (Sponsor: Dr. James Green, FACSM)
Email: dsharp@una.edu
(No relevant relationships reported)

Board #175 8:00 AM - 9:30 AM  Cortisol and Testosterone Awakening Response During Training in Elite Military Men
(No relevant relationships reported)

Board #176 8:00 AM - 9:30 AM  The Effectiveness Of Neuromuscular Training Versus Traditional Training On Dynamic Balance In Athletes: A Meta-analysis
Mei Qi Zhang, John Liu. Springfield College, Springfield, MA
Email: mzhang2@springfieldcollege.edu
(No relevant relationships reported)
Board #177 8:00 AM - 9:30 AM
The Impact of Isometric Handgrip Training on Cardiovascular Stress Reactivity: Does Baseline Psychological Stress Matter?
Ellen C. McGarity-Shiplay, Morgan Silvester, Kaitlyn Liu, Sarah Bailey, Kyra E. Pyke. Queen’s University, Kingston, ON, Canada
Email: osen3@queensu.ca
(No relevant relationships reported)

Board #178 8:00 AM - 9:30 AM
Pushing A Sled: Assessing Its Impact On Gait Temporospatial Parameters In Young Healthy Adults
Martin G. Rosario1, Aneesh Hyder2, Monica Mathis3, Stephanie Timon4, Heather Taylor5, Chad Swank6. 1Texas Woman’s University; Dalls, TX; 2Texas Woman’s University, Denton, TX. (Sponsor: Alexis Ortiz, FACSM)
Email: mrosario1@twu.edu
(No relevant relationships reported)

Board #179 8:00 AM - 9:30 AM
The Specificity of Muscular Coordination between Front Crawl Swimming and Dry-land Resistance Training Exercises.
Emmet Crowley. University of Limerick, Limerick, Ireland. (Sponsor: Dr Giles Warrington, FACSM)
Email: emmet.crowley@ul.ie
(No relevant relationships reported)

Board #180 8:00 AM - 9:30 AM
Effects Of Lower-leg Kinesio Taping On Ankle Strength, Foot Pressure And Balance
Young-Bae Eun1, Ah-Ram Kim2, Jong-Hak Lee3, Ho-Seong Lee4. 1Dankook University, Cheonan-si, Korea, Republic of; 2Namseoul University, Cheonan-si, Korea, Republic of
Email: hosh28@dankook.ac.kr
(No relevant relationships reported)

Board #181 8:00 AM - 9:30 AM
Effects Of Whole-body Electro stimulation On Concurrent Training Related To Explosive Strength, Anaerobic Power And VO2max.
Ismael Martinez Guardado1, Manuel Del Viejo Gragera1, Jeffrey M. Mjaanes, FACSM2, Aldo Vásquez Bonilla3, Rafael Timón Andrade4, Guillermo Olcina Camacho5. 1Sport Sciences Faculty. University of Extremadura, Cáceres, Spain; 2Northwestern University, Evanston, IL; 3University of Colorado, Boulder, CO; 4Loyola University, Chicago, IL; 5Sponsor: Jeffrey M. Mjaanes, FACSM
Email: imartinezg@unex.es
(No relevant relationships reported)

Board #182 8:00 AM - 9:30 AM
Improving Shoulder Internal Rotation Motion of In-season Throwing Athletes: A Randomized Controlled Trial
David Roskin1, Kimberly Keyser1, Christina Alperi2, Heather Myers3. 1Duke University Health System, Durham, NC; 2North Carolina School of Science and Mathematics, Durham, NC
(No relevant relationships reported)

Board #183 8:00 AM - 9:30 AM
The Influence Of Previous Training Intensity On The Rating Of Perceived Exertion
Jos J. de Koning, FACSM1, Jos de Haan2, Carl Foster, FACSM2. 1Vrije Universiteit, Amsterdam, Netherlands; 2University of Wisconsin - La Crosse, La Crosse, WI
Email: jj.de.koning@vu.nl
(No relevant relationships reported)

Board #184 8:00 AM - 9:30 AM
The Effects of 12-week Yoga Practice on Flexibility and Dynamic Balance of Female College Students
Si-Kuan NG. The Chinese University of Hong Kong, Hong Kong, China
Email: sarobert1218@gmail.com
(No relevant relationships reported)

Board #185 8:00 AM - 9:30 AM
Original Mat Pilates in Classic Ballet: A Case Study
Vicente P. Lima1, Bruna A. Souza1, Luanda L. Pasquini2, Bruno L. P. Lima1, Rodrigo G. S. Vale3, Juliana B. P. Castro1. 1Rio de Janeiro State University, Rio de Janeiro, Brazil; 2Castelo Branco University, Rio de Janeiro, Brazil
Email: professorvicentelima@gmail.com
(No relevant relationships reported)

Board #186 8:00 AM - 9:30 AM
Relationship Between Cumulative Training Loads and Treatments of Division II Swimmers
Christopber Lara, Candace Juaha, James Moutat, IV, Jose Alvarez, Blanca Lagaron, Angel Quintero, Adam Murphy, Cameron LeBato, Shruti Bali, Vivy Hua, Derrick Gardner, Nicole Kuhar, Arianna Mazzarini, Marcela Fernandez-Alvez, Vanessa Yingling, FACSM. CSU East Bay, Hayward, CA. (Sponsor: Vanessa Yingling, FACSM)
Email: clarag7@horizon.csueastbay.edu
(No relevant relationships reported)

Board #187 8:00 AM - 9:30 AM
The Effect Of Core Strength Training On Dynamic Balance And Agility In Collegiate Korfball Players
Lei Yao1, Hao Gou2, Lingjie Zheng3, Jindong Chang4. 1Southwest University, Chongqing, China; 2Chongqing College of Humanities, Science & Technology, Chongqing, China; 3High School Affiliated to Southwest University, Chongqing, China. 'The Branch of the Collaborative Innovation Center of Assessment toward Basic Education Quality at Southwest University, Chongqing, China
Email: yaoleisouthwest@163.com
(No relevant relationships reported)

Board #188 8:00 AM - 9:30 AM
Studies On The Effect Of Single Scull Training On The Skill Improvement In Sweep Rowers
Chunmei Cao1, Congming Chen1, Keying Zhang1, Yu Liu1, Weimo Zhu, FACSM. 1Division of Sport Science and Physical Education, Beijing, China; 2University of Illinois at Urbana-Champaign, Urbana, IL. (Sponsor: Weimo Zhu, FACSM)
Email: caocm@tsinghua.edu.cn
(No relevant relationships reported)

