The proposed session will highlight the aligned, coordinated, and comprehensive efforts of Exercise is Medicine, the National Physical Activity Plan’s Healthcare Sector, and the Prescription for Activity Task Force to promote physical activity in healthcare settings.

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  
Exercise Is Medicine  
Robert Sallis, FACSM. Kaiser Permanente Medical Center, Fontana, CA  
(No relevant relationships reported)

3 1:40 PM - 2:10 PM  
National Physical Activity Plan Healthcare Sector  
Elizabeth A. Joy, FACSM. Intermountain Healthcare, Salt Lake City, UT  
(No relevant relationships reported)

4 2:10 PM - 2:40 PM  
Prescription for Activity Task Force  
Cedric Bryant, FACSM. American Council on Exercise, San Diego, CA  
Reported Relationships: C. Bryant: Salary; Chief Science Officer, American Council on Exercise.

2:40 PM - 3:00 PM  
Overall Discussion

A-02 Exercise is Medicine® - Symposium - EIM in Action in Diverse and Underserved Communities: Lessons Learned and Resources for the Next Decade of EIM  
Tuesday, May 29, 2018, 1:00 PM - 3:00 PM  
Room: Hyatt-Niccollet Ballroom D

Over the past 10 years, EIM has made a global impact on healthcare. EIM potential will be fully realized when it reaches vulnerable populations. Our proposed symposium builds on past symposia sponsored by EIM for Underserved Populations and will provide data, strategies, and tools from current and planned EIM programs in diverse and underserved populations. Specifically, we will: 1) highlight formative work on lifestyle programs referral schemes; 2) discuss the ‘how’ of EIM implementation, critically reflecting on current/planned EIM projects; and 3) suggest how existing EIM tools and processes may be adapted for practical use in diverse and underserved populations.

5 1:00 PM - 1:10 PM  
Chair: Molly B. Conroy, FACSM. University of Utah, Salt Lake City, UT  
(No relevant relationships reported)

6 1:10 PM - 1:30 PM  
Implementing Physical Activity Referral Schemes in Under-Resourced Community Health Centers  
Jennifer West. Cabarrus Health Alliance, Kannapolis, NC  
(No relevant relationships reported)

7 1:30 PM - 1:50 PM  
Promoting Physical Activity among African-Americans through Policy  
Pamela G. Bowen. University of Alabama at Birmingham, Birmingham, AL  
(No relevant relationships reported)

8 1:50 PM - 2:10 PM  
EIM in Action in Diverse Communities in Minneapolis: Lessons from the Host City  
Jonathan Miller. University of Minnesota, Minneapolis, MN  
Reported Relationships: J. Miller: Consulting Fee; The Loppet Foundation.

2:10 PM - 2:30 PM  
Expanding EIM in Underserved Populations in the Next Decade: Tools, Resources, and Best Practices  
Amber L. Vermeesch. University of Portland, Portland, OR  
(No relevant relationships reported)

2:30 PM - 3:00 PM  
Overall Discussion

A-03 Exercise is Medicine® - Tutorial Lecture - Exercise as Medicine: The Development of the Pediatric Exercise Medicine Network  
Tuesday, May 29, 2018, 1:00 PM - 1:50 PM  
Room: Hyatt-Greenway Ballroom

Children with a chronic medical condition (CMC) often live complicated lives and are higher users of the healthcare system. However, the role of exercise as medicine is often under utilized for this population. Children growing up with a CMC are more likely to experience reduced fitness levels, which can impair their ability to do the things they want to do thereby negatively impacting their quality of life. It has become increasingly recognized by the healthcare system that prescribing exercise as medicine can be a cost-effective means of disease management, with the potential to reduce long-term healthcare costs. However, it is perceived that many clinicians do not have adequate knowledge when it comes to exercise testing and training. There is also a paucity of formal education programs specific to pediatric exercise medicine. Further, research studies often lack sufficient power to conduct the clinical trials that are necessary to generate knowledge acceptable to the clinical community.

10 Tim Takken. UMC Utrecht, Utrecht, Netherlands  
(No relevant relationships reported)

11 Brian W. Timmons. McMaster University, Hamilton, ON, Canada  
(No relevant relationships reported)

A-04 Exercise is Medicine® - Tutorial Lecture - EIM: Rx - Your National Parks  
Tuesday, May 29, 2018, 2:10 PM - 3:00 PM  
Room: Hyatt-Greenway Ballroom

Physical inactivity has been recognized as a major risk factor related to chronic disease. This presentation will make the connection between Exercise is Medicine (EIM) as promoted by ACSM and the “Healthy Parks—Healthy People” initiative of the National Park Service (NPS). Each April the NPS designates a National Park Rx Day to promote the movement of prescribing parks and nature to people/patients as a means for improving human health. Moving, in all its forms, is advantageous to healthy body function. Outdoor physical activity/play can be a part of an exercise prescription. Beyond health benefits, it will serve to both reinforce positive attitudes and motivate continuing participation in healthy physical activity.

12 Thomas P. Martin, FACSM. Wittenberg University, Springfield, OH  
(No relevant relationships reported)
Many have suggested that physical inactivity is the major public health problem of our time and this has been the genesis for the Exercise is Medicine program. However the clear focus in getting patients more active has been on aerobic exercise, with little encouragement given for resistance training. However, studies have shown that muscle strength correlates with lower rates of chronic disease and mortality. Further we know that age related loss of muscle mass (sarcopenia) is associated with increases in musculoskeletal pain and decreased functional status. For these reasons, promoting resistance training should be an integral part of the exercise prescription. This session would bring together cutting age science with practical application regarding the role of resistance training in disease prevention and treatment.

A-05  Exercise is Medicine® - Highlighted Symposium - The Role of Resistance Training in Disease Prevention and Treatment
Tuesday, May 29, 2018, 3:15 PM - 5:15 PM
Room: Hyatt-Nicollet Ballroom A

The importance of and how to teach active play. It is important that we begin this education at a very early age in the clinic. Movement play is the stepping stone to an active childhood, which defines an adult’s activity level by age eight. Creating active children is a key to curbing obesity, diabetes, chronic disease that can last a lifetime. The art of play is dissolving rapidly with the increase in screens, technology and school demands. It is becoming necessary to teach kids and parents how to play. It is important that we begin this education at a very early age in the clinic and continue the education and resources into the community.

A-06  Exercise is Medicine® - Symposium - Let’s Play! Operationalization of Active Play for EIM Pediatrics
Tuesday, May 29, 2018, 3:15 PM - 5:15 PM
Room: Hyatt-Nicollet Ballroom D

The Barriers to Continuing Play and Activity in the Community

The purpose of this presentation is to explain and demonstrate a collaboration model to promote the Exercise is Medicine Initiative among non-physician providers. Nurse practitioners and physician assistants are often the primary healthcare providers within a community. These non-physician providers diagnose and treat disease, coupled with the ability to prescribe medication, order laboratory and diagnostic testing and refer patients to other specialists as warranted. It is prudent to aggressively expand the clinical partnership of the EIM initiative to nurse practitioners and physician assistants within the walls of higher education and the communities wherein they practice.

A-07  Exercise is Medicine® - Colloquium - Exercise is Medicine: The Role of Non-Physician Providers
Tuesday, May 29, 2018, 3:15 PM - 4:05 PM
Room: Hyatt-Greenway Ballroom

The current medical education models prepare physicians to manage chronic disease; however, very little education is conducted to teach physicians the knowledge/skills to practice prevention-oriented, value-based wellness care. This issue is exacerbated by low employment of content experts in exercise and lifestyle medicine in medical education. In this tutorial, Drs. Trilk and Bowersock will share experiences in integrating exercise and lifestyle medicine curriculum into their respective institutions to help highlight ways that exercise science professionals may be able to be trained in, and seek similar interdisciplinary opportunities for, teaching and career advancement in the medical education setting.

A-08  Exercise is Medicine® - Colloquium - Exercise Science in Medical Education
Tuesday, May 29, 2018, 4:25 PM - 5:15 PM
Room: Hyatt-Greenway Ballroom
Successful physical activity promotion is dependent upon the context in which it occurs. Demographic, social, organizational, economic, political, and relationship dynamics and characteristics shape the response to efforts to promote physical activity. This presentation will focus on highlighting the relationships between physical activity and economic impact, organizational performance, individual performance, and community vitality. In addition, a complex systems perspective will provide a lens through which best practice program design principles are discussed.

Nico Pronk, FACSM. HealthPartners Institute, Bloomington, MN

Reported Relationships: N. Pronk: Salary; HealthPartners.
A-10 Joseph B. Wolfe Memorial Lecture - Physical Activity for Cancer Prevention and Treatment: State of the Evidence
Wednesday, May 30, 2018, 8:00 AM - 9:15 AM
Room: CC-Hall A

More than 14 million individuals around the world develop cancer each year, and almost 9 million die of this disease. In the U.S., 4 in 10 persons will develop an invasive cancer in their lifetimes. Yet, research suggests that up to half of cancers could be prevented through lifestyle change. Over the past few decades, epidemiologic studies in millions of persons have shown that high levels of physical activity are associated with reduced risks for many cancers, including breast, colon, endometrium, kidney, bladder, esophagus, stomach, lung, and others. Moreover, individuals diagnosed with cancer can have improved prognosis if they are physically active. This talk will summarize the epidemiologic evidence as reviewed by the 2018 U.S. Physical Activity Guidelines Advisory Committee, describe potential mechanisms linking physical activity with cancer risk and prognosis, and propose needed avenues of research.

Anne McTiernan, FACSM. Fred Hutchinson Cancer Research Center, Seattle, WA
(No relevant relationships reported)

Wednesday, May 30, 2018, 9:30 AM - 11:30 AM
Room: CC-Ballroom A

This highlighted session focuses on state-of-the-art use of technology to increase physical activity and prevent and manage chronic conditions. The all-star list of speakers will present the latest scientific findings for the use of technology and mobile health platforms in support of increasing physical activity and improving health, including use of big data, social media, and precision intervention methodologies. New technological frontiers in physical activity promotion in the context of obesity prevention and in cancer survivors will be discussed.

Chair: Charles E. Matthews, FACSM. National Cancer Institute, Rockville, MD
(No relevant relationships reported)

Leveraging the Mobile Health Revolution to Promote Population-Wide Physical Activity & Reduce Sedentary Behavior
Abby C. King, FACSM. Stanford University School of Medicine, Stanford, CA
(No relevant relationships reported)

Using Technology to Understand and Promote Physical Activity: Opportunities and Challenges
Siobhan M. Phillips, Northwestern University Feinberg School of Medicine, Chicago, IL
(No relevant relationships reported)

Leveraging Social Media for Health Behavior Change
Sherry Pagoto. University of Connecticut, Storrs, CT
Reported Relationships: S. Pagoto: Honoraria; Fitbit.

Precision mHealth: A New Frontier in Tailored Obesity Interventions
Deborah F. Tate. University of North Carolina, Chapel Hill, NC
Reported Relationships: D.F. Tate: Honoraria; Weight Watchers.

A-12 Basic Science World Congress - Symposium - Hypertrophy: The Intrinsic Molecular Variables
Wednesday, May 30, 2018, 9:30 AM - 11:30 AM
Room: CC-Ballroom B

Hypertrophy of muscle is a sought after goal of athletes and gym-goers alike. Mitigation of sarcopenia, via pro-anabolic intervention, is also a goal of many ‘anti-aging’ interventions. In this symposium, models to probe the mechanisms of hypertrophy ranging from cellular, animal, human, and clinical situations will be highlighted to demonstrate the importance of molecular pathways important to the regulation of skeletal muscle hypertrophy.

Marcas M. Bamman, FACSM. University of Alabama at Birmingham, Birmingham, AL
(No relevant relationships reported)

Using Phosphoproteomics to Understand How Mechanical Signals Regulate Skeletal Muscle Mass
Troy Hornberger. University of Wisconsin-Madison, Madison, WI
(No relevant relationships reported)

Ribosomal Control of Skeletal Muscle Mass: New Ideas for an Old Concept
Gustavo Nader. The Pennsylvania State University, University Park, PA
(No relevant relationships reported)

Skeletal muscle atrophy is a hallmark of all states of disuse and an often catastrophic consequence of many disease states. Mitigation of atrophy is important for injured athletes, aging persons, as well as persons in disease-induced states of wasting. Our understanding of the etiology of muscular atrophy is important if we are to describe
American College of Sports Medicine

ways to combat it. In this symposium animal and human model data will show our state-of-the-art understanding of molecular underpinnings of muscular atrophy and highlight means that might attenuate it.

41 9:30 AM - 9:35 AM
Chair: Sue Bodine. University of Iowa, Iowa City, IA
(No relevant relationships reported)

42 9:30 AM - 9:35 AM
Co-Chair: Paul Greenhaff. University of Nottingham Medical School, Nottingham, United Kingdom
(No relevant relationships reported)

43 9:35 AM - 10:00 AM
Aetiology of Non-Inflammatory vs Inflammatory Induced Muscle Wasting In Vivo
Paul L. Greenhaff. University of Nottingham, Nottingham, United Kingdom
(No relevant relationships reported)

44 10:00 AM - 10:25 AM
Mechanisms of Disuse Atrophy in Young and Old Animals: Comparisons of Different Muscle Types
Sue Bodine. University of Iowa, Iowa City, IA
(No relevant relationships reported)

45 10:25 AM - 10:50 AM
Anabolic Resistance in Humans and Strategies to Attenuate Disuse Atrophy
Luc JC van Loon. Maastricht University, Maastricht, Netherlands
(No relevant relationships reported)

46 10:50 AM - 11:15 AM
Massage as an Anabolic Intervention for Disuse Atrophy: Effect on Protein Synthesis and Satellite Cells
Esther E. Du Pont-Versteegden. University of Kentucky, Lexington, KY
(No relevant relationships reported)

11:15 AM - 11:30 AM
Overall Discussion

A-14 Symposium - Basic Mechanisms of the Bradycardia of Exercise Training (Everything You Want to Know About the Heart Rate of an Athlete)
Wednesday, May 30, 2018, 9:30 AM - 11:30 AM
Room: CC-102EF

Athletes have a lower resting heart rate (bradycardia) that can be less than half the normal value. For veteran athletes who have been training at a high level for decades this can become problematic. Training-induced bradycardia is usually attributed to increased activity of the vagus nerve on the sinoatrial node, but there is an alternative view that it is intrinsic to the heart. In this session, four experts will discuss bradycardia from all angles, providing everything you want to know about the heart rate of an athlete! This symposium will appeal to a broad audience from basic scientists to practitioners.

47 9:30 AM - 9:35 AM
Chair: George E. Billman. The Ohio State University, Columbus, OH
(No relevant relationships reported)

49 9:35 AM - 10:00 AM
How Can Human SAN Robustly Maintain our Heart Rhythm?
Vadim V. Fedorov. The Ohio State University, Columbus, OH
(No relevant relationships reported)

50 10:00 AM - 10:25 AM
Training Bradycardia: The Case for Changes in Intrinsic Pacemaker Rate
George E. Billman. The Ohio State University, Columbus, OH
(No relevant relationships reported)

A-15 Symposium - Exercise Training for Patients with Hypertrophic Cardiomyopathy: Time for a New Approach?
Wednesday, May 30, 2018, 9:30 AM - 11:30 AM
Room: CC-101G

Exercise training has become the standard of care for most patients with cardiovascular disease to improve functional capacity, and reduce morbidity and mortality. However, hypertrophy cardiomyopathy (HCM), the most common inherited cardiovascular disease, may be an exception. Patients with HCM are excluded from participation in competitive sports, though there is a distinct lack of evidence about the efficacy and safety of exercise in this population. This symposium will provide an overview of HCM, outline the risk of exercise-induced arrhythmias, and present the benefits of moderate intensity exercise and the place for high intensity exercise in this population.

51 9:30 AM - 9:35 AM
Chair: Benjamin D. Levine, FACSM. Institute for Exercise and Environmental Medicine and University of Texas Southwestern Medical Centre, Dallas, TX
(No relevant relationships reported)

54 9:35 AM - 10:00 AM
Hypertrophic Cardiomyopathy: Overview and Pathophysiology of Exercise Intolerance
Martin S. Maron. Tufts Medical Centre, Boston, MA
(No relevant relationships reported)

A-16 Symposium - Important Considerations for Thermoregulatory Research
Wednesday, May 30, 2018, 9:30 AM - 11:30 AM
Room: CC-Auditorium 2

Understanding and utilizing appropriate methodologies, study design and interpretation of data are fundamental to research. This symposium aims to consider the

www.acsm.org
complexities, limitations and applications of techniques and approaches commonly utilized in thermoregulatory research. Presenters will discuss methodological issues with model validations, approaches to sex differences and temperature regulation, determination of workloads during exercise in the heat, thermoregulation and hydration, and neural control of skin blood flow during thermoregulatory stress.

58 9:30 AM - 9:35 AM  
Chair: Ollie Jay, FACSM. University of Sydney, Lidcombe, Sydney, Australia  
(No relevant relationships reported)

59 9:35 AM - 9:55 AM  
Methodological Issues with Model Validations  
George Havenith, FACSM. Loughborough University, Loughborough, United Kingdom  
(No relevant relationships reported)

60 9:55 AM - 10:15 AM  
Considering Neural Control of the Cutaneous Circulation During Reflex Thermoregulatory Stress  
Anna E. Staniewicz. The Pennsylvania State University, University Park, PA  
(No relevant relationships reported)

61 10:15 AM - 10:35 AM  
Thermoregulation, Hydration and Exercise Performance  
Ronald J. Maughan, FACSM. University of St. Andrews, St. Andrews, United Kingdom  
(No relevant relationships reported)

62 10:35 AM - 10:55 AM  
Sex-Differences in Temperature Regulation During Exercise in the Heat  
Daniel Gagnon. Montreal Heart Institute and Université de Montréal, Montreal, QC, Canada  
(No relevant relationships reported)

63 10:55 AM - 11:15 AM  
Assessing Thermoregulatory Responses to Exercise: Which Intensity Should I Use?™  
Ollie Jay, FACSM. University of Sydney, Sydney, Australia  
(No relevant relationships reported)

11:15 AM - 11:30 AM  
Overall Discussion

A-17 Symposium - Wendell Stainsby’s Scientific Legacy: The Roles of Oxygen and Lactate in Exercise Metabolism  
Wednesday, May 30, 2018, 9:30 AM - 11:30 AM  
Room: CC-103

Wendell N. Stainsby, ScD, FACSM, was one of the earlier basic integrative physiologists to embrace the academic and scientific community of ACSM. He was a frequent scientific presenter at ACSM meetings and an ACSM citation award winner in 1986. While his research explored several different areas of muscle physiology, the track most relevant to ACSM was the role of O2 in lactate metabolism. Dr. Stainsby’s contributions in this area remain underappreciated. For example, his laboratory was one of the first to show that skeletal muscle lactate production can occur in the absence of hypoxia.

64 9:30 AM - 9:40 AM  
Chair: Michael C. Hogan, FACSM. University of California, San Diego, La Jolla, CA  
(No relevant relationships reported)

65 9:40 AM - 10:05 AM  
Wendell Stainsby, Oxygen Delivery, and Metabolic Rate  
Jack K. Barclay. University of Guelph, Guelph, Canada  
(No relevant relationships reported)

66 10:05 AM - 10:30 AM  
Wendell Stainsby, Oxygen, and Lactate  
L. Bruce Gladden, FACSM. Auburn University, Auburn, AL  
(No relevant relationships reported)
American College of Sports Medicine

A-19  Exercise is Medicine® - Symposium - Exercise is Medicine for Mental Illness: Translating Evidence to Practice

Wednesday, May 30, 2018, 9:30 AM - 11:30 AM
Room: Hyatt-Nicollet Ballroom A

This symposium highlights recent studies aimed at ensuring that the benefits of exercise and physical activity interventions for people living with a wide range of mental disorders are translated into routine clinical practice. Clinical groups targeted include people with schizophrenia, depression, and posttraumatic stress disorder. The results of an international validation study of a new clinical tool aimed to more accurately assess physical activity in sedentary populations, such as people living with mental illness, will also feature in this symposium. Together, the results outlined will provide clear examples of how research findings can make a positive difference in clinical care.

A-20  Exercise is Medicine® - Symposium - Osteoarthritis as an Inflammatory Disease and its Modification by Physical Activity

Wednesday, May 30, 2018, 9:30 AM - 11:30 AM
Room: Hyatt-Nicollet Ballroom D

Potential Speakers: Introduction (5 Minutes): Dr. William E. Kraus, Moderator Dr. Mark Hochberg will address osteoarthritis symptoms (pain and quality of life), pathogenesis and impact of physical activity and exercise. Dr. Virginia Byers Kraus will address osteoarthritis progression pathogenesis and impact of physical activity and exercise. Dr. Kim Huffman will address the role of muscle in joint health and arthritis, direct physical and paracrine effects. The moderator and 3 speakers will finish the symposium engaging with the audience via a panel question and answer session.
### A-22 Thematic Poster - Exercise Biomarkers

**Wednesday, May 30, 2018, 9:30 AM - 11:30 AM**

**Room:** CC-Lower level L100C

**Chair:** Joseph Weir, FACSM. University of Kansas, Lawrence, KS

(No relevant relationships reported)

---

### A-23 Thematic Poster - Exercise Intensity and Psychology

**Wednesday, May 30, 2018, 9:30 AM - 11:30 AM**

**Room:** CC-Lower level L100E

**Chair:** Yuri Feito, FACSM. Kennesaw State University, Kennesaw, GA

(No relevant relationships reported)
A-24 Thematic Poster - Sex-Dependent Muscle Physiology

Wednesday, May 30, 2018, 9:30 AM - 11:30 AM
Room: CC-Lower level L100F

110 Board #8
9:30 AM - 11:30 AM
Examining The Effects of Functional Resistance Training on Affect, State Anxiety and Enjoyment in College-Age Females
Jamie Faro1, Phil Gona1, Marisa Hastie1, Laura L. Hayman1, Julie Wright1, Jessica Whiteley1.1 University of Massachusetts Boston, Boston, MA. 2 Lasell College, Newton, MA
Email: Jamie.faro001@umb.edu
(No relevant relationships reported)

111 Chair: Kimberly Huey, FACSM. Drake University, Des Moines, IA
(No relevant relationships reported)

112 Board #1
9:30 AM - 11:30 AM
The Influence of Oral Contraceptive Use on Skeletal Characteristics of Female Collegiate Rowers
Breanne S. Baker, Ivy E. Brown, Michael G. Bemben, FACSM, Allen Knehans, Debra A. Bemben, FACSM. University of Oklahoma, Norman, OK. (Sponsor: Dr. Debra Bemben, FACSM) Email: bree.baker@ou.edu
(No relevant relationships reported)

113 Board #2
9:30 AM - 11:30 AM
T Cells Accumulate in Skeletal Muscle Following Contraction-induced Damage To A Greater Degree In Women
Michael R. Deyhle, Kaitlyn Evans, Chris Sutton, Seth Hampton, Jacob Parmley, Jacob R. Sorensen, 84602, Allen Parcell, FACSM, Robert Hydahl, 84602. Brigham Young University, Provo, UT Email: mrd.deyhle@gmail.com
(No relevant relationships reported)

114 Board #3
9:30 AM - 11:30 AM
Sex-Related Differences in Muscle Composition and Motor Unit Firing Rates of the First Dorsal Intersosseous.
Mandy E. Wray, Adam J. Sterczala, Jonathan D. Miller, Hannah L. Dinnick, Trent J. Herda. University of Kansas, Lawrence, KS Email: mandy.wray@ku.edu
(No relevant relationships reported)

115 Board #4
9:30 AM - 11:30 AM
Effects of Estrogen Receptor Alpha and Progesterone on Skeletal Muscle Fatigue and Recovery
Christine A. Cabelka1, Brittany C. Collins2, Cory W. Baumann3, Espen E. Spangenburg1, Dawn A. Lowe, FACSM,1 University of Minnesota, Minneapolis, MN. 2University of Utah, Salt Lake City, UT. 3East Carolina University, Greenville, NC
Email: cabelb007@umn.edu
(No relevant relationships reported)

116 Board #5
9:30 AM - 11:30 AM
Increased Quadriceps Muscle Attenuation Correlates With Reduced Cellular And Whole Muscle Function In Older Women
Chad R. Straight1, John D. Chace1, Philip A. Ades2, Michael J. Toth3, Mark S. Miller4.1 University of Massachusetts Amherst, Amherst, MA. 2University of Vermont, Burlington, VT Email: cstraight@umass.edu
(No relevant relationships reported)
WEDNESDAY, MAY 30, 2018

Final Program

117 Board #6 9:30 AM - 11:30 AM
Myosin Super-relaxed State is Affected by Aging in Female But Not Male Skeletal Muscle
Sira M. Karvinen¹, Lian A. Phung², Brent A. Colson¹, David D. Thomas³, Dawn A. Lowe, FACSM. ¹University of Jyväskylä, Jyväskylä, Finland. ²University of Minnesota, Minneapolis, MN. ³University of Arizona, Tucson, AZ. (Sponsor: Dawn A. Lowe, FACSM)
Email: sirakarvinen@jyu.fi
(No relevant relationships reported)

118 Board #7 9:30 AM - 11:30 AM
The Effects Of Whole-body Vibration On Posture, Balance, And Mobility In Women With Multiple Sclerosis
Eduardo Freitas, Christine Frederiksen, Ryan M. Miller, Aaron D. Heishman, Japneet Kaur, Karolina J. Koziol, Bianca A. R. Galletti, Debra A. Bemben, FACSM, Michael G. Bemben, FACSM. University of Oklahoma, Norman, OK. (Sponsor: Michael G. Bemben, FACSM)
Email: eduardofreitas@ou.edu
(No relevant relationships reported)

A-25 Thematic Poster - Walking Biomechanics
Wednesday, May 30, 2018, 9:30 AM - 11:30 AM
Room: CC-Lower level L100H

Chair: Jean L. McCrory, FACSM. West Virginia University, Morgantown, WV
(No relevant relationships reported)

120 Board #1 9:30 AM - 11:30 AM
Decreased Gait Variability Following Anterior Cruciate Ligament Reconstruction Negatively Impacts Patient Function
Terry L. Grindstaff¹, Meredith Chaput¹, Brooke Farmer¹, Kayla Anderson¹, Amelia S. Lanier¹, Amelia S. Lanier¹, Brian A. Knarr², Christopher Wichman¹, Kimberly A. Turman¹, Creighton University; Omaha, NE. ²University of Nebraska at Omaha. Omaha, NE. ³University of Nebraska Medical Center, Omaha, NE. ⁴GKIK Ortho Specialists, Omaha, NE. (Sponsor: Joan Eckerson, FACSM)
Email: GrindstaffTL@gmail.com
(No relevant relationships reported)

A-26 Clinical Case Slide - Hip and Pelvis I
Wednesday, May 30, 2018, 9:30 AM - 11:10 AM
Room: CC-200E

Chair: Angela Smith, FACSM. Nemours Children’s Health System, Bryn Mawr, PA
(No relevant relationships reported)

127 Board #5 9:30 AM - 11:30 AM
Spatiotemporal Comparisons Between Male and Female Soldiers While Walking With Heavy Loads
Joseph F. Seay, Victoria A. Gregory, Peter N. Frykman, Nathaniel I. Smith, Rebecca E. Fellin. U.S. Army Research Institute of Environmental Medicine, Natick, MA
Email: joseph.f.seay.civ@mail.mil
(No relevant relationships reported)

128 Board #6 9:30 AM - 11:30 AM
Relationship Between First Metatarsal Motion and Metatarsal Load Distribution During Walking
Christopher Casillas, James Becker. Montana State University, Bozeman, MT
(No relevant relationships reported)

129 Board #7 9:30 AM - 11:30 AM
Gait Biomechanics at Different Time Periods Following Anterior Cruciate Ligament Reconstruction
Christopher Johnston, Jonathan Goodwin, Brian Pietro Simone, FACSM, Troy Blackburn. University of North Carolina at Chapel Hill, Chapel Hill, NC
(No relevant relationships reported)

130 9:30 AM - 9:50 AM
Recurrent Hip Pain in a Preadolescent Soccer Athlete
Megan Fraker, Greg Canty. Children’s Mercy, Kansas City, MO
Email: mfraker@cmh.edu
(No relevant relationships reported)

131 9:50 AM - 10:10 AM
Hip Pain Post Pregnancy
Sarah T. Yang. Schwab Rehabilitation Hospital/University of Chicago, Chicago, IL
Email: sarah.yang@gmail.com
(No relevant relationships reported)

132 10:10 AM - 10:30 AM
Pubic Pestilence-Cross Country
Keirsten E. Smith, James B. Robinson, Earl R. Stewart, Brett C. Bentley. University of Alabama Sports Medicine, Tuscaloosa, AL
(No relevant relationships reported)

133 10:30 AM - 10:50 AM
Novel Treatment of Anterolateral Thigh Pain-Priathlon
Ciara Johnson, McCasey Smith, Neil Segal. University of Kansas Medical Center, Kansas City, KS
(No relevant relationships reported)

134 10:50 AM - 11:10 AM
Groin Pain Following Spin Class in a Personal Trainer
Joseph Dadabo, Prakash Jayabal. Shirley Ryan AbilityLab/ Northwestern University, Chicago, IL. (Sponsor: Joseph Ihm, FACSM)
Email: jdadabo@srallab.org
(No relevant relationships reported)
Concussion is an important injury for all athletes. The most recent Concussion in Sport Group Guidelines which were presented in Berlin in 2016 and published in 2017 are the most up to date international guidelines regarding concussion. The document incorporates several systematic reviews to answer specific questions related to concussion. This session will explore the applications of the Berlin CISG document for team physicians and clinicians in 2018. The session will include speakers who were members of the expert panel at the Berlin CIS meeting and will discuss specifically the clinical applications of the Berlin CISG document for providers.

A-27  Clinical Case Slide - Medical Issues I

Wednesday, May 30, 2018, 9:30 AM - 11:10 AM
Room: CC-200F

135  Chair: Kenneth P. Barnes, FACSM. Elon University / Kernodle Clinic Orthopedics & Sports Medicine, Elon, NC
(No relevant relationships reported)

136  Discussant: Hallie Labrador. NorthShore University HealthSystem, Gurnee, IL
(No relevant relationships reported)

137  Discussant: Suzanne S. Hecht, FACSM. University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

138  9:30 AM - 9:50 AM
Avoiding Grave Cardiac Outcomes in an Athlete with Grave’s Disease
Sander Rubin, Robert Kinningham, FACSM. University of Michigan, Ann Arbor; MI
Email: sanders.rubin@gmail.com
(No relevant relationships reported)

139  9:50 AM - 10:10 AM
Exercise Intolerance in an Endurance Athlete with Depression
Ankit B. Shah, Aaron L. Baggish, FACSM, Meagan M. Wasfy. Massachusetts General Hospital, Boston, MA
Email: ankit.b.shah@medstar.net
(No relevant relationships reported)

140  10:10 AM - 10:30 AM
Exercise Intolerance-cycling
Devon E. Hutton, Sean C. Robinson. Oregon Health and Science University, Portland, OR. (Sponsor: Diane L. Elliot, FACSM)
Email: huttond@ohsu.edu
(No relevant relationships reported)

141  10:30 AM - 10:50 AM
Left Lower Quadrant Abdominal Pain in a Division 1 Discus Thrower
Alyssa M. Nephi1, Tracy Bras2, Kentaro Onishi1. 1University of Pittsburgh Medical Center, Pittsburgh, PA. 2Maine General Orthopedics/Evergreen Sports Medicine Fellowship, Augusta, ME. (Sponsor: Brian A. Davis, FACSM)
Email: nephans@upmc.edu
(No relevant relationships reported)

142  10:50 AM - 11:10 AM
Effects Of An Exercise Program On Quality Of Life On A Rheumatoid Arthritis Patient: A Case Study
Diego A. Alonso-Aubin1, Iván Chulvi-Medrano1, Moisés Picón1, Tamara Rial1, Juan M. Cortell-Tormo1. 1University of Alicante, Alicante, Spain. 1International Hypoactive & Physical Therapy Institute, Vigo, Spain. (Sponsor: Avery D. Faigenbaum, FACSM)
Email: diego.alonso.aubin@gmail.com
(No relevant relationships reported)

A-28  Tutorial Lecture - An Update from the Berlin Concussion Consensus Statement: Practical Applications

Wednesday, May 30, 2018, 9:30 AM - 10:20 AM
Room: CC-208AB

A-29  Tutorial Lecture - Butterflies, Chills and Weight Gain: Are We Forgetting about Iodine and Thyroid Function in Athletes?

Wednesday, May 30, 2018, 9:30 AM - 10:20 AM
Room: CC-Auditorium 1

It is estimated that 27 million Americans have thyroid disorders, half of which are undiagnosed. Although thyroid function is influenced by factors such as autoimmunity, stress, and chronic disease, diet—including intake/status of iodine, iron, selenium, vitamin D and overall calories—plays an important, often under-recognized role. The first part of this session will review thyroid function and endocrinology with emphasis on the role of key nutrients in hypothyroidism, hyperthyroidism and euthyroid sick syndrome. The second part will focus on assessment for thyroid disorders and the appropriate nutrition and lifestyle therapies, culminating with several short case studies.

A-30  Tutorial Lecture - Practice. We do in Sports but are we Doing Enough in the Classroom

Wednesday, May 30, 2018, 9:30 AM - 10:20 AM
Room: CC-101CD

In sports we practice almost daily to become better, however, that mindset may not translate into the classroom. Purpose: Provide foundational evidence on the importance of practice in classroom learning and how to make practice more efficient. Objectives: (1) provide foundational information on what we now about practice and distribution of practice for learning and (2) provide practical tips for improving practice within courses. Needs Statement: Given an emerging growth in teaching strategies in recent years, it seems appropriate, to bring faculty development to the teachers and maintain the growing momentum of evidence-based education within the College.


Wednesday, May 30, 2018, 9:30 AM - 10:20 AM
Room: CC-200B

This workshop will provide the audience a brief overview and a case-based approach of principals of plain radiography use in Sports Medicine.

143  Margot Putukian, FACSM. Princeton University, Princeton, NJ
(No relevant relationships reported)

144  Kevin Guskievich, FACSM. University of North Carolina, Chapel Hill, NC
(No relevant relationships reported)

145  Stanley A. Herring, FACSM. University of Washington, Seattle, WA
(No relevant relationships reported)
Exercise medicine is now recognized as a critical component of cancer management with knowledge from benchtop to bedside increasing exponentially through high-quality research driving change in clinical practice. Appropriate exercise prescription prior to commencement of surgery, chemotherapy or radiation therapy results in improved patient outcomes. Implemented during chemotherapy or radiation therapy, side effects are reduced and treatment efficacy enhanced. Exercise is the primary mode of rehabilitation post-treatment. Exercise directly influences tumour biology suppressing cancer growth and actually enhancing survival. Increasing understanding of these mechanisms informs more effective exercise prescription and has the potential for development of new therapeutics.

Robert U. Newton. Edith Cowan University, Joondalup, Australia (No relevant relationships reported)

Dr. Lynall will open with a review on concussion, risk factors for musculoskeletal injuries, and then report on a consistent elevated risk of musculoskeletal injury in the year following concussion. Dr. Howell will then present on the limitations of clinical concussion tests, the literature suggestive of physiological deficit persistence beyond clinical recovery, how postural control impairments may continue after clinical recovery, and how these impairments may play a role as a potential mechanism for the elevated injury risk.

Robert Lynall. University of Georgia, Athens, GA (No relevant relationships reported)

David R. Howell. Children’s Hospital Colorado, Aurora, CO (No relevant relationships reported)

There is a wide variation in the quality of the slides used by speakers. Ideas that are seen are heard and comprehended better than when the audience has trouble reading the information. Simple and interesting slides are also better comprehended.

James S. Skinner, FACSM. Indiana University, Brevard, NC (No relevant relationships reported)

There is a lot of controversy about “the best” type of training in healthy adults and this tutorial session will review the scientific evidence and discuss the controversies surrounding the relative roles of exercise intensity and volume in effecting health and fitness gains as part of exercise prescription.

Carol Ewing Garber, FACSM. Teachers College, Columbia University, New York, NY 

We will provide an overview for management of several acute fractures/dislocations encountered in sports medicine with updated, condensed information from last year’s sessions (combining 2 sessions into 1). Many fractures/dislocations can be managed by the primary care clinician on the sideline and 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 fractures/dislocations encountered, fundamentals of acute care, general rules for initial management, and teaching pearls and 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 fractures.

Jack Spittler. University of Colorado, Denver; CO (No relevant relationships reported)

Morteza Khodaee, FACSM. University of Colorado, Denver (No relevant relationships reported)

Car dio-oncology is a rapidly developing field focused on the potential for commonly used cancer therapies to directly or indirectly (via deconditioning) cause cardiotoxicity, or damage to the heart. As a result, many cancer survivors are at increased risk for cardiovascular morbidity and mortality. This symposium will discuss novel resting and exercise magnetic resonance imaging techniques for assessing cardiotoxicity and other components of the oxygen cascade, the distinct pathophysiology of cardiotoxicity relative to traditional heart disease, mechanisms of resulting exercise intolerance, as well as current evidence and potential for both acute and chronic aerobic exercise as therapeutic interventions to mitigate cardiotoxicity.

Amy A. Kirkham. University of Alberta, Edmonton, AB, Canada (No relevant relationships reported)

Mark J. F. Haykowsky. The University of Texas Arlington, Arlington, TX (No relevant relationships reported)

Blood flow restriction (BFR) training has been used for over 30 years to enhance gains from resistance training. Multiple mechanisms have been proposed to explain the beneficial adaptations following BFR training, including greater muscle damage and increased retention of muscle mass. Blood flow restriction is also becoming increasingly popular for use in injury rehabilitation as well as for recovery from exercise. The purpose of this tutorial is to provide evidence-based recommendations for the application of BFR training for injury rehabilitation, as well as to discuss the potential risks and countermeasures that may be employed to mitigate them.

Yun-Tsung Chen1, Mong-Da Hsu2, Yao-Yi Hsieh1, Jung-Chang Lin3. ‘National Taiwan Normal University, Taipei, Taiwan. ‘Chinese Culture University, Taipei, Taiwan Email: cthero178@gmail.com (No relevant relationships reported)
161 Board #2 9:30 AM - 11:00 AM
Exercise with Blood Flow Restriction and Power Development of the Lower Body
Justin Faller, Susan Sofit, Kristen Oueltette, Vicent J. Paolone, FACSM, Brian Thompson. 1Skidmore College, Saratoga Springs, NY, 2Springfield College, Springfield, MA. (Sponsor: Vincent J. Paolone, FACSM)
Email: jfaller@skidmore.edu
(No relevant relationships reported)

162 Board #3 9:30 AM - 11:00 AM
The Effect of Blood Flow Restriction Training on Body Composition and Muscular Strength in College-Aged Individuals.
Zachary R. Salyers, Jaime Larkin, Michael Lane, Aaron Sciascia. Eastern Kentucky University, Richmond, KY
Email: zachary_salyers1@eku.edu
(No relevant relationships reported)

163 Board #4 9:30 AM - 11:00 AM
Early Adaptations In Strength As A Result Of Blood Flow Restriction Training Is Not Mode-specific
Ethan C. Hill, Terry Housh, FACSM, Cory Smith, Joshua Keller, Richard Schmidt, Glen Johnson, FACSM. University of Nebraska - Lincoln, Lincoln, NE. (Sponsor: Terry Housh, FACSM)
Email: ethan.hill@unl.edu
(No relevant relationships reported)

164 Board #5 9:30 AM - 11:00 AM
Acute Effects Of Resistance Training With And Without Blood Flow Restriction On Muscle Thickness
Iván Chulvi-Medrano, Moisés Picón, Juan M. Cortell-Tormo, Diego A. Alonso-Aubín, Tamara Raif, José Fernández-Sáez, Daniel Alonso. 1University of Alicante, Alicante, Spain, 2International HypoPressive and Physical Therapy Institute, Vigo, Spain, 3University of Valencia, Valencia, Spain
Email: ivan.chulvi@ua.es
(No relevant relationships reported)

165 Board #6 9:30 AM - 11:00 AM
Acute Cardiovascular Responses To Resistance Training With And Without Blood Flow Restriction
Moisés Picón, Iván Chulvi-Medrano, Juan M. Cortell-Tormo, Diego A. Alonso-Aubín, Tamara Raif, José Fernández-Sáez, Daniel Alonso. 1University of Alicante, Alicante, Spain, 2International HypoPressive and Physical Therapy Institute, Vigo, Spain, 3University of Valencia, Valencia, Spain
Email: moisespicomartinez@hotmail.com
(No relevant relationships reported)

166 Board #7 9:30 AM - 11:00 AM
Blood Flow Restriction During Barbell Squats does not Alter Performance or Muscular Damage
Teresa Wyczynski, Joseph Badinger, Cody E. Morris, Ray VanWye, Scott Arnett, Lee J. Winchester. Western Kentucky University, Bowling Green, KY. (Sponsor: Scott Lyons, FACSM)
(No relevant relationships reported)

A-39 Free Communication/Poster - Cardiovascular
Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

167 Board #8 9:30 AM - 11:00 AM
The Effect Of Different Exercises On Qt Dispersion In Sedentary Women.
Guner Cicek, Ovguzhan Celik. 1Hhit university, Corum, Turkey, 2Magla Siti Koçman University, Magla, Turkey. (Sponsor: Mark D. Peterson, FACSM)
Email: gunercciek@hitit.edu.tr
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>No.</th>
<th>Board #17</th>
<th>9:30 AM - 11:00 AM</th>
<th>Heart Rate Variability in Marathon Runners During Steady State Exercise and a Graded Exercise Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Christopher J. Lundstrom, Timothy J. Houghton, Kelsey Sutter, George R. Biitl, University of Minnesota, Minneapolis, MN. (Sponsor: Dr. Eric Snyder, FACSM) Email: <a href="mailto:lund0982@umn.edu">lund0982@umn.edu</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #18</th>
<th>9:30 AM - 11:00 AM</th>
<th>Leukocyte and Lactate Responses to Different Modes of Exercise at the Same Target Heart Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Pearl Law, Fadila Haddad, Frank P. Zaidvær, Ammanarie Stelhi, Sebastian Pionrbo, Shlomit Radom-Aizik, UC Irvine, Irvine, CA. (Sponsor: Burkett Fall, FACSM) (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #19</th>
<th>9:30 AM - 11:00 AM</th>
<th>Effects of Off-Season Training on In-Season Training Load and Time Spent in Heart Rate Zones</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Jason A. Melnyk, Kimberly Kostelas, Central Connecticut State University, New Britain, CT. (Sponsor: Sean Walsh, FACSM) Email: <a href="mailto:jmelnyk@ccsu.edu">jmelnyk@ccsu.edu</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #20</th>
<th>9:30 AM - 11:00 AM</th>
<th>Resistive-based Walking Training For Individuals With Poststroke Hemiparesis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Christopher P. Hurt, Marcas M. Bamman, FACSM, Tara Pearce, Sarah dos Anjos, Jutulak Kongsuk, David A. Brown, University of Alabama at Birmingham, Birmingham, AL. (Sponsor: Marcas M Bamman, FACSM) (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #21</th>
<th>9:30 AM - 11:00 AM</th>
<th>Cardiovascular Risk Markers in Firefighters: A Longitudinal Study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Steven Martin, Rachel Atchison, Kory Sealy, Kalen Johnson, Alison McGuire, Jason Lytle, John Green, FACSM, Stephen Crouse, FACSM, Texas A&amp;M University, College Station, TX. (Sponsor: Stephen F. Crouse, FACSM) Email: <a href="mailto:semartin@tamu.edu">semartin@tamu.edu</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #22</th>
<th>9:30 AM - 11:00 AM</th>
<th>Training Impulses And The Relation With Performance Improvement: Not That Straightforward</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Kobe M. Vermeire, Gilles Vandewieele, Jan Bourgeois, Jan Boone, Ghent University, Ghent, Belgium Email: <a href="mailto:kobe.vermeire@ugent.be">kobe.vermeire@ugent.be</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #23</th>
<th>9:30 AM - 11:00 AM</th>
<th>Indoor Cycling Energy Expenditure: Does Sequence Matter?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Cristina Cortis1, Carl Foster, FACSM2, Mich Cook2, Scott T. Doberstein2, Cordial Gillette2, John P. Porcari, FACSM2, 1University of Cassino and Lazio Meridionale, Cassino, Italy, 2University of Wisconsin-La Crosse, La Crosse, WI Email: <a href="mailto:c.cortis@unicas.it">c.cortis@unicas.it</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #24</th>
<th>9:30 AM - 11:00 AM</th>
<th>Comparison of Three Lactate Threshold Determination Methods in Trained Cyclists and in Non-Cyclists</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lisa Ferguson-Stegall1, Rachael Nelson1, Mallory Wirth1, Anthony Wolfe1, 1Hamline University, Saint Paul, MN, 2University of Texas at Austin, Austin, TX (Sponsor: Hirofumi Tanaka, FACSM) Email: <a href="mailto:lstegall01@hamline.edu">lstegall01@hamline.edu</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #25</th>
<th>9:30 AM - 11:00 AM</th>
<th>Assessing The Ability Of The Wattbike Cycle Ergometer To Predict Maximal Oxygen Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Nicholas J. Hanson1, Erin E. Kishman1, Kyle D. DeRosia1, Sarah C. Martinez2, Sungwoo Lee1, Cory M. Scheadler2, Michael G. Miller1, 1Western Michigan University, Kalamazoo, MI, 2Northern Kentucky University, Highland Heights, KY Email: <a href="mailto:njhanson@gmail.com">njhanson@gmail.com</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #26</th>
<th>9:30 AM - 11:00 AM</th>
<th>Validity and Reliability of the Lode Excalibur Sport Cycle Ergometer for the Wingate Anaerobic Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>William R. Lumm, Southern Connecticut State University, New Haven, CT. (Sponsor: Robert Axtell, FACSM) Email: <a href="mailto:hummingbird@southernct.edu">hummingbird@southernct.edu</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #27</th>
<th>9:30 AM - 11:00 AM</th>
<th>Evaluation of Asymmetry in Power Production During Cycling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>John W. Farrell III, Daniel Blackwood, Brian Priibble, Rebecca Larson, University of Oklahoma, Norman, OK Email: <a href="mailto:John.W.Farrell-1@ou.edu">John.W.Farrell-1@ou.edu</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #28</th>
<th>9:30 AM - 11:00 AM</th>
<th>Posture Influence on Recovery Intervals in Sprint Cycling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Deanna Ernott, Lorrie Brilla, FACSM, Harsh Buddhadev, Wren McLaughlin, Western Washington University, Bellingham, WA. (Sponsor: Lorrie Brilla, FACSM) (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #29</th>
<th>9:30 AM - 11:00 AM</th>
<th>Effects Of Cycling Cadence On Physiological Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Daniel J. Blackwood, John W. Farrell, III, Rebecca D. Larson, University of Oklahoma, Norman, OK (Sponsor: Christopher Black, FACSM) (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #30</th>
<th>9:30 AM - 11:00 AM</th>
<th>Do High-Intensity Intervals 24hr Prior to a Simulated Cycling Race Enhance 40km Time Trial Performance?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>G. Alan Garville, Edward K. Merritt, R. Andrew Shanely, Appalachian State University, Boone, NC (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #31</th>
<th>9:30 AM - 11:00 AM</th>
<th>Novice Cyclists Using Shorter Crank Lengths Produced Greater Power at Same VO2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Boe M. Burns1, Jessica Armmandariz1, Brian M. Moscicki1, 1Humboldt State University, Arcata, CA, 2Indiana University, Bloomington, IN (Sponsor: Vincent J Paolone, FACSM) Email: <a href="mailto:boe.burns@humboldt.edu">boe.burns@humboldt.edu</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No.</th>
<th>Board #32</th>
<th>9:30 AM - 11:00 AM</th>
<th>The Influence of Exercise Intensity on Training Load in Professional Cycling</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Teun van Erp1, Marco Hoozemans1, Carl Foster, FACSM2, Jos J. de Koning, FACSM1, 1Vrije Universiteit, Amsterdam, Netherlands, 2University of Wisconsin, La Crosse, WI (No relevant relationships reported)</td>
</tr>
</tbody>
</table>
A-41 Free Communication/Poster - Muscle Dynamics

Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

192 Board #33 9:30 AM - 11:00 AM
The Physiological and Perceptual Response to Self-, Even- and Variable Paced Cycling Time Trials
Jos J. de Koning, FACSM; Tim Veneman; Wouter Schallig; Maaike Eken; Carl Foster, FACSM.
(No relevant relationships reported)
Email: j.j.de.koning@vu.nl

193 Board #34 9:30 AM - 11:00 AM
Comparison of Incremental Cycling Trial Protocols to Estimate Maximal Oxygen Consumption in Recreationally Trained Cyclists
Eric L. Salhus, James W. Smith, Anthony J. Bull, Colorado College, Colorado Springs, CO. (Sponsor: Joan M. Eckerson, FACSM)
(No relevant relationships reported)

194 Board #35 9:30 AM - 11:00 AM
Feasibility and Effectiveness of using Electromyography to Track Physical Activity
Joel Ramirez, Stefan Keslacy, Deborah Won, Dominic Defiesta, Christine Dy, California State University Los Angeles, Los Angeles, CA.
Email: jrami133@calstatela.edu
(No relevant relationships reported)

195 Board #36 9:30 AM - 11:00 AM
Electromyography Activity During Aerobic Exercise Using Swiss-ball Compared With Walking.
Toshihiro Wakimoto1, Tatsuya Saito1, Tomomu Monri1, Yoshiyuki Yamana2, Sohuchi Fujimoto1, Toshihiro Takao1. 1Kawasaki University of Medical Welfare, Kawasaki, Japan. 2Kawasaki Medical School, Kurashiki, Japan.
Email: wakimoto@med.kawasaki-m.ac.jp
(No relevant relationships reported)

196 Board #37 9:30 AM - 11:00 AM
Force and Electromyographic Responses during Sustained Isometric Muscle Actions anchored by RPE Values
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)

197 Board #38 9:30 AM - 11:00 AM
A Comparison of Muscle Unit Activation during Biceps Curl Exercise at 40, 60, 80 and 100% of 1 Repetition Maximum
Alex Zykoff, Mike Aquino, Jacqueline Pellechia, John Petrizzo, John Wygand, FACSM, Robert M. Otto, FACSM. Adelphi University, Garden City, NY. (Sponsor: Robert M. Otto, FACSM)
Email: azy14@aol.com
(No relevant relationships reported)

198 Board #39 9:30 AM - 11:00 AM
The Effect Of Using A Weightlifting Belt On Muscle Activation During A Conventional Deadlift
Jacqueline Pellechia, John Petrizzo, Robert M. Otto, FACSM, John Wygand, FACSM. Adelphi University, Garden City, NY. (Sponsor: John Wygand, FACSM)
Email: jacquelinepellechia@mail.adelphi.edu
(No relevant relationships reported)

199 Board #40 9:30 AM - 11:00 AM
Comparison of EMG Muscle Activity and Turn Times Using Orthosis and Stock Insoles During Skiing
Heidi Nunnikhoven, Montana State University, Bozeman, MT
(No relevant relationships reported)

200 Board #41 9:30 AM - 11:00 AM
Knee Joint-Specific Eccentric Utilization Ratio Determines Lower-Extremity Stretch-Shortening Cycle Function During Countermovement Jumps
Jordi Heeneman, John Krzyszkowski, Kristofer Kipp. Marquette University, Milwaukee, WI. (Sponsor: Paula Papunek, FACSM)
(No relevant relationships reported)

201 Board #42 9:30 AM - 11:00 AM
Neural And Muscular Alterations Of The Plantar Flexors In Middle-aged Women
Michelle Burge, Kevin Phillips, Byungjoo Noh, Matt Gage, Tejin Yoon. Michigan Technological University, Houghton, MI. (Sponsor: Sandra Hunter, FACSM)
Email: mmburge@mtu.edu
(No relevant relationships reported)

202 Board #43 9:30 AM - 11:00 AM
Comparison Of Electromyographical Signal Analyses For Estimating Lactate Threshold
Ronald L. Snarr1, Danilo V. Telesso2, Ashleigh V. Hallmark1, Michael R. Esco, FACSM. 1Georgia Southern University, Statesboro, GA. 2The University of Alabama, Tuscaloosa, AL.
Email: rsnarr@georgiasouthern.edu
(No relevant relationships reported)

203 Board #44 9:30 AM - 11:00 AM
Are Upper Body Muscle Activations Different In Various Type Of Push-up Exercise?
Melanie Poudevigne, FACSM, Moroni Demoos, Thomas Andre, Hae Chung. Clayton State University, Morrow, GA.
Email: mpoudevigne@gmail.com
(No relevant relationships reported)

204 Board #45 9:30 AM - 11:00 AM
Changes in Bilateral Hand Force After 30 Minutes of Climbing in Elite Level Rock Climbers
Philip F. Ferrara, James Becker, John G. Seifert. Montana State University, Bozeman, MT
(No relevant relationships reported)

205 Board #46 9:30 AM - 11:00 AM
Effects Of Postactivation Potentiation On Subsequent 40-yard Sprint Performance In 16- To 23-year-old Male Athletes
Cody Yates1, Peter J. Chometowski1, Mark Flury1, Steven M. Howell1, Anthony Deldun1, Frank R. Wojan2, Jamal Roper1, Jeremy Armstrong2. 1Northern Illinois University, DeKalb, IL. 2Loyola University Chicago, Chicago, IL. 3XCEL Sport Science & Fitness, Nicholasville, KY.
Email: cody.yates23@yahoo.com
(No relevant relationships reported)
A-42 Free Communication/Poster - Cellular/Molecular
Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

206 Board #47 11:00 AM - 12:30 PM
Altered Arginase Activity Following Ischemic Stroke: The Role Of Metabolic Syndrome
Shinichi Asano1, Paul D. Chantler1, Taara L. Barr1. 1Fairmont State University, Fairmont, WV. 2West Virginia University, Morgantown, WV. 3Yalari Bio Incorporated, Morgantown, WV
(No relevant relationships reported)

207 Board #48 11:00 AM - 12:30 PM
Exercise Intensity Reduces Circulating Annexin V- CD105 Microparticles in Adults With Prediabetes
Natalie ZM Eichner, Nicole M. Gilbertson, Emily M. Heist, Julian M. Gaitan, Luca Musante, Sabrina LaSalvia, Eugene J. Barrett, Arthur L. Weltman, FACSM, Uta Erdbrügger, Steven K. Malin, FACSM. University of Virginia, Charlottesville, VA. (Sponsor: Steven Malin, FACSM)
Email: nz8eh9zj@virginia.edu
(No relevant relationships reported)

A-43 Free Communication/Poster - Age-Dependent Physiology
Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

213 Board #54 11:00 AM - 12:30 PM
Identifying the Onset of Frailty
Dongmin Kwak1, Cory W. Baumann2, LaDora V. Thompson1. 1Boston University, Boston, MA. 2University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

214 Board #55 11:00 AM - 12:30 PM
Dystrophia Myotonica and Low Skeletal Muscle Mass In Older-aged Women
Roberto Gabriel Gonzalez-Mendoza, Francisco Torres-Naranjo, Alejandro Guaytan-Gonzalez, Juan R. Lopez-Taylor, Noe Gonzalez-Gallegos, Isabel Valadez. Universidad de Guadalajara, Guadalajara, Mexico
Email: roberto.gonzalez@academicos.udg.mx
(No relevant relationships reported)

215 Board #56 11:00 AM - 12:30 PM
Comparison of Growth in Children Undergoing Three Different ACL Reconstructions
Dustin J. Richter, Roger Lyon, Scott Van Valin, Xue-Cheng Liu. Medical College of Wisconsin, Milwaukee, WI
Email: drichter@mcw.edu
(No relevant relationships reported)

216 Board #57 11:00 AM - 12:30 PM
Age Associated Muscle Strength Loss During A Single Bout of Eccentric Contractions in Mice
Christopher Rawdon, Christopher Ingalls. Georgia State University, Atlanta, GA
Email: crawdon1@student.gsu.edu
(No relevant relationships reported)

217 Board #58 11:00 AM - 12:30 PM
Fatigue Resistance To Eccentric Contractions In Older Adults
Caitlin Skousen, Jacob R. Sorensen, Kyle Williams, Robert D. Hyldahl. Brigham Young University, Provo, UT
Email: caitlinskousen@gmail.com
(No relevant relationships reported)

218 Board #59 11:00 AM - 12:30 PM
Loss of Lean Mass Increases Risk for Postural Hypotension in Older Men and Women
Jefferson M. Spicher, Amy L. Silva-Smith, Melissa J. Benton, FACSM. University of Colorado, Colorado Springs, CO
Email: jspiche2@uccs.edu
(No relevant relationships reported)

219 Board #60 11:00 AM - 12:30 PM
Impact of Nitrite Therapy on Change in Steady State Submaximal Exercise in Older
Kelly Allsup1, Rachel Eleazu2, Nancy W. Glynn1, Jessica M. Shultz2, James Kostra, Jr.3, Ross Arena, FACSM, Daniel E. Forman4. 1VA Pittsburgh Healthcare System, Pittsburgh, PA. 2University of Illinois at Chicago, Chicago, IL. (Sponsor: Ross Arena, FACSM)
Email: Kelly.Allsup@va.gov
(No relevant relationships reported)
American College of Sports Medicine

A-44 Free Communication/Poster - Bone and Connective Tissue
Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

220 Board #61 11:00 AM - 12:30 PM
Circulating Irisin Levels And Bone Strength In Korean Adults
Jong Whan Choi, Jae Seung Chang, Jung Soo Lim, In Deok Kong. Yonsei Univ. Wonju College of Medicine, Wonju, Korea, Republic of.
(No relevant relationships reported)

221 Board #62 11:00 AM - 12:30 PM
Bone Health Among Female Collegiate Athletes Participating in Loading and Active Loading Sports
Alexandra Sirosi, Jessica A. Inomogna, Ryan E. Reid, Nathan Chiariitti, Meghan McGillivray, Ross E. Andersen, FACSM. McGill University, Montreal, QC, Canada. (Sponsor: Ross Andersen, FACSM)
Email: alexandra.siroisi@mail.mcgill.ca
(No relevant relationships reported)

222 Board #63 11:00 AM - 12:30 PM
Weight Gain, not Simple Resumption of Menses, Improves Bone Metabolism in Aromenorrheic Exercising Women
Emily A. Southmayd, Rebecca J. Mallinson, Nancy L. Williams, FACSM, Mary Jane De Souza, FACSM. Penn State University, University Park, PA.
(No relevant relationships reported)

223 Board #64 11:00 AM - 12:30 PM
The Effects Of A Single Bout Exercise On Rankl Pathway, Cytokines And Bone Turnover Markers In College Women
JIYEON KIM1, HYOJIN KIM2, GWON KIM3, SUKO LEE4, DONGHO PARK5, SEOKKI MIN6, Chungsun KIM7. 1TEXAS A& M- San Antonio, San Antonio, TX, 2Dongduk Women's University, Seoul, Korea, Republic of, 3Inha University, Incheon, Korea, Republic of, 4Korea Institute of Sport Science, Seoul, Korea, Republic of
Email: jkim@tamusa.edu
(No relevant relationships reported)

224 Board #65 11:00 AM - 12:30 PM
Influences Of Alcohol Consumption, Physical Activity, And Body Composition On Areal Bone Mineral Density In Korean College-aged Female Students
SoJung Kim1, DongJun Sung2, JaeWoong Gu3, SeungBum Oh4. 1University of Massachusetts, Lowell, MA. 2Konkuk University, Chung-Ju, Korea, Republic of
Email: sojung_kim@uml.edu
(No relevant relationships reported)

225 Board #66 11:00 AM - 12:30 PM
Sex-specific Mediation Of Physical Activity's Effects On The Muscle-bone Unit In Active Young Adults.
Simon Higgins1, Chester M. Sokolowski2, Megha Vishwanath2, Jessica G. Anderson3, Michael D. Schmidt4, Ellen M. Evans, FACSM5, Richard D. Lewis, FACSM6. 1University of Georgia, Athens, GA, 2University of Georgia, Athens, GA, 3University of North Carolina at Chapel Hill, Chapel Hill, NC, 4Elon University, Elon, NC.
Email: shiggins8@elon.edu
(No relevant relationships reported)

226 Board #67 11:00 AM - 12:30 PM
Bone Mineral Content/Density And Muscle Strength In Young Women From Different Racial/Ethnic Backgrounds - A Pilot Study
JAPNEET KAUR, EDUARDO D.S. FREITAS, RYAN M. MILLER, AARON D. HEISHMAN, DEBRA A. BEMBEN, FACSM, MICHAEL G. BEMBEN, FACSM. UNIVERSITY OF OKLAHOMA, NORMAN, OK. (Sponsor: MICHAEL G. BEMBEN, FACSM)
(No relevant relationships reported)

227 Board #68 11:00 AM - 12:30 PM
Gender Differences in Mechanical Properties of the Achilles Tendon: Longitudinal Response to Heavy Loading Exercise
Email: jessica.digiacomo@uconn.edu
(No relevant relationships reported)

A-45 Free Communication/Poster - Anterior Cruciate Ligament Injury
Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

228 Board #69 11:00 AM - 12:30 PM
Neuromuscular Changes During Return To Play After ACL Surgery In Elite Soccer Players
Frantisek Zahalka1, Tomas Maly2, Dai Sugimoto2, Lucia Mal2, Lee Cabell1, Arnold Baac1. 1Charles University, FFES, Prague, Czech Republic, 2Boston Children's Hospital, Boston, MA, 3Arkansas Tech University, Russellville, AR, 4University of Vienna, Vienna, Austria
Email: zahalkaf@tvs.cuni.cz
(No relevant relationships reported)

229 Board #70 11:00 AM - 12:30 PM
Quadriceps Function Does Not Differ Between Subjects With ACL Reconstruction With Impulsive Vs. Normal Loading
Jonathan Goodwin, Chris Johnston, Brian Pietrosimone, FACSM, Troy Blackburn. University of North Carolina at Chapel Hill, Chapel Hill, NC
Email: tjgoodwin@unc.edu
(No relevant relationships reported)

230 Board #71 11:00 AM - 12:30 PM
Interlimb Asymmetries Post ACL Reconstruction During Sprints
Jamie Kronenberg1, Nicole Veltri1, Danielle Pasquale1, Joshua M. Tom1, Patrick McKeon1, Kathy J. Simpson1, Rumit S. Kakar1. 1Ithaca College, Ithaca, NY, 2University of Georgia, Athens, GA
(No relevant relationships reported)

231 Board #72 11:00 AM - 12:30 PM
Quadriceps Strength and Loading Symmetry Following ACL Reconstruction
Skyler Holmes1, Steven Garcia2, Tyler Moffit3, Mike Vakula3, Melissa Montgomery1, Derek Pamukoff1. 1California State University Fullerton, Fullerton, CA, 2Utah State University, Logan, UT. (Sponsor: Daniela Rubin, FACSM)
Email: sholmes@fullerton.edu
(No relevant relationships reported)

232 Board #73 11:00 AM - 12:30 PM
Quality Of Semitendinosus Tendon Regeneration As A Function Of Time Post-ACL Reconstruction
Clara Amat Fernandez, Anthony S. Kulas, Zachary J. Domire. East Carolina University, Greenville, NC
(No relevant relationships reported)
P18 Final Program

233 Board #74  11:00 AM - 12:30 PM
Greater Loading Rates during Gait are Associated with Knee Symptoms 1.5 Years Following ACL Reconstruction
Brian Pietrosimone, FACSM1, Christopher Johnston2, Brittnery Luc-Harkey1, Matthew Harkey1, Laura Stanley, FACSM3, Jonathan Goodwin1, Hope Davis4, Jeffrey Spang1, J Troy Blackburn1.
1University of North Carolina, Chapel Hill, NC. 2University of North Carolina at Chapel Hill, Chapel Hill, NC. 3Brigham and Women’s Hospital, Boston, MA. 4Tufts Medical Center, Boston, MA
Email: brian@unc.edu
(No relevant relationships reported)

234 Board #75  11:00 AM - 12:30 PM
Biomechanical Evaluation Of Landing Maneuvers In Soccer Players With An Anterior Cruciate Ligament Reconstruction
Ahmad Alanazi1, Katy Mitchell2, Tony Roddy2, Alexis Ortiz, FACSM3, Majmaah University, Majmaah, Saudi Arabia. 2Texas Woman’s University, Houston, TX
Email: aalanazi@mju.edu.sa
(No relevant relationships reported)

235 Board #76  11:00 AM - 12:30 PM
Lesser Mechanical Loading During Walking Gait Associates with Worse Proteoglycan Density 6 months Following Anterior Cruciate Ligament Reconstruction
Steven J. Pfeiffer1, Jeffrey Spang2, Daniel Nisbet1, David Lalush1, Kyle Wallace1, Matthew Harkey2, Lauren Stanley2, Randy Schnitz2, Troy Blackburn1, Brian Pietrosimone, FACSM3. 1University of North Carolina, Chapel Hill, NC. 2Tufts Medical Center, Boston, MA. 3University of North Carolina at Greensboro, Greensboro, NC
Email: spfeiffer@email.unc.edu
(No relevant relationships reported)

236 Board #77  11:00 AM - 12:30 PM
Assessment of Torsional Knee Stiffness in Individuals Following Anterior Cruciate Ligament Reconstruction During Running
Kylie Davis, Cale A. Jacobs, Mary L. Ireland, FACSM, Darren L. Johnson, Brian Noehren, FACSM. University of Kentucky, Lexington, KY.
Email: kda254@uky.edu
(No relevant relationships reported)

237 Board #78  11:00 AM - 12:30 PM
Quadriceps Force Steadiness following Anterior Cruciate Ligament Reconstruction during a Maximum Voluntary Isometric Contraction
Alex Spencer, Cale Jacobs, Kylie Davis, Darren Johnson, Mary L. Ireland, FACSM, Brian Noehren, FACSM. University of Kentucky, Lexington, KY.
Email: spence38@uky.edu
(No relevant relationships reported)

238 Board #79  11:00 AM - 12:30 PM
Differences In Electrocortical Activity Between ACL-reconstructed Patients And Healthy Controls During A Force-Reproduction Task
Moniek Roe of Robe1, Carmen van den Hoven1, Roy Hoogeslag1, Bart Koopman2, Rianne Huis in ’t Veld, 'OCON Centre for Orthopedic Surgery, Hengelo, Netherlands. 1University of Twente, Enschede, Netherlands
Email: m.roesofrobe@occon.nl
(No relevant relationships reported)

239 Board #80  11:00 AM - 12:30 PM
Examining the Relationships Between the Mode of Quadriceps Contraction and Clinical Outcomes After ACL Reconstruction
Steven M. Davi, Adam S. Lepley, Julie P. Burland, Lindsey K. Lepley, University of Connecticut, Storrs, CT
Email: steven.davi@uconn.edu
(No relevant relationships reported)

ACSM 56th Annual Meeting

240 Board #81  11:00 AM - 12:30 PM
Dynamic Knee Orthosis System for Females with Anterior Cruciate Ligament Injuries
Menglin Jia1, Joshua M. Tome2, Mengyu Shi, Fujui Park1, Jintu Fan1, Rumit Singh Kaka2. 1Cornell University, Ithaca, NY. 2Ithaca College, Ithaca, NY
(No relevant relationships reported)

A-46 Free Communication/Poster - Running Biomechanics

Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

241 Board #82  11:00 AM - 12:30 PM
Relationship Between Knee Valgus Asymmetry During Running And Side-Step Cutting Mechanics in Female Lacrosse Players.
Bhushan Thakkur, Jenna Kostiuk, Kathryn Harrison, Jacqueline Morgan, Gregory Crosswell, D.S. BLAISE WILLIAMS, III, FACSM. Virginia Commonwealth University, RICHMOND, VA. (Sponsor: D.S. Blaise Williams III, FACSM)
Email: thakkarbs2@vcu.edu
(No relevant relationships reported)

242 Board #83  11:00 AM - 12:30 PM
Sex and Speed Influence Joint Moment Impulses During Running
Email: hfeller@wisc.edu
(No relevant relationships reported)

243 Board #84  11:00 AM - 12:30 PM
Do Selective Pressures on Pelvic Dimensions Influence Risk of Running Injury Development?
Nanni E. Frankston, Kevin Hunt, Jacob E. Vollmar, Ashley B. Nguyen, John J. Davis, IV, Andrea K. Chomistek, Allison H. Gruber. Indiana University, Bloomington, IN. (Sponsor: Joseph Hamill, FACSM)
(No relevant relationships reported)

244 Board #85  11:00 AM - 12:30 PM
The Effect of Real-Time Feedback on Vertical Oscillation and Running Economy
Richard Robinson, Teresa Rose, Hannah Jones. University of Indianapolis, Indianapolis, IN
Email: robinsonther@uindy.edu
(No relevant relationships reported)

245 Board #86  11:00 AM - 12:30 PM
Dynamic Hip Strength and Footfall Patterns in Competitive Distance Runners
Tyler J. Moffitt, Brett K. Post, Melissa M. Montgomery, Robert G. Loeckie, Derek N. Pamukoff. California State University, Fullerton, Fullerton, CA. (Sponsor: Daniela Rubin, FACSM)
Email: tjmoffitt@csuf.fullerton.edu
(No relevant relationships reported)

246 Board #87  11:00 AM - 12:30 PM
The Effect of Fatigue on Impact Forces and Pressure Distribution During an Incremental Run
 Dimitrios Katsavelis, Caroline Marmin, Matthew Maystrick. Creighton University, Omaha, NE. (Sponsor: Joan Eckerson, FACSM)
Email: DimitriosKatsavelis@creighton.edu
(No relevant relationships reported)
American College of Sports Medicine

Board #88
11:00 AM - 12:30 PM
Association Between Tibial Acceleration and Vertical Loadrates in Runners of All Footstrike Patterns
Todd Hayano1, Adam Tenforde2, Steve Jamison3, Irene Davis, FACSM4. 1Spaulding Rehabilitation Hospital/Harvard Medical School, Charlestown, MA. 2Spaulding Rehabilitation Hospital/ Harvard Medical School and Spaulding National Running Center/Spaulding Cambridge Hospital, Charlestown, MA. 3Spaulding National Running Center/Spaulding Cambridge Hospital, Cambridge, MA. (Sponsor: Irene Davis, FACSM)
Email: thayano@partners.org
(No relevant relationships reported)

Board #89
11:00 AM - 12:30 PM
Increased Foot And Tibial Angles at Footstrike Decrease Vertical Loadrates in Runners
Haylee E. Donaghie Borgstrom1, Adam S. Tenforde2, Robert Diaz3, Steve T. Jamison4, Irene S. Davis, FACSM5. 1Spaulding Rehabilitation Hospital, Harvard Medical School, Boston, MA. 2Spaulding Rehabilitation Hospital, Spaulding National Running Center, Harvard Medical School, Boston, MA. 3Spaulding National Running Center/Spaulding Cambridge Hospital, Cambridge, MA. (Sponsor: Irene Davis, FACSM)
Email: jacobmc0801@aol.com
(No relevant relationships reported)

Board #90
11:00 AM - 12:30 PM
Increased Resistted Sprinning Load Decreases Bilateral Asymmetry in Sprinning Kinetics
Jacob A. McNabb1, Trisha A. VanDusseldorp, Garret M. Hester, Yuri Feito, FACSM, Gerald T. Mangine. 1Kennesaw State University, Kennesaw, GA. (Sponsor: Yuri Feito, FACSM)
Email: jacobmc0801@aol.com
(No relevant relationships reported)

Board #91
11:00 AM - 12:30 PM
Muscle Activation Characteristics of the Posterior Oblique Sling System in High and Low Economy Runners
Nicole K. Rendos1, Moataz Eltoukhy2, Wesley N. Smith1. 1Andrews Research & Education Foundation, Gulf Breeze, FL. 2California State University, Chico, CA. (Sponsor: Wesley N. Smith)
Email: rkakar@ithaca.edu
(No relevant relationships reported)

Board #92
11:00 AM - 12:30 PM
Trunk Kinematics Comparison During Self-selected Treadmill Jogging Between Age Groups
Rumit S. Kakar1, Zachary Finer1, Natalie Knight1, Joshua M. Tomé1, Yunpeng Li1, Kathy J. Simpson2. 1Ithaca College, Ithaca, NY. 2University of Georgia, Athens, GA
Email: rkakar@ithaca.edu
(No relevant relationships reported)

Board #93
11:00 AM - 12:30 PM
IMU Based Foot Strike Classification Algorithm For Real-time Feedback And Research Purposes In Running
Erik Maartens1, Max Paquet2, Clare E. Milner, FACSM, Jaap Buurke1. 1Roessingh Research and Development, University of Twente, Enschede, Netherlands. 2University of Memphis, Memphis, TN. 3Drexel University, Philadelphia, PA
(No relevant relationships reported)

Board #94
11:00 AM - 12:30 PM
Influences Of Direction Of Locomotion And Body Weight Support On Metabolic Costs During Running
Kenji Masunoto1, Kendall Galor1, Andrew Craig-Jones2, John A. Mercer, FACSM3. 1Kyushu University, Kasuga, Japan. 2University of Nevada, Las Vegas, NV
(No relevant relationships reported)

Board #95
9:30 AM - 11:00 AM
The Influence of Activity Trackers on Physical Activity, Cardiorespiratory Endurance, Body Composition, and Exercise Motivation
Michael A. Smith1, Melissa Powers2, Larissa Boyd3, Thomas Hancock1. 1University of Oklahoma, Norman, OK. 2University of Central Oklahoma, Edmond, OK
(No relevant relationships reported)

Board #96
9:30 AM - 11:00 AM
Lifestyle Behaviors and Muscular Strength in Young Adults
Henry Piascik, Kristofer S. Wisniewski, Gabrielle M. Brennan, Sara D. Dieterich, Patricia Fitzgertaud, Maura J. Voskpi, Stephen LoRusso, Baruch Vainshelboim. 1Saint Francis University, Loretto, PA
Email: hxp100@francis.edu
(No relevant relationships reported)

Board #97
9:30 AM - 11:00 AM
Increasing Physical Activity In Office Workers - An RCT Of Treadmill Workstations.
Frida Bergman, Viktoria Wahlström, Patrik Wennberg, Carl-Johan Boroxbek, Ann Solin, Fredrik Ohberg, Tommy Olsson. 1Umeå university, Umeå, Sweden
Email: frida.bergman@umu.se
(No relevant relationships reported)

Board #98
9:30 AM - 11:00 AM
Effects Of Two Exercise Programs On The Values Of Cholesterol and Triglycerides In A Group Of Obese Adults In The Northern Center Of Mexico
Daniel Carranza-Bautista1, Marco A. Enriquez Martinez2, Raúl Lomas Acosta1, Julia Janeth Rosales Mares1, Carlos Enriquez Martinez1, Christopher Gonzalez Sandoval1, Pedro Jimenez Alarcon1, Valeria Vital Cruz1, Carlos Mencelaca Valdez1, Javier Martinez Pinedo1. 1Universidad Autonoma de Nuevo Leon., San Nicolás de los Garza, Nuevo Leon, Mexico. 2Benemérita Escuela Normal Manuel Avila Camacho., Zacatecas., Mexico. 3Secretaría de Educación Coahuila., Saltillo, Coahuila, Mexico. 4Secretaría de Educación Zacatecas, Zacatecas, Mexico. 5En Forma Wellness Lab., Guadalupe, Zacatecas, Mexico. 6Secretaría de Salud de Acero., Fresnillo, Zacatecas, Mexico
Email: carranzabd@hotmail.com
(No relevant relationships reported)

Board #99
9:30 AM - 11:00 AM
Fitness Trackers and Motivational Interviewing: Effects on Body Composition in Chronic Low Back Pain
Kathryn J. Southard, Laura D. Ellingson, Jeni E. Lansing, Maria Perez, Greg J. Weltk, FACSM. 1Iowa State University, Ames, IA. (Sponsor: Dr. Greg Weltk, FACSM)
Email: kjsouth@iastate.edu
(No relevant relationships reported)

Board #100
9:30 AM - 11:00 AM
Changes in Body Composition Following a 6-Month Standing Workstation Intervention
Cara G. Daniels, Monisha Maharajan, Kyler Daugherty, Jaclyn Olson, Melissa Powers, Larissa Boyd. 1The University of Central Oklahoma, Edmond, OK
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Location</th>
<th>Email(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>260</td>
<td>Effects of Exercise Referral Schemes on Physical Activity Levels</td>
<td>Nikita Price, T. Williams, Elizabeth Horton, Gary Ligouri, FACSM, Steve Mann, Alfonso Jimenez.</td>
<td>Coventry, United Kingdom.</td>
<td><a href="mailto:Price.n5@uni.coventry.ac.uk">Price.n5@uni.coventry.ac.uk</a></td>
</tr>
<tr>
<td>261</td>
<td>A Worksite Intervention Program for Obese Sedentary Women</td>
<td>Joan A. Cebbrick-Grossman</td>
<td>The University of Scranton, Scranton, PA</td>
<td><a href="mailto:joan.grossman@scranton.edu">joan.grossman@scranton.edu</a></td>
</tr>
<tr>
<td>262</td>
<td>Dose Knowledge of Physical Activity Recommendations Change After A Physical Activity Intervention?</td>
<td>Katrina D. DuBoise, FACSM, Deirdre Dlugonski.</td>
<td>East Carolina University, Greenville, NC</td>
<td><a href="mailto:dubosek@ecu.edu">dubosek@ecu.edu</a></td>
</tr>
<tr>
<td>263</td>
<td>Effects Of Two Consecutive 4 Month-a-year Training Program On Metabolic Syndrome And Vo2 Max Evolution</td>
<td>Felix Morales-Palomino, Miguel Ramirez-Jimenez, Juan Fernando Ortega, Ricardo Mora-Rodriguez.</td>
<td>UCLM, Toledo, Spain.</td>
<td><a href="mailto:felixmoraepalomino@gmail.com">felixmoraepalomino@gmail.com</a></td>
</tr>
<tr>
<td>264</td>
<td>Exercise Intervention with Lifestyle Improves Mental Health and Decreases Morbid Thoughts</td>
<td>Francisco E. Ramirez, Neil Nedley, Daniel Peterson, Monica Fukuda, Johanna Emerson.</td>
<td>Nedley Clinic, Weimar, CA.</td>
<td>Email: <a href="mailto:eramirez@weimar.edu">eramirez@weimar.edu</a></td>
</tr>
<tr>
<td>265</td>
<td>The Effect of Early Life Undernutrition on Voluntary Physical Activity in Mice.</td>
<td>Eric C. Leszczynski, Ashley N. Tripplett, David P. Ferguson.</td>
<td>Michigan State University, East Lansing, MI</td>
<td>No relevant relationships reported</td>
</tr>
<tr>
<td>266</td>
<td>Squatting With Elastic Bands Facilitates More Weight Used And Time Under Muscle Tension</td>
<td>Nicole L. Rogers, Javier Gene, Alvaro Juesas, Pedro Gargallo, Andres Gene, Rosario Salvador, Juan C. Colado, Michael E. Rogers, FACSM.</td>
<td>Wichita State University, Wichita, KS.</td>
<td>No relevant relationships reported</td>
</tr>
<tr>
<td>267</td>
<td>Effect Of Kinesitherapy And Massage To Injury Skeletal Muscle Repair'S Histomorphology And C-reactive Protein</td>
<td>Pin Lu, qinlong liu.</td>
<td>Tianjin Normal University, China.</td>
<td><a href="mailto:1782541441@qq.com">1782541441@qq.com</a></td>
</tr>
<tr>
<td>268</td>
<td>Changes In Cortisol Levels With An Aquatic Resistance Workout Versus A Weight Workout</td>
<td>Juan C. Colado, N. Travis Tripplett, Jorge Flandez, Joaquin Madera, Victor Tella, Nicole L. Rogers, Michael E. Rogers, FACSM.</td>
<td>University of Valencia, Valencia, Spain.</td>
<td>Email: <a href="mailto:n_figueroa1@u.pacific.edu">n_figueroa1@u.pacific.edu</a></td>
</tr>
<tr>
<td>269</td>
<td>A Call for Physical Activity Guidelines to Be Established in Equatorial Africa</td>
<td>Brianna N. Tracy, Lorraine A. Holman, William E. Herrin, Norah Madaya, Courtney D. Jensen.</td>
<td>University of the Pacific, Stockton, CA.</td>
<td>Uganada Bureau of Statistics, Kampala, Uganda Email: <a href="mailto:b_tracy@u.pacific.edu">b_tracy@u.pacific.edu</a></td>
</tr>
<tr>
<td>270</td>
<td>Does Joint-angle Specificity After Short-term Isometric Strength Training Have A Neural Basis?</td>
<td>Marcel B. Landza, Thomas G. Balshaw, Roxanas Panagiotis, Jonathan P. Folland, FACSM, FACSM.</td>
<td>Loughborough University, Loughborough, United Kingdom.</td>
<td>Email: <a href="mailto:marcel.lanza@gmail.com">marcel.lanza@gmail.com</a></td>
</tr>
<tr>
<td>271</td>
<td>Cardiovascular Effects of a Randomized Workplace Cycling Intervention</td>
<td>James E. Peterman, Kalee L. Morris, Rodger Kram, William C. Bymes, FACSM.</td>
<td>University of Colorado Boulder, Boulder, CO.</td>
<td>Email: <a href="mailto:flona.skelley2@gmail.desu.edu">flona.skelley2@gmail.desu.edu</a></td>
</tr>
<tr>
<td>272</td>
<td>Effects Of A 12-month Community-based Exercise Program In Men And Women With Non-communicable Diseases.</td>
<td>Fiona Skelly, Brona Furlong, Lisa Loughney, Noel McCaffrey, Niall Moyna.</td>
<td>Dublin City University, Dublin, Ireland</td>
<td><a href="mailto:Fiona.skelly2@gmail.desu.edu">Fiona.skelly2@gmail.desu.edu</a></td>
</tr>
<tr>
<td>273</td>
<td>Efficacy Trial Of A Behavioral Lifestyle Intervention To Promote Appropriate Gestational Weight Gain</td>
<td>Lyndi M. Buckingham-Schutt, Laura D. Ellingson, Spyridoula Vazou, Greg J. Welk, FACSM, Christina G. Campbell.</td>
<td>Iowa State University, Ames, IA.</td>
<td>Email: <a href="mailto:buckingh@gmail.com">buckingh@gmail.com</a></td>
</tr>
<tr>
<td>274</td>
<td>Baseline Body Composition Affects Exercise Training Outcomes: Results from Diabetic and Athletic Populations</td>
<td>Natalie M. Figueroa, Cynthia Villalobos, J. Mark VanNess, Paul D. Vosti, Courtney D. Jensen.</td>
<td>University of the Pacific, Stockton, CA.</td>
<td>Email: <a href="mailto:n_figueroa1@u.pacific.edu">n_figueroa1@u.pacific.edu</a></td>
</tr>
</tbody>
</table>

ACSM May 29 – June 2, 2018

Minneapolis, Minnesota
American College of Sports Medicine

Board #117 9:30 AM - 11:00 AM
Blood Flow Restriction Training and Functional Improvements in a Single Subject with Parkinson Disease
Peter C. Douris, Joanne Donoghue. New York Institute of Technology, Old Westbury, NY. (Sponsor: Gordon Schmidt, FACSM)
Email: pdouris@nyit.edu
(No relevant relationships reported)
Donoghue Presenting

Board #118 9:30 AM - 11:00 AM
A Knowledge Based Intervention on Health and Physical Activity Knowledge and Behavior in Hispanic College Students
Ulku S. Karabulut, Zasha Romnero, Paloma Mendoza, Ricardo Parra, Murat Karabulut. 1. UTRGV, Brownsville, TX. 2. UTRGV, Edinburg, TX
Email: ulku.karabulut@utrgv.edu
(No relevant relationships reported)

Board #119 9:30 AM - 11:00 AM
The Moderating Effect of Baseline Depression and Age on the Efficacy of an Exercise Intervention on Preventing Postpartum Depression and Stress
Beth A. Lewis1, Shira Dansiger2, Katie Schuver1, Joe Ciccolo1, Carrie Terrell1, Melissa Avery1. 1. University of Minnesota, Minneapolis, MN. 2. Brown University & The Miriam Hospital, Providence, RI. 3. Columbia University, New York, NY
Email: bleevis@cuny.edu
(No relevant relationships reported)

Board #120 9:30 AM - 11:00 AM
The Acute Effect of a Single Yoga Lesson on Mood and Stress among College Students
Zhonghui He1, Xin Qi1, Jiabin Tong1, Senlin Chen1, Shuchang He1. 1. Peking University, Beijing, China. 2. Louisiana State University, Baton Rouge, LA
Email: hezh@pku.edu.cn
(No relevant relationships reported)

Board #121 9:30 AM - 11:00 AM
Effects Of A 12-week Structured Exercise Intervention On Cholesterol
Brett Staniland1, Jorge Lopez-Fernandez1, Isabel Sanchez2, Tamara Iturraga2, Maria Ayuso2, Elizabeth Horton2, Lou Atkinson2, Steve Mann3, Gary Liguori, FACSM4, Alfonso Jimenez5. 1. Coventry University, Coventry, United Kingdom. 2. GOFit Lab, Madrid, Spain. 3. Aston University, Birmingham, United Kingdom. 4. University of Rhode Island, Kingston, RI. 5. University of Mississippi, Oxford, MS
Email: stanilab@uni.coventry.ac.uk
(No relevant relationships reported)

Board #122 9:30 AM - 11:00 AM
The Influence Of Non-exercise Physical Activity During Aerobic Exercise On Cardiometabolic Risk Factors
Damon L. Swift1, Joshua E. McGee1, Savanna G. Barefoot1, Patricia Brophy1, Chesley A. Solar1, Joseph A. Hounard, FACSM1, Lesley D. Lutes2. 1. East Carolina University, Greenville, NC. 2. University of British Columbia, Kelowna, BC, Canada
Email: swiftdl@ecu.edu
(No relevant relationships reported)

Board #123 9:30 AM - 11:00 AM
Video Conferencing Based Health Coaching is Effective for Inducing Weight Loss and Improving Metabolic Markers
Kelly E. Johnson1, Michelle K. Alencar2, Kathryn E. Coakley1, Damon L. Swift1, Christine M. Mermier1, Len Kravitz2, Fabiano T. Amorim1, Ann L. Gibson, FACSM1. 1. University of Saint Mary, Leavenworth, KS. 2. California State University Long Beach, Long Beach, CA. 3. University of New Mexico, Albuquerque, NM. 4. East Carolina University, Greenville, NC. (Sponsor: Ann Gibson, FACSM)
Email: kelly.johnson@stmary.edu
(No relevant relationships reported)

Board #124 9:30 AM - 11:00 AM
Effects Of Accumulated Short-bout Exercise On Obesity Index: A Meta-analysis
Heeontac Kim1, Joel Reesee2, Minsoo Kang, FACSM3. 1. Middle Tennessee State University, Murfreesboro, TN. 2. Brigham Young University–Hawaii, Laie, HI. 3. The University of Mississippi, University, MS
Email: hk3m@mtmail.mtsu.edu
(No relevant relationships reported)

Board #125 9:30 AM - 11:00 AM
A Weekly Structured Physical Activity Program Enhances Short-term Retention Of Middle-aged Adult Fitness Centre Users
Jorge Lopez-Fernandez1, Brett Staniland1, Isabel Sanchez2, Tamara Iturraga3, Maria Ayuso4, Elizabeth Horton4, Steven Mann4, Gary Liguori, FACSM5, Lou Atkinson6, Alfonso Jimenez7. 1. Coventry University, Coventry, United Kingdom. 2. GOFit Lab, Madrid, Spain. 3. active Research Institute, London, United Kingdom. 4. University of Rhode Island, Kingston, RI. 5. University of Mississippi, Oxford, MS
Email: loperezfej@uni.coventry.ac.uk
(No relevant relationships reported)

Board #126 9:30 AM - 11:00 AM
Exercise Training in ‘at Risk’ Black and White Women: A Comparative Cohort Analysis
Megan Bowdon, Pamela Marcovitz, Susanna K. Jain, Judith Boura, Kaitlin Liroff, Barry Franklin, FACSM. Beaumont Health, Royal Oak, MI. (Sponsor: Barry Franklin, PhD, FACSM)
Email: megan.bowdon@beaumont.org
(No relevant relationships reported)

Board #127 9:30 AM - 11:00 AM
Association Between Stage Of Behavior Change With Cardiovascular Risk, Perception Of Health And Quality Of Life Among Professionals From Health Institutions
Arnaud dos Santos, João Pedro da Silva Júnior, Victor Keihan Rodrigues Matudo, CELAFITSCS, Sao Paulo, Brazil
Email: personal.amauri@hotmail.com
(No relevant relationships reported)

Board #128 9:30 AM - 11:00 AM
Experimental Investigation of Exercise-Related, Perceived Hedonic Responses to Preferred Versus Imposed Media Content
Emily Frith, Paul D. Loprinzi, 38655. University of Mississippi, Oxford, MS
(No relevant relationships reported)

Board #129 9:30 AM - 11:00 AM
The Glutathione Redox Status And Total Antioxidant Responses To Supervised Physical Exercises In Metabolic Syndrome
Roberto C. Burini, FACSM, Fernando Moreto, Hugo T. Kano, Okesley Teixeira, Camila R. Correa. Sao Paulo State University (UNESP) - Botucatu Medical School, Botucatu, Brazil
Email: burini@fmb.unesp.br
(No relevant relationships reported)

Board #130 9:30 AM - 11:00 AM
The Wearable Technological Device as a Means of Physical Activity Monitoring
Alissa Underhill. Olivet Nazarene University, Bourbonnais, IL
Email: amunderhill@olivet.edu
(No relevant relationships reported)

www.acsm.org
Board #131 9:30 AM - 11:00 AM
The Physiological Assessment and Analysis of the Physical Demand of Riding a Snowmobile
Tania J. Pereira, University of Guelph, Guelph, ON, Canada. (Sponsor: Lawrence Spriet, FACSM)
Email: t.d.j.pereira@gmail.com
(No relevant relationships reported)

Board #132 9:30 AM - 11:00 AM
Randomized Trial Of Amino Acid Mixture Combined With Physical Activity Promotion In Overweight Adults
Keisuke Ueda1, Hiroyuki Sasa2, Takehiko Tsujimoto2, Chiaki Sanbongi1, Shuji Ikemori1, Hiroyuki Kobayashi3, Yoshihisa Nakata4.
1Meiji Co., Ltd., Odaiba, Japan. 2The University of Tokyo, Meguro, Japan. 3Shinme University, Matsue, Japan. 4University of Tsukuba, Tsukuba, Japan.
Reported Relationships: K. Ueda: Salary; Meiji Co., Ltd.

Board #133 9:30 AM - 11:00 AM
Validity Of Adhesive Worn Actigraph GT3X+
Accelerometer
AnnaMagee Morris, Roxanna Lopez, Eleanor Stevenback, Ketherine H. Ingram, Ph.D., Kennesaw State University, Kennesaw, GA
(No relevant relationships reported)

Board #134 9:30 AM - 11:00 AM
Changes in Perceived Importance of Physical Activity and Nutrition for Health Following (S)Partners Intervention
Breanne R. Carlson1, Rachel Greco, 49855, Erich J. Petushek1, Karin A. Pfeiffer, FACSM, Joseph J. Carlson1.
1Michigan State University Extension, East Lansing, MI. 2Northern Michigan University, Marquette, MI. 3Michigan State University, East Lansing, MI. (Sponsor: Karin Pfeiffer, FACSM)
Email: bree@msu.edu
(No relevant relationships reported)

Board #135 9:30 AM - 11:00 AM
Weight Status Differences In Light-intensity Physical Activity Increases From A Workplace Behavioral Intervention
1Northwestern University, Chicago, IL. 2University of Minnesota, Minneapolis, MN. 3Arizona State University, Phoenix, AZ. (Sponsor: Matthew Buman, FACSM)
Email: kara.gavin@northwestern.edu
(No relevant relationships reported)

Board #136 9:30 AM - 11:00 AM
Understanding Patient Experiences with Healthcare Providers and Exercise Promotion
Ann M. Sylvia, Bridgewater State University, Bridgewater, MA
Email: asylvia@student.bridgew.edu
(No relevant relationships reported)

Board #137 9:30 AM - 11:00 AM
Does Squat Depth and Width Influence Hip and Knee Joint Moments?
W Matt Denning1, Brad Gardiner2, Tyler Standifird2, Lauren Williams1.
1Brigham Young University - Idaho, Rexburg, ID. 2Weber State University, Ogden, UT. 3Utah Valley University, Orem, UT
Email: demningw@byu.edu
(No relevant relationships reported)

Board #138 9:30 AM - 11:00 AM
Feasibility of Progressive Resistance Training in Retired Mexican Women with Osteoarthritis
Oswaldo Ceballos-Gurrola, Erika M. Hernandez-Rojas, Maria C. Enriquez-Reyna. Universidad Autonoma de Nuevo Leon, San Nicolas de los Garza, Mexico
Email: oscegu@hotmail.com
(No relevant relationships reported)

Board #139 9:30 AM - 11:00 AM
Clinical Trial To Assess The Effect Of High-intensity Interval, Progressive Resistance Or Concurrent Exercise Protocol On Hormonal Responses In Latin-american Overweight Adults
Gina Paola Velasco-Orjuela1, Andrea del Pilar Quintero1, María A. Dominguez-Sanchez2, Jorge E. Correa-Bautista3, Antonio Garcia-Hernoso4, Johanan C. Peña-Braga1, Robinson Ramirez-Vélez5.
1Universidad del Rosario, Bogotá D.C., Colombia. 2Universidad de la Sabana, Chia, Colombia. 3Universidad de Santiago de Chile, USACH, Santiago de Chile, Chile.
Email: robin@ob@hotmail.com
(No relevant relationships reported)

Board #140 9:30 AM - 11:00 AM
Volume Of Exercise For Prevention Of Weight Regain (MET POWeR)
Amanda N. Szabo-Reed, Joseph E. Donnelly, FACSM, Richard A. Washburn, FACSM, Debra K. Sullivan, Jeffery J. Honas, Matthew S. Mayo, Ron Krebill, Anna Gorzyczka, Jeannine Goetz. Kansas University Medical Center, Kansas City, KS
Email: aszabo2@ku.edu
(No relevant relationships reported)

Board #141 9:30 AM - 11:00 AM
Preliminary Findings From A Stealth Physical Activity Intervention Targeting Inactive Dog Owners
Katie Becofsky, Brittany Mastellar, Erin Cawley, Rachel Mudway, Connor Saleeba, Aloc Shostek. University of Massachusetts Amherst, Amherst, MA
Email: kbcofsky@umass.edu
(No relevant relationships reported)

Board #142 9:30 AM - 11:00 AM
The Effects of Physical Activity on Physical and Mental Health in Stroke Patients
City C. Hsieh1, Yu-Chieh Liang2, Yen-Ting Lai2, Jung-Cheng Yang2, Fhsiao-Ling Huang2.
1Tsing Hua University, Hsinchu, Taiwan. 2Taiwan University Hospital Hsinchu Branch, Hsinchu, Taiwan.
Email: chsieh@mail.nd.nthu.edu.tw
(No relevant relationships reported)

Board #143 9:30 AM - 11:00 AM
Assessing Feasibility of Implementing Exercise is Medicine Referral Program at Tertiary Medical Center
Daniel Fosselman, Elisabeth Nogan. The Ohio State University, Columbus, OH
(No relevant relationships reported)

Board #144 9:30 AM - 11:00 AM
Effects Of 4-week Crossfit Training On Weightlifters’ Body Composition
Shui-Chang Hsu, Jyun-Ru Chen, Szu-Kai Fu, Wei-Chin Tseng, Kuo-Wei Tseng, Chang-Chi Lai. Department of Exercise and Health Sciences, University of Taipei, Taipei, Taiwan.
Email: azxcd153264@gmail.com
(No relevant relationships reported)

Board #145 9:30 AM - 11:00 AM
Maternal Aerobic Exercise and DHA Levels During Pregnancy Influences Infant Heart Outcomes
Cody J. Strom, Kim Kew, Blake Rushing, Christy Isler, Edward Newton, Linda E. May. East Carolina University, Greenville, NC
Email: Stromc17@students.ecu.edu
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board #</th>
<th>Title</th>
<th>Time</th>
<th>Authors</th>
</tr>
</thead>
</table>
| 305     | Board #156                                                           | 9:30 AM - 11:00 AM| Independent but Not Alone - A Physical Activity Intervention for Military Spouses  
Rebecca Gasper, Emily Mailey, Brandon Irwin, Kansas State University, Manhattan, KS  
Email: rgasper11@ksu.edu  
(No relevant relationships reported) |
| 306     | Board #157                                                           | 9:30 AM - 11:00 AM| Post-operative Lifestyle Intervention And Markers Of Physical And Mental Health  
Craig P. Flanagan, Wesley N. Smith, Kevin A. Jacobs, FACSM, Lee D. Kaplan, University of Miami, Coral Gables, FL  
(Sponsor: Arlette C. Perry, FACSM)  
Email: c.flanagan1@umiami.edu  
(No relevant relationships reported) |
| 307     | Board #158                                                           | 9:30 AM - 11:00 AM| Maintenance Of Physical Activity Level And Dissemination Of “Plus Ten” Message In Community-based Group Exercise  
Yoshinobu Saito1, Yoko Ogama1, Takayuki Tajima1, Ayumi Tanaka1, Yayoi Kibayashi1, Chisato Shibata1, Motohiko Miyachi1, Toru Takebayashi1.  
1Keio University, Fojisiwa, Japan.  
Fujisawa City Health and Medical Foundation, Fojisiwa, Japan.  
National Institute of Health and Nutrition, Tokyo, Japan.  
1Keio University, Shinjuku-ku, Japan  
Email: hui2162@cuhk.edu.hk  
(No relevant relationships reported) |
| 308     | Board #159                                                           | 9:30 AM - 11:00 AM| Body Composition Differences in Trained and Sedentary Individuals Matched for High BMI  
Andrea Santi, University of Minnesota, Minneapolis, MN  
Email: sant032@umn.edu  
(No relevant relationships reported) |
| 309     | Board #160                                                           | 9:30 AM - 11:00 AM| Opportunities and Frequency of Jumping Behaviors in Elementary Female Physical Education Students  
Skip M. Williams, David Thomas, FACSM, Illinois State University, Normal, IL  
(Sponsor: David Thomas, FACSM)  
Email: swillia1@ilstu.edu  
(No relevant relationships reported) |
| 310     | Board #161                                                           | 9:30 AM - 11:00 AM| Cardiovascular Risk, Physical Fitness According To Socioeconomic Level And Geographical In A National Sample  
Guilermo Droppelmann1, Felipe Feijoo1, Josivaldo de Souza1, Sandra Mahecha-Matsudo1.  
1MEDS Clinics, Santiago, Chile.  
2Pontificia Universidade Catolica de Valparaíso, Valparaíso, Chile  
Email: guilermo.droppelmann@meds.cl  
(No relevant relationships reported) |
| 311     | Board #162                                                           | 9:30 AM - 11:00 AM| Does Physical Activity Programming Influence Health and Wellness Attitudes in a Rural School District?  
Madeline A. Lyon1, Timothy K. Behrens, FACSM1, Dick Carpenter2, Elizabeth Tucker2, Carmen Luna2, Julaine Field2, Cheryl Kelly2.  
1Northern Arizona University, Flagstaff, AZ.  
2University of Colorado Colorado Springs, Colorado Springs, CO  
3Kaiser Permanente Colorado, Denver, CO  
Email: mal457@nau.edu  
(No relevant relationships reported) |
| 312     | Board #163                                                           | 9:30 AM - 11:00 AM| The Influence Of Upper Extremity And Whole-body Movements On Energy Expenditure During Active Gaming  
Movements On Energy Expenditure During Active Gaming  
Keith Naugle, IUPUI, Indianapolis, IN  
Email: kenaugle@iupui.edu  
(No relevant relationships reported) |
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>320</td>
<td>Board #161: HealthSteps Process Evaluation: Exploring Delivery of</td>
<td>9:30 AM - 11:00 AM</td>
</tr>
<tr>
<td></td>
<td>a Healthy Lifestyle Program from Coach and Participant Perspectives</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wendy Blunt, Dawn P. Gill, Brendan Riggin, Judith Belle Brown,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Robert J. Petrella, FACSM. Western University, London, ON, Canada</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:wblunt@uw.ca">wblunt@uw.ca</a> (No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>321</td>
<td>Board #162: The Relationship Between Usual Care Intervention And</td>
<td>9:30 AM - 11:00 AM</td>
</tr>
<tr>
<td></td>
<td>Expanded Intervention On Hospital Readmission And Cost Reduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lenard Angelo R. San Miguel, CUNY-York College, Queens, NY</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:lenardangelo.sanmiguel@aol.com">lenardangelo.sanmiguel@aol.com</a> (No relevant relationships</td>
<td></td>
</tr>
<tr>
<td></td>
<td>reported)</td>
<td></td>
</tr>
<tr>
<td>322</td>
<td>Board #163: The Role Healthcare Providers’ Physical Activity Levels</td>
<td>9:30 AM - 11:00 AM</td>
</tr>
<tr>
<td></td>
<td>Have On Barriers To Physical Activity Counseling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Bhihba M. Das, Katrina D. DuBose, FACSM, Alexandra S. Peyton. East</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Carolina University, Greenville, NC. (Sponsor: Katrina D. DuBose,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FACSM) Email: <a href="mailto:bhihba@gmail.com">bhihba@gmail.com</a> (No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>323</td>
<td>Board #164: Public Health Impact of a Family-based Pediatric Obesity</td>
<td>9:30 AM - 11:00 AM</td>
</tr>
<tr>
<td></td>
<td>Treatment Program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Roderick T. Bartee, Paige Wuebben, Kate A. Heelan, FACSM. University</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of Nebraska at Kearney, Kearney, NE. (Sponsor: Kate A. Heelan, FACSM)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:bartee2@unk.edu">bartee2@unk.edu</a> (No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>324</td>
<td>Board #165: Physician Characteristics and Hospital Contextual Factors</td>
<td>9:30 AM - 11:00 AM</td>
</tr>
<tr>
<td></td>
<td>Associated with Physicians’ Intention to Provide Exercise Counseling</td>
<td></td>
</tr>
<tr>
<td></td>
<td>An-Min Lynn, Juan-Hau Huang. National Taiwan University College of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public Health, Taipei, Taiwan Email: <a href="mailto:juang@ntu.edu.tw">juang@ntu.edu.tw</a> (No relevant</td>
<td></td>
</tr>
<tr>
<td></td>
<td>relationships reported)</td>
<td></td>
</tr>
<tr>
<td>325</td>
<td>Board #166: Social Support is Associated with Change in Physical</td>
<td>9:30 AM - 11:00 AM</td>
</tr>
<tr>
<td></td>
<td>Activity Following Bariatric Surgery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sara J. Kovac1, Anita P. Couroulas2, Renee J. Rogers2, Kelliann K.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Davis2, John M. Jakucie, FACSM. Temple University, Philadelphia, PA.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Email: <a href="mailto:sara.kovac@temple.edu">sara.kovac@temple.edu</a> (No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>326</td>
<td>Board #167: Feasibility of Implementing a Healthy Vending Initiative</td>
<td>9:30 AM - 11:00 AM</td>
</tr>
<tr>
<td></td>
<td>on a Public University Campus</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Alexis M. Malmkar, Roderick T. Bartee, Abbey A. Bryce, Kate A.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Heelan, FACSM. University of Nebraska at Kearney, Kearney, NE.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>327</td>
<td>Board #168: Does Music-Based Cadence Entrainment Alter Metabolic</td>
<td>9:30 AM - 11:00 AM</td>
</tr>
<tr>
<td></td>
<td>Intensity?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Colleen J. Sands, Scott W. Ducharme, Dylan C. Perry, Elroy J. Aguiar,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Christopher C. Moore, Catrine Tudor-Locke, FACSM. University of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Massachusetts Amherst, Amherst, MA. (Sponsor: Catrine Tudor-Locke,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FACSM) (No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>A-48</td>
<td>Free Communication/Poster - Physical Activity and Health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Wednesday, May 30, 2018, 7:30 AM - 12:30 PM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Room: CC-Hall B</td>
<td></td>
</tr>
</tbody>
</table>
American College of Sports Medicine

Board #175
9:30 AM - 11:00 AM
The Prevalence of Hypertension in a Population of Former Professional Football Players
Jaime Kaplan, Genevieve E. Smith, Gregory W. Stewart, FACSM. Tulane University School of Medicine, New Orleans, LA. (Sponsor: Gregory Stewart, MD, FACSM) (No relevant relationships reported)

Board #176
9:30 AM - 11:00 AM
Waist Circumference Influences Associations Between Physical Activity And Metabolic Syndrome Risk In College-aged Females
G.M. Frederick1, M.V. Fedewa2, B.M. Dau3, W.J. McConnell4, E.D. Hathaway5, R.E. Salyer1, S. Higgins5, M.D. Schmidt1, E.M. Evans, FACSM. 1University of Alabama, Tuscaloosa, AL. 2East Carolina University, Greenville, NC. 3University of Tennessee Chattanooga, Chattanooga, TN. 4Elon University, Elon, NC. (Sponsor: Ellen M. Evans, FACSM) Email: glum@tulane.edu (No relevant relationships reported)

Board #177
9:30 AM - 11:00 AM
The Prevalence of Obesity and Diabetes Mellitus in a Former Professional Football Player Population
Genevieve E. Smith, Gregory W. Stewart, FACSM. Tulane University, New Orleans, LA. (Sponsor: Gregory Stewart, MD, FACSM) Email: glum@tulane.edu (No relevant relationships reported)

Board #178
9:30 AM - 11:00 AM
Vigorous Intensity Volume, Not Total Volume Of Physical Activity, Predicts Adiposity In Young Adults
Minsuk Oh, Kathleen F. Janz, FACSM, Steven M. Levy, University of Iowa, Iowa City, IA. (Sponsor: Kathleen F. Janz, FACSM) Email: minsoh@uiowa.edu (No relevant relationships reported)

Board #179
9:30 AM - 11:00 AM
Association Between Physical Activity Level, Body Composition And Muscular Strength Among Health Professional
João Henrique V. Pietri, Amauri dos Santos, João Pedro da Silva Junior, Diana Carolina Gonzalez, Victor Keihan Rodrigues Matsudo. CELAFISCS, Sao Paulo, Brazil Email: joao_henrique17@hotmail.com (No relevant relationships reported)

Board #180
9:30 AM - 11:00 AM
The Influence of Physical Activity on Energy Balance and Resting Metabolic Rate in Adults
Robert Buresh, FACSM1, Yuri Feito, FACSM1, Cassie Williamson1, Brian Kisicicewicz2, Corrine Ellis2, Leah Tsui2, Anna Schlupp2, Kelsey Shepard1, Stella Volpe, FACSM1. 1Kennesaw State University, Kennesaw, GA. 2Drexel University, Philadelphia, PA (No relevant relationships reported)

Board #181
9:30 AM - 11:00 AM
Exercise and Anxiety in Adults with Arthritis and Other Rheumatic Diseases: Support for Evidential Value
George A. Kelley, FACSM, Kristi Sharpe Kelley. West Virginia University, Morgantown, WV Email: gkelley@bse.wvu.edu (No relevant relationships reported)

Board #182
9:30 AM - 11:00 AM
Activity Pacing, Fatigue, Physical Activity And Quality Of Life In Adults With Multiple Sclerosis
Ulric S. Abonie1, Fenneke Hoekstra2, Trynke Hoekstra2, Cees P. van der Schans3, Rienk Dekker1, Lucus H. V. van der Woude4, Florentina J. Hettinga1. 1University of Essex, Colchester, United Kingdom. 2University of Groningen, Groningen, Netherlands. (Sponsor: Carl Foster, FACSM) Email: usabon@essex.ac.uk (No relevant relationships reported)

Board #183
9:30 AM - 11:00 AM
Association Between Sedentary Behavior, Body Composition, Muscular Strength And Quality Of Life Among Health Professionals
Bianca Regina de Oliveira, Amauri dos Santos, João Pedro da Silva Junior, Victor Keihan Rodrigues Matsudo. CELAFISCS, Sao Paulo, Brazil Email: aoseesapesagenda@gmail.com (No relevant relationships reported)

Board #184
9:30 AM - 11:00 AM
Examining Relationships Between Pregnancy Symptoms and Gestational Weight Gain
Ashlyn A. Swafford, Rebecca A. Schlaff, Meghan Baruth, Samantha J. Deere, Saguaro Valley State University, University Center, MI Email: n00930729@unf.edu (No relevant relationships reported)

Board #185
9:30 AM - 11:00 AM
Mean Combined Relative Grip Strength and Metabolic Syndrome: 2011-2014 NHANES
Mary Summerlin, Michael R. Richardson, James R. Churilla, FACSM. University of North Florida, Jacksonville, FL. (Sponsor: James R. Churilla, FACSM) Email: n00930729@unf.edu (No relevant relationships reported)

Board #186
9:30 AM - 11:00 AM
Body Composition and Aerobic Capacity in Mexican Police officers
Maciste H. Macias Cervantes1, Evelin Moreno-Vargas1, Natalia Vilchis-Valdez1, Arturo Figueroa, FACSM2, Claudia Luevano-Contreras1, Ma Eugenia Garay-Sevillia1, Ana L. Gonzalez-Yebra2. 1Departamento de Ciencias Medicas UG, Leon, Mexico. 2Texas Tech University, Lubbock, TX. 3UNIVERSIDAD DE GUANAJUATO, Leon, Mexico Email: macistehabacuc@yahoo.com.mx (No relevant relationships reported)

Board #187
9:30 AM - 11:00 AM
Trajectories of Stair Climbing Performance for Black and White Midlife Women
Brittney S. Lange-Maia1, Imke Janssen2, Carrie Karvonen-Gutierrez3, Stephanie L. Fitzpatrick1, Elsa S. Strotmeyer4, Bradley M. Appelhans5, Elizabeth F. Avery5, Sheila A. Degan, FACSM5, Howard M. Kravitz6. 1Rush University Medical Center, Chicago, IL. 2University of Michigan, Ann Arbor, MI. 3Kaiser Permanente, Portland, OR. 4University of Pittsburgh, Pittsburgh, PA. (Sponsor: Sheila Degan, FACSM) (No relevant relationships reported)

Board #188
9:30 AM - 11:00 AM
Relationship between Body Composition and Health Behaviors in High and Low Fit College Women
Chaise A. Murphy, Shinya Takahashi, Jim Bowdard, Jean Ann Fischer, Marsha Cernjul, Desmond Cooney, Karsten Koehler. University of Nebraska-Lincoln, Lincoln, NE Email: chaise.murphy@huskers.unl.edu (No relevant relationships reported)
348 Board #189 9:30 AM - 11:00 AM
Association of Breakfast Frequency with Lean Body Mass in Healthy Young Subjects: A Cross-Sectional Study
Jun Yasuda1, Mai Asako1, Takuma Arimitsu2, Satoshi Fujita3, 1Graduate School of Sport and Health Science, Ritsumeikan University, Shiga, Japan. 2College of Sport and Health Science, Ritsumeikan University, Shiga, Japan
Email: 55flykyan@gmail.com
(No relevant relationships reported)

349 Board #190 9:30 AM - 11:00 AM
High Intensity Interval Training and Dietary Supplement Use in the Army
Jessica L. Kegel, Josh B. Kozman, Patricia A. Deuster, FACSM. Uniformed Services University, Bethesda, MD
(No relevant relationships reported)

350 Board #191 9:30 AM - 11:00 AM
The “Fit But Fat” Concept: A Re-evaluation Of National Health Data
Jennifer Bunn, Danielle Eustace, Taylor Miskech, Michael Irouzek. Campbell University, Buies Creek, NC. (Sponsor: Michael J Webster, FACSM)
Email: bunnj@campbell.edu
(No relevant relationships reported)

351 Board #192 9:30 AM - 11:00 AM
The Impact of Cardiovascular Disease Diagnosis on Physical Activity Behavior
Yuehan Wang, Martijn F.H. Maessen, André L.M. Verbeek, Maria T.E. Hopman, FACSM, Thijis M.H. Eijsvogels. Radboud University Medical Centre, Nijmegen, Netherlands
Email: Y.Wang@student.ru.nl
(No relevant relationships reported)

352 Board #193 9:30 AM - 11:00 AM
Weight Status, Physical Fitness & Health-related Quality Of Life Among Chinese Adolescents
Xiangren Yi1, Meng Ding2, Shuyuan Huang1, Lei Zhang1, Wenxin Chen1, Nuo Yi1, Peng Zhang, FACSM3, Yong “Tai” Wang, FACSM4. 1Shandong University, Jinan, China. 2Shandong Normal University, Jinan, China. 3East Stroudsburg University, East Stroudsburg, PA. 4the University of Texas at Tyler, Tyler, TX. (Sponsor: Yong “Tai” Wang, FACSM)
Email: xrenyi@sdu.edu.cn
(No relevant relationships reported)

353 Board #194 9:30 AM - 11:00 AM
Leisure-time Physical Activity Throughout Adulthood: Implications For All-cause, And Cause-specific Mortality
Pedro F. Saint-Maurice1, Diamiroud Coughlan1, Sarah K. Keadle2, Richard P. Troiano3, Charles E. Matthews, FACSM4. 1National Cancer Institute, Rockville, MD. 2California Polytechnic State University, San Luis Obispo, CA. (Sponsor: Charles E. Matthews, FACSM)
Email: pedro.saintmaurice@nih.gov
(No relevant relationships reported)

354 Board #195 9:30 AM - 11:00 AM
Physical Activity Declines At Significant Life Events In Young Adults
Jon Miller, Megan Winkler, Mary Christoph, Toben Nelson, Daheia Barr-Anderson, FACSM, Dianne Neumark-Sztainer. University of Minnesota, Minneapolis, MN. (Sponsor: Daheia Barr-Anderson, FACSM)
Email: mil5687@umn.edu
(No relevant relationships reported)
American College of Sports Medicine

362 Board #203 9:30 AM - 11:00 AM
Impact of Air Pollution on Physical Activity: A Cohort Study of Beijing College Students
Hongjun Yu, Weimo Zhu, FACSM1, Chunmei Cao1, Tonghua University, Beijing, China. 1University of Illinois at Urbana-Champaign, Urbana, IL. (Sponsor: Weimo Zhu, FACSM)
Email: yuhj12@mail.tonghua.edu.cn
(No relevant relationships reported)

363 Board #204 9:30 AM - 11:00 AM
Cardiorespiratory Fitness and Incidence of Dyslipidemia: A Cohort Study Among Japanese Women
Takehisa Ohta1, Susumu S. Sawada, FACSM1, Kana Takagi2, Junzo Nagashima1, Takeshi Yoshitaka1, Yasunori Imagawa1, Nobuyoshi Ono1, Wataru Fukuda1, Reni Koyanagi1, Yuko Gando1, Motohiko Miyachi1, Hiroyuuki Sasa1, I-Min Lee, FACSM1, Steven N. Blair, FACSM1, Naokata Ishii1. 1The University of Tokyo, Tokyo, Japan. 2National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan. 3Yokohama City Sports Medical Center, Yokohama, Japan. 4Harvard Medical School, Boston, MA. 5University of South Carolina, Columbia, SC
(No relevant relationships reported)

364 Board #205 9:30 AM - 11:00 AM
Cardiorespiratory Fitness Measured from Cardiopulmonary Exercise Testing for Mortality Risk Prediction in Apparently Healthy Men and Women
Mary T. Imboden1, Matthew P. Harber, FACSM1, W H. Finch1, Derron L. Bishop2, Mitchell H. Whaley, FACSM1, Leonard A. Kaminsky, FACSM1,1 Ball State University, Muncie, IN. 2Indiana University School of Medicine, Muncie, IN. (Sponsor: Leonard A. Kaminsky, FACSM)
Email: mstttl2@bsu.edu
(No relevant relationships reported)

365 Board #206 9:30 AM - 11:00 AM
Obesity And Health-related Physical Activity Behavior In Selected European Countries: Needs Assessment for the Eubohealth-consortium
Lina Hermeling, Marion Flechner-Mors, Romy Lauer, Jürgen M. Steineracker, FACSM, Susanne Kobel. Ulm University, Ulm, Germany. (Sponsor: Prof. Jürgen M. Steineracker, FACSM)
Email: lina.hermeling@uni-ulm.de
(No relevant relationships reported)

366 Board #207 9:30 AM - 11:00 AM
The Association of Physical Activity and Body Mass Index with Myocardial Infarction: The Tromsø Study
Marjir Renninger1, Maria-Lisa Løchen2, 1UIF Ecklund, FACSM2, Lailia A. Hopstock1, Lone Jorgensen1, Elliniv B. Mathiessen1, Inger Njollstad1, Henrik Schirmer1, 1Tromsø, Norway. 2University of Texas Medical Branch, Galveston, TX. 3University of Michigan, Ann Arbor, MI. 4The University of Texas at Austin, Austin, TX. 5Ball State University, Muncie, IN. (Sponsor: Andreas N. Kavazis, FACSM)
Email: marjir.renninger@web.de
(No relevant relationships reported)

367 Board #208 9:30 AM - 11:00 AM
Cardiorespiratory Fitness, Alcohol Consumption And The Incidence Of Hyper Non-HDL Cholesterolemia: A Cohort Study
Natsumi Watanabe1, Kazunori Shimada1, Susumu S. Sawada, FACSM1, I-Min Lee, FACSM2, Yuko Gando1, Haruki Momma1, Ryoko Kawakami1, Motohiko Miyachi1, Yumiko Hagi1, Chihiro Kinugawa1, Takashi Okamato1, Koji Tsukamoto2, Steven N. Blair, FACSM3, 1Juntendo University, Chiba, Japan. 2Juntendo University, Graduate School of Medicine, Tokyo, Japan. 3Ball State University, Muncie, IN. 4University of Illinois at Urbana-Champaign, Urbana, IL. 5National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan. 6Harvard Medical School, Boston, MA. 7Tokoh University, Sendai, Japan. 8Waseda University, Saitama, Japan. 9Tokai University, Kanagawa, Japan. 10Tokyo Cancer, Tokyo, Japan. 11University of South Carolina, Columbia, SC
(No relevant relationships reported)

368 Board #209 9:30 AM - 11:00 AM
Overturning the Hypothesis that Cigarettes Can Enhance Hematocrit and Improve Aerobic Capacity
Grace L. Naylor1, Jennica Harrison1, J. Mark VanNess1, Michelle M. Amara1, Jonathan M. Saxe1, Lewis E. Jacobson2, Courtney D. Jensen3. 1University of the Pacific, Stockton, CA. 2St. Vincent Hospital, Indianapolis, IN
(No relevant relationships reported)

369 Board #210 9:30 AM - 11:00 AM
The Association Between Physical Activity, Sleep, and Cardiovascular Risk Factors in College Students
Heather H. Betz, Julie M. Cousins. Albion College, Albion, MI. (Sponsor: Jonathan Myers, FACSM)
Email: hbetz@albion.edu
(No relevant relationships reported)

370 Board #211 9:30 AM - 11:00 AM
The Association of Body Composition with Cardiometabolic Risk Factors in Apparently Healthy Young Adult Females
Samantha C. Orr, Mary A. Elsesser, Ryan T. Tyler, Timothy A. Rengers, Evan Eschler, Tamara Hew-Butler, FACSM, Charles RC Marks, Kristin R. Landsis-Piwowar, Myung D. Choi, Elise C. Brown. Oakland University, Rochester, MI
Email: orr@oakland.edu
(No relevant relationships reported)

A-49 Free Communication/Poster - Nutrition Interventions
Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

371 Board #212 11:00 AM - 12:30 PM
Lifelong Ketogenic Diet Feeding Increases Longevity, But Does Not Alter Oxidative Stress Markers in Rats
Hailey A. Parry, Wesley C. Kephart, Petey Mumford, Matthew Romero, Cody Harn, C. Brooks Mobley, Yufeng Zhang, Michael D. Roberts, Andreas N. Kavazis, FACSM. Auburn University, Auburn, AL. (Sponsor: Andreas N. Kavazis, FACSM)
(No relevant relationships reported)

372 Board #213 11:00 AM - 12:30 PM
The Effects of Choline Intake and Resistance Exercise Training on Strength Gains in Older Adults
Chang Wook Lee1, Elkego Galvani1, Teak V. Lee1, Vincent CW Cher1, Steve Bul1, Stephen F. Crouse, FACSM1, James D. Flockey2, Stephen B. Smith1, Stephen E. Rechman, FACSM1, 1University of Houston-Victoria; Victoria, TX. 2University of Texas Medical Branch, Galveston, TX. 3Pierce College, Woodland Hills, CA. 4Georgia Court University, Lakewood, NJ. 5Dixie State University, St. George, UT. 6Texas A&M University, College Station, TX
(No relevant relationships reported)

373 Board #214 11:00 AM - 12:30 PM
Utilization And Efficacy Of The “Run Fueled” Smart-phone Application Among Collegiate Endurance Runners
Michelle Barrack1, Michael Fredericson, FACSM, Emil Kras2, Brian Kim1, Sonal Singh1, Kristen Gravani1, Beth Miller, Aurelia Nativ, FACSM1, 1California State University, Long Beach, Long Beach, CA. 2Stanford University, Stanford, CA. 3University of California, Irvine, Irvine, CA. 4University of California, Los Angeles, Los Angeles, CA. 5Duke University, Durham, NC. (Sponsor: Aurelia Nativ, FACSM)
Email: michelle.barrack@csulb.edu
(No relevant relationships reported)
P28 Final Program

Board #215 11:00 AM - 12:30 PM
Effect Of Pre-sleep Whole-food Or Protein Beverage On Morning Metabolism In Active Women
Samantha M. Leyh, Brandon D. Willingham, Daniel A. Baur, Lynn B. Panton, FACSM, Michael J. Ormsbee, FACSM. Florida State University, Tallahassee, FL
(No relevant relationships reported)

A-50 Free Communication/Poster - Cognition and Emotion

Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

Board #216 11:00 AM - 12:30 PM
The Acute Effects Of A 30-min Moderate Aerobic Exercise On Autonomic And Inhibitory Control
Yuu-Man LEE, Stanley Sai-chuen HUI, FACSM. The Chinese University of Hong Kong, Hong Kong, Hong Kong. (Sponsor: Prof. Stanley Sai-chuen HUI, FACSM)
Email: mlee256091@gmail.com
(No relevant relationships reported)

Board #217 11:00 AM - 12:30 PM
Physical Fitness and Cognitive Performance in Women
Email: jr220979@my.ncwc.edu
(No relevant relationships reported)

Board #218 11:00 AM - 12:30 PM
The Acute Effect Of Endurance Exercise On An Executive Function Task In Middle-age And Older Adults
Brandon A. Yates1, Ariela R. Orkaby2, Ekow Dadzie, Jr.3, Elaine C. Lee1, Lawrence E. Armstrong, FACSM4. 1Spaulding Rehabilitation Hospital, Cambridge, MA. 2VA Boston Healthcare System, Boston, MA. 3University of Connecticut, Storrs, CT. (Sponsor: Lawrence Armstrong, PhD, FACSM, FACSM)
Email: byates@partners.org
(No relevant relationships reported)

Board #219 11:00 AM - 12:30 PM
Experimental Effects of Acute Exercise on Episodic Memory Acquisition: Decomposition of Multi-Trial Gains and Losses
Eveleen Sng, Emily Frith, Paul Loprinzi. University of Mississippi, Oxford, MS
(No relevant relationships reported)

Board #220 11:00 AM - 12:30 PM
EMF Stimulation As Passive Exercise Improves Cognition And Psychomotor Activity In Senescent Rats
Timea Teglas1, Gabriella Dömnyé2, Karoly Béres1. 1University of Physical Education, Budapest, Hungary. 2Semmelweis University, Budapest, Hungary
Email: timea.teglas87@gmail.com
(No relevant relationships reported)

Board #221 11:00 AM - 12:30 PM
Effects of Acute Exercise on Stress-Induced Memory Function
Pamela Ponce, Dylan Delancey, Emily Frith, Paul D. Loprinzi. University of Mississippi, University, MS
(No relevant relationships reported)

Board #222 11:00 AM - 12:30 PM
The Effects of Acute Exercise on Working Memory and Delay Discounting
Julie A. Cantelon1, Grace E. Giles2, Robin B. Kanarek1, Caroline R. Mahoney1, Holly A. Taylor1. 1Tufts University, Medford, MA. 2U.S. Army NSRDEC, Natick, MA
Email: julie.cantelon@tufts.edu
(No relevant relationships reported)

Board #223 11:00 AM - 12:30 PM
The Effects Of Pilates On Cognitive Functions In Middle-aged Women
Yuya Fujii1, Keisuke Fujii2, Kayoko Isono1, Naomi Otsuki2, Kaya Joho1, Tomohiko Okura1. 1University of Tsukuba, Ibaraki, Japan. 2Ibaraki Prefectural University of Health Sciences, Ibaraki, Japan.
Email: tokyovillabond.yuya@gmail.com
(No relevant relationships reported)

Board #224 11:00 AM - 12:30 PM
Trade-off Between 30-minute Physical Activity And 1-hour Revision Time
Jacky Ka-wai Chan, Stanley Sai-chuen Hui, FACSM. The Chinese University of Hong Kong, Hong Kong, Hong Kong
Email: major.jacky@yahoo.com.hk
(No relevant relationships reported)

Board #225 11:00 AM - 12:30 PM
Does False Feedback Alter Performance in an Anaerobic Maximal Test Among Healthy Young Adults?
Nathaniel G. Bodell, Andrew Craig-Jones, Jeffrey Montes, James W. Navalta, FACSM. University of Nevada, Las Vegas, Las Vegas, NV. (Sponsor: James Navalta, FACSM)
(No relevant relationships reported)

Board #226 11:00 AM - 12:30 PM
Increased Exercise Activity In An Enriched Environment Improves Anxiety-like Behavior And Cognition.
Mizuki Sudo1, Soichi Ando2, Yutaka Kano3, Toshiya Nagamatsu4. 1Physical Fitness Research Institute, Meiji Yasuda Life Foundation of Health and Welfare, Hachioji, Tokyo, Japan. 2University of Electro-Communications, Chofu, Tokyo, Japan
Email: mizuki97@hotmail.com
(No relevant relationships reported)

Board #227 11:00 AM - 12:30 PM
The Role of Low Frequency Power in the Relationship Between Exercise and Memory
Alexis B. Slutsky, Jennifer L. Etner, FACSM, Sudharanarum Arunachalam, Laurie Wideman, FACSM. University of North Carolina at Greensboro, Greensboro, NC. (Sponsor: Laurie Wideman, FACSM)
Email: abslutsk@uncg.edu
(No relevant relationships reported)

Board #228 11:00 AM - 12:30 PM
The Effect of Acute Aerobic Exercise on Attention and Affect in Middle-aged Women
Jonathan Little, Kara T. McNeill, Cara Poole, Eric E. Hall, FACSM, Theresa Ramos, Elizabeth S. Evans. Elon University, Elon, NC. (Sponsor: Eric E. Hall, PhD, FACSM)
(No relevant relationships reported)

Board #229 11:00 AM - 12:30 PM
Exercise Training Related Changes in Verbal Fluency in Healthy Older Adults and Mild Cognitive Impairment
Allison P. Williams1, Zuleyha Ozturk2, Tina Mirzazadeh3, Yasmeen Farooqi-Shah1, Kristy A. Nielsen2, J. Carson Smith, FACSM4. 1University of Maryland, College Park, MD. 2Marquette University, Milwaukee, WI. (Sponsor: J. Carson Smith, PhD, FACSM)
(No relevant relationships reported)
A-51 Free Communication/Poster - Cognition and Emotion, Special Populations

Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

398 Board #239 11:00 AM - 12:30 PM
Cognitive Function And Quality Of Life: Relationships In Individuals With And Without Spinal Cord Injury
Shauna Dudley-Javoroski, Jinhyun Lee, Richard K. Shields. University of Iowa, Iowa City, IA
(No relevant relationships reported)

399 Board #240 11:00 AM - 12:30 PM
Both Combined And Aerobic Training Improve Cognitive Function In Hypertensive Elderly
Wellington Martins Santos, Amanda Sardeli, Victor Gadelha, Daisa Moraes, Claudia Cavaglioni, Mara Chacon-Mikahill. University of Campinas, Campinas, Brazil
Email: well.martins.santos@gmail.com
(No relevant relationships reported)

400 Board #241 11:00 AM - 12:30 PM
Mismatch Between Perception of Disability and Functional Outcomes in Individuals with Large Burn Injuries
Mu Huang1, Manall F. Jaffery2, Gilbert Moraléz1, Matthew N. Cramer1, Steven A. Romero2, Craig G. Crandall, FACSM. 1Institute for Exercise and Environmental Medicine, Dallas, TX. 2University of North Texas Health Science Center, Fort Worth, TX. (Sponsor: Craig Crandall, FACSM)
Email: mu.huang@utsouthwestern.edu
(No relevant relationships reported)

401 Board #242 11:00 AM - 12:30 PM
Effects of Acute Aerobic Exercise on Cognitive Function in Individuals with Down Syndrome
Sang Ock Wee1, Elizabeth Schroeder2, Georgios Grigoriadis2, Alexander J. Rosenberg1, Kanokwan Bunsawat1, Garrett Griffith1, Tracy Baynard, FACSM, Bo Fernhall, FACSM. 1California State University San Bernardino, San Bernardino, CA. 2University of Illinois at Chicago, Chicago, IL. 3University of Utah, Salt lake city, UT. (Sponsor: Bo Fernhall, FACSM)
Email: sangouk.wee@csusb.edu
(No relevant relationships reported)

402 Board #243 11:00 AM - 12:30 PM
The Effects of Cardiovascular Health on Cognitive Function in Older Adults
Justin Mason1, Salvador Jaime2, Arun Maharaj3, Roque Nelson1, Gershon Tenenbaum2, Arturo Figueroa, FACSM. 1Florida State University, Tallahassee, FL. 2University of Wisconsin - La Crosse, La Crosse, WI. 3Texas Tech University, Lubbock, TX. (Sponsor: Arturo Figueroa, FACSM)
Email: justinmason1@gmail.com
(No relevant relationships reported)

403 Board #244 11:00 AM - 12:30 PM
Longitudinal Investigation of Daily Physical Education on Fitness Levels and Processing Speed among Minority Youth
Brooke E. Huhn, Julian A. Reed, Caroline E. Stanton. Furman University, Greenville, SC. (Sponsor: Anthony Caterisano, FACSM)
Email: brooke.huhn@furman.edu
(No relevant relationships reported)

404 Board #245 11:00 AM - 12:30 PM
Investigation Between Daily PE, Fluid Intelligence, Fitness and BMI among Middle School Youth Over Time
Caroline E. Stanton, Julian A. Reed, Brooke E. Huhn. Furman University, Greenville, SC. (Sponsor: Anthony Caterisano, FACSM)
Email: caroline.stanton@furman.edu
(No relevant relationships reported)
405 Board #246 11:00 AM - 12:30 PM
Lasting Effects of Acute Exercise on Working Memory Performance in Older Adults with Long and Short Sleep
Junyoon Won, Alfonso Alfiniti, Lauren Weiss, Corey Michelson, J. Carson Smith, FACSM, 1 University of Maryland at College Park, College Park, MD. 2 Johns Hopkins University, Baltimore, MD.
(Sponsor: J. Carson Smith, FACSM)
Email: won25@umd.edu

406 Board #247 11:00 AM - 12:30 PM
Cognitive Performance Changes After 12 Weeks Of Strength Training In Elderly Overweight Women

407 Board #248 11:00 AM - 12:30 PM
Associations Of Objectively Measured Physical Activity With Executive Functioning In Chinese Young Adults
Tao Huang, Linrun Zhao, Jun Lin, Shanghai Jiao Tong University, Shanghai, China.

408 Board #249 11:00 AM - 12:30 PM
The Effects Of High-Cadence Cycling On Emotional Recognition In Individuals With Parkinson's Disease
Angela L. Ridgel, Sara A. Harper, Bryan T. Dowdell, Brandon S. Pollock, Kent State University, Kent, OH.
(Sponsor: J Derek Kingsley, FACSM)
Email: aridgel@kent.edu

409 Board #250 11:00 AM - 12:30 PM
Impact of Physical Activity on Cognition in Older Mexican Americans
Kamiah Moss, Stephanie Large, Sid E. O'Bryant, Leigh A. Johnson, The University of North Texas Health Science Center, Fort Worth, TX.
Email: kamiah.moss@unthsc.edu

410 Board #251 11:00 AM - 12:30 PM
Safety, Enjoyment, And Physiological Responses Of Kinect-based Exergames In Older Adults At Risk For Falls
Elisa F. Ogawa, Haikun Huang, Lap-Fai Yu, Tongjian You, FACSM, University of Massachusetts Boston, Boston, MA.
(Sponsor: Tongjian You, FACSM)
Email: elisa.ogawa001@umb.edu

411 Board #252 11:00 AM - 12:30 PM
Acute Dose-response Effects Of Aerobic Exercise On Cerebrovascular Hemodynamics
Sophy J. Perdomo, Bethany Barone Gibbs, John M. Jakicic, FACSM, Christopher E. Kline, Jeffrey R. Balzer, University of Kansas Medical Center, Kansas, KS.
(Sponsor: University of Pittsburgh, Pittsburgh, PA)
Email: SJP90@pitt.edu

412 Board #253 11:00 AM - 12:30 PM
Endocannabinoid Responses to Exercise in Individuals with Substance Use Disorders
Angelique G. Brellenthin, Kevin M. Crombie, Cecilia J. Hillard, Kelli F. Koltyn, FACSM.
1 Iowa State University, Ames, IA.
2 University of Wisconsin-Madison, Madison, WI.
(Sponsor: Kelli Koltyn, FACSM)

413 Board #254 11:00 AM - 12:30 PM
Impact of High-Intensity Interval Exercise on Executive Function and Brain Derived Neurotrophic Factor
Charles S. Schwartz, Aaron L. Slusher, Virginia T. Patterson, Edmund O. Acevedo, FACSM, Virginia Commonwealth University, Richmond, VA.
Email: schwartzes@vcu.edu

414 Board #255 11:00 AM - 12:30 PM
Effect Of A Single Session Of High-intensity, Resistance Or Combination Exercise Training On Neurotrophic Factors In Overweight Collegiate Men: The Brainfit Study
Maria Andrea Dominguez-Sanchez, Gina Paola Velasco-Orjuela, Andrea del Pilar Quintero, Jorge Enrique Correa-Bautista, Antonio Garcia-Hermoso, Rosa Helena Bustos-Cruz, Carlos Andres Peña-Guzmán, Luis Andres Téllez-T, Robinson Ramírez-Vélez.
1 Universidad de La Sabana, Chia, Colombia.
2 Universidad del Rosario, Bogotá D.C, Colombia.
3 Universidad de Santiago de Chile, USACH, Santiago de Chile, Chile.
4 Universidad Santo Tomás, Bogotá D.C, Colombia
Email: robins640@hotmail.com

415 Board #256 11:00 AM - 12:30 PM
Effects Of Prior Endurance And Resistance Training On PD: Role Of Autophagy And Apoptosis
Ning Jiang, Zhen Xu, Zhe Wang, Yong Zhang, Li Li Ji, FACSM.
1 Tianjin Key Laboratory of Exercise Physiology and Sports Medicine, Tianjin University of Sport, TIAN JIN, China.
(School of Kinesiology, University of Minnesota, MN)
Email: ningyunlong@163.com

416 Board #257 11:00 AM - 12:30 PM
Impacts of Cerebellar tDCS During a Dual-Task: Sustained Balance Improvement
Kira G. Oberle, Caroline J. Ketcham, Elon University, Elon, NC.
(Sponsor: Dr. Eric Hall, FACSM)

417 Board #258 11:00 AM - 12:30 PM
Aerobic Exercise Training Effects On Nrf2 and The Antioxidant Defense System
Lauren S. Vervaecke, Allan H. Goldfarb, FACSM, Laurie Wideman, FACSM, Joseph Starnes, FACSM, Keith Erikson, University of North Carolina Greensboro, Greensboro, NC.
Email: vervaecke@nccatstate.edu

418 Board #259 11:00 AM - 12:30 PM
The Effects of Acute Aerobic Exercise On Primary Motor Cortical Excitability in Healthy Older Adults
Email: beafrancisco@alumni.ubc.ca
American College of Sports Medicine

419 Board #260 11:00 AM - 12:30 PM
Pathways To Functional Hypothalamic Amenorrhea: Role Of Energetic And Psychosocial Factors
Nicole C. Aurigemma, Pennsylvania State University; University Park, PA. (Sponsor: Mary Jane De Souza, FACSM)
Email: nca11@psu.edu
(No relevant relationships reported)

420 Board #261 11:00 AM - 12:30 PM
Objective Sleep Characteristics of Young Elite Female Gymnasts
Jasmien Dumortier1, Jan Boone2, An Mariman2, Liesbeth Delesie2, Els Tobbac2, Dirk Vogelaers2, Jan G. Bourgeois1.1, Ghent University, Ghent, Belgium. 2Ghent University Hospital, Ghent, Belgium
Email: Jasmien.Dumortier@UGent.Be
(No relevant relationships reported)

421 Board #262 11:00 AM - 12:30 PM
Impact of a Carbohydrate Mouth Rinse on Motor Performance and Corticospinal Motor Excitability
Darrin C. LaForge1, Julie Hibbard1, Madison Moore1, Stephen Folger1, Gabriel K. Harris2, Stephen Bailey, FACSM3.1, Elon University, Elon, NC. 2North Carolina State University, Raleigh, NC
Email: dlaforge@elon.edu
(No relevant relationships reported)

422 Board #263 11:00 AM - 12:30 PM
Endocannabinoid System Involvement in Exercise-Induced Enhancement of Fear Extinction in Mice
Kevin M. Crombie1, Angelique G. Brelenthal1, Cecilia J. Hillard2, Kelli F. Kolyn, FACSM3. 1University of Wisconsin - Madison, Madison, WI. 2Medical College of Wisconsin, Milwaukee, WI. 3Sponsor: Kelli F. Kolyn, FACSM
Email: kmcrombie@wisc.edu
(No relevant relationships reported)

A-53 Free Communication/Poster - Age and Gender Issues
Wednesday, May 30, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

423 Board #264 11:00 AM - 12:30 PM
Moderate Risk of the Female Athlete Triad Predicts Injuries in Division II Female Athletes
Jennifer L. Scheid, Morgan E. Stefanik, Michelle Copolo-Ziener, Karen L. Roehling. Daemen College, Amherst, NY
(No relevant relationships reported)

424 Board #265 11:00 AM - 12:30 PM
Perceptions Regarding Injury and Training in Elite, Adolescent Rock Climbers
Rachel N. Meyers1, Morgan N. Potter2, Steven L. Hobbs1, Aaron J. Provance1. 1University of Colorado Boulder, Boulder, CO. 2Children’s Hospital Colorado, University of Colorado School of Medicine, Aurora, CO
(No relevant relationships reported)

425 Board #266 11:00 AM - 12:30 PM
The Relationship Between Flexibility and Low Back Pain in Female Adolescent Gymnasts
Morgan N. Potter, David R. Howell, Emily A. Stuart. Children’s Hospital Colorado, Aurora, CO
Email: morgan.potter@childrenscolorado.org
(No relevant relationships reported)

426 Board #267 11:00 AM - 12:30 PM
Sex Differences in Objective and Subjective Sleep in Collegiate Athletes
Janelle L. Adomeit1, Brett M. Gervas1, Stephanie L. Dietrich1, Babak Mohkalesh1, Jason R. Carter1. 1Michigan Technological University, Houghton, MI. 2University of Chicago, Chicago, IL
(No relevant relationships reported)
433 Board #274 11:00 AM - 12:30 PM
Relationship Between Dorsiflexion Strength Asymmetry, Walking Performance, and Disability in Multiple Sclerosis Patients
David J. Lantis1, Gregory S. Cantrell2, John P. Hintz2, Cameron D. Owens3, Debra A. Bemben, FACSM4, Christopher D. Black, FACSM5, Daniel J. Larson1, Rebecca D. Larson1. 1St. Ambrose University, Davenport, IA. 2Northern State University, Aberdeen, SD. 3University of Oklahoma, Norman, OK
Email: lantisdavidjd@isu.edu
(No relevant relationships reported)

434 Board #275 11:00 AM - 12:30 PM
Relationship between Soleus H Reflex and Balance Metrics in People with Multiple Sclerosis
Greg Cantrell1, David Lantis2, Mike Bemben, FACSM3, Chris Black, FACSM4, Dan Larson1, Rebecca Larson1. 1Northern State University, Aberdeen, SD. 2St. Ambrose, Davenport, IA. 3University of Oklahoma, Norman, OK
Email: gcantrell1984@gmail.com
(No relevant relationships reported)

435 Board #276 11:00 AM - 12:30 PM
Body Temperature Regulation In Ms Patients Performing Physical Activity In The Heat
Georgia Chaseling1, Davide Filingeri1, Scott Davis, FACSM2, Ollie Jay, FACSM3. 1University of Sydney, Sydney, Australia. 2University of Loughborough, Loughborough, United Kingdom. 3Southern Methodist University, Dallas, TX (Sponsor: Dr Ollie Jay, FACSM)
Email: georgia.chaseling@sydney.edu.au
(No relevant relationships reported)

436 Board #277 11:00 AM - 12:30 PM
Physical Activity is Associated with Walking Capacity in Persons with Multiple Sclerosis
Brooks A. Hibner1, Garrett Griffiths2, Elizabeth C. Schroeder3, Alexander J. Rosenberg4, Rachel E. Bollaert5, Robert W. Motl6, Ahnahn Munra Kick7, Tracy Baynard, FACSM8, Bo Fernhall, FACSM9. 1Integrative Physiology Laboratory, University of Illinois at Chicago, Chicago, IL. 2Beckman Institute for Advance Science and Technology University of Illinois Urbana-Champaign, Champaign, IL. 3UAB/Lakeshore Research Collaborative, University of Alabama at Birmingham, Birmingham, AL
Email: bhibner2@uic.edu
(No relevant relationships reported)

437 Board #278 11:00 AM - 12:30 PM
Reduced Cognitive Function and Preserved Physical Function in Cannabis Users with Multiple Sclerosis
Nathaniel B. Ketelhut, John H. Kindred, Felix Proessl, Thorsten Rudroff, FACSM. Colorado State University, Fort Collins, CO. (Sponsor: Thorsten Rudroff, FACSM)
Email: nathan.ketelhut@colostate.edu
(No relevant relationships reported)

438 Board #279 11:00 AM - 12:30 PM
Body Fatness is Associated with Lower Aerobic Fitness in Persons with Multiple Sclerosis
Emerson Sebastião1, Robert W. Motl2. 1Northern Illinois University, DeKalb, IL. 2University of Alabama, Birmingham, AL
Email: esebastiao@niu.edu
(No relevant relationships reported)

439 Board #280 11:00 AM - 12:30 PM
Hemodynamic and Functional Variables in Parkinson Disease Patients: High Intensity Interval versus Continuous Moderate Exercise Training
Bianca Fernandes1, Júlia L. Balbo2, Guilherme V. Guimarães2, Fábio A. Barbieri3, Emmanuel G. Ciola4. 1São Paulo State University – UNESP, School of Sciences, Physical Education Department, Bauru, Brazil. 2University of São Paulo (USP), School of Medicine, Heart Institute, São Paulo, Brazil
(No relevant relationships reported)
Factors Influencing Firefighters' Perceptions of Worksite Exercise
Charity L. Lane, O’Dane Brady, Thomas Janus, John M. Mayer, FACSM. University of South Florida, Tampa, FL
(No relevant relationships reported)
In the pursuit of a competitive edge, athletes, sports scientists, and coaches have a growing desire to better understand which ergogenic aids are likely to be of benefit, and to whom. Although substantial evidence exists supporting the efficacy of supplements in improving exercise capacity and performance, inconsistencies among study outcomes remain. This may be due, in part, to the variability in responses. Intervention studies reporting group means often fail to provide the data that identifies and exposes individual responses. Such variability in responses to ergogenic aids clearly demonstrates the need for further analyses and the elucidation of potential mechanisms.

The hypertrophy is skeletal muscle in response to external stimuli through resistance exercise has important consequences for a number of individuals. Programming of resistance exercise to optimize a hypertrophic phenotypic response requires an understanding of the relative importance of variables that have been shown to affect hypertrophy. The aim of this symposium is to probe our understanding of what extrinsic variables affect the magnitude of hypertrophy and how our understanding of these variables can aid in promotion of hypertrophy in a variety of populations.

The path to hypertrophy: The extrinsic variables.

The importance of frequency for muscle hypertrophy:

Evidence based or wishful thinking?