Board #189 8:00 AM - 9:30 AM
Results of a Six Week Training Protocol for Dancers to Achieve Pointe (Toe Shoe) Readiness
Marianne Liederbach1, Kristen Stevens2, Emily Sandow1, Karl Orishimo1, Ian J. Kremenic2. 1NYU Langone Orthopedic Hospital, New York, NY; 2Lenox Hill Hospital, New York, NY. (Sponsor: Malachy P. McHugh, PhD, FACSM)
Email: marianne.liederbach@nymcu.org
(No relevant relationships reported)

Board #190 8:00 AM - 9:30 AM
Effect Of 3d Multiple Object Tracking Training On Collegiate Ice Hockey And Lacrosse Game Performance
Erin Manning, Jesse Hall, John Rose. University of New England, Biddeford, ME
Email: emanning1@une.edu
(No relevant relationships reported)

Board #191 8:00 AM - 9:30 AM
Pelvic and Core Strength Training Improves Pelvic Posture, Hamstrings-to-Quadriceps Ratio, and Vertical Jump Performance
Chue-Hoi Leong, Cassandra York, Zachary Bohling. Central Connecticut State University, New Britain, CT
Email: c.leong@ccsu.edu
(No relevant relationships reported)
American College of Sports Medicine

Board #192 8:00 AM - 9:30 AM
Impact of 4-week Brain Endurance Training (BET) on Cognitive and Physical Performance in Professional Football Players
Walter Staiano1, Michele Merlini2, Chiara Gattoni1, Samuele Marcoza. 1University of Valencia, Valencia, Spain. 2University of Kent, Chatham Maritime, United Kingdom. 3University of Bologna, Bologna, Italy
(No relevant relationships reported)

Board #193 8:00 AM - 9:30 AM
Effect of Wheelchair Tai Chi Ball Exercise on Physical & Mental Health among Elderly
Jingle Xu1, Shiqi Yu1, Chung-Hyun Goh1, Ting Liao2, Xuansiang Neil Dong1, Gloria Duke1, Danita Alfred1, Yong Tai Wang, FACSM. 1The University of Texas at Tyler, Tyler, TX. 2Wuhan Sports University, Wuhan, China. (Sponsor: Yong Tai Wang, FACSM)
Email: JXu3@patriots.uttyler.edu
(No relevant relationships reported)

Board #194 8:00 AM - 9:30 AM
Health And Fitness Benefits Using A Heart Rate Intensity-based Commercial Fitness Exercise Regimen
John C. Quindry, FACSM, Cassie Williamson. University of Montana, Missoula, MT
Email: John.quindry@msou.umt.edu
(No relevant relationships reported)

Board #195 8:00 AM - 9:30 AM
Comparison of Two Training Programs for Improvement of Muscular Strength Quantified via Pull-Ups
Claire Lyn Lee1, Eric C. Bredahl1, Michael T. Lane2, Jacob A. Siedlik1. 1Creighton University, Omaha, NE. 2Eastern Kentucky University, Richmond, KY (Sponsor: Joan Eckerson, FACSM)
(No relevant relationships reported)

Board #196 8:00 AM - 9:30 AM
Effect Of Suspension Training On Functional Movement Screen (FMS) and Mobility, Activation, Posture, and Symmetry (MAPS)
Megan Jackson1, Emily Hilliard1, Ann T. Shields1, Alex McDaniel1, Ryan Swiezy1, Rachel Williams1, Courtney K. Milleson1, Andrew Ortiz1, Brad Hollingsworth1, Sarah Noland1, Raechel Santee1, Phillip Morie1, Lauren Ackerman1, Emma Schmid1, Kelsey D. Bryan1, Frances M. Livingston1, Tiago Barreira1, Wayland Tseh1. 1University of North Carolina Wilmington, Wilmington, NC. 2Syracuse University, Syracuse, NY. (Sponsor: Dr. Robert Boyce, FACSM)
(No relevant relationships reported)

Board #197 8:00 AM - 9:30 AM
Biomechanical Analysis of Collegiate Baseball: Training Implications for Enhancement of Pitching Endurance
Andria C. Moitoza1, William P. Lydon1, J. Mark VanNess1, Alexis C. King1, Courtney D. Jensen1, University of the Pacific, Stockton, CA. 2University of Illinois at Urbana-Champaign, Champaign, IL
(No relevant relationships reported)

Board #198 8:00 AM - 9:30 AM
Automated Impact Corroboration From Game Video In Ice-hockey Using Computer Vision Approaches
Muhammad Sohaib Arif1, Aaron Plotnik-Riley1, Erik Bolt2, Stephen J. McGreggor1, Davor Stojanow1. 1Eastern Michigan University, Ypsilanti, MI. 2Clarkson University, Potsdam, NY. (Sponsor: Mark Peterson, FACSM)
Email: marif@emich.edu
(No relevant relationships reported)

Board #199 8:00 AM - 9:30 AM
Relationship Between the Perceived Training Loads of Division II Swimmers and Coaches
Bianca Lagamon, Angel Quintero, Derrick Gardner, Vanessa Yingling, FACSM, James Moaat IV. California State University, East Bay, Hayward, CA. (Sponsor: Vanessa Yingling, FACSM)
(No relevant relationships reported)
Board #208 9:30 AM - 11:00 AM
Acute Muscular Responses to Practical vs. Traditional Blood Flow Restriction Resistance Exercise
Robert Thiebaud¹, Takashi Abe², Jeremy Loenneke³, Tyler Garcia¹, Vickie Wong², Raksha N. Chatakondi², Takashi Abe⁵, John P. Bentley¹, Jeremy P. Loenneke⁴, Matthew B. Jessee¹, Samuel Buckner², Grant Mouser³, Per Aagaard¹, Robert Boushel⁴, Pedro G. Morales-Corral⁵, Takashi Abe⁵, Jochen Stukey and Scott Dankel.¹ Texas A&M University, College Station, TX. ²University of Southern Mississippi, Hattiesburg, MS. ³University of Kentucky, Lexington, KY. ⁴University of Colorado - Denver, CO. ⁵University of South Florida, Tampa, FL. (No relevant relationships reported)
Email: rthiebaud@txwes.edu

Board #209 9:30 AM - 11:00 AM
Blood Flow Restriction Does Not Augment Low Force Contractions Taken to or Near Task Failure
Samuel L. Buckner¹, Matthew B. Jessee², Scott J. Dankel³, Kevin T. Mattoke⁴, James G. Mouser⁵, Zachary W. Bell⁶, Takashi Abe⁷, John P. Bentley⁸, Jeremy P. Loenneke⁹, Matthew J. Bell¹⁰, University of Texas - San Antonio, TX. ¹University of South Florida, Tampa, FL. ²University of Southern Mississippi, Hattiesburg, MS. ³University of Mississippi, University, MS. ⁴Troy University, Troy, AL. ⁵Lindenwood University - Belleville, Belleville, IL. ⁶Troy University, Troy, AL. ⁷University of Mississippi, University, MS. ⁸University of Kentucky, Lexington, KY. ⁹University of Colorado - Denver, CO. ¹⁰University of Southern Mississippi, University, MS. (No relevant relationships reported)
Email: slbuckner@usf.edu