Overall discussion.
Injury and damage to tissues are an almost inevitable consequence of participation in sport and likely recreational exercise. The repair and recovery of tissues from such damage is a crucial aspect of return-to-play for athletes and continued participation in exercise programs. The mechanisms that underpin recovery and repair of damaged is paramount for effective and complete recovery. A primary goal of this symposium is to examine how the mechanisms governing repair of tendon and muscle damage using various models.

In recognition of the multi-factorial influences affecting the adoption and maintenance of physical activity across the life course, a social ecological framework has been increasingly utilized in identifying relevant interventions across different levels of impact. These impact levels include individual, community, environmental, and policy levels, as well as information and communication technology channels. The objective of this session is to describe the evidence on this topic that has been compiled by the 2018 Physical Activity Guidelines Advisory Committee Report. Particularly promising intervention areas will be highlighted.

Injury and damage to tissues are an almost inevitable consequence of participation in sport and likely recreational exercise. The repair and recovery of tissues from such damage is a crucial aspect of return-to-play for athletes and continued participation in exercise programs. The mechanisms that underpin recovery and repair of damaged is paramount for effective and complete recovery. A primary goal of this symposium is to examine how the mechanisms governing repair of tendon and muscle damage using various models.

The first federal Physical Activity Guidelines for Americans were issued in 2008. The 2018 Physical Activity Guidelines Advisory Committee Report, submitted to the U.S. Department of Health and Human Services in early 2018, provides independent advice based on current scientific evidence to the federal government for development of the 2nd edition of the Guidelines, to be issued in late 2018. This session will provide an overall discussion and highlight perspectives on the evidence that underpins these guidelines, the methods by which they will be disseminated, and areas for future research.
Sports wellness should replace sports medicine, which centers on disease. The future goal for care should be creating behavior and culture change to promote healthy activities. The emphasis is to move people’s perspective away from unrecognized unhealthy behaviors to positive health choices. This symposium will focus on evidence-based concepts demonstrating health improvements in the areas of exercise and disease management; better sleep habits and performance; and digital health technologies. By looking at research, we aim to shift people’s focus from accepting cultural norms that lead to poor health to developing a proactive, revolutionary mindset.

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

Physical Activity Promotion: Information and Communication Technologies
Melissa A. Napolitano. The George Washington University, Washington, DC
(No relevant relationships reported)

Exercise is Medicine® - Symposium - Sports Wellness: Future Directions for Medicine, Sleep and Digital Health
Wednesday, May 30, 2018, 1:00 PM - 3:00 PM
Room: Hyatt-Greenway Ballroom C

Sports wellness should replace sports medicine, which centers on disease. The future goal for care should be creating behavior and culture change to promote healthy activities. The emphasis is to move people’s perspective away from unrecognized unhealthy behaviors to positive health choices. This symposium will focus on evidence-based concepts demonstrating health improvements in the areas of exercise and disease management; better sleep habits and performance; and digital health technologies. By looking at research, we aim to shift people’s focus from accepting cultural norms that lead to poor health to developing a proactive, revolutionary mindset.

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

Persistent Vestibular Symptoms and Impairment following Concussion in Adolescents
Aaron M. Sinnott1, Valerie L. Reeves1, Cyndi L. Holland1, Nicholas A. Blaney1, Andrew M. Rosse1, Hannah B. Blitzer1, R.J. Elbin2, Michael W. Collins3, Anthony P. Kontos2. University of Pittsburgh, Pittsburgh, PA, University of Pittsburgh Medical Center, Pittsburgh, PA, University of Arkansas, Fayetteville, AR
Email: amss26@pitt.edu
(No relevant relationships reported)

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

Influence Of Motion Sensitivity On Baseline Symptoms, Cognitive, And Vestibular/oculomotor Scores In Adolescent Athletes
R.J. Elbin1, Mallory McElroy2, Katie Stephenson-Brown1, Anthony Kontos2. University of Arkansas, Fayetteville, AR, University of Pittsburgh Medical Center, Pittsburgh, PA.
(Sponsor: Dr. Matthew Ganio, FACSM)
(No relevant relationships reported)

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

Longitudinal Multimodal Assessment To Quantify Concussion Recovery Trajectory Among Youth Athletes
David R. Howell, Gregory D. Myer1, Anna N. Brilliant1, Kim Barber Foss1, William P. Meehan, III2, Children’s Hospital Colorado, Aurora, CO, Cincinnati Children’s Hospital Medical Center, Cincinnati, OH, Boston Children’s Hospital, Waltham, MA.
(Sponsor: Louis R. Osternig, FACSM)
Email: David.Howell@ucdenver.edu
(No relevant relationships reported)

Abstract Withdrawn

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

Functional Near Infrared Spectroscopy Identifies Changes in Cognitive Workload Following Pediatric Concussion
Email: mastercc@email.chop.edu
(No relevant relationships reported)

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

The Effect of Anxiety on Baseline Concussion Assessment in Adolescent Females
Christopher P. Tomczyk, Jody Langdon, George Shaver, Tamarah Hunt, FACSM. Georgia Southern University, Statesboro, GA.
(Sponsor: Tamarah Hunt, FACSM)
Email: c04469r@georgiasouthern.edu
(No relevant relationships reported)

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

Concussion Recovery In Adolescents: The Influence Of Race And Sex On Neurocognition
Seema S. Aggarwal, Summer D. Ott, Nikhil S. Padhye. The University of Texas Houston Health Science Center, Houston, TX
Email: seema.s.aggarwal@uth.tmc.edu
(No relevant relationships reported)

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

Thematic Poster - Concussion Assessment and Management in Pediatric Athletes
Wednesday, May 30, 2018, 1:00 PM - 3:00 PM
Room: CC-Lower level L100C

Thematic Poster - Exercise Psychology-Stress
Wednesday, May 30, 2018, 1:00 PM - 3:00 PM
Room: CC-Lower level L100E

Chair: Steven J. Petruzzello, FACSM. University of Illinois at Urbana-Champaign, Urbana, IL
(No relevant relationships reported)
American College of Sports Medicine

501 Board #7 1:00 PM - 3:00 PM
Appraisals Significantly Influence Endurance Performance and Psychophysiological Response: Stress Appraisals, Emotions, Coping, and Cortisol Responses
Mark A. Thompson, John Toner, John L. Perry, Rachel Burke, Adam R. Nicholls, University of Hull, Hull, United Kingdom
Email: mark.thompson@hull.ac.uk
(No relevant relationships reported)

B-10 Basic Science World Congress - Thematic Poster - Moderating Skeletal Muscle I

502 Chair: Troy Hornberger, University of Wisconsin-Madison, Madison, WI
(No relevant relationships reported)

503 Board #1 1:00 PM - 3:00 PM
No Effect Of Hmb Or α-hica On Training-induced Changes In Performance Or Body Composition
Filipe J. Teixeira1, Catarina N. Matias2, Cristina P. Monteiro3, Maria J. Valamatos2, Joana F. Reis2, Francisco Tavares4, Christophe Domingos1, Francisco B. Alves5, Ana R. Batista6, Luís B. Sardinha7, Stuart M. Phillips, FACSM8, Faculty of Human Kinetics, University of Lisbon, Lisbon, Portugal 9, CIPER, Faculty of Human Kinetics, University of Lisbon, Lisbon, Portugal 10, Universidade Espanhola Europeia, Laureate International Universities, Lisbon, Portugal 11, Waseda University, Hamilton, New Zealand 12, McMaster University, Hamilton, ON, Canada
Email: filipe@groviant-labs.com
(No relevant relationships reported)

504 Board #2 1:00 PM - 3:00 PM
Human Skeletal Muscle Lipid Mediator Responses to Resistance Exercise and Anti-inflammatory Drugs
Tommy R. Lundberg1, Mats Lilja1, Mirko Mandić2, Krishna Rao Maddipati3, Thomas Gustafsson2, Eric Runnman1, Karolinska Institutet, Stockholm, Sweden 12, Wayne State University, Detroit, MI
Email: tommy.lundberg@ki.se
(No relevant relationships reported)

505 Board #3 1:00 PM - 3:00 PM
Hyperbaric-oxygen Reduces Inflammation And Regenerates Rats Skeletal Muscle Via Macrophage And Satellite Cell Activation.
Takuya Oyaizu, Mitsuhiro Enomoto, Naoki Yamamoto, Masaki Horie, Atsushi Okawa, Kazuyoshi Yagishita, Tokyo Medical and Dental University, Tokyo, Japan
Email: oyaizu.ortho@mnd.ac.jp
(No relevant relationships reported)

506 Board #4 1:00 PM - 3:00 PM
Muscle Fiber Type Adaptations To Exercise Differ In Obese And Non-obese Volunteers
Maxime Moreillon, Yannick Morard, Nicholas T. Broskey, Sonia Conde Alonso, Cyril Besson, Francesca Amati, FACSM1, University of Lisbon, Lisbon, Portugal 2, 5, 6, 7, 8, 9, University of Wisconsin-Madison, Madison, WI 10, CIPER, Faculty of Human Kinetics, University of Lisbon, Lisbon, Portugal 11, University of Lisbon, Lisbon, Portugal 12, University of Lisbon, Lisbon, Portugal 13, University of Lisbon, Lisbon, Portugal 14, University of Lisbon, Lisbon, Portugal 15
Email: max.moreillon@gmail.com
(No relevant relationships reported)

507 Board #5 1:00 PM - 3:00 PM
2000 Steps/Day Does Not Prevent Muscle Atrophy or Strength Loss During Bed Rest
Emily Arenton-Lantz, Efrego Galvan, Sneh Nagamara, Adam Wach, Christopher Fry, Doug Paddon-Jones, FACSM, University of Texas Medical Branch, Galveston, TX
(No relevant relationships reported)
B-11 Thematic Poster - Muscle Basic Science Applications

Wednesday, May 30, 2018, 1:00 PM - 3:00 PM
Room: CC-Lower level L100F

Chair: Cory Baumann, University of Minnesota, Minneapolis, MN

509 Board #1 1:00 PM - 3:00 PM
Aerobic Exercise Training Alters The Lipopolysaccharide-induced Cytokine Secretory Profile Of Skeletal Muscle In Mice
Alex J. Mattingly, Orlando Laitano, Thomas L. Clanton. University of Florida, GAINESVILLE, FL
Email: mattingly@ufl.edu
(No relevant relationships reported)

510 Board #2 1:00 PM - 3:00 PM
Activation of G Protein-Coupled Estrogen Receptor Contributes to Muscle Force Potentiation in Ovariectomized Mice
Gengyan Le1, Gordon L. Warren, FACSM, Dawn A. Lowe, FACSM. University of Minnesota, Minneapolis, MN. Georgia State University, Atlanta, GA. (Sponsor: Dawn Lowe, FACSM)
Email: gle1@umn.edu
(No relevant relationships reported)

511 Board #3 1:00 PM - 3:00 PM
The Role Of Dynamin-related Protein 1 (drp1) In The Adaptations To Exercise
Timothy M. Moore1, Zhengyu Zhu2, Amanda J. Lin2, Nareg Kalajian2, Kevin Corey1, Kate Whitney2, Joe Lee2, Timothy Ho2, Theodore Ho2, Lorraine Turcotte, FACSM, Andrea Hevenor2
1University of Southern California, Los Angeles, CA. 2University of California, Los Angeles, CA. (Sponsor: Lorraine Turcotte, FACSM)
Email: mooret@usc.edu
(No relevant relationships reported)

512 Board #4 1:00 PM - 3:00 PM
Effect of Inflammation on Ribosome Biogenesis during Myotube Hypertrophy in Primary Human Myogenic Cells
Brandon M. Roberts, Derek Wiggins, Sam Windham, Marcos Banman, FACSM. University of Alabama at Birmingham, Birmingham, AL. (Sponsor: Marcos Banman, FACSM)
Email: brob21@uab.edu
(No relevant relationships reported)

514 Board #5 1:00 PM - 3:00 PM
Skeletal Muscle Gene Expression Study of Monozygous Twins with 35 Years of Divergent Exercise History
Adam Osmond1, Robert J. Talmadge1, Katie E. Bathgate2, James R. Bagley3, Lee E. Brown, FACSM, Jared W. Coburn, FACSM, Andy J. Galpin1, Kevin A. Murach1, Edward Jo3, Cal Poly Pomona, Pomona, CA. 4California State University-Fullerton, Fullerton, CA 5San Francisco State University, San Francisco, CA. University of Kentucky. Lexington, KY. (Sponsor: Lee Brown, FACSM)
Email: adosmond@cpp.edu
(No relevant relationships reported)
522  Board #5  1:00 PM - 3:00 PM  
Effect of 8 Weeks of Eccentric Cycling Training on Running Economy in Healthy Males  
Albino G. Schifino, Andrew J. Weiler, Jonathan Huaquc, Chei Hoi Leong, Central Connecticut State University, New Britain, CT.  
(Sponsor: Dr. Sean Walsh, FACSM)  
Email: ahs27911@sugg.edu  
(No relevant relationships reported)  
523  Board #6  1:00 PM - 3:00 PM  
The Impact of a Novel Wrist Cooling Device on 10km Running Performance in the Heat  
Kelsey Denby, Emily Schlicht, Ronald Caruso, Michael Lopez, Stephen Ives, Skidmore College, Saratoga Springs, NY. (Sponsor: Paul Arciero, FACSM)  
Email: kelseydenny@mac.com  
(No relevant relationships reported)  
524  Board #7  1:00 PM - 3:00 PM  
The Influence of AlterG Treadmill Training on Lower Extremity Muscle Performance in Cross Country Runners  
Tracy A. Dierks, Vincent C. Nitti, Todd W. Arnold, Jason Pociask, Jacqueline Fletcher, Indiana University, Indianapolis, IN.  
St. Vincent Sports Performance, Indianapolis, IN  
Community Health Network, Indianapolis, IN  
Email: tdlrks@ius.edu  
(No relevant relationships reported)  
525  Board #8  1:00 PM - 3:00 PM  
Nocturnal Heart Rate Variability and Morning Orthostatic Test as Tools to Monitor Training Load  
Ville Vesterinen, Ari Nummela. KIHU - Research Institute for Olympic Sports, Jyväskylä, Finland  
Email: ville.vesterinen@kihu.fi  
(No relevant relationships reported)  
B-13  Free Communication/Slide - Heat Stress/Stroke  
Wednesday, May 30, 2018, 1:00 PM - 2:45 PM  
Room: CC-101CD  
526  Chair: W. Larry Kenney, FACSM. Pennsylvania State University, University Park, PA  
(No relevant relationships reported)  
527  Chair: Jody Greaney. Pennsylvania State University, University Park, PA  
(No relevant relationships reported)  
528  1:00 PM - 1:15 PM  
Fitness Level Does Not Impact Cardiovascular Drift and Decreased Maximal Oxygen Uptake during Heat Stress  
Tori M. Stone, Jonathan E. Wingo, FACSM. The University of Alabama, Tuscaloosa, AL (Sponsor: Jonathan E Wingo, FACSM)  
Email: tmstone3@crimson.ua.edu  
(No relevant relationships reported)  
529  1:15 PM - 1:30 PM  
24 Hour Naproxen Dose On Core Temperature And II-6 During Cycling In The Heat  
Dawn M. Emerson, J. Mark Davis, FACSM, Toni M. Torres-McGeehee, Stephen C.L. Chen, Charles C. Emerson, Craig E. Pleifler, Joseph D. Bivona, Justin V. Stone, J. Larry Durstine, FACSM.  
1 University of Kansas, Lawrence, KS  
2 University of South Carolina, Columbia, SC  
3 Bob Jones University, Greenville, SC  
4 University of Missouri - Kansas City, Kansas City, MO  
5 Landier University, Greenwood, SC  
(No relevant relationships reported)  
530  1:30 PM - 1:45 PM  
Music Mitigates Heat-Related Reductions In Exercise Performance, But At What Cost?  
Timothy English, Yorgi Mavros, Ollie Jay, FACSM. The University of Sydney, Lidcombe, Australia. (Sponsor: Dr Ollie Jay, FACSM)  
Email: tim/english@sydney.edu.au  
(No relevant relationships reported)  
531  1:45 PM - 2:00 PM  
Acute Muscle Fatigue to Skeletal Muscle Heating via Pulsed Shortwave Diathermy  
Paul Hafén, Rob Hylldahl. Brigham Young University, Provo, UT  
Email: paul.hafen@byu.net  
(No relevant relationships reported)  
532  2:00 PM - 2:15 PM  
Sustained Metabolic Switch to Lipid Oxidation During Exertional Heat Stroke  
2 Metabolon, Morrisville, NC  
3 US Army, Ft Detrick, MD  
4 US Army, Natick, MA. (Sponsor: Scott K. Powers, FACSM)  
Email: orlando.laitano@ufl.edu  
(No relevant relationships reported)  
533  2:15 PM - 2:30 PM  
Physical Factors Related To Heat Exchange In Male And Female Mice During Exertional Heat Stroke  
(Sponsor: Scott K. Powers, FACSM)  
(No relevant relationships reported)  
534  2:30 PM - 2:45 PM  
Comparison of Rectal Temperature Responses During a Modified Heat Tolerance Test  
Email: yurihosokawa8002@gmail.com  
(No relevant relationships reported)  
535  Chair: Jonathon L. Stickford. Appalachian State, Boone, NC  
(No relevant relationships reported)  
536  1:00 PM - 1:15 PM  
Thoracic Blood Volumes and Periodic Breathing in Chronic Heart Failure  
Caitlin C. Fermoyle, Steven C. Chase, Bruce D. Johnson. Mayo Clinic, Rochester, MN.  
(Sponsor: Scott K. Powers, FACSM)  
(No relevant relationships reported)  
537  1:15 PM - 1:30 PM  
Respiratory Work of Breathing in Older and Younger Adults  
Joshua R. Smith, Troy J. Cross, Erik H. Van Iersen, Thomas P. Olson, FACSM. Mayo Clinic, Rochester, MN. (Sponsor: Thomas Olson, FACSM)  
Email: smith.joshual1@mayo.edu  
(No relevant relationships reported)
ACSM 65th Annual Meeting

Wednesday, May 30, 2018

1:00 PM - 1:20 PM
Exercise Induced Electrocardiogram Abnormalities In Elite Swimmer
Dalya Navot-Mintzer1, Naama W. Constantini, FACSM2 1Wingate Institute and Clalit Health Services, Netanya, Israel 1Shaare Zedek Medical Center, Jerusalem, Israel
Email: ndalya@gmail.com
(No relevant relationships reported)

1:20 PM - 1:40 PM
Cardiac Rehabilitation: A Gateway to the Senior Olympics
Kirk D. Hendrickson. Beaumont Health, Royal Oak, MI. (Sponsor: Barry A. Franklin, FACSM)
Email: kirk.hendrickson@beaumont.org
(No relevant relationships reported)

1:40 PM - 2:00 PM
Chest Pain and Palpitations - Lacrosse
Email: elizabeth.e.barton@gmail.com
(No relevant relationships reported)

2:00 PM - 2:20 PM
Painful Arm Mass-Weight Lifting
Jenna Crowder, Franklin Sease, FACSM, Irfan Asif, Vicki R. Nelson. Greenville Health System, Greenville, SC. (Sponsor: Franklin Sease, FACSM)
Email: Jcrowder@ghs.org
(No relevant relationships reported)

2:20 PM - 2:40 PM
Cardiovascular Disease—Ice Hockey
Bradley Changstrom1, Robert Quaife1, Matt Sokolowski2, Nicholas Edwards2, Gregory Cse2, William Cornwell3 1University of Colorado Hospital, Denver; CO 2Colorado Avalanche Hockey Club, Denver, CO 3University of Colorado Denver-Auschutz Medical Campus, Denver, CO
Email: bradleychangstrom@uedenver.edu
(No relevant relationships reported)

2:40 PM - 3:00 PM
Palpitations, Diaphoresis, Left-sided Chest, And Shoulder Pain - Football
James N. Cornwell, David Wilhelm. LECOM Health Sports Medicine, Erie, PA. (Sponsor: Patrick F. Leary, DO FACSM, FACSM)
Email: james.cornwell@med.lecom.edu
(No relevant relationships reported)

Clinical Case Slide - Musculoskeletal: Spine to Ankle

B-16 Clinical Case Slide - Musculoskeletal: Spine to Ankle
Wednesday, May 30, 2018, 1:00 PM - 3:00 PM
Room: CC-200F

552 Chair: Joshua Blomgren. Rush University Medical Center, Chicago, IL
(No relevant relationships reported)

553 Discussant: Kaleigh Shubs. Advocate Lutheran General, Park Ridge, IL
(No relevant relationships reported)

554 Discussant: Kyle J. Cassas, FACSM. Greenville Health System, Greenville, SC
(No relevant relationships reported)
American College of Sports Medicine

555  1:00 PM - 1:20 PM
Ankle Pain—Volleyball Player
Jacob Reisner1, Cara Prideaux1, Edward Laskowski, FACSM2, Mayo School of Graduate Medical Education, Rochester, MN. 2 Mayo Clinic, Rochester, MN. (Sponsor: Edward Laskowski, FACSM)
Email: reisner.jacob@mayo.edu
(No relevant relationships reported)

556  1:20 PM - 1:40 PM
Rare Cause of Second Webspace Interdigital Neuritis Diagnosed with Ultrasound
Marissa L. Dombrovsky-Johnson1, Brennan J. Boettcher2, Jonathan T. Finnoff, FACSM3, Mayo Clinic, Rochester, MN. (Sponsor: Jonathan T. Finnoff, FACSM)
(No relevant relationships reported)

557  1:40 PM - 2:00 PM
Low Back Pain in a First-year Medical Student
Michael S. Antonis. MedStar Georgetown University, Washington, DC
(No relevant relationships reported)

558  2:00 PM - 2:20 PM
Rib Injury in a Professional Baseball Player
Christopher Trinh, Brian Coleman, James Barrett. University of Oklahoma Health Science Center, Oklahoma City, OK
(No relevant relationships reported)

559  2:20 PM - 2:40 PM
Acute Lumbar Pain - Football
Timothy J. Durkin, Katherine Edensfield, Guy Nicolette, Stephen Carek, Jay Clugston. University of Florida, Gainesville, FL
Email: durkin@ufl.edu
(No relevant relationships reported)

560  2:40 PM - 3:00 PM
Low Back Pain - Recreational Soccer Player
Sean Matsuwaka, Brian Liem. University of Washington, Seattle, WA
Email: seanmatsuwaka@gmail.com
(No relevant relationships reported)

B-17  Clinical Case Slide - Shoulder
Wednesday, May 30, 2018, 1:00 PM - 3:00 PM
Room: CC-Mezzanine M100F

561  Chair: Tracy Ray, FACSM. Duke University, Durham, NC
(No relevant relationships reported)

562  Discussant: C. Mark Chassay, FACSM. IRONMAN Sports Medicine Institute, Houston, TX
(No relevant relationships reported)

563  Discussant: David Olson, FACSM. University of Minnesota, St. Paul, MN
(No relevant relationships reported)

564  1:00 PM - 1:20 PM
Pectoralis Muscle Rupture While Lifting Weights
Mimi Zumwalt, Thomas Githens, Adam Wooldridge. Texas Tech University Health Sciences Center, Lubbock, TX. (Sponsor: Jacalyn McComb, FACSM)
Email: mimi.zumwalt@ttuhsc.edu
(No relevant relationships reported)

565  1:20 PM - 1:40 PM
Teen With Acute Shoulder Pain Four Years After A Car Accident.
Natalie Ronshaugen, Kyle Nagle. University of Colorado, Aurora, CO. (Sponsor: John Hill, FACSM)
Email: natalie.ronshaugen@ucdenver.edu
(No relevant relationships reported)

B-18  Tutorial Lecture - Sticking Cardiac Rehab! Overcoming Obstacles to Increase Participation in Women
Wednesday, May 30, 2018, 1:00 PM - 1:50 PM
Room: CC-Auditorium 1

Cardiac rehabilitation programs play an integral role in the management of recurrent cardiovascular disease (CVD). However, in female patients, a disparity exists between the enrollment and participation. Barriers that limit women from attending cardiac rehabilitation and secondary prevention program services have been identified and classified into physical and psychosocial barriers. In this tutorial, expert practitioner-academics will detail specific physical and psychosocial obstacles that limit cardiac rehabilitation adherence for women. We will discuss future directions for professionals in program design and risk factor management that aim to engage women pre-and post-cardiac event.

570  Paula Seffens. University of North Georgia, Oakwood, GA
(No relevant relationships reported)

571  Kelly Massey. Georgia College, Milledgeville, GA
(No relevant relationships reported)

B-19  Clinical Workshop-Hands On Demonstration - Relating Physiology/Anatomy of the Hamstring Muscles to the Injuries Seen
Wednesday, May 30, 2018, 1:00 PM - 1:50 PM
Room: CC-200B

In this workshop a connection between physiology of the hamstring musculature, the specific different anatomical structures of the hamstring and the specific clinical injuries seen will be discussed. Implications for rehabilitation and prevention will be also presented.

572  Geoffrey Vernall. South Australian Sports Institute, Adelaide, Australia, Brighton, Australia
(No relevant relationships reported)

573  Malachy McHugh, FACSM. Nicholas Institute of Sports Medicine and Athletic Trauma, New York, NY
(No relevant relationships reported)

www.acsm.org
With recent changes in healthcare and a shift towards population health, exercise professionals should understand what role they can play in reducing chronic diseases. In this tutorial, we will review healthcare concepts that may not be part of exercise science curriculums. We will then provide additional online resources and a step-by-step guide for approaching primary care providers to develop lasting relationships. Lastly, we will highlight successful models of how primary care providers are working with exercise professionals to improve patient health outcomes.

**Reported Relationships:**

- Cherie Pettitt. Rocky Mountain University of Health Professions, Provo, UT (No relevant relationships reported)
- Kathryn Ackerman, FACSM. Boston Children’s Hospital, Boston, MA (No relevant relationships reported)
- Yi-Meng Yen. Boston Children’s Hospital, Boston, MA (No relevant relationships reported)
- Mark R. Hutchinson, FACSM. University of Illinois at Chicago, Chicago, IL (No relevant relationships reported)

This session will describe the prevalence and management concordums of hip fractures in the athletic, military, adult, and pediatric populations, with a focus on running sports. Hip stress fracture is an under-recognized phenomenon that is often initially misdiagnosed as a muscle or tendon injury. A delay in proper diagnosis can have catastrophic consequences, including prolonged exclusion from activity to full fracture requiring pinning or even hip replacement surgery. We will discuss risk factors, warning signs, diagnosis, management (including controversies in pharmacological and physical treatment), return to play, and prevention strategies.

**Reported Relationships:**

- Adam S. Tenforde. Spaulding Rehabilitation Hospital, Cambridge, MA (No relevant relationships reported)
- Kathryn Ackerman, FACSM. Boston Children’s Hospital, Boston, MA (No relevant relationships reported)
- Yi-Meng Yen. Boston Children’s Hospital, Boston, MA (No relevant relationships reported)

This tutorial lecture will provide a state-of-the-art overview of the role that the renin-angiotensin system plays in skeletal muscle wasting during disease (e.g., chronic heart failure) and in response prolonged inactivity. Specifically, this session will provide a summary of the renin-angiotensin signaling in skeletal muscle and highlight recent advances in our understanding of the cellular mechanisms responsible for muscle atrophy due to hyperactivity of the renin-angiotensin system. Finally, this lecture will also underscore the recent advances in the development of therapeutic approaches (e.g., pharmacological and exercise) to protect skeletal muscle from atrophy due to increased renin-angiotensin signaling.

**Reported Relationships:**

- Elizabeth A. Joy, FACSM. Intermountain Healthcare, Salt Lake City, UT (No relevant relationships reported)

This session will focus on how self-reported physical activity (PA) data can be used to inform decision making aimed at improving population health. The session will provide several examples of use cases where PA data can inform clinical interventions, resource deployment, and benefit design. The session will highlight the critical importance of partnership between clinical champions, data analytics, payers, and community partners.

**Reported Relationships:**

- Elizabeth A. Joy, FACSM. Intermountain Healthcare, Salt Lake City, UT (No relevant relationships reported)

This is a talk about the effects and demands of water immersion. The CARE Consortium is a 30 institution investigation on the natural history of concussion. This presentation will: 1) outline the gaps in the science and justification for the study; 2) present up to date findings on clinical outcomes in student-athletes; 3) present up to date findings on clinical outcomes in military service academy cadets; 4) present findings on advanced imaging, biomarkers, and head impact exposure.

**Reported Relationships:**

- Steven P. Broglio, FACSM. University of Michigan, Ann Arbor, MI (No relevant relationships reported)
- Michael McCrea. Medical College of Wisconsin, Milwaukee, WI (No relevant relationships reported)

This comparative presentation takes advantage of an expert ultrasonographer and musculoskeletal radiologist to share with the audience ideal opportunities and indications to use each imaging modality when evaluating injuries of the upper extremity.
American College of Sports Medicine

587 Dustin Nahban, FACSM. USOC Colorado Springs, CO
(No relevant relationships reported)

588 Michael Bresler. University of Illinois at Chicago, Chicago, IL
(No relevant relationships reported)

B-27 Exercise is Medicine® - Colloquium - Exercise and Cancer Care: A Review of Guidelines for Cancer Patients, Identifying Areas of Need and Advancing Best Practices
Wednesday, May 30, 2018, 2:10 PM - 3:00 PM
Room: Hyatt-Nicollet Ballroom A

This colloquium provides an interactive discussion of current exercise guidelines for cancer survivors and application to clinical practice. Cancer survivors are increasing in number and evidence supports exercise as an effective treatment. Therefore, providers must be knowledgeable about the evidence that established the guidelines and where gaps remain. Additionally, survivors receive personalized treatments, requiring health care professionals to understand both the evidence supporting the guideline recommendations and the gaps. In order to be effective and efficient in helping meet individuals’ rehabilitation needs, providers must be knowledgeable about evaluations and treatments to help patients navigate a changing, expensive culture of care.

589 Lynn Gerber. George Mason University, Fairfax, VA
(No relevant relationships reported)

590 Samman Shahpar. Shirley Ryan AbilityLab, Chicago, IL
(No relevant relationships reported)

B-28 Highlighted Symposium - The Science Behind Top Fitness Trends
Wednesday, May 30, 2018, 3:15 PM - 5:15 PM
Room: CC-Ballroom A

Over the past 12 years, the editors of ACSM’s Health & Fitness Journal have surveyed thousands of professionals worldwide to determine the health and fitness trends. The purpose of this session is to connect the scientific evidence of the “Worldwide Survey of Fitness Trends for 2018” to their application in the clinical and commercial exercise settings. Presenters will highlight several trends, including High Intensity Interval Training (#1), Wearable Technology (#3) and Yoga (#7), as well as provide a historical perspective on the survey itself.

591 3:15 PM - 3:20 PM
Chair: Melissa W. Roti, FACSM. Westfield State University, Westfield, MA
(No relevant relationships reported)

592 3:20 PM - 3:35 PM
Historical Perspective of the Worldwide Survey of Fitness Trends
Edward T. Howley, FACSM. University of Tennessee, Maryville, TN

593 3:35 PM - 4:05 PM
Will Wearable Technology Make You Fitter, Healthier or Happier?
Kate Lyden. University of Massachusetts, Amherst, MA

594 4:05 PM - 4:35 PM
Helping Cancer Patients Find Their Namaste!
Karen M. Mustian. University of Rochester School of Medicine, Rochester, NY
(No relevant relationships reported)

595 4:35 PM - 5:05 PM
High-Intensity Interval Training: Everything Old is New Again
Martin J. Gibala. McMaster University, Hamilton, ON, Canada
(No relevant relationships reported)

B-29 Basic Science World Congress - Symposium - Satellite Cells and their Role in the Hypertrophic and Atrophic Processes
Wednesday, May 30, 2018, 3:15 PM - 5:15 PM
Room: CC-102EF

Since their discovery in 1961 satellite cells, or muscle stem cells, have been a topic of increasing study. These pluripotent cells have now been demonstrated to play a variety of roles in skeletal muscle growth, regeneration, repair following injury, and various diseases processes. In this symposium the presenters will examine the role of the satellite cell in a variety of models in an attempt to define the importance of the cell in the processes of atrophy and hypertrophy.

596 3:15 PM - 3:20 PM
Chair: Gianni Parise. McMaster University, Hamilton, ON, Canada
(No relevant relationships reported)

597 3:15 PM - 3:20 PM
Co-Chair
Michael De Lisio. University of Ottawa, Ottawa, ON, Canada
(No relevant relationships reported)

598 3:20 PM - 3:45 PM
The Importance of Skeletal Muscle Capillarization for the Satellite Cell Response to Damage/Exercise
Gianni Parise, McMaster University, Hamilton, ON, Canada
(No relevant relationships reported)

599 3:45 PM - 4:10 PM
Satellite Cell Regulation of Extracellular Matrix Remodeling During Hypertrophy
Charlotte A. Peterson. University of Kentucky, Lexington, KY
(No relevant relationships reported)

600 4:10 PM - 4:35 PM
Cellular Systems in Skeletal Muscle Across the Cancer Continuum
Michael De Lisio. University of Ottawa, Ottawa, ON, Canada
(No relevant relationships reported)

601 4:35 PM - 5:00 PM
Perivascular Stem/Stromal Cell Regulation of Muscle Growth
Marni D. Boppart. University of Illinois, Urbana, IL
(No relevant relationships reported)

5:00 PM - 5:15 PM
Overall Discussion

B-30 Basic Science World Congress - Symposium - Supplements and Nutraceuticals to Promote Hypertrophy and Combat Atrophy
Wednesday, May 30, 2018, 3:15 PM - 5:15 PM
Room: CC-103

Supplement and nutraceuticals are now a multi-billion dollar market in the US alone. There are a number of supplements that have been marketed as being effective in promotion of exercise-induced lean body mass gains, however, few have been studied to the degree to make a valid claim in this regard. Similarly, supplements have also been touted as anti-atrophic and yet the evidence here is even more scant. In this symposium the evidence for supplements with an evidence-based for promoting hypertrophy or attenuating atrophy will be reviewed.

602 Co-Chair
Stuart M. Phillips, FACSM. McMaster University, Hamilton, ON, Canada
(No relevant relationships reported)
Physical inactivity, obesity, and chronic diseases continue to rise globally and present a significant economic burden to our society and health care systems. The implementation of evidence-based programs to address these problems has not kept pace with ongoing research efforts from the field. Our failure to properly connect individuals to evidence-based interventions limits the impact of our scientific advances. This symposium will focus attention on the “how” and “under what circumstances” we can optimally implement and utilize evidence-based physical activity and lifestyle programs in clinical and community settings, while utilizing new technologies to expand the reach of these efforts.

**B-31 Symposium - ACSM/SBM Co-Sponsored Symposium: Dissemination and Implementation of Evidence-based Physical Activity and Lifestyle Interventions**

**Wednesday, May 30, 2018, 3:15 PM - 5:15 PM**

**Room: CC-Ballroom B**

**Chair:** David E. Goodrich, VA Center for Evaluation & Implementation Resources, Ann Arbor, MI  
(No relevant relationships reported)

**3:15 PM - 3:25 PM**

**Session 1: Innovations in Dissemination and Implementation**

- **3:15 PM - 3:20 PM**
  - **Beyond Protein: Creatine Monohydrate and Vitamin D**
  - **Eric Rawson, FACSM, Messiah College, Mechanicsburg, PA**  
  (No relevant relationships reported)

- **3:20 PM - 3:25 PM**
  - **An Appraisal of Protein Needs for Active Persons: How Much and What Can You Expect?**
  - **Stuart M. Phillips, FACSM, McMaster University, Hamilton, ON, Canada**  
  (No relevant relationships reported)

**3:25 PM - 4:05 PM**

**Session 2: Challenges and Opportunities in Implementation**

- **3:25 PM - 3:45 PM**
  - **Advancing Dissemination and Implementation Research: An NIH Perspective**
  - **David A. Chambers, National Cancer Institute - Div. of Cancer Control & Population Sciences, Rockville, MD**  
  (No relevant relationships reported)

- **3:45 PM - 4:05 PM**
  - **Challenging the Adoption-Implementation Gap: Leveraging a Participatory Approach to Improve Uptake and Scalability of Evidence-based Programs**
  - **Samantha Harden, Virginia Tech Dept of Human Nutrition, Foods and Exercise, Blacksburg, VA**  
  (No relevant relationships reported)

**4:05 PM - 5:00 PM**

**Session 3: New Tools and Technologies**

- **4:05 PM - 4:25 PM**
  - **Cul de Sacs and Changing Directions: Implementing and Evaluating Complex Interventions in Real World Practice**
  - **Denise Campbell-Scherer, University of Alberta, Department of Family Medicine, Edmonton, AB, Canada**  
  (No relevant relationships reported)
This symposium will provide up to date and clinically applicable information for sports medicine practitioners and exercise professionals on how to successfully prescribe exercise to persons with disabilities. As the population of individuals with disabilities grows worldwide, it is important that sports medicine practitioners and exercise professionals are aware of the special considerations for implementing Exercise is Medicine in this population. This session will cover the benefits of exercise for persons with disabilities as well as key precautions and updated exercise testing guidelines. Lastly we will highlight technologies and advocacy-based resources for promoting disability inclusion in sports and exercise.

This symposium will provide up to date and clinically applicable information for sports medicine practitioners and exercise professionals on how to successfully prescribe exercise to persons with disabilities. As the population of individuals with disabilities grows worldwide, it is important that sports medicine practitioners and exercise professionals are aware of the special considerations for implementing Exercise is Medicine in this population. This session will cover the benefits of exercise for persons with disabilities as well as key precautions and updated exercise testing guidelines. Lastly we will highlight technologies and advocacy-based resources for promoting disability inclusion in sports and exercise.

**B-35**

**Symposium - The Anti-Doping Movement: What's New in Research and Administration**

Wednesday, May 30, 2018, 3:15 PM - 5:15 PM
Room: CC-101AB

During this tutorial session, attendees will be updated on the latest scientific and administrative efforts in the anti-doping movement.

621 3:15 PM - 3:20 PM
**Chair:** Stuart E. Willick, FACSM. University of Utah, Salt Lake City, UT
(No relevant relationships reported)

622 3:20 PM - 3:45 PM
**Current Medical Issues in Anti-Doping**

Margo Mountjoy, FACSM. University of Guelph, Guelph, ON, Canada
(No relevant relationships reported)

623 3:45 PM - 4:10 PM
**What's new in Anti-Doping Administration**

Travis Tygart. USADA, Colorado Springs, CO
(No relevant relationships reported)

624 4:10 PM - 4:35 PM
**Advances in Laboratory Testing**

Daniel Eichner. Sports Medicine Research and Testing Laboratory, Salt Lake City, UT
(No relevant relationships reported)

625 4:35 PM - 5:00 PM
**Update on Anti-Doping Research**

Stuart E. Willick, FACSM. University of Utah, Salt Lake City, UT
(No relevant relationships reported)

5:00 PM - 5:15 PM
Overall Discussion

**B-36**

**Symposium - Get Up, Get Moving: New Research in Sedentary Behavior**

Wednesday, May 30, 2018, 3:15 PM - 5:15 PM
Room: CC-Lower level L100C

631 3:15 PM - 3:20 PM
**Chair:** David W. Dunstan. Baker IDI Heart and Diabetes Institute, Melbourne, Australia
(No relevant relationships reported)

632 3:20 PM - 3:50 PM
**Board #1**

**Association Between Exercise And Prolonged Television Viewing Days On Time-use And Physical Activity Energy Expenditure In Older Us Adults**

Charles E. Matthews, FACSM1, Sarah Keadle2, Pedro Saint-Maurice1, Steven C. Moore1, Erik A. Willis1, Joshua N. Sampson1, David Berrigan1, National Cancer Institute, Rockville, MD, Cal Poly, San Luis Obispo, CA
Email: charles.matthews2@nih.gov
(No relevant relationships reported)

633 3:50 PM - 4:05 PM
**Board #2**

**Prolonged Uninterrupted Sitting Impairs Vascular Function and Increases Biomarkers of Atherosclerotic Risk in Overweight Adults**

Megan S. Grace1, Rachel E D Climie1, Michael Wheeler1, Elisabeth Lambert1, Carolina Ika Sarl1, Farzaneh Rezai3, Hamza Ali2, Gavin Lambert1, Neville Owen1, Daniel J. Green1, Bronwyn A. Kingwell1, David W. Dunstan1, Baker Heart and Diabetes Institute, Melbourne, VIC, Australia1; Swinburn University, Melbourne, VIC, Australia1; Monash University, Melbourne, VIC, Australia1; University of Western Australia, Perth, WA, Australia
Email: megan.grace@baker.edu.au
(No relevant relationships reported)
**ACSM 65th Annual Meeting**

**Wednesday, May 30, 2018, 3:15 PM - 5:15 PM**

**Room: CC-Mezzanine M100C**

**Chair:** John M. Jakicic, FACSM. University of Pittsburgh, Pittsburgh, PA

(No relevant relationships reported)

**Board #1**

3:15 PM - 5:15 PM

Evaluation of Free Exercise Apps and Ability to Promote Physical Activity

Cynthia M. Ferrara, FACSM1, Christopher Burke2, Allison Fahey2. Merrimack College, North Andover; MA 3University of Massachusetts Lowell, Lowell, MA

(No relevant relationships reported)

**Board #2**

3:15 PM - 5:15 PM

The Feasibility of a Gender- and Culturally-Sensitive Weight Loss Intervention Plus Mobile Health Technology for Hispanic Males

David O. García, PhD1, Luis A. Valdez, PhD, MPH, Benjamin Aceves, MPH1, David Campos, BS1, Julio Loya, BSN, RN2, Melanie Hingle, PhD, RD3, Kyle Humphrey, MS1, Melanie L. Bell, PhD1, Marilyn McEwen, PhD, RN, Steven P. Hooker, PhD, FNAK, FACSM1. University of Arizona, Tucson, AZ. 2University of Miami-Columbia, Columbia, MO 3Arizona State University, Tempe, AZ.

(Sponsor: Steven Hooker, FACSM)

Email: davidogarcia@email.arizona.edu

(No relevant relationships reported)

**Board #3**

3:15 PM - 5:15 PM

Metabolic Cost and Exercise Intensity during Active Virtual Reality Gaming

Dulce H. Gomez, Nicole Bolter, C. Matthew Lee, James R. Bagley, Marialice Kern, FACSM. San Francisco State University, San Francisco, CA.

(Sponsor: Marialice Kern, FACSM)

Email: dhgomez@ucdavis.edu

(No relevant relationships reported)

**Board #4**

3:15 PM - 5:15 PM

Interest in Virtual Reality for Injury Rehabilitation and Performance Enhancement Among Collegiate Soccer Athletes

Leilani Madrigal, Makenna Henry, Alison Ede, Tiffany Vargas. Merrimack College, North Andover, MA

(Sponsor: Diane L. Gill, FACSM)

Email: leilani.madrigal@csulb.edu

(No relevant relationships reported)

**Board #5**

3:15 PM - 5:15 PM

Playing Pokemon Go is Associated with Higher Daily Total Energy Expenditure

Tyler Langford. Middle Tennessee State University, Murfreesboro, TN

Email: twl2q@mtmail.mtsu.edu

(No relevant relationships reported)

**Board #6**

3:15 PM - 5:15 PM

Home-basedergaming For Preschoolers' Cognition And Health Outcomes: A Randomizedcross-over Study

Zan Gao, FACSM1, Jung Eun Lee, 558121, Zachary Pope, 554551, Nan Zeng2, Xiaoxiong Li, Ying Zhang2. University of Minnesota, Minneapolis, MN 2University of Minnesota, Duluth, MN 3Hunan Normal University, Changsha, China 4Zhejiang Normal University, Hangzhou, China

Email: gaoz@umn.edu

(No relevant relationships reported)

---

**B-37 Thematic Poster - Health Technology for Physical Activity: Just Do It!**

**Wednesday, May 30, 2018, 3:15 PM - 5:15 PM**

**Room: CC-Mezzanine M100C**

**Chair:** John M. Jakicic, FACSM. University of Pittsburgh, Pittsburgh, PA

(No relevant relationships reported)

**Board #1**

3:15 PM - 5:15 PM

Evaluation of Free Exercise Apps and Ability to Promote Physical Activity

Cynthia M. Ferrara, FACSM1, Christopher Burke2, Allison Fahey2. Merrimack College, North Andover; MA 3University of Massachusetts Lowell, Lowell, MA

(No relevant relationships reported)

**Board #2**

3:15 PM - 5:15 PM

The Feasibility of a Gender- and Culturally-Sensitive Weight Loss Intervention Plus Mobile Health Technology for Hispanic Males

David O. García, PhD1, Luis A. Valdez, PhD, MPH, Benjamin Aceves, MPH1, David Campos, BS1, Julio Loya, BSN, RN2, Melanie Hingle, PhD, RD3, Kyle Humphrey, MS1, Melanie L. Bell, PhD1, Marilyn McEwen, PhD, RN, Steven P. Hooker, PhD, FNAK, FACSM1. University of Arizona, Tucson, AZ. 2University of Miami-Columbia, Columbia, MO 3Arizona State University, Tempe, AZ.

(Sponsor: Steven Hooker, FACSM)

Email: davidogarcia@email.arizona.edu

(No relevant relationships reported)

**Board #3**

3:15 PM - 5:15 PM

Metabolic Cost and Exercise Intensity during Active Virtual Reality Gaming

Dulce H. Gomez, Nicole Bolter, C. Matthew Lee, James R. Bagley, Marialice Kern, FACSM. San Francisco State University, San Francisco, CA.

(Sponsor: Marialice Kern, FACSM)

Email: dhgomez@ucdavis.edu

(No relevant relationships reported)

**Board #4**

3:15 PM - 5:15 PM

Interest in Virtual Reality for Injury Rehabilitation and Performance Enhancement Among Collegiate Soccer Athletes

Leilani Madrigal, Makenna Henry, Alison Ede, Tiffany Vargas. Merrimack College, North Andover, MA

(Sponsor: Diane L. Gill, FACSM)

Email: leilani.madrigal@csulb.edu

(No relevant relationships reported)

**Board #5**

3:15 PM - 5:15 PM

Playing Pokemon Go is Associated with Higher Daily Total Energy Expenditure

Tyler Langford. Middle Tennessee State University, Murfreesboro, TN

Email: twl2q@mtmail.mtsu.edu

(No relevant relationships reported)

**Board #6**

3:15 PM - 5:15 PM

Home-basedergaming For Preschoolers' Cognition And Health Outcomes: A Randomizedcross-over Study

Zan Gao, FACSM1, Jung Eun Lee, 558121, Zachary Pope, 554551, Nan Zeng2, Xiaoxiong Li, Ying Zhang2. University of Minnesota, Minneapolis, MN 2University of Minnesota, Duluth, MN 3Hunan Normal University, Changsha, China 4Zhejiang Normal University, Hangzhou, China

Email: gaoz@umn.edu

(No relevant relationships reported)
### B-38 Thematic Poster - High Intensity Interval Training

**Wednesday, May 30, 2018, 3:15 PM - 5:15 PM**  
Room: CC-Lower level L100H

**Chair:** Tom Hazell, Wilfrid Laurier University, Waterloo, ON, Canada  
(No relevant relationships reported)

| 647 | Board #7 | 3:15 PM - 5:15 PM  
**Effects of Exergaming on College Students' Mood and Energy Expenditure Compared to Traditional Treadmill Exercise**  
Wenxi Liu1, Zachary Pope1, Nan Zeng1, Jung Eun Lee2, Zan Gao, FACSM1  
1University of Minnesota Twin Cities, Minneapolis, MN  
2University of Minnesota Duluth, Duluth, MN. (Sponsor: Zan Gao, FACSM)  
Email: liuw4443@umn.edu  
(No relevant relationships reported) |
|---|---|---|
| 648 | Board #8 | 3:15 PM - 5:15 PM  
**Effectiveness of Combined Smartwatch and Social Media Intervention on Breast Cancer Survivor Outcomes: Randomized Trial**  
Zachary Pope, Nan Zeng, Rui Zhang, Hye Y. Lee, Zan Gao, FACSM.  
University of Minnesota-Twin Cities, Minneapolis, MN.  
(Sponsor: Zan Gao, FACSM)  
Email: pope157@umn.edu  
(No relevant relationships reported) |

### B-39 Thematic Poster - Running Injuries

**Wednesday, May 30, 2018, 3:15 PM - 5:15 PM**  
Room: CC-Lower level L100E

**Chair:** Allison H. Gruber, Indiana University Bloomington, Bloomington, IN  
(No relevant relationships reported)

| 653 | Board #4 | 3:15 PM - 5:15 PM  
**Increased Metabolic and Cardiorespiratory Stress with Isoenergetic Long vs. Short-Bout High-Intensity Interval Exercise**  
Gregory C. Bogdanis1, Spiros Tsirigkakis2, Alexandra Katsoula1, Georgia Daskalaki1, Alexandros Chatzi1, Amalia Mantzou1, Evangelia Kousouni1, Panagiotsi Velgkekas, Vassilis Mougos1, George Mastorakos1  
1National and Kapodistrian University of Athens, Athens, Greece  
2University of Thessaly, Trikala, Greece  
3Democritus University of Thrace, Komotini, Greece  
4Aristotle University of Thessaloniki, Thessaloniki, Greece  
Email: gbgdanis@phed.uoa.gr  
(No relevant relationships reported) |
| 654 | Board #5 | 3:15 PM - 5:15 PM  
**High Intensity Functional Training Improves Flexibility in Overweight and Obese Adults**  
Justin DeBlauw, Kansas State University, Manhattan, KS  
Email: jdeblauw@ksu.edu  
(No relevant relationships reported) |
| 655 | Board #6 | 3:15 PM - 5:15 PM  
**Metabolic Effects of Two Novel High-Intensity Circuit Training Protocols**  
Tony P. Nunez1, Fabiano T. Amorim2, Nicholas M. Beltz1, Christine M. Mermier1, Terence A. Moriarty1, Roberto C. Nava1, Trisha A. VanDusseldorp1, Len Kravitz1  
1Metropolitan State University of Denver, Denver, CO  
2University of New Mexico, Albuquerque, NM  
3University of Wisconsin-Eau Claire, Eau Claire, WI  
4Kennesaw State University, Kennesaw, GA  
Email: tnunez1@msudenver.edu  
(No relevant relationships reported) |
P48 Final Program

661 Board #4 3:15 PM - 5:15 PM
The Role Of Off-axis Force In Running-related Overuse Injury
John J. Davis, IV, Jacob E. Vollmar, Ashley B. Nguyen, Emily G. Wagoner, Naomi E. Frankston, Allison H. Gruber. Indiana University Bloomington, Bloomington, IN. (Sponsor: Joe Hamill, FACSM)
Email: jjd1@iu.edu
(No relevant relationships reported)

662 Board #5 3:15 PM - 5:15 PM
Effects Of A 4-week Intervention Using Semi-custom Foot Orthoses On Perceived Pain And Patellofemoral Loading In Targeted Sub-groups Of Recreational Runners.
Jonathan Sinclair. University of Central Lancashire, Preston, United Kingdom
(No relevant relationships reported)

663 Board #6 3:15 PM - 5:15 PM
Patellofemoral Pain Lead to Greater Joint Motion and Coordination Variability during a Prolonged Run
Jessica A. Mutcher, Klarie Ake, Barry A. Munkasy, Li Li, FACSM.
Georgia Southern University, Statesboro, GA
Email: jmutcher@georgiasouthern.edu
(No relevant relationships reported)

664 Board #7 3:15 PM - 5:15 PM
The Effect of Base of Gait on Hip and Pelvis Frontal Plane Motion in Collegiate Cross Country Runners
Christa Wille. University of Wisconsin-Madison, Madison, WI
Email: cmwille@wisc.edu
(No relevant relationships reported)

B-40 Thematic Poster - Vascular Function

Wednesday, May 30, 2018, 3:15 PM - 5:15 PM
Room: CC-Lower level L100F

665 3:15 PM - 5:15 PM
Chair: R Matthew Brothers. University of Texas at Austin, Austin, TX
(No relevant relationships reported)

666 Board #1 3:15 PM - 5:15 PM
Physical Activity Modulates Blood Pressure Regulation During Controlled Low and High Salt Diets
Austin T. Robinson1, Kamila U. Migdal1, Matthew C. Babcock1, Joseph C. Watso1, Megan M. Wenner1, Sean D. Stocker1, William B. Farquhar, FACSM1, 3University of Delaware, Newark, DE 2University of Pittsburgh, Pittsburgh, PA. (Sponsor: William B Farquhar, FACSM)
Email: jmutcher@georgiasouthern.edu
(No relevant relationships reported)

667 Board #2 3:15 PM - 5:15 PM
Particulate Matter Air Pollution and Vascular Function in Older Adults: A Natural Experiment
Jayson R. Gifford1, Tyler Mangum2, Joshua Weavil1, Ashley Nelson1, Joshua F. Lee1, H. Jon Groot1, Ryan Broxterman1, Matthew Rossman1, Russell Richardson1. 1Brigham Young University, Provo, UT 2University of Utah, Salt Lake City, UT 3University of Colorado: Boulder, Boulder, CO
Email: jayongifford@byu.edu
(No relevant relationships reported)
American College of Sports Medicine

3:15 PM - 3:30 PM
Influence of Multiple Indices of Body Composition on Cardiometabolic Risk Factors in Adults
Lyndsey M. Hombuckle1, Robert Baresh, FACSM2, Yuri Feito, FACSM2, Cassie D. Watson3, Brian Kiszczakiewicz4, Ayles Herrington1, Corrine Ellis5, Leah Tsui6, Anna Schlupp7, Kelsey Shepard7, Stella Volpe, FACSM8* University of Tennessee, Knoxville, Knoxville, TN;9 Kennesaw State University, Kennesaw, GA; 4 Drexel University, Philadelphia, PA
(No relevant relationships reported)

3:30 PM - 3:45 PM
Changes in Total and Regional Body Composition during the season in Division 1 Football Players
Tyler A. Bosch, Christiana Raymond-Pope, Donald R. Dengel, FACSM, University of Minnesota, Minneapolis, MN. (Sponsor: Donald R. Dengel, FACSM)
(No relevant relationships reported)

3:45 PM - 4:00 PM
A Comparison of Preseason Body Composition and Phase Angle in NCAA Division I Female Athletes
Takudzwa A. Madzima, Svetlana Nepocatych, Daniel A. Baur, Kirtida Patel, Walter R. Bizby, FACSM, Elon University, Elon, NC
Email: tmadzima@elon.edu
(No relevant relationships reported)

4:00 PM - 4:15 PM
Caffeine Consumption in Habitual Users Has No Impact on BIA-Derived Measurements of Body Composition
Cassie M. Williamson1, Brett S. Nickerson2, Emily E. Bechke3, Cherylyn McLeister4, Brian M. Kiszczakiewicz5* Kennesaw State University, Kennesaw, GA; 5201 University Blvd, Laredo, TX.
(Sponsor: Mark Tillman, FACSM)
Email: cwil397@kennesaw.edu
(No relevant relationships reported)

4:15 PM - 4:30 PM
Regional Variations in Physical Fitness and Body Composition in Ecuadorian Adolescents
Cheryl A. Howe, FACSM1, Sharon L. Casapulla1, Jay Shbrook2, Pablo Lopez2, Mario J. Grijalva3, Darlene Berryman4, L Benelcazar5 Ohio University, ATHENS, OH; 7Osoro University, Vallepso, CA; 3Pontifical Catholic University of Ecuador; Quito, Ecuador
Email: howcc@ohio.edu
(No relevant relationships reported)

4:30 PM - 4:45 PM
Comparison of Ultrashort Versus Short High-Intensity Interval Training for Body Composition, Anaerobic, and Aerobic Performance
Masoud Moghaddam, Tyler W.D. Muddle, Carlos A. Estrada, Mitchel A. Magrini, Nathaniel D.M. Jenkins, Bert H. Jacobson, FACSM, Oklahoma State University, Stillwater, OK. (Sponsor: Bert H. Jacobson, FACSM)
(No relevant relationships reported)

4:45 PM - 5:00 PM
23 Year Analysis Of Anthropometric Profiles And Long-Term Career Progression Of German Junior Female Rowers
Kay Winkert, Gunnar Trefz, Werner Lormes, Katja Machus, Jürgen M. Steinacker, FACSM. University Hospital Ulm, Ulm, Germany
Email: kay.winkert@uni-ulm.de
(No relevant relationships reported)

5:00 PM - 5:15 PM
Telomere Length Of Middle-aged Sprinters And Endurance Runners: Relationships To Performance And Body Composition
HERBERT G. SIMÕES, CAIO V. SOUSA, LYSLEINE A. DEUS, SAMUEL S. AGUIAR, PATRICIA A. SANTOS, LUCAS P. BASBOSA, HIGOR G. SOUSA, ERICA C. ROSA, ROSÂNGELA V. ANDRADE, THIAGO S. ROSA. UNIVERSIDADE CATÓLICA DE BRASÍLIA, BRASÍLIA, Brazil
Email: hgsimoes@gmail.com
(No relevant relationships reported)

682 5:00 PM - 5:15 PM
Telomere Length Of Middle-aged Sprinters And Endurance Runners: Relationships To Performance And Body Composition
HERBERT G. SIMÕES, CAIO V. SOUSA, LYSLEINE A. DEUS, SAMUEL S. AGUIAR, PATRICIA A. SANTOS, LUCAS P. BASBOSA, HIGOR G. SOUSA, ERICA C. ROSA, ROSÂNGELA V. ANDRADE, THIAGO S. ROSA. UNIVERSIDADE CATÓLICA DE BRASÍLIA, BRASÍLIA, Brazil
Email: hgsimoes@gmail.com
(No relevant relationships reported)

B-42 Free Communication/Slide - Mitochondria and Metabolism in Health and Disease
Wednesday, May 30, 2018, 3:15 PM - 5:15 PM
Room: CC-101CD

683 Chair: Gordon Fisher, FACSM. University of Alabama - Birmingham, Birmingham, AL
(No relevant relationships reported)

684 3:15 PM - 3:30 PM
Tumor Derived Factors Induce Muscle Mitochondria Hyperpolarization And Subsequent Superoxide Production
Megan E. Rosa-Caldwell, Jacob L. Brown, David E. Lee, Tyrone A. Washington, Nicholas P. Greene. University of Arkansas, Fayetteville, AR. (Sponsor: Dr. Stephen Crouse, FACSM)
Email: mrosa@uark.edu
(No relevant relationships reported)

685 3:30 PM - 3:45 PM
The Impact Of HSP72 On Metabolism And The Mitochondrial Response To Exercise In Female Mice
Ananda J. Liu1, Zhenqi Zhou2, Timothy M. Moore2, Brian G. Drew2, Vicente Ribas3, Darren C. Henstridge1, Mark A. Febbraio1, Andrea Hevene1 1University of California, Los Angeles, Los Angeles, CA; 2University of Southern California, Los Angeles, CA 3Baker IDI Heart and Diabetes Institute, Melbourne, Australia 4Garvin Institute of Medical Research, Sydney, Australia
Email: AJLin@mednet.ucla.edu
(No relevant relationships reported)

686 3:45 PM - 4:00 PM
Mitochondrial Fusion Is Essential For Regulation Of Adult Skeletal Muscle Mass And Protein Synthesis
Graham R. McGinnis, Zachary D. Bush, Margaret B. Bell, Glenn C. Rowe. University of Alabama at Birmingham, Birmingham, AL
(No relevant relationships reported)

687 4:00 PM - 4:15 PM
Skeletal Muscle Mitochondrial Fusion Is Required for Exercise Performance and Mitochondrial Oxidative Capacity
Glenn C. Rowe, Zachary D. Bush, Margaret B. Bell, Graham R. McGinnis. University of Alabama at Birmingham, Birmingham, AL
Email: gcrowe@uab.edu
(No relevant relationships reported)

688 4:15 PM - 4:30 PM
Human Muscle Fiber-Specific Responses of Mitochondrial Fusion Proteins To Sprint Interval and Moderate-Intensity Continuous Training
Lauren E. Skelly1, Jenna B. Gillen1, Barnaby P. Frankish2, Florence E. Godkin1, Mark A. Tarnopolsky1, Robyn M. Murphy2, Martin J. Gibala1 1McMaster University, Hamilton, ON, Canada; 2La Trobe University, Melbourne, Australia. (Sponsor: Dr. Stuart Phillips, FACSM)
(No relevant relationships reported)
### P50 Final Program

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Presenters</th>
<th>Email</th>
<th>Relationship Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>689</td>
<td>4:30 PM - 4:45 PM</td>
<td>Exercise As An Intervention To Mitigate Mitochondrial Dysfunction And Impaired Glucose Tolerance Induced By Sleep-loss</td>
<td>Nicholas J. Saner, David J. Bishop, FACSM, Jonathan D. Bartlett, Victoria University, Institute of Sport, Exercise and Active Living, Melbourne, Australia. (Sponsor: David Bishop, FACSM)</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>690</td>
<td>4:45 PM - 5:00 PM</td>
<td>Offspring of Mothers with Diabetes have Reduced Muscle Oxidative Capacity Measured by Near Infrared Spectroscopy</td>
<td>Brian A. Irving, Timothy D. Allerton, Gaëlle Spielmann, Stefany Primeau, Arnold Nelson, FACSM, Dennis Landin, Neil M. Johannsen, Louisiana State University, Baton Rouge, LA. (Sponsor: LSU Health Science Center; Baton Rouge, LA. (Sponsor: Arnold Nelson, FACSM)</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

### B-43 Clinical Case Slide - Foot and Ankle

**Wednesday, May 30, 2018, 3:15 PM - 4:55 PM**

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Presenters</th>
<th>Email</th>
<th>Relationship Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>691</td>
<td>5:00 PM - 5:15 PM</td>
<td>Skeletal Muscle DNA Methylation Changes following Gastric Bypass in Women with Type 2 Diabetes</td>
<td>Matthew D. Barberio, G. Lynis Dohn, Walter J. Pories, Evan P. Nadler, Monica J. Hubal, FACSM, Children's National Medical Center, Washington DC., DC. (Sponsor: George Washington University, Washington DC., DC. (Sponsor: Arnold Nelson, FACSM)</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

### B-44 Clinical Case Slide - Knee I

**Wednesday, May 30, 2018, 3:35 PM - 4:55 PM**

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Presenters</th>
<th>Email</th>
<th>Relationship Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>3:35 PM - 3:55 PM</td>
<td>Using Ultrasound To Diagnose Knee Pain</td>
<td>PATRICK CAREY. Martin Army Community Hospital, FORT BENNING, GA</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>701</td>
<td>3:55 PM - 4:15 PM</td>
<td>Knee Lesions - Treating The Athlete Not The Images</td>
<td>Spencer Kirk, Michael Ladewski. Presence Resurrection Medical Center, Chicago, IL</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>
B-45 Clinical Case Slide - Lumbosacral Spine
Wednesday, May 30, 2018, 3:15 PM - 4:55 PM
Room: CC-Mezzanine M100F

Chair: Arthur Jason De Luigi, MedStar NRH/Georgetown University Hospital, Olney, MD
(No relevant relationships reported)

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

Discussant: Aaron Lee, McNeal Hospital, Bervyn, IL
(No relevant relationships reported)

3:35 PM - 3:55 PM
Unusual Cause of Postpartum Back Pain
Jacob Wessels. Allina Health, St Paul, MN. (Sponsor: Morteza Khodaei, FACSM)
Email: jakewessels@gmail.com
(No relevant relationships reported)

3:55 PM - 4:15 PM
Persistent Lower Back Pain In A Gaelic Footballer.
David Keohane. Cork University Hospital, Cork, Ireland
Email: david.kehane@ucc.ie
(No relevant relationships reported)

4:15 PM - 4:35 PM
Back Injury-Deadlift Weights
Amie Kim, Christopher Gentile, David Matherly, Ronald Alexander Horowitz. Mount Sinai Icahn School of Medicine Beth Israel Medical Center, New York, NY
Email: amie.kim@gmail.com
(No relevant relationships reported)

Back Pain-hockey
Melanie Kennedy, Anastasia Fischer, FACSM, Reno Ravindran. Nationwide Children’s Hospital, Columbus, OH
Email: melaniekennedy115@gmail.com
(No relevant relationships reported)

4:35 PM - 4:55 PM
Back Pain-hip

B-46 Tutorial Lecture - ActivEarth Session: Electric Bikes for Transport and Health
Wednesday, May 30, 2018, 3:15 PM - 4:05 PM
Room: CC-Auditorium 1

European nations with high rates of bicycling have low rates of obesity. However, trip distances in North America are longer and there is less of a mainstream cycling culture. E-bikes have motors that only provide assistance when pedaling. They allow for greater trip distances and reduce the other limitations associated with active transportation. Thus, e-bikes could be a viable transportation option, while providing health enhancing PA and reducing CO2 emissions. This tutorial will compare physiological responses to conventional biking, e-biking, and walking. It will also examine effects of an e-bike intervention on CVD risk factors along with real-world usage patterns.

David R. Bassett, FACSM. University of Tennessee, Knoxville, TN
Reported Relationships: D.R. Bassett: Consulting Fee; ActiGraph-Scientific Advisory Board.

B-47 Tutorial Lecture - Finding the Physical Activity Needle in the Economic Haystack
Wednesday, May 30, 2018, 3:15 PM - 4:05 PM
Room: CC-Auditorium 2

Little information exists on the economic value of investments to improve physical activity opportunities in communities. This information may encourage decision makers to allocate resources for activity-friendly communities. This tutorial will describe current research on the economic value of physical activity infrastructure investments. The first speaker will overview research on physical activity investments and economic outcomes. The second speaker will review the latest research findings of physical activity infrastructure improvement effects on property values and retail sales. Both speakers will discuss research and practice gaps and make recommendations to advance the economic benefits of physical activity.

David M. Buchner, FACSM. University of Illinois at Urbana-Champaign, Urbana-Champaign, IL
(No relevant relationships reported)

Jenny H. Liu. Portland State University, Portland, OR
(No relevant relationships reported)

Wednesday, May 30, 2018, 3:15 PM - 4:05 PM
Room: CC-101G

Our primary goal is to describe a novel, enhanced baseline screening program developed between an Army unit and an academic institution. We will also discuss the similarities and differences between sports and combat concussions as well as novel ways to treat and begin rehabilitation in a deployed setting.

Shawn F. Kane, FACSM. US Army, Ft Bragg, NC
(No relevant relationships reported)

Jason P. Mihalik. University of North Carolina, Chapel Hill, NC
(No relevant relationships reported)

B-49 Clinical Workshop-Hands On Demonstration - An Osteopathic Approach to Concussion
Wednesday, May 30, 2018, 3:15 PM - 4:05 PM
Room: CC-200B

This workshop is an osteopathic approach to both active and more chronic symptoms of concussion. It will be a multi-disciplinary approach with an osteopathic physician, a physical therapist, and a massage therapist. It will explain safe techniques and approaches to use in the office, on the field and in the more chronic management of concussion.

Sherrie L. Ballantine-Talmadge. CU Sports Medicine and Performance Center, Boulder, CO
(No relevant relationships reported)

Ann McNamara. CU Sports Medicine and Performance Center, Boulder, CO
(No relevant relationships reported)

Kate Dean. CU Sports Medicine and Performance Center, Boulder, CO
(No relevant relationships reported)
## Exercise is Medicine® - Tutorial Lecture - Making Sense of the New ACSM Pre-participation Health Screening Recommendations

Wednesday, May 30, 2018, 3:15 PM - 4:05 PM  
Room: Hyatt-Greenway Ballroom D

The new ACSM’s recommendations for exercise preparticipation health screening are based on three factors: 1) current level of physical activity, 2) presence of signs or symptoms and/or known cardiovascular, metabolic, and renal disease, and 3) desired exercise intensity. A significant departure from the old recommendations was removing cardiovascular disease (CVD) risk factor assessment. We acknowledged when formulating the new recommendations, there would be challenges in “teaching an old dog new tricks”, particularly regarding the removal of CVD risk factors. This prediction has proven to be correct. This tutorial will formulate and apply a guided approach to address the challenges of the new recommendations in determining whether medical clearance is required before beginning an exercise program.

### Lecture Speakers

| Speaker | Affiliation | Relationship
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Linda Pescatello</td>
<td>FACSM, University of Connecticut, Storrs, CT</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

## Exercise is Medicine® - Tutorial Lecture - The Exercise is Medicine® On Campus Solution

Wednesday, May 30, 2018, 3:15 PM - 4:05 PM  
Room: Hyatt-Greenway Ballroom C

The number of Exercise is MedicineOn Campus (EIM-OC) programs registering and receiving recognition has increased significantly over the last 7 years. As Exercise Is Medicine (EIM) enters its 10th year, the goal of this presentation is to show the history of EIM-OC highlighting the registration and recognition process, the support and mechanisms to create an EIM-OC initiative, successful programs at the Bronze, Silver, and Gold institution level, and mechanisms to sustain EIM-OC programs long-term.

### Lecture Speakers

| Speaker | Affiliation | Relationship
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Renee Jeffreys-Heil</td>
<td>Florida Gulf Coast University, Fort Myers, FL</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>Carena Winters</td>
<td>FACSM, Jacksonville University, Jacksonville, FL</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

## Tutorial Lecture - Cancer’s in Remission: Now What?

Wednesday, May 30, 2018, 4:25 PM - 5:15 PM  
Room: CC-Auditorium 2

Every cancer patient wants to hear the statement, “You’re cured.” The oncology physician gives the patient a hug and sends them on their way. Everyone is pleased. However, when the patient complains of shoulder pain during their yearly follow up, the physician just shrugs off the complaint and says, “Don’t worry about it, your cancer is still in remission.” This is a common statement heard in oncology offices around the country. It is important to recognize and treat these musculoskeletal issues in cancer patients.

### Lecture Speakers

| Speaker | Affiliation | Relationship
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eric R. Helm</td>
<td>University of Pittsburgh Medical Center, Pittsburgh, PA</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>Adam Susmarski</td>
<td>United States Naval Academy, Annapolis, MD</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

## Tutorial Lecture - Covering Adventure Races and Other Events in the Wilderness/ATLS

Wednesday, May 30, 2018, 4:25 PM - 5:15 PM  
Room: CC-101G

This session will include a review of environmental considerations and advanced trauma life support skills necessary when covering an athletic event in the wilderness.

### Lecture Speakers

| Speaker | Affiliation | Relationship
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew JM Gregory</td>
<td>FACSM, Vanderbilt University, Nashville, TN</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>John Batson</td>
<td>FACSM, Lowcountry Spine &amp; Sport, Hardeeville, SC</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

## Obesity Management: Setting a Target for ‘Clinically Significant Weight Loss’ Does More Harm than Good

Wednesday, May 30, 2018, 4:25 PM - 5:15 PM  
Room: CC-Auditorium 1

How much weight loss is required for health benefit is the source of uncertainty and debate. Pervasive within obesity management guidelines is the observation that “clinically significant weight loss” should be set at a threshold of 5%. Although for most health outcomes a 5% weight loss is associated with benefit, adults who adopt and sustain physical activity combined with a healthful diet, experience health benefits in association with modest (< 5%) or even no weight loss. Because adults may discontinue the adoption of healthy behaviors to manage obesity because they fail to lose weight, the sooner we discontinue the practice of using weight loss targets alone to determine the efficacy of treatment strategies to manage obesity, the better.

### Lecture Speakers

| Speaker | Affiliation | Relationship
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Ross</td>
<td>FACSM, Queen’s University, Kingston, ON, Canada</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

## The Use of Neurocognitive Principles in Musculoskeletal and Concussion Injury Prevention and Rehabilitation

Wednesday, May 30, 2018, 4:25 PM - 5:15 PM  
Room: CC-200B

Neurocognitive is rapidly gaining clinical interest and literature evidence as an important tool in sports performance and the prevention and rehabilitation of sport injuries including concussion and musculoskeletal injuries. This workshop will feature short presentations by a clinician/researcher with expertise in this field of study (background and evidence) and by a physical therapist with significant experience in implementing these principles into clinical practice (practical therapeutic approaches). The presenters will then conduct audience-interactive demonstrations of specific evaluations, exercises, and progressions.

### Lecture Speakers

| Speaker | Affiliation | Relationship
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Daniel C. Herman</td>
<td>FACSM, University of Florida, Gainesville, FL</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>Zach Sutton</td>
<td>UF-Health Physical Therapy, Gainesville, FL</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

## Protective Effects of Physical Activity and Fitness on Metabolic Disease, Obesity and Cardiovascular Disease

Wednesday, May 30, 2018, 4:25 PM - 5:15 PM  
Room: Hyatt-Nicollet Ballroom D

Results from a number of prospective studies indicate that low CRF is a risk factor and at least as robust as traditional factors for several diseases, the most studied being metabolic disease/diabetes mellitus (DM)/obesity and cardiovascular disease (CVD). Furthermore, the protective effects of physical activity/CRF seem to be present throughout the lifespan in both sexes, and CRF has been shown to attenuate or potentially abolish the obesity-related risks of morbidity/mortality.

### Lecture Speakers

| Speaker | Affiliation | Relationship
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Timothy S. Church</td>
<td>ACAP Health Consulting, Dallas, TX</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>Carl J. Lavie</td>
<td>Ochsner Heart and Vascular Institute, Jefferson, LA</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

## Colloquium - Government Health Initiatives Incorporating EIM

Wednesday, May 30, 2018, 4:25 PM - 5:15 PM  
Room: Hyatt-Greenway Ballroom C

This colloquium highlights how EIM has been successfully been incorporated into various governmental health initiatives to achieve specific health objectives.-Taiwan: Doctors and allied health professionals undergoing EIM Exercise Prescription courses

### Lecture Speakers

| Speaker | Affiliation | Relationship
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew JM Gregory</td>
<td>FACSM, Vanderbilt University, Nashville, TN</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>John Batson</td>
<td>FACSM, Lowcountry Spine &amp; Sport, Hardeeville, SC</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>
American College of Sports Medicine

as a structured effort to improve physical activity and reduce frailty in the elderly. Singapore: Systematic EIM training of health coaches in the health ministry’s “War on Diabetes” - Brazil: The “Mexa-se”, a small city initiative that starts with physicians referring patients to the government’s community health programmes

739 Benedict Tan, FACSM. Changi General Hospital, Singapore, Singapore
(No relevant relationships reported)

B-58 Free Communication/Poster - Body Composition
Wednesday, May 30, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

740 Board #1 2:00 PM - 3:30 PM
Challenging The Testing Protocol Of The Bod Pod
Eric Shameus, PhD, DPT, Sarah Bengtson, DPT, Sierra Griffin, DPT, Ahmed Eldeka, PhD, PT, Liza Malley, BS. Florida Gulf Coast University, Fort Myers, FL. (Sponsor: Mitchell L. Cordova, FACSM)
Email: eshamus@fgcu.edu
(No relevant relationships reported)

741 Board #2 2:00 PM - 3:30 PM
Assessing The Impact Of Body Fat Percentage And Lean Mass On Wingate Performance
Robert T. Sanders1, Andy Bosak1, Matthew L. Sokoloski2, Hannah E. Nelson1, James Kelly1, Jared Feister1. Liberty University, Lynchburg, VA. Texas Woman's University, Denton, TX. (Sponsor: Dr. James Schofield, FACSM)
Email: rsanders1@liberty.edu
(No relevant relationships reported)

742 Board #3 2:00 PM - 3:30 PM
Comparison Of A-mode And B-mode Ultrasound For Measurement Of Subcutaneous Fat
Dale R. Wagner, Trenton Judd, Joshua Gordon, Casey McPherson, Adrianna Robison. Utah State University, Logan, UT. (Sponsor: Edward Heath, FACSM)
Email: dale.wagner@usu.edu
(No relevant relationships reported)

743 Board #4 2:00 PM - 3:30 PM
Agreement in Fat and Muscle Estimation between Bioelectrical Impedance and Anthropometry in Youth Athletic Population
Enrique O. Prada, Aldo F. Longo, Néstor A. Lentini, Marcelo L. Carduy, Gustavo D. Aquilino. CeNARD, Buenos Aires, Argentina
(No relevant relationships reported)

744 Board #5 2:00 PM - 3:30 PM
Normalization For Body Mass Affects The Correlation Of Strength Tests To Speed And Agility Tests
Anthony Catersiano, FACSM1, Mike Gentry1. Furman University, Greenville, SC. Virginia Polytechnic Institution, Blacksburg, VA
Email: tony.catersiano@furman.edu
(No relevant relationships reported)

745 Board #6 2:00 PM - 3:30 PM
Ability of the LeanScreen App to Accurately Assess Body Composition
Kimberly L. Radtke, John P. Porcari, FACSM, Ray Marx, Richard Mikat, FACSM, Scott Dobierstein, Abigail Ryskie, Carl Foster, FACSM. University of Wisconsin - La Crosse, WI. (Sponsor: John Porcari, FACSM)
Email: kradtk@uwlax.edu
(No relevant relationships reported)

746 Board #7 2:00 PM - 3:30 PM
Validation of New Skinfold Prediction Equation Based on Dual-Energy X-Ray Absorptiometry for Women.
Jillian Barnes, MS, Stephen Ball, PhD. University of Missouri - Columbia, Columbia, MO. (Sponsor: Jill Kanaley, PhD, FACSM)
(No relevant relationships reported)

747 Board #8 2:00 PM - 3:30 PM
Evaluation of Regional Body Composition in Able-Body and Wheelchair Basketball Teams
Judy R. Wilson, FACSM, Sara Kirk, Sarah Poydence. University of Texas @ Arlington, Arlington, TX
(No relevant relationships reported)

748 Board #9 2:00 PM - 3:30 PM
Effects Of Menstrual Cycle On Body Weight And Intracellular And Extracellular Fluid
Mikako Sakamaki-Sunaga, Kayoko Kamemoto, Mizuki Yamada, Tomoka Matsuoka. Nippon Sport Science University, Tokyo, Japan
Email: sunaga@nittai.ac.jp
(No relevant relationships reported)

749 Board #10 2:00 PM - 3:30 PM
Body Fat Percent and Relative Intensity in Walking at 2.5 mph among University Students
Istvan Kovacs, Weihao Liu, FACSM, Ethan E. Hull. Slippery Rock University, Slippery Rock, PA
Email: istvan.kovacs@usu.edu
(No relevant relationships reported)

750 Board #11 2:00 PM - 3:30 PM
Hyperhydration Acutely Increases Bioelectrical Impedance Analysis Body Fat Estimates
Evans L. Matthews, Marisa M. Maertens, Peter A. Hosick. Montclair State University, Montclair, NJ
Email: matthewese@montclair.edu
(No relevant relationships reported)

751 Board #12 2:00 PM - 3:30 PM
Effects of a Six Week Weight Loss Challenge on Body Composition and Cardiovascular Health
Melissa A. Whidden, Jamie M. Blose, Jared M. James, Antonio L. Battaglino, Alexis N. Trumbetti, Anna K. Schade, Katie M. Cooper, Paul K. Stickles, Melissa A. Reed, Selem Razon. West Chester University, West Chester, PA. (Sponsor: Dr. W. Craig Stevens, FACSM)
(No relevant relationships reported)

752 Board #13 2:00 PM - 3:30 PM
Evaluation Of Body Composition Measurements Obtained Using Whole-body Plethysmography
Timothy R. Macaulay, Conor D. Uhlir, E. Todd Schroeder, FACSM. University of Southern California, Los Angeles, CA. (Sponsor: E. Todd Schroeder, FACSM)
Email: tmacaulay@usc.edu
(No relevant relationships reported)

753 Board #14 2:00 PM - 3:30 PM
Large Exercise-induced Weight Loss on Fat Distribution and Metabolic Risk Factors in Young Obese Males
Jolene Lim1, Govindasamy Balasekaran, FACSM1, Melissa Mayo1, Vivassureishi Victor Govindasawamy2. Nanyang Technological University, Singapore, Singapore. Concordia University Chicago, Chicago, IL. (Sponsor: Govindasamy Balasekaran, FACSM)
(No relevant relationships reported)

www.acsm.org
P54 Final Program

754 Board #15 2:00 PM - 3:30 PM
Sport-Specific Changes to Bone and Lean Mass
Proportionalities among College Athletes
Taylor Burris, Elisah Farrales, Robert Taylor, Jerry L. Mayhew, 63501, William F. Brechue, FACSM, Laurel M. Wentz. \(^2\)Truman State University, Kirkville, MO \(^\ast\) A. T. Still University, Kirkville, MO \(^\ast\)Appalachian State University, Boone, NC
Email: trn6425@truman.edu
(No relevant relationships reported)

755 Board #16 2:00 PM - 3:30 PM
Body Fat Differences Between Skinfold, Impedance, And Dexa Measurements
Donna J. Terbizan, FACSM, \(^1\)Shannon David, \(^1\)Kyle J. Hackney, \(^1\)Sherri Sustro, \(^1\)Elizabeth Hilliard, \(^1\)Bryan Christensen, \(^1\)Yeong Rhee, \(^1\)Steven Mitchell. \(^2\)North Dakota State University, Fargo, ND \(^\ast\)North Dakota State University and Sanford Health, Fargo, ND
(No relevant relationships reported)

756 Board #17 2:00 PM - 3:30 PM
Characterization Of Fat-free Mass Index And Body Fat Mass Index: Relationship To Strength Performance In Resistance-trained Females
Alexis A. Pihoker, Eric T. Trexler, Austin M. Peterjohn, Gregory L. Nuckols, Malia N.M. Blue, Katie R. Hirsch, Cara C. Anderson, Abbie E. Smith-Ryan, FACSM, University of North Carolina at Chapel Hill, Chapel Hill, NC (Sponsor: Abbie Smith-Ryan, FACSM)
Email: alexisp@live.unc.edu
(No relevant relationships reported)

757 Board #18 2:00 PM - 3:30 PM
Body Composition Varies by Position in Female NCAA Division 1 Lacrosse Players
Jessica S. Siplon, James M. Smoliga, FACSM, High Point University, High Point, NC
Email: jmsmoliga@highpoint.edu
(No relevant relationships reported)

758 Board #19 2:00 PM - 3:30 PM
Does the Body Composition of Collegiate Male Lacrosse Players Differ by Position?
Abigail Goldburt, James M. Smoliga, FACSM, High Point University, High Point, NC
Email: jmsmoliga@highpoint.edu
(No relevant relationships reported)

759 Board #20 2:00 PM - 3:30 PM
Effects of an Acute Strength and Conditioning Bout on Dual Energy X-ray Absorptiometry Results
Jason R. Lytle, Steve E. Martin, John S. Green, FACSM, Stephen F. Crouse, FACSM, Texas A&M, College Station, TX (Sponsor: Stephen F. Crouse, FACSM)
(No relevant relationships reported)

760 Board #21 2:00 PM - 3:30 PM
The Effect of Pretest Instructions and Between Day Test-Retest Reliability of Air Displacement Plethysmography
Emily Dunston, Shelby Chriest, Sayer Avena, Katrina Taylor, Annika Valyk. Eastern Washington University, Cheney, WA (Sponsor: Wendy Repovich, FACSM)
(No relevant relationships reported)

761 Board #22 2:00 PM - 3:30 PM
Relationship Between Sarcopenia Classification Methods, Relative Fat Mass, and Skeletal Muscle Mass
Kassi Meacham, A. Paige Glenn, John P. Yake, Mary L. Williams, Jennifer J. Didier. Sam Houston State University, Huntsville, TX
(No relevant relationships reported)

ACSM 65th Annual Meeting

762 Board #23 2:00 PM - 3:30 PM
A Comparison Of Methods Used To Determine Percent Body Fat And Minimum Wrestling Weight
Paul T. Cutrufello, Andrew C. Venezia, Michael J. Landram, Curt B. Dixon, FACSM. \(^1\)The University of Scranton, Scranton, PA \(^2\)Lock Haven University, Lock Haven, PA
Email: paul.cutrufello@scranton.edu
(No relevant relationships reported)

763 Board #24 2:00 PM - 3:30 PM
Comparison of Methods Assessing Body Composition in Young Adults
Maura L. Jegerski, Baruch Vainshelboim, Gabrielle M. Brennan, Henry Piascik, Sara D. Dieterich, Patricia Fitzgerald, Stephen LoRusso, Kristofer S. Wisniewski. Saint Francis University, Loretto, PA
Email: mlj100@francis.edu
(No relevant relationships reported)

764 Board #25 2:00 PM - 3:30 PM
Validation Of The Inbody 770 For The Assessment Of Percent Body Fat In Young Adults
Joseph L. Andreacci, FACSM, \(^1\)Vincenzo Nocenti, Chelsea Wernich, \(^1\)Andrea J. Fradkin, FACSM, \(^1\)Curt B. Dixon, FACSM, \(^1\)Bloomburg University, Bloomburg, PA \(^2\)Lock Haven University, Lock Haven, PA
Email: jandreac@bloomu.edu
(No relevant relationships reported)

765 Board #26 2:00 PM - 3:30 PM
Association between Segmental Lean Body Mass and Muscular Strength
Joshua D. Graham. Saint Francis University, Loretto, PA
(No relevant relationships reported)

766 Board #27 2:00 PM - 3:30 PM
Does the Body Composition of Collegiate Male Lacrosse Players Differ by Position?
Abigail Goldburt, James M. Smoliga, FACSM, High Point University, High Point, NC
Email: jmsmoliga@highpoint.edu
(No relevant relationships reported)

767 Board #28 2:00 PM - 3:30 PM
Alphabet Soup: BMI, WC, ADP - What Measures Provide Adequate Estimates Of Obesity In Aging Adults?
Amy L. Morgan, FACSM, Mary-Jon Ludy, \(^1\)Edward T. Kelley, \(^1\)Sarah G. Kearney, \(^1\)Matt Laurent. \(^1\)Bowling Green State University, Bowling Green, OH \(^\ast\)Tarleton State University, Stephenville, TX
(No relevant relationships reported)

768 Board #29 2:00 PM - 3:30 PM
Validity of Ultrasound and Skinfolds for the Measurement of Body Composition in Collegiate Basketball Players
Jeremy T. Barnes, Jason D. Waggener, \(^1\)Jeremy P. Loenneke, \(^1\)William M. Miller, \(^1\)Southeast Missouri State University, Cape Girardeau, MO \(^\ast\)University of Mississippi, University, MS
(No relevant relationships reported)

769 Board #30 2:00 PM - 3:30 PM
Efficacy Of Ketogenic Diet On Body Composition During Resistance Training In Trained Men
Vargas Salvador, Ramón Romance, \(^1\)Jorge L. Petro, \(^1\)Diego A. Bonilla, \(^1\)Ismeal Galanche, \(^1\)Sergio Espinar, \(^1\)Rick B. Kreider, FACSM, \(^1\)Javier Benitez-Porres. \(^1\)EADE-University of Wales, Málaga, Spain \(^1\)University of Malaga, Málaga, Spain \(^1\)University of Córdoba, Málaga, Spain \(^1\)University, Bogotá, Bogotá, Colombia \(^\ast\)Better by Science, Málaga, Spain \(^\ast\)Better by Science, Málaga, Spain \(^\ast\)Texas A & M University, Málaga, Spain (Sponsor: Richard Bruce Kreider, FACSM)
Email: salvadordvargasolmedina@gmail.com
(No relevant relationships reported)
**American College of Sports Medicine**

**Board #31**

**2:00 PM - 3:30 PM**

**Bioelectrical Impedance Analysis Versus Dual-Energy X-ray Absorptiometry Body Fat Percentage Measurements in Collegiate Basketball Players**

Michelle L. Otto, Southeast Missouri State University, Cape Girardeau, MO. (Sponsor: Joe Pujol, FACSM)

Email: mloettle@semo.edu

(No relevant relationships reported)

---

**Board #32**

**2:00 PM - 3:30 PM**

**Anthropometric and Performance Statistics Comparisons in Baseball Batters: A Longitudinal Study**

Vishak Vinod, Thejasvi Reddy Anantasagar, Richard A. Karasch, James G. Disch, Zacharias Papadakis, University of Houston, Houston, TX. (Sponsor: Peter W. Grandjean, FACSM)

Email: zacharias.papadakis@rice.edu

(No relevant relationships reported)

---

**Board #33**

**2:00 PM - 3:30 PM**

**Comparison of Overall and Segmental Body Composition in Collegiate Track Athletes Using BIA and DXA**

Dustin W. Davis, Matthew J. Garver, Molly A. Jennings, Brian J. Hughes, Steve Burns, Taylor K. Dinyer, Alex Rickard, Justin L. Cof, Laura A. Wilson, Jenna L. Carducci, Anna L. Blazer, University of Central Missouri, Warrensburg, MO. (Sponsor: Peter W. Grandjean, FACSM)

Email: dwdavis@ucmo.edu

(No relevant relationships reported)

---

**Board #34**

**2:00 PM - 3:30 PM**

**Longitudinal Changes In Skinfold Thicknesses In Relation To Body Fat Changes Assessed with DXA**

Juan R. Lopez-Taylor, Roberto Gabriel Gonzalez-Mendoza, Alejandro Gaytan-Gonzalez, Juan Antonio Jimenez-Alvarado, Marisol Villegas-Balcazar, Edma Elvia Jauregui-Ulloa, Francisco Torres-Naranjo, Universidad de Guadalajara, Guadalajara, Mexico

Email: taylor@cucs.udg.mx

(No relevant relationships reported)

---

**Board #35**

**2:00 PM - 3:30 PM**

**Hydration and Electrolyte Status of Brazilian Olympic Athletes**

Franz H. Burini, Rafael Rezende, Pedro Rodstein, Thalles Messora, Roberto C. Burini, FACSM. UNESP Medical School, Botucatu, Brazil. (Sponsor: Roberto C. Burini, FACSM)

Email: fburini@fmb.unesp.br

(No relevant relationships reported)

---

**Free Communication/Poster - Contact Sports**

Wednesday, May 30, 2018, 1:00 PM - 6:00 PM

**Room: CC-Hall B**

**Board #36**

**2:00 PM - 3:30 PM**

**Injury Monitoring and Player Education, a Survey of Current Practices in Irish Amateur Rugby Union**

Caithríona A. Yeomans, Thomas M. Comyns, Rosiin Cahalan, Giles D. Warrington, FACSM, Andrew J. Harrison, Kevin Hayes, Mark Lyons, Mark J. Campbell, Ian C. Kenny. University of Limerick, Limerick, Ireland. (Sponsor: Dr. Giles D Warrington, FACSM)

Email: caithriona.yeomans@ul.ie

(No relevant relationships reported)

---

**Board #37**

**2:00 PM - 3:30 PM**

**Optimal Cooling Periods For Rugby League In Hot/humid Conditions**

Grant Lynch, Connor Graham, Timothy English, Ollie Jay, FACSM. University of Sydney, Sydney, Australia. (Sponsor: Dr Ollie Jay, FACSM)

(No relevant relationships reported)

---

**Board #38**

**2:00 PM - 3:30 PM**

**Wearable Sensors to Quantify Performance and Fatigue during Tournament Competition among Elite Developmental Ice Hockey Players**

Ken Martel, Andrea Workman, Davor Stojanov, Stephen J. McGregor. Eastern Michigan University, Ypsilanti, MI. (Sponsor: Andrew R. Coggin, Ph.D., FACSM, FACS)

Email: kem@usahockey.org

(No relevant relationships reported)

---

**Board #39**

**2:00 PM - 3:30 PM**

**Movement Deficiencies in Division II Male Football Athletes as it Relates to Class and Position**

Taylor A. Taraski, Jenny A. Martinez, Christopher C. Winter, Jeremy E. Glaser, Brandon M. Fjerstad, Jeremy L. Knous. Saginaw Valley State University, University Center, MI

Email: tatarask@svsu.edu

(No relevant relationships reported)

---

**Board #40**

**2:00 PM - 3:30 PM**

**Physical Demands of NCAA Division I Hockey Training and Competition Using Microtechnology**

Bryce V. Murphy, Donald R. Dengel, FACSM, Julian Wolfson, Calvin C. Dietz, Corey S. Petersen, Tyler A. Bosch. University of Minnesota, Minneapolis, MN. (Sponsor: Donald R Dengel, FACSM)

Email: murp1142@umn.edu

(No relevant relationships reported)

---

**Board #41**

**2:00 PM - 3:30 PM**

**Physical Skills of Teen Student-Athletes of Combat Sports: A Comparative and Correlational Analysis**

Aldo F. Longo, Gustavo D. Aquilino, Marcelo L. Cardey, Néstor A. Lentini, Enrique O. Prada. CeNARD, Buenos Aires, Argentina

(No relevant relationships reported)

---

**Board #42**

**2:00 PM - 3:30 PM**

**Differences in Velocity Output in the Back Squat, Bench Press, and Deadlift Among Collegiate Hockey Players**

Chris Pitsikoulis, Chad Trudo, Josh Giochey, Josue Argueta, Guillermo Blano. Aurora University, Aurora, IL

Email: cpitsikoulis@aurora.edu

(No relevant relationships reported)

---

**Board #43**

**2:00 PM - 3:30 PM**

**Evaluation Of The Health And Physical Fitness And Factors Influencing Retention Of Scholastic Sports Officials In The Sport Of American Football**

Aaron T. Hall, Cody E. Morris, Stacey Forstythe, Tricia Jordan, Mark A. Schafer, Teresa L. Wiczynski, Paula Upright. Trevecca Nazarene University, Nashville, TN. Western Kentucky University, Bowling Green, KY (Sponsor: Scott Lyons, FACSM)

Email: athall@trevecca.edu

(No relevant relationships reported)

---

**Board #44**

**2:00 PM - 3:30 PM**

**Hydration Status in Division III Female Hockey Players Prior to Competition**

Anthony Clapp, Danielle Heitkamp. Augustburg University, Minneapolis, MN. (Sponsor: John L. Walker, FACSM)

Email: clapp@augsburg.edu

(No relevant relationships reported)

---

**Board #45**

**2:00 PM - 3:30 PM**

**This Study Provides Quantification Of Positional Physical Demands Of Selected Positions**

Bert H. Jacobson, FACSM. Oklahoma state university, Stillwater, OK

Email: bert.jacobson@okstate.edu

(No relevant relationships reported)
Players

Prediction Including Skating Economy in Ice-Hockey
Updating the Skating Multistage Aerobic Test for VO2max

(No relevant relationships reported)

Email: aciccone@ku.edu

Lawrence, KS.

Anthony B. Ciccone, Joseph P. Weir, FACSM.

Away Games Indicate a Presence of Fatigue?

(No relevant relationships reported)

Email: comtois.alain-steve@uqam.ca

3

Richard M. Storie

Validity & Reliability Of A New Hockey-Specific Test In Elite

Email: groetsc1@msu.edu

Pivarnik, FACSM)

Michigan State University, East Lansing, MI.

Jane A. Groetsch, Ashley N. Triplett, James M. Pivarnik, FACSM.

By A Division I College Female Field Hockey Team Using

Comparison Of Heart Rate, Speed, And Sprints Performed

Email: jessica.moon13@gmail.com

(Sponsor: Chad M. Kerksick, FACSM)

Jessica Moon.

Characteristics of Female Collegiate Ice Hockey Players

Email: jessica.moon13@gmail.com

Chad M. Kerksick, FACSM

(Sponsor: James M. Pivarnik, FACSM)

Jessica Moon. Lindenwood University Belleville, Belleville, IL.

(sponsor: David Q. Thomas, FACSM)

C. Grimwood, Nathan P. Fillers.

University of Littoral Côte d'Opale, Dunkerque, France

1

Hardin Simmons University, Abilene, TX.

2

Gifu University, Gifu, Japan

3

Nagoya Gakuen University, Aichi, Japan.

(No relevant relationships reported)

Email: oguri@gifu.shotoku.ac.jp

Tanaka, FACSM) (Sponsor: Kiyoji

Nagoya Gakuin University, Aichi, Japan.

1

UANL, Monterrey, Mexico

2

Universidad Federal do Paraná, Curitiba, Brazil

3

Univerdade de São Paulo, São Paulo, Brazil

(Co-NY'U CUNY Lehman College Bronx,

NY, NY'Texas Woman's University, Denton TX, TX'Appalachian State University, Boone, NC, NC.

(Sponsor: Steven R. McAnulty, FACSM)

(No relevant relationships reported)

Email: Sebastien.beauregard@mail.mcgill.ca

(Sponsor: Ross Andersen, FACSM)

(B) 60

Free Communication/Poster - Perception

Wednesday, May 30, 2018, 1:00 PM - 6:00 PM

Room: CC-Hall B

798 Board #59

Lowest Perceived Exertion In The Late Morning Due To Effects Of The Endogenous Circadian System

Saurabi S. Thosar, Maya X. Herzig, Sally A. Roberts, Alec M. Berman, Noal A. Clemons, Andrew W. McHill, Nicole P. Bowles, Saurabi S. Thosar, Maya X. Herzig, Sally A. Roberts, Alec M. Berman, Noal A. Clemons, Andrew W. McHill, Nicole P. Bowles, Steven A. Shea. Oregon Health & Science University, Portland, OR.

Email: thosar@ohsu.edu

Reported Relationships: S.S. Thosar: Salary; NIH F32 award.
Board #66 2:00 PM - 3:30 PM
Time Perception, Pacing And Exercise: Intensity Distorts The Perception Of Time
Andrew M. Edwards, Alister McCormick. Plymouth Marjon University, Plymouth, United Kingdom
Email: aedwards@marjon.ac.uk
(No relevant relationships reported)

Board #67 2:00 PM - 3:30 PM
Self-Confidence is Positively Related to Rating of Perceived Exertion During a Maximal Squat Test
Colby A. Sousa1, Michael H. Haischer1, Daniel M. Cooke1, Joseph P. Carzoli1, Amber M. Shipherd2, Trevor K. Johnson3, Edward P. Davis1, Dan J. Belcher1, Robert F. Zoeller1, Michael Whitehurst, FACSM4, Michael C. Zourdos4, Florida Atlantic University
Boca Raton, FL. 5Texas A&M University-Kingsville, Kingsville, TX
Email: csousa2016@fau.edu
(No relevant relationships reported)

Board #68 2:00 PM - 3:30 PM
Effects of Performance Foam on Perceived Exertion and Recovery in High-Intensity Functional Exercise
Justin M. Goins, Toni M. Torres-McGehee, Tim Bailey, Samantha Weber, Jacob Kay. University of South Carolina, Columbia, SC
Email: GOINSJ@mailbox.sc.edu

Board #69 2:00 PM - 3:30 PM
Comparison Of HR And RPE During Self-selected And Prescribed Exercise Bouts In College Students
Ashley Ewald, Nicholas Boer, Kara Hamilton. University of Tennessee at Chattanooga, Chattanooga, TN
(No relevant relationships reported)

Board #70 2:00 PM - 3:30 PM
Effect of Spotters on State Anxiety and Self Confidence During Maximal Squatting Among Male High School Athletes
Drew Rykert1, Abigail Larson1, Chad Harris, FACSM2, Kent J. Adams, FACSM1, Mark DeBeliso, FACSM3, Southern Utah University, Cedar City, UT. 4Metropolitan State University of Denver, Denver, CO. 5California State University Monterey Bay, Seaside, CA.
(Sponsor: Mark DeBeliso, FACSM)
(No relevant relationships reported)

Board #71 2:00 PM - 3:30 PM
Comparing Training Load and Intensity Perceptions Between Female Distance Runners and Their Coach
Lawrence W. Judge1,2, Beau M. Link2, Andrew Mullally2, Mark King2, Zachary Watererson2, David M. Bellar3 Ball State University, Muncie, IN. 4Fort Wayne Medical Education Program, Ft. Wayne, IN. 5University of Louisiana at Lafayette, Lafayette, LA.
(Sponsor: Matthew Harber, FACSM)
Email: lwjudge@bsu.edu
(No relevant relationships reported)

Board #72 2:00 PM - 3:30 PM
Rating Of Perceived Exertion In The Squat Until Muscle Failure Versus Non-failure In Women
Wanderson Divino, Vanessa Lopez1, Carlos Alexandre Vieira1, Ronson Camilo Soares1, João Felipe Mota1, Alcides Corrêa de Morais Junior1, Martim Bottaro1, Paulo Gentili1 Federal University of Goias, Goiânia, Brazil. 2University of Brasilia, Brasilia, Brazil
Email: wanderson.nilo@gmail.com
(No relevant relationships reported)
**Board #73**  
**3:30 PM - 5:00 PM**  
**Effects of High-Intensity Interval Training on Plasma Volume**  
William B. Trimble, II, Jerita Mitchell, Olivia D. Hocevar, Tyron’E Hawkins, Robert R. Kraemer, FACSM, Southeastern Louisiana University, Hammond, LA. (Sponsor: Dr. Robert R. Kraemer, FACSM, FACSM)  
Email: william.trimble@selu.edu  
(No relevant relationships reported)

**Board #74**  
**3:30 PM - 5:00 PM**  
**Cardiovascular Responses to Blood Flow Restriction and Very Low Load Resistance Exercise in the Upper Body**  
J Grant Mouser, Kevin T. Mattocks, Scott J. Dankel, Samuel L. Buckner, Matthew B. Jesse, Zachary W. Bell, Takashi Abe, Jeremy P. Loenneke. The University of Mississippi, University, MS  
(No relevant relationships reported)

**Board #75**  
**3:30 PM - 5:00 PM**  
**Novel Gene Variant Associated with Exercise Pressor Reflex Responsiveness**  
Nathan Garvin, John Hayes, David Vandenbergh, James A. Pawelecky, FACSM. Pennsylvania State University, University Park, PA. (Sponsor: James A Pawelecky, FACSM)  
(No relevant relationships reported)

**Board #76**  
**3:30 PM - 5:00 PM**  
**Acute Hemodynamic Response to Very Low Load Resistance Exercise With or Without Blood Flow Restriction**  
Kevin T. Mattocks, J Grant Mouser, Matthew B. Jesse, Scott J. Dankel, Samuel L. Buckner, Zachary W. Bell, Takashi Abe, Jeremy P. Loenneke. The University of Mississippi, University, MS  
(No relevant relationships reported)

**Board #77**  
**3:30 PM - 5:00 PM**  
**Comparison of Exercise-induce Endothelial Shear Stress Between Poiseuille’S Law and Womersley’S Approximation**  
Francisco J. Morales¹, Brycen J. Ratcliffe², Caleb D. Harrison², Evan J. Bockover¹, Sierra Crowe¹, Colin R. Carriker¹, Alvaro N. Gurovich, FACSM. ¹The University of Texas at El Paso, El Paso, TX; ²Indiana State University, Terre Haute, IN; ³High Point University, High Point, NC  
Email: fmoralesac@miners.utep.edu  
(No relevant relationships reported)

**Board #78**  
**3:30 PM - 5:00 PM**  
**Influence of High-Intensity Exercise on Aortic Stiffness and Femoral Artery Shear Patterns**  
Jacob P. DeBlois¹, Wesley K. Lefferts², Kevin S. Heffernan¹, Bo Fernhall, FACSM. ¹Syracuse University, Syracuse, NY; ²University of Illinois Chicago, Chicago, IL. (Sponsor: Bo Fernhall, FACSM)  
(No relevant relationships reported)

**Board #79**  
**3:30 PM - 5:00 PM**  
**Acute Resistance Exercise Effects on Blood Flow in Resistance-Trained Versus Untrained Individuals**  
Alaina Glasgow, Kathryn Geither, Jason C. Parks, Erica M. Marshall, Leslie Sensibello, Yu Lun Tai, J. Derek Kingsley, FACSM. Kent State University, Kent, OH  
Email: aglasgo2@kent.edu  
(No relevant relationships reported)
American College of Sports Medicine

827 Board #88  3:30 PM - 5:00 PM
Examining Peripheral Hemodynamics During Handgrip Exercise in Varsity Rovers
Kevin Decker, Austin Hogwood, Jennifer Weggen, Ruhi Manyar, Ashley Darling, Austin Michael, Ryan Garten. Virginia Commonwealth University, Richmond, VA
(No relevant relationships reported)

828 Board #89  3:30 PM - 5:00 PM
Muscle Oxygenation and Metabolic Regulations During Low and Moderate Intensity Exercise with Blood Flow Restriction
HYEJUNG HWANG, Sahiro Mizuno, Nobukazu Kasai, Chihiro Kojima, Duichi Sumi, Nanako Hayashi, Kazushige Goto. Ritsumeikan University, Shiga, Japan
Email: kkuhhj@gmail.com
(No relevant relationships reported)

B-62 Free Communication/Poster - Cardiac
Wednesday, May 30, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

829 Board #90  3:30 PM - 5:00 PM
Usefulness Of Two-Dimensional Echo Strain In Evaluation Of Cardiac Function In Elite Athletes
Benedetta Tosi, Beatrice Leone, Loira Toncelli, Giorgio Galanti, FACSM. University of Florence, Florence, Italy
Email: benedetta.tosi@unifi.it
(No relevant relationships reported)

830 Board #91  3:30 PM - 5:00 PM
HR, %HRmax, %HRR, SPM In Moderate-Intensity Walking Among University Students By Sex And Resting HR
WenHao Liu, FACSM, Istvan Kovacs, Ethan E. Hull. Slippery Rock University, Slippery Rock, PA
Email: wenhao.liu@sruc.edu
(No relevant relationships reported)

831 Board #92  3:30 PM - 5:00 PM
Passive Heat Stress Attenuates the Rise in Blood Pressure During Face Cooling
Email: mmmcbrayd@buffalo.edu
(No relevant relationships reported)

832 Board #93  3:30 PM - 5:00 PM
Alcohol and Cardiovascular Health: Acute Alterations Versus Chronic Adaptations
Jennica Harrison1, Grace L. Naylor1, J. Mark VanNess1, Michelle M. Amaral1, Greg Roberts2, Jonathan M. Saxe2, Lewis E. Jacobson1, Courtney D. Jensen1. University of the Pacific, Stockton, CA. St. Vincent Hospital, Indianapolis, IN
Email: j.harrison4@u.pacific.edu
(No relevant relationships reported)

833 Board #94  3:30 PM - 5:00 PM
Cardiac Structure-function And Aerobic Capacity In Individuals With A Competitive Sports History
Nicholas A. Wasinger, Zachary Headman, Brent W. Lambson, Ty M. Fulmer, Tatyana V. Kondrashova, William F. Brechue, FACSM. A.T. Still University, Kirksville, MO. (Sponsor: William F. Brechue, Ph.D., FACSM)
Email: nwasinger@atsu.edu
(No relevant relationships reported)

834 Board #95  3:30 PM - 5:00 PM
Free-Weight Resistance Exercise Versus Weight Machines on Pulse Wave Reflection
Kathryn Geither, Leslie Sensibello, Jason C. Parks, Erica M. Marshall, Yu Lun Tai, J. Derek Kingsley, FACSM. Kent State University, Kent, OH
(No relevant relationships reported)

835 Board #96  3:30 PM - 5:00 PM
Accuracy of a Smartphone Application to Measure Heart Rate Variability in Adult Females
Clayton Nicks, Kate Early, Brian Tyo. Columbus State University, Columbus, GA
Email: nicks_clayton@columbusstate.edu
(No relevant relationships reported)

836 Board #97  3:30 PM - 5:00 PM
Effects of AMPK α2 Gene Deficiency on Exercise Induced Cardiac Hypertrophy in Mice
Xin Xu1, Xuedong Shang2, Jing Jing1, Guo Li1. Shanghai University of Sport, Shanghai, China. National Research Institute of Sports Medicine, Beijing, China
(No relevant relationships reported)

837 Board #98  3:30 PM - 5:00 PM
Validation Of The Non-invasive Assessment Of Cardiac Output Via The Closed-circuit Acetylene Rebreathing Technique
Dean Palmer, Ashley Hardin, Justin Lawley, Satyam Sarma, Michinari Hieda, Benjamin Levine, FACSM. JEEM, Dallas, TX. (Sponsor: Benjamin D. Levine, FACSM)
(No relevant relationships reported)

838 Board #99  3:30 PM - 5:00 PM
Holter Ecg In Sports People: 20 Years Of Monitoring
Riccardo Ariani, Alessio Bartoletti, Giorgio Galanti. University of Florence, Florence, Italy
Email: riccardo.ariani@libero.it
(No relevant relationships reported)

839 Board #100  3:30 PM - 5:00 PM
The Effects Of High Intensity Interval Training On Heart Rate Variability In Physically Inactive Adults
Abdullah B. Alansare1, Elward K. Alford1, Sukho Lee2. Texas A&M University-San Antonio, San Antonio, TX. The University of Louisiana at Monroe, Monroe, LA. Texas A&M University-San Antonio, San Antonio, TX
(No relevant relationships reported)

840 Board #101  3:30 PM - 5:00 PM
Autonomic Modulation in Response to Three Different Autonomic Reflex Tests in Women with Fibromyalgia
J. Derek Kingsley, FACSM, Kathryn Geither, Alaina Glasgow, Erica M. Marshall, Jason C. Parks, Leslie Sensibello, Yu Lun Tai. Kent State University, Kent, OH
Email: j.kingsle@kent.edu
(No relevant relationships reported)

841 Board #102  3:30 PM - 5:00 PM
Heart Rate Variability Response To Altitude Exposure In College-aged Students In Nepal
Alex Claiborne, Helaine M. Alessio, FACSM, Mark Walsh, Eric Slattery, Arden McMeth, Byran Smucker. Miami University, Oxford, OH. (Sponsor: Helaine Alessio, FACSM)
Email: clalboc@miamioh.edu
(No relevant relationships reported)
P60 Final Program

842 Board #103 3:30 PM - 5:00 PM
Ageing Alters Right Ventricular But Not Left Ventricular Myocardial Mechanics
Glenn Stewart1, Bruce Johnson2, Bryce Balmain3, Kenji Shino2, Akira Yamada1, Norman Morris1, Jonathan Chan1, Surendran Sabapathy2 Mayer Clinic, Rochester, MN 2 Griffith University, Gold Coast, Australia 3 Prince Charles Hospital, Brisbane, Australia
Email: stewart.glenn@mayo.edu
(No relevant relationships reported)

843 Board #104 3:30 PM - 5:00 PM
Risk Factors of Hypertension Among Different Adult Groups in the Tujia-Nationality Settlement of China
Xiaoli Liu1, Xiangrong Shi2, Male, FACSM 1 Hubei University for Nationalities, Enshi, China 2 UNTHSC, Fort Worth, TX
(No relevant relationships reported)

844 Board #105 3:30 PM - 5:00 PM
Risk of Cardiovascular Disease in American Firefighters: An Intervention is Warranted
Nicholas B. Zachmeier1, Hyosung Han1, Alexis C. King1, Mark VanNess2, Cynthia Villalobos2, Courtney D. Jensen2
University of the Pacific, Stockton, CA
(No relevant relationships reported)

845 Board #106 3:30 PM - 5:00 PM
Effectiveness of Three-Dimensional Echocardiography for Asian Postural Orthostatic Tachycardia Syndrome during Exercise Therapy
Takahiro Uechi1, Tomoya Sada1, Kazukuni Hiraibuki2, Noritaka Hata1, Yuki Sano1, Ai Hirasawa1, Takeaki Matsuda1, Shigeki Shibata2 1 Kyorin University School of Medicine, Mitaka, Japan 2 Kyorin University, Mitaka, Japan; 1 Sponsor: Shigehiko Ogoh, FACSM
(No relevant relationships reported)

846 Board #107 3:30 PM - 5:00 PM
Left Ventricular Hypertrophy: New Indexation With Body Cell Mass
Gabriele Mascherini1, Cristian Petri1, Giorgio Galanti1 1 University of Florence, Florence, Italy
Email: gabriele.mascherini@unifi.it
(No relevant relationships reported)

847 Board #108 3:30 PM - 5:00 PM
Parasympathetic Modulation at Rest, During Exercise And Recovery From Maximal Exercise, In Boys And Men
Justin Guikley1, Brandon Dykstra2, Jennifer Erichsen3, Eric Heidorn4, Anthony D. Mahon1 1 Coastal Carolina University, Conway, SC 2 Ball State University, Muncie, IN 3 South Carolina School of Medicine, Columbia, SC
Email: jguikley@coastal.edu
(No relevant relationships reported)

848 Board #109 3:30 PM - 5:00 PM
Link Between Left Ventricular Mass And Body Composition In Young Male And Female Athletes
Giorgio Galanti1, Cristian Petri1, Gabriele Mascherini1 1 University of Florence, Florence, Italy
Email: giorgio.galanti@unifi.it
(No relevant relationships reported)

849 Board #110 3:30 PM - 5:00 PM
Sex Differences In Aortic Stiffness, 24-hour Blood Pressure, And Cardiac Deformation In Marathon Runners
Jacqueline A. Augustin1, Wesley K. Lefferts2, Jacob P. DeBlois3, Tiago V. Barreira1, Kan Liu1, Beth A. Taylor1, Kevin S. Heffernan1 1 Syracuse University, Syracuse, NY 2 SUNY Upstate Medical University, Syracuse, NY 3 University of Connecticut, Storrs, CT
(Sponsor: Bo Fernhall, FACSM)
(No relevant relationships reported)

ACSM 65th Annual Meeting

850 Board #111 3:30 PM - 5:00 PM
Influence of cuff pressure on cardiovascular responses to knee extension exercise with blood flow restriction
Sarah G. Kearney1, Tyler Singer1, Jon Stavres1, Steven J. Elmer2, Matt A. Kilgas1, John McDaniel1 1 Kent State University, Kent, OH 2 Michigan Technological University, Houghton, MI
(No relevant relationships reported)

B-63 Free Communication/Poster - Cardiac Rehabilitation

851 Board #112 3:30 PM - 5:00 PM
Does UK Cardiac Rehabilitation Provide an Effective Stimulus For Change?
Said Ibeggezuzen1, Chelsea Moore2, Michelle Swainson2, Theocharis Ispoglou3, Costas Tsakridades4, Karen Birch, FACSM; 1 University of Leeds, Leeds, United Kingdom; 2 Leeds Beckett University, Leeds, United Kingdom. (Sponsor: Professor Karen Birch, FACSM)
Email: bbss@leeds.ac.uk
(No relevant relationships reported)

852 Board #113 3:30 PM - 5:00 PM
Changes in Functional Capacity and Hemodynamic Responses in Costa Rican Cardiac Rehabilitation Patients
Felipe Araya-Ramirez1, Jose Moncada-Jimenez2, Peter W. Grandjean3, FACSM; 1 National University of Costa Rica, Heredia, Costa Rica; 2 University of Costa Rica, San Jose, Costa Rica; 3 Baylor University, Waco, TX. (Sponsor: Peter W. Grandjean, FACSM)
Email: felipe.araya.ramirez@una.cr
(No relevant relationships reported)

853 Board #114 3:30 PM - 5:00 PM
Comparison of Outcomes Related to Dietary Behavioral Changes in Phase II Cardiac Rehabilitation
Jillian N. Turek1, Nathan J. Boehlke1, Teresa M. Corbisiero1, Caitlin M. Stackpool1, Allison B. Havercat1, Mary S. Meyers1, Cynthia A. Ostet1 1 Porter Adventist Hospital/Centura Health, Denver, CO
(No relevant relationships reported)

854 Board #115 3:30 PM - 5:00 PM
Influence of Metabolic Syndrome on Response to Cardiac Rehabilitation
Lynn Gerber1, Samuel Powers, Carey Escheik, Jillian Kallman Price, Patrick Austin, Carla Porter, Henry Tran, Marianne Sherman, Zobair Younossi, Zobair Younossi, Inova Health System, Falls Church, VA. (Sponsor: Walter Frontera, FACSM)
Email: ngerber1@gmu.edu
(No relevant relationships reported)

855 Board #116 3:30 PM - 5:00 PM
Enablers, Barriers, And Intervention Strategies For Maintaining Exercise Following Cardiac Rehabilitation
Carmen C. Cuthbertson1, Molly S. Miller2, Sydney A. Jones, Joseph C. Engeda3, Kelly R. Evenson4, FACSM. 1 University of North Carolina at Chapel Hill, Chapel Hill, NC
Email: carmencc@email.unc.edu
(No relevant relationships reported)

856 Board #117 3:30 PM - 5:00 PM
Functional Capacity And Cardiac Self-efficacy Measures Are Associated With Health Literacy In Cardiac Rehabilitation
James Kostera1, Kelly Allsup2, Amanda Delligatti3, Andrew Althouse1, Ross Arena, FACSM, 1 Daniel Forman1 1 University of Pittsburgh, Pittsburgh, PA; 2 Va Pittsburgh, Pittsburgh, PA; 3 University of Chicago, Chicago, IL. (Sponsor: Ross Arena, FACSM)
Email: jk83@pitt.edu
(No relevant relationships reported)
871 Board #132 2:00 PM - 3:30 PM
Oxidative Stress Impaired Irisin Synthesis and Mitochondrial Homeostasis in C2C12 Myoblasts
Ziyi Zhang1, Tianjian Wang1, Hai Bo1, Yong Zhang1, Li Li Ji, FACSM2 1Tianjin University of Sport, Tianjin, China 2University of Minnesota, Minnesota, MN. (Sponsor: Li Li Ji, FACSM)
Email: zhangzy427@163.com
(No relevant relationships reported)

872 Board #133 2:00 PM - 3:30 PM
Exercise Training Induced Anti-inflammatory IL-1β and TNF-α in Aged Skeletal Muscle: Role of Mitochondrial Homeostasis
Yong Zhang1, Chao Song1, Jingwen Zhang1, Hai Bo1, Li Li Ji, FACSM2 1Tianjin University of Sport, Tianjin, China 2University of Minnesota, Minnesota, MN. (Sponsor: Li Li Ji, FACSM)
Email: yzhang@tj.edu.cn
(No relevant relationships reported)

873 Board #134 2:00 PM - 3:30 PM
Overexpression of PGC-1α Modulates Mitophagy in Aged Mice Skeletal Muscle
Dongwook Yeo, Li Li Ji, FACSM. University of Minnesota at Twin Cities, Minneapolis, MN. (No relevant relationships reported)

874 Board #135 2:00 PM - 3:30 PM
Testosterone and Resistance Exercise Improved Body Composition and Basal Metabolic Rate after Spinal Cord Injury
Ashraf S. Gorjey, FACSM, Refka E. Khalil, Timothy Lavis, Teodoro Castilo, Robert A. Adler. Hunter Holmes McGuire VA Medical Center, Richmond, VA
Email: ashraf.gorjey@va.gov
(No relevant relationships reported)

875 Board #136 2:00 PM - 3:30 PM
Key Glycolytic Metabolites In Paralyzed Skeletal Muscle Are Altered 7 Days After Spinal Cord Injury In Mice.
Zachary A. Graham1, Jacob A. Siodnik2, Lauren Harlow1, Hesham A. Tawfeek1, William A. Bauman1, Christopher P. Cardozo1 1James J. Peters VAMC, Bronx, NY 2Creighton University, Omaha, NE
Email: zachary.graham@msm.edu
(No relevant relationships reported)

876 Board #137 2:00 PM - 3:30 PM
Type 1 Diabetes Suppresses Intracellular Calcium Ion Influx by Heat Stress in Rat Skeletal Muscle
Ryo Ikegami1, Hiroaki Eshima1, David C. Poole, FACSM2, Yutaka Kano3 1The University of Electro-Communications, Tokyo, Japan 2Tianjin University of Sport, Tianjin, China 3Kansas State University, Manhattan, KS. (Sponsor: David C Poole, FACSM, FACSM)
Email: ikegami@ecc.pc.uec.ac.jp
(No relevant relationships reported)

877 Board #138 2:00 PM - 3:30 PM
Muscle Oxygenation Of The Quadriceps Femoris During Voluntary Or Femoral Nerve Stimulation Induced Fatiguing Contractions
Hiroshi Akima1, Ryosuke Ando2 1Nagoya University, Nagoya, Aichi, Japan 2Japan Institute of Sports Sciences, Kita, Tokyo, Japan. (Sponsor: Katsumi Asano, FACSM)
(No relevant relationships reported)

878 Board #139 2:00 PM - 3:30 PM
mRNA Expressionin the Rat Spinal Cord Including Motoneurons Innervating Damaged Muscle
Hirofumi Miyata1, Nami Matsaura1, Hiroshi Nagahisa1, Ryoataro Yamada2, Takashi Yamada3 1Yamaguchi Univ, Yamaguchi, Japan 2Sapporo Medical Univ, Sapporo, Japan
Email: hiro@yamaguchi-u.ac.jp
(No relevant relationships reported)

879 Board #140 2:00 PM - 3:30 PM
Effects Of Post-activation Potentiation On Neuromuscular Parameters
Sandro F. da Silva1, Delvis M. Cardoso2, Gaspar P. da Silva3, Miller F. Guimarães1, Cintia C. D. Rocha1, Claudio H. Mosquera4 1University of Lavras, Lavras, Brazil 2University of Pedro de Valdivia, Chillan, Chile 3Presbyterian College Gammon, Lavras, Brazil 4University of Los Lagos, Puerto Montt, Chile
Email: sandrosf@delf.ula.br
(No relevant relationships reported)

880 Board #141 2:00 PM - 3:30 PM
The Effect of Caffeine on Peak Torque, Muscle Fatigue and Prefrontal Cortex Blood Flow
Krishan Bhakta, Makenzie Stade, Joshua A. Cotter. California State University, Long Beach, Long Beach, CA
Email: kbhakta12@gmail.com
(No relevant relationships reported)

881 Board #142 2:00 PM - 3:30 PM
Relationships between Motor Unit Behavior during Maximal Effort Contractions and Skeletal Muscle Phenotype
Ryan J. Colquhoun1, Mitchel A. Magoni1, Cody T. Haun2, Tyler W.D. Muddle3, Patrick M. Tomko4, Michael J. Luera5, Cameron S. Mackey1, Christopher G. Vann1, Jeffrey S. Martin1, Kaelin C. Young2, Jason M. DeFreitas3, Michael D. Robert4, Nathaniel D.M. Jenkins5 1Okahoma State University, Stillwater, OK 2Auburn University, Auburn, AL
Email: ryan.colquhoun@okstate.edu
(No relevant relationships reported)

882 Board #143 3:30 PM - 5:00 PM
Music And Regular Physical Exercise: perception Of Practitioners Regarding Duration And Performance.
Igor Roberto Dias1, Elias de França2, Jeferson O. Santana1, Vinícius Hirota3, Maria Luisa J. Miranda4, Iris C. Sanchez5, Eric C. Capruto6 1University of Lavras, Lavras, Brazil 2Presbyterian College Gammon, Lavras, Brazil 3Univrsidade Estácio de Sá, São Paulo, Brazil 4Universidade de São Judas Tadeu, São Paulo, Brazil 5University of Minnesota at Twin Cities, Minneapolis, MN
Email: i.rivas@msn.com
(No relevant relationships reported)

883 Board #144 3:30 PM - 5:00 PM
Providing Estimates Of Fitness May Influence Subjects' Exercise
neeraj sathrur, james langland, kate piked, andrew olson. university of minnesota, minneapolis, MN
(No relevant relationships reported)

884 Board #145 3:30 PM - 5:00 PM
Associations Between The Physical Activity Vital Sign And Cardiometabolic Disease In High-risk Pediatric Patients
Email: vnelson2@ghs.org
(No relevant relationships reported)
Board #146 3:30 PM - 5:00 PM
Acute Effect of Three Different Exercise Training Modalities on Executive Function in Overweight Inactive Men: The BrainFit Study
Andrea del Pilar Quintero1, María A. Domínguez-Sánchez2, Kely Bonilla-Vargas1, Jorge E. Correa-Bautista1, Gina Paola Velasco-Orjuela1, Antonio García-Hermoso3, Alejandra Tordecilla-Sanders4, Robinson Ramírez-Vélez1 Universidad del Rosario, Bogotá D.C, Colombia 1Universidad de la Sabana, Chía, Colombia 2Universidad de Santiago de Chile, USACH, Bogotá D.C, Colombia
Email: robin640@hotmail.com
(No relevant relationships reported)

Board #147 3:30 PM - 5:00 PM
An Evaluation of an Unstructured and Structured Approach to Increasing Recess Physical Activity
Whitney M. Holeva-Ekund1, Timothy K. Behrens, FACSM1, Carmen Luna2, Dick Carpenter1, Elizabeth Tucker1, Juliane Field2, Cheryl Kelly2 Northern Arizona University, Flagstaff, AZ 1Kaiser Permanente Colorado, Denver, CO 2University of Colorado Colorado Springs, Colorado Springs, CO
Email: whmin8@nau.edu
(No relevant relationships reported)

Board #148 3:30 PM - 5:00 PM
 Associations Between Self-Efficacy and Acculturation on Leisure-Time Physical Activity in Hispanic Men Enrolled in a Weight Loss Intervention
Julio C. Loya1, Luis A. Valdez2, Melanie BelF, Brooke Rabe3, Steven P. Hooker, FACSM3, David O. Garcia1 Universidad de la Sabana, Chía, Colombia 1University of Missouri - Columbia, Columbia, MO 2University of Arizona, Tucson, AZ 3Arizona State University, Phoenix, AZ (Sponsor: Steven Hooker, FACSM)
Email: jc4z2@gmail.com
(No relevant relationships reported)

Board #149 3:30 PM - 5:00 PM
Low-Frequency High-Intensity Interval Training (HIIT) Improves Cardiorespiratory Fitness and Body Composition in Overweight Adults
Parco Siu, FACSM1, Edwin Chin2, Stephen Wong, FACSM1, Daniel Fong1, Derwin Chan1, Heidi Ngai1, Paul Lee1, Patrick Yung The University of Hong Kong, Hong Kong 1Hong Kong, Hong Kong 2The Chinese University of Hong Kong, Hong Kong, Hong Kong
Email: pmsiu@hku.hk
(No relevant relationships reported)

Board #150 3:30 PM - 5:00 PM
The Influence of Nutritional Intervention Program on the Dietary Habits of High School Students
Daniel S. Moran, FACSM1, Ran Kanori2, Yoram Epstein, FACSM2 1Ariel University, Ariel, Israel 2Washington College, Savne, Israel 3Sheba Medical Center, Tel Hashomer, Israel
Email: dmoran@jshb.falh.gov.il
(No relevant relationships reported)

Board #151 3:30 PM - 5:00 PM
Effect of a Neuromotor Intervention on Balance and Strength
Anna M. Carman, Rachel M. Whorton, Joshua D. Guggenheimer1 Saint Catherine University, Saint Paul, MN. (Sponsor: Mark Blegen, FACSM)
Email: aamcarman@stkate.edu
(No relevant relationships reported)

Board #152 3:30 PM - 5:00 PM
Health And Wellness Coaching Improves Body Composition and Quality Of Life With No Diet Prescription
Paula Helena Dayan1, Luciana Oquendo Pereira-Lancha2, Antônio Herbert Lancha Junior1 Physical Education and Sport School, University of São Paulo, São Paulo, Brazil 1Instituto de Bem Estar e Saúde, São Paulo, Brazil
Email: nutri.pauladayan@gmail.com
(No relevant relationships reported)
P64 Final Program

898 Board #159 3:30 PM - 5:00 PM
Comparing Home- And Group-based Physical Activity Interventions For People Living With HIV
Jason R. Jaggers, Gregory A. Hand, FACSM 1 University of Louisville, Louisville, KY 2 West Virginia University, Morgantown, WV
Email: jason.jaggers@louisville.edu
(No relevant relationships reported)

899 Board #160 3:30 PM - 5:00 PM
College Students’ Situational Motivation and Physiological Outcomes during Single and Double Player Exergaming Conditions
Daniel McDonough, Zachary Pope, Jung Eun Loe, Nan Zeng, Zan Gao, FACSM 1 University of Minnesota - Twin Cities, Minneapolis, MN 2 University of Minnesota - Duluth, Duluth, MN
Email: mcdof0785@umn.edu
(No relevant relationships reported)

900 Board #161 3:30 PM - 5:00 PM
Comparison of Caloric Expenditure in a Smart Watch and Portable Metabolic Cart
Andrew Rioveros, Evan Glasheen, Antoinette Domingo, Taylor Penafort, Brian Panaligan, Jochen Kressler. San Diego State University, San Diego, CA
Email: rioveros.andrew@gmail.com
(No relevant relationships reported)

B-67 Free Communication/Poster - Older Adults and Aging

901 Board #162 3:30 PM - 5:00 PM
Weight Loss Involving Exercise Increases Older Women’s Perceived Ability To Accomplish Their Physical Roles
R.E. Salyer, G.M. Frederick, R.A. Reed, A.C. Berg, C.R. Straight, M.A. Johnson, P.J. O’Connor, FACSM, E.M. Evans, FACSM 1 University of Georgia, Athens, GA 2 University of Massachusetts, Amherst, MA. (Sponsor: Ellen Evans, FACSM)
Email: res69159@uga.edu
(No relevant relationships reported)

902 Board #163 3:30 PM - 5:00 PM
A Comparison of Changes in Strength And Dynamic Balance Following 8 Weeks of Eccentric Training in Older Adults
Samantha Johnson, Corey Gray, Bunny Donnelly, Dana Fuller, Jennifer Caputo 1 Middle Tennessee State University, Murfreesboro, TN 2 University of Kansas Medical Center, Kansas City, KS 3 Donnelly Physical Therapy, Murfreesboro, TN
Email: slj4x@mtmail.mtsu.edu
(No relevant relationships reported)

903 Board #164 3:30 PM - 5:00 PM
Changes In Cortical Gray Matter Following A 12-moth Physical Activity Intervention In Older Adults
Chelsea Stillman, Jamie Cohen, Edward McAuley, Art Kramer, Kirk Erickson 1 University of Pittsburgh School of Medicine, Pittsburgh, PA 2 Northeastern University, Boston, MA 3 University of Pittsburgh, Pittsburgh, PA
Email: krek4@pitt.edu
(No relevant relationships reported)

904 Board #165 3:30 PM - 5:00 PM
Impact Of BAILAMOS® Dance Program On Self-reported Physical Activity In Older Latinos
Guilherme M. Balbin, Isabelia G. Marques, Jaqueline Guzman, Susan Aguiliaga, Priscilla M. Vasquez, David X. Marquez, FACSM 1 University of Illinois at Chicago, Chicago, IL 2 University of Illinois at Urbana-Champaign, Champaign, IL
Email: gbalbin2@uiuc.edu
(No relevant relationships reported)

ACSM 5th Annual Meeting

905 Board #166 3:30 PM - 5:00 PM
Effects Of Lower-leg Training With CLX Bands On Balance, Strength, And Mobility In Older Women
Michael E. Rogers, FACSM, Nicole Rogers. Wichita State University, Wichita, KS
Email: michael.rogers@wichita.edu
(No relevant relationships reported)

906 Board #167 3:30 PM - 5:00 PM
Combined Aerobic And Resistance Training In The Elderly: Effects Of Exercise Order On Arterial Stiffness
Yoko Shiotsu, Masahiko Yasagita. Doshisha University, Kyotanabe, Japan
(No relevant relationships reported)

907 Board #168 3:30 PM - 5:00 PM
The Relationships Of Physical Exercise To Executive Function And Mental Health In Elderly Individuals
Yukie Kikukawa, Toru Ishihara, Nobuyasu Tornabechi, Yukiko Torita, Masao Mizuno 1 Hokkaido University, Sapporo, Japan 2 Hokkaido University and Tamagawa University Brain Science Institution, Sapporo and Machida, Japan
Email: kikukawa43@gmail.com
(No relevant relationships reported)

908 Board #169 3:30 PM - 5:00 PM
Effects Of 24 Months Resistance And Endurance Training On Muscle Quality, Quantity And Physical Functions In Elderly With Long-term Care
Akiyo Yoshikoi, Takashi Kaji, Hiroki Sugiyama, Teruhiko Koike, Yoshiharu Oshida, Hiroshi Akima 1 Nagoya University, Nagoya, Japan 2 Kajino Medical Clinic, Gifu, Japan. (Sponsor: Katsumi Asano, FACSM)
Email: yoshikoi@nagoya-u.jp
(No relevant relationships reported)

909 Board #170 3:30 PM - 5:00 PM
Physical Function, Cardiorespiratory Fitness, and Body Composition In Older Individuals
Patrick Saracino, Justin Mason, Arun Maharaj, Salvador Jaime, Michael Ormsbee, FACSM, Arturo Figueroa, FACSM 1 Florida State University; Tallahassee, FL 2 Texas Tech University, Lubbock, TX 3 University of Wisconsin, La Crosse, WI
(No relevant relationships reported)

910 Board #171 3:30 PM - 5:00 PM
Impacts of Multidimensional Exercise Program for Older Adults on Mild Cognitive Impairment
Hsiu-Hua Wang, J. M. Lin, C. Y. Huang 1 National Chung Cheng University, Chia-Yi, Taiwan 2 National Chiayi University, Chia-Yi, Taiwan
Email: gcsww@gmail.com
(No relevant relationships reported)

911 Board #172 3:30 PM - 5:00 PM
Association Between Light Intensity Physical Activity And Sedentary Behavior Among Active Older Women
Luís Adriano Lima, Diana Carolina Gonzalez, João Pedro Silva Junior, Timóteo Leandro Araújo, Sandra Mahecha Matsudo, Victor Keihan Rodrigues Matsudo. CÉLAFICS, São Caetano do Sul, Brazil
Email: Luis.adriano.17@gmail.com
(No relevant relationships reported)

912 Board #173 3:30 PM - 5:00 PM
Effects Of A 12-week Self-managed Exercise Program On Fatigability In Older Adults
Mutasim D. Alharbi, Baian A. Baattaiah, Lisa MK Chin, Clinton J. Wutzke, Jeffrey E. Herrick. George Mason University, Fairfax, VA. (Sponsor: Randall Keyser, FACSM)
(No relevant relationships reported)
Board #174 3:30 PM - 5:00 PM
Physical Activity And Technology: Older Latinos’ Perceptions
Isabela G. Marquez, Jackelyn Cantoral, David X. Marquaz, FACSM. University of Illinois at Chicago, Chicago, IL.
(No relevant relationships reported)

Board #175 3:30 PM - 5:00 PM
Changes in Global Health Status in Older Adults Following a Self-Managed Exercise Program
Saad A. Alhamad, Michele Nofal, Clinton J. Wutzke, Lisa M.K. Chin, Jeffrey E. Herrick. George Mason University, Fairfax, VA. (Sponsor: Randall E. Keyser, FACSM)
Email: salhammad@masonlive.gmu.edu
(No relevant relationships reported)

Board #176 3:30 PM - 5:00 PM
Reducing Sedentary Behavior and Improving Physical Function in Older Adults
Brianna Leitzelar1, Kevin M. Crambie1, Angelique G. Brellenthin1, Laura D. Ellingson, FACSM2, Kelli F. Kolyn, FACSM3 University of Wisconsin-Madison, Madison, WI4 Iowa State University, Ames, IA. (Sponsor: Kelli F. Kolyn, FACSM)
(No relevant relationships reported)

Board #177 3:30 PM - 5:00 PM
Physical Activity Policy for Older Adults in China: A Textual Analysis
Bing Zhan1, Weimo Zhu, FACSM2 University of Physical Education and Sports, Beijing, China3 University of Illinois Urbana Champaign, Urbana, IL. (Sponsor: Weimo Zhu, FACSM)
Email: bingzhan@illinois.edu
(No relevant relationships reported)

Board #178 3:30 PM - 5:00 PM
Efficacy Of BingoBounce®: A Game-centered Mobile Application To Improve Physical And Cognitive Performance In Older Adults
K. Jason Crandall, Matthew Shake, Rilee P. Mathews, Kathryn Dispennette. Western Kentucky University, Bowling Green, KY. (Sponsor: Scott Lyons, FACSM)
Email: Jason.crandall@wku.edu
Reported Relationships: K. Crandall: Intellectual Property; Western Kentucky University.