Board #210 9:30 AM - 11:00 AM
Nitric Oxide-dependent Myogenic Satellite Cell Activation In Human Skeletal Muscle Following Blood-flow Restricted Exercise
Jakob L. Nielsen¹, Charlotte Suettà², Ulrik Frandsen³, Lene Rordam¹, Jens Bilow², Robert Boushel³, Per Aagaard³, University of Southern Denmark, Odense, Denmark. ²Bispebjerg-Frederiksberg & Herlev-Gentofte Hospitals, Copenhagen, Denmark. ³Bispebjerg Hospital, Copenhagen, Denmark. ⁴Bispebjerg Hospital & Copenhagen University, Copenhagen, Denmark. ⁵University of British Columbia, Vancouver, BC, Canada. (No relevant relationships reported)

Board #211 9:30 AM - 11:00 AM
Endurance is Augmented By Greater Blood Flow Restriction Pressures: Muscle Size and Strength Are Not
Matthew B. Jessee¹, Samuel Buckner², Grant Mouser³, Kevin Mattoke⁴, Scott Dankel⁵, Takashi Abe⁶, Zachary W. Bell⁷, John P. Bentley⁸, Jeremy P. Loenneke⁹, University of Texas - San Antonio, TX. ¹University of South Florida, Tampa, FL. ²University of Southern Mississippi, Hattiesburg, MS. ³University of Mississippi, University, MS. ⁴University of South Florida, Tampa, FL. ⁵University of Mississippi, University, MS. ⁶Troy University, Troy, AL. ⁷Lindenwood University - Belleville, Belleville, IL. ⁸University of Mississippi, University, MS. ⁹University of Kentucky, Lexington, KY. (No relevant relationships reported)
Email: Matthew.Jessee@usm.edu

Board #212 9:30 AM - 11:00 AM
The Acute Muscle Swelling Response: The Influence Of Sex And Cuff Size
Vickie Wong², Raksha N. Chatakondi², Takashi Abe², Zachary W. Bell², Robert W. Spitz³, Scott J. Dankel⁴, Jeremy P. Loenneke². The University of Mississippi, University, MS. (No relevant relationships reported)
Board #220
9:30 AM - 11:00 AM
Exercise and High-Fat Diets Upr egulate Endoplasmic Reticulum Membrane Protein Sensors and Muc2 in Female Mice
Paul J. Wisniewski, Natasha Malonza, Lauren A. Hall, Robert A. Dowden, Sara C. Campbell, PhD, FACSM. Rutgers University, New Brunswick, NJ. (Sponsor: Sara C. Campbell, PhD, FACSM, ACSM)
Email: pwisniewski86@gmail.com
Reported Relationships: P.J. Wisniewski: Other (please describe); Supported by a student Research Fellowship Award: Crohn's & Colitis Foundation (Ref. # 53364).

Board #221
9:30 AM - 11:00 AM
Hypocaloric High Fat and High Carbohydrate Diets on Visceral Adipose Tissue and Body Composition
Jarrett Walbolt, Yunsuk Koh. Baylor University, Waco, TX
(No relevant relationships reported)

Board #222
9:30 AM - 11:00 AM
Exploring The Utility Of Muac In Classifying Adult Metabolic Syndrome Risk Using Nhans 2015-2016
Hayley G. Boucher, Brian Miller, Laura Richardson, Judith A. Juvancic-Hetzl. The University of Akron, Akron, OH. (Sponsor: Dr. Ronald Oterstetter, FACSM)
Email: hgb6@zips.uakron.edu
(No relevant relationships reported)

Board #223
9:30 AM - 11:00 AM
Patterns of Interrupting Prolonged Sitting and Postprandial Triglycerides in East-Asian Young Men with Central Obesity
Varis Wongpipit, June J. Yu, Stephen H.S. Wong. FACSFM. The Chinese University of Hong Kong, Hong Kong, Hong Kong
Email: varis.w@link.cuhk.edu.hk
(No relevant relationships reported)

Board #224
9:30 AM - 11:00 AM
The Relationship Between a High Sugar-Low Fiber Dietary Food Intake and Obesity in a Clinical Setting
Emma R. Lucas, Nicholas V. Neuwald, Arlette C. Perry, FACSM, Wesley N. Smith. University of Miami, Coral Gables, FL. (Sponsor: Arlette Perry, FACSM)
Email: exl192@miami.edu
(No relevant relationships reported)

Board #225
9:30 AM - 11:00 AM
Acute Exercise Intervention Combined with Metformin’s Influences on Glucose Homeostasis in T2D Mice
Wenqing Shen, Yi Zhang, Qiang Zhang, Zhengtang Qi, Yi Sun, Shuzhe Ding. East China Normal University, Shanghai, China
Email: GraceShen07@163.com
(No relevant relationships reported)

Board #226
9:30 AM - 11:00 AM
Effect Of Combined Training On Metabolic Control In Type 2 Diabetes Overweight Patients
Menaka N. Kalupahana,1 Katya Vargas-Ortiz,2 Claudia Luevano Contrasera,1 Lorena Berra Reynoso,1 Arturo Figueroa, FACSM,1 Efrain Orozco Nieto,1 Antonio E. Rivera1, Maciste H. Macias Cervantes1,1 UNIVERSIDAD DE GUANAJUATO, Leon, Mexico. 2Texas Tech University, Lubbock, TX. 1Clinica MIRA, Leon, Mexico. COMUDE, Leon, Mexico. Instituto de Investigaciones México, Lea’n, México. (Sponsor: Arturo Figueroa, FACSM)
Email: macistehabacuc@yahoo.com.mx
(No relevant relationships reported)
Board #234  9:30 AM - 11:00 AM
Weight Loss Combined with Increased Water Consumption Improves Cognitive Performance in Overweight Older Adults
Kayla J. Airaghi, Brenda M. Davy, FACSM, Elaina L. Marinik, Kevin P. Davy, FACSM, Tina Savla, Benjamin Katz. Virginia Tech, Blacksburg, VA
Email: kaairaghi@vt.edu
(No relevant relationships reported)

Board #235  9:30 AM - 11:00 AM
Effectiveness Of 12-week Exercise Training On Body Composition And Lipid Metabolism Of Non-alcoholic Fatty Liver Disease
Zhu Lin1, Jing-xin Liu2, 1Guangzhou Sport University, Guangzhou, China. 2Shanghai University of Sport, Shanghai, China
Email: 40848567@qq.com
(No relevant relationships reported)

Board #236  9:30 AM - 11:00 AM
Post-Meal Walking Vs. Pre-Meal Vinegar Ingestion: Strategies to Reduce Postprandial Hyperglycemia
Brady J. Holmer1, Sarah J. Taylor2, Cory M. Scheadler1, Matthew J. Garver1. 1University of Florida, Gainesville, FL. 2Abilene Christian University, Abilene, TX
Email: holmerb1@ufl.edu
(No relevant relationships reported)

Board #237  9:30 AM - 11:00 AM
Effects Of Different Exercise On Autophagy & Inflammation In Visceral Adipose Tissue Of Obese Mice
Yongjun Zhao1, Yuxiu He2, 1Lv liang University, lvliang, China. 2Hebei Normal University, Shijiazhuang, China
Email: zhaoyjun@126.com
(No relevant relationships reported)

Board #238  9:30 AM - 11:00 AM
“Living High-training Low” Improves Hepatic Steatosis In Obese Mice
Wang Ru. Shanghai University of Sport, Shanghai, China
Email: wangru0612@163.com
(No relevant relationships reported)

Board #239  9:30 AM - 11:00 AM
Effects Of Nutritional Status On Arterial Stiffness In The Subjects With Pre-sarcopenia
Kecin Huang, Shizue Itano, Kanako Hamaguchi, Toshiyuki Kurosawa, Natsuki Hasegawa, Motoyuki Iemitsu, Kiyoshi Sanada. Ritsumeikan University, Shiga, Japan
Email: grant0361xk@ed.ritsumei.ac.jp
(No relevant relationships reported)

Board #240  9:30 AM - 11:00 AM
Effects of Novel Compression Exercise Technology on Glycogenolysis Levels and Weight in Type II Diabetics
Cristian Torres1, Richard Henderson2, Chloe Wernecke1. 1Vasper Systems, Moffett Field, CA. 2Covington Medical, Lubbock, TX
(No relevant relationships reported)

Board #241  9:30 AM - 11:00 AM
High-fat Diet-induced Obesity Induces Peripheral Neuropathy During Improved Cutaneous Wound Healing
Emma C. Moore, Adam Johnston. University of Prince Edward Island, Charlottetown, PE, Canada
Email: ecmoore@upei.ca
(No relevant relationships reported)

Board #242  9:30 AM - 11:00 AM
Home Cooked Meals With Whole, Plant Foods and the Protection Against Central Adiposity
Nicholas V. Neuwald, Arlette C. Perry, FACSM, Wesley N. Smith. University of Miami, Coral Gables, FL. (Sponsor: Arlette Perry, FACSM)
Email: meuwald@gmail.com
(No relevant relationships reported)

Board #243  9:30 AM - 11:00 AM
Role Of Aerobic Exercise On Cardiac Autonomic Modulation And Adipokines In Polycystic Ovary Syndrome
Stella V. Philbois, Tâbata P. Facioli, HUGO C. SOUZA. UNIVERSITY OF SÃO PAULO, Ribeirão Preto, Brazil
Email: hugoess@fmrp.usp.br
(No relevant relationships reported)

Board #244  9:30 AM - 11:00 AM
Aerobic Exercise Reduced Body Weight through Midbrain-striatal Dopaminergic Plasticity in Obese Mice
Wei Chen, Juan Li, Yuxiu He, Yakai Niu. Hebei Normal University, Shijiazhuang, China
(No relevant relationships reported)

Board #245  9:30 AM - 11:00 AM
Effect Of Physical Training In Leptin-deficient Ob/ob Mice: Oxidative Stress Evaluation In Prefrontal Cortex
Mathieu Santos de Sousa Fernandes, Sr1, Lucas Lucena1, Diorginis José S. Ferreira1, Anderson Pedraza2, Severina Andrade-Silva2, Glauber Braz1, José Stefano Tadeu, PhD2, Fabiana Sant’ana Evangelista, PhD2, Claudia Pinto Marques Souza de Oliveira, PhD2, MD1, Claudia J. Lagranha1. 1University of São Paulo, São Paulo, Brazil. 2Federal University of São Francisco Valley, Petrolina, Brazil. 3Federal University of Pernambuco, Vitória de Santo Antão, Brazil
Email: theusfernandes10@hotmail.com
(No relevant relationships reported)

Board #246  9:30 AM - 11:00 AM
Severity of Fatigue is Associated with Cardiorespiratory Fitness in Cancer Survivors
Rosie Twomey1, Mary E. Medsky2, John Temesi3, S. Nicole Culos-Reed1, Guillaume Y. Millet1. 1University of Calgary, Calgary, AB, Canada. 2Oregon Health & Science University, Portland, OR. 3Northumbria University, Newcastle upon Tyne, United Kingdom.
*Univ Lyon, UJM-Saint Etienne, Saint-Etienne, France
Email: Rosemary.Twomey@ucalgary.ca
(No relevant relationships reported)

Board #247  9:30 AM - 11:00 AM
Comparing Modified Treadmill Protocols for Cancer Survivors: A Pilot Study
Email: dshackel@carrollu.edu
(No relevant relationships reported)
American College of Sports Medicine

3560 Board #248  9:30 AM - 11:00 AM
Exercise as Supportive Care Has Selective Benefits for Chemotherapy Tolerance and Weight Gain
Amy A. Kirkham1, Kelcey A. Bland2, Karen A. Gelmon3, Donald C. McKenzie4, Kristin L. Campbell, FACSM. 1University of Alberta, Edmonton, AB, Canada. 2Australian Catholic University, Melbourne, Australia. 3University of Alberta, Canada. 4University of British Columbia, Vancouver, BC, Canada. (Sponsor: Kristin Campbell, FACSM)
Email: amy.kirkham@ualberta.ca
(No relevant relationships reported)

3561 Board #249  9:30 AM - 11:00 AM
Adherence And Attendance During Versus After Chemotherapy In Exercise Influence On Taxane Side Effects
Kendra Zadravec1, Kelecey A. Bland2, Amy A. Kirkham3, Josh Bovard4, Tamara Shenkier5, David Zucker5, Margot K. Davis6, Donald C. McKenzie7, Karen A. Gelmon7, Kristin L. Campbell8. 1University of British Columbia, Vancouver, BC, Canada. 2Australian Catholic University, Melbourne, Australia. 3University of Alberta, Edmonton, AB, Canada. 4University of British Columbia, Vancouver, BC, Canada. 5University of Vermont, Burlington, VT. 6University of California, San Francisco, San Francisco, CA. 7University of Alberta, Canada. 8University of British Columbia, Vancouver, BC, Canada. (Sponsor: Kristin Campbell, FACSM)
Email: kendra.zadravec@ubc.ca
(No relevant relationships reported)