Board #179 3:30 PM - 5:00 PM
The Effects of Pedometers on Body Weight and Metabolic Factors in Patients with Prediabetes
James J. Pinola, Patricia Davidson, Melissa Whidden, Melissa Reed. West Chester University, West Chester, PA.
Email: JRP665220@wcupa.edu
(No relevant relationships reported)

Board #180 2:00 PM - 3:30 PM
MVPA And DXA-derived Adiposity In Adolescents With And Without Down Syndrome
E. Andrew Pitchford1, Chelsea Adkins2, Joseph E. Hornyk3, Rebecca E. Hasson, FACSM1 Iowa State University, Ames, IA3 Michigan State University, East Lansing, MI1 University of Michigan, Ann Arbor, MI.
Email: epitchf@iastate.edu
(No relevant relationships reported)

Board #181 2:00 PM - 3:30 PM
Cancer Cachexia: Metabolic Changes In Carbohydrate Metabolism Of The Liver
Sarah Ramey1, Megan E. Rosa-Caldwell1, Jacob L. Brown2, Richard A. Perry1, Wesley A. Haynie1, Aaron R. Caldwell2, Tyrone A. Washington3, Michael P. Wiggs4, Nicholas P. Greene5 University of Arkansas, Fayetteville, AR6 University of Texas at Tyler; Tyler, TX. (Sponsor: Dr. Stephen Crouse, FACSM)
Email: snr015@aarau.edu
(No relevant relationships reported)

Board #182 2:00 PM - 3:30 PM
Time-Dependent Alterations in Liver and Adipose Mitochondrial Respiration During Colon-26 Cancer Cachexia
Gabriel S. Pena, Jessica L. Halle, Joseph P. Carzoli, Hector G. Paez, Michael C. Zouzdos, Michael Whitehurst, FACSM, Andy V. Khamoui. Florida Atlantic University, Boca Raton, FL. (Sponsor: Michael Whitehurst, FACSM)
(No relevant relationships reported)

Board #183 2:00 PM - 3:30 PM
Dietary Fat Intake Predicts Aortic Stiffness Independent of Physical Activity
Jessica J. Gadberry1, Nicholas A. Carlini1, Summer L. Burke1, Marilyn S. Campbell1, Bradley S. Flemons2 University of Kentucky, Lexington, KY3 Ball State University, Muncie, IN.
Email: Jessica.smith13@uky.edu
(No relevant relationships reported)

Abstract Withdrawn

Board #185 2:00 PM - 3:30 PM
High Intensity Circuit Training Versus Moderate Strength Training On Body Composition In Obese Adults
Neil McMillan1, Gary Miller1, Sandy Combs, Jr1, Tiffany Gibson1, Jamy Ard2 Wake Forest University, Winston-Salem, NC Wake Forest Baptist Health, Winston-Salem, NC. (Sponsor: Michael J. Berry, FACSM)
(No relevant relationships reported)

Board #186 2:00 PM - 3:30 PM
Continuous Exercise Training Reduces Arterial Stiffness In An Exercise Dose Dependent Manner in Adults With Prediabetes
Malinnoor Khurshid, Natalie Z.M. Eichner, Julian M. Gaitan, Nicole M. Gilbertson, Eugene J. Barrett, Arthur Weltman, FACSM, Steve K. Malin, FACSM. University of Virginia, Charlottesville, VA.
(No relevant relationships reported)

Board #187 2:00 PM - 3:30 PM
Influence Of Sex On The Relationship Between Two Estimates Of Visceral Adipose Tissue
Gregory L. Nuckols, Kara C. Anderson, Austin M. Peterjohn, Katie R. Hirsch, Malia N.M. Blue, Alexis A. Pihoker, Eric T. Tredler, Abbie E. Smith-Ryan, FACSM. UNC Chapel Hill, Chapel Hill, NC. (Sponsor: Abbie Smith-Ryan, FACSM)
Email: gnikolks@live.unc.edu
(No relevant relationships reported)

Board #188 2:00 PM - 3:30 PM
The Effect Of Single Stair-Climbing/Descending Bouts Of Varying Lengths On Postprandial Glycemic Responses
Eric Bartholomae, Jeff Moore, Kathryn Ward, Zach Johnson, Jochen Kressler. San Diego State University, San Diego, CA.
(No relevant relationships reported)

B-68 Free Communication/Poster - Chronic Disease
Wednesday, May 30, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

Board #189 2:00 PM - 3:30 PM
MVPA And DXA-derived Adiposity In Adolescents With And Without Down Syndrome
E. Andrew Pitchford1, Chelsea Adkins2, Joseph E. Hornyk3, Rebecca E. Hasson, FACSM1 Iowa State University, Ames, IA3 Michigan State University, East Lansing, MI1 University of Michigan, Ann Arbor, MI.
Email: epitchf@iastate.edu
(No relevant relationships reported)
Board #190 2:00 PM - 3:30 PM
Changes In Liver And Skeletal Muscle Sensitivity In Response To Acute And Chronic Calorie Restriction On A Low Carbohydrate Diet
Erik Kirk, FACSM; Dominic Reeds, Samuel Klein1; Southern Illinois University Edwardsville, Edwardsville, IL; Washington University in St. Louis School of Medicine, St. Louis, MO; Washington University in St. Louis School of Medicine, St. Louis, MO
Email: ekirk@siue.edu
(No relevant relationships reported)

Board #191 2:00 PM - 3:30 PM
Exercise Training Attenuates Non-Alcoholic Fatty Liver Disease in rats with Diabetes via Endoplasmic Reticulum Stress
Junhan Li1, Derun Gao2, Junzhi Sun1, Kai Zou1, Quansheng Su1; Chengdu Sport University, Chengdu, China; University of Massachusetts, Boston, MA. (Sponsor: Tongjian You, FACSM)
(No relevant relationships reported)

Board #192 2:00 PM - 3:30 PM
Effect of Exercise and/or Spirulina maxima On Body Composition In Obesity/Obese Humans
Marco A. Hernández-Lepe1, Abraham Wall-Medrano1, José A. López-Díaz1, Marco A. Juárez-Oropeza2, Rosa P. Hernández-Torres3; Arnulfo Ramos-Jiménez4; Universidad Autónoma de Ciudad Juárez, Ciudad Juárez, Mexico; Universidad Nacional Autónoma de México, Ciudad de México, Mexico; Universidad Autónoma de Chihuahua, Chihuahua, Mexico
Email: marco.hernandez@uacj.mx
(No relevant relationships reported)

Board #193 2:00 PM - 3:30 PM
Restricted Carbohydrate Diet and Exercise Increase BDNF, Cognitive Function, and Metabolic Profiles
Amy M. Gyorkos1, Mark Baker1, Alex Eason2, Deborah Lown1, Lauren Mütze2; Grand Valley State University, Allendale, MI; University of Calgary, Calgary, AB, Canada. (Sponsor: Timothy J. Michael, FACSM)
Email: gyorkosa@gvsu.edu
(No relevant relationships reported)

Board #194 2:00 PM - 3:30 PM
Normalized Grip Strength Thresholds for the Detection of Metabolic Syndrome in Colombian Collegiate Students
Katherine González-Ruíz1, Antonio García-Hermoso1, Alejandro Tordecilla-Sanders2; Jorge E. Correa-Bautista3, Aura Cristina Quino-Ávila4, Carolina Sandoval-Cuellar5, Mónica Liliana Ojeda-Pardo1, Andrea del Pilar Quintero1, Robinson Ramírez-Vélez2; Universidad Nacional Autónoma de México, Ciudad de México, Mexico; Universidad Nacional Autónoma de Chihuahua, Chihuahua, Mexico; Universidad del Rosario, Bogotá D.C, Colombia
Email: robin640@hotmail.com
(No relevant relationships reported)
Board #203 2:00 PM - 3:30 PM

Effects of Early Life Undernutrition on Maximum Treadmill Running Capacity in Mice
Logan A. Pendergrast, Joe R. Visker, Ashley N. Trippett, Eric C. Leszcynski. Michigan State University, East Lansing, MI
Email: pender21@msu.edu
(No relevant relationships reported)

Board #204 2:00 PM - 3:30 PM

Metabolic and Microbial Responses to Exercise in C57 Wild-type and Adenyl Cyclase 5 KO Mice
Robert A. Dowden1, Paul J. Wisnieski2, John Guers2, Macro Oydanich2, Stephen F. Vatner2, Lora McGuinness2, Lee Kerkhof2, Sara Campbell, FACSM1. Rutgers, The State University of New Jersey, New Brunswick, NJ. 1Rutgers, New Jersey Medical School, Cardiovascular Research Center, Newark, NJ. (Sponsor: Dr. Sara Campbell, FACSM)
Email: rld267@kines.rutgers.edu
(No relevant relationships reported)

Board #205 2:00 PM - 3:30 PM

Anti-apoptosis Effects Of Diosgenin In D-galactose-induced Aging Brains
Shin-Da Lee1, Yi-Yuan Lin2, Shiu-Min Cheng2, Chih-Yang Huang1
1China Medical University, Taichung, Taiwan; 2Asia University, Taichung, Taiwan. (Sponsor: Chia-Hua Kuo, FACSM)
Email: shinda@mail.cmu.edu.tw
(No relevant relationships reported)

Board #206 2:00 PM - 3:30 PM

The Characterization of Normal Weight Obesity in College Students
Kara C. Anderson, Katie R. Hirsch, Malia N.M. Blue, Austin M. Peterjohn, Gregory L. Nuckols, Eric T. Trexler, Alexis A. Pihoker, Abbie E. Smith-Ryan, FACSM. University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Abbie Smith-Ryan, FACSM)
(No relevant relationships reported)

Board #207 2:00 PM - 3:30 PM

Effects of Acute Exercise and Green Tea Supplementation on Glucose Homeostasis in Overweight/Obese Postmenopausal Women
Shannon L. Jordan1, Sarah E. Deemer2, Vic BenEzra, David Nichols, FACSM1. Lamar University, Beaumont, TX. 1The University of Alabama at Birmingham, Birmingham, AL; 2Texas Woman’s University, Denton, TX. (Sponsor: David Nichols, FACSM)
Email: sjordan5@lamar.edu
(No relevant relationships reported)

Board #208 2:00 PM - 3:30 PM

Family History of Diabetes Does Not Affect Exercise-Induced Improvements in Insulin Sensitivity and Metabolic Flexibility
Manuel Amador1, Cesar Meza1, Mario Garcia1, Christopher Figueroa1, George King, FACSM1, Andrew McAinche1, Sudip Bajpeyi1. 1University of Texas at El Paso, El Paso, TX; 2Victoria University, St. Alburns, Australia. (Sponsor: George King, FACSM)
Email: mamador2@miners.utep.edu
(No relevant relationships reported)

Board #209 2:00 PM - 3:30 PM

Physical Activity and Glycemic Control in Low Versus High Inflammation Phenotypes in Metabolically Healthy Adults
Morgan Chamberlin, Jarnie Ritter, Adam Maes, Stephanie Wilson, Sarah Bronsky, Seth Walk, Carl Yeoman, Mary P. Miles. FACSM. Montana State University, Bozeman, MT
(No relevant relationships reported)

Board #210 2:00 PM - 3:30 PM

Reduced Insulin Sensitivity in Young, Normoglycemic Subjects, Alters Tissue Oxygenation During Post Occlusive Reactive Hyperemia
Esther E. Wu1, Thomas J. Barstow, FACSM2; Dana K. Townsend3,1Wheaton College, Wheaton, IL; 2Kansas State University, Manhattan, KS. (Sponsor: Thomas J. Barstow, FACSM)
(No relevant relationships reported)

Board #211 2:00 PM - 3:30 PM

Lower Glucose Tolerance in Normoglycemic, Healthy Hispanics with a Family History of Type 2 Diabetes
Cesar Meza1, Manuel Amador1, Mario Garcia1, Christopher Figueroa1, Andrew McAinche1, Sudip Bajpeyi1. 1University of Texas at El Paso, El Paso, TX; 2Victoria University, St. Alburns, Australia
Email: cameza2@miners.utep.edu
(No relevant relationships reported)

Board #212 2:00 PM - 3:30 PM

Restricted Carbohydrate Diet and Exercise Improves Metabolic and Inflammatory Profiles in Metabolic Syndrome
Lauren Miutz1, Alex Eason1, Mark Baker1, Deborah Lowen2, Amy M. Gyorkos3. 1University of Calgary, Calgary, AB; 2Canada’s Grand Valley State University, Allendale, MI; 3University of Kentucky, Lexington, KY. (Sponsor: Abbie Smith-Ryan, FACSM)
Email: lauren.miutz@ucalgary.ca
(No relevant relationships reported)

Board #213 2:00 PM - 3:30 PM

Metabolic Flexibility Among Obese Pregnant Women May Lead to Unfavorable Downstream Metabolic Outcomes
Rachel A. Tinus1, Maire Blankenship1, Bailey Pitts1, Alyssa Olenick1, Donald L. Hoover1, Kevin J. Pearson1, W. Todd Cade1, Jill M. Maples1. 1Western Kentucky University, Bowling Green, KY; 2Western Michigan University, Kalamazoo, MI. (Sponsor: Timothy J. Michael, FACSM)
Email: rachel.tinus@wku.edu
(No relevant relationships reported)

Board #214 2:00 PM - 3:30 PM

Exercise And Diet In Circadian Control Of Postprandial Glycemia
Katarina T. Borer1, Navneet Sharma2, Andrew Stefan1. 1University of Michigan, Ann Arbor, MI; 2Central Michigan University, Mount Pleasant, MI
Email: katarina@umich.edu
(No relevant relationships reported)

Board #215 2:00 PM - 3:30 PM

The Postprandial Glycemic Response to Acute Bout of Exercise in Healthy Adults
Rui Li, Hannah Doolittle. Northeastern University, Boston, MA
Email: r.li@northeastern.edu
(No relevant relationships reported)

Board #216 2:00 PM - 3:30 PM

Low-Calorie Diet Plus Interval Exercise Training Improves Metabolic Flexibility and Insulin Sensitivity in Obese Women
Nicole M. Gilbertson, Natalie Z.M. Eichner, Emily M. Heisent Monique Francois, Julian M. Gaitan, James H. Meaheffy, Taryn E. Hassinger, Peter T. Hallowell, Arthur Weltman, FACSM, Steven K. Malin, FACSM. University of Virginia, Charlottesville, VA. (Sponsor: Steven Malin, FACSM)
Email: mng6kk@virginia.edu
(No relevant relationships reported)
### B-69 Free Communication/Poster - Nutrition and Immunology

**Wednesday, May 30, 2018, 1:00 PM - 6:00 PM**

**Room: CC-Hall B**

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Authors</th>
<th>Affiliations</th>
<th>Email(s)</th>
<th>Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>956</td>
<td>The Effects Of Age And Sex On Obesity And Insulin Action In C57b/6j Mice</td>
<td>Allison Dalton, Lucas Calzini, Andrei Tuluca, Stephen Ives, Thomas H. Reynolds, IV, Skidmore College, Saratoga Springs, NY (Sponsor: Donald Dengel, FACSM)</td>
<td>Email: <a href="mailto:treynold@skidmore.edu">treynold@skidmore.edu</a> (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 957 | Bovine Colostrum Has No Effect on Mucosal Immunity Before or After Exercise in a Hot and Humid Environment | Trevor Gillum, Zachary McKenna, Quint Berkenmeier, Ashley Naylor, Austin Kleint, Felipe Gorini. California Baptist University, Riverside, CA | Email: tgillum@calbaptist.edu (No relevant relationships reported) | | |

| 958 | Pd2/hiuf-1 Axis Regulates Intestinal Barrier Function After Strenuous Swimming | Die Wu, Beibei Luo, Dao Xiang, Peijie Chen. Shanghai University of Sport, Shanghai, China (No relevant relationships reported) | Email: lib0226@126.com | | |

| 959 | Aerobic Training Status Enhances the Pentraxin 3-Mediated Innate Immune Response Following Maximal Exercise | Aaron L. Slusher, Tiffany M. Zühiga, Edmund O. Acvevedo, FACSM. Virginia Commonwealth University, Richmond, VA (Sponsor: Edmund O. Acvevedo, FACSM) | Email: slusheral@vcu.edu (No relevant relationships reported) | | |

### B-70 Free Communication/Poster - Concussion I

**Wednesday, May 30, 2018, 1:00 PM - 6:00 PM**

**Room: CC-Hall B**

<table>
<thead>
<tr>
<th>#</th>
<th>Title</th>
<th>Authors</th>
<th>Affiliations</th>
<th>Email(s)</th>
<th>Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>963</td>
<td>Board #24: Adding Short-Term Interval Exercise to a Low-Calorie Diet Favorably Influences Appetite in Obese Adults</td>
<td>Emily M. Heistin, Nicole M. Gilbertson, Natalie Z.M. Eichner, Julian M. Gaitan, Monique E. Francois, James H. Mehallfey, Taryn E. Hassinger, Peter T. Hallowell, Arthur Weltman, FACSM, Steven K. Malin, FACSM. University of Virginia, Charlottesville, VA. (Sponsor: Steven Malin, FACSM)</td>
<td>Email: <a href="mailto:emh5bh@virginia.edu">emh5bh@virginia.edu</a> (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 964 | Exercise-induced Th17 Lymphocyte Response And Their Relationship To CVD Risk Factors In Obese, Postmenopausal Women | Maria A. Cardenas1, Michael M. Levitt1, Bryan Richie2, Shaohan Lu1, Elise E. Erickson1, Cameron Cook1, Jay Haynes2, Andreas Kreutzer1, Joel B. Mitchell, FACSM2, melody D. Phillips, FACSM2. Texas Christian University, Fort Worth, TX. (Sponsor: Texas Christian University, Fort Worth, TX.) (No relevant relationships reported) | Email: maria.a.cardenas@tcu.edu | | |

| 965 | Exercise-induced Th17 Lymphocyte Response And Their Relationship To CVD Risk Factors In Obese, Postmenopausal Women | Maria A. Cardenas1, Michael M. Levitt1, Bryan Richie2, Shaohan Lu1, Elise E. Erickson1, Cameron Cook1, Jay Haynes2, Andreas Kreutzer1, Joel B. Mitchell, FACSM2, melody D. Phillips, FACSM2. Texas Christian University, Fort Worth, TX. (Sponsor: Texas Christian University, Fort Worth, TX.) (No relevant relationships reported) | Email: maria.a.cardenas@tcu.edu | | |

| 966 | Acute Exercise-Induced Response of Platelet-Monocyte Complexes in Obese Postmenopausal Women | Michael M. Levitt1, Maria A. Cardenas1, Bryan Richie2, Carmen A. Cook1, Kara Stock1, Shaohan Lu1, Jay Haynes2, Andreas Kreutzer1, Joel B. Mitchell, FACSM2, melody D. Phillips, FACSM2. Texas Christian University, Fort Worth, TX. (Sponsor: Texas Christian University, Fort Worth, TX.) (No relevant relationships reported) | Email: mike.levitt@tcu.edu | | |

| 967 | Effects Of A Musculoskeletal Injury On Rebaseline Concussion Assessment Performance | Kelsey Bryk1, Ryan DeWolf2, Jessie Oldham3, Melissa DiFabio1, Katherine Breidlove1, Thomas Kaminski1, Thomas Buckley1. University of Delaware, Newark, DE. (Sponsor: Massachusetts General Hospital, Boston, MA) (No relevant relationships reported) | Email: kbryk@udel.edu | | |

| 968 | Fighting In The Nhl 5 Year Review: Fists Of Fury But Few Concussions, Believe It! | Neustadl Aidian3, Dave milzman4, zach tannebaum1, Andrew Lincoln1, JEREMY ALTMAN1. Georgetown u school of medicine. Washington, DC. (Sponsor: Georgetown University) (No relevant relationships reported) | Email: milzmand@georgetown.edu | |
969  Board #230  3:30 PM - 5:00 PM  Determining the Appropriate Timing of Administration of Computerized Neurocognitive Testing Following Maximal Exertion- Preliminary Analysis
Samantha A. Mohler, Cory L. Butts, Zachary J. Sebhath, Katie L. Stephenson-Brown, Brendon P. McDermott, FACSM, Matthew S. Gario, FACSM, R.J. Elbin. University of Arkansas, Fayetteville, AR. (Sponsor: Matthew Gario, FACSM) (No relevant relationships reported)

970  Board #231  3:30 PM - 5:00 PM  Does Greater Susceptibility to Neck Injury Put Females at Higher Risk of Prolonged Sport-Related Concussion Recovery?
Sumit Kanwar1, Manisha R. Chand1, Evan Peck1, Cleveland Clinic Florida, Weston, FL. 2Cleveland Clinic Florida, West Palm Beach, FL. Email: sumit_kanwar@yahoo.com (No relevant relationships reported)

971  Board #232  3:30 PM - 5:00 PM  The Interrelationship and Diagnostic Utility of Memory and Reaction Time in Concussed Students
Margaret E. Bristow1, Cali A. Van Valkenburgh1, Gianna D. Maragliano1, Vincent C. Nitto1, Adam W. Shink1, Courtney D. Jensen1. 1University of the Pacific, Stockton, CA. 2St. Vincent Hospital, Indianapolis, IN. Email: m_bristow@u.pacific.edu (No relevant relationships reported)

972  Board #233  3:30 PM - 5:00 PM  No Increased Lower Extremity Injury Risk Following Concussion in Youth Tackle Football Players
Robert C. Lynam1, Erin B. Wasserman1, Timothy C. Mauntel1, Zachary Y. Kerr1, Eric E. Hall, FACSM1, Thomas A. Buckley6. 1University of Georgia, Athens, GA. 2Datadyn Center for Sports Injury Research and Prevention, Indianapolis, IN. 3Walter Reed National Military Medical Center, Bethesda, MD. 4University of North Carolina at Chapel Hill, Chapel Hill, NC. 5Elon University, Elon, NC. 6University of Delaware, Newark, DE. Email: rlynam@uga.edu

Reported Relationships: R.C. Lynam: Contracted Research - Including Principle Investigator; Funding was provided by USA Football. The content of this abstract is solely the responsibility of the authors and does not necessarily represent the official views of the program sponser.

973  Board #234  3:30 PM - 5:00 PM  Head Impact Exposure of Youth Football Players During Their 7th and 8th Grade Seasons
Jason C. Dorman1, Verle D. Valentine, FACSM1, Paul A. Thompson2, Thayne A. Munce, FACSM1, Sanford Sports Science Institute, Sioux Falls, SD. 2Sanford Research, Sioux Falls, SD. (Sponsor: Thayne A. Munce, FACSM)

Email: jason.dorman@sanfordhealth.org (No relevant relationships reported)

974  Board #235  3:30 PM - 5:00 PM  Concussion Baseline Performance on Rapid Number and Picture Naming Tests
Melissa S. DiFabio, Jessie R. Oldham, Thomas W. Kaminski, FACSM, Thomas A. Buckley. University of Delaware, Newark, DE. Email: mdfabio@udel.edu (No relevant relationships reported)
B-71 Free Communication/Poster - Exercise-Diabetes
Wednesday, May 30, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

982 Board #243 2:00 PM - 3:30 PM
Maintenance of Health-Related Fitness Gains Following Underwater Treadmill Training in Adults with Type 2 Diabetes
Ryan T. Connors1, John M. Coons2, Dana K. Fuller2, Youngdeok Kim3, Don W. Morgan, FACSM4, University of Alabama in Huntsville, Huntsville, AL; Middle Tennessee State University; Murfreesboro, TN; Texas Tech University, Lubbock, TX. (Sponsor: Dr. Don W. Morgan, FACSM)
(No relevant relationships reported)

983 Board #244 2:00 PM - 3:30 PM
A Bout of High-Intensity Interval Training Increases Serum Muscinv in Adults with Metabolic Syndrome
Jaime A. Gallo-Villegas1, Leonardo A. Castro-Valencia1, Miguel Alzate1, Luis Valbuena1, Yeliana L. Sanchez1, Juan C. Aristizabal1, Raúl Narváez-Sánchez1, Juan C. Calderón1, University of Antioquia, Medellin, Colombia; Politécnico Jaime Isaza Cadavid, Medellin, Colombia; Indigentes Antioquia, Medellin, Colombia
Email: jaime.gallo@udea.edu.co
(No relevant relationships reported)

984 Board #245 2:00 PM - 3:30 PM
Time-efficient Sprint Interval Exercise Improves 24-h Glycaemic Control In Men With Type 2 Diabetes
Richard S. Metcalfe1, Conor MClean1, Sinead Fitzpatrick1, Gary McDermott1, Noel Brick1, Ben Fitzpatrick1, Gareth Davison2, Swansea University, Swansea, United Kingdom; Ulster University, Belfast, United Kingdom; Atnagelvin Area Hospital, Derry-Londonderry, United Kingdom
Email: rs.metcalfe@swansea.ac.uk
(No relevant relationships reported)

985 Board #246 2:00 PM - 3:30 PM
The Acute Effects of Exercise Intensity on Blood Glucose Levels in Type 1 Diabetes
Charles Fontaine, Christine Laughlin, Shane Blechinger, University of Minnesota Duluth, Duluth, MN. (Sponsor: John R. Keener, FACSM)
Email: cfontai@umn.edu
(No relevant relationships reported)

986 Board #247 2:00 PM - 3:30 PM
Exercise Reduces HbA1c in Type 2 Diabetics, but Improved Strength Associates with Poorer Outcomes
Cynthia Villalobos1, Paul D. Visiti1, J. Mark VanNess1, Courtney D. Jensen1, University of the Pacific, Stockton, CA; St. Joseph’s Hospital, Stockton, CA
Email: c.villalobos@u.pacific.edu
(No relevant relationships reported)

987 Board #248 2:00 PM - 3:30 PM
The Effects Of Simulated Hypoxia Bouts On Resting Blood Glucose Levels And Hemodynamics Of A Type 1 Diabetic: A Case Study
Devin J. Rettke, Scott Drum, FACSM, Northern Michigan University, Marquette, MI. (Sponsor: Scott Drum, FACSM)
Email: drettke@nmu.edu
(No relevant relationships reported)
### Board #255
**2:00 PM - 3:30 PM**

**Effect of Intra-Venous Antioxidant Infusion on the Development of Neuromuscular Fatigue During Whole Body Exercise in Hypertensive Middle-Age Individuals**

Taylor S. Thurston, Joshua C. Weavil, Thomas J. Hureau, Jayson R. Gifford, Russell S. Richardson, Markus Aman 11 University of Utah, Salt Lake City, UT 12 University of Strasbourg, Strasbourg, France 13 Brigham Young University, Provo, UT

Email: thurston@byu.edu

(No relevant relationships reported)

### Board #256
**2:00 PM - 3:30 PM**

**Effects of High Intensity Interval Exercise Training on Blood Pressure in Patients with Hypertension**

Jung Jun Park, Eun-Ah Jo, Kyung-In Cho, Do-sun Im 1 Pusan National University, Busan, Korea, Republic of 2 Kosin University, Busan, Korea, Republic of 3 Korea University, Seoul, Korea, Republic of

Email: jjparkkn@pusan.ac.kr

(No relevant relationships reported)

### Board #257
**2:00 PM - 3:30 PM**

**24 Hour Ambulatory Blood Pressure Dipping And Variability Characteristics Following Maximal Treadmill Exercise In Community Dwelling Healthy Older Adults.**

Thomas R. Petrella, Narlon C. B. S. Silva, Ashleigh De Cruz, Alan Salnioni, Robert J. Petrella, FACSM, Western University, London, ON, Canada. (Sponsor: Robert Petrella, FACSM)

Email: tpetrell@uwo.ca

(No relevant relationships reported)

### Board #258
**2:00 PM - 3:30 PM**

**Post-isometric Exercise Hypotension After Moderate intensity Handgrip Exercise In Hypertensive Elderly**

Milton R. Moraes, Vivian E. Moraes, Joyce B. Vicente, Geiziane R. Meo, Rafael R. Olheir, Iorany C. Sousa, Luiz H. Peruchi, Rodrigo V. Neves, Thaigo S. Rosa, Aparecido P. Ferreira, Luiz R. Souza, 1 Catholic University of Brasilia, Brasilia, Brazil 2 University of Mogi das Cruzes, Mogi das Cruzes, Brazil

Email: nmoraes70@gmail.com

(No relevant relationships reported)

### Board #259
**2:00 PM - 3:30 PM**

**Effects Of Isometric Handgrip Versus Aerobic Exercise On Blood Pressure In Elderly Hypertensive Patients**

Sae Young Jae, Eun Sun Yoon, Hyun Jeong Kim. University of Seoul, Seoul, Korea, Republic of

(No relevant relationships reported)

### Board #260
**2:00 PM - 3:30 PM**

**Effects of Whole-body Vibration On Strength, Body Composition, and Function in Skilled Nursing Home Residents**

Brandon F. Grubbs, Arturo Figueroa, FACSM; Jeong-Su Kim, FACSM; Karla Schmitt, Lynn B. Panton, FACSM. Middle Tennessee State University; Murfreesboro, TN 2 Texas Tech University, Lubbock, TX 3 Florida State University, Tallahassee, FL (Sponsor: Lynn B. Panton, FACSM)

Email: brandon.grubbs@mtsu.edu

(No relevant relationships reported)

### Board #261
**2:00 PM - 3:30 PM**

**The Association of Muscular Strength and Treadmill-Based Walking Economy in Older Men and Women.**

Paul M. Gallo, FACSM, Nicole M. Hafner, Peter Ronai, FACSM 1 Norwalk Community College, Norwalk, CT 2 Sacred Heart University, Fairfield, CT

(No relevant relationships reported)

### Board #262
**2:00 PM - 3:30 PM**

**Passive Mobilization-induced Vascular Function: Adaptations In Bedridden Oldest-old.**

Massimo Venturelli, Anna Pedrinolli, Silvia Pogliaghi, FACSM 1, Alessandro Colosio, Ettore Mutri, Emiliano Ce, Stefano Longo 2, Fabio Esposito, Federico Schena 1 University of Verona, Verona, Italy 2 Mons Mazzalli Foundation, Mantua, Italy 1 University of Milan, Milan, Italy

Email: massimo.venturelli@univr.it

(No relevant relationships reported)

### Board #263
**2:00 PM - 3:30 PM**

**Comparing Post-Exertional Symptoms Following Serial Exercise Tests**

Larivel J. Mateo, Lily Chu, Staci Stevens 1, Jared Stevens, Christopher R. Snell, Todd Davenport, Mark Van Ness 1 University of the Pacific, Stockton, CA 2 Independent Contractor; Burlingame, CA 3 Workwell Foundation, Ripon, CA

(No relevant relationships reported)

### Board #264
**2:00 PM - 3:30 PM**

**Exercise Ventilatory Limitation To Exercise In Dyspneic Iraq And Afghanistan Veterans**

Jacquelyn C. Klein-Adams, Anays M. Sotolongo, Duncan Ndirungu, Nancy Eager, Michael J. Falvo. VA NJ Health Care System, East Orange, NJ

Email: jacquelyn.klein-adams@va.gov

(No relevant relationships reported)

### Board #265
**2:00 PM - 3:30 PM**

**The Validity of an Energy Cost Prediction Equation for Unloaded Cycling**

Jacqueline H. Gallagher, Victoria S. Danner, April M. Daly, Dianne M. Babbitt. Cedar Crest College, Alletontown, PA. (Sponsor: Michael D. Brown, FACSM)

(No relevant relationships reported)

### Board #266
**2:00 PM - 3:30 PM**

**Metabolic Cost of Walking in Low Functioning Older Adults**

Anoop Balachandran, Duane B. Corbett, Amal A. Wanigatunga, Boya Lin 1 University of Florida, Gainesville, FL 2 Johns Hopkins University, Baltimore, MD. (Sponsor: Todd M. Manini, FACSM)

(No relevant relationships reported)
P72  Final Program

1008  Board #269  3:30 PM - 5:00 PM  Multicentric Exercise Program Effects On Functional Capacity And Cognition In Frail Hospitalized Patients
Mikel Lopez Saez de Asteasu1, Nicolas Martinez-Vellilla2, Alvaro Casas-Herrero2, Fabricio Zamborn-Ferrareis1, Francisco Antonio Amu-Ruiz2, Javier Alonso-Renedo2, Mikel Izquierdo4 1Public University of Navarre, Pamplona, Spain 2Complejo Hospitalario de Navarra, Pamplona, Spain
Email: mikel.lopez.saezdeastesus@gmail.com  
(No relevant relationships reported)

1009  Board #270  3:30 PM - 5:00 PM  Correlation between One-leg Standing Time and Trail Making Test in Japanese Older Adults
Yasu KIMURA1, Kazuko OHKF, Mamoru HISATOMI1, Mieko SHIMADA4, Nobuko K. HONGU1 1Inst. Fitness & Health Sciences, Toshima, Tokyo, Japan 2Segiymama Jogakuen University, Nagoya, Japan 3Chiba Pref. University of Health Sciences, Chiba, Japan 4The University of Arizona, Tucson, AZ
Email: kimya4162@yahoo.co.jp  
(No relevant relationships reported)

1010  Board #271  3:30 PM - 5:00 PM  Effects of Personal Training on Body Composition and Physical Fitness in Older Adults with DLSD
Gae Hwan Park1, Chae-Hee Park3 1FIT Training Center, Seoul, Korea 2Republic of Korea National Sport University, Seoul, Korea 3Republic of.  
(Sponsor: Wojtek Chodzko-Zajko, FACSM)
Email: chaeapark@knus.ac.kr  
(No relevant relationships reported)

1011  Board #272  3:30 PM - 5:00 PM  Knowledge And Practices Of Primary Health-care Providers To Counsel About Physical Activity And Fall Prevention
Harry Papadopoulos1, Lorena Guerrero1, Mara Nery-Hurwit1, Fabricio Zambom-Ferraresi1, Steven Castle, MD1 1Pacific Lutheran University, Tacoma, WA
Email: papadoha@plu.edu  
(No relevant relationships reported)

1012  Board #273  3:30 PM - 5:00 PM  Golf Intervention Improves Fast but Not Self-selected Gait Speed.
Nicole A. Marcione1, Andrea M. DaBois1, Steven Castle, MD1, George J. Salem, PhD, FACSM4 1University of Southern California, Los Angeles, CA 2Greater Los Angeles Veterans Affairs Hospital, Los Angeles, CA
Email: marcione@usc.edu  
(No relevant relationships reported)

1013  Board #274  3:30 PM - 5:00 PM  Correlations Among Subjective vs. Objective Physical Activity, Diet, and Medication Use in Older Adults
Victoria E. Warren1, Kelsey D. Loss1, Kyle L. Timmerman1, Steven Castle, MD1, George J. Salem, PhD2, FACSM4 1Miami University, Oxford, OH 2University of California, San Diego, CA 3Greater Los Angeles Veterans Affairs Hospital, Los Angeles, CA 4The University of Arizona, Tucson, AZ
Email: warrenvo@miamioh.edu  
(No relevant relationships reported)

1014  Board #275  3:30 PM - 5:00 PM  Standing Balance, Muscle Strength And Proprioception of Each Lower Limb Joint- Which Are Significant Predictors For Mobility In Community-dwelling Older Adults?
Yejun Wang1, Jin Han2, Judith Anson2, Gordon Waddington2, Roger Adams3 1University of Southern California, Los Angeles, CA 2Pacific Lutheran University, Tacoma, WA 3University of Royal, London, United Kingdom
Email: 18818264957@163.com  
(No relevant relationships reported)

1015  Board #276  3:30 PM - 5:00 PM  Exercise Prescription Intervention Plan for Pre-frail and Frail Elderly in New Taipei City
Email: mikel.lopez.saezdeastesus@gmail.com  
(No relevant relationships reported)

1016  Board #277  3:30 PM - 5:00 PM  The Effect Of Two Low-dose Strength/Balance Programs On The Physical Function Of Mobility-limited Older Adults
Michael P. Corcoran1, Ian Sotnek2, Jonathan Lashyn3, Jordan Vetter4, Domenic DiSisto1 1Merrimack College, North Andover, MA 2Sponsor: Kevin Finn, FACSM
Email: corcoranm@merrimack.edu  
(No relevant relationships reported)

1017  Board #278  3:30 PM - 5:00 PM  Associations Between Grip Strength And Generalized Anxiety Disorder: Results From Tilda
Brett R. Gordon1, Cillian P. McDowell1, Matthew P. Herring2 1University of Limerick, Limerick, Ireland 2University of the Pacific, Stockton, CA 3St. Vincent Hospital, Indianapolis, IN
Email: brett.gordon@sl.ie  
(No relevant relationships reported)

1018  Board #279  3:30 PM - 5:00 PM  Thermoregulation, Strokes, And Dementia: A Healthy Heart Begins A Healthy Brain.
Saejel G. Mohan1, J. Mark VanNess2, Jonathan M. Saxe3, Greg Roberts2, Lewis E. Jacobson2, Courtney D. Jensen4 1University of the Pacific, Stockton, CA 2St. Vincent Hospital, Indianapolis, IN
Email: saejelmohan@gmail.com  
(No relevant relationships reported)

1019  Board #280  3:30 PM - 5:00 PM  Changes in Cardiovascular Health Following Exercise in Older Men and Women at Risk for Dementia
Andrea F.M. Petrella1, Narlon C. Boa Sorte Silva1, Dawn P. Gill1, Robert J. Petrella1, FACSM. Western University, London, ON, Canada  
(Sponsor: Robert J. Petrella, FACSM)
Email: ampetrella@uwindsor.ca  
(No relevant relationships reported)

B-74  Exercise is Medicine®/Poster - EIM: Exercise Programs
Wednesday, May 30, 2018, 1:00 PM - 6:00 PM  Room: CC-Hall B

1020  Board #281  3:30 PM - 5:00 PM  The Effect of Two Training Protocols on Post Exercise Lactate Clearance in Heart Failure Patients
Yair Blumberg1, Eyal Amon2, Basem Hijazi2, Offir Ertraacht1, Ilan Goldenberg3, Robert Klempfner4, Shaul Atar5, Bar Ilan, Zefat, Israel 2Sheba Medical Center, Ramat Gan, Israel 3Galilee Medical Center, Nahariya, Israel
Email: warrenvo@miamioh.edu  
(No relevant relationships reported)

1021  Board #282  3:30 PM - 5:00 PM  Effects Of 12 Weeks Of Yoga Program in Middle Aged Women With Frozen Shoulder
Ibus Kwon, Jae-keun Oh, Taeyeon Kim. Korea National Sport University, Seoul, Korea, Republic of Email: emilykwon@naver.com  
(No relevant relationships reported)

1022  Board #283  3:30 PM - 5:00 PM  VO2 Peak, Energy Cost and Stress Biomarkers Responses to High Intensity Interval Protocol (HIIT)
Franz H. Burini, Rafael Rezende, Pedro Rodtsch, Thalles Messora, Julio Mariano1, Roberto C. Burini1, FACSM. UNESP Medical School, Botucatu, Brazil.  
(Sponsor: Roberto C Burini, FACSM)
Email: fburini@fmb.unesp.br  
(No relevant relationships reported)

1023  Board #284  3:30 PM - 5:00 PM  Patterns of Physical Activity and Muscle Strengthening Exercise in U.S. Undergraduates
Adrienne Wald. The College of New Rochelle, New Rochelle, NY.  
(Sponsor: Carol Ewing Garber, FACSM)
Email: awald@cnr.edu  
(No relevant relationships reported)
1024 Board #285 3:30 PM - 5:00 PM
Multiple Strength Assessments to Evaluate Adaptations to High-Load and Low-Load Blood Flow Restricted Exercise
Summer B. Cook, FACSM1, Dain P. LaRocche, FACSM2, Todd M. Manini, FACSM1; University of New Hampshire, Durham, NH2; University of Florida, Gainesville, FL
Email: summer.cook@unh.edu
(No relevant relationships reported)

1025 Board #286 3:30 PM - 5:00 PM
Oral Creatine Hydrochloride Supplementation: Acute Effects on Intermittent, Submaximal Bouts of Resistance Exercise
Daniel McDonough, Shawn Simonson, Yong Gao, Scott Conger; Boise State University, Boise, ID. (Sponsor: Dr. Zan Gao, FACSM)
Email: mcdco0785@umn.edu
(No relevant relationships reported)

1026 Board #287 3:30 PM - 5:00 PM
A Comparison of Two Tai Chi Interventions Tailored for Different Health Outcomes
Yin Wu1, Beth Taylor, FACSM2, Patrick Coli3, Susan Glenney4, Crystal Park1, Richard Fortinsky5, Cindy Senk6, Kirsten Benson7, Matt McGowan8, Stylia DiBiasi9, Ken Zaborowski10, Ming-Hui Chen11, Holly Lewis12, Jacqueline Wolff13, Shiqi Chen14, Linda S. Pescatello, FACSM1; University of Connecticut, Storrs, CT; University of Connecticut Health Center, Farmington, CT; Seabury Continuous Care Community, Bloomfield, CT; University of Pittsburgh, Pittsburgh, PA. (Sponsor: Linda S. Pescatello, FACSM)
Email: yin.wu@acsm.org
(No relevant relationships reported)

1027 Board #288 3:30 PM - 5:00 PM
ICT Use and Physical Activity & Implication for Musculoskeletal Pains among Tertiary Institution Students in Kwara State Nigeria
Seidina Yakubu Ilia1, Olufunmilola Leah Dominion1, Faathiah Adeyinka Niyi-Odumosu1, Talabi Ebun Adetayo1; University of Ilorin, Ilorin, Nigeria1; Loughborough University, Loughborough, United Kingdom
Email: naydatabase@gmail.com
(No relevant relationships reported)

1028 Board #289 3:30 PM - 5:00 PM
Bedside Exercise Device for Heart or Liver Transplantation Recipients in Early Postoperative Period
Ssu-Yuan Chen1, Shocci-Shen Wang1, Ray-Heng Hu1, Yih-Sharrng Chen2, Ching Lan2, Andrew K. Dorsch3, Bruce H. Dobkin4; Fu Jen Catholic University Hospital and Fu Jen Catholic University, New Taipei City, Taiwan1; National Taiwan University Hospital and National Taiwan University, Taipei, Taiwan1; University of California, Los Angeles, CA
Email: ssyuyuan@ntu.edu.tw
(No relevant relationships reported)

1029 Board #290 3:30 PM - 5:00 PM
Improving College Students’ Health-Related Fitness Through Physical Activity Classes
Wenhao Liu, FACSM, Ethan E. Hall, Istvan Kovacs; Slippery Rock University, Slippery Rock, PA
Email: wenhao.liu@sru.edu
(No relevant relationships reported)

1030 Board #291 3:30 PM - 5:00 PM
Retrospective Analysis Of A Supervised Exercise Program Offered To Post-hematopoietic Stem Cell Transplant Patients
Kate M. Edwards1, Adelle Bottrell1, Steven R. Larsen1, Michael Marthick1; University of Sydney, Sydney, Australia1; Royal Prince Alfred Hospital, Sydney, Australia1; Chris O’Brien Lifehouse, Sydney, Australia1. (Sponsor: Ollie Jay, FACSM)
Email: kate.edwards@sydney.edu.au
(No relevant relationships reported)

1031 Board #292 3:30 PM - 5:00 PM
Shriners Hospitals For Children® At Galveston Exercise Prescription Guidelines For Children With Severe Burn Injury
Eric Rivas1, David N. Hemdoun1, Janos Cambiaso-Daniel1, Victoria G. Rontoyanni1, Shauna Glover2, Craig Porter2, Oscar E. Suman, FACSM1; Shriners Hospitals for Children and The University of Texas Medical Branch, Galveston TX, and Texas Tech University, Lubbock, TX; Shriners Hospitals for Children and The University of Texas Medical Branch, Galveston, TX; Medical University of Graz, Austria; Shriners Hospitals for Children and The University of Texas Medical Branch, Galveston, TX. (Sponsor: Oscar E. Suman, FACSM)
Email: eric.rivas@ttu.edu
(No relevant relationships reported)

1032 Board #293 3:30 PM - 5:00 PM
Post-menarcheal Trabecular Bone Score as a Function of Organized Physical Activity
Jodi N. Dowthwaite1, Renaud Winzenrieth1, Tamara A. Scerpella2; SUNY Upstate Medical University; Binghamton University, Syracuse, NY; Medimaps Group, Mergueil, France2; University of Wisconsin, Madison, Madison, WI. (Sponsor: Jill Kanaley, FACSM)
Email: dowthwaite@upstate.edu
(No relevant relationships reported)

1033 5:30 PM - 5:35 PM
5:35 PM - 5:50 PM
3:30 PM - 5:00 PM
Chair: Kerri L. Vasold, Michigan State University, East Lansing, MI
(No relevant relationships reported)

1034 5:35 PM - 5:50 PM
GPS for Professional Success: 10 Behavior Skills of Highly Successful People
Barry A. Franklin, FAACSM, William Beaumont Hospital, Royal Oak, MI
(No relevant relationships reported)

1035 5:50 PM - 6:05 PM
Exploring Job Opportunities in Human Health and Nutrition Markets
Emily Pankow Fritz, Kemiu Foods, L.C., Des Moines, IA
(No relevant relationships reported)

1036 6:05 PM - 6:20 PM
6:20 PM - 6:30 PM
Overall Discussion
From the Lab to the Racetrack: How to Run a Successful Consulting Business in Exercise Science
David P. Ferguson, Michigan State University, East Lansing, MI
(No relevant relationships reported)

www.acsm.org
Muscle catabolism occurs during a number of disease and physiological states including burns, sepsis, weight loss, surgery, and hypoxia. The loss of muscle is a negative adaptation that can compromise metabolic health and could be deleterious to performance. In this symposium, presenters will discuss how to mitigate muscle loss in situations of catabolism with interventions focusing on nutritional- and exercise-related variables.
**C-04 Symposium - Evidence-Based Injury and Illness Prevention in Paralympic Sport**

**Thursday, May 31, 2018, 8:00 AM - 10:00 AM**
**Room: CC-208AB**

The Paralympic Games have become one of the largest sporting events globally. The longitudinal, prospective injury and illness surveillance system (IISS) has become an integral part of the International Paralympic Committee’s monitoring of Games-time clinical and operational services, with a view to increasing knowledge of injury and illness in athletes with impairment. This is achieved through two steps. Firstly, physicians responsible for the care of para-athletes athletes at major international competition benefit from an increased awareness of the incidence and types of injuries that athletes might sustain. Second, through the identification of risk factors associated with common injuries and illnesses, prevention strategies may be developed and monitored for effectiveness over time. This symposium will highlight some of the most dynamic and pertinent topics in Paralympic injury and illness epidemiology and prevention, while engaging a discussion with several key Paralympic sport leaders regarding future directions.

**Chair:** Wayne Derman, Stellenbosch University, Cape Town, South Africa

**1053 8:00 AM - 8:05 AM**
Chair: Wayne Derman, Stellenbosch University, Cape Town, South Africa
(No relevant relationships reported)

**1054 8:05 AM - 8:30 AM**
Translating Epidemiology to Policy Change for Injury Prevention in Paralympic Sport
Nick Webborn, FACSM. University of Brighton, Brighton, United Kingdom
(No relevant relationships reported)

**1055 8:30 AM - 8:55 AM**
Injury Prevention in Paralympic Athletes - how does Impairment Type and Event Matter?
Cheri Blauwet, Harvard Medical School, Boston, MA
(No relevant relationships reported)

**1056 8:55 AM - 9:20 AM**
The Epidemiology of Illness in Paralympic Sports and the Impact of Longitudinal Data Collection
Wayne Derman, Stellenbosch University, Cape Town, South Africa
(No relevant relationships reported)

**1057 9:20 AM - 9:45 AM**
Engaging Sport Federations in Meaningful Change - Translating Injury Surveillance into Practice
Peter Van de Vlet. International Paralympic Committee, Bonn, Germany
(No relevant relationships reported)

**9:45 AM - 10:00 AM**
Overall Discussion

**C-05 Symposium - Revisit: NIRS, What Can It Tell Us About Muscle for Exercise**

**Thursday, May 31, 2018, 8:00 AM - 10:00 AM**
**Room: CC-101G**

This symposium will share recent scientific findings about utilizing Near Infrared Spectroscopy (NIRS) to study skeletal muscle metabolism and blood flow. The use of NIRS to study skeletal muscle has been increasing, and new technological developments have opened new opportunities to apply the technology. Updates will be provided on the key issues related to the use of NIRS: quantification of signals, improving signal penetration depth, use in evaluating muscle disease, and scaling up signal analysis.

**Chair:** Kevin K. McCully, FACSM. University of Georgia, Athens, GA

**1058 8:00 AM - 8:05 AM**
Chair: Kevin K. McCully, FACSM. University of Georgia, Athens, GA
Reported Relationships: K.K. McCully: Ownership Interest (Stocks, Bonds); Infrared Rx, Inc.

**1059 8:05 AM - 8:30 AM**
What does NIRS Measure in Muscle?
Thomas Barstow, FACSM. Kansas State University, Manhattan, KS
(No relevant relationships reported)

**1060 8:30 AM - 8:55 AM**
NIRS Penetration Depth and Correcting for Adiopose Tissue
Shunsaku Koga. Kobe Design University, Kobe, Japan
(No relevant relationships reported)

**1061 8:55 AM - 9:20 AM**
NIRS and Skeletal Muscle in the Evaluation of Pathological Conditions
Bruno Grassi, FACSM. University of Udine, Udine, Italy
(No relevant relationships reported)

**1062 9:20 AM - 9:45 AM**
Scaling up NIRS Testing and Analysis for Clinical Trials
Kevin K. McCully, FACSM. University of Georgia, Athens, GA
Reported Relationships: K.K. McCully: Ownership Interest (Stocks, Bonds); Infrared Rx, Inc.

**9:45 AM - 10:00 AM**
Overall Discussion

**C-06 Symposium - The Secrets of Competition: How to Beat Your Olympic/Paralympic Opponents (OPSSMSS)**

**Thursday, May 31, 2018, 8:00 AM - 10:00 AM**
**Room: CC-205AB**

This session will explore the science behind winning, and how to beat other competitors, in a multi-disciplinary way. First, the importance of pacing and tactics in head-to-head competition will be explored by Dr Florentina Hettinga. Secondly, the impact of cognition on performance will be explored, particularly relevant in Paralympic sports for athletes with an intellectual impairment by Dr Debbie van Biesen. Lastly, the impact of personality traits and states on competitive performance will be explored by Prof Jack Raglin.

**1063 8:00 AM - 8:05 AM**
Chair: Florentina Hettinga. University of Essex, Colchester, United Kingdom
(No relevant relationships reported)

**1064 8:05 AM - 8:30 AM**
Pacing and Tactics in Head-to-Head Competition: The Science Behind Winning Over Your Olympic/Paralympic Opponents
Florentina Hettinga. University of Essex, Colchester, United Kingdom
(No relevant relationships reported)

**1065 8:30 AM - 8:55 AM**
Impact of Cognition in Sports Performance: How to Beat Your Paralympic Opponents When Competing With an Intellectual Impairment
Debbie van Biesen. UK/Leuven, Leuven, Belgium
(No relevant relationships reported)

**1066 8:55 AM - 9:20 AM**
Impact and Management of Personality Traits and States in Competitive Performance
Jack Raglin, FACSM. Indiana University, Bloomington, IN
(No relevant relationships reported)

**1067 9:20 AM - 9:45 AM**
Practical Application of Pacing, Tactics, Cognition and Psychobiology: How Do Athletes Prepare for Winning?
PyeongChang 2018 Olympic/Paralympic Athlete TBD. United States Olympic Committee, Colorado Springs, CO
(No relevant relationships reported)
### C-07 Thematic Poster - Carbohydrate and Fat Metabolism

**Thursday, May 31, 2018, 8:00 AM - 10:00 AM**

**Room:** CC-Lower level L100C

<table>
<thead>
<tr>
<th>Board</th>
<th>Title</th>
<th>Chair</th>
<th>Sponsor</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>#076</td>
<td>Similar Substrate Use During Prolonged Cycling in Men and Women</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#077</td>
<td>No Lipolytic Suppression With Pre Exercise Carbohydrate Regardless of its Glycemic Index</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#078</td>
<td>Overload Alters Skeletal Muscle Glucose Utilization but not Glucose Uptake or Hypertrophy in Insulin-Resistant Mice</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#079</td>
<td>Post-Exercise Fructose-Maltodextrin Ingestion Enhances Subsequent Endurance Capacity</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#080</td>
<td>Prolonged Low-moderate Intensity Exercise On Physiological Markers Of Metabolic And Oxidative Stress</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### C-08 Thematic Poster - Mental Health and Exercise

**Thursday, May 31, 2018, 8:00 AM - 10:00 AM**

**Room:** CC-Lower level L100E

<table>
<thead>
<tr>
<th>Board</th>
<th>Title</th>
<th>Chair</th>
<th>Sponsor</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>#081</td>
<td>The Interrelationship Between Depression and Hemoglobin: Men Are Affected More Than Women</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#082</td>
<td>Associations Between Physical Activity and Depression: Results from The Irish Longitudinal Study on Ageing</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### ACSM 65th Annual Meeting

<table>
<thead>
<tr>
<th>Board</th>
<th>Title</th>
<th>Chair</th>
<th>Sponsor</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1075</td>
<td>In Vivo Knockdown of Hepatocellular eNOS Reduces Cellular Anti-Oxidant Defense and Mitochondria Biogenesis/Function</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#1076</td>
<td>Acute Exercise by Insulin Resistant Rats Induces Muscle Fiber Type-selective Improvement in Insulin-stimulated Glucose Uptake</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
1083 Board #3 8:00 AM - 10:00 AM
Influence Of Omega-3 Status On Depression And Anxiety In Young Women With Obesity
Helen T. O'Connor¹, Rebecca L. Cook¹, Helen M. Parker¹, Cheyne Donges¹, Janet Franklin¹, Kate S. Steinbeck¹, Hoa Lun Cheng², Manohar Garg², Nicholas J. O’Dwyer¹. ¹The University of Sydney, Sydney, Australia. ²Charles Sturt University, Bathurst, Australia.
Email: helen.oconnor@sydney.edu.au
(No relevant relationships reported)

1084 Board #7 8:00 AM - 10:00 AM
An Examination of Affective Change in the Absence of Physical Sensation
Kathryn M. Rougeau¹, Stephen R. Koziel³, Steven J. Petruzzello, FACSM. ¹Oakland University, Rochester, MI. ²University of Illinois, Urbana, IL. (Sponsor: Steven J. Petruzzello, FACSM)
Email: rougeau@oakland.edu
(No relevant relationships reported)

1085 Board #8 8:00 AM - 10:00 AM
Acute Effects of Resistance Exercise in Depressed Black/ African American People Living with HIV
Sanaz Nosrat, James W. Whitworth, Nicholas J. SantaBarbara, Mark E. Louie, Joseph T. Ciccolo. Teachers College, Columbia University, New York, NY
Email: sn2504@tc.columbia.edu
(No relevant relationships reported)

C-09 Thematic Poster - Performance after ACL Reconstruction
Thursday, May 31, 2018, 8:00 AM - 10:00 AM
Room: CC-Lower level L100F

1086 Chair: Brian Noehren, FACSM. University of Kentucky, Lexington, KY
(No relevant relationships reported)

1087 Board #1 8:00 AM - 10:00 AM
Peak and Rapid Force Deficits during Countermovement Jump Persist Longer than Reduced Jump Height post-ACL Reconstruction
Email: cobian@pt.wisc.edu
(No relevant relationships reported)

1088 Board #2 8:00 AM - 10:00 AM
Neuromuscular Training improves Sagittal Plane Hip and Knee landing Kinematics and Kinetics In Acl-reconstructed athletes
Christopher Nagelli¹, Samuel Wordeman¹, Stephanie Di Stasi¹, Joshua Hoffman¹, Tiffany Marulli², Timothy E. Hewett, FACSM. ¹Mayo Clinic, Rochester, MN. ²The Ohio State University, Columbus, OH.
Email: cobian@pt.wisc.edu
(No relevant relationships reported)

1089 Board #3 8:00 AM - 10:00 AM
Biomechanical Adaptations After Exercise in Healthy and ACL Reconstructed Individuals
Lindsay V. Slater¹, Silvia Blemker¹, Jay Hertel, FACSM, Sue Saliba², Art Weltman, FACSM, Joe Hart, FACSM. ¹Northwestern University, Chicago, IL. ²University of Virginia, Charlottesville, VA. (Sponsor: Joe Hart, FACSM)
Email: lindsay.slater@northwestern.edu
(No relevant relationships reported)

1090 Board #4 8:00 AM - 10:00 AM
Influence of Lower Extremity Muscle Activation on Altered Landing Biomechanics in ACL Reconstructed Individuals
Elisabeth Holt¹, Anh-Dung Nguyen¹, David R. Bell¹, Stephanie M. Trigsted¹. ²High Point University, High Point, NC. ¹University of Wisconsin Madison, Madison, WI. (Sponsor: Kevin R. Ford, FACSM)
Email: eloft@highpoint.edu
(No relevant relationships reported)

1091 Board #5 8:00 AM - 10:00 AM
Fear of Reinjury is Associated with Knee Biomechanics During Single Limb Landing after ACL Reconstruction
Julie P. Burland, Lindsey K. Lepley, Lindsay J. DiStefano, Steven. M. Davi, Adam S. Lepley. University of Connecticut, Storrs, CT
Email: julie.burland@uconn.edu
(No relevant relationships reported)

1092 Board #6 8:00 AM - 10:00 AM
Functional Knee Bracing Improves Loading Symmetry Following ACL Reconstruction
Robin Queen, FACSM, Kristen Renner¹, Alex Pебeble¹, Thomas Miller². ¹Virginia Tech, Blacksburg, VA. ²Virginia Tech Carilion School of Medicine, Roanoke, VA
Email: rmqueen@vt.edu
Reported Relationships: R. Queen: Contracted Research - Including Principle Investigator; Don Joy Orthopedics.

1093 Board #7 8:00 AM - 10:00 AM
Effects of Localized Vibration on Knee Joint Position Sense in Individuals with ACL-Reconstruction
Takashi Nagai, Nathan D. Schlatly, Nathaniel A. Bates, Timothy E. Hewett, FACSM. Mayo Clinic, Rochester, MN. (Sponsor: Timothy E. Hewett, PhD, FACSM, FACSM)
Email: nagai.takashi@mayo.edu
(No relevant relationships reported)

1094 Board #8 8:00 AM - 10:00 AM
Quantifying Whole Body Compensations in Ground Reaction Forces During Gait in Individuals Post-ACLr
Paige E. Lin, Neurna H. Neamat Allah, Stephanie M. Yano, Andrea L. Alsalahat, Susan M. Sigward. University of Southern California, Los Angeles, CA
Email: paigeeli@usc.edu
(No relevant relationships reported)

C-10 Thematic Poster - Physical Activity in Cancer Prevention and Control
Thursday, May 31, 2018, 8:00 AM - 10:00 AM
Room: CC-Mezzanine M100C

1095 Chair: Alpa V. Patel, FACSM. American Cancer Society, Atlanta, GA
(No relevant relationships reported)

1096 Board #1 8:00 AM - 10:00 AM
Nigel T. Brockton¹, Kate Allen¹, Rachel L. Thompson¹, Martin J. Wiseman¹, Giota Mitrou², Teresa Norat³, Michael Leitzmann³, Anne McTiernan¹. ¹American Institute for Cancer Research, Arlington, VA. ²World Cancer Research Fund, London, United Kingdom. ³Imperial College London, London, United Kingdom.
Email: n.brockton@aicr.org
(No relevant relationships reported)
Board #2 8:00 AM - 10:00 AM
Breast Cancer and Physical Activity Level (BC-PAL) Trial: Findings on Cardiorespiratory Fitness and Body Composition
Jessica McNeil1, Darren R. Brenner2, Chelsea R. Stone1, Rachel O’Reilly1, Jeffrey K. Vallance3, Kerry S. Courneya4, Kevin E. Thorpe5, Douglas J. Klein6, Christine M. Friedenreich7. 1Alberta Health Services, Calgary, AB, Canada. 2Athabasca University. Athabasca, AB, Canada. 3University of Alberta, Edmonton, AB, Canada. 4University of Toronto, Toronto, ON, Canada. 
Email: jessica.mcnell2@ahs.ca (No relevant relationships reported)

Board #3 8:00 AM - 10:00 AM
Self-reported Physical Activity Is Associated With Angiogenesis-And Inflammation-related Biomarkers In Colorectal Cancer Patients: Results From The Colocare Cohort
Caroline Himbert1, Biljana Gigic2, Christy A. Warby1, Tengda Lin3, Petra Schrotz-King4, Clare Abbenthart-Martin5, Stephanie Skender6, Nina Habermann7, Lin Zielke8, Alexis Ulrich9, Juergen Boehn10. 1University Medical Center Hamburg-Eppendorf, Hamburg, Germany. 2University Clinic of Heidelberg, Heidelberg, Germany. 3University of Würzburg, Würzburg, Germany. 4University Clinic of Lübeck, Lübeck, Germany. 5University Hospital of Lübeck, Lübeck, Germany. 6University of Artland, Artland, Germany. 7University Medical Center Hamburg-Eppendorf, Hamburg, Germany. 8University Hospital of Hamburg-Eppendorf, Hamburg, Germany. 9University Hospital of Hamburg-Eppendorf, Hamburg, Germany. 10University Medical Center Hamburg-Eppendorf, Hamburg, Germany. 
Email: caroline.himbert@hcci.de (No relevant relationships reported)

Board #4 8:00 AM - 10:00 AM
Pennsylvania Cancer Survivors And Their Adherence To The ACSM Physical Activity Guideline
Joachim Wiskemann1, Wayne Foo2, Renate M. Whikels3, Shirley M. Bluthmann4, Scherezae K. Mama5, William Calo6, Eugene Zengerich7, Joel Segel1, Kathryn H. Schmitz8, ACSM. The Pennsylvania State University, Hershey, PA. (Sponsor: Kathryn Schmitz, ACSM) 
Email: joachim.wiskemann@psu.edu (No relevant relationships reported)

Board #5 8:00 AM - 10:00 AM
Differences In Physical Activity Patterns Between Adults With And Without Cancer History
Amal A. Wanigatunga1, Gillian K. Gresham2, Pei-Lun Kao3, Pablo Martinez-Amoza1, Vadim Zipunnikov4, Sydney M. Dy5, Eleanor M. Simonick6, Jennifer A. Schrack7, 1Johns Hopkins University, Baltimore, MD. 2Cedars-Sinai Medical Center, Los Angeles, CA. 3National Institute on Aging, Baltimore, MD. (Sponsor: Todd M. Manini, FACSM) 
Email: awanigatunga1@jh.edu (No relevant relationships reported)

Board #6 8:00 AM - 10:00 AM
Exercise Is More Effective Than Health Education In Reducing Fatigue In Fatigued Cancer Survivors
Patricia Sheehan1, Suzanne Denielle2, Michael Harrison3, FACSM. Waterford Institute of Technology, Waterford, Ireland. 
Email: patricia.sheehan@postgrad.wit.ie (No relevant relationships reported)

Board #7 8:00 AM - 10:00 AM
Effects of a Lifestyle Intervention on Change in Body Composition in Prostate Cancer Patients Undergoing Androgen Deprivation Therapy
Zachary L. Chaplow1, Brian C. Focht2, FACSM3, Alexander R. Lucas4, Elizabeth Grainger5, Christina Simpson6, Ciaran M. Fairman7, Jennifer M. Thomas-Aure8, Victoria R. DeSencra9, Jessica Bowman10, Jacki Bussell11, Steven K. Clinton12. 1The Ohio State University, Columbus, OH. 2Wake Forest University, Winston Salem, NC. (Sponsor: Brian C. Focht, FACSM) 
Email: chaplow.1@osu.edu (No relevant relationships reported)
American College of Sports Medicine

1111  Board #7  8:00 AM - 10:00 AM
Effects Of Continuous Versus Interval Exercise On Sleep
Profile In Young Healthy Males
Jorge Fernando Tavares de Souza, Solange Prado Sáo José, Hanna
Karen Moreira Antunes. Universidade Federal de São Paulo, São
Paulo, Brazil
Email: jorge.fernando22@hotmail.com
(No relevant relationships reported)

1112  Board #8  8:00 AM - 10:00 AM
The Effect of Total Sleep Time on Ultra-Endurance Triathlon
Performance
Jacob N. Kasiolé, Kyle A. Smith, Daniel A. Baur, Brandon
D. Willingham, Margaret C. Morrissey, Samantha M. Leyh,1
Patrick G. Saracino1, Michael J. Ormsbee, FACSM.2,1Florida State
University, Tallahassee, FL.2Elon University, Elon, NC. (Sponsor:
Dr. Michael Ormsbee, FACSM)
(No relevant relationships reported)

C-12  Free Communication/Slide - New Insights
in Measurement of Physical Activity and
Sedentary Behavior
Thursday, May 31, 2018, 8:00 AM - 10:00 AM
Room: CC-Mezzanine M100D

1113  Chair: Gregory J. Welk, FACSM. Iowa State University, Ames,
IA
(No relevant relationships reported)

1114  8:00 AM - 8:15 AM
Measuring Change in Physical Activity Across a Technology-
Based Intervention
Whitney A. Welch, Bonnie Spring, Siobhan M. Phillips, Juned
Siddique. Northwestern University Feinberg School of Medicine,
Chicago, IL. (Sponsor: Ann M Swartz, FACSM)
Email: whitney.welch@northwestern.edu
(No relevant relationships reported)

1115  8:15 AM - 8:30 AM
Validation Of A Research-grade Accelerometer In Estimating
Free-living Sedentary Time
Albert Mendoza,1 Kate Lyden, John Sirard, John Staudenmayer,
Catrine Tudor-Locke, FACSM,2 Patty Freedson, FACSM.3
1California State University, East Bay, Hayward, CA. 2KAL
Research Consulting LLC, Denver, CO. 3University of
Massachusetts-Amherst, Amherst, MA. (Sponsor: Patty Freedson,
FACSM)
Email: albert.mendoza@csueastbay.edu
(No relevant relationships reported)

1116  8:30 AM - 8:45 AM
Validation of Activity Monitor Methods in Classifying
Sedentary Behavior in Distinct Activity Domains
Julian Martinez, Mami M. Takeda, Sarah K. Keadle. California
Polytechnic State University San Luis Obispo, San Luis Obispo, CA.
(Sponsor: Todd Hagopian, FACSM)
Email: jmart250@calpoly.edu
(No relevant relationships reported)

1117  8:45 AM - 9:00 AM
Video-Recorded Validation of Wearable Step Counters
Under Free-living Conditions
Lindsay Toth. University of Tennessee, Knoxville, TN. (Sponsor:
David R. Bassett, Jr., PhD, FACSM)
Email: ltoth2@vols.utk.edu
(No relevant relationships reported)

1118  9:00 AM - 9:15 AM
Use of Consumer Monitors for Estimating Energy
Expenditure in Youth
Andrew S. Kaplan, Samuel R. Lamanion, Paul R. Hibbing, Scott E.
Crouther, FACSM. University of Tennessee-Knoxville, Knoxville, TN
(No relevant relationships reported)

1119  9:15 AM - 9:30 AM
Validity and Reliability of the Exercise Vital Signs
Questionnaire in a Diverse Urban Population
Norberto Quiles1, Lin Piao1, Aston K. McCullough1,2Queens
College, Flushing, NY.2Teachers College, Columbia University, New
York, NY
(No relevant relationships reported)

1120  9:30 AM - 9:45 AM
Validity of a Novel Objective Screening Test for Risk of
Physical Inactivity in Toddlers
Aston K. McCullough, Carol Ewing Garber, FACSM. Columbia
University Teachers College, New York, NY. (Sponsor: Carol Ewing
Garber, FACSM)
Email: akm2169@columbia.edu
(No relevant relationships reported)

C-13  Free Communication/Slide - VO2max
Thursday, May 31, 2018, 8:00 AM - 10:00 AM
Room: CC-Mezzanine M100F

1121  9:45 AM - 10:00 AM
Sensitivity of a Consumer Activity Tracker to Detect
Changes In Lab-based and Free-living Activity Settings
Greg J. Petrucci, Jr., Patty S. Freedson, FACSM, Brittany R.
Masteller, Melanna F. Cox, John W. Staudenmayer, John R. Sirard.
UMass Amherst, Amherst, MA. (Sponsor: Patty S. Freedson,
FACSM)
Email: gpetrucci@umass.edu
Reported Relationships: G.J. Petrucci: Contracted Research -
Including Principle Investigator; Mistfit Shine™ Wearables (Fossil Group,
Richmond, TX, USA).

1122  9:00 AM - 9:15 AM
Effect Of Total Sleep Time on Ultra-Endurance Triathlon
Performance
Jacob N. Kasiolé, Kyle A. Smith, Daniel A. Baur, Brandon
D. Willingham, Margaret C. Morrissey, Samantha M. Leyh,1
Patrick G. Saracino1, Michael J. Ormsbee, FACSM.2,1Florida State
University, Tallahassee, FL.2Elon University, Elon, NC. (Sponsor:
Dr. Michael Ormsbee, FACSM)
(No relevant relationships reported)

1123  9:15 AM - 9:30 AM
Fitness And Age-related Associations: Is VO2peak A Valid
Measure For Older Adults?
Ryan J. Dougherty, Jacob B. Lindheimer, Aaron J. Stegner, Stephanie
Van Riper, Jacob V. Nimneman, Ozionna C. Okonkwo, Dane B.
Cook, FACSM. University of Wisconsin - Madison, Madison, WI.
(Sponsor: Dane B. Cook, FACSM)
Email: rdougherty@wisc.edu
(No relevant relationships reported)

1124  9:45 AM - 10:00 AM
Evaluating The Influence Of Methodological Variables On
The Determination Of VO2peak And The Lactate Threshold.
Nicholas Jannick1, Javier Botella2, David Pyne, FACSM, David
Pyne, FACSM,2 David Bishop, FACSM1, David Bishop, FACSM2.
1Victoria University, Melbourne, Australia. 2Australian Institute of
Sport, Canberra, Australia. 3University of Canberra, Canberra,
Australia. 4Edith Cowan University, Joondalup, Australia. (Sponsor:
Professor David Bishop, FACSM)
Email: nicholas.jannick@live.vu.edu.au
(No relevant relationships reported)

1125  8:30 AM - 8:45 AM
Evaluation of VO2peak Calculations for the Boer 2 Through 5
Protocols
Nicholas F. Boer, Josh Johann, Gregory Heath, FACSM. Univ. of
Tennessee, Chattanooga, TN
Email: nicholas-boer@utc.edu
(No relevant relationships reported)

www.acsm.org
C-15 Clinical Case Slide - Knee II
Thursday, May 31, 2018, 8:00 AM - 10:00 AM
Room: CC-200F

1140 Chair: Aaron Rubin, FACSM. Kaiser Permanente Sports Medicine Program, Fontana, CA
(No relevant relationships reported)

1141 Discussant: Anthony E. Annan. Home, London, United Kingdom
(No relevant relationships reported)

1142 Discussant: Cindy Y. Lin. University of Washington Medical Center, Seattle, WA
(No relevant relationships reported)

1143 8:00 AM - 8:20 AM
Knee Pain - Exercise
Samuel T. Dona, Dean Padaov, Robert Monaco, Steven Sclafani. Atlantic Sports Health, Morristown, NJ
Email: Samuel.Dona@atlantichealth.org
(No relevant relationships reported)

1144 8:20 AM - 8:40 AM
Knee Effusion-gymnast
Reno Ravidran. Nationwide Childrens Hospital, Columbus, OH
(No relevant relationships reported)

1145 8:40 AM - 9:00 AM
Acute Knee Pain in Adolescent Basketball Player
Kristopher Paultre. JMH/UM, Miami, FL
Email: kristopher.paultre@jhsmiami.org
(No relevant relationships reported)

P80 Final Program

1126 8:45 AM - 9:00 AM
Change In VO2max And Time Trial Performance To Interval Training Prescribed According To Ventilatory Threshold
Email: astorino@csusm.edu
(No relevant relationships reported)

1127 9:00 AM - 9:15 AM
The Impact Of An Interval Training Program On Muscle And Cerebral Oxygenation Responses To Incremental Ramp Exercise
Jan Boone, Kevin Caen, Kobe Vermeire, Jan Bourgeois. Ghent University, Ghent, Belgium
Email: Jan.boone@ugent.be
(No relevant relationships reported)

1128 9:15 AM - 9:30 AM
Relationships Between VO2max And Blood Lactate During Exercise Across Different Populations
Inigo San-Millán, Jared Berg, Janel Martinez, Ryan Kohler, Charles Van Atta. University of Colorado School of Medicine, Aurora, CO. 1CU Sports Medicine and Performance Center, Boulder, Colorado, CO
Email: inigo.sannmillan@ucdenver.edu
Reported Relationships: 1. San-Millán: Consulting Fee; Ascent Nutrition, Institute of Motion Analysis (IMA). Contracted Research - Including Principle Investigator; Leomoto, LLC. Ownership Interest (Stocks, Bonds); MuscleSound, Inc.

1129 9:30 AM - 9:45 AM
The Effect Of Stride Frequency Variations On Running Performance At The Velocity Of VO2Max
Boram Lim, Boe Burrus, Justus Ortega, Young Sub Kwon. Humboldt State University, Arcata, CA
(No relevant relationships reported)

1130 9:45 AM - 10:00 AM
Predictability Of VO2max From Three Commercially Available Devices
(Sponsor: Dr. Karin Pfefifer, FACSM)
(No relevant relationships reported)

C-14 Clinical Case Slide - Cardiovascular II
Thursday, May 31, 2018, 8:00 AM - 10:00 AM
Room: CC-101CD

1131 Chair: Paul D. Thompson, FACSM. Hartford Hospital, Hartford, CT
(No relevant relationships reported)

1132 Discussant: Benjamin D. Levine, FACSM. Texas Health Presbyterian Hospital Dallas, Dallas, TX
(No relevant relationships reported)

1133 Discussant: Rachel Lampert. Yale University, New Haven, CT
(No relevant relationships reported)

1134 8:00 AM - 8:20 AM
Left Arm Cramping and Prominent Veins in a 19 year-old Women’s Collegiate Soccer Player
Andrew Schleihau, Kimberly Kaiser, Robert Hosey, FACSM. University of Kentucky, Lexington, KY
(No relevant relationships reported)

1135 8:20 AM - 8:40 AM
Cardiovascular Football
Stephen Caro, Timothy Darkin, Michael Dillon, Floyd Burke, Katherine Edenfield, Guy Nicolette, James Clagston. University of Florida, Gainesville, FL. 1Heart and Vascular Institute of Florida, Gainesville, FL
Email: scarek@ufl.edu
(No relevant relationships reported)

1136 8:40 AM - 9:00 AM
Chest Pain, Palpitations and Heart Murmur In A Basketball Player
Colin L. Conner, John Stock, Mitchell Cohen. 1Arizona Pediatric Cardiology, Phoenix, AZ. 2Pediatric Cardiac Care of Arizona, Phoenix, AZ
(No relevant relationships reported)

1137 9:00 AM - 9:20 AM
New Heart Murmur in a Male Basketball Player
Emily Miller, Dena Florezyk. UCLA, Los Angeles, CA
Email: Emily.Miller@mednet.ucla.edu
(No relevant relationships reported)

1138 9:20 AM - 9:40 AM
Misleading Congenital Brain and Heart Abnormalities in a Syncopal Soccer Player
Michael E. Pitzer, Heather Bauby. 1Virginia Commonwealth University, Richmond, VA. 2Randolph-Macon College, Ashland, VA
(No relevant relationships reported)

1139 9:40 AM - 10:00 AM
Evaluation And Management Of Recurrent Symptomatic, Exercise-induced Tachyarrhythmia
Michael Fitzgerald. University of Kentucky, Lexington, KY
Email: mafi243@uky.edu
(No relevant relationships reported)

C-15 Clinical Case Slide - Knee II
Thursday, May 31, 2018, 8:00 AM - 10:00 AM
Room: CC-200F

1140 Chair: Aaron Rubin, FACSM. Kaiser Permanente Sports Medicine Program, Fontana, CA
(No relevant relationships reported)

1141 Discussant: Anthony E. Annan. Home, London, United Kingdom
(No relevant relationships reported)

1142 Discussant: Cindy Y. Lin. University of Washington Medical Center, Seattle, WA
(No relevant relationships reported)

1143 8:00 AM - 8:20 AM
Knee Pain - Exercise
Samuel T. Dona, Dean Padaov, Robert Monaco, Steven Sclafani. Atlantic Sports Health, Morristown, NJ
Email: Samuel.Dona@atlantichealth.org
(No relevant relationships reported)

1144 8:20 AM - 8:40 AM
Knee Effusion-gymnast
Reno Ravidran. Nationwide Childrens Hospital, Columbus, OH
(No relevant relationships reported)

1145 8:40 AM - 9:00 AM
Acute Knee Pain in Adolescent Basketball Player
Kristopher Paultre. JMH/UM, Miami, FL
Email: kristopher.paultre@jhsmiami.org
(No relevant relationships reported)
C-16 Clinical Case Slide - Medical Issues II
Thursday, May 31, 2018, 8:00 AM - 10:00 AM
Room: CC-200E

Chair: William W. Dexter, FACSM. Maine Medical Center, Portland, ME
(No relevant relationships reported)

Discussant: Andrea Stracciolini, FACSM. Children’s Hospital Boston, Boston, MA
(No relevant relationships reported)

Discussant: Francis G. O’Connor, FACSM. Uniformed Services University, Bethesda, MD
(No relevant relationships reported)

8:00 AM - 8:20 AM
Abdominal Pain - Professional Singer
Tamara Rial-Rebullido1, Fernanda Gonzalez2, Iván Chuli-Medrano3. 
1International Hypopressive and Physical Therapy Institute, Vigo, Spain. 2Universidad Autónoma de Durango, Durango, Mexico. 3University of Alicante, Alicante, Spain. (Sponsor: Avery D. Faigenbaum, FACSM) 
Email: rialtamar@gmail.com
(No relevant relationships reported)

8:20 AM - 8:40 AM
Abnormal Weight Gain in a Collegiate Athlete - Swimming
Roberta Dennison. Boston Children’s Hospital, Boston, MA. (Sponsor: Kathryn E. Ackerman, MD, MPH, FACSM) 
(No relevant relationships reported)

8:40 AM - 9:00 AM
Syncope Episode in a College Football Player
Bjorn A. Jacobson, Richard A. Okragly. TriHealth Bethesda Primary Care Sports Medicine Fellowship, Cincinnati, OH. (Sponsor: Henry Steene, FACSM) 
Email: bjomjaco@mac.com
(No relevant relationships reported)

9:00 AM - 9:20 AM
Headache and Near Syncope in a Soldier After Training
Robert H. Lutz. Duke Sports Science Institute, Durham, NC. (Sponsor: Shawn F. Kane, FACSM) 
Email: robert.lutz@duke.edu
(No relevant relationships reported)

C-17 Colloquium - Muscle Growth Does/Does Not Contribute to the Increases in Strength that Occur after Resistance Training
Thursday, May 31, 2018, 8:00 AM - 8:50 AM
Room: CC-103

It is commonplace for exercise physiology textbooks to state that the initial increases in strength with a resistance exercise program are caused by neurological factors, before being predominantly driven by increases in muscle size. However, the importance of skeletal muscle hypertrophy for exercise induced changes in strength after resistance training remains the subject of debate. This colloquium will present theory and evidence for and against the idea that hypertrophy contributes to the changes in strength after resistance training.

Chair: William W. Dexter, FACSM.
Duke University, Durham, NC
(No relevant relationships reported)

Discussant: Francis G. O’Connor, FACSM. Uniformed Services University, Bethesda, MD
(No relevant relationships reported)

1156 9:20 AM - 9:40 AM
Going the Distance Makes Me Tired: Seizure in a Cross Country Runner
Caitlin G. Waters, James Broadhurst, John H. Stevenson. UMass Memorial Medical Center, Worcester, MA. (Sponsor: Pierre Rouzier, FACSM) 
Email: caitw32@gmail.com
(No relevant relationships reported)

1157 9:40 AM - 10:00 AM
Cotton Mouth In A Cross Country Runner.
Jason A. Kirkbride, Siobhan Statuta. University of Virginia, Charlottesville, VA. (Sponsor: John MacKnight, FACSM) 
(No relevant relationships reported)

C-18 Tutorial Lecture - Implications of Sedentary Behavior for Physical Activity Guidelines: Interactions and Research Gaps
Thursday, May 31, 2018, 8:00 AM - 8:50 AM
Room: CC-Ballroom B

Sedentary behavior is a risk factor for chronic disease and premature mortality. However, the degree to which the effects of sedentary behavior interact with the effects of physical activity at greater intensities is not clear. This session will describe the evidence on this topic that has been compiled by the Physical Activity Guidelines for Americans 2018 Advisory Committee, and to describe important research gaps.

The speakers will include Dr. Peter Katzmarzyk, FACSM, Chair of the Sedentary Behavior Subcommittee, and Dr. William E. Kraus, FACSM, Chair of the Exposure Subcommittee of the Physical Activity Guidelines for Americans 2018 Advisory Committee.

1160 8:00 AM - 8:10 AM
Sedentary Behavior and Physical Activity: Evidence and Implications
Peter T. Katzmarzyk, FACSM. Pennington Biomedical Research Center, Baton Rouge, LA
(No relevant relationships reported)

1161 8:10 AM - 8:20 AM
Accuracy of Physical Activity Monitoring Instruments
William E. Kraus, FACSM. Duke University, Durham, NC
(No relevant relationships reported)

C-19 Tutorial Lecture - Increasing Physical Activity through Built Environment Approaches: What’s New from the Community Guide?
Thursday, May 31, 2018, 8:00 AM - 8:50 AM
Room: CC-Auditorium 1

The Community Preventive Services Task Force recently recommended, based on sufficient evidence, that built environment approaches that combine one or more interventions to improve pedestrian or bicycle transportation systems with one or more land use and environmental design interventions increase physical activity among adults, children, and youth in communities. This session will provide an overview of the Community Guide process of systematic review associated with these recommendations; a review of the body of evidence supporting these

www.acsm.org
recommendations; current strategies of disseminating these recommendations; and timely examples of community applications of these Community Guide recommendations.