3562 Board #250  9:30 AM - 11:00 AM
Changes of Total and Tumor Specific Cell Free Dna During an Exhaustive Cycling Exercise Test
Tobias Ehler, Suzan Botzenhardt, Perikles Simon. Johannes Gutenberg University, Mainz, Germany
Email: ehler@uni-mainz.de
(No relevant relationships reported)

3563 Board #251  9:30 AM - 11:00 AM
Cardiac Rehabilitation Improves Fitness In Patients With Subclinical Markers Of Cardiotoxicity While Receiving Chemotherapy
Dennis J. Kerrigan, FACSM, Madhulata Reddy, Eleanor Walker, Bernard Cook, Randa Loutfi, James McCord, Jodi Baxter, Steven J. Keteyian, FACSM. Henry Ford Heart and Vascular Institute, Detroit, MI
Email: dkerrigan1@hfhs.org
(No relevant relationships reported)

3564 Board #252  9:30 AM - 11:00 AM
Exercise Prescription Based on a Six Minute Walk Test in Childhood Acute Lymphoblastic Leukemia Survivors
Gabrielle E. Duhannel1, Maxime Carol1, Valérie Lemay1, Simon Droin1, Nathalie Alos2, Laurence Bertout3, Maja Krajnovic3, Caroline Lavenderiere4, Marie-Josée Raboisson5, Daniel Sinnett6, Gregoir Andelfinger7, Daniel Cumier1. 1Université de Montréal, Montréal, QC, Canada. 2Saint-Justine University Hospital Research Center, Montréal, QC, Canada. Email: gabrielle.duhannel@gmail.com
(No relevant relationships reported)

3565 Board #253  9:30 AM - 11:00 AM
Comparison of Body Composition Quantification Methods in Prostate Cancer Patients Undergoing Androgen Deprivation Therapy
Zachary L. Chaplow1, Brian C. Focht, FACSM2, Alexander R. Lucas2, Elizabeth Grainger2, Christina Simpson3, Ciaran M. Fairman4, Jennifer M. Thomas-Ahner5, Jessica Bowman6, Victoria R. DeScevza, Kathryn Dispennette7, Marcy Haynam9, Steven K. Clinton7. 1The Ohio State University, Columbus, OH. 2Virginia Commonwealth University, Richmond, VA. 3Edith Cowan University, Perth, Australia. Email: rachel.bollaert@marquette.edu
(No relevant relationships reported)

3566 Board #254  9:30 AM - 11:00 AM
Delivering Exercise Medicine To Pancreatic Cancer Patients: Is It Feasible, Safe And Efficacious?
Nicolas H. Hart1, Dennis R. Taaffe, FACSM2, Robert U. Newton3, Nigel A. Spy4, Daniel A. Galvão, FACSM5. Edith Cowan University, Perth, Western Australia, Australia. 2Genesis Care, Perth, Western Australia, Australia. (Sponsor: Dennis Taaffe, FACSM)
Email: n.hart@ecu.edu.au
(No relevant relationships reported)

G-43 Free Communication/Poster - Clinical Exercise Physiology - Other
Saturday, June 1, 2019, 7:30 AM - 11:00 AM
Room: CC-Hall WA2

3567 Board #255  9:30 AM - 11:00 AM
The Intersection Of Cognitive Performance, Physical Function, Aging, And Multiple Sclerosis: A Cross-sectional Comparative Study
Rachel E. Bollaert1, Brian M. Sandroff1, Elizabeth Stine-Morrow2, Bradley P. Sutton3, Robert W. Mott3. Marquette University, Milwaukee, WI. 1University of Alabama at Birmingham, Birmingham, AL. 2University of Illinois, Urbana, IL.
Email: rachel.bollaert@marquette.edu
(No relevant relationships reported)

3568 Board #256  9:30 AM - 11:00 AM
Influence of Acute Aerobic Exercise on 24-hour Ambulatory Central Blood Pressure
Malvina Shoukri1, Thomas Burke, Brandon Kistler, Bradley Fleenor, Matthew Harber, FACSM, Ball State University, Muncie, IN. (Sponsor: Matthew P. Harber, FACSM)
(No relevant relationships reported)

3569 Board #257  9:30 AM - 11:00 AM
Leucocyte Telomere Length, Inflammation and Oxidative Stress in Master Athletes: The Interplay
Herbert G. Simões, Samuel S. Aguiar, Lysleine A. Deus, Caio V. Souza, Rodrigo VP Neves, Lucas P. Barbosa, Patrick A. Santos, Erica C. c c Rosa, Rosângela V. Andrade, Thiago S. Rosa. CATHOLIC UNIVERSITY OF BRASILIA, Brasília, Brazil
Email: hgsimos@gmail.com
Souza Presentings

3570 Board #258  9:30 AM - 11:00 AM
Short-term Detraining Effects On Cardiorespiratory Fitness And Body Composition In Trained Older Adults
Inês R. Correia, Sofia L. Freitas, Júlia M. Lopes, João P. Magalhães, Diana A. Santos, Luís B. Sardinha. Faculdade de Medicina Humana, Universidade de Lisboa, Lisbon, Portugal
(No relevant relationships reported)

3571 Board #259  9:30 AM - 11:00 AM
The Effects of Aerobic Exercise on Heart Rate Variability in People Living with HIV
Norberto Quiles1, Alex Evangelista2, Alexis Ortiz, FACSM. 1Queens College, Flushing, NY. 2Borough of Manhattan Community College, New York, NY. 3UT Health San Antonio, San Antonio, TX. (Sponsor: Alexis Or, FACSM)
Email: bodyworks.pt@gmail.com
(No relevant relationships reported)
### Board #260
**9:30 AM - 11:00 AM**
**Associations Between Cardiorespiratory Fitness and Brain-derived Neurotrophic Factor In Serum and Platelets-poor Plasma**

Anne K. Geji¹, Lars Bo Andersen², Jakob Tarp², Natasa Holbæk Pedersen¹, Niels Wedderkopp¹, Lone Pejs³, Anna Bugge¹. ¹University College Copenhagen, Copenhagen, Denmark. ²Western Norway University of Applied Sciences, Sogndal, Norway. ³Norwegian School of Sport Sciences, Oslo, Norway. 4University of Southern Denmark, Odense, Denmark. 5University Hospital Copenhagen, Copenhagen, Denmark

Email: akge@kp.dk
(No relevant relationships reported)

### Board #261
**9:30 AM - 11:00 AM**
**Effect of Resistance Training Session on Intraocular Pressure in Patients with Primary Open Angle Glaucoma**

Luis Felipe Milano Teixeira¹, Sidney Diyou Tamura², Henrique Malaquias Possobom³, Marcelo Conte. ¹Universidade de Sorocaba, Sorocaba, Brazil. ²NEPECE - HOSBOS, Sorocaba, Brazil. ³HOSBOS, Sorocaba, Brazil. 4Escola Superior de Educação Física de Jundiaí, Jundiaí, Brazil

Email: teixeira.luisfelipe@gmail.com
(No relevant relationships reported)

### Board #262
**9:30 AM - 11:00 AM**
**Hippocampal Growth Factor and Myokine Cathepsin B Response to Aerobic and Resistance Training in 3xTg-AD Mice**

Gabriel Pena. Florida Atlantic University, Boca Raton, FL. (Sponsor: Michael Whitehurst, FACSM)
(No relevant relationships reported)

### Board #263
**9:30 AM - 11:00 AM**
**Comparison of Work-induced Fatigue Responses Between One Versus Three 12-hour Shifts in Nurses**

Brennan J. Thompson. Utah State University, Logan, UT

Email: brennan.thompson@usu.edu
(No relevant relationships reported)

### Board #264
**9:30 AM - 11:00 AM**
**The Effectiveness Of Simulation-based Learning In Preparing Exercise Physiology Students For Emerging Clinical Practice Domains**

Nathan E. Reeves. Griffith University, Griffith University, Australia

Email: n.reeves@griffith.edu.au
(No relevant relationships reported)

### Board #265
**9:30 AM - 11:00 AM**
**Relationship Between Changes in Gait Speed & Resistance Training**

William Perez, Brian Phipps, Jeffrey Beans, Leslie Katznel, Odessa Addison. Veterans Affairs Medical Center, Baltimore, MD

(No relevant relationships reported)

### Board #266
**9:30 AM - 11:00 AM**
**Telephone Intervention Is An Effective Follow-up To Stabilize %body Fat and Markers Of Inflammation After Primary Intervention**

Kyung-Shin Park¹, Brett S. Nickerson¹, Seongkwon Cho¹, Bounj Kang¹, ¹Texas A&M International University, Laredo, TX. ²Elizabeth City State University, Elizabeth City, NC

Email: kpark@tamiam.edu
(No relevant relationships reported)

### Board #267
**9:30 AM - 11:00 AM**
**Sports Injury Management Program in Pima Community College Offers Study Abroad Opportunities for International Students**

Akira Kondo¹, Chiaki Ishioka¹, Nobuko Hongu, FACSM. ¹Pima Community College, Tucson, AZ. ²University of Arizona, Tucson, AZ. (Sponsor: Nobuko Hongu, FACSM)

Email: akondo@pima.edu
(No relevant relationships reported)

### Board #268
**9:30 AM - 11:00 AM**
**A Comparison of Attitude Toward Physical Education Class, Physical Activity Level, and Aerobic Fitness between Hong Kong and Shanghai Adolescents**

HU Rui, HUI Stanley Sai-Chuen, FACSM. The Chinese University of Hong Kong, Hong Kong, Hong Kong

Email: hurui@link.cuhk.edu.hk
(No relevant relationships reported)

### Board #269
**9:30 AM - 11:00 AM**
**Effects Of A Loaded Roach March On Isometric Muscle Strength Measured With A Novel HHD Fixation System**

Jessica Schindler¹, Jonathan Kaplan¹, Clifford Hancock¹, Rebecca Zifchock¹, Erika Hussey¹, John Ramsay¹. ¹Combat Capabilities Development Command - Soldier Center, Natick, MA. ²United States Military Academy, West Point, NY.

(No relevant relationships reported)

### Board #270
**9:30 AM - 11:00 AM**
**Effects of High-Intensity Interval Training on Fitness during Initial Military Training**

John R. Boman. United States Military Academy, West Point, NY.

Email: john.boman@westpoint.edu
(No relevant relationships reported)

### Board #271
**9:30 AM - 11:00 AM**
**Individual Muscle Hypertrophy and Strength Responses to Traditional Resistance Training vs Drop Set System**

Cleiton Libardi¹, Vitor Anglero¹, Carlos Ugrinowitsch². ¹Federal University of São Carlos (UFSCar), São Carlos, Brazil. ²University of São Paulo (USP), São Paulo, Brazil.

Email: c.libardi@ufscar.br
(No relevant relationships reported)

### Board #272
**9:30 AM - 11:00 AM**
**Wearable Positive End-Expiratory Pressure Valve Increases Aerobic Capacity and Performance**

STEPHEN F. CROUSE, FACSM, Sean Boutros², William B. Benton¹, Michael Moreno¹, Patrick McCulloch², Bradley S. Lambert¹. ¹Texas A&M University, College Station, TX. ²United States Military Academy, West Point, NY. ³Methodist Research Institute, Houston, TX.

Reported Relationships: S.F. Crouse: Other (please describe); Member, Board of Directors, PEEP Performance LLC.
American College of Sports Medicine

Board #273 9:30 AM - 11:00 AM
Muscle, Blood and Performance Responses to Ice Hockey Match-play in Elite Male Players
Jeppe F. Vigh-Larsen1, Giorgios Ermidis2, Vincenzo Rago3, Morten B. Randers3, Dan Fransson4, Lasse G. Hybhold1, Frank V. de Paoli5, Kristian Overgaard6, Thomas B. Andersen1, Lars Nybo1, Peter Krustup1, Magni Mohr2. 1Aarhus University, Aarhus, Denmark. 2University of Southern Denmark, Odense M, Denmark. 3University of Exeter, Exeter, United Kingdom. 4University of Gothenburg, Gothenburg, Sweden. 5University of Copenhagen, Copenhagen, Denmark.
Email: jeppefoged@hotmail.com
(No relevant relationships reported)

Board #274 9:30 AM - 11:00 AM
Effect of Bicycle Crank Length on Maximal Oxygen Consumption and Ventilatory Threshold in Trained Cyclists
Stephanie A. Sullivan1, Jordan T. Lee1, Chad W. Wagoner1, Brian C. Jensen2, David K. Williams1, Brian Moscicki1, Bing Yu1, Edgar W. Shields1, Claudio L. Battaglini, FACSM1. 1University of North Carolina, Chapel Hill, NC. 2University of North Carolina School of Medicine, Chapel Hill, NC. 3Indiana University, Bloomington, IN.
(No relevant relationships reported)

Board #275 9:30 AM - 11:00 AM
The Effects of Experiential Learning on Exercise Physiology Self-Efficacy
Miriam E. Leary, Lori A. Sherlock. West Virginia University, Morgantown, WV.
Email: miriam.leary@hsc.wvu.edu
(No relevant relationships reported)