Gregory W. Heath, FACSM. University of Tennessee at Chattanooga, Chattanooga, TN
(No relevant relationships reported)

David P. Hopkins. Centers for Disease Control and Prevention, Atlanta
(No relevant relationships reported)

C-20 Tutorial Lecture - Sharing your Science on Social: Tips and Guidance for Beginners
Thursday, May 31, 2018, 8:00 AM - 8:50 AM
Room: CC-Auditorium 2

Caitlin Kinser. American College of Sports Medicine, Indianapolis, IN
(No relevant relationships reported)

Tanya M. Halliday. University of Colorado Anschutz Medical Campus, Denver, CO
(No relevant relationships reported)

C-21 Clinical Workshop-Hands On Demonstration - Fundamental Musculoskeletal Ultrasound of the Shoulder and Elbow for Physicians and Non-Physicians
Thursday, May 31, 2018, 8:00 AM - 8:50 AM
Room: CC-200B

Ultrasound (US) represents a cost-effective (predicted savings of $6.9 billion when appropriate substitution is made for musculoskeletal US in place of MRI over a 14-year period, and approximately one fifth of the cost to the patients per Medicare), readily available diagnostic imaging modality that has gained popularity in musculoskeletal and sports medicine to evaluate a variety of shoulder and elbow. This course will familiarize participants to basic ultrasound terminology and scan of the shoulder and elbow focusing special attentions to most commonly seen injuries in sports. We will spend first part of the session with an introductory instruction, followed by demonstration scan, concluding with hands-on scanning and ongoing Q&A in smaller groups.

Jay Smith. Mayo Clinic, Rochester, MN
Reported Relationships: J. Smith; Stock Ownership; Tenex Health.

Gerard Malanga. New Jersey Regenerative Institute, Cedar Knolls, NJ
(No relevant relationships reported)

Mark Sack. University of Pittsburgh Medical Center, Pittsburgh, PA
(No relevant relationships reported)

Jacob Sellen. Mayo Clinic, Rochester, MN
(No relevant relationships reported)

C-22 Exercise is Medicine® - Tutorial Lecture - Emerging Opportunities in the Diabetes Prevention Program (DPP) for Health and Fitness Professionals
Thursday, May 31, 2018, 8:00 AM - 8:50 AM
Room: Hyatt-Greenway Ballroom C

The national diabetes prevention program (DPP) has more than a decade of evidence demonstrating its effectiveness in reducing the incidence of type 2 diabetes amongst high risk people. Core to the program is helping participants make meaningful changes in lifestyle (physical activity and dietary intake) to achieve at least a 5.7% weight loss. Medicare will begin reimbursement for the DPP in April 2018 providing more opportunities for at-risk people to participate in the program. With higher participation rates will come a need for more local programs, and the necessary staffing. This presents an opportunity for health and fitness professionals to engage professionally with the DPP. This session will provide an overview of the DPP, reimbursement for the DPP, and roles for health and fitness professionals associated with the DPP.

Elizabeth A. Joy, FACSM. Intermountain Healthcare, Salt Lake City, UT
(No relevant relationships reported)

Robyn M. Stuhr. American College of Sports Medicine, Indianapolis, IN
(No relevant relationships reported)

C-23 Exercise is Medicine® - Tutorial Lecture - Health Benefits of Easily Accessible Pragmatic Physical Activity Below Recommended Dosage
Thursday, May 31, 2018, 8:00 AM - 8:50 AM
Room: Hyatt-Nicollet Ballroom D

Wide spread persistent inactivity makes continued efforts in physical activity promotion a lasting challenge. Precise content of physical activity recommendations are not broadly known, and there are concerns that the general messaging of the guidelines including the recommendations to perform (at least) 150 minutes of at least moderate intensity physical activity per week might seem unattainable for and actually discourage currently inactive people. The session will provide (in part) out-of-the-box examples of pragmatic, easily accessible physical activity regimes below 150 minutes and/or with lower than moderate intensity that yield meaningful health benefits.

C-24 Exercise is Medicine® - Colloquium - How to Create a “Fit City”? Strategies Learned from Minneapolis-St. Paul
Thursday, May 31, 2018, 8:00 AM - 8:50 AM
Room: Hyatt-Nicollet Ballroom A

ACSM ranks cities by their fitness levels. Minneapolis-St. Paul is located in the State of Minnesota where frigid temperatures during the winter months could be seen as a barrier to active commuting and outdoor exercise. Yet, Minneapolis-St. Paul ranks first in the country as an ACSM Fit City. This ranking is the result of partnerships that increase access to fun and sustainable means of physical activity. In this interactive session, the Mayor of Minneapolis will talk alongside community leaders who developed an outdoor ski program set near the underserved community of North Minneapolis, and our bike-share program. In this unique interactive session, our former Mayor, RT Rybak, will talk alongside community leaders involved in our bike-share program and an outdoor activity program including the underserved community of North Minneapolis.

Steven D. Stovitz, FACSM. University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

John Munger. The Loppet Foundation, Minneapolis, MN
(No relevant relationships reported)

Bill Dossett. Nice Ride Minnesota, Minneapolis, MN
(No relevant relationships reported)

Mayor Jacob Frey. Minneapolis Mayor, Minneapolis, MN
(No relevant relationships reported)

C-25 Elsworth R. Buskirk Tutorial Lecture - Feeding Soldiers in the Field: Developing Nutritional Strategies to Mitigate Effects of Undereating
Thursday, May 31, 2018, 9:10 AM - 10:00 AM
Room: CC-Ballroom B

Physiological demands on modern Warfighters are often compared to those of elite athletes, but feeding them like elite athletes is a challenge. Dr. Buskirk’s wide ranging research included studies on diet and energy balance effects on body composition and performance, and as a graduate student he assisted Dr. Henry Taylor on nutrition research sponsored by the US Military, including the famous Minnesota Starvation Study. This tutorial will trace that work’s legacy by reviewing unique nutritional recommendations; current strategies of disseminating these recommendations; and timely examples of community applications of these Community Guide recommendations.

Eszter Füzéki. Goethe University, Frankfurt am Main, Germany
(No relevant relationships reported)
C-26  Tutorial Lecture - Get Outside: Understanding the Importance of Outdoor Physical Activity for Children and Youth
Thursday, May 31, 2018, 9:10 AM - 10:00 AM
Room: CC-Auditorium 1

Health benefits of outdoor activity for children and youth are vast and include reduced stress, decreased symptoms of attention deficit disorder, depression, and anxiety disorders, as well as increased feelings of wellbeing and participation in vigorous physical activity. However, the average child spends less than seven minutes a day outside. Many places available for outdoor activity provide an environment conducive to exploration and discovery, and can naturally encourage physical activity. This tutorial will: 1) discuss benefits of being active outside; 2) review current programs that encourage outdoor activity; and 3) explore ways to engage children and youth in outdoor activities.

1178  Rebecca A. Battista, FACSM. Appalachian State University, Boone, NC
(No relevant relationships reported)

1179  Shannon R. Siegel, FACSM. University of San Francisco, San Francisco, CA
(No relevant relationships reported)

C-27  Tutorial Lecture - Hamstring Update: Osseotendinous and Myotendinous Junction Injuries
Thursday, May 31, 2018, 9:10 AM - 10:00 AM
Room: CC-103

Hamstring injuries are one of the most common injuries affecting active individuals. The risk of recurrence within 2 weeks of return to play is high, frequently resulting in prolonged time away from activities. Our session will highlight 1) biology of osseotendinous junction, 2) biology of myotendinous junction, 3) biomechanics of hamstring and clinical evaluation and treatment updates to improve knowledge base of this common injuries.

1180  Kentaro Onishi. University of Pittsburgh Medical Center, Pittsburgh, PA
(No relevant relationships reported)

1181  Fabrisia Ambrosio. University of Pittsburgh, Pittsburgh, PA
(No relevant relationships reported)

1182  James H-C Wang. University of Pittsburgh, Pittsburgh, PA
(No relevant relationships reported)

C-28  Colloquium - Tweet Science
Thursday, May 31, 2018, 9:10 AM - 10:00 AM
Room: CC-Auditorium 2

What is the science of communicating by Twitter? How can science, health, and exercise professionals improve their tweets to optimize messaging? A senior scientist, a young physician, and the Communications and Public Information committee navigate.

1183  Angela D. Smith, FACSM. Nemours/AI duPont Hospital for Children, Bryn Mawr, PA
(No relevant relationships reported)

1184  Alex McDonald. Kaiser-Permanente, Fontana, CA
(No relevant relationships reported)

1185  Eric Rawson, FACSM. Messiah College, Mechanicsburg, PA
(No relevant relationships reported)

C-29  Clinical Workshop-Hands On Demonstration - Practical Sports Ultrasound of the Shoulder
Thursday, May 31, 2018, 9:10 AM - 10:00 AM
Room: CC-200B

This 50 minute workshop covers the topic of common shoulder conditions in athletes, including effective ultrasound anatomy evaluation. We also discuss US-guided procedures, techniques, and how these can improve safety and efficency of treatment. Building on our experiences from last year, we will specifically focus on high yield clinical scenarios commonly seen in sports medicine practice. The first section of the workshop will include a live demonstration. This will be followed by hands practice in small group sessions divided by participant experience level.

1186  Christine Eng. Spaulding Rehabilitation Hospital, Boston, MA
(No relevant relationships reported)

1187  Steven Makovitch. Spaulding Rehabilitation Hospital, Boston
(No relevant relationships reported)

C-30  Exercise is Medicine® - Tutorial Lecture - Bridging the Great Divide: Using Guidelines to Link Health Care and Communities
Thursday, May 31, 2018, 9:10 AM - 10:00 AM
Room: Hyatt-Nicollet Ballroom D

Linking health care and communities is an effective approach to prevent and control chronic diseases; however, challenges to forming these linkages exist. Utilizing clinical and community guidelines is one strategy to help create such linkages. Several current physical activity promotion initiatives can and do utilize clinical and community guidelines to facilitate these linkages. The purpose of this tutorial is to describe these guidelines, as well as highlight examples of initiatives using such guidelines to facilitate community-clinical linkages from the federal (e.g., Million Hearts® 2022 and the National Diabetes Prevention Program) and the private sector.

1188  John D. Omura. Centers for Disease Control and Prevention, Atlanta, GA
(No relevant relationships reported)

1189  Elizabeth A. Joy, FACSM. Intermountain Healthcare, Salt Lake City, UT
(No relevant relationships reported)

C-31  Exercise is Medicine® - Tutorial Lecture - Exercise is Medicine! Why are People Not Buying into the Prescription? Making Lifestyle PA a Reality in Peoples’ Daily Lives
Thursday, May 31, 2018, 9:10 AM - 10:00 AM
Room: Hyatt-Nicollet Ballroom A

Exercise is Medicine, now a global health initiative has irrefutably substantiated the importance of exercise as a means of treating and preventing chronic disease while improving the quality of life. Unfortunately, too many people fail to meet the recommended physical activity (PA) guidelines. A current research overview will highlight that although the benefits of exercise are appreciated, most adults prefer day-to-day PA over traditional exercise. With the goal of providing an addition for EIM, evidence-based practices along with creative and innovative intervention strategies behind MyHouse Activity and MyWork Activity will be described, discussed, and encouraged.

1190  Felicia Cavallini. Limestone College, Gaffney, SC
(No relevant relationships reported)

1191  Angela Kolen. St. Francis Xavier University, Antigonish, NS, Canada
(No relevant relationships reported)
THURSDAY, MAY 31, 2018

P84 Final Program

C-32 Exercise is Medicine® - Tutorial Lecture - Physical Activity Guidelines: Minutes, Steps and Bouts?
Thursday, May 31, 2018, 9:10 AM - 10:00 AM
Room: Hyatt-Greenway Ballroom CC

1192 John M. Jakicic, FACSM. University of Pittsburgh, Pittsburgh, PA
(No relevant relationships reported)

C-33 Free Communication/Poster - Acute Exercise - Cardiorespiratory Physiology
Thursday, May 31, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

1193 Board #1 8:00 AM - 9:30 AM
Aerobic Exercise Reduces The Pro-thrombotic Potential Of Circulating Microparticles in Healthy Individuals
Patrick J. Highton¹, David J. Stensel¹, Fernanda R. Golzi², Naomi Martin³, Nicolette C. Bishop⁴. "Loughborough University, Leicester, United Kingdom. ¹De Montfort University, Leicester, United Kingdom
Email: P.Highton@lboro.ac.uk
(No relevant relationships reported)

1194 Board #2 8:00 AM - 9:30 AM
FURIN Variant Associations with Postexercise Hypotension are Ethnicity and Intensity Dependent
¹Hartford Hospital, Hartford, CT. ²Yale University, New Haven, CT
³Rio de Janeiro State University, Rio de Janeiro, Brazil. (Sponsor: Linda S. Pescatello, FACSM)
(No relevant relationships reported)

1195 Board #3 8:00 AM - 9:30 AM
Repeatability of the Neurocardiovascular Responses to Isometric Handgrip in Young Adults
Gabrielle A. Dillon, Paul J. Fadel, FACSM, Lacy M. Alexander, FACSM, Jody L. Greaney, ¹Pennsylvania State University, University Park, PA. ²University of Texas Arlington, Arlington, TX
(No relevant relationships reported)

1196 Board #4 8:00 AM - 9:30 AM
Ambulatory Blood Pressure Lower Following Aquatic Exercise than Land Treadmill Exercise
Dustin P. Joubert, Caitlin Hogan, Jessica Barnes, Taylor Todd, Joshua Warner, Stephen F. Austin State University, Nacogdoches, TX
(Sponsor: Stephen F Crouse, FACSM)
Email: jouberdt@sfasu.edu
(No relevant relationships reported)

1197 Board #5 8:00 AM - 9:30 AM
Effects of Different Exercise Modalities on Postprandial Hyperglycemia in Overweight and Obese Adults
Craig W. Berry, Conlan J. Varty, Kristina B. Arslain, Kevin D. Ballard, Miami University, Oxford, OH. (Sponsor: Helaine Alessio, FACSM)
Email: berrycw@miamioh.edu
(No relevant relationships reported)

ACSM 65th Annual Meeting

1198 Board #6 8:00 AM - 9:30 AM
Autonomic Modulation After Acute Resistance Exercise in Resistance-Trained Individuals
Alexa DeBord, Alaina Glasgow, Kathryn Geither, Leslie Sensibello, Jason C. Parks, Erica M. Marshall, Yu Lun Tai, J. Derek Kingsley, FACSM. Kent State University, Kent, OH
Email: adebord@kent.edu
(No relevant relationships reported)

1199 Board #7 8:00 AM - 9:30 AM
Daily exercise Compared To Exercise On Alternating Days On Post-exercise Hypotension In prehypertensive Men
Zachary Zeigler, Conner Drees, Tabor Morse, Rebecca Lentz, Exekial Morse, Lydia Duranl. Grand Canyon University, mesa, AZ
Email: zachary.zeigler@gcu.edu
(No relevant relationships reported)

1200 Board #8 8:00 AM - 9:30 AM
Upper and Lower-body Resistance Exercise With and Without Blood Flow Restriction on Pulse Wave Reflection
Yu Lun Tai, Erica M. Marshall, Alaina Glasgow, Jason C. Parks, Kathryn Geither, Leslie Sensibello, Ramon Oliveira, J. Derek Kingsley, FACSM. Kent State University, Kent, OH
Email: yta1@kent.edu
(No relevant relationships reported)

1201 Board #9 8:00 AM - 9:30 AM
Blood Pressure Reactivity During Short-term Water Restriction in Young Adults
Joseph C. Watso, Matthew C. Babcock, Austin T. Robinson, Kamila U. Migdal, Sean D. Stocker, Megan M. Wenner, William B. Farquhar, FACSM. ¹University of Delaware, Newark, DE
¹University of Pittsburgh, Pittsburgh, PA. (Sponsor: William B Farquhar, FACSM)
(No relevant relationships reported)

1202 Board #10 8:00 AM - 9:30 AM
Brachial Artery FMD Responses To Steady-State Moderate-Intensity And High-Intensity Interval Exercise In Mid-Spectrum Chronic Kidney Disease
Jeffrey S. Forrse, Matthew Peterson, Zacharias Papadakis, Fernando Gutierrez, Nicholas Schwedock, Burritt W. Hess Jr, Jackson O. Griggs, D. Crawford Allison, Ron L. Wilson, Peter W. Grandjean, FACSM. ¹Baylor University, Waco, TX. ²Family Health Center, Waco, TX. ³Baylor Scott & White Health, Waco, TX
(Sponsor: Dr. Peter W. Grandjean, FACSM)
Email: forssje@tfasu.edu
(No relevant relationships reported)

1203 Board #11 8:00 AM - 9:30 AM
Pulmonary Responses During Exercise On Dryland Vs. Immersive Ergocycle
Mauricio Garzon, Mathieu Gayda, Anl Nigam, Alain-Steve Comtois², Martin Juneau². ¹University of Quebec in Montreal, Cardiovascular Prevention and Rehabilitation Centre (EPIC), Montreal, QC, Canada. ²University of Quebec in Montreal, Montreal, QC, Canada
Email: mauricioogrz@gmail.com
(No relevant relationships reported)

1204 Board #12 8:00 AM - 9:30 AM
Blood Pressure Responses to Intermittent Physical Activity in Elementary School-Age Children
Emma Weston, Tiwa Ajibewa, Matt Nagy, Molly O’Sullivan, Shannon Block, Rebecca Hasson, FACSM. University of Michigan, Ann Arbor, MI
Email: emmajw@umich.edu
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Time</th>
<th>Abstract Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1205</td>
<td>Board #13</td>
<td>8:00 AM - 9:30 AM</td>
<td>Comparing the Changes in Cardiovascular Function After Acute Exposure to Tai Chi or Walking</td>
<td>Stephen A. Maris, Christa R. Winter, Vincent J. Paolone, FACSM, Samuel A.E. Headley, FACSM. Springfield College, Springfield, MA. (Sponsor: Samuel Headley, FACSM) Email: <a href="mailto:stephen.a.maris@gmail.com">stephen.a.maris@gmail.com</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1206</td>
<td>Board #14</td>
<td>8:00 AM - 9:30 AM</td>
<td>Metabolic Responses to a Battling Rope Protocol Performed in the Seated or Stance Positions</td>
<td>Dominishia Felder, Hannah Mitchell, 77030, Kasey Hogan, Reka Kovacs, Wayne Brewer, 77030. Texas Woman's University, Houston, TX. (Sponsor: Alexs Ortiz PT, PhD, FACSM, FACSM) Email: <a href="mailto:dfelder@twu.edu">dfelder@twu.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1207</td>
<td>Board #15</td>
<td>8:00 AM - 9:30 AM</td>
<td>Longer vs. Shorter Intervals Elicit Similar Cardiovascular But Significantly Different Metabolic Responses During Interval Cycling</td>
<td>Andrew Scott, Christopher Bennett, Jasmine Lasslett, Daniel Reeves. University of Portsmouth, Portsmouth, United Kingdom Email: <a href="mailto:andrew.scott@port.ac.uk">andrew.scott@port.ac.uk</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1208</td>
<td>Board #16</td>
<td>8:00 AM - 9:30 AM</td>
<td>Oxygenation Characteristics during Knee Extension Exercise in Severe and Extreme Domain</td>
<td>Andrew M. Alexander, Kaylin D. Didier, Shane M. Hammer, Thomas J. Barstow, 66502, FACSM. Kansas State University. Manhattan, KS. (Sponsor: Thomas J Barstow, FACSM) Email: (No relevant relationships reported)</td>
</tr>
<tr>
<td>1209</td>
<td>Board #17</td>
<td>8:00 AM - 9:30 AM</td>
<td>Perceptual And Cardiovascular Responses To Very Low Load Exercise With And Without Blood Flow Restriction</td>
<td>Zachary W. Bell, Samuel L. Backner, Matthew B. Jessee, J Grant Mouser, Kevin T. Mattocks, Scott J. Dankel, Takashi Abe, Jeremy P. Loenneke. The University of Mississippi, University, MS Email: (No relevant relationships reported)</td>
</tr>
<tr>
<td>1210</td>
<td>Board #18</td>
<td>8:00 AM - 9:30 AM</td>
<td>Use of Compression Socks During a Marathon Does Not Mitigate Exercise-Associated Muscle Damage</td>
<td>Amanda L. Zaleski, Linda S. Pescatello, FACSM, Gregory Panza, Kevin Ballard, William Adams, Yuri Hosokawa, Paul D. Thompson, FACSM, Beth A. Taylor, FACSM. 1 Hartford Hospital and University of Connecticut, Hartford, CT. 2 University of Connecticut, Storrs, CT. 3 Miami University, Oxford, OH. 4 University of North Carolina Greensboro, Greensboro, NC. 5 Hartford Hospital, Hartford, CT. (Sponsor: Beth Taylor, FACSM) Email: <a href="mailto:amanda.zaleski@hhchealth.org">amanda.zaleski@hhchealth.org</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1211</td>
<td>Board #19</td>
<td>8:00 AM - 9:30 AM</td>
<td>Influence of Acute Exercise and Insulin on the Akt/eNOS Pathway in Rodent Aortic Smooth Muscle.</td>
<td>Lea Haverbeck, Gavin Connolly, Brendan J. Farley, Roop C. Jayaraman, Naveen Sharma, Rachael K. Nelson. Central Michigan University, Mount Pleasant, MI Email: (No relevant relationships reported)</td>
</tr>
<tr>
<td>1212</td>
<td>Board #20</td>
<td>8:00 AM - 9:30 AM</td>
<td>Effect of Aerobic Exercise on Artery Stiffness and Cerebrovascular Pulsatility in Hypertensive and Non-Hypertensive Adults</td>
<td>Wesley K. Lefferts, Jacob D. DeBois, Girolamo L. Mammolito, Elizabeth A. Dressel, Candace N. Receno, Kevin S. Heffeman. Syracuse University, Syracuse, NY. (Sponsor: Bo Fernhall, FACSM) Email: <a href="mailto:wleffert@syr.edu">wleffert@syr.edu</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>
### P86 Final Program

<table>
<thead>
<tr>
<th>Board # &amp; Title</th>
<th>Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1220</td>
<td>Graduated Compression Socks Does Not Improve Cardio-respiratory Responses To Maximal Exercise</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1221</td>
<td>Board #29 Easy Breather Exercise Table: A Feasibility Evaluation of a Medical Device to Facilitate Gravity Powered Ventilation</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1222</td>
<td>Board #30 Three Weeks of Respiratory Muscle Endurance Training Decrease the Cost of Walking In Obese Adolescents</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1223</td>
<td>Board #31 Individual Variability in the Leg Blood Flow Response to Expiratory and Inspiratory Resistive Loadings</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1224</td>
<td>Board #32 Hypercapnic and Hypoxic Ventilatory Responses are Non-Normally Distributed: A Retrospective Analysis</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1225</td>
<td>Board #33 Comparing Ventilatory Mechanics Between Face Mask and Mouthpiece During High-Intensity Exercise</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1226</td>
<td>Board #34 Cycling Time Trial Performance with Addition of External Dead Space</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
</tbody>
</table>

### ACSM 65th Annual Meeting

<table>
<thead>
<tr>
<th>Board # &amp; Title</th>
<th>Time</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1227</td>
<td>Characterizing The Mechanics Of Breathing In Swimmers</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1228</td>
<td>Effect of Growth and Changes in Body Composition on Cycling Efficiency in Normal Weight and Obese Children</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1229</td>
<td>Blunted Sympathetic Vasomotor Outflow To Inspiratory Resistive Breathing During Exercise In Women Compared to Men</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1230</td>
<td>Spirometry Values In Recreational Runners Are Acutely Lower After Prolonged Exercise</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1231</td>
<td>Exercise-Induced Diaphragmatic Fatigue Is Determined By The Work Of Breathing In Healthy Men</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1232</td>
<td>Prevalence of Exercise Induced Bronchoconstriction in Recreational Adult Hockey Players as determined by Sport Specific Field Exercise Challenge Test</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
<tr>
<td>1233</td>
<td>Improving The Accuracy Of A Turbine Spirometer At Low Flow Rates</td>
<td>8:00 AM - 9:30 AM</td>
</tr>
</tbody>
</table>
American College of Sports Medicine

Board #42 8:00 AM - 9:30 AM
Baseline Ventilatory Thresholds Determine Cardiorespiratory Adaptations to High-Intensity Interval Training in Obese Participants
Juan F. Ortega, Maria del Valle Guio-de-Prada, Miguel Ramirez-Jimenez, Félix Morales-Palomino, Jesús G. Pallarés, Ricardo Mora-Rodríguez. University of Castilla-La Mancha, Toledo, Spain Email: juanfernando.ortega@uclm.es
(No relevant relationships reported)

Board #43 8:00 AM - 9:30 AM
The Impact Of An Eight Week Apnea Training Program On Spleen Volume And Hematological Values
Jamie Bouten, Kevin Caen, Jan Staatenmas, Filip Lefereve, Wim Derave, Leen Looters, Peter Van Eezeo, Jan G. Bourgois, Jan Boone. Ghent University, Gent, Belgium Email: jamie.bouten@ugent.be
(No relevant relationships reported)

Board #44 8:00 AM - 9:30 AM
Sex Differences in Diaphragmatic Fatigue: Implications for Performance
Joseph F. Welch, Bruno Archiza, Jordan A. Guenette, Christopher R. West, A. William Sheel, FACSM. University of British Columbia, Vancouver, BC, Canada. (Sponsor: William Sheel, FACSM)
(No relevant relationships reported)

Free Communication/Poster - Blood Flow Restriction

Thursday, May 31, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

Board #45 8:00 AM - 9:30 AM
Corticocromotor Function During Blood Flow Restricted Arm Crank Ergometry
Miika L. Frechette, Ann-Maree Vallence, Brendan R. Scott, Summer B. Cook, FACSM. 1University of New Hampshire, Durham, NH. 2Murdoch University, Perth, Australia. (Sponsor: Summer B. Cook, FACSM)
Email: mlf2003@wildcats.unh.edu
(No relevant relationships reported)

Board #46 8:00 AM - 9:30 AM
Acute Muscle Fatigue In Men And Women Following Upper-limb Low-intensity Blood-flow Restricted Exercise
Afonso Borges, Carolina Teodóso, Pedro Matos, Pedro Pezarat Correia, Pedro Mil-Homens, Pedro Fatela, Goncalo V. Mendonca, 1Faculdade de Motricidade Humana, Lisboa, Portugal. 2Universidade Europeia, Lisboa, Portugal. (Sponsor: Bo Fernhall, FACSM)
(No relevant relationships reported)

Board #47 8:00 AM - 9:30 AM
Postactivation Potentiation during Blood Flow Restricted Complex Training
Christopher J. Cleary, Dylan A. DiScenza, Summer B. Cook, FACSM. University of New Hampshire, Durham, NH. (Sponsor: Summer B. Cook, FACSM)
Email: summer.cook@unh.edu
(No relevant relationships reported)

Board #48 8:00 AM - 9:30 AM
Muscular Responses To Very Low Load Resistance Exercise With Blood Flow restriction In The Upper Body
Samuel L. Buckner, Matthew B. Jesse, Scott J. Dankel, J Grant Mouser, Kevin T. Mattokes, Zachary W. Bell, Takashi Abe, Jeremy P. Loenneke. The University of Mississippi, University, MS
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board Number</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
<th>Email Addresses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1248</td>
<td>9:00 AM - 10:30 AM</td>
<td>Evaluation Of In-School Physical Activity During Recess, P.E., And Academically-Related Movement Activities</td>
<td>Robert Booker, Riley Galloway, Trisha Doering, <em>Missouri State University, Springfield, MO.</em> (Sponsor: Barbara A Bushman, FACSM)</td>
<td><a href="mailto:rooker1@live.missouristate.edu">rooker1@live.missouristate.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1249</td>
<td>9:00 AM - 10:30 AM</td>
<td>Accuracy of Wrist-Worn Activity Monitors during Wheelchair Use</td>
<td>John Smith, <em>Texas A&amp;M University-San Antonio, San Antonio, TX</em></td>
<td><a href="mailto:johnsmith@tamu.edu">johnsmith@tamu.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1250</td>
<td>9:00 AM - 10:30 AM</td>
<td>Assessment of Physical Activity &amp; Sedentary Behavior in Individuals with Chronic Low Back Pain</td>
<td>Jeni E. Lansing, Maria Perez, Kathryn J. Southard, Laura D. Ellingson, <em>Iowa State University, Ames, IA</em></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1251</td>
<td>9:00 AM - 10:30 AM</td>
<td>Development of Step Count Cut-Points for School Day Sedentary Behavior</td>
<td>Timothy A. Brusseau, Ryan D. Burns, <em>University of Utah, Salt Lake City, UT</em></td>
<td><a href="mailto:Tim.brusseau@utah.edu">Tim.brusseau@utah.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1252</td>
<td>9:00 AM - 10:30 AM</td>
<td>Comparing Two Generations of ActiGraph Accelerometers: Coronary Artery Risk Development in Young Adults (CARDIA)</td>
<td>Kara M. Whitaker,1 Kelley Pettee Gabriel, FACSM, David R. Jacobs, Jr.,1 Stephen Sidney,1 Barbara Sternfeld, FACSM,2 1<em>University of Iowa, Iowa City, IA.</em> 2<em>University of Texas Health Science Center at Houston, Austin, TX.</em></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1253</td>
<td>9:00 AM - 10:30 AM</td>
<td>Statistical Assessment of Yoga Posture Acquisition using a 3D Room Sensor</td>
<td>Paula R. Pullen,1 Hannah Crumley,1 Samuel M. Fouche,1 Molly Martin,1 Ryan Martucci,1 William Seffens,2 1<em>University of North GA, Dalton, GA.</em> 2<em>University of Georgia,</em></td>
<td><a href="mailto:psseffens@ung.edu">psseffens@ung.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1254</td>
<td>9:00 AM - 10:30 AM</td>
<td>Muscular Strength Attenuates Adverse Effects Of Overweight On Cardiometabolic Risk Factors But Not In Its Counterparts With Higher Fat Among College Students</td>
<td>Robinson Ramirez-Vélez,1 Jorge E. Correa-Bautista, Antonio Garcia-Hermoso,2 Alejandra Torrecilla-Sanders,1 Daniel H. Prieto-Benavides,1 Carolina Sandoval-Cuellar,1 Katherine Gonzalez-Ruiz,1 Elisa Andrea Cobo-Mejía,2 Rocio del Pilar Castellanos-Vega,2 1<em>Universidad de Santiago de Chile, Chile.</em> 2<em>Universidad de Boyacá, Tunja, Colombia.</em></td>
<td><a href="mailto:robin1640@hotmail.com">robin1640@hotmail.com</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1255</td>
<td>9:00 AM - 10:30 AM</td>
<td>Accelerometer Positioning Issues and Implications for Contemporary Analysis Methods</td>
<td>Kristen M. Metcalff, Jacob E. Simmering, Steven M. Levy, Kathleen F. Janz, FACSM, <em>The University of Iowa, Iowa City, IA</em></td>
<td><a href="mailto:kristen-metcalff@uiowa.edu">kristen-metcalff@uiowa.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1256</td>
<td>9:00 AM - 10:30 AM</td>
<td>Evaluation Of Physical Activity And Sedentary Time In Women Of Varying BMI Using Accelerometers And IPAQ</td>
<td>Samantha Banister, Elizabeth James, Adam Sparks, Travis Gladney, Edna Hamilton, Sankeda Dowdell, Kate Early, Clayton Nicks, Brian Tyo, <em>Columbus State University, Columbus, GA</em></td>
<td><a href="mailto:banister_samantha@columbusstate.edu">banister_samantha@columbusstate.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1257</td>
<td>9:00 AM - 10:30 AM</td>
<td>Comparing Hip and Wrist Accelerometer Estimates of Moderate-Vigorous Physical Activity Across Activity Domains</td>
<td>Mami M. Takeda, Juliana Martinez, Sarah K. Keadle, <em>California Polytechnic State University-San Luis Obispo, San Luis Obispo, CA.</em> (Sponsor: Todd Alan Hagobian, FACSM)</td>
<td><a href="mailto:mmtakeda@calpoly.edu">mmtakeda@calpoly.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1258</td>
<td>9:00 AM - 10:30 AM</td>
<td>Impact Of Placement Of Wrist-worn Activity Monitors During The Lab And Free-living Settings</td>
<td>Minsoo Kang, FACSM, Nan Hee Lee, Hyun Chul Jung, Soeun Jeon, Sukho Lee, The University of Mississippi, University, MS. 2<em>Georgia Institute of Technology, Atlanta, GA.</em> 3<em>University of Louisiana at Monroe, Monroe, LA.</em> 4<em>Texas A&amp;M University-San Antonio, San Antonio, TX.</em></td>
<td><a href="mailto:kang@olemiss.ms">kang@olemiss.ms</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1259</td>
<td>9:00 AM - 10:30 AM</td>
<td>Pregnancy Walking Cadence Does Not Vary By Trimester</td>
<td>Mallory R. Marshall,1 Alexander H.K. Montoye,2 Ashley J. George,1 1<em>Samford University, Birmingham, AL.</em> 2<em>Alma College, Alma, MI</em></td>
<td><a href="mailto:mmmarshall@samford.edu">mmmarshall@samford.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1260</td>
<td>9:00 AM - 10:30 AM</td>
<td>Application of Geographic Information Systems (GIS) Methods in Walkability Assessment</td>
<td>Hai Yan, Weimo Zhu, FACSM, <em>University of Illinois at Urbana Champaign, Urbana, IL.</em> (Sponsor: Weimo Zhu, FACSM)</td>
<td><a href="mailto:haiyan2@illinois.edu">haiyan2@illinois.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1261</td>
<td>9:00 AM - 10:30 AM</td>
<td>Moderate And Vigorous Intensity Walking Cadence (Steps/min) Thresholds In 41-60 Year Old Adults</td>
<td>Catrine Tudor-Locke, FACSM,1 Elofy J. Aguilar,2 Scott W. Ducharme,1 Christopher C. Moore,1 John M. Schuna, Jr.,1 Tiago V. Barreira,1 Stuart R. Chipkin,1 John Staedenmayer,2 1<em>University of Massachusetts Amherst, Amherst, MA.</em> 2<em>Oregon State University, Corvallis, OR.</em></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1262</td>
<td>9:00 AM - 10:30 AM</td>
<td>Comparison of Physical Activity Guideline Compliance Estimates Among Active Youth Using Different Step-Based Definitions</td>
<td>John M. Schuna, Jr., Yu Meng, Melinda M. Manore, FACSM, Siew Sun Wong, <em>Oregon State University, Corvallis, OR.</em></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>
1263 Board #71 9:00 AM - 10:30 AM
Physical Activity Category Classification Using The Actigraph G9X In Youth
Samuel R. LaMunion, Paul R. Hibbing, Andrew S. Kaplan, Scott E. Crouter, FACSM. University of Tennessee, Knoxville, TN
Email: slamanio@vols.utk.edu
(No relevant relationships reported)

1264 Board #72 9:00 AM - 10:30 AM
Validation of Automatic Activity Detection on Wearable Activity Trackers
Diana Dorn, Ronald Gangnon, Jessica Gorzelitz, David Bell, Kelli Koltyn, FACSM, Lisa Cadmus-Bertram. University of Wisconsin Madison, Madison, WI. (Sponsor: David Cook, FACSM)
(No relevant relationships reported)

1265 Board #73 9:00 AM - 10:30 AM
Dominant Vs Non-dominant Wrist: A Comparison Of Steps Per Day
Susan Park, University of Tennessee, Knoxville, TN. (Sponsor: David R Bassett Jr. PhD, FACSM)
Email: spark48@vols.utk.edu
(No relevant relationships reported)

1266 Board #74 9:00 AM - 10:30 AM
Revising Free Text Inputs In Physical Activity Self-report Methods: Lessons From The ACT24
Robert W. Korycinski1, Brian Barrer2, Kelley Petee Gabriel, FACSM1, Heather R. Bowles1. 1National Cancer Institute, Bethesda, MD. 2Information Management Services, Inc., Rockville, MD.
1University of Texas Health Science Center at Houston, Austin, TX
(No relevant relationships reported)

1267 Board #75 9:00 AM - 10:30 AM
Diurnal Patterns of Physical Activity Illustrate Important Time-of-Day Differences Between Younger and Older Adults.
Nicolas D. Knuth1, Jennifer A. Schrack1, Stephanie A. Kliethermes2,3, Jennifer A. Schrack1, Stephanie A. Kliethermes2,3.
1University of Florida, Gainesville, FL. 2Northwestern University, Chicago, IL. 3University of California San Diego, La Jolla, CA.
(No relevant relationships reported)

1268 Board #76 9:00 AM - 10:30 AM
Organized Physical Activity Participation From Pre-puberty To Adulthood: A Longitudinal Study In U.S. Females
Jodi N. Dowthwaite1, Stephanie A. Kliethermes1, Jill A. Kanaley, FACSM1, Tamarash A. Sperella2. 1SUNY Upstate Medical University; Binghamton University, Syracuse, NY. 2University of Wisconsin, Madison, Madison, WI. 3University of Missouri-Columbia, Columbia, MO. (Sponsor: Jill Kanaley, FACSM)
Email: dowthwaite@upstate.edu
(No relevant relationships reported)

1269 Board #77 9:00 AM - 10:30 AM
Predicting Resistance Training Exercise Repetitions Using A Wrist-worn Activity Monitor
Scott A. Conger1, Jun Guo2, Kenzie Mercier1, Cameron D. Needham1, Clare Zamzow1, Christopher Mecham1, Hao Chen1, David R. Bassett, Jr., FACSM1. 1Boise State University, Boise, ID. 2University of Tennessee, Knoxville, TN
Email: scottconger@boisestate.edu
(No relevant relationships reported)

1270 Board #78 9:00 AM - 10:30 AM
Modifying Accelerometer Cut-points Affects Criterion Validity in Free-living Youth and Adults
Paul R. Hibbing, David R. Bassett, FACSM, Scott E. Crouter, FACSM. University of Tennessee, Knoxville, TN
Email: phibbing@vols.utk.edu
(No relevant relationships reported)

1271 Board #79 9:00 AM - 10:30 AM
Harmonizing Physical Activity Data across Cohorts in the Lifetime Risk Pooling Project
Amanda E. Paluch1, John T. Wilkins1, Kelley Petee Gabriel, FACSM1, Victor W. Zhong1, Donald M. Lloyd-Jones2,3, Mercedes R. Carnethon1. 1Northwestern University, Chicago, IL. 2University of Texas Health Science Center, Houston, TX
Email: amanda.paluch@northwestern.edu
(No relevant relationships reported)

1272 Board #80 9:00 AM - 10:30 AM
Automated Detection of Wheelchair Propulsion Using a Single Wrist Accelerometer
Matthew N. Ahmadi1, Kati Karinaharji, Sijan Gomersall1, Kelly Clancy2, Sean Tweed3, Stewart G. Trost, FACSM1. 1Queensland University of Technology, Brisbane, Australia. 2University of Queensland, Brisbane, Australia. 3Griffith University, Gold Coast, Australia. (Sponsor: Stewart G. Trost, FACSM)
Email: matthew.ahmadi@qut.edu.au
(No relevant relationships reported)

1273 Board #81 9:00 AM - 10:30 AM
Validity And Reliability Of The Past Questionnaire Among Women
Brian Tyo, Kate Early, Clayton Nicks, Travis Gladney, Edna Hamilton, Elizabeth James, Adam Sparks. Columbus State University, Columbus, GA
Email: tyo_brian@columbusstate.edu
(No relevant relationships reported)

1274 Board #82 9:00 AM - 10:30 AM
Comparing Accelerometry Methods in an Older Adult Physical Activity Intervention and Associations with Health Outcomes
Katie Thrailils, Suneea Godbole, Todd Manini, FACSM, Eileen Johnson, Jacqueline Kerr. “San Diego State University/University California San Diego, San Diego, CA. 1University California San Diego, San Diego, CA. 1University of Florida, Gainesville, FL. 2University California Berkeley, Berkeley, CA
(No relevant relationships reported)

1275 Board #83 9:00 AM - 10:30 AM
Accuracy And Reliability Of A Consumer-grade Activity Tracker Among Older People: A Pilot Study
Catherine Patrick, Michael A. Smith, Antonio Harris, Melissa Powers. University of Central Oklahoma, Edmond, OK
Email: absolutelycleanok@gmail.com
(No relevant relationships reported)

1276 Board #84 9:00 AM - 10:30 AM
Accuracy Of Fitbit Surge and Smartphone Apps at Measuring Cycling Distance and Speed
Jose L. Ganez, Ivan A. Figueroa, Merrill D. Funk. University of Texas Rio Grande Valley, Brownsville, TX
(No relevant relationships reported)

1277 Board #85 9:00 AM - 10:30 AM
Sponsor: Jami Everett. University of Texas Rio Grande Valley, Brownsville, TX
(No relevant relationships reported)

1278 Board #86 9:00 AM - 10:30 AM
Smartphone Carrying Location and Accuracy of Popular Pedometer Smartphone Apps While Jogging
Merrill D. Funk, Murat Karabulut. Pedometer Smartphone Apps While Jogging
Email: merrillfunk@hotmail.com
(No relevant relationships reported)

1279 Board #87 9:00 AM - 10:30 AM
Validity Of Physical Activity Measure for Health Outcomes
Matthew N. Ahmadi, Kati Karinaharji, Sijan Gomersall1, Kelly Clancy2, Sean Tweed3, Stewart G. Trost, FACSM1. 1Queensland University of Technology, Brisbane, Australia. 2University of Queensland, Brisbane, Australia. 3Griffith University, Gold Coast, Australia. (Sponsor: Stewart G. Trost, FACSM)
Email: matthew.ahmadi@qut.edu.au
(No relevant relationships reported)
Free Communication/Poster - Physical Activity and Health in Older Adults

**Board #86**
**9:00 AM - 10:30 AM**
**Predictors of Central Blood Pressure in Older Adults**
Emma Albin, Nathan Meier, Duck-chul Lee, FACSM, Iowa State University, Ames, IA. (Sponsor: Duck-chul Lee, FACSM)
Email: ealbin@iastate.edu
(No relevant relationships reported)

**Board #87**
**9:00 AM - 10:30 AM**
**Physical Activity Patterns Among Older Central Pennsylvania Cancer Survivors: A Comparison With BRFSS National Data**
Wayne Foo, Kathryn Schnitz, FACSM, Penn State Cancer Institute, Hershey, PA. (Sponsor: Kathryn Schnitz, FACSM)
Email: wfoo@pshs.psu.edu
(No relevant relationships reported)

**Board #88**
**9:00 AM - 10:30 AM**
**Predictors of Diagnostic Variables of Sarcopenia in Older Adults**
Nathan Meier, Duck-Chul Lee, FACSM, Iowa State University, Ames, IA. (Sponsor: Duck-Chul Lee, FACSM)
Email: nmeier@iastate.edu
(No relevant relationships reported)

**Board #89**
**9:00 AM - 10:30 AM**
**The Difference of Body Composition According to Smart Phone Proficiency in Korean Elderly**
Joon-Sik Kim1, Jung-Woon Kim1, Sowon Hahn1, Yeon-Soo Kim2. 1Health and Exercise Science Laboratory, Institute of Sports Science, Seoul National University, Seoul, Korea, Republic of; 2Department of Psychology, Seoul National University, Seoul, Korea, Republic of
(No relevant relationships reported)

**Board #90**
**9:00 AM - 10:30 AM**
**Associations of Cardiorespiratory Fitness and Percent Body Fat with Health-Related Quality of Life in Elderly**
Heather Danzer, Nathan Meier, Duck-chul Lee, FACSM, Iowa State University, Ames, IA. (Sponsor: Duck-chul Lee, FACSM)
Email: hdanzer@iastate.edu
(No relevant relationships reported)

**Board #91**
**9:00 AM - 10:30 AM**
**Preschool Breakfast Menus That Meet Dietary Guidelines: Comparing What Is Served And Consumed By Children**
Stacie M. Kirk, Erik P. Kirk, FACSM, Southern Illinois University Edwardsville, Edwardsville, IL
Email: skirk@siue.edu
(No relevant relationships reported)
American College of Sports Medicine

1293 Board #101 8:00 AM - 9:30 AM Adequacy Of The Nutritional Intake In Volleyball Male College Athletes After Receiving Nutritional Counseling Sayra Nataly Muñoz-Rodriguez, Alejandro Gaytan-Gonzalez, Sergio Alejandro Copado-Aguila, Roberto Gabriel Gonzalez-Mendoza, Clara Yunuen Rodriguez-Ramirez, Juan R. Lopez-Taylor. Universidad de Guadalajara, Guadalajara, Mexico (No relevant relationships reported)

1294 Board #102 8:00 AM - 9:30 AM Comparison Of Blood Markers In College Athletes With Different Protein Intake Brenda Guadalupe Sanchez-Conchas, Alejandro Gaytan-Gonzalez, Roberto Gabriel Gonzalez-Mendoza, Sergio Alejandro Copado-Aguila, Marisol Villegas-Balcazar, Francisco Torres-Naranjo, Juan R. Lopez-Taylor. Universidad de Guadalajara, Guadalajara, Mexico (No relevant relationships reported)

1295 Board #103 8:00 AM - 9:30 AM Blood Markers In College Athletes According To Their Vegetable/Animal Protein Intake Rate Alejandra Karey Corona-Martinez, Alejandro Gaytan-Gonzalez, Roberto Gabriel Gonzalez-Mendoza, Sergio Alejandro Copado-Aguila, Marisol Villegas-Balcazar, Francisco Torres-Naranjo, Juan R. Lopez-Taylor. Universidad de Guadalajara, Guadalajara, Mexico (No relevant relationships reported)

1296 Board #104 8:00 AM - 9:30 AM Carbohydrate Intake in Mexican Soccer Players in Different Training Sessions Samuel A. Garcia Castrejon, Maria de Lourdes Mayol Soto, Martha Smith Pedraza, Adriana De la Parra-Solomon, Arturo Becerra Gamboa. Gatorade Sports Science Institute México, México City, Mexico Email: salgac81@yahoo.com.mx Reported Relationships: S.A. Garcia Castrejon: Contracted Research - Including Principle Investigator; This study was funded by the Gatorade Sports Science Institute. The views expressed in this abstract are those of the authors and do not necessarily reflect the position or policy of PepsiCo, Inc.

1297 Board #105 8:00 AM - 9:30 AM Omega-3 Index in Division I Collegiate American Football Athletes Andrew T. Askow1, Anthony J. Anzalone1, Jason D. Stone1, Will Jennings1, Aaron Carbuhn1, Ryan Pinson1, Amy Bragg1, K. Michelle Kirk1, David A. Gable1, Stephen F. Crouse1, FACSFM, William S. Harris1, Jonathan M. Oliver1,1 Texas Christian University, Fort Worth, TX. 1University of Kansas, Lawrence, KS. 1University of Wyoming, Laramie, WY. 1University of California, Santa Barbara, CA. 1Texas AM University, College Station, TX. 1OmegaQuant, LLC, Sioux Falls, SD. (Sponsor: Stephen F. Crouse, FACSFM) (No relevant relationships reported)

1298 Board #106 8:00 AM - 9:30 AM Association between Leptin and Measures of Bone Density and Lean Mass in Long Distance Runners Alexis Ortiz, FACSFM, Dina Acosta, Jennu McM anus, Dai Cheng, Rita Dellostrito, Anita Oliver, Wendy Patterson. Texas Woman’s University, Houston, TX Email: aortiz10@twu.edu (No relevant relationships reported)

1299 Board #107 8:00 AM - 9:30 AM Effects Of 6-week Resistance-type Exercise Training On Serum 25-hydroxyvitamin D Concentrations In Young Men Zhen-Bo Cao1, Xiaokai Ma1, Lin Zhang1, Xiaomin Sun1, Zheng Zhu1. ‘Shanghai University of Sport, Shanghai, China. ‘Xi’an Jiaotong University, Xi’an, China Email: caozb_sh@gmail.com (No relevant relationships reported)

Final Program  P91

1300 Board #108 8:00 AM - 9:30 AM Limited Knowledge about the Potential Chronic Effects of Excessive Iron Intake among College Distance Runners Sarah C. Bent, Anna E. Greer, Beau K. Greer. Sacred Heart University, Fairfield, CT. (Sponsor: Peter Ronai, FACSFM) Email: bents@sacredheart.edu (No relevant relationships reported)

1301 Board #109 8:00 AM - 9:30 AM Macronutrient And Supplementation Distribution Evaluation From Athletes Training For The Ironman Triathlon. Maria Cecilia L. de Carvalho1, Caroline A. Yoshioka1, Renata F. Viebig1, Erico C. Caperuto2. 1Mackenzie Presbiterian University, Sao Paulo, Brazil. 2Sao Judas Tadeu University, Sao Paulo, Brazil Email: ciaecarvalho9@hotmail.com (No relevant relationships reported)

1302 Board #110 8:00 AM - 9:30 AM Comparison Of Dietary Habits Between Volunteer Firefighters And Non-firefighters Deborah L. Fearheller1, Alexandra Puryear1, Lauren N. Chavis2, Kelly C. McLaughlin1, Emily Reeve1, Meaghan E. Corbin1, Stephanie Donahue1, Christian K. Roberts, FACSFM1, Pamela Chlad1. 1Ursinus College, HEART Laboratory; Collegeville, PA. 2National Institute of Health, Clinical Research Associate, Bethesda, MD. 1Geriatrics Research Education & Clinical Center, VA Greater Los Angeles Healthcare System, Los Angeles, CA. 2Ursinus College, Sports Medicine Clinic, Collegeville, PA. (Sponsor: Christian K Roberts, FACSFM) (No relevant relationships reported)

1303 Board #111 8:00 AM - 9:30 AM Effects Of Recovery Nutrition on Body Composition and Session RPE in Collegiate Tennis Players Annika Vahl, Christi Brewer, Katrina Taylor. Eastern Washington University, Cheney, WA (No relevant relationships reported)

1304 Board #112 8:00 AM - 9:30 AM Does Exclusion of Trunk Region Improve Accuracy of DXA Lean Soft Tissue from Non-Fasted Assessments? Grant M. Tinsley1, Brent S. Nickerson1. 1Texas Tech University, Lubbock, TX. 2Texas A&M International University, Laredo, TX Email: grant.tinsley@ttu.edu (No relevant relationships reported)

1305 Board #113 8:00 AM - 9:30 AM Food Intake And Fluid Balance Varies Between Individuals During A 120 Km Running Race Floris Wardenaar1, Daan Hoogervorst1. 1Arizona State University, Phoenix, AZ. 2Cordes Fysiotherapie, Voorhout, Netherlands Email: Floris.wardenaar@asu.edu (No relevant relationships reported)

C-39 Free Communication/Poster - Correlates and Behavioral Aspects of Physical Activity

THURSDAY, MAY 31, 2018

1306 Board #114 9:00 AM - 10:30 AM Physical Activity, Sedentary Behavior and Sleep in Adolescents - Weekday and Weekend Patterns Agnes G. Bucko, Marsha Dowda, FACSFM, Russ R. Pate, FACSFM. University of South Carolina, Columbia, SC Email: abucko@email.sc.edu (No relevant relationships reported)

www.acsm.org
<table>
<thead>
<tr>
<th>Time</th>
<th>Board #115</th>
<th>Time</th>
<th>Board #123</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00 AM - 10:30 AM</td>
<td>Social Cognitive Theory Role in Physical Activity Behavior and Health-Related Quality of Life in Parkinson’s Melinda S. Hill, PhD. <em>The Ohio State University, Columbus, OH.</em> (Sponsor: Brian C. Focht, PhD, FACSM, CSCS, FACSM) Email: <a href="mailto:hill.1238@osu.edu">hill.1238@osu.edu</a></td>
<td>9:00 AM - 10:30 AM</td>
<td>The Relationship Among Resilience, Personality, Anxiety andFitness in Recruit Firefighters Dakota G. Morales, Allyson G. Box, Steven J. Petruzzello, FACSM. <em>University of Illinois at Urbana-Champaign, Urbana, IL.</em> (Sponsor: Steven J. Petruzzello, FACSM) Email: <a href="mailto:dgmoral2@illinois.edu">dgmoral2@illinois.edu</a></td>
</tr>
<tr>
<td></td>
<td>(No relevant relationships reported)</td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>9:00 AM - 10:30 AM</td>
<td>Board #116</td>
<td>9:00 AM - 10:30 AM</td>
<td>Physical Activity Perceptions and Behavior of PregnantWomen with Past Miscarriage and Infertility Experiences Christopher P. Connolly, Gretchen G. Stolte, Bryce W. Magee. <em>Washington State University, Pullman, WA</em> Email: <a href="mailto:c.connolly@wsu.edu">c.connolly@wsu.edu</a></td>
</tr>
<tr>
<td></td>
<td>Self-Selected Intensity of Four Different Modes of AerobicExercise in Sedentary Adults Luke Hai1, Heather J. Porter2, Curt B. Dixon, FACSM3. 1Bloomsburg University, Bloomsburg, PA. 2Penn State University, State College, PA. 3Lock Haven University, Lock Haven, PA. (Sponsor: Curt Dixon, PhD, FACSM) Email: (No relevant relationships reported)</td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>9:00 AM - 10:30 AM</td>
<td>Board #117</td>
<td>9:00 AM - 10:30 AM</td>
<td>Older Adults’ Narratives Of Physical Activity And Health:Intrinsic Goal Pursuits, Autonomy, And Healthy Identities Christina Johnson, Neil Pradouro, Thomas Greene. <em>Cornell College, Mount Vernon, IA</em> Email: <a href="mailto:cjohnson@cornellcollege.edu">cjohnson@cornellcollege.edu</a></td>
</tr>
<tr>
<td></td>
<td>Using Ecological Momentary Assessment to ExploreProposed Indices of Exercise Readiness and SubsequentExercise Behavior Kelley Strohacker, Michael O’Neil, Cary M. Springer, LucasSheridan. University of Tennessee, Knoxville, TN Email: <a href="mailto:kstrohac@utk.edu">kstrohac@utk.edu</a></td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>9:00 AM - 10:30 AM</td>
<td>Board #119</td>
<td>9:00 AM - 10:30 AM</td>
<td>Examination Of The Association Between Values AndPhysical Activity In A Behavioral ProgramLisa M. Wisniewski1, Kelliann K. Davis, FACSM, John M. Jakicic, FACSM. 1Saint Francis University, Loretto, PA. 2University of Pittsburgh, Pittsburgh, PA. 3University of Pittsburgh, Pittsburgh, PA Email: <a href="mailto:lwisniewski@francis.edu">lwisniewski@francis.edu</a></td>
</tr>
<tr>
<td></td>
<td>Explore Factors Associated with Exercise Behavior amongthe Older Chinese Adults in the Rural Area Zi Yan1, Ruoyan Lu2, Yueping Li1, Zhenquan Zhang2, AlexandraHarrington1. 1Merrimack College, North Andover, MA. 2FujianMedical University, Fujian, China Email: <a href="mailto:yanz@merrimack.edu">yanz@merrimack.edu</a></td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>9:00 AM - 10:30 AM</td>
<td>Board #120</td>
<td>9:00 AM - 10:30 AM</td>
<td>Anthropometry, Physical Functioning, And Quality Of LifeIn The Exercising Diabetic PatientLena K. Perry1, Cynthia Villalobos2, J. Mark VanNess1, Paul D. Vosti1, Courtney D. Jensen1. 1University of the Pacific, Stockton, CA. 2St. Joseph Hospital, Stockton, CA Email: <a href="mailto:1.perry2@u.pacific.edu">1.perry2@u.pacific.edu</a></td>
</tr>
<tr>
<td></td>
<td>Physical Activity Postings On Social Media: Physical Activity And Self-presentation Differences Between Sharers AndNon-sharers Katherine Balfany, Maria M. Beitzel, Kathleen S. Wilson. California State University, Fullerton, Fullerton, CA. (Sponsor: Daniela A. Rubin, FACSM) Email: <a href="mailto:kballany@csu.fullerton.edu">kballany@csu.fullerton.edu</a></td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>9:00 AM - 10:30 AM</td>
<td>Board #121</td>
<td>9:00 AM - 10:30 AM</td>
<td>The Role of Gratitude in Intrinsic and Extrinsic Exercise MotivationAllison Hicks, Savannah Neece, Marci DeCaro, Paul Salmon. <em>University of Louisville, Louisville, KY</em> Email: <a href="mailto:allison.hicks.1@louisville.edu">allison.hicks.1@louisville.edu</a></td>
</tr>
<tr>
<td></td>
<td>Exploring Physical and Mental Readiness to Exercise inInactive Men and Women: A Thematic Analysis Paula-Marie M. Ferrara, Ethan T. Schaltegger, Rebecca A. Zakrajsek, Kelley Strohacker. University of Tennessee, Knoxville, TN Email: (No relevant relationships reported)</td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>9:00 AM - 10:30 AM</td>
<td>Board #122</td>
<td>9:00 AM - 10:30 AM</td>
<td>Mindfulness and Intrinsic Exercise Motivation—TheMediating Role of Exercise Self-EfficacySavannah M. Neece, Allison Hicks, Paul Salmon, Marci DeCaro. <em>University of Louisville, Louisville, KY</em> Email: <a href="mailto:savannah.neace@louisville.edu">savannah.neace@louisville.edu</a></td>
</tr>
<tr>
<td></td>
<td>Examination of Personality Related to Individuals’ ReportedPrimary Mode of Exercise Allyson G. Box1, Yuri Feito, FACSM2, Chris Brown2, Steven J. Petruzzello, FACSM3. 1University of Illinois at Urbana-Champaign, Urbana, IL. 2Kennesaw State University, Kennesaw, GA. (Sponsor: Steven J. Petruzzello, FACSM) Email: <a href="mailto:agbox2@illinois.edu">agbox2@illinois.edu</a></td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>9:00 AM - 10:30 AM</td>
<td>Board #123</td>
<td>9:00 AM - 10:30 AM</td>
<td>The Mediating Effect of Perceived Health on theRelationship Between Physical Activity and Subjective Well-beingZhanjia Zhang1, Bo Chen2, Qiang Li3, Weiyan Chen1. 1University of Michigan, Ann Arbor, MI. 2Beijing University of Chemical Technology, Beijing, China. 3Nanjing Sport University, Nanjing, China Email: <a href="mailto:zzj@umich.edu">zzj@umich.edu</a></td>
</tr>
<tr>
<td></td>
<td>(No relevant relationships reported)</td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>
American College of Sports Medicine

Board #133 9:00 AM - 10:30 AM
Testing The Effects Of Message Framing On Physical Activity Motivation: Does Stage Of Change Matter?
Derek J. Hevel, Anthony J. Amorose, Kristen M. Lagally, FACSM, Anna Rinaldi-Miles, Scott Pierce. Illinois State University; Normal, IL
Email: djhevel@ilstu.edu
(No relevant relationships reported)

Board #132 9:00 AM - 10:30 AM
Race and Types of Movement in Indoor Group Cycling
Alvin L. Morton, Derrick T. Yates, Miguel Aranda, Lyndsey Hornbuckle. University of Tennessee; Knoxville, TN
Email: amorton16@vols.utk.edu
(No relevant relationships reported)

Board #135 9:00 AM - 10:30 AM
Cardiorespiratory Fitness, Physical Activity, and Psychological Effects of an Acute Bout Of Cycling Exercise in People with Epilepsy
Kristen E. Johnson, Patrick J. O’Connor, FACSM. University of Georgia; Athens, GA. (Sponsor: Patrick O’Connor, FACSM)
(No relevant relationships reported)

Board #134 9:00 AM - 10:30 AM
Machines versus Free Weights: Does Exercise Mode Influence Affect and Perceived Exertion?
Daniel J. Cavarretta, Walter R. Bixby, FACSM, Eric E. Hall, FACSM. Elon University; Elon, NC
(No relevant relationships reported)

C-40 Free Communication/Poster - Correlates and Behavioral Aspects of Physical Activity in College Students

Thursday, May 31, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

Board #135 9:00 AM - 10:30 AM
The Impact of Body Fat Percentage on Appearance and Weight Management Related Motivations to Exercise in College Age Men
Elizabeth A. Easley, Molly N. Melton, Rhianne J. Schofield, Ashley M. Garris, Sarah H. Selchorst, William F. Riner, FACSM. University of South Carolina; Lancaster, Lancaster, SC
(No relevant relationships reported)

Board #136 9:00 AM - 10:30 AM
Self-Reported Wellness Benefits of Recreational Sports Use in College Freshmen
Kerri L. Vasold1, Samantha J. Deere2, James M. Pivarnik, FACSM1. 1Michigan State University; East Lansing, MI. 2Saginaw Valley State University; University Center, MI
Email: vasoldkl@msu.edu
(No relevant relationships reported)

Board #137 9:00 AM - 10:30 AM
Academic and Non-Academic Stress of College Students Enrolled in Physical Activity Classes
Lauren Kizlik, Kristin Nassen, Dr. Jessica Albers. Minnesota State University; Mankato, Mankato, MN
(No relevant relationships reported)

Board #138 9:00 AM - 10:30 AM
Gender Differences In College Student Physical Activity Based On The Use Of Wearables, Apps, And Social Media
Oliver W. Wilson, Melissa Bopp, FACSM, Samantha Shields, Zack Papalia, Michele Duffy. The Pennsylvania State University; State College, PA. (Sponsor: Dr. Melissa Bopp, FACSM)
Email: oww2@psu.edu
(No relevant relationships reported)

Board #139 9:00 AM - 10:30 AM
Cellular Telephone Use Predicts the Likelihood of Being an “Active Couch Potato” in College Students
Hannah Altsman, Andrew Lepp, Jacob E. Barkley. Kent State University; Kent, OH. (Sponsor: Ellen Glickman, FACSM)
Email: haltsman@kent.edu
(No relevant relationships reported)

Board #140 9:00 AM - 10:30 AM
Motivations for Moving: An Analysis of Physical Activity in Residential College Students
Cassandra T. Eddy, Ladasia Cooke, Thomas Hart, Jennifer McDonald. Saginaw Valley State University; Saginaw, NY. (Sponsor: Denise Smith, FACSM)
Email: ceddy1@skidmore.edu
(No relevant relationships reported)

Board #141 9:00 AM - 10:30 AM
An Examination of Obligatory Exercise, Eating Attitudes, and Perceived Body Image Among Collegiate Males and Females
Cherilyn Mc Lester, Bethany Wheeler, Emily Bechke, Cassie Willamson, John R. McLester, FACSM. Kent State University; Kent, OH. (Sponsor: John R. McLester, FACSM)
Email: cemc@kent.edu
(No relevant relationships reported)

Board #142 9:00 AM - 10:30 AM
Understanding the Relation Between Physical Fitness and Executive Function among Adolescents: An Expectancy-value Approach
Xiaoxia Zhang, Joonyoung Lee, Georgina Vint, Xiangli Gu, Tao Zhang. University of North Texas; Denton, TX
Email: XiaoxiaZhang@mhtnlf.com
(No relevant relationships reported)

Board #143 9:00 AM - 10:30 AM
School’S Physical Environment And Children’S Physical Activity Self-efficacy
Maria E. Santiago-Rodriguez1, Mercedes Rivera1, Farah A. Ramirez-Marrero, FACSM2. 1University of Illinois at Chicago, Chicago, IL. 2University of Puerto Rico, Rio Piedras, PR
Email: msant24@uic.edu
(No relevant relationships reported)

Board #144 9:00 AM - 10:30 AM
Childhood Experiences in Physical Education May Have Long-term Implications
Matthew A. Ladwig, Pantaleimon Ekkekakis, FACSM, Spyridoula Vazou. Iowa State University; Ames, IA
Email: maladwig@iastate.edu
(No relevant relationships reported)

Board #145 9:00 AM - 10:30 AM
Weight Dependent Disparities in Adolescent Girls: The Impact of Brief Interventions on Exercise and Healthy Eater Identity
Eylde N. Kramer, Dahcia J. Barr-Anderson, FACSM. University of Minnesota; Minneapolis, MN
(No relevant relationships reported)
P94  Final Program

1338  Board #146  9:00 AM - 10:30 AM
Positive Body Image And Compliance With Physical Activity Recommendations Across Physical Activity Contexts In Adolescents
Christine Sundgot-Borgen1, Kethe M. E. Engen1, Jan H. Rosenvinge2, Gunn Pettersen1, Oddgeir Frings3, Monica K. Torstveit1, Elin Kolle1, Jorunn Sundgot-Borgen, FACSM1, Solfird Bratland-Sanda1.
1Norwegian School of Sport Sciences, Oslo, Norway. 2UiT-The Arctic University of Norway, Tromsø, Norway. 3University of Agder, Kristiansand, Norway. University of Southeast Norway, Bø, Norway. (Sponsor: Jorunn Sundgot-Borgen, FACSM)
Email: c.s.borgen@nih.no
(No relevant relationships reported)

1339  Board #147  9:00 AM - 10:30 AM
Exploring Predictors of Concussion Concerns in Young Sport Parents
Nathan D’Amico1, RJ Elbin2, Philip Schatz3, Anthony Kontos3.
1University of Arkansas, Fayetteville, AR. 2Saint Joseph’s University, Philadelphia, PA. 3University of Pittsburgh Medical Center, Pittsburgh, PA. (Sponsor: Dr. Matthew Ganio, FACSM)
Email: mradamico@email.unc.edu
(No relevant relationships reported)

1340  Board #148  9:00 AM - 10:30 AM
Understanding Mothers And Daughters Physical And Emotional Health
Kellie A. Walters1, Denise M. Anderson1, Katherine A. Jordan2, Christine A. Chard3.
1California State University, Long Beach, Long Beach, CA. 2Clemson University, Clemson, SC. 3Colorado State University, Fort Collins, CO
Email: kellie.walters@csulb.edu
(No relevant relationships reported)

1341  Board #149  9:00 AM - 10:30 AM
Physical Activity and Play Behaviors during Indoor and Outdoor Free Play in Toddlers
Tyler Kybartas, Jake T. Ramsey, Dawn P. Coe, FACSM. University of Tennessee, Knoxville, TN
Email: tylerkybartas@gmail.com
(No relevant relationships reported)

1342  Board #150  9:00 AM - 10:30 AM
Activity Type, Play Context, and Group Composition during Indoor and Outdoor Free Play in Toddlers
Vincenzo G. Nocera, Tyler J. Kybartas, Jake T. Ramsey, Dawn P. Coe, FACSM. University of Tennessee Knoxville, Knoxville, TN
Email: vnocera@vols.utk.edu
(No relevant relationships reported)

1343  Board #151  9:00 AM - 10:30 AM
Youth Sport Coaches Perceptions and Prioritization of Sport Safety
Melissa C. Kay, Christina B. Vander Vegt, Johna K. Register-Mihalik. University of North Carolina - Chapel Hill, Chapel Hill, NC. (Sponsor: Kevin Guskeiwicz, FACSM)
Email: mkay@email.unc.edu
(No relevant relationships reported)

1344  Board #152  9:00 AM - 10:30 AM
Relationships among Weight Perception, Exercise Behaviors and Physical Fitness in Korean Elementary School Children
Woong-Hee Lee1, Sun-Young Lim2, Ah-Reun Jung1, Jin-Hee Lee2, Yoon-Hee Choi2, Kun-Ho Yoon1, Dae-Taek Lee1. 1Kookmin University, Seoul, Korea, Republic of. 2The Catholic University of Korea, Seoul, Korea, Republic of.
(No relevant relationships reported)

ACSM May 29 – June 2, 2018
Minneapolis, Minnesota

ACSM 65th Annual Meeting

1345  Board #153  9:00 AM - 10:30 AM
The Effect Of Goal Structure On Vo2 And Motivation In 6-10 Year Old Children During Exergame Play
Jonathan B. Naylor, Jacob E. Barkley. Kent State University, Kent, OH. (Sponsor: Ellen Glickman, PhD FACSM, FACSM)
Email: jnaylor1@kent.edu
(No relevant relationships reported)

1346  Board #154  9:00 AM - 10:30 AM
Using Self-determination Health Behavior Model To Examine Adolescents’ Need Support, Need Satisfaction, And Health-related Outcomes
Hongying Wang1, Xiaoxia Zhang1, Shutang Ren1, Xiangli Gu2, Tao Zhang2. 1Shanghai University of Sport, Shanghai, China. 2University of North Texas, Denton, TX. 3Putoo Education College, Shanghai, China
Email: hongyingwang95996@gmail.com
(No relevant relationships reported)

1347  Board #155  9:00 AM - 10:30 AM
Physical Literacy, Anxiety, And Depression In Sixth-grade Physical Education Students
Gene L. Farrer1, Paul E. Yeatts2, Hongxin Li3. 1West Texas A&M University, Canyon, TX. 2Texas Woman’s University, Denton, TX. 3University of North Texas, Denton, TX
Email: gfarren@wtamu.edu
(No relevant relationships reported)

1348  Board #156  9:00 AM - 10:30 AM
Learning Through Play: Positive Effects Of Active Playing On Cognition In Children
Isabela A. Ramos1, Eduardo B. Fontes2, Rainea M dos S Pereira3, Isabel A. David1, Jessica Sanches1, Stephany V. Brito3, Rodrigo A V Browne1, Carmen S G Campbell1. 1University Catholic of Brasilia, UniProjeção, Brasilia, Brazil. 2Federal University of Rio Grande do Norte, Natal RN, Brazil. 3University Catholic of Brasilia, Brasilia, Brazil. 4Federal Fluminense University, Rio de Janeiro, Brazil. 5Federal University of Rio Grande do Norte, Brasilia, Brazil
Email: abibraramos@gmail.com
(No relevant relationships reported)

1349  Board #157  9:00 AM - 10:30 AM
High School Adolescents’ Physical Activity and Physical Fitness: A 3 x 2 Achievement Goal Approach
Shen? Li1, JoonYoung Lee2, Xiaoxia Zhang1, Xiangli Gu2, Tao Zhang2. 1Shanghai University, Shanghai, China. 2University of North Texas, Denton, TX
Email: shenliang@t.shu.edu.cn
(No relevant relationships reported)

1350  Board #158  9:00 AM - 10:30 AM
Understanding High School Adolescents’ Physical Activity and Depressive Symptoms from a Psychosocial Perspective
Tao Zhang1, Xiangli Gu2, Shen? Li1, JoonYoung Lee2, Xiaoxia Zhang1. 1University of North Texas, Denton, TX. 2Shanghai University, Shanghai, China
Email: TAO.ZHANG@UNT.EDU
(No relevant relationships reported)

C-42  Free Communication/Poster - Correlates and Behavioral Aspects of Sport

Thursday, May 31, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

1351  Board #159  9:00 AM - 10:30 AM
Athletic Coping Skills of Female Ultrarunners
Shad K. Robinson, Ashley M. Bullers, Michael C. Meyers, FACSM. Idaho State University, Pocatello, ID
(No relevant relationships reported)
American College of Sports Medicine

1352 Board #160  9:00 AM - 10:30 AM
Learning Effect of Anchoring Bias in Combination with Action-Perception Coupling in Noveice Golf Putting
Andrew Nixon, Matthew Miltenberger, Shala Davis, FACSM, Gavin Moir. East Stroudsburg University, East Stroudsburg, PA. Email: anixon@esu.edu
(No relevant relationships reported)

1353 Board #161  9:00 AM - 10:30 AM
Academic Confidence and Grit Predict Mindfulness in Collegiate Student-Athletes
Brigid M. Brennan, Caroline J. Ketcham, Kirtida Patel, Eric E. Hall, FACSM. Elon University, Elon, NC. Email: bbrennan@elon.edu
(No relevant relationships reported)

1354 Board #162  9:00 AM - 10:30 AM
Psychophysiological And Pacing Strategy Responses To A Sprint Exercise Performed With Different Exercise Expectations.
Bruno F. Viana1, Bruno Ribeiro Ramalho Oliveira2, Tony Meireles Santos1, Fabiano Aparecido Pinheiro1, Lucelnido Silva Cerqueira2, Allan Inoue1, Dominic Mickelwright, FACSM1, Alexis Maugere, Flavio Oliveira Pires2. 1Augusto Motta University Center (UNSAM), Rio de Janeiro, RJ, Brazil, Rio de janeiro, Brazil. 2Herminio da Silva University Center, Rio de Janeiro, RJ, Brazil, Rio de janeiro, Brazil. 3Pernambuco Federal University, Recife, PE, Brazil, Pernambuco, Brazil. 4University of São Paulo, SP, Brazil., São Paulo, Brazil. 5Federal University of Rio de Janeiro, Rio de janeiro, Brazil. 6Brazilian Navy, Brazil, Rio de janeiro, Brazil. 7University of Essex, Colchester, UK, Rio de janeiro, Brazil. 8University of Kent, Chatham Maritime, UK, Rio de janeiro, Brazil. 9University of São Paulo, SP, Brazil, Rio de janeiro, Brazil. Email: bferreiraviana1@yahoo.com.br
(No relevant relationships reported)