Board #276 9:30 AM - 11:00 AM
Left Ventricular Function and Cardiac Biomarker Release - The Influence of Exercise Intensity, Duration and Mode: A Systematic Review and Meta-Analysis
James A. Donaldson. CANTERBURY CHRIST CHURCH UNIVERSITY, Canterbury, United Kingdom.
Email: james.donaldson@canterbury.ac.uk
(No relevant relationships reported)

Board #277 9:30 AM - 11:00 AM
Independent and Combined Effects of Arterial Angulations and Shear Stress on Vascular Function
Email: ac039@email.uark.edu
(No relevant relationships reported)

Board #278 9:30 AM - 11:00 AM
Association Of Mid-pregnancy And Current Exercise With Arterial Stiffness 6 Months-3 Years After Delivery In Women
Abby J. Heinichen, Catherine A. O’Byrne, Paige Wilbanks, Nicole Hoffner, William Tucker, Abbi D. Lane-Cordova. University of South Carolina, Columbia, SC.
Email: lanecord@mailbox.sc.edu
(No relevant relationships reported)

Board #279 9:30 AM - 11:00 AM
The Impact of Blood Flow Restrictive Exercise on Endothelial Function
Leryn Reynolds, Robbie Pittman, Hannah Twiddy, Old Dominion University, Norfolk, VA.
Email: lreynold@odu.edu
(No relevant relationships reported)

Board #280 9:30 AM - 11:00 AM
The Effects of Simultaneous Upper and Lower Body Cycling on Cardiorespiratory Responses.
Jessica Royen, Brandi N. Guillette, Kierstin Marshall, Kimberly Billiot, Robert R. Kraemer, FACSM. Southeastern Louisiana University, Hammond, LA.
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board #</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>3600</td>
<td>9:30 AM - 11:00 AM</td>
<td>Dearborn SHINES For Healthy Kids: Understanding Physical Activity Among Arab American Students in Physical Education and the Impact of SPARK</td>
<td>Erin E. Centelo, Jeanne Barcelona, Hayley McKown, Christine Pedder, Mariane Fahlman, FACSM 1, University of Hawaii at Manoa, Honolulu, HI 2, Wayne State University, Detroit, MI. Email: <a href="mailto:ecenelope@wayne.edu">ecenelope@wayne.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>3601</td>
<td>9:30 AM - 11:00 AM</td>
<td>Do Activity Monitors Correctly Classify Driving Time as Sedentary?</td>
<td>Rachel Barnett, Matthew Nelson, Cami Christopher, Mami Takeda, Julian Martinez, Sarah K. Keadle. California Polytechnic State University, San Luis Obispo, CA. (No relevant relationships reported)</td>
</tr>
<tr>
<td>3602</td>
<td>9:30 AM - 11:00 AM</td>
<td>Comparing Estimates Of Sedentary, Light And Moderate-vigorous Physical Activity Between Activity Monitors</td>
<td>Cami Christopher, Rachel Barnett, Mami Takeda, Julian Martinez, Matt Nelson, Sarah Keadle. California Polytechnic State University, San Luis Obispo, CA. Email: <a href="mailto:cchrist17@calpoly.edu">cchrist17@calpoly.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>3603</td>
<td>9:30 AM - 11:00 AM</td>
<td>High-active Mice Have Elevated Clearance Rate Of Beas Compared To Low-active Mice</td>
<td>Jorge Z. Granados, Gabriella A. M. Ten Have, Ayland C. Letsinger, John J. Thaden, J. Timothy Lightfoot. FACSM, Nicolaas E. P. Deutz. Texas A&amp;M University, College Station, TX. Email: <a href="mailto:jgranados@tamu.edu">jgranados@tamu.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>3604</td>
<td>9:30 AM - 11:00 AM</td>
<td>Ghrelin and PYY are Differentially Altered Following an Acute Bout of Aerobic vs Resistance Exercise</td>
<td>Tanya M. Halliday, Mollie H. White, Davis M. Bitton, Allison K. Hild, Jonathan R. Miller, Edward L. Melanson, FACSM, Marc-Andre Comer. 1 University of Utah, Salt Lake City, UT. 2 University of Colorado Anschutz Medical Campus, Aurora, CO. Email: <a href="mailto:tanya.halliday@utah.edu">tanya.halliday@utah.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>3605</td>
<td>9:30 AM - 11:00 AM</td>
<td>Can A Polyphenol Supplement Improve Sports Vision And Reaction Time? A Pilot Investigational Study</td>
<td>Neil E. Wolkodoff, Gerald M. Haase, Bethany Brauning. 1 Colorado Center for Health &amp; Sport Science, Denver, CO. 2 University of Colorado, Aurora, CO. 3 Boulder Community Hospital, Boulder, CO. Email: <a href="mailto:neil@cochss.com">neil@cochss.com</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>3606</td>
<td>9:30 AM - 11:00 AM</td>
<td>Metabolic Flexibility is Impaired in Response to Acute Exercise in the Young Offspring of Mothers with Type 2 Diabetes</td>
<td>Cullen Vincellette, Timothy Allerton, Brian Irving, FACSM, Guillaume Spielmann, Neil Johannsen. Louisiana State University, Baton Rouge, LA. Email: <a href="mailto:cvinc19@lsu.edu">cvinc19@lsu.edu</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>
American College of Sports Medicine

Board #302  9:30 AM - 11:00 AM
Head Trauma Biomarkers In NCAA Men’s Soccer Athletes Over The Course Of A Season
Andreas Kreuter1, Javier A. Zaramago2, Jonathan M. Oliver1, Anthony Anzalone1, Tori Corso3, David Javovic1, James Hall1, Sid O’Bryant1, Stacie L. Urbina2, Lernel W. Taylor, IV, FACSM3. Texas Christian University, Fort Worth, TX. 1University of Mary Hardin-Baylor, Belton, TX. 2United States Military Academy, West Point, NY. 3Wake Forest School of Medicine, Winston-Salem, NC. 4University of North Texas Health Science Center, Fort Worth, TX.
Email: a.kreuter@tcu.edu
(No relevant relationships reported)

Board #303  9:30 AM - 11:00 AM
The Role of Endogenous Opioids in Cerebral Glucose Uptake Following Acute Exercise
Qudratullah Qadiri1, Candance Longoria2, Harlee York1, Kelly A. Dougherty1, Bryce J. Muth1, Sara C. Campbell, FACSM3, John J. Guen4. Stockton University, Galloway, NJ. 2Rutgers University, New Brunswick, NJ.
(No relevant relationships reported)