1355 Board #163  9:00 AM - 10:30 AM
Impact Of Music On Athletes’ Motivation And Flow State During Competitions
Michaela Cocca1, Armando Cocca1, Ney Augusto Da Silva2, Luis Tomas Rodenas Cuenca2. 1Texas A&M University San Antonio, San Antonio, TX. 2Autonomous University of Nuevo Leon, Monterrey, Mexico. Email: michaela.cocca@gmail.com
(No relevant relationships reported)

1356 Board #164  9:00 AM - 10:30 AM
Evaluating The Effectiveness Of Applying Grief-Response Models To Sport Injury In Collegiate Student-Athletes
Sydney Brown, Eric E. Hall, FACSM. Elon University, Elon, NC. (Sponsor: Dr. Eric Hall, FACSM) Email: sbrown53@elon.edu
(No relevant relationships reported)

1357 Board #165  9:00 AM - 10:30 AM
Indicators Of Burnout In College Athletes: Proportion Comparisons By Sex And Sport Type
Victor Hugo Montejo-Lambaren, Sara Ramirez-Hernandez, Alejandro Gaytan-Gonzalez, Roberto Gabriel Gonzalez-Mendoza, Juan R. Lopez-Taylor. Universidad de Guadalajara, Guadalajara, Mexico. Email: victor.hugo.montejo@uag.edu.mx
(No relevant relationships reported)

1358 Board #166  9:00 AM - 10:30 AM
Differences in Sport Motivation Types in NCAA Division II Athletes over Time
Mindy Hartman Mayol1, Urska Doberske1, Matthew D. Beckley, FACSM1. 1University of Indianapolis, Indianapolis, IN. 2University of Southern Indiana, Evansville, IN. 3DePauw University, Greencastle, IN. Email: mmayol@indy.edu
(No relevant relationships reported)
1366 Board #174 9:00 AM - 10:30 AM
Cross-cultural Invariance Of The Mental Toughness Inventory Among American And Greek Athletes
Grant B. Morgan, Andreas Stamatis, Zacharias Papadakis, Vassilis Mougios, Gregory Bogdanis, Alexandra Spinou. 1Baylor University, Waco, TX; SUNY Plattsburgh, Plattsburgh, NY. 2Rice University, Houston, TX. 3Aristotelian University of Thessaloniki, Thessaloniki, Greece. 4National and Kapodistrian University of Athens, Athens, Greece. 5Democritus University of Thrace, Komotini, Greece. (Sponsor: Peter Grandjean, FACSM)
(No relevant relationships reported)

1367 Board #175 9:00 AM - 10:30 AM
Athletic Identity does not Predict Reporting Intentions in Intercollegiate Athletes
Email: mna49593@uga.edu
(No relevant relationships reported)

1373 Board #181 9:00 AM - 10:30 AM
Caleb D. Johnson, Alice D. LaGoy, Gert-Jan Pepping, Shawn R. Eagle, Anne Beeth, Christopher Connaboy. 1University of Pittsburgh, Pittsburgh, PA. 2Australian Catholic University, Sydney, Australia
Email: cdj20@pitt.edu
(No relevant relationships reported)

1377 Board #177 9:00 AM - 10:30 AM
Anxiety And Depression Indicators In College Athletes: Proportion Comparisons By Sex And Type Of Sport
Sara Ramirez-Hernandez, Victor Hugo Montejio-Lambaren, Alejandro Gaytan-Gonzalez, Roberto Gabriel Gonzalez-Mendoza, Juan R. Lopez-Taylor. Universidad de Guadalajara, Guadalajara, Mexico
(No relevant relationships reported)

1376 Board #178 9:00 AM - 10:30 AM
Effect of Watching Professional Baseball on Health Outcomes in Elderly Japanese: A Randomized Controlled Trial
Ryoko Kawakami, Susanna S. Sawada, FACSM, Tomoko Itu, Yuko Gando, Tomohiro Fukashi, Ryoosuke Fujii, Satoshi Kurita, Koichiro Oka, Shinzo Sakamoto, Mitsuru Higuchi, FACSM. 1Waseda University, Tokorozawa, Japan. 2National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan. 3Seibu Lions Company Limited, Tokorozawa, Japan

1378 Board #179 9:00 AM - 10:30 AM
Is Short-passing Ability Related To Anxiety And Self-confidence In Division III Collegiate Soccer Players?
Mohammed Bila, Angela Hillman, Alan M. Levine. Marywood University, Scranton, PA
Email: m.a.bila2013@gmail.com
(No relevant relationships reported)

1379 Board #180 9:00 AM - 10:30 AM
Effects of Mental Fatigue Induced Using the Smartphone on Physical & Technical Performance of Footballers
Gianpiero Greco, Roberto Tambolini, Pasquale Ambruosi, Francesco Fischetti. University of Bari, Bari, Italy
Email: gianpiero.greco@uniba.it
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Time</th>
<th>Board #</th>
<th>Title</th>
<th>Authors</th>
<th>Email/Address</th>
<th>Relationship Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 AM</td>
<td>#188</td>
<td>Effect of Hypoxia on EEG During and After Cycle Ergometer Exercise</td>
<td>Seongdae Kim, Hee-hyuk Lee, Ilgyu Jeong, Hannam University, Daejeon, Korea, Republic of</td>
<td><a href="mailto:wwwwwwte@naver.com">wwwwwwte@naver.com</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#189</td>
<td>Cardiovascular Adjustments During Steady-state Cycling: Effects Of Heat And Altitude.</td>
<td>Robert W. Kenefick, FACSM, Karleigh E. Bradbury, John H. Sellers, Adam J. Luippold, Katherine M. Mitchell, Beau R. Yurkevich, John H. Sellers, Robert W. Kenefick, FACSM.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#190</td>
<td>Between Individual Variability in Sleep and Awake Pulse Oximetry During Ascent Of Mt. Kilimanjaro</td>
<td>Stephen R. Muza, FACSM, Robert W. Kenefick, FACSM, Beth A. Beideman, Charles S. Fulco, Scott W. Hamilton.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#191</td>
<td>Combined Effects of Heat and Altitude on Sweating Responses during Steady-State Cycling Exercise</td>
<td>Adam J. Luippold, Karleigh E. Bradbury, Katherine M. Mitchell, Beau R. Yurkevich, John H. Sellers, Robert W. Kenefick, FACSM.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#192</td>
<td>Heart Rate Variability And Body Composition As A Hypoxia Risk Factor In Military Pilots.</td>
<td>JUAN MIGUEL CASTRO HERRERA. FUERZA Aerea COLOMBIANA, BOGOTA, Colombia.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#193</td>
<td>Differences of Surface Electromyography during Incremental Cycling Exercise in Hypoxia and Normoxia Using Wavelet Transform Analysis</td>
<td>Hayato Ohnuma, Ryo Yamanaka, Toshiyuki Ohyu, Masahiro Hagiwara, Ryota Akagi, Yasuhiro Suzuki.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#194</td>
<td>The Effect of Endurance Exercise in Hypoxia on Hepcidin Response in Athletes</td>
<td>Duichi Sumi, Chihiro Kojima, Kazushighe Goto. Ritsumeikan University, Kusatsu, Japan. (Sponsor: Robert K Kraemer, FACSM)</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#195</td>
<td>Blood Oxidative Stress Following Exercise Recovery in Normobaric and Hypobaric Hypoxic Environments</td>
<td>John C. Quindry, FACSM; Tiffany S. Quindry, Katheryn Tiemessen, Roksana Zak, Robert Shute, John Cuddy, Walter Hailes, Dustin Slivka, FACSM; Brent Ruby, FACSM; University of Montana, Missoula, MT; University of Nebraska - Omaha, NE.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#196</td>
<td>Cardiopulmonary Responses, Brain and Muscle Oxygenation during Exercise on Hypoxia as Acclimatization to Hypoxic Training</td>
<td>Jin Uchimaru, Yi-Zhen Yu, Fan Chen, Hidekazu Takemura, Hirokazu Takahashi, Shozo Suzuki. Sendai University, Shibata, Japan.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#197</td>
<td>Precooling With An Ice Vest: Effect On Core Temperature And Heart Rate While Swimming</td>
<td>Brent Alumbaugh, Shelbi Peters, Leah Hendrick, Michael Reeder. Colorado Mesa University, Grand Junction, CO.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#198</td>
<td>Effects Of Cycling In The Cold On Neuromuscular Activation And Fatigue</td>
<td>Brittany N. Followay, Jeremiah A. Vaughan, Savannah R. Hall, Elliott Arroyo, Cody S. Dulaney, Joseph A. Laudato, Ellen L. Glickman, Adam R. Jajtner. Kent State University, Kent, OH.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#199</td>
<td>Habitation to the Cold Pressor Test</td>
<td>Alyssa Leger, David Bellia. University of Louisiana at Lafayette, Lafayette, LA.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#200</td>
<td>Afterdrop Effect during Recovery after Aerobic Exercise in a Cold vs Moderate Temperature Environment</td>
<td>Jeremiah A. Vaughan, Brittany N. Followay, Savannah R. Hall, Joseph A. Laudato, Elliott Arroyo, Cody S. Dulaney, Adam R. Jajtner, Ellen L. Glickman, FACSM. Kent State University, Kent, OH.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#201</td>
<td>Thermal Responses Associated with Prolonged Cycling in Cold Temperature Cody S. Dulaney, Adam R. Jajtner, Jeremiah A. Vaughan, Brittany N. Followay, Elliott Arroyo, Savannah R. Hall, Joseph A. Laudato, Ellen L. Glickman FACSM Exercise Physiology Department, Kent State University, Kent, OH.</td>
<td>(No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8:00 AM</td>
<td>#202</td>
<td>The Impact Of Long Duration Spaceflight On The Function Of Plasma Cells</td>
<td>Guillauame Spielmann, John Campbell, Brian E. Cruciare, Mitzi S. Laughlin, Richard J. Simpson, FACSM. Louisiana State University, Baton Rouge, LA. NASA-Johnson Space Center, Houston, TX; University of Arizona, Tucson, AZ.</td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>
P98 Final Program

1395 Board #203 8:00 AM - 9:30 AM
Power But Not Fatigue Is Influenced By Hot And Cold Immersion Prior To Vigorous Cycling
Donald L. Hoover1, Samuel K. Knot2, Christopher A. Bidwell3, Carrie A. Revlet1, Sarah E. Parks2, Daren T. Webb1, Lawrence W. Judge1, Elizabeth Norris2, Scott W. Arnett1. 1Western Michigan University, Kalamazoo, MI. 2Western Kentucky University, Bowling Green, KY. 3Western Kentucky University, Bowling Green, IN. 4Ball State University, Muncie, IN
Email: don.hoover.pt.phd@gmail.com
(No relevant relationships reported)

1396 Board #204 8:00 AM - 9:30 AM
Central Chemosensitivity is Augmented during Thermoneutral Head Out Water Immersion in Healthy Adults
James R. Sackett, Zachary J. Schlader, Christopher L. Chapman, Blair D. Johnson. University at Buffalo, Buffalo, NY. (Sponsor: Dave Hostler, FACSM)
Email: jamesesc@buffalo.edu
(No relevant relationships reported)

1397 Board #205 8:00 AM - 9:30 AM
The Role of Diver hydration Status on Performance Following Head Out Water Immersion
Hayden Hee1, David R. Pendergast1, Zachary J. Schlader1, Lindsey N. Russo1, Brian M. Clementy1, Mary G. Carey1. 1University of Rochester, Rochester, NY. (Sponsor: Dave Hostler, FACSM)
Email: haydenhe@buffalo.edu
(No relevant relationships reported)

1398 Board #206 8:00 AM - 9:30 AM
Effects Of Concurrent Exercise During Simulated Microgravity On Soleus Muscle Fiber Myonuclear Content
Kaylie R.M. Zapanta1, Joshua A. Cottar2, Andrew J. Galpin3, James R. Bagley4. 1University of Southern California, Los Angeles, CA. 2California State University, Long Beach, Long Beach, CA. 3California State University, Fullerton, Fullerton, CA. 4San Francisco State University, San Francisco, CA
Email: kzapanta@usc.edu
(No relevant relationships reported)

1399 Board #207 8:00 AM - 9:30 AM
Reliability of the Portable Metabolic Gas Analysis System used on the International Space Station
Alan D. Moore, FACSM1, Meghan E. Downe2, Shannon L. Jordan1, Alan H. Feiveson1, Jamie R. Guined2, Stuart MC Lee3. 1Lamar University, Beaumont, TX. 2KBReyle, Houston, TX. 3NASA-Johnson Space Center, Houston, TX. 4University of Houston, Houston, TX
Email: alan.moore@lamar.edu
(No relevant relationships reported)

C-45 Free Communication/Poster - Heat/Hydration

1400 Board #208 8:00 AM - 9:30 AM
Physiological Response in Time to Exhaustion Trial Across Varied Environmental Conditions
Savannah R. Hall, Ellen L. Glickman, FACSM, Jeremiah A. Vaughan, Brittany N. Followay, Elliott Arroyo, Cody S. Dulaney, Joseph A. Laudato, Adam R. Jajtner. Kent State University, Kent, OH
Email: shall58@kent.edu
(No relevant relationships reported)

1401 Board #209 8:00 AM - 9:30 AM
Thermoregulatory Responses To Moderate-intensity And High-intensity Cycling In The Heat
Eliott Arroyo, Brittany N. Followay, Jeremiah A. Vaughan, Cody S. Dulaney, Joseph A. Laudato, Savannah R. Hall, Ellen L. Glickman, FACSM, Adam R. Jajtner. Kent State University, Kent, OH
(No relevant relationships reported)

1402 Board #210 8:00 AM - 9:30 AM
Effects Of Wrist Cooling On Balance And Cognitive Performance In The Heat
Rachel K. Katch, Ryan Curtis, Andres Almeraya, Rebecca L. Stearns, Douglas J. Casa, FACSM. University of Connecticut Storrs, CT. (Sponsor: Dr. Douglas J. Casa, FACSM)
Email: rachel.katch@uconn.edu
(No relevant relationships reported)

1403 Board #211 8:00 AM - 9:30 AM
Game-to-Game Increases in Core TemperatureDuring Rugby 7's World Series Tournaments
Lee Taylor, FACSM1, Heidi Thornton2, Nick Lumley3, Christopher Stevens4. 1Aspetar – Orthopaedic and Sports Medicine Hospital, Doha, Qatar. 2Newcastle Knights Rugby League Club, Newcastle, Australia. 3Scottish Rugby Union, Edinburgh, United Kingdom. 4Southern Cross University, Coffs Harbour, Australia
Email: lee.taylor@aspetar.com
(No relevant relationships reported)

1404 Board #212 8:00 AM - 9:30 AM
Effect of Thermal Stress on Cycling and Plasma Volume Shifts, Body Weight and Water Intake
Joseph A. Laudato, Ellen L. Glickman, FACSM, Brittany N. Followay, Jeremiah A. Vaughan, Eliott Arroyo, Cody S. Dulaney, Savannah R. Hall, Adam R. Jajtner. Kent State University, Kent, OH.
(Sponsor: Ellen Glickman, FACSM)
Email: jlaudat1@kent.edu
(No relevant relationships reported)

1405 Board #213 8:00 AM - 9:30 AM
World Championship Heat Stress Preparation: A Comparison Of IAAF And UCI Athletes
Julien Periard1, David Nichols2, Sebastien Racinais2. 1University of Sherbrooke, Sherbrooke, QC, Canada. 2Aspetar Sports Medicine Hospital, Doha, Qatar. (Sponsor: Dr. Douglas Pyne, FACSM)
Email: julien.périard@canberra.edu.au
(No relevant relationships reported)

1406 Board #214 8:00 AM - 9:30 AM
Gastrointestinal Telemetric Pills Used as Rectal Probes Provide Inaccurate Measurements of Absolute Rectal Temperatures
Jonathan Gosselin1, Jeff Béliveau2, Mathieu Hamel1, Douglas Casa, FACSM3, Yuri Hosokawa4, José A. Morais1. 1University of Sherbrooke, Sherbrooke, QC, Canada. 2University of Connecticut, Storrs, CT. 3McGill University, Montreal, QC, Canada
Email: j.gosselin2@usherbrooke.ca
(No relevant relationships reported)

1407 Board #215 8:00 AM - 9:30 AM
Gastrointestinal Heat Sink: Impact on Ingestible Telemetric Pill and Rectal Probe Temperature Measurements Following Exercise
Eric DB Goulet, Adrien De La Flore, Jonathan Gosselin. University of Sherbrooke, Sherbrooke, QC, Canada
Email: eric.goulet@usherbrooke.ca
(No relevant relationships reported)
American College of Sports Medicine

Board #216  8:00 AM - 9:30 AM
Evidence for Seasonal Acclimatization of Behavioral Thermoregulation in Resting Humans
Zachary J. Schlader, James R. Sackett, Christopher L. Chapman, Blair D. Johnson. University at Buffalo, Buffalo, NY. (Sponsor: David Hostler, FACSM)
Email: zjchlad@buffalo.edu
(No relevant relationships reported)

Board #217  8:00 AM - 9:30 AM
Thermoregulation And Perception Among Lean/obese And Fit/unfit Girls Cycling In The Heat
Carolina de Ávila Rodrigues, Gabriela Tomedi Leites, Flavia Meyer. Federal University of Rio Grande do Sul, Porto Alegre, Brazil
Email: anilorne@portobweb.com.br
(No relevant relationships reported)

Board #218  8:00 AM - 9:30 AM
Effect Of Dehydration On Cognitive Functions: A Meta-analysis
Melinda Millard-Stafford, FACSM, Matthew T. Winbush. Georgia Institute of Technology, Atlanta, GA
Email: mindy.millardstafford@ap.gatech.edu
(No relevant relationships reported)

Board #219  8:00 AM - 9:30 AM
Dehydration is How You Define It: Comparison of 318 Blood and Urine Spot Checks
Tamarah Hew-Butler, FACSM, Christopher Eskin, Jordan Bickham, Mario Rusnak, Melissa VanderMeulen. Oakland University, Rochester, MI
Email: hew@oakland.edu
(No relevant relationships reported)

Board #220  8:00 AM - 9:30 AM
Thirst Perception and Fluid Intake are not Affected by Knowledge of Water Losses During Exercise
Catalina Capitán-Jiménez, Luis Fernando Aragón-Vargas, FACSM. University of Costa Rica, CARTAGO, Costa Rica. (Sponsor: Luis Fernando Aragon-Vargas, FACSM)
Email: ktaucr@gmail.com
(No relevant relationships reported)

Board #221  8:00 AM - 9:30 AM
Fluid Intake Pattern, Dehydration, and Performance In Young Athletes During A Triathlon In Tropical Climate
Anita M. Rivera-Brown, FACSM1, José R. Quiñones-González2, Patricia Pagán-Lasalle2. 1University of Puerto Rico School of Medicine, San Juan, Puerto Rico. 2Syracuse University, Syracuse, NY
Email: anriver.brown@gmail.com
(No relevant relationships reported)

Board #222  8:00 AM - 9:30 AM
Effects of Hypohydration on Markers of Catabolism in Females Following Resistance Exercise
Joshua J. Gann1, Thomas L. Andre2, Brooke L. Roemer1, Darryn S. Willoughby, FACSM3. 1University of Louisiana-Monroe, Monroe, LA. 2Clayton St. University, Morrow, GA. 3Baylor University, Waco, TX
Email: gann@ulm.edu
(No relevant relationships reported)

Board #223  8:00 AM - 9:30 AM
Factors Influencing Hydration Status during a NCAA Division 1 Soccer Preseason
Yasuki Sekiguchi1, William M. Adams2, Ryan M. Curtis3, Courteney L. Benjamin1, Douglas J. Casa, FACSM1. 1University of Connecticut, Storrs, CT. 2University of North Carolina, Greensboro, NC
Email: yasuki.sekiguchi@uc conn.edu
(No relevant relationships reported)

Board #224  8:00 AM - 9:30 AM
Pregame Hydration Status of Collegiate Basketball Players on Consecutive Days of Play
Daniel N. Poel, Jason C. Dorman, Elizabeth H. Kasparek, Paul A. Thompson, Thayne A. Munce, FACSM. Sanford Health, Sioux Falls, SD. (Sponsor: Dr. Thayne Munce, FACSM)
(No relevant relationships reported)

Board #225  8:00 AM - 9:30 AM
Bilateral Differences in Muscle Activation Associated with Cycling in Varying Environmental Conditions
Adam R. Rajter, Brittany N. Falloway, Jeremiah A. Vaughan, Elliott Arroyo, Savannah R. Hall, Cody S. Dulaney, Joseph A. Laudato, Ellen L. Glickman, FACSM. Kent State University, Kent, OH
(No relevant relationships reported)

Board #226  8:00 AM - 9:30 AM
Hydration Biomarker and Plasma Copeptin Variability in Response to Partial Rehydration After Exercise-Induced Dehydration
Colleen X. Munoz1, Evan C. Johnson1, Laura J. Kunces1, Amy L. McKenzie2, Corey Butts2, Aaron Caldwell2, Adam Seal2, Brendon P. McDermott, FACSM3, Jakob L. Vingren, FACSM4, James Boyette2, Colin Melford5, Abigail Colburn3, Skyler Wright4, Ecow Dadzie2, Vigilio Lopez5, Lawrence E. Armstrong, FACSM6, Elaine C. Lee7. 1University of Hartford, West Hartford, CT. 2University of Wyoming, Laramie, WY. 3Arla Foods, Vilhjálmshöfn, Iceland. 4Virta Health, San Francisco, CA. 5University of Arkansas, Fayetteville, AR. 6University of North Texas, Denton, TX. 7University of Connecticut, Storrs, CT. (Sponsor: Lawrence E. Armstrong, FACSM)
(No relevant relationships reported)

Board #227  8:00 AM - 9:30 AM
Fast Rehydration Rate Helps To Keep Positive Body Fluid Balance Longer Time: A Pilot Study
Alejandro Gaytan-Gonzalez1, Roberto Gabriel Gonzalez-Mendoza2, Eduardo Pineda-Ruani3, Sergio Alejandro Copado-Aguila1, Jesus Eduardo Gonzalez-Rivera2, Marisol Villegas-Balcazar1, Juan R. Lopez-Taylor1. 1Universidad de Guadalajara, Guadalajara, Mexico. 2Universidad Autónoma de Sinaloa, Culiacán, Mexico
Email: alejandro.gaytan@cuce.udg.mx
(No relevant relationships reported)

Board #228  8:00 AM - 9:30 AM
Error Analysis of a Commercial Water Planning Tool for Road Race Event Organizers
Kurt J. Sollanek1, Kelly Fatman1, Chris Troyanos1, Samuel N. Cheuvront, FACSM1. 1Sonoma State University, Rohnert Park, CA. 2Boston Athletic Association, Boston, MA. 3Sports Science Synergy, LLC, Franklin, MA. (Sponsor: Robert W. Kenefick, Ph.D., FACSM)
Email: sollanek@sonoma.edu
(No relevant relationships reported)

Board #229  8:00 AM - 9:30 AM
A Comparison of Environmental Heat Stress Response in Professional and Amateur Sports Car Racing Drivers
Samuel C. Barthel, Todd M. Buckingham, David P. Ferguson. Michigan State University, East Lansing, MI
Email: samuel.barthel45@gmail.com
(No relevant relationships reported)

Board #230  8:00 AM - 9:30 AM
Effect of Fatigue and Active Hyperthermia on Proprioception
Khouloud Mtibaa1, Nidhal Zarrouk2, Christophe Hauzier1, Sebastien Racinais2, 1Qatar University, Doha. Qatar. 2Aspetar Orthopaedic and Sports Medicine Hospital, Doha, Qatar. (Sponsor: Lawrence E. Armstrong, FACSM)
(No relevant relationships reported)
### Pre-Conference Sessions

**Board #231**

**8:00 AM - 9:30 AM**

**Whole-body Sweating Rate And Percentage Of Weight Lost By Dehydration In Two Different Volleyball Training Exercises**

Sergio Alejandro Copado-Aguila, Sayra Nataly Muñoz-Rodríguez, Alejandro Gaytan-Gonzalez, Roberto Gabriel Gonzalez-Mendoza, Ix Chel Andalon-Gonzalez, Cesar Alonso Rodarte-Salinas, Angelica Janette Ramirez-Gonzalez, Juan R. Lopez-Taylor. *Universidad de Guadalajara, Guadalajara, Mexico*

Email: sergilocopadoaguila_euc@hot.com

(No relevant relationships reported)

**Board #232**

**8:00 AM - 9:30 AM**

**Effects of Aerobic Cycling Exercise in the Heat on Neuromuscular Activation and Fatigue**

Ellen L. Glickman, FACSM, Brittany N. Followley, Jeremiah A. Vaughan, Savannah R. Hall, Eliot Arroyo, Cody S. Dulaney, Joseph A. Laudato, Adam R. Jaznek. *Kent State University, Kent, OH*

Email: eglickma@kent.edu

(No relevant relationships reported)

**Board #233**

**8:00 AM - 9:30 AM**

**Predicting The Onset Of Sweat During Cycling In Simulated Environments**

F. Michael Williams-Bell, Garrick Forman, Shilpa Dogra, Martin Agelin-Chaab, Michael W.R. Holmes. *Durham College, Oshawa, ON, Canada*.

1. Brock University, St. Catharines, ON, Canada
2. University of Ontario Institute of Technology, Oshawa, ON, Canada

Email: michael.williams-bell@durhamcollege.ca

(No relevant relationships reported)

**Board #234**

**8:00 AM - 9:30 AM**

**Folic Acid Improves Vascular Function, But Not Skin Blood Flow, In Heart Failure Patients**

Bryce N. Balmain,1 Ollie Jay, FACSM, Norman R. Morris,1 Annelia J. McFarland,1 Kenji Shino,1 Glenn M. Stewart,1 Rohan Jayasinghe,1 Jonathan Chant,1 Surendran Sabapathy,1 Griffith University, Gold Coast, Australia.

2. University of Sydney, Sydney, Australia.
3. Mayo Clinic, Rochester, MN.
4. Gold Coast University Hospital, Gold Coast, Australia.

Email: michael.williams-bell@durhamcollege.ca

(No relevant relationships reported)

**Board #235**

**8:00 AM - 9:30 AM**

**Combined Heat Treatment and Exercise Prevents Skeletal Muscle Insulin Resistance in Wistar Rats Fed a High-Fat Diet**

JIE XIU ZHAO, FEI QIN, MINXIAO XU, CHAO YU QI, YANAN DONG, ZHONGWEI WANG, ZHINING HAN. *China Institute of Sport Science, Beijing, China.* (Sponsor: Craig Crandall, FACSM)

Email: zhaojie@cc.sh.cn

(No relevant relationships reported)

**Board #236**

**8:00 AM - 9:30 AM**

**The Effect of Mild Hypohydration on Performance and Thermoregulation in Male Cyclists: A Blinded Study**

J.D. Adams,1 Dylan Scott,2 Natasha Brand,2 Hyeon-Gyu Suh,2 Adam D. Seal1; Brendan P McDermott, FACSM, Matthew S. Ganio, FACSM,4 Stavros A. Kavouras, FACSM,3 Mayo Clinic, Rochester, MN. 1University of Arkansas, Fayetteville, AR. (Sponsor: Stavros A. Kavouras, FACSM)

Email: adams.jon@mayo.edu

(No relevant relationships reported)

**Board #237**

**8:00 AM - 9:30 AM**

**Thermal Behavior During Recovery From Exercise**

Nicole T. Vargas,1 Christopher L. Chapman,1 James R. Sackett,2 Jabril Abdul-Rashed,2 Muhammed McBryde,2 Blair D. Johnson,1 Rob Gathercole2, Zachary J. Schlader1. 1University at Buffalo, Buffalo, NY. 2Lululemon athletica inc., Vancouver, BC. (Sponsor: Dave Hostler, PhD, FACSM)

Email: ntvargas@buffalo.edu

(No relevant relationships reported)

---

### Free Communication/Poster Sessions

**C-46**

**Free Communication/Poster - Exercise Immunology**

**Board #238**

**8:00 AM - 9:30 AM**

**Erk1/2 And Ccr2 Expression In Fit And Unfit Males**

Anson M. Blanks, Lauren N. Pedersen, Virginia L. Mihulick, Attiya Shah, R. Lee Franco. *Virginia Commonwealth University, Richmond, VA*

Email: blanksam2@vcu.edu

(No relevant relationships reported)

**Board #239**

**8:00 AM - 9:30 AM**

**Alleles Associated with Voluntary Physical Activity are Predicted to be Older Than Anatomically Modern Humans**

Aylard C. L. Setneger, Alexandra R. Thompson, J Timothy Lightfoot, FACSM, Texas A&M University, College Station, TX. (Sponsor: J Timothy Lightfoot, FACSM)

Email: ayland@tamu.edu

(No relevant relationships reported)

**Board #240**

**8:00 AM - 9:30 AM**

**Aerobic Training Status and Fatty Acid-InducedlrTERT mRNA Expression Following Maximal Exercise**

Tiffany M. Zuniga, Aaron L. Slusher, Edmund O. Acevedo, FACSM. *Virginia Commonwealth University, Richmond, VA*

(No relevant relationships reported)

**Board #241**

**8:00 AM - 9:30 AM**

**Association Between Actn3 R577x Polymorphism And Weight-lifting Performance In Japanese And Italian Athletes.**

Naoiko Kikuchi,1 Myosotis Massidda,1 Tatsuru Miyamae,2 Shunsuke Suzuki,3 Akhiko Inoue,1 Naoyuki Kobatake1, Daniele Masala1, Carla M. Calo2 CM, Koichi Nakazato1. 1Nippon Sport Science University, Tokyo, Japan. 2University of Cagliari, Cagliari, Italy. 3University of Cassino and Southern Latium, Cassino, Italy

Email: n.kikuchi@nittai.ac.jp

(No relevant relationships reported)

**Board #242**

**8:00 AM - 9:30 AM**

**The Interplay between Genes and Psychosocial Home Environment on Leisure-time Physical Activity: a Twin Study**

Sari Aaltonen1,2 Jaakko Kaprio1,3 Urho M. Kujala,4 Lea Pulkkinen2,3 Richard J. Rose1,3 Karri Silventoinen1. 1University of Helsinki, Helsinki, Finland. 2University of Jyväskylä, Jyväskylä, Finland. 3Indiana University, Bloomington, IN

Email: sari.s.aaltonen@helsinki.fi

(No relevant relationships reported)

**Board #243**

**8:00 AM - 9:30 AM**

**The Effect Of Exercise Mode On The Hypothalamic Expression Of Kiss-1and Gpr54 Genes Mrna In Dietinduced Obesity Rats**

Yi Yan, Chunyu Liang, Rui XU. *Beijing Sport University, Beijing, China*

Email: yanyi22@sina.com

(No relevant relationships reported)

**C-47**

**Free Communication/Poster - Musculoskeletal**

**Board #244**

**8:00 AM - 9:30 AM**

**Retrocalcaneal Approach Of Ultrasound Guided Tibial Nerve Block: A Preliminary Study**

Hongjae Lee. Ilsanpaik Hosp., Inje Univ, Goyang, Korea, Republic of

(No relevant relationships reported)
1437 Board #245 8:00 AM - 9:30 AM
Dynamic Quadriceps Strength are Associated with Self-Reported Disability Following ACL Reconstruction
Steven A. Garcia1, Tyler J. Moffitt1, Mike N. Yakula2, Skylar C. Holmes1, Melissa M. Montgomery1, Derek N. Parnack2,1. Cal State University Fullerton, Fullerton, CA. 1Utah State, Logan, UT. (Sponsor: Daniella A. Rubin, FACSM)
Email: stiegarcia@fullerton.edu

1438 Board #246 8:00 AM - 9:30 AM
Response Of Muscle Damage Markers After Acute Heavy Exercise In Different Ovarian Hormone Secretion
Akemi Sawai1, Risa Mitsuhashi1, Yuki Warashina1, Alexander Zaboronok2, Ryota Sone1, Noboru Mesaki1, Hitoshi Shiromi1, Koichi Watanabe1. 1Tsukuba University, Tsukuba, Japan. 2University of Tsukuba Hospital, Tsukuba, Japan.

1439 Board #247 8:00 AM - 9:30 AM
Within-Day Intra- And Intertester Reliability Of Ultrasonographic Measurements Of Acromion-Greater Tuberosity Distance Performed By Novice Testers
Eric Arguello. University of North Texas Health Science Center, Fort Worth, TX

1440 Board #248 8:00 AM - 9:30 AM
Effect Of Cryotherapy To A Muscle Versus A Joint On Functional Performance
Christine Lauber, Jennifer Dudash, Michaela Hoffman, Megan Vandergriff. University of Indianapolis, Indianapolis, IN. (Sponsor: Matthew Beekley, FACSM)
Email: clauber@uindy.edu

1441 Board #249 8:00 AM - 9:30 AM
VO2max Differs Between Those with Chronic Ankle Instability and Healthy Matched Controls
Michael J. Turner, FACSM, Jimmy Joyner, Anyea King, Areagash Theodros, Tricia Hubbard-Turner, FACSM. UNC Charlotte, Charlotte, NC
Email: mturner@uncc.edu

1442 Board #250 8:00 AM - 9:30 AM
Reliability of a Smartphone Compass App and Goniometer for Assessing Tibial Rotation Range of Motion
Justin Stanek, Illinois State University, Normal, IL. (Sponsor: Kristen Lagally, FACSM)
Email: jstanek@ilstu.edu

1443 Board #251 8:00 AM - 9:30 AM
Breast Injuries In Female Collegiate Athletes: Prevalence, Type, And Impact On Sport Participation
Laura J. Smith1, Tamara Eichelberger1,2, Edward J. Kane1. 1University of Michigan Flint, Flint, MI. 2Azusa Pacific University, Azusa, CA. 3University of St. Augustine for Health Sciences, San Marcos, CA

1444 Board #252 8:00 AM - 9:30 AM
Medical Utilisationat a Major Sporting Event- A Descriptive and Epidemiological Analysis
Vashishth Ramlogan1, Shammi Ramlacklan1, Alicia Ramtahal1, Saleem Varachha1, Dinesha Gopee1, Wendell Lai-Hing2, Felix Calderon1. 1San Fernando General Hospital, San Fernando, Trinidad and Tobago. 2Amateur Swimming Association of Trinidad and Tobago, Port of Spain, Trinidad and Tobago. 3Central American and Caribbean Amateur Swimming Confederation, Port of Spain, Trinidad and Tobago
Email: vsr103@hotmail.com

1445 Board #253 8:00 AM - 9:30 AM
Injury Reporting in Collegiate Runners
Kristynie Wieggand, Julia Freedman Silvernail. University of Nevada, Las Vegas, Las Vegas, NV. (Sponsor: John Mercer, FACSM)
Email: bartel@unlv.nevada.edu

1446 Board #254 8:00 AM - 9:30 AM
Determining Orthopedic Knee Surgeons’ Preference in using Hamstring or Patellar Tendon ACL Grafts
Scott L. Davis, Joel D. Reece. Brigham Young University Hawaii, Laie, HI. (Sponsor: Eli Lankford, FACSM)

1447 Board #255 8:00 AM - 9:30 AM
Percent Body Fat Differs between those with Chronic Ankle Instability and Healthy Matched Controls
Tricia Hubbard-Turner, FACSM, Jimmy Joyner, Anyea King, Areagash Theodros, Michael Turner, FACSM. University of North Carolina @ Charlotte, Charlotte, NC
Email: thubbar1@unce.edu

1448 Board #256 8:00 AM - 9:30 AM
Effects of Instrument Assisted Soft Tissue Mobilization on Biceps Femoris Muscle Architecture
Will C. Hawkins1, Ryan M. Thiele2, John P. Vardiman2, Philip M. Gallagher3. 1University of Southern Indiana, Evansville, IN. 2Kansas State University, Manhattan, KS. 3University of Kansas, Lawrence, KS.
Email: wchawkins@usi.edu

1449 Board #257 8:00 AM - 9:30 AM
Analysis of USAWR Wheelmill VO2 Max Testing Between Classes
Brandon Kane1, Ellie Moore1, Kerri Morgan2, James Rimmer1. 1Lakeshore Foundation, Birmingham, AL. 2Washington University, St. Louis, MO
Email: brandonk@lakeshore.org

C-48 Free Communication/Poster - Cardiac and Pulmonary Rehabilitation
Thursday, May 31, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

1450 Board #258 9:00 AM - 10:30 AM
Predictors of Health-Related Quality of Life in Patients with Symptomatic Peripheral Arterial Disease
Polly Montgomery, Ming Wang, Cong Xu, Andrew Gardner. Pennsylvania State University, Hershey, PA

1451 Board #259 9:00 AM - 10:30 AM
Impact of Cardiovascular Disease Diagnosis on All-Cause Mortality Reductions after Cardiac Rehabilitation.
Martijn Maessen1, Thijs Eijsvogels1, Esmée Bakker1, Esther Meindersma1, Niels van Gorp1, Nicole Piijnenburg2, Maria Hopman, FACSM. 1Radboudumc, Nijmegen, Netherlands. 2Coöperatie VGZ UA, Arnhem, Netherlands. (Sponsor: Maria Hopman, FACSM)
Email: martijn.maessen@radboudumc.nl
P102  Final Program
1452  Board #260  9:00 AM - 10:30 AM
Mobile phone-based Cardiac Rehabilitation Program Improves Exercise Capacity and Clinical Outcomes in Chinese Revascularized Patients
Jing Ma1, cheng Ge1, yajun shi1, yong xu1, Chenghui Zhao1, Chunjue Liu1, ling Gao1, Sidney C. Smith1, Yunfui Chen1. 1. department of Cardiology, beijing. China. 2. heart and vascular center, Chapel Hill, NC
Email: crystalma@126.com
(No relevant relationships reported)

1453  Board #261  9:00 AM - 10:30 AM
Relationships Between Short Physical performance Battery And Clinical and Laboratory Factors For Cardiovascular Disease Inpatients
Tomohiro Yasuda1, Toshiaki Nakajima2, Tatsuya Sawaguchi3, Naohiro Nozawa4, Tomoe Arakawa2, Reiko Takashashi2, Yuta Mizushima2, Satoshi Katayanagi2, Kuzuhisa Matsumoto2, Shigeru Toyota3, Teruo Inoue3. 1. Seirei Katsushika Hospital, Shizuoka, Japan. 2. Dokkyo Medical University, Hatano, Japan. 3. Dokkyo Medical University Hospital, Tochigi, Japan
Email: tomo-nhiro-y@showa-ac.jp
(No relevant relationships reported)

1454  Board #262  9:00 AM - 10:30 AM
Knowledge and Perceived Physician Encouragement Toward Exercise in Congenital Heart Disease Patients and Their Spheres
Michaela F. Martinez, Matthew J. Garver. University of Central Missouri, Warrensburg, MO
Email: mfm16290@ucmo.edu
(No relevant relationships reported)

1455  Board #263  9:00 AM - 10:30 AM
Submaximal Oxygen Uptake Efficiency Slope as a Predictor of VO2max in Men with Cardiovascular Disease
Clare M. McDermott, Ciara M. McCormack, Sarah M. Kelly, Andrew McCarron, Kieran M. Moran, Niall M. Moyna. Dublin City University, Dublin, Ireland
Email: clare.mcdermott26@email.dcu.ie
(No relevant relationships reported)

1456  Board #264  9:00 AM - 10:30 AM
Unstable Surface Training Is More Effective For Improving Stability Than Walking Training In Stroke Survivors
Younsun Son1, Eunkyung Park2, Juneson Johnson1, Youngsoo Joo1, Jaehyun Yoo1. 1. University of Houston, Houston, TX. 2. University of Texas Rio Grande Valley, McAllen, TX.
(No relevant relationships reported)

1457  Board #265  9:00 AM - 10:30 AM
The Role of Ethnicity in Developing Cardiovascular Disease in At-Risk Populations
Nguyen D. Nguyen1, Cynthia Villalobos1, Natalie Figueroa1, Tristan J. Kittinger1, Paul D. Vosti1, Courtney D. Jensen1. 1. University of the Pacific, Stockton, CA. 2. St. Joseph's Medical Center, Stockton, CA
Email: n_nguyen55@u pacific.edu
(No relevant relationships reported)

1458  Board #266  9:00 AM - 10:30 AM
Sex Differences Over Time In Exercise Ventilatory Dynamics In Patients With Cystic Fibrosis
Matthew A. Tucker, Nichole Siegler, Jacob Looney, Paula Rodriguez-Miguiz, Kathleen T. McKie, Caralee Forseen, Reva H. Crandall, Ryan A. Harris, FACS M. Augusta University, Augusta, GA. (Sponsor: Ryan Harris, FACS M)
Email: matthewr@augusta.edu
(No relevant relationships reported)

1459  Board #267  9:00 AM - 10:30 AM
Antioxidant Supplementation Improves Skeletal Muscle Metabolism During Maximal Exercise In Patients With Cystis Fibrosis
Paula Rodriguez Miguelez, Jacob Looney, Nichole Seigler, Matthew Tucker, Kathleen McKie, Caralee Forseen, Ryan Harris, FACS M. Augusta University, Augusta, GA. (Sponsor: Ryan A. Harris, FACS M)
(No relevant relationships reported)

1460  Board #268  9:00 AM - 10:30 AM
Qigong exercise for Chronic Obstructive Pulmonary Disease Rehabilitation A Randomized Controlled Trial
Meng Ding1, Meng Ding1, Xiangren YF, Xianhai Chen1, Xiaosheng Dong1, Mengyao Chao2, Yong “Tai” Wang, FACS M. 1. Shandong Normal University, Jinan, China. 2. Affiliated Hospital of Shandong University of Traditional Chinese Medicine, Jinan, China. 3. the University of Texas at Tyler, Tyler, TX. (Sponsor: Yong “Tai” Wang, FACS M)
Email: dingmeng@pmail.com
(No relevant relationships reported)

C-49  Free Communication/Poster - Cardiorespiratory Fitness
Thursday, May 31, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

1461  Board #269  9:00 AM - 10:30 AM
The Association of Combined Peak Oxygen Consumption and Ventilatory Efficiency with Survival in Hypertrophic Obstructive Cardiomyopathy
Jose R. Medina-Inojosa, Joshua Smith, Veronica Layrisse, Thomas P. Olson, FACS M. Mayo Clinic Rochester, Rochester, MN. (Sponsor: Thomas Olson PHD, FACS M)
Email: Medinajnojosa.jose@mayo.edu
(No relevant relationships reported)

1462  Board #270  9:00 AM - 10:30 AM
Does Estimated Cardiorespiratory Fitness Accurately Predict Directly Measured VO2peak In Breast Cancer Survivors?
Meghan Michalski, Catherine Capaci, Kylie Roved, Richard Happel, Jessica Scott. Memorial Sloan Kettering Cancer Center, New York, NY
Email: michalsm@mskcc.org
(No relevant relationships reported)

1463  Board #271  9:00 AM - 10:30 AM
Abnormal Submaximal Cardiopulmonary Exercise Parameters Predicts Impaired Peak Exercise Performance In Sickle Cell Anemia Patients
Adam W. Powell, Tarek Alsaeid, Omar Niss, Robert J. Fleck, James Cnota, Punam Malik, Charles T. Quinn, Wayne A. Mays, Michael D. Taylor, Clifford Chin. Cincinnati Children’s Hospital Medical Center, Cincinnati, OH
Email: adam.powell@chnmc.org
(No relevant relationships reported)

1464  Board #272  9:00 AM - 10:30 AM
Considering Cardiorespiratory Fitness Relative to Lean Body Mass in HIV+ compared with HIV- Hispanic Women
Farah A. Ramirez-Marrero, FACS M, Walter Frontera, FACS M, Jorge Santana-Bagur, Valerie Wojna. University of Puerto Rico, San Juan, Puerto Rico
Email: farah.ramirez1@upr.edu
(No relevant relationships reported)

1465  Board #273  9:00 AM - 10:30 AM
Impact of Primary Disease Status on Six-Minute Walking Distance.
Ulf G. Bronus, Cynthia Fritsch, Karen Vuckovic, Laurie Quinn, Eileen Collins. University of Illinois at Chicago, Chicago, IL
(No relevant relationships reported)
American College of Sports Medicine

Board #274 9:00 AM - 10:30 AM
Cardiorespiratory Fitness Is Inversely Associated With Metabolic Syndrome And Clustering Of Metabolic Risk Factors: The Ball State University Adult Physical Fitness Study
Nicole L. Koontz, Mary T. Imboden, Elizabeth P. Kelley, Matthew P. Harber, FACSM, Holmes W. Finch, Leonard A. Kaminsky, FACSM, Mitchell H. Whaley, FACSM. Ball State University, Muncie, IN
(No relevant relationships reported)

Board #275 9:00 AM - 10:30 AM
Physical Activity Patterns And Cardiorespiratory Fitness In Men With Cardiovascular Disease
Ciara M. McCormack, Clare M. McDermott, Sarah M. Kelly, Andrew McCarron, Kieran M. Moran, Niall M. Moyna. Dublin City University, Dublin, Ireland
(No relevant relationships reported)

Board #276 9:00 AM - 10:30 AM
Firefighters and Physical Function: Should There Be Annual Testing?
Hyoung Han, Alexcis C. King, J. Mark VanNess, Cynthia Villalobos, Courtney D. Jensen. University of the Pacific, Stockton, CA
Email: h.han3@u.pacific.edu
(No relevant relationships reported)

Board #277 9:00 AM - 10:30 AM
Comparison of Six-minute Walk Test VO2max Prediction Equations in Cardiac Rehabilitation Patients
Lucas K. Shrum1, Jason D. Waggener2, William M. Miller3, Majid M. Syed-Abdul1, Dhwan S. Soni1, Beverly J. Hoover4, Mary McCrate1, Beverly Kester1, Duc T. Nguyen1, Thomas J. Pujol1, FACSM4. 1Southeast Missouri State University, Cape Girardeau, MO. 2University of Mississippi, Oxford, MS. 3University of Missouri-Columbia, Columbia, MO. 4Saint Francis Medical Center, Cape Girardeau, MO.
(Sponsor: Thomas Joe Pujol, FACSM)
Email: lkshrum2s@semo.edu
(No relevant relationships reported)

Board #278 9:00 AM - 10:30 AM
Fat Mass, and Not Heart Rate Recovery is Associated With Cardiorespiratory Fitness in Young, Sedentary Adults
J. Matthew Thomas, Julie S. Pendergast, W. Scott Black, Philip A. Kern, Jody L. Clasey, FACSM. University of Kentucky, Lexington, KY
(Sponsor: Jody L. Clasey, FACSM)
(No relevant relationships reported)

Board #279 9:00 AM - 10:30 AM
Aerobic Exercise Capacity In Mild-to-moderate Chronic Kidney Disease Is Maintained Over A 5 Year-period
Helena Wallin1, Anette Rickenlund1, Maria E. Eriksson2, Eva Jansson1, Carin Wallquist1, Brittta Hylander Rössner1, Stefan Jacobsson1. 1Karolinska Institutet, Huddinge, Sweden. 2Karolinska Institutet, Stockholm, Sweden.
Email: helena.wallin@ki.se
(No relevant relationships reported)

Exercise is Medicine®Poster - EIM: Counseling and On-Campus
Thursday, May 31, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

Board #280 9:00 AM - 10:30 AM
Bridging The Gap Between Campaigns And Programs, The Country-based Public Health Policy Issue: “Move It For Health”
Roberto C. Burini, FACSM, Franz H. Burini. UNESP Medical School, Botucatu, Brazil
Email: fburini@fmb.unesp.br
(No relevant relationships reported)

C-50

www.acsm.org
1481 Board #289 9:00 AM - 10:30 AM
Preliminary Results Of An In-depth Investigation Of Exercise Is Medicine On Campus
Oliver Wilson, Nishat Bhuiyan, Melissa Bopp, FACSM, Zach Papalia. The Pennsylvania State University, State College, PA.
(Sponsor: Dr. Melissa Bopp, FACSM)
Email: oww2@psu.edu
(No relevant relationships reported)

1482 Board #290 9:00 AM - 10:30 AM
Referred Students’ Motivators And Barriers To Participate In An EIMOC Program
Kristen M. Lagally, FACSM, Derek Hevel, Lauren Von Schaumburg, Anna Rinaldi-Miles. Illinois State University, Normal, IL
Email: kmlagal@ilstu.edu
(No relevant relationships reported)

C-51 President’s Lecture - Paralympic Sports Medicine - Evolution of a Specialty
Thursday, May 31, 2018, 10:30 AM - 11:20 AM
Room: CC-Ballroom A

Over the last quarter of a century the Paralympic Games has become the third-biggest sporting event in the world behind the Olympics and FIFA World Cup with over 4,000 athletes competing in front of 2.15 million spectators. The medical support services, and illness and injury prevention programmes have also had to grow and learn from a small base of knowledge. Adapted sports is a highly complex mix of trying to push the boundaries of sporting performance against a background of an underlying impairment which can have significant implications for health. Continued developments of new sports and disability specific equipment add to the complexity of understanding the biomechanics of injury. Specific postgraduate training programmes have developed to meet the needs of the sports physician caring for the Para athlete. Particular considerations for care of the travelling athlete, anti-doping procedures and unique physiological responses to exercise have created one of the most fascinating but challenging new specialties. The talk will discuss the evolution of the speciality and the development of the international multi-centred research programme to help deliver illness and injury prevention.

1483 Nick Webborn, FACSM. British Paralympic Association, London, United Kingdom
(No relevant relationships reported)

C-52 President’s Lecture - 68 is the New 43: Rebellious Rise of the Senior Olympics
Thursday, May 31, 2018, 10:30 AM - 11:20 AM
Room: CC-Auditorium Main

1484 Pamela M. Peeke, FACSM. University of Maryland School of Medicine, College Park, MD
(No relevant relationships reported)
Hypoxic conditioning is an innovative strategy for weight management in obese patients, improving health markers in hypertensive and older individuals. Potential mechanisms include up-regulated endocrine and metabolic responses, improved appetite regulation, vascular function, and muscular and neuro-vegetative adaptations. Heat therapy improves clinical biomarkers of cardiovascular and metabolic health. It also favours muscle hypertrophy and protects from atrophy, and could be used during musculoskeletal unloading, such as post-surgical immobilization. Exercising at a lower absolute intensity under hypoxic or hot conditions may also reduce mechanical loading, while ensuring an adequate exercise stimulus for weight management (obese) or fitness maintenance (injured athletes).

Chair: Caroline Smith. Appalachian State University, Boone, NC
(No relevant relationships reported)

Walking in Hypoxia to Improve Cardio-Metabolic Health and Promote Weight Loss
Olivier Girard. Aspetar, Doha, Qatar
(No relevant relationships reported)

Impact of Hypoxia on Glucose Metabolism, Appetite Regulations, Muscle Damage and Inflammatory Responses
Kazushige Goto. Ritsumeikan University, Kusatsu, Japan
(No relevant relationships reported)

Heat Therapy as a “New” Tool to Combat Cardiometabolic Disease Risk
Christopher T. Minson, FACSM. University of Oregon, Eugene, OR
(No relevant relationships reported)

Heat Therapy for Muscle Rehabilitation
Sebastien Racinais. Aspetar, Doha, Qatar
(No relevant relationships reported)

Symposium - Few Easy Pieces on Breathing Control during Exercise in Man: Lessons from Other Species and from Human Diseases
Thursday, May 31, 2018, 1:00 PM - 3:00 PM
Room: CC-101G

Dr. Haouzi will describe the normal ventilatory and gas exchange response to exercise in humans and some animal models, and define the various concepts and theories proposed to explain these responses. Dr. Dempsey will describe what are the mechanisms of ventilatory and gas exchange limitations during heavy exercise in humans. The presentation will focus on the specificity of the response in athlete. Dr. Stringer will describe what are the limiting factors altering the ventilatory response in certain disease states and how these data can be used to understand the limitations of theses responses in healthy subjects.

Chair: Philippe Haouzi. Penn State Hershey Medical Center; Hershey, PA
(No relevant relationships reported)

The Ventilatory Response to Exercise: From Data to Theories
Philippe Haouzi. Pennsylvania State University; Hershey, PA
(No relevant relationships reported)
### D-04  Symposium - Planes, Trains, and Automobiles: Novel Intervention Strategies to Encourage Physically Active Transportation

**Thursday, May 31, 2018, 1:00 PM - 3:00 PM**  
**Room: CC-102EF**

Community-based strategies to improve physical activity are designed to make walking and bicycling easy and safe options for everyone. One way communities can support physical activity is to plan for active transportation, which has both health and environmental benefits. Active transportation is any human-powered means of travel, such as walking, biking, or wheelchair rolling. Public transport is also an active mode because it involves walking at the beginning and end of most trips. This symposium will explore novel intervention strategies used to encourage active transportation as applied in airports, light rail systems, and reductions in automobile use.

#### 1499  1:00 PM - 1:10 PM
**Chair:** Janet W. Rankin, FACSM. Virginia Tech, Blacksburg, VA  
(No relevant relationships reported)

#### 1500  1:10 PM - 1:35 PM
**Moving Active Transport from the Bottom of the US Agenda to the Top**  
James F. Sallis, FACSM. University of California at San Diego, San Diego, CA  
**Reported Relationships:** J.F. Sallis: Royalty; San Diego State University Research Foundation for SPARK physical activity programs. Consulting Fee; School Specialty Inc. Ownership Interest (Stocks, Bonds); Santech Inc.

#### 1501  1:35 PM - 2:00 PM
**Planes – Walk to Fly: Increasing Walking in the Atlanta Hartsfield-Jackson Airport**  
Janet E. Fulton, FACSM. CDC, Atlanta, GA  
(No relevant relationships reported)

#### 1502  2:00 PM - 2:25 PM
**Trains – Transit Related Activity in Neighborhoods (TRAIN) Results**  
Harold W. Kohl, III, FACSM. University of Texas Health Science Center Houston School of Public Health, Austin, TX  
(No relevant relationships reported)

#### 1503  2:25 PM - 2:50 PM
**Automobiles – Shared Mobility Options: Prospects for Increasing Physical Activity**  
Anne V. Moudon. University of Washington, Seattle, WA  
(No relevant relationships reported)

#### 2:50 PM - 3:00 PM
**Overall Discussion**

---

### D-05  Symposium - Return to Play Issues for the Athlete with Known Cardiovascular Disease

**Thursday, May 31, 2018, 1:00 PM - 3:00 PM**  
**Room: CC-Ballroom B**

The management and return to play of athletes with known cardiovascular disease is challenging and since the American College of Cardiology/American Heart Association/Heart Rhythm Society Guidelines, often includes a shared decision making model instead of a condition based clearance. The shared decision making model requires an individualized and collaborative recommendation and clearance decision involving at a minimum, the athlete and their family, the team physician and consulting cardiologist. This session will explore common scenarios and perspectives from team physicians as well as evidence based information regarding genetic cardiac disease and athletes with implantable defibrillators.

#### 1504  1:00 PM - 1:20 PM
**Chair:** Aaron L. Baggish, FACSM. Massachusetts General Hospital, Harvard University, Boston, MA  
(No relevant relationships reported)
| Board #5 | 1:00 PM - 3:00 PM | Copper - Zinc Serum Traces, Lipid Profile, Geriatric Depression, and Daily Living Activities in Older Adults  
Jean C. Zambrano, Ramón A. Marquina, María V. Gómez, Edileiba Rojas, Carlos E. Rondón, Thairy G. Reyes-Valero, Rafael A. Reyes-Alvarez.  
1University of the Andes Mérida-Venezuela, Merida, Venezuela, Bolivarian Republic of.  
2University of the Andes Mérida-Venezuela, Mérida, Venezuela, Bolivarian Republic of.  
3NOVA Southeastern University, Fort Lauderdale, FL.  
Email: marquina@ula.ve  
(No relevant relationships reported) |
|---|---|---|
| Board #6 | 1:00 PM - 3:00 PM | Heavier, Stronger for Better Bone Mineral Density of Middle Age and Older Adults  
Xiong Qin, Weimo Zhu, FACSM.  
University of Illinois at Urbana and Champaign, Urbana, IL.  
(Sponsor: Weimo Zhu, FACSM)  
Email: xiongq22@illinois.edu  
(No relevant relationships reported) |
| Board #7 | 1:00 PM - 3:00 PM | Age-related Alterations In Functionality And Muscle Architecture Of The Lower Limbs In Women  
Kevin C. Phillips, Byungjoo Noh, Michelle Burga, Matt Gage, Tejin Yoon.  
Michigan Technological University, Houghton, MI.  
(Sponsor: Sandra Hunter, FACSM)  
Email: kcp@umich.edu  
(No relevant relationships reported) |
| Board #8 | 1:00 PM - 3:00 PM | Effects Of Linear Periodization Versus Concurrent Periodization Training On Adl's In An Elderly Population  
Brian A. Zalma, Andrew NL Buskard, Craig Dent, Catherine Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
| Board #9 | 1:00 PM - 3:00 PM | Using the Heart Rate Index Equation to Estimate Peak METs in Physically Active Adults  
Roger Sacks, Barry Franklin, FACSM, Jenna Brinks, Judy Bourn, Shelby Potkin, Rinna Rida, Harold Friedman, Abhay Bilolikar, Justin Trivax, Diedre Brunke.  
William Beaumont Hospital, Royal Oak, MI.  
(Sponsor: Dr. Barry Franklin, FACSM)  
Email: Roger.Sacks@beaumont.org  
(No relevant relationships reported) |
| Board #10 | 1:00 PM - 3:00 PM | Effects of 12-weeks of Aerobic Exercise Training on Insulin Sensitivity Under Energy Balanced Conditions in Women  
Christian E. Behrens, Jr.  
The University of Alabama at Birmingham, Birmingham, AL.  
(Sponsor: Dr. Gordon Fisher FACSM, FACSM)  
(No relevant relationships reported) |
| Board #11 | 1:00 PM - 3:00 PM | Confirming Training-Related Aerobic Improvement Using Confirming Training-Related Aerobic Improvement Using  
Tharpa Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
| Board #12 | 1:00 PM - 3:00 PM | The Effects Of Tempo-adjusted Music On Gait Speed And Functionality In Middle-aged And Older Adults  
Jeffrey M. Janot, Saori Braun, Nicole Cisewski, Anna Stover, Samantha Noetzelman, Lauren Grover.  
University of Wisconsin-Eau Claire, Eau Claire, WI.  
Email: janotjm@uwec.edu  
(No relevant relationships reported) |
| Board #13 | 1:00 PM - 3:00 PM | Unilateral and Contralateral Rapid Torque Adaptations To Unilateral and Contralateral Rapid Torque Adaptations  
1Kennesaw State University, Kennesaw, GA.  
2Oklahoma State University, Stillwater, OK.  
3Oklahoma State University, Stillwater, OK.  
4Oklahoma State University, Stillwater, OK.  
Email: olmosalex73@gmail.com  
(No relevant relationships reported) |
| Board #14 | 1:00 PM - 3:00 PM | Confirming Training-Related Aerobic Improvement Using Confirming Training-Related Aerobic Improvement Using  
Tharpa Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
| Board #15 | 1:00 PM - 3:00 PM | Ipsilateral and Contralateral Rapid Torque Adaptations To Ipsilateral and Contralateral Rapid Torque Adaptations  
1Kennesaw State University, Kennesaw, GA.  
2Oklahoma State University, Stillwater, OK.  
3Oklahoma State University, Stillwater, OK.  
4Oklahoma State University, Stillwater, OK.  
Email: olmosalex73@gmail.com  
(No relevant relationships reported) |
| Board #16 | 1:00 PM - 3:00 PM | Confirming Training-Related Aerobic Improvement Using Confirming Training-Related Aerobic Improvement Using  
Tharpa Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
| Board #17 | 1:00 PM - 3:00 PM | Confirming Training-Related Aerobic Improvement Using Confirming Training-Related Aerobic Improvement Using  
Tharpa Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
| Board #18 | 1:00 PM - 3:00 PM | Confirming Training-Related Aerobic Improvement Using Confirming Training-Related Aerobic Improvement Using  
Tharpa Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
| Board #19 | 1:00 PM - 3:00 PM | Confirming Training-Related Aerobic Improvement Using Confirming Training-Related Aerobic Improvement Using  
Tharpa Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
| Board #20 | 1:00 PM - 3:00 PM | Confirming Training-Related Aerobic Improvement Using Confirming Training-Related Aerobic Improvement Using  
Tharpa Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
| Board #21 | 1:00 PM - 3:00 PM | Confirming Training-Related Aerobic Improvement Using Confirming Training-Related Aerobic Improvement Using  
Tharpa Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
| Board #22 | 1:00 PM - 3:00 PM | Confirming Training-Related Aerobic Improvement Using Confirming Training-Related Aerobic Improvement Using  
Tharpa Armitage, Joseph Signorile.  
University of Miami, Miami, FL.  
(No relevant relationships reported) |
1538 Board #7 1:00 PM - 3:00 PM
Utilizing Next Generation Sequencing to Describe Age-Related Skeletal Muscle Changes with Bed Rest
Ziad S. Mahmassani, Paul T. Reidy, Alec I. McKenzie, Chris Stubben, Robin Marcus, Paul LaStayo, Mark Supiano, Michael Howard, Micah J. Drummond. University of Utah, Salt Lake City, UT
Email: ziad.mahmassani@health.utah.edu
(No relevant relationships reported)

D-10 Thematic Poster - Movement Training
Thursday, May 31, 2018, 1:00 PM - 3:00 PM
Room: CC-Lower level L100F

1539 Chair: Kevin R. Ford, FACSM. High Point University, High Point, NC
(No relevant relationships reported)

1540 Board #1 1:00 PM - 3:00 PM
Neuromotor Training in Older Adults: A Pilot Study
Natalie Barron, Michelle Perri, Joshua Guggenheim. St. Catherine's University, St Paul, MN. (Sponsor: Mark Blegen, FACSM)
Email: mbarron@stkat.de
(No relevant relationships reported)

1541 Board #2 1:00 PM - 3:00 PM
Dual-task Training Reduces Fall Frequency And Increases Physical Activity In Individuals With Parkinson’s Disease
Amanda L. Penko1, Jacob E. Barkley2, Jay L. Alberts1. 1Cleveland Clinic, Cleveland, OH. 2Kent State University, Kent, OH
(No relevant relationships reported)

1542 Board #3 1:00 PM - 3:00 PM
A Novel Movement Ability Training Program Enhances Performance in Female Soccer Athletes
Casey Myers1, Mike Decker2, Kevin Shelburne, Matt Shaw1, Julie Graves1, Eric McCarty2, Michelle Wolcott1. 1University of Denver, Denver, CO. 2University of Colorado, Boulder, CO
Email: casey.myers1@gmail.com
(No relevant relationships reported)

1543 Board #4 1:00 PM - 3:00 PM
Results from the Randomized Controlled Trial Cyclical Lower Extremity Exercise (CYCLE) Trial for Parkinson’s disease
Jay L. Alberts, Amanda L. Penko, Arson Rosenfeldt, Nicole M. Zimmerman. Cleveland Clinic, Cleveland, OH
Email: albert@ccf.org
(No relevant relationships reported)
1560 1:00 PM - 1:20 PM
Thoracic Pain in a Competitive Middle-Aged Tennis Player
Stacey Bennis1, Daniel Blazé2. 1McGraw Medical Center of Northwestern University/Shirley Ryan AbilityLab, Chicago, IL. 2Northwestern University/Shirley Ryan AbilityLab, Chicago, IL. (Sponsor: Joseph Ilm, MD, FACSM) (No relevant relationships reported)

1561 1:20 PM - 1:40 PM
Cervical Spinal Injury: Presenting Issue — Decreased Range Of Motion Globally, Mild-to-moderate Stiffness With Chronic Pain
Zeron R. Jimenez. Mercy College, Dobbs Ferry, NY. (Sponsor: M. Allison Williams, FACSM) Email: zeronjfr@gmail.com (No relevant relationships reported)

1562 1:40 PM - 2:00 PM
Spinal Trauma in a Division I Football Player
Ajean K. Ramprasad. Crozer-Keystone Health System, Springfield, PA. (Sponsor: Tom Kaminiski, PhD, FACSM) (No relevant relationships reported)

1563 2:00 PM - 2:20 PM
Thoracic Radiculopathy Case
Malia Cali, Jacques Courseault. LSUHSC, New Orleans, LA Email: mcali@lusuhs.edu (No relevant relationships reported)

1564 2:20 PM - 2:40 PM
Persistent Right Upper Limb Weakness: Football
Melissa Lau, Michael Baria. Ohio State University, Columbus, OH (No relevant relationships reported)

1565 1:00 PM - 1:20 PM
Knee Pain - Football, Basketball
Alexandra Warrick, Julie Ingwerson, Brian Haus. UC Davis, Sacramento, CA. (Sponsor: Brian Davis, M.D., FACSM) Email: aewarrick@ucdavis.edu (No relevant relationships reported)

1566 1:20 PM - 1:40 PM
Knee Pain And Instability - Soccer Player
Allison N. Schroeder, Kentaro Onishi. University of Pittsburgh Medical Center, Pittsburgh, PA. (Sponsor: Thomas Best, FACSM) Email: aschroe1@alumni.nd.edu (No relevant relationships reported)

1567 1:40 PM - 2:00 PM
Keen Pain and a Moveable Mass in Basketball Player
James Wilcox, Robert Baker, FACSM, Keith Kenter. Western Michigan University Homer Stryker M.D. School of Medicine, Kalamazoo, MI. (Sponsor: Robert Baker, FACSM) (No relevant relationships reported)

D-13 Clinical Case Slide - Knee III
Thursday, May 31, 2018, 1:00 PM - 3:00 PM
Room: CC-200F
Chair: Scott A. Paluska, FACSM. Christie Clinic Sports Medicine, Champaign, IL (No relevant relationships reported)

D-14 Basic Science World Congress - Keynote - Muscular Molecular Messages for Mere Mortals and Gold Medal Athletes
Thursday, May 31, 2018, 1:00 PM - 1:50 PM
Room: CC-Auditorium 1
Marco Sandri. University of Padova, Padova, Italy (No relevant relationships reported)

Thursday, May 31, 2018, 1:00 PM - 1:50 PM
Room: CC-208AB
High-intensity interval exercise (HIIE) has been used for decades in athlete training environments. In recent years, several studies have demonstrated the advantages of HIIE compared to continuous moderate intensity exercise for improving cardiovascular fitness in both healthy adults and adults with conditions such as heart disease. Some studies have shown promising results in children as well, but many experts question whether HIIE is safe or effective in children. This talk will review the effects of HIIE on health conditions and address whether HIIE has a role to play in addressing obesity and other health conditions in children.

D-16 Tutorial Lecture - A “PFIT” Approach to Elbow UCL Injuries in Athletes: Integrating Prevention, Function, Imaging, and Treatment
Thursday, May 31, 2018, 1:00 PM - 1:50 PM
Room: CC-101CD
This state of the art session will review the most-up to date data on elbow ulnar collateral ligament (UCL) injuries in athletes. We will integrate epidemiology in all athletes and all ages. Second, imaging with a particular emphasis on pathological findings in ultrasonography but highlight that medical intervention may not be indicated if an athlete is asymptomatic. Next, the newest surgical techniques including internal bracing will be reviewed and discuss which type of surgical intervention is indicated with outcomes. Finally, an integration of the Kinetic Chain and how minimizing breaks in the chain could lead to decreased UCL injuries.
Introduction Habit Theory as a behavior-change strategy and detail interventions derived from the concept of habit, discuss the ways habits are defined and measured, and describe their associated characteristics and underlying neurological mechanisms. Second, we will discuss the relevance of Habit Theory for increasing physical activity and decreasing sedentary time, with a goal of demonstrating the potential utility of habit-based strategies for promoting sustained behavior change. Finally, we will discuss the relevance of Habit Theory for increasing physical activity and decreasing sedentary time, with a goal of demonstrating the potential utility of habit-based strategies for promoting sustained behavior change.

D-17 Tutorial Lecture - People of Color in the Outdoors: Missed Opportunities for Physical Activity
Thursday, May 31, 2018, 1:00 PM - 1:50 PM
Room: CC-101AB

Racial and ethnic disparities in leisure-time physical activity exist such that non-Hispanic whites are more likely to meet physical activity guidelines than people of color in the United States. Substantial evidence demonstrates that access to parks and green spaces contribute to greater levels of physical activity. However, less is known about why people of color spend less time outdoors and in larger state and national parks participating in leisure time physical activity. The goal of this tutorial is to highlight current literature on disparities in outdoor physical activity participation and new opportunities for health promotion programs targeting this group.

1578 Olivia Affuso, FACSM. University of Alabama - Birmingham, Birmingham, AL
(No relevant relationships reported)

1579 Myron Floyd. North Carolina State University, Raleigh, NC
(No relevant relationships reported)

1580 Timothy Makubuya. University of Missouri - St. Louis, St. Louis, MO
(No relevant relationships reported)

D-18 Clinical Workshop-Hands On Demonstration - Hip Ultrasound
Thursday, May 31, 2018, 1:00 PM - 1:50 PM
Room: CC-200B

Over the last decade, the rules for artistic gymnastics have progressed and changed. With these changes, there has been an increased emphasis on difficulty and explosive power rather than graceful and flexibility. Because of these changes, there has been a change in the injury patterns of the sport. Furthermore, there has been an increase in the number of athletes who participate in gymnastics, as well as in the sport’s injury patterns. This session will review the common injuries providers may see in their gymnasts as well as an overview of the various types of gymnastics in which their patients may participate.

1581 Jay Smith. Mayo Clinic, PM&R, Rochester, MN

D-19 Tutorial Lecture - Common Injuries in the Changing World of Gymnastics
Thursday, May 31, 2018, 1:00 PM - 1:50 PM
Room: Hyatt-Greenway Ballroom C

The primary purpose of this Tutorial Lecture is threefold. First, we will introduce the concept of habit, discuss the ways habits are defined and measured, and describe their associated characteristics and underlying neurological mechanisms. Second, we will introduce Habit Theory as a behavior-change strategy and detail interventions derived from Habit Theory from existing literature and our own work, regarding multiple health behaviors. Finally, we will discuss the relevance of Habit Theory for increasing physical activity and decreasing sedentary time, with a goal of demonstrating the potential utility of habit-based strategies for promoting sustained behavior change.

1582 Emily A. Stuart. Children’s Hospital Colorado, University of Colorado School of Medicine, Aurora, CO
(No relevant relationships reported)

D-20 Tutorial Lecture - Harnessing Healthy Habits to Promote Sustained Behavior Change
Thursday, May 31, 2018, 1:00 PM - 1:50 PM
Room: Hyatt-Nicoliit Ballroom D

This tutorial will provide an explanation of how muscle motor units are recruited through the full range of efforts, and how they subsequently fatigue (when active) and recover (when turned off). A model will be presented that explains individual motor unit, and whole muscle, fatigue progression during exercise and work. In this session, an emphasis will be put on teaching how different relative load magnitudes can challenge fast twitch motor units during resistance training.

1585 Jim R. Potvin. McMaster University, Tescumseh, ON, Canada
(No relevant relationships reported)

D-21 Basic Science World Congress - Tutorial Lecture - How Motor Units (Really) Work
Thursday, May 31, 2018, 2:10 PM - 3:00 PM
Room: CC-Auditorium 1

The application of bio-banding or training and competition based on maturity status rather than chronological age is rather new to sport science. Football (soccer) is a prime, recent world-wide example. Experts in its application and the biological and psychological factors underpinning its use will describe what this process is and how it works in practice.

1587 Alan D. Rogol, FACSM. University of Virginia, Charlottesville, VA
(No relevant relationships reported)

1588 Robert Malina, FACSM. University of Texas at Austin, Bay City, TX
(No relevant relationships reported)

D-22 Basic Science World Congress - Tutorial Lecture - Muscle Protein Turnover in Human Skeletal Muscle
Thursday, May 31, 2018, 2:10 PM - 3:00 PM
Room: CC-Auditorium 2

1586 Blake B. Rasmussen. University of Texas Medical Branch, Galveston, TX
(No relevant relationships reported)

D-23 Tutorial Lecture - Bio-Banding in Youth Sports: Potential Applications
Thursday, May 31, 2018, 2:10 PM - 3:00 PM
Room: CC-208AB

Sudden cardiac death (SCD) is the leading cause of death in exercising athletes. This symposium looks at the demographics of SCD including the incidence and etiology specific to certain age groups. It also examines how sudden cardiac arrest (SCA) and death occurs with relation to exercise compared to SCA/D which occurs while not exercising and takes an in-depth look at marathons specifically. There will be an intriguing presentation on what precipitates SCA/D in both young athletes and older athletes/exercisers and finally how to develop and implement and emergency action plan. This symposium gives a broad view of SCA/D with exercise.