Board #304  9:30 AM - 11:00 AM
Diminished Cardiovascular Performance That Persists Up To 3 Days After Completion Of Repeated 6-hour Hypoxic Resting Dives At L.35 ATA Is Associated With Reduced Oxygen Consumption
Elizabeth R. Bergeron, John P. Florian. Navy Experimental Diving Unit, Panama City Beach, FL.
(No relevant relationships reported)

Board #305  9:30 AM - 11:00 AM
The Combined Impact Of Altitude And Heat Shock Protein 70 And Hypoxia-inducible Factor-1 Alpha
Roy M. Salgado, Katherine M. Mitchell, Karleigh E. Bradbury, Adam J. Luippold, Charles S. Fulco, Jermaine A. Ward, Robert W. Kenefick, FACSM. US Army Research Institute of Environmental Medicine, Natick, MA.
Email: roy.m.salgado.civ@mail.mil
(No relevant relationships reported)

Board #306  9:30 AM - 11:00 AM
Effects Of Exercise On Stress-induced Attenuation Of Vaccination Responses In Mice
Yi Sun1, Selena S. Wang2, Christy S. Carter1, Thomas W. Buford, FACSM3, Jeffrey A. Woods, FACSM4. 1University of ALABAMA AT BIRMINGHAM, BIRMINGHAM, AL. 2University OF ILLINOIS AT URBANA-CHAMPAIGN, URBANA, IL. 3University of North Texas Health Science Center, Fort Worth, TX. 4Wake Forest School of Medicine, Winston-Salem, NC.
Email: jisun@uabmc.edu
(No relevant relationships reported)

Board #307  9:30 AM - 11:00 AM
Body Composition Assessment In Athletes with Cardiac Disease
Claudia Pérez1, Juan Tejo2, Raúl Smith1, Fernando Carrasco1. 1Hospital de Carabineros de Chile, Santiago, Chile. 2Centro de Alto Rendimiento de Chile, Santiago, Chile. 3Instituto Teleton, Santiago, Chile. 4University of Chile, Santiago, Chile.
Email: claudiaperezmlmd@gmail.com
(No relevant relationships reported)

Board #308  9:30 AM - 11:00 AM
Wearable Technology To Reduce Sedentary Behavior And CVD Risk In Older Adults: A Pilot Trial
Lisa M. Roberts1, Byron C. Jaeger2, Liliana C. Baptista1, Sara A. Harper1, Elizabeth Jackson1, Anna K. Gardner1, Bhanauprasad Sandesar2, Todd M. Marin1, Stephen D. Anton1, Thomas W. Buford1. 1University of Alabama at Birmingham, Birmingham, AL. 2University of Florida, Gainesville, FL.
(No relevant relationships reported)

Board #309  9:30 AM - 11:00 AM
Identifying Specific Elements Necessary for a Pediatric Cardiac Rehabilitation Program: An e-Delphi Study
Tracy Curran1, Susan Duty2, Naomi Gauthier, Rachelle Pojednic, FACSM3. 1Boston Children’s Hospital, Boston, MA. 2Simon’s University, Boston, MA. 3University of Southern Denmark, Odense, Denmark.
Email: tracy.curran@cardio.chboston.org
(No relevant relationships reported)

Board #310  9:30 AM - 11:00 AM
Consequences Of Physical Inactivity In Older People: An Umbrella Review Of Meta-analyses
Conor Cunningham1, Roger O’ Sullivan2, Paolo Caserotti3, Mark A. Tully1. 1Institute of Public Health in Ireland, Dublin, Ireland. 2University of Edinburgh, Edinburgh, United Kingdom. 3University of Southern Denmark, Odense, Denmark.
Email: conor.cunningham@publichealth.ie
(No relevant relationships reported)

Board #311  9:30 AM - 11:00 AM
How Does Circadian Rhythm Relate To Neuropsychological and Neuroimaging Markers in Older People at Risk for Dementia?
(No relevant relationships reported)

Board #312  9:30 AM - 11:00 AM
Exercise Intervention Reduces Circadian Clock Suppressor, CRY2, in Adults with Obesity
Melissa L. Erickson1, Hui Zhang2, John P. Kirwan, FACSM3. 1Pennington Biomedical Research Center, Baton Rouge, LA. 2Case Western Reserve University, Cleveland, OH. 3University of Michigan, Ann Arbor, MI. 4University of North Carolina at Chapel Hill, Chapel Hill, NC.
Email: melissal Erickson@pbrc.edu
(No relevant relationships reported)

Board #313  9:30 AM - 11:00 AM
The Effects Of Different Resistance Training Zones With Equalized Volumes On Muscular Adaptations
Alexandre L. Evangelista1, Roberta A.G.T. Evangelista2, Tiago V. Brao1, Caué V. La Scala Teixeira3, Danilo S. Bocalini4, Roberta L. Rica1, Angelica C. Alonso4, Julia Maria D. Greve4. 1University of São Paulo, Brazil. 2University of São Paulo, São Paulo, Brazil. 3Federal University of São Paulo, São Paulo, Brazil. 4University of São Paulo, São Paulo, Brazil.
Email: contato@alexandrel.evangelista.com.br
(No relevant relationships reported)

G-44  President’s Lecture - Molecular and Metabolic Mechanisms Underlying the Exercise-Cancer Link
Saturday, June 1, 2019, 11:15 AM - 12:05 PM
Room: CC-205

G-45  President’s Lecture - Prehabilitation for Abdominal and Thoracic Surgery: Ready for Prime Time?
Saturday, June 1, 2019, 11:15 AM - 12:05 PM
Room: CC-204

The goal of surgery is to cure or palliate disease, but surgery itself is a major metabolic stress with short-term and long-term consequences. Efforts to support recovery
currently focus on the postoperative period ("rehabilitation"), but deconditioning related to the metabolic stress of surgery and hospitalization may have already initiated a downward spiral, further contributing to complications and disability. Preoperative physical fitness, physical activity, and nutritional status are predictors of surgical complications and prolonged disability. "Prehabilitation" aims to enhance functional capacity in the preoperative period in anticipation of the upcoming stress of surgery. This session will introduce concepts related to multimodal prehabilitation and review the growing body of evidence that a personalized, structured, multimodal preoperative exercise and nutritional program can improve exercise capacity prior to major surgery and improve functional status and surgical outcomes.

3627  Liane Feldman. McGill University, Montreal, QC, Canada
(No relevant relationships reported)
Numbers listed next to each individual represent the presentation number associated with the presentation. Bold numbers represent primary author.
Numbered lists next to individual entries represent the presentation number associated with the presentation. Bold numbers represent primary author.
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Numbers listed next to each individual represent the presentation number associated with the presentation. Bold numbers represent primary author.