1589 Mats Borjesson. Sahlgrenska University Hospital, Gothenburg, Sweden
(No relevant relationships reported)
THURSDAY, MAY 31, 2018

### D-25 Clinical Workshop-Hands On Demonstration - Practical Sports Ultrasound of the Elbow

**Thursday, May 31, 2018, 2:10 PM - 3:00 PM**
**Room: CC-200B**

This 50 minute workshop covers the topic of common elbow conditions in athletes, including effective ultrasound anatomy evaluation. We also discuss US-guided procedures, techniques and how these can improve safety and efficacy of treatment. Building upon our experiences from last year, we will focus on several high-yield clinical scenarios that are commonly seen in sports medicine practice. The first section of the workshop will include a live demonstration. This will be followed by hands on practice in small group sessions, divided by participant experience level.

**1590 Ashwin Babu. Mass General Sports Medicine, Boston, MA**
(No relevant relationships reported)

**1591 Adam Tenforde. Spaulding Rehabilitation Hospital / Harvard Medical School, Charlestown, MA**
(No relevant relationships reported)

### D-26 Tutorial Lecture - The Science of Soccer: Integrating Training, Monitoring, and Nutritional Strategies to Optimize Performance

**Thursday, May 31, 2018, 2:10 PM - 3:00 PM**
**Room: Hyatt-Greenway Ballroom C**

Soccer is not only the most popular sport in the world, but also places tremendous demands on athletes. This presentation will focus on examining the demands of the game and how this should drive an athlete's training methodology. Additionally, new advancements in monitoring, including training load, fitness assessment, and biomarker tracking, provide potentially important methods for optimizing both athlete health and performance. Nutritional strategies can also be used to complement the training methods and can be guided by the results obtained from strategic athlete monitoring.

**1593 Shawn M. Arent, FACSM. Rutgers University, New Brunswick, NJ**
Reported Relationships: S.M. Arent: Contracted Research - Including Principle Investigator; Quest Diagnostics.

**1594 Mark Russell. Leeds Trinity University, Horsforth, United Kingdom**
Reported Relationships: M. Russell: Contracted Research - Including Principle Investigator; Pepsico, Ltd., BENEO GmbH.

### D-27 Tutorial Lecture - Yoga: A Mind-Body Approach to Physical Activity and Health

**Thursday, May 31, 2018, 2:10 PM - 3:00 PM**
**Room: Hyatt-Nicollet Ballroom D**

Yoga is one of the oldest forms of physical activity. However, while an extremely popular form of physical activity, there are a variety of styles of yoga that may elicit different health-related benefits and may be applicable to different individuals. This session will compare and contrast the different style of yoga, the health benefits of yoga, and application of yoga as an option for achieving public health guidelines for physical activity.

**1595 Sally A. Sherman. University of Pittsburgh, Pittsburgh, PA**
(No relevant relationships reported)

### D-28 Highlighted Symposium - Physical Exercise for Brain Health: Where Does HIIT Fit?

**Thursday, May 31, 2018, 3:15 PM - 5:15 PM**
**Room: CC-Ballroom A**

How does high-intensity interval training (HIIT) impact brain function? We will examine the effects of HIIT on cognition and sleep in younger and older adults, and explore the potential application of HIIT in schools to improve academic performance.

**1600 Co-Chair: Vitor A. Lira. University of Iowa, Iowa City, IA**
(No relevant relationships reported)

**1601 Co-Chair: Scott K. Powers, FACSM. University of Florida, Gainesville, FL**
(No relevant relationships reported)

**1602 3:15 PM - 3:40 PM**
**Autophagy in Basal and Increased Muscle Use**
Vitor A. Lira. University of Iowa, Iowa City, IA
(No relevant relationships reported)

**1603 3:40 PM - 3:45 PM**
**Discussion**
Vitor A. Lira. University of Iowa, Iowa City, IA
(No relevant relationships reported)

**1604 3:45 PM - 4:10 PM**
**Autophagy and Disease-Induced Skeletal Muscle Atrophy**
Scott K. Powers, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)

**1605 4:10 PM - 4:15 PM**
**Discussion**
Scott K. Powers, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)

### D-29 Basic Science World Congress - Symposium - Autophagy and Skeletal Muscle Biology

**Thursday, May 31, 2018, 3:15 PM - 5:15 PM**
**Room: CC-Auditorium 1**

Autophagy, a fundamental process for degrading and recycling cellular components, is conserved from yeast to mammals. However, its molecular regulation and cellular targets (i.e., proteins and organelles) are tissue-specific. Recent studies have demonstrated that autophagy is required for normal muscle function in a variety of conditions. This symposium will focus on recent advances in relation to the role and regulation of skeletal muscle autophagy in: i) basal and increased muscle use (e.g., resting and exercise); ii) atrophy due to decreased muscle use; iii) regeneration from muscle injury; and iv) sarcopenia and aging. Mechanistic gaps in our understanding will be discussed as they may guide future studies into the discovery of therapeutic targets to improve and/or preserve skeletal muscle function.

**1600 Co-Chair: Vitor A. Lira. University of Iowa, Iowa City, IA**
(No relevant relationships reported)

**1601 Co-Chair: Scott K. Powers, FACSM. University of Florida, Gainesville, FL**
(No relevant relationships reported)

**1602 3:15 PM - 3:40 PM**
**Autophagy in Basal and Increased Muscle Use**
Vitor A. Lira. University of Iowa, Iowa City, IA
(No relevant relationships reported)

**1603 3:40 PM - 3:45 PM**
**Discussion**
Vitor A. Lira. University of Iowa, Iowa City, IA
(No relevant relationships reported)

**1604 3:45 PM - 4:10 PM**
**Autophagy and Disease-Induced Skeletal Muscle Atrophy**
Scott K. Powers, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)

**1605 4:10 PM - 4:15 PM**
**Discussion**
Scott K. Powers, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)
### D-30 Basic Science World Congress - Symposium
- **1610** 3:15 PM - 3:20 PM
  **Co-Chair:** Stuart M. Phillips, FACSM, McMaster University, Hamilton, ON, Canada
- **1611** 3:15 PM - 3:20 PM
  **Co-Chair:** Robert E. Sallis, FACSM, Kaiser Permanente Medical Center; Fontana, CA
  **Reported Relationships:** (No relevant relationships reported)
- **1612** 3:20 PM - 3:45 PM
  **Strong for Life: Starting a Revolution in Gerontological Research 1-RM at a Time**
  Roger A. Fielding, Tufts University; Boston, MA
- **1613** 3:45 PM - 4:10 PM
  **Endurance And Resistance Exercise For Bone Health: Are They Cracked Up To Be?**
  Wendy M. Kohrt, FACSM, University of Colorado Denver, Aurora, CO
  **Reported Relationships:** (No relevant relationships reported)
- **1614** 4:10 PM - 4:35 PM
  **Pump Up Your Blood Vessels and Heart: Myths and Realities**
  Maureen J. MacDonald, McMaster University; Hamilton, ON, Canada
  **Reported Relationships:** (No relevant relationships reported)

### D-31 Symposium - Beyond MVPA: The Role of Reducing Sedentary Time and Promoting Light Intensity Physical Activity in Older Adults
**Thursday, May 31, 2018, 3:15 PM - 5:15 PM**
**Room:** CC-103

The focus of this symposium is to provoke thinking beyond moderate-to-vigorous physical activity (MVPA) in aging populations and to feature emerging evidence for important health benefits through reducing sedentary time and promoting light intensity PA for healthy aging in later life.

**1616** 3:15 PM - 3:30 PM
**Chair:** David M. Buchanan, FACSM, University of Illinois, Urbana Champaign, Urbana, IL
**Reported Relationships:** (No relevant relationships reported)

**1617** 3:30 PM - 3:50 PM
**Measuring SB and LPA in Older Adults: Accelerometer Calibration and Correlation with Self-report**
L-Min Lee, FACSM, Harvard University Medical School; Boston, MA
**Reported Relationships:** (No relevant relationships reported)

**1618** 3:50 PM - 4:10 PM
**Light Intensity PA: Under-Recognized Contributions to Healthy Aging**
Andrea Z. LaCroix, University of California, San Diego, La Jolla, CA
**Reported Relationships:** (No relevant relationships reported)

**1619** 4:10 PM - 4:30 PM
**Sedentary Behavior: Is this a Different Health Risk than Low Levels of PA in Later Life?**
John Bellettiere, University of California, San Diego, La Jolla, CA
**Reported Relationships:** (No relevant relationships reported)

**1620** 4:30 PM - 4:50 PM
**Increasing PA and Reducing SB in Older Adults: WHISHful Thinking?**
Marcia L. Stefanick, Stanford University, Stanford, CA
**Reported Relationships:** (No relevant relationships reported)

**4:50 PM - 5:15 PM**
**Overall Discussion**
A growing body of evidence in adults and children suggests that higher levels of physical activity are associated with favorable appetite control, leading to energy balance and optimal body weight. This session will present new clinical and basic research exploring the optimal dose of structured exercise and physical activity needed to permit and defend a blood pressure that is higher than observed at rest. This brainstem and other central circuitry is modified during conditions of exercise and sedentary behavior will be highlighted in these presentations.
American College of Sports Medicine

1637 3:15 PM - 3:20 PM
Chair: Jim Paweleczyk, FACSM. Penn State University, University Park, PA
(No relevant relationships reported)

1638 3:20 PM - 3:50 PM
Implications of Baroreflex Resetting during Exercise
Paul J. Fadel, FACSM. University of Texas at Arlington, Arlington, TX
(No relevant relationships reported)

1639 3:50 PM - 4:20 PM
Central Mechanisms of Baroreflex Resetting
Scott Smith. University of Texas Southwestern Medical Center, Dallas, TX
(No relevant relationships reported)

1640 4:20 PM - 4:50 PM
The Emerging Role of Exercise in Neurocardiology
David J. Paterson. University of Oxford, Oxford, United Kingdom
(No relevant relationships reported)

1641 4:50 PM - 5:05 PM
Synthesis: Current Understanding of Blood Pressure Regulation during Exercise
Michael Joyner, FACSM. Mayo Clinic, Rochester, MN
(No relevant relationships reported)

5:05 PM - 5:15 PM
Overall Discussion

D-36 Thematic Poster - Body Composition - Sport and Physiologic Considerations
Thursday, May 31, 2018, 3:15 PM - 5:15 PM
Room: CC-Mezzanine M100C

1642 Chair: Kelly Massey. Millidgeville, GA
(No relevant relationships reported)

1643 Board #1 3:15 PM - 5:15 PM
Comparison of Bone and Body Composition in the Affected and Unaffected Arms in Breast Cancer Survivors
Ashley Arteaga, Rachael H. Hunt, Daniel R. Marshall, Jeong-Su Kim, Michael J. Ormsbee, Robert Moffatt, Lynne B. Panton, FACSM. Florida State University, Tallahassee, FL
(No relevant relationships reported)

1644 Board #2 3:15 PM - 5:15 PM
Phase Angle and Body Composition in Breast Cancer Survivors Compared to Healthy Age-Matched Women
Caroline D. Deaterly, Elizabeth Evans, Takudzwa A. Madzima. Elon University, Elon, NC. (Sponsor: Paul C. Miller, FACSIM)
(No relevant relationships reported)

1645 Board #3 3:15 PM - 5:15 PM
The Influence of Body Composition and Skinfold Thickness on Skin Temperature Changes after Resistance Exercise
Maxine Weigert, Nico Nitzsche, Christiane Lösch, Lutz Baumgärtel, Henry Schultz. Chemnitz University of Technology, Chemnitz, Germany
Email: martin.weigert@hsv.tu-chemnitz.de
(No relevant relationships reported)

Final Program P115

1646 Board #4 3:15 PM - 5:15 PM
Body Composition of Collegiate Baseball and Softball Athletes, Consortium of College Athlete Research (C-CAR) Study
Madeline A. Czech, Christiana J. Raymond-Pope, Tyler A. Bosch, Jack W. Ransone, FACSM, Jonathan M. Oliver, Aaron Carlbahr, Philip R. Stanforth. University of Nebraska, Lincoln, NE. Texas Christian University, Fort Worth, TX. University of Minnesota, Minneapolis, MN. University of Texas, Austin, TX. (Sponsor: Donald R. Dangel, FACSM)
(No relevant relationships reported)

1647 Board #5 3:15 PM - 5:15 PM
Body Composition of Division I Collegiate Basketball Athletes, Consortium of College Athlete Research (C-CAR) Study
Anna L. Solfest, Christiana J. Raymond-Pope, Aaron Carlbahr, Philip R. Stanforth, Jonathan M. Oliver, Jack W. Ransone, FACSM, Tyler A. Bosch, Donald R. Dangel, FACSM. University of Minnesota, Minneapolis, MN. University of Kansas, Lawrence, KS. University of Texas, Austin, TX. Texas Christian University, Fort Worth, TX. University of Nebraska, Lincoln, NE. (Sponsor: Donald R. Dangel, FACSM)
(No relevant relationships reported)

1648 Board #6 3:15 PM - 5:15 PM
Positional Body Composition of Division I Volleyball Players, Consortium of College Athlete Research (C-CAR) Study
Katie L. Bisch, Tyler A. Bosch, Aaron Carlbahr, Philip R. Stanforth, Jonathan M. Oliver, Jack W. Ransone, FACSM. University of Minnesota, Minneapolis, MN. University of Kansas, Lawrence, KS. University of Texas, Austin, TX. Texas Christian University, Fort Worth, TX. University of Nebraska, Lincoln, NE. (Sponsor: Donald R. Dangel, FACSM)
(No relevant relationships reported)

1649 Board #7 3:15 PM - 5:15 PM
Body Composition of Division I Collegiate Female Equestrian Athletes
Olivia H. Dengel, Christiana J. Raymond-Pope, Jonathan M. Oliver, Tyler A. Bosch, Donald R. Dangel, FACSM. College of St. Benedict, St. Joseph, MN. University of Minnesota, Minneapolis, MN. Texas Christian University, Fort Worth, TX. (Sponsor: Donald R. Dangel, FACSM)
(No relevant relationships reported)

D-37 Thematic Poster - Exercise Training in Cancer Patients
Thursday, May 31, 2018, 3:15 PM - 5:15 PM
Room: CC-Lower level L100E

1650 Chair: Karen M. Mustian. University of Rochester James P. Wilmot Cancer Center, Rochester, NY
(No relevant relationships reported)

1651 Board #1 3:15 PM - 5:15 PM
How Does a Supervised Exercise Program Improve Quality Of Life In Patients With Cancer?
Malike G. Sweegers. VU University Medical Center, Amsterdam, Netherlands
Email: m.sweegers@vumc.nl
(No relevant relationships reported)
1652 Board #2 3:15 PM - 5:15 PM
Exercise and The Cancer Patient: Function Improves Independent of Cardiovascular and Anthropometric Changes
Sarah R. McDowell1, Cynthia Villalobos1, Justin C. Brown2, Paul D. Vosti3, Courtney D. Jensen1. 1University of the Pacific, Stockton, CA. 2Harvard University, Cambridge, MA. 3St. Joseph’s Medical Center, Stockton, CA. (Sponsor: Kathryn H. Schmitz, FACSM)
Email: s.mc dowell@u.pacific.edu
(No relevant relationships reported)

1653 Board #3 3:15 PM - 5:15 PM
Piloting the Effect of Aerobic Exercise during Chemotherapy Infusion in Patients with Cancer
Kate M. Edwards1, Vanessa Thomas1, Catherine Seet-Lee1, Birinder S. Cheema2, Michael Boyer3, Michael Marthick3. 1University of Sydney, Sydney, Australia. 2University of Western Sydney, Cambelltown, Australia. 3Chris O’Brien Lifehouse, Sydney, Australia. (Sponsor: Ollie Jay, FACSM)
Email: kate.edwards@sydney.edu.au
(No relevant relationships reported)

1654 Board #4 3:15 PM - 5:15 PM
Effect of Exercise on Chemotherapy-Induced Peripheral Neuropathy Symptoms in Women with Breast Cancer
Kelcey A. Blaud1, Amy A. Kirkham1, Josiah Bovard1, Tamara Shnkrie2, David Zucker2, Margot K. Davis1, Don C. McKenzie1, Karen A. Gelmon2, Kristin L. Campbell1. 1University of British Columbia, Vancouver, BC, Canada. 2University of Alberta, Edmonton, AB, Canada. 3British Columbia Cancer Agency, Vancouver, BC, Canada. 4Swedish Cancer Institute, Seattle, WA
Email: d.taaffe@ecu.edu.au
(No relevant relationships reported)

1655 Board #5 3:15 PM - 5:15 PM
Benefits of Immediate Versus Delayed Exercise in Men Initiating ADT for Prostate Cancer
Dennis R. Taffe1, FACSM1, Robert U. Newton2, Nigel Spry2, David Joseph1, Suzanne K. Chambers1, Robert A. Gardiner1, Prac Cornue2, David HK Shum1, Daniel A. Galvao1. 1Edith Cowan University, Perth, Australia. 2Genesis CancerCare, Perth, Australia. 3Sir Charles Gairdner Hospital, Perth, Australia. 4Griffith University, Gold Coast, Australia. 5University of Queensland, Brisbane, Australia. 6Australian Catholic University, Melbourne, Australia
Email: d.taffe@ecu.edu.au
(No relevant relationships reported)

1656 Board #6 3:15 PM - 5:15 PM
Effects of an Exercise Intervention on Lung Cancer Patients Who Have Undergone a Lobectomy
Nicholas Harman1, Jessica M. Brown2, Daniel Shackelford2, Reid Hayward1. 1University of Northern Colorado, Greeley, CO. 2Carroll University, Waukesha, WI
Email: nicholas.harman@unco.edu
(No relevant relationships reported)

D-38 Thematic Poster - Hydration

Thursday, May 31, 2018, 3:15 PM - 5:15 PM
Room: CC-Lower level L100C

1657 Chair: Samuel N. Cheuvront, FACSM. USARIEM, Natick, MA
(No relevant relationships reported)

1658 Board #1 3:15 PM - 5:15 PM
Ad Libitum Fluid Consumption Off-sets Thermal and Cardiovascular Strain Exacerbated by Dehydration during Heat Waves
Connor Graham1, Nathan B. Morris, Ollie Jay, FACSM. University of Sydney, Sydney, Australia. (Sponsor: Ollie Jay, FACSM)
Email: cgra4818@uni.sydney.edu.au
(No relevant relationships reported)
1667 Board #2 3:15 PM - 5:15 PM
A Novel Approach To Investigate Differences In Knee Mechanics After ACL Reconstruction Using Inertial Sensors
Jasper Reenalda1, Erik Maarntens1, Jaap Buurke1, Mary Lloyd Ireland, FACSM2, Brian Noehren, FACSM.1 Roessingh Research and Development, University of Twente, Enschede, Netherlands. 2University of Kentucky, Lexington, KT. (Sponsor: Brian Noehren, FACSM)
Email: j.reenalda@rni.nl
(No relevant relationships reported)

1668 Board #3 3:15 PM - 5:15 PM
Reductions in Peak Knee Adduction Moment in Three Previously Studied Gait Modification Strategies: Preliminary Analysis
Bryndan Lindsey1, Oladipo Eddo1, Shane Caswell1, David Hollinger1, Jessica Pope1, Matt Prebble1, Ana M. Azevedo2, Nelson Cortes1.1George Mason University, Manassas, VA 2University of Lisbon, Lisbon, Portugal
Email: m.cortes@gmu.edu
(No relevant relationships reported)

1669 Board #4 3:15 PM - 5:15 PM
Lack of Association Between Clinical Measures of Symmetry and Knee Loading Mechanics After ACL Reconstruction
Lindsey K. Lepley, Julie P. Burland, Steven M. Davi, Adam S. Lepley. University of Connecticut, Storrs, CT
Email: lslepley@uconn.edu
(No relevant relationships reported)

1670 Board #5 3:15 PM - 5:15 PM
The Effects of Wearing Knee Wraps on Total Concentric Work Performed During the Back Squat Exercise.
Cardyl Trionfante1, Ben Kantuara2, Erica Marshall2, Arnold G. Nelson, FACSM1, J. D.erek Kingsley, FACSM.1Louisiana State University, Baton Rouge, LA 2Kent State University, Kent, OH. (Sponsor: Arnold G Nelson, FACSM)
Email: dtrionfante@gmail.com
(No relevant relationships reported)

1671 Board #6 3:15 PM - 5:15 PM
Acute Effects of Two Hip Flexor Stretching Techniques on Knee Joint Position Sense and Balance
Hussain Aslan1, David Suprak3, Harsh Buddhadev2, Jun San Juan2.1Western Washington University, Kirkland, WA 2Western Washington University, Bellingham, WA
Email: husseinaaslan1974@yahoo.com
(No relevant relationships reported)

1672 Board #7 3:15 PM - 5:15 PM
Movement Efficiency Profile Affects Knee Loading Responses to a Controlled Acute Exposure to High Metabolic and Mechanical Training Load
Barnett Frank, Troy Blackburn, Steve Marshall, Claudio Battaglini, FACSM, Anthony Hackney, FACSM, Darin Pahu. The University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Claudio Battaglini, PhD, FACSM)
Email: bfrank@email.unc.edu
(No relevant relationships reported)

1673 Board #8 3:15 PM - 5:15 PM
Effects Of Load Carriage and Step Length Manipulation on Knee Loads During Walking
Richard W. Willy1, Paul DeVita, FACSM, Stacey A. Meardon, John D. Willson1.1University of Montana, Missoula, MT 2East Carolina University, Greenville, NC. (Sponsor: Paul DeVita, FACSM)
Email: rich.willy@umontana.edu
(No relevant relationships reported)
P118 Final Program

1681 Board #7 3:15 PM - 5:15 PM
HealthSteps Lifestyle Prescription Program Can Increase Physical Activity and Decrease Blood Pressure in At Risk Adults
Robert J. Petrella, FACSM1, Dawn P. Gill2, Wendy Blunt3, Roseanne W. Pulford1, Adam Gavarkos5, Narlon C. Boa Sorte Silva1, Cassandra Bartol1, P. Karen Sinnamovarg2, Ashleigh De Cruz2, Guangyong Zou2. 1Western University, London, ON, Canada. 2Harvard University, Cambridge, MA. Email: Robert.Petrella@schulich.uwo.ca (No relevant relationships reported)

1682 Board #8 3:15 PM - 5:15 PM
The Effect of 2 Walking Programs on Hba1c in Sedentary Employees During a 10 Week Intervention
Mynor G. Rodriguez-Hernandez, James R. McDonald, David D. Pascoe, FACSM, Michael D. Robert, Daniella D. Wadsworth. Auburn University, Auburn, AL. (Sponsor: David D. Pascoe, FACSM) Email: mynor.rodriguez@ucr.ac.cr (No relevant relationships reported)

D-41 Free Communication/Slide - Exercise Immunology

Thursday, May 31, 2018, 3:15 PM - 4:45 PM
Room: CC-101CD

1683 Chair: Jill A. Kanaley, FACSM. University of Missouri, Columbia, MO. (No relevant relationships reported)

1684 3:15 PM - 3:30 PM
The Impact of Physical Activity Level on the Oral Microbiome: A Cross-Sectional Investigation
Stephanie P. Kurti1, Jacob M. Allen2, Javier Abello1, Lucy J. Mailing2, Jeffrey A. Woods, FACSM1, Sara K. Rosenkranz1, Craig A. Harms, FACSM. 1Harvard University, Cambridge, MA. 2University of Illinois, Champaign-Urbana, IL. 3Kansasa State University, Manhattan, KS (Sponsor: Craig A. Harms, FACSM) Email: kurtis@jmu.edu (No relevant relationships reported)

1685 3:30 PM - 3:45 PM
Respiratory Infections in Young Elite Female Gymnasts
Jan G. Bourgois1, Jan Boone2, An Mariman1, Liesbeth Delesie1, Els Tobback3, Dirk Vogeliers1, Jasmin Damortier1. 1Ghent University, Ghent, Belgium. 2Ghent University Hospital, Ghent, Belgium. 3Ugent.Be Email: Jan.Bourgois@UGent.Be (No relevant relationships reported)

1686 3:45 PM - 4:00 PM
The Percentage Of Non-classical Monocytes In Obese Individuals Is Reduced By High-intensity Interval Training
Fabiano T. Amorim1, Mariana Aguilar de Matos2, Bruna C. Chaves Garcia2, Kaio C. Pinhal2, Vanessa O. Fernandes2, Denia V. Vargas3, Flávio de Castro Magalhães2, Etel Rocha-Vieira2. 1University of New Mexico, Albuquerque, NM. 2Universidade Federal dos Vales do Jequitinhonha e Macurí, Diamantina, Brazil. (Sponsor: Dr. Ann Gibson, FACSM) Email: amorimf@uminho.edu (No relevant relationships reported)

1687 4:00 PM - 4:15 PM
Inflammatory Cytokine Production is Elevated in MAIT Cells Following Acute Exercise
Erik D. Hanson1, Eli Danson1, William S. Evans1, William A. Wood2, Samy Sakkal1, Claudio L. Battaglini, FACSM. 1University of North Carolina at Chapel Hill, Chapel Hill, NC. 2Victoria University, Melbourne, Australia. (Sponsor: Claudio Battaglini, FACSM) Email: edhanson@email.unc.edu (No relevant relationships reported)

1688 4:15 PM - 4:30 PM
Environmental Mobilization Of Hematopoetic Stem Cells With Exercise, Compression, And Cooling

1689 4:30 PM - 4:45 PM
Effects of Acute Eccentric Exercise on Immune Responses to Vaccination in Young and Aged Mice.
Yi Sun, Jeffrey A. Woods, FACSM. University of Illinois at Urbana-Champaign, Urbana, IL. (Sponsor: Jeffrey Woods, FACSM) Email: yisun@illinois.edu (No relevant relationships reported)

D-42 Free Communication/Slide - Obesity Patterns and Interventions

Thursday, May 31, 2018, 3:15 PM - 5:15 PM
Room: CC-Mezzanine M100D

1690 Chair: Kathleen Woolf, FACSM. New York University, New York, NY. (No relevant relationships reported)

1691 3:15 PM - 3:30 PM
Association Between Body Composition and Physical Activity Behaviors
Pedro J. Benito1, Eliane A. Castro2, Daniel Dos Santos2, Rocío Cupero1, Ana B. Peinado2. 1University Politécnica de Madrid, Madrid, Spain. 2Universidade de Franca, São Paulo, Brazil. Email: pedroj.benito@upm.es (No relevant relationships reported)

1692 3:30 PM - 3:45 PM
Change in Energy Intake and Health Eating Index in Response to Exercise During Weight Maintenance
Lauren T. Poteet, Anna M. Gorczyca, Amanda N. Szabo, Felicia S. Steger, Ron Kreibill, Matthew S. Mayo, Debra K. Sullivan, Richard A. Washburn, FACSM, Joseph E. Donnelly, FACSM. University of Kansas Medical Center, Kansas City, KS Email: lptomey@kumc.edu (No relevant relationships reported)

1693 3:45 PM - 4:00 PM
Vo2max Is Associated With Energy Expenditure Measures, Including Diet Induced Thermogenesis, Under Sedentary Conditions
Takahumi Ando, Paolo Piaggi, Jonathan Knoff, National Institute of Diabetes and Digestive and Kidney Diseases, Phoenix, AZ. Email: takahumi.ando@nih.gov (No relevant relationships reported)

1694 4:00 PM - 4:15 PM
Weight Loss is Associated with Change inLeftVentricular Mass in Adults with Obesity: The Heart Health Study
Renée J. Rogers, Erik B. Schelbert, Yaron Fridman, Meghan R. Maher, John M. Jakicic, FACSM. University of Pittsburgh, Pittsburgh, PA. (Sponsor: John M. Jakicic, FACSM) Email: rj.rogers@pitt.edu (No relevant relationships reported)


1695 4:15 PM - 4:30 PM
Attenuation of Excessive Weight Gain One Year Post Pediatric Obesity Treatment Initiation
Kate A. Heelan, FACSM, Holly Bower, Bryce M. Abbey, Roderick T. Bartee. University of Nebraska - Kearney, Kearney, NE. Email: heelanka@unk.edu (No relevant relationships reported)
1696 4:30 PM - 4:45 PM  
**Association Between Family Health Behaviors and Obesity Severity: Does Weight Metric Matter?**  
Karissa L. Peyer, Joani Jack, Gregory W. Heath, FACSM.  
¹University of Tennessee at Chattanooga, Chattanooga, TN.  
²University of Tennessee College of Medicine Chattanooga and Children’s Hospital at Erlanger, Chattanooga, TN.  
(No relevant relationships reported)

1697 4:45 PM - 5:00 PM  
**Outdoor Time and Metabolically Healthy Obesity in Children: Results from the Canadian Health Measures Survey**  
Brittany V. Rioux, Neetu Gupta, Danielle R. Bouchard, James Dunbar, Martin Sénéchal. University of New Brunswick, Fredericton, NB, Canada  
Email: rioux.brittany@unb.ca  
(No relevant relationships reported)

1698 5:00 PM - 5:15 PM  
**Anthropometric Changes in Elementary School Children Receiving Varying Amounts of Obesity Prevention Programming**  
Abigail E. Duffine, Emily N. Werner, Brianna D. Higgins, Dorothy Hanrahan, Kristen Kochenour, Patricia A. Shewokis, Stella L. Volpe, FACSM, Drexel University, Philadelphia, PA. (Sponsor: Stella L. Volpe, FACSM)  
Email: aed76@drexel.edu  
(No relevant relationships reported)

D-43 Clinical Case Slide - Head  
**Thursday, May 31, 2018, 3:15 PM - 4:55 PM**  
**Room:** CC-200E

1699 3:15 PM - 3:35 PM  
**Chair:** Anastasia Noel Fischer, FACSM. Nationwide Children’s Hospital, Columbus, OH  
(No relevant relationships reported)

1700 3:15 PM - 3:35 PM  
**Discussant:** Sean Engel. University of Minnesota, Minneapolis, MN  
(No relevant relationships reported)

1701 3:35 PM - 3:55 PM  
**Discussant:** Robert B. Kiningham, FACSM. University of Michigan, Ann Arbor, MI  
(No relevant relationships reported)

1702 3:35 PM - 4:15 PM  
**Different Strokes for Different Folks - Football**  
Tu Dan Nguyen, Mark Chassay, FACSM, Jocelyn Szeot, Noor Alzarka. ¹University of Texas Health Science Center at Houston, Houston, TX. ²Memorial Family Medicine Residency, Sugar Land, TX  
Email: tudan.nguyen@uth.tmc.edu  
(No relevant relationships reported)

1703 3:35 PM - 4:15 PM  
**Head Injury - Trampoline**  
Michael J. Coolls, Jason Mihalik, Kevin Cameiro. University of North Carolina, Chapel Hill, NC. (Sponsor: Kevin Guskiewicz, FACSM)  
(No relevant relationships reported)

1704 3:55 PM - 4:15 PM  
**Head And Neck Injury-Soccer**  
Tracy Bras. Evergreen Sports Medicine Fellowship, Augusta, ME. (Sponsor: Jim Dunlap, FACSM)  
(No relevant relationships reported)

D-44 Clinical Case Slide - Leg  
**Thursday, May 31, 2018, 3:15 PM - 5:15 PM**  
**Room:** CC-200F

1705 4:15 PM - 4:35 PM  
**Vision and Vestibular Problems: A Bumpy Ride**  
Olivia E. Podolak, MD, Fairuz Mohamed, MPH, Christina L. Master, MD, CAQSM. Children’s Hospital of Philadelphia, Philadelphia, PA  
(No relevant relationships reported)

1706 4:35 PM - 4:55 PM  
**Sustained Post-concussive Learning Disorder And Severe Emotional Dysregulation In A Pediatric Patient**  
Mary Daley. Tufts Medical Center, Boston, MA  
Email: mdaley521@gmail.com  
(No relevant relationships reported)

1707 Chair: Philip F. Skiba. Advocate Lutheran General Hospital, Park Ridge, IL  
(No relevant relationships reported)

1708 Discussant: Terry Nicola, FACSM. UIC Sports Medicine Center, Chicago, IL  
(No relevant relationships reported)

1709 Discussant: Pierre L. Viviers, FACSM. Stellenbosch University, Stellenbosch, South Africa  
(No relevant relationships reported)

1710 3:15 PM - 3:35 PM  
**Right Distal Thigh Pain - Water Polo**  
Erin M. Conlee, Brett J. Kindle, Jay Smith. ¹Mayo Clinic, Rochester, MN. ²Andrews Institute, Gulf Breeze, FL. (Sponsor: Karen L.Newcomer, MD, FACSM)  
(No relevant relationships reported)

1711 3:35 PM - 3:55 PM  
**Anterior Thigh Pain - Shot put/Discus**  
Casey Muir, Edward Laskowski, FACSM. Mayo Clinic, Rochester, MN  
Email: Muir.Casey@mayo.edu  
(No relevant relationships reported)

1712 3:55 PM - 4:15 PM  
**Atypical Leg Pain in a Chi Runner**  
Jennifer Oberstar. University of Minnesota, Minneapolis, MN.  
(Sponsor: Steven Stovitz, FACSM)  
Email: ober0042@umn.edu  
(No relevant relationships reported)

1713 4:15 PM - 4:35 PM  
**Unilateral Quadriceps Weakness**  
Jaqui Stone. University of Calgary, CALGARY, AB, Canada  
Email: jestone@ucalgary.ca  
(No relevant relationships reported)

1714 4:35 PM - 4:55 PM  
**Say It Aint Sew: A Unique Cause of Calf Pain in Marathoner**  
Matthew D. Sedgley, MD FAAFP CAQSM. MedStar Sports Medicine, Ellicott City, MD. (Sponsor: Nailah Coleman, MD, FACSM)  
Email: matthew.d.sedgley@medstar.net  
(No relevant relationships reported)

1715 4:55 PM - 5:15 PM  
**Leg Pain in Recreational Runner with Parkinson’s Disease - Running**  
Timothy M. Dekker, George G.A. Pujalte, FACSM. Mayo Clinic, Jacksonville, FL  
Email: dekker.timothy@mayo.edu  
(No relevant relationships reported)
While inflammation is an essential component of healthy responses to injury or infection, it also plays a role in the promotion of unhealthy conditions such as type 2 diabetes, cancer, neurodegenerative and cardiovascular diseases. Exercise can have pro- or anti-inflammatory effects that can influence inflammation states. This presentation will explore healthy, chronic low-grade, and acute high inflammation phenotypes, the concept of inflammation phenotype flexibility, and how exercise may influence phenotype shifts.

Mary P. Miles, FACSM, Montana State University, Bozeman, MT
(No relevant relationships reported)
Musculoskeletal ultrasound (MSK US) represents a cost-effective (predicted savings of $6.9 billion when appropriate substitution is made for musculoskeletal US in place of MRI over a 14-year period, and approximately one fifth of the cost to the patients per Medicare) readily available diagnostic imaging modality that has gained popularity in musculoskeletal and sports medicine to evaluate a variety of knee and ankle/foot conditions. This course will focus on more recent and advanced topics in the knee and ankle/foot ultrasound. First portion of the session will be spent for demonstration scans of advanced structures, followed by hands on & interactive scan sessions for remainder of the time in smaller groups.

**D-50 Clinical Workshop-Hands On Demonstration - Intermediate/Advanced Musculoskeletal Ultrasound of the Knee and Ankle/Foot for Physicians and Non-Physicians**

**Thursday, May 31, 2018, 3:15 PM - 4:05 PM**

**Room:** CC-200B

Rapid advances are being made in the study of underlying mechanisms of sport, exercise and disease using a variety of ‘omics-based approaches. NIH and others have invested resources into the study of genetic and molecular modifiers of physical activity and other sport- or performance related outcomes. This was talked about in 2014 at ACSM to orient novices to the ‘omics world. In 2018, an update will be provided to include the impacts of the emergence of RNAseq and other technologies and the establishment of consortia such as MOTTRAP and ATHLOME.

**D-51 Tutorial Lecture - Advances in Exercise ‘Oomics: A Primer**

**Thursday, May 31, 2018, 4:25 PM - 5:15 PM**

**Room:** CC-101AB

With over 4,300 participants and 2 million spectators at Rio 2016, the Paralympic Games is a high-profile sporting event but issues around medical care of the athlete with a disability remain. Sports medicine physicians are challenged with caring for highly competitive athletes but with a wide range of impairments, and often complex medical conditions. Getting your athletes to the start line is one of the key roles of the sports medicine physician. Medical complications associated with travel to, and preparation for, major competition can be prevented or managed. However training in sports medicine may fail to provide the necessary knowledge.

**D-52 Tutorial Lecture - The Paralympic Team Physician: Preparing Your Team for Travel**

**Thursday, May 31, 2018, 4:25 PM - 5:15 PM**

**Room:** CC-101G

Wearable technologies are now widely used by researchers, clinicians, and the lay public. A common metric to most technologies is step counting (i.e., steps/day) and cadence (i.e., step/min) is emerging as a reasonable proxy for ambulatory intensity. This tutorial lecture reviews the state of science supporting benchmark values (i.e., standards or reference points) to aid common interpretation and communication. Questions that will be answered: How many steps/day are enough, how many steps/day are too few, how fast is enough, and how do you know if a device is accurate enough?

**D-53 Tutorial Lecture - Wearable Technology: Benchmarking Step Counting and Cadence Metrics for Common Interpretations**

**Thursday, May 31, 2018, 4:25 PM - 5:15 PM**

**Room:** CC-102EF

Obesity is a cause of cardiovascular problems, such as heart failure. The term, “obesity paradox,” has been coined to describe the phenomenon whereby people with conditions caused by obesity do better if they are obese compared with others who are not obese. On the surface, these seem like two incompatible truths and thus a paradox. However, an understanding of the bias resulting from studying only those with a problem caused by obesity creates what epidemiologists call either “collider stratification bias” or “index event bias.” This flaw leads to obesity appearing protective. Ultimately, this results in confusion to the medical community.

**D-54 Tutorial Lecture - What is the Obesity Paradox, and Where Do We Go from Here?**

**Thursday, May 31, 2018, 4:25 PM - 5:15 PM**

**Room:** CC-Ballroom B

Wearable technologies are now widely used by researchers, clinicians, and the lay public. A common metric to most technologies is step counting (i.e., steps/day) and cadence (i.e., step/min) is emerging as a reasonable proxy for ambulatory intensity. This tutorial lecture reviews the state of science supporting benchmark values (i.e., standards or reference points) to aid common interpretation and communication. Questions that will be answered: How many steps/day are enough, how many steps/day are too few, how fast is enough, and how do you know if a device is accurate enough?

**D-55 Clinical Workshop-Hands On Demonstration - Fundamental Musculoskeletal Ultrasound of the Knee and Ankle/Foot for Physicians and Non-Physicians**

**Thursday, May 31, 2018, 4:25 PM - 5:15 PM**

**Room:** CC-200B

**D-56 Free Communication/Poster - Fitness Assessment**

**Thursday, May 31, 2018, 1:00 PM - 6:00 PM**

**Room:** CC-Hall B

**1735** Catrine Tudor-Locke, FACSM. University of Massachusetts Amherst, Amherst, MA

(No relevant relationships reported)

**1736** Steven D. Stovitz, FACSM. University of Minnesota, Minneapolis, MN

(No relevant relationships reported)

**1737** Jay Smith. Mayo Clinic, Rochester, MN

**Reported Relationships:** J. Smith; Stock Ownership; Tenex Health.

**1738** Eugene Yousik Roh. Stanford University/Stanford Health Care, Redwoodcity, CA

(No relevant relationships reported)

**1739** Mckinley M. Hall. University of Iowa, Iowa City, IA

(No relevant relationships reported)

**1740** Board #1 2:00 PM - 3:30 PM

The Association of Asymmetry in Hopping Tests and Non-Contact Injuries in Division I Female Student-athletes

Meghan Warren1, Monica Lininger1, Craig A. Smith1, Adam Copp1, Nicole J. Chimera2. 1Northern Arizona University, Flagstaff, AZ. 2Smith Performance Center, Tucson, AZ. Email: meghan.warren@nau.edu

(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board #2</th>
<th>2:00 PM - 3:30 PM</th>
<th>The Association of Proximal Hip Strength and Non-Contact Injury in Division I Female Student-Athletes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nicole J. Chimera, Monica R. Lininger, Craig A. Smith, Adam Copp, Meghan Warren, Daemen College, Amherst, NY, Northern Arizona University, Flagstaff, AZ, Smith Performance Center, Tucson, AZ. Email: <a href="mailto:nichimera@daemen.edu">nichimera@daemen.edu</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #3</th>
<th>2:00 PM - 3:30 PM</th>
<th>Wearable Contour Sensors to Assess Neuromuscular Control During Repeated Unilateral Parallel Squat Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shannon E. Linderman, Donna Mosley Scarborough, Eric M. Berksom, Mary M. Eckert, Nan-Wei Gong, Massachusetts General Hospital, Boston, MA, MGH Institute of Health Professions, Charlestown, MA, Figur8 Inc, Boston, MA. Email: <a href="mailto:SLINDERMAN@mgh.harvard.edu">SLINDERMAN@mgh.harvard.edu</a></td>
<td>Reported Relationships: S.E. Linderman: Salary; figur8, Inc.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #4</th>
<th>2:00 PM - 3:30 PM</th>
<th>Knee Extension Strength Asymmetry does not affect Peak Power or Fatigue during the Wingate Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stuart Best, Reiley Bergin, Scott Royer, Joshua Winters, Kathleen Poploski, Nicholas Heebner, John Abt, FACSM, Scott Lephalt, FACSM, University of Kentucky, Lexington, KY. (Sponsor: John Abt, FACSM) Email: <a href="mailto:stuart.best@uky.edu">stuart.best@uky.edu</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #5</th>
<th>2:00 PM - 3:30 PM</th>
<th>Cardiorespiratory Fitness of Otherwise Healthy Obese Women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vipa Bernhardt, Dharini M. Bhannmar, Rubria Marines-Price, Tony G. Babb, FACSM, Texas A&amp;M University Commerce, Commerce, TX, University of Nevada-Las Vegas, Las Vegas, NV, Institute for Exercise and Environmental Medicine, Texas Health Presbyterian Hospital and UT Southwestern Medical Center, Dallas, TX. (Sponsor: Tony G Babb, FACSM) Email: <a href="mailto:vipa.bernhardt@tamuc.edu">vipa.bernhardt@tamuc.edu</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #6</th>
<th>2:00 PM - 3:30 PM</th>
<th>A Cluster Analysis and Validation of Health-related Fitness Tests in College Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>You Fu, Ryan D. Burns, Timothy Brusseau, Nora Constantino, University of Nevada, Reno, Reno, NV, University of Utah, Salt Lake City, UT. Email: <a href="mailto:jeffrey.lee@griffithuni.edu.au">jeffrey.lee@griffithuni.edu.au</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #7</th>
<th>2:00 PM - 3:30 PM</th>
<th>Work Performed Above The Respiratory Compensation Point Is Not Equivalent To Wt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jeffrey A. Lee, Surendran Sabapathy, Michael J. Simmonds, Troy J. Cross, Griffith University, Gold Coast, Queensland, Australia, Mayo Clinic, Rochester, MN. Email: <a href="mailto:jeffrey.lee@griffithuni.edu.au">jeffrey.lee@griffithuni.edu.au</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #8</th>
<th>2:00 PM - 3:30 PM</th>
<th>Effectiveness of Preseason Conditioning on VO2max, in College Athletes Assessed via Ift and Gxt</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kallie LaValle, Jordan Nieuwsma, Joseph D. Ostrem, Concordia University - St. Paul, St. Paul, MN. (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #9</th>
<th>2:00 PM - 3:30 PM</th>
<th>Comparison of Non-Maximal Tests for Exercise Prescription and Outcome Assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reem A. Alajmi, Carl Foster, FACSM, John P. Pocarc, FACSM, Kim Radke, Scott T. Dobberstein, University of Wisconsin-La Crosse, La Crosse, WI. Email: <a href="mailto:clintonhein@yahoo.com">clintonhein@yahoo.com</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>
Board #18  2:00 PM - 3:30 PM  Stride Time Variation and Resilience in Healthy Young Adults during a Graded Exercise Task
Nikki E. Barczak¹, Matthew W. Wittssein¹, Nicholas A. Hagedis². ¹The University of North Carolina at Chapel Hill, Chapel Hill, NC. ²Elon University, Elon, NC
Email: barczak@live.unc.edu
(No relevant relationships reported)

Board #19  2:00 PM - 3:30 PM  Using Vertical Shoulder Press To Find The Occurrence Of Bilateral Deficit In Recreationally Trained Participants
Arthur J. Burley, James L. Ramsey, Shel Levine, John W. Carbone, Rebecca W. Moore. ¹Eastern Michigan University, ²Joshua Tree, CA.
(No relevant relationships reported)

Board #20  2:00 PM - 3:30 PM  Does a Push-Up Using the Spyder 360 ™ Elicit More Muscle Activation Compared with a Standard Push-up?
Kent D. Johnson, FACSM, William Vantrease. ¹Lipscomb University, Nashville, TN
Email: kentjohnson@lipscomb.edu
(No relevant relationships reported)

Board #21  2:00 PM - 3:30 PM  Lifespan Physical Fitness Analysis In A University-Sponsored, Guided Exercise Program
Chris Dondzila, Amy Campbell, Vanessa Deo. ¹Grand Valley State University, Allendale, MI. (Sponsor: Stephen Glass, FACSM)
(No relevant relationships reported)

Board #22  2:00 PM - 3:30 PM  Chinese Collegiate Fitness Index Report Based on the Supporting Active Lifestyle Perspective
Yi Liu¹, Xiaolei Liu², Mingxi Guan¹, Hao Guo¹, Yan Peng¹, Ming Yang¹, Jindong Chang¹. ¹Southwest University; ²Chongqing University of Posts and Telecommunications, Chongqing, China
(No relevant relationships reported)

Board #23  2:00 PM - 3:30 PM  Unsupervised Home-based Intermittent Walking Effectively Improves Physiological and Psychosocial Health
Carrie Ferguson, Rosalind E. Lancaster, Shauna Burke, Gemma K. Lyall, Karen M. Birch, FACSM. ¹University of Leeds, Leeds, United Kingdom
Email: C.Ferguson@leeds.ac.uk
(No relevant relationships reported)

Board #24  2:00 PM - 3:30 PM  Examination of the Relationship between Handgrip Strength and Upper Body Muscular Endurance in College-age Females
Cassandra E. Forsythe¹, Matthew Orange¹, James W. Krieger². ¹CCSU, New Britain, CT. ²WeighIn® LLC, Issaquah, WA. (Sponsor: Sean Walsh PhD, FACSM)
Email: cassandra@weighin.com
(No relevant relationships reported)

Board #25  2:00 PM - 3:30 PM  Effects Of A 12-minute Daily Physical Activity Intervention On Health Measures Of Office Workers
María Konstantaki, Georgina Colgate. ¹Buckinghamshire New University, High Wycombe, United Kingdom
Email: maria.konstantaki@bucks.ac.uk
(No relevant relationships reported)

Board #26  2:00 PM - 3:30 PM  Bone Strength Differences According to Peak Power Norm Table Categories
Rebekkah J. Reichert, Maria G. Alvarez, Andrew Denys, Kimberly D. Esperato, Priscilla Franson, Arianna M. Mazzarini, Vanessa R. Yingling, FACSM. ¹California State University, East Bay, Hayward, CA. (Sponsor: Vanessa R. Yingling, FACSM)
Email: rebekkahreichert@gmail.com
(No relevant relationships reported)

Board #27  2:00 PM - 3:30 PM  Aerobic And Anaerobic Parameters Of A Three-minute All-out Test Are Associated With Rowing Performance
Gabrielle A. Mori, Emily M. Casper, Alec R. Dickson, Kyle L. Sunderland, ¹High Point University, High Point, NC
(No relevant relationships reported)

Board #28  2:00 PM - 3:30 PM  Counting Talk Test Measurements and the Relationship to Heart Rate for Exercise Prescription
Morgan Johnson, Randí Lite. ¹Simmons College, Boston, MA. (Sponsor: John Porcari, FACSM)
Email: johnme@simmons.edu
(No relevant relationships reported)

Board #29  2:00 PM - 3:30 PM  Effects of Eight Weeks of Self-Determined Training on Cardiorespiratory Fitness in Recreationally Trained Females
Anthony J. Bull, Julia Lauzon, Kaitlyn DiMarco. ¹Colorado College, Colorado Springs, CO. (Sponsor: Terry J. Housh, FACSM)
(No relevant relationships reported)

Board #30  2:00 PM - 3:30 PM  The Impact of Exercise on Stress Management in Federal Officers
Scott R. Richmond¹, Thomas S. Altina², Amanda M. Perkins-Ball³, Riley Galloway², Sam D. Enright³, ¹Lindenwood University, St. Charles, MO. ²Missouri State University, Springfield, MO. ³Rice University, Houston, TX
Email: SSRichmond@lindenwood.edu
(No relevant relationships reported)

Board #31  2:00 PM - 3:30 PM  Measured Fitness and Self-Reported Exercise and Stress in Law Enforcement Officers: A Longitudinal Study
Riley Galloway¹, Thomas S. Altina¹, Scott R. Richmond¹, Amanda M. Perkins-Ball³, Zachary Burt¹. ¹Missouri State University, Springfield, MO. ²Lindenwood University, St. Charles, MO. ³Rice University, Houston, TX
(No relevant relationships reported)

Board #32  2:00 PM - 3:30 PM  Association Between Anthropometric Characteristics And Aerobic Capacity In Firefighters
Crystal Hajek¹, Cassie Schiller¹, Jacquelyn Zera¹, Elizabeth Nagle, FACSM². ¹John Carroll University, University Heights, OH. ²University of Pittsburgh, Pittsburgh, PA. (Sponsor: Elizabeth Nagle, FACSM)
Email: chajek18@jcu.edu
(No relevant relationships reported)

Board #33  2:00 PM - 3:30 PM  Validity of Hit & Turn Tennis Test in Estimating Aerobic Capacity with Amateur Players
Bo Li, Jianrong Zhong, Xinxin Wang, Xiaotian Li, Lu Jin, Yuchao Cao, Lv Miao, Yongming Li. ¹Shanghai University of Sport, Shanghai, China. ²University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Stephen Glass, FACSM)
Email: 412001625@qq.com
(No relevant relationships reported)
1773  Board #34  2:00 PM - 3:30 PM
Ambulation and Physical Function after Eccentric Resistance Training in Adults with Incomplete Spinal Cord Injury
Whitney J. Stone1, Sandra L. Stevens2, Dana K. Fuller2, Jennifer L. Caputo2. 1University of Central Missouri, Warrensburg, MO. 2Middle Tennessee State University, Murfreesboro, TN. (Sponsor: Kevin Finn, FACSM)
(No relevant relationships reported)

1774  Board #35  2:00 PM - 3:30 PM
Preservation of Explosive Force In Long-term Strength Trained Elders Is Determined by Neural Adaptations
Lucas B. R. Orsatto1, Matheus J. Wiest1, Bruno M. Moura1, David F. Collins1, Fernando Diefenthaler1. 1Universidade Federal de Santa Catarina, Florianópolis, Brazil. 2Toronto Rehabilitation Institute, Toronto, ON, Canada. (Sponsor: University of Alberta, Edmonton, AB, Canada)
(No relevant relationships reported)

1775  Board #36  2:00 PM - 3:30 PM
Suspended Weight Training During Squats: Does It Improve Balance More Than Traditional Squats?
Bryan K. Christensen1, Samuel P. Thielen1, Kyle J. Hackney1, Jeremiah T. Moen1. 1North Dakota State University, Fargo, ND. 2Sanford Power Center, Fargo, ND. 3Mayville State University, Mayville, ND
Email: bryan.christensen.1@ndsu.edu
(No relevant relationships reported)

1776  Board #37  2:00 PM - 3:30 PM
Male And Female Fatigue Responses To Heavier- And Lighter-load Lumbar Extension Resistance Training
James P. Fisher, James Steele, Charlotte Stuart. Southampton Solent University, Southampton, United Kingdom
Email: james.fisher@solent.ac.uk
(No relevant relationships reported)

1777  Board #38  2:00 PM - 3:30 PM
Effects of Vibration Resistance Training on Bone Mineral Density of Postmenopausal Females
Li Peng1, weimao zhu, FACSM. 1College of Physical Education, South-West University, Chongqing, China. 2University of Illinois at Urbana-Champaign, Urbana, IL.
(Sponsor: weimao Zhu, FACSM)
(No relevant relationships reported)

1778  Board #39  2:00 PM - 3:30 PM
Impact of a Restricted Breathing Mask on Proteolytic Activity Post Resistance Training
Thomas Andre1, Joshua Gann2, Emily Zipperman1, Paul Hwang1, Darryn Willoughby, FACSM. 1Clayton State University, Morrow, GA. 2Louisiana Monroe University, Monroe, LA. 3Baylor University, Waco, TX
Email: thomasandre@clayton.edu
(No relevant relationships reported)

1779  Board #40  2:00 PM - 3:30 PM
Comparative Responses To Squats Done With Free Weights And An Exoskeleton.
Lily J. Vargas, Matthew K. Daunis, Tyler Bayers, Ling Bai, Thorburn B. Symons, John Caruso. University of Louisville, Louisville, KY
(No relevant relationships reported)
D-58 Free Communication/Poster - Renal Physiology

Thursday, May 31, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

1793 Board #54 3:30 PM - 5:00 PM
The Effect of Dietary Nitrates on Exercise Capacity in Chronic Kidney Disease
Meghan G. Ramick1, Daniella L. Kirkman2, Joseph M. Stock2, Bryce J. Muth3, David G. Edwards4. (West Chester University, West Chester, PA. University of Delaware, Newark, DE)

1794 Board #55 3:30 PM - 5:00 PM
The Kidney As A Hub For Ph Modulation: Interrelationship Of Lactate, Pulse, And Blood Pressure
Ronan C. Musselman1, J. Mark VanNess2, Greg Roberts2, Jonathan M. Save3, Lewis E. Jacobson2, Courtney D. Jensen4. (University of the Pacific, Stockton, CA. St. Vincent Hospital, Indianapolis, IN)

1795 Board #56 3:30 PM - 5:00 PM
Home-based Exercise Improves Heart Contractility Determined by 2D Speckle Tracking Strain in Renal Transplant Recipients
Laura Stefani1, Riggs Kilka, FACSM2, Gianni Pedrizzetti2, Chiara Ingletto2, Benedetta Tosi2, Stefano Pedri2, Giorgio Galanti1. (1University of Florence, Firenze, Italy. 2University of Trieste, Trieste, Italy. 3ExAOTE, Firenze, Italy. Sponsor: Riggs J. Kilka, FACSM)

1796 Board #57 3:30 PM - 5:00 PM
Combined Effects of Hypohydration, Muscle Damage, and Exertional Hyperthermia on Biomarkers of Acute Kidney Injury
Cory L. Butts, Aaron R. Caldwell, Samantha A. Mohler, Matthew S. Giano, FACSM, Nicholas P. Greene, Michigan State University, East Lansing, MI. (Sponsor: Riggs J. Kilka, FACSM)

1797 Board #58 3:30 PM - 5:00 PM
Associations of Physical Activity, Diet, and Kidney Function in Pre-diabetic Early Stage Chronic Kidney Disease
Faithah Niyi-Odumosu1, Thomas Yates2, Joseph Henson2, David J. Stensel3, Alice C. Smith3, Melanie J. Davies3, Nicolette C. Bishop1, 2St. Vincent Hospital, Indianapolis, IN. 3University of South Carolina, Columbia, SC. Sponsor: Dr. Brenda P. McDermott, FACSM)

1798 Board #59 3:30 PM - 5:00 PM
Aerobic Exercise Improves Subclinical Cardiopulmonary Abnormalities in Chronic Kidney Disease
Danielle L. Kirkman, Bryce J. Muth, Joseph M. Stock, David G. Edwards. (University of Delaware, Newark, DE)

www.acsm.org
1799 Board #60 3:30 PM - 5:00 PM
Using an Accelerometer to Predict Mechanical Load of Physical Activities in Adults
Shelby L. Francis, Kathleen F. Janz, FACSM, Jacob E. Simmering. University of Iowa, Iowa City, IA. (Sponsor: Kathleen F. Janz, FACSM)
(No relevant relationships reported)

1800 Board #61 3:30 PM - 5:00 PM
To Investigation Of The Alignment Abnormality In Pelvic Girdles In One Leg Standing X-ray Examination
Masanori Takemura1, Kenichi Ichihashi1, Arjit Banerjee2, Junzo Tsujita1. 1Ichihashi Clinic, Kobe, Japan. 2Amagasaki-city Board of Education, Amagasaki, Japan. 1Institute of Health & Sports Medical Science, Osaka, Japan
Email: masa_takemura27@yahoo.co.jp
(No relevant relationships reported)

1801 Board #62 3:30 PM - 5:00 PM
A Comparison of pQCT Versus B-Ultrasound for Lower Leg Muscle Size Assessment in Young Adults
Samuel R. Buchanan, Robert E. Hight, Breanne S. Baker, Christopher D. Black, Michael G. Bemben, FACSM, Debra A. Bemben, FACSM. The University of Oklahoma, Norman, OK. (Sponsor: Debra Bemben, FACSM)
(No relevant relationships reported)

1802 Board #63 3:30 PM - 5:00 PM
Measurement Of Nitrate And Nitrite In Biopsy-Sized Muscle Samples
Andrew R. Coggan, FACSM, Ashley D. Troutman, Mary Beth Brown, FACSM. Indiana University Purdue University Indianapolis, Indianapolis, IN
Email: acoggan@iupui.edu
(No relevant relationships reported)

1803 Board #64 3:30 PM - 5:00 PM
2D Ultrasound-Based Characterization of Achilles Tendon Micromorphology in Runners Using Spatial Frequency Parameters
Ari L. Buaer1, Kai-Yu Ho2, Yu-Jen Chang2, Abbigail Fietzer3, Michelle Evers4, Caleb Strausberg5, Greg Bashford6, Kornelia Kulig6. 1University of Southern California, Los Angeles, CA. 2University of Nevada, Las Vegas, Las Vegas, NV. 3West Virginia University, Morgantown, WV. 4University of Nebraska-Lincoln, Lincoln, NE
Email: baquer@wlu.edu
(No relevant relationships reported)

1804 Board #65 3:30 PM - 5:00 PM
Test-Retest Reliability of Muscle Cross Sectional Area and Echo Intensity in Upper Extremity Muscles
Brett Pexa1, Joseph B. Myers2, Hayden Giuliani3, Eric D. Ryan1. 1University of North Carolina at Chapel Hill, Chapel Hill, NC. 2Tampa Bay Rays Baseball Organization, St. Petersburg FL. 3Tampa Bay Rays Baseball Organization, St. Petersburg, FL.
(Sponsor: Brian Pietrosimone, FACSM)
Email: pexa@live.unc.edu
(No relevant relationships reported)

1805 Board #66 3:30 PM - 5:00 PM
Assessment of Muscle Injury Using Diffusion Kurtosis MRI and H MRS
Richard M. Lovering, Shama R. Iyer, Jiachen Zhao, Steven Roys, Wenjun Zhu, Su Xu. University of Maryland School of Medicine, Baltimore, MD. (Sponsor: E.G. McFarland, FACSM)
(No relevant relationships reported)
American College of Sports Medicine

D-60  Free Communication/Poster - Aging Biomechanics
Thursday, May 31, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

1813  Board #74  3:30 PM - 5:00 PM
Difference in Attentional Involvement and Respiratory Complexity During Static Balance Between Older and Young Adults
John P. Manning1, Luis Hernandez2, Shuqi Zhang1, Paul Wright1, David Benner1, Li Li, FACSM2. 1Northern Illinois University; DeKalb, IL. 2Georgia Southern University; Statesboro, GA
Email: jnmanning3@niu.edu
(No relevant relationships reported)

1814  Board #75  3:30 PM - 5:00 PM
Mobility And Balance Performance Is Associated With Health-related Quality Of Life In Community-dwelling Older Adults
Lauren Graham1, Allison M. O’Halloran1, Trishia T. Yada1, Jane E. Freund1, Chitra Lakshmi K. Balasubramaniam1, Srikant Vallabhaigouda1. 1Elon University, Elon, NC. 2University of North Florida, Jacksonville, FL. (Sponsor: Stephen Bailey, FACSM)
Email: igraham12@elon.edu
(No relevant relationships reported)

1815  Board #76  3:30 PM - 5:00 PM
Relationship between Cognition and Exercise Capability in Community-dwelling Older Adults
Chunmei Cao1, Yu Liu2, Jinglin Liu3, Weimo Zhu, FACSM1, Weimo Zhu, FACSM1. 1Tsinghua University, Beijing, China. 2Peking University, Beijing, China. 3University of Illinois at Urbana-Champaign, Urbana, IL. (Sponsor: Weimo Zhu, FACSM)
Email: caocm@tsinghua.edu.cn
(No relevant relationships reported)

1816  Board #77  3:30 PM - 5:00 PM
Greater Stance Time Variability is Associated with Lower Step Activity in Older Adults
Trishia T. Yada1, Lauren E. Graham1, Allison M. O’Halloran1, Jane E. Freund1, Chitra Lakshmi K. Balasubramaniam1, Srikant Vallabhaigouda1. 1Elon University, Elon, NC. 2University of North Florida, Jacksonville, FL. (Sponsor: Stephen Bailey, FACSM)
Email: yadat@outlook.com
(No relevant relationships reported)

1817  Board #78  3:30 PM - 5:00 PM
Elevated BMI Impairs Balance Among Older Adults With Vestibular Disorders
Alexis C. King1, J Mark Van Ness1, Toni J. Oliver2, Courtney D. Jensen1. 1University of the Pacific, Stockton, CA. 2San Luis Sports Therapy, Templeton, CA
Email: a_king10@sx.pacific.edu
(No relevant relationships reported)

1818  Board #79  3:30 PM - 5:00 PM
The Effect of Mental Fatigue on Postural Stability in Young and Older Women
Amanda J. Morris, Garrett Lindsey, Anita D. Christie. University of Oregon, Eugene, OR. (Sponsor: David Gabriel, FACSM)
Email: amorris8@uoregon.edu
(No relevant relationships reported)

1819  Board #80  3:30 PM - 5:00 PM
Electrical Nerve Stimulation Elicits Intensity-dependent Changes in Force Steadiness in Young and Older Adults
Diba Mani, Daniel F. Feeney, Roger M. Enoka. University of Colorado, Boulder, CO. (Sponsor: Robert Mazzeo, FACSM)
Email: manid@colorado.edu
(No relevant relationships reported)

D-61  Free Communication/Poster - Biomechanics of Resistance Training
Thursday, May 31, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

1820  Board #81  3:30 PM - 5:00 PM
Effects Of Resistance Training On Maximal Motor Unit Firing Rates In Young And Older Males
Phuong L. Hu1, Garrett M. Hester1, Ryan J. Colquhoun2, Mitchel A. Magrini1, Zachary K. Pope1, Alejandra Barrera-Curiel3, Carlos A. Estrada3, Jason M. DeFreitas3. 1Kennesaw State University; Kennesaw, GA. 2Oklahoma State University; Stillwater, OK. (No relevant relationships reported)

1821  Board #82  3:30 PM - 5:00 PM
Dynamic Balance Changes in Older Adults Following 12-Weeks of a Self-Managed Exercise Program
Michele Nofal, Saad Alhannad, Lisa MK Chin, Jeffrey E. Herrick, Clinton J. Wutzke. George Mason University, Fairfax, VA. (Sponsor: Randall E. Keyser, FACSM)
Email: mnofal@gmu.edu
(No relevant relationships reported)

1822  Board #83  3:30 PM - 5:00 PM
An Analysis of Squat Mechanics Between Individuals With High and Low Strength Levels
Kevin H. Chee1, Pablo B. Costa2, Jared W. Coburn, FACSM2, Derek N. Pumukoff2. 1University of Nevada, Las Vegas, Las Vegas, NV. 2California State University, Fullerton, Fullerton, CA. (No relevant relationships reported)

1823  Board #84  3:30 PM - 5:00 PM
Improving Posterior Chain Engagement and Forward Trunk Lean During The Front Squat
Scott Wilson, William Goodman, Christopher Casillas, Linnea Zavala, James Becker. Montana State University, Bozeman, MT
Email: james.becker4@montana.edu
(No relevant relationships reported)

1824  Board #85  3:30 PM - 5:00 PM
Effects of Squat Depth and Stance Width on Lower Extremity Frontal Plane Kinetics
Lauren R. Williams1, Tyler W. Standifird2, W. Matt Denning3, Brad Gardiner3. 1Utah Valley University, Orem, UT. 2Brigham Young University Idaho, Rexburg, ID. 3Weber State University, Ogden, UT. (No relevant relationships reported)

1825  Board #86  3:30 PM - 5:00 PM
Influence of Attentional Focus in a Weighted Barbell Back Squat Among Experienced Performers
Blake Loxtercamp1, Marcus Moore1, Scott Auster2, Greg DeNunzio2, Lesley M. Scibora1. 1University of St. Thomas, St. Paul, MN. 2Northwestern Health Sciences University, Bloomington, MN
Email: Lox10002@uthomnas.edu
(No relevant relationships reported)

1826  Board #87  3:30 PM - 5:00 PM
Load-dependent Relative Muscular Effect of the Knee Extensor Muscles During Back and Front Squats
John Krzyszczowski, Kristof Kipp, Sandra Dahling, Jordi Heeneman. Marquette University, Milwaukee, WI. (Sponsor: Paula Papandek, FACSM)
Email: john.krzyszczowski@marquette.edu
(No relevant relationships reported)
1827 Board #88 3:30 PM - 5:00 PM
Development and Validation of Efficient Assessment Tool to Quantify Strength Training Technical Expertise
Erich Petushek\(^1\), Sarah B. Clarke\(^2\), Sandor Dorgo\(^3\), William Ebbon\(^4\), Gregory D. Myer, FACSM\(^5\), Tron Krosshaug\(^6\). Michigan State University, East Lansing, MI. Northern Michigan University, Marquette, MI. University of Texas at El Paso, El Paso, TX. \(^6\)Lakeland University, Plymouth, WI. Cincinnati Children’s Hospital Medical Center, Cincinnati, OH. \(^5\)Norwegian School of Sports Sciences, Oslo, Norway. (Sponsor: Gregory D. Myer, FACSM)
Email: petushek@msu.edu
(No relevant relationships reported)

1828 Board #89 3:30 PM - 5:00 PM
Dynamic Resistance Training Promotes Better Neuromuscular Benefits And Reduces Oxidative Stress In Healthy Wistar Rats
Michel Souza\(^1\), Rodrigo Neves\(^2\), Thiago Rosa\(^3\), Alexandre Oliveira\(^4\), Gustavo Gomes\(^5\), Rafael Costa\(^6\), Bernardo Brix\(^7\), Luiz Souza\(^8\), Rafael Other\(^9\), Lyseline Deus\(^10\), Milton Monte\(^11\), Universidade Católica de Brasilia, São Paulo, Brazil. \(^11\)Universidade Católica de Brasilia, Brasilia, Brazil
Email: mks_gtr@hotmail.com
(No relevant relationships reported)

1829 Board #90 3:30 PM - 5:00 PM
Mechanomyographic Amplitude Is Sensitive To Neuromuscular Adaptations Following High- Versus Low-load Resistance Training
Patrick M. Tomko\(^1\), Armelia Miramonti\(^2\), Ethan C. Hill\(^3\), Cory M. Smith\(^4\), Kristen C. Cochrane-Snymani\(^5\), Ryan J. Colquhoun\(^6\), Terry J. Houshi\(^7\), Joel T. Cramer\(^8\), Nathaniel D.M. Jenkins\(^9\), Oklahoma State University, Stillwater, OK. \(^9\)University of Nebraska-Lincoln, Lincoln, NE. \(^5\)Fresno State University, Fresno, CA
(No relevant relationships reported)

1830 Board #91 3:30 PM - 5:00 PM
Prediction of Ground Reaction Forces of Flexible Barbells using their Bar End Displacement
Mehmood Mallick, Sunyeop Lee, Randolph E. Hutchison, Anthony Caterisano, FACSM. Furman University, Greenville, SC. (Sponsor: Anthony Caterisano, FACSM)
Email: randolph.hutchison@furman.edu
(No relevant relationships reported)

1831 Board #92 3:30 PM - 5:00 PM
Comparison of Peak Ground Reaction Forces at Natural Frequencies of a Flexible Barbell
Randolph E. Hutchison, Sunyeop Lee, Anthony Caterisano, FACSM. Furman University, Greenville, SC. (Sponsor: Anthony Caterisano, FACSM)
Email: randolph.hutchison@furman.edu
(No relevant relationships reported)

1832 Board #93 3:30 PM - 5:00 PM
Relationship between Mechanical & Neuromuscular indices of Fatigue during Resistance Exercise
Andrew Renggli, Jarod Vance, Randal Claytor. Miami University, Oxford, OH. (Sponsor: Helaine Alessio, FACSM)
Email: rengglam@miamioh.edu
(No relevant relationships reported)

1833 Board #94 3:30 PM - 5:00 PM
Relationship Between Mechanical Work and Metabolic Cost of Multiple Sets of Resistance Exercise to Failure
Eric W. Slattery, Andrew Renggli, Jarod Vance, Randal Claytor. Miami University, Oxford, OH. (Sponsor: Helaine Alessio, FACSM)
Email: rengglam@miamioh.edu
(No relevant relationships reported)

1834 Board #95 3:30 PM - 5:00 PM
Influence Of Anthropometric Factors On Balance In Masters Olympic Weightlifters
Mara A. Mercedo, Kayleigh R. Erickson, Robert J. Burke, Bryan L. Riemann. Armstrong State University, Savannah, GA
Email: mms5386@stu.armstrong.edu
(No relevant relationships reported)

1835 Board #96 3:30 PM - 5:00 PM
Support Moment Distribution While Squatting With Different Depths and Percentages One Rep Max
William Goodman\(^1\), Scott Wilson\(^2\), Linnea Zavalal, Victoria Flores\(^2\), Joshua Cotter\(^3\), James Becker\(^4\). \(^2\)Montana State University, Bozeman, MT. \(^3\)California State University, Long Beach, Long Beach, CA
Email: james.becker@montana.edu
(No relevant relationships reported)

D-62 Free Communication/Poster - Mobile Monitoring
Thursday, May 31, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

1836 Board #97 3:30 PM - 5:00 PM
Reliability and Validity of a Wireless Inertial Sensor for Assessing Vertical Jump Biomechanics
Joseph J. DeVita, Ian J. Kremenic, Karl F. Orishimo, Malachy P. McHugh, FACSM. Nicholas Institute of Sports Medicine and Athletic Trauma, Lenox Hill Hospital, New York, NY. (Sponsor: Malachy P McHugh, FACSM)
Email: jjdevita@umich.edu
(No relevant relationships reported)

1837 Board #98 3:30 PM - 5:00 PM
Validity of a Commercially Available Inertial Measurement Unit for Vertical Jump Height Measurement
Gregory A. Crisafulli, Jeffrey B. Taylor, Anh-Dung Nguyen, Kevin R. Ford, FACSM. High Point University, High Point, NC. (Sponsor: Kevin R. Ford, FACSM)
Email: crisag12@highpoint.edu
(No relevant relationships reported)

1838 Board #99 3:30 PM - 5:00 PM
Reliability Of A Running Power Meter Between Trials Of Submaximal Running On Three Different Surfaces
Frank Lara, Lee Shearer, Mason Coppi, Nicholas Hayden, Jake Ogden, Scott Murr, Randolph Hutchison, Eric Sobolewski. Furman University, Greenville, SC. (Sponsor: Anthony Caterisano, FACSM)
Email: randolph.hutchison@furman.edu
(No relevant relationships reported)

1839 Board #100 3:30 PM - 5:00 PM
Reliability Between Running Power Meter Footpods During Trials Of Submaximal Running On Three Different Surfaces
Lee Shearer, Nicholas Hayden, Frank Lara, Mason Coppi, Jake Ogden, Scott Murr, Eric Sobolewski, Randolph E. Hutchison. Furman University, Greenville, SC. (Sponsor: Anthony Caterisano, FACSM)
Email: randolph.hutchison@furman.edu
(No relevant relationships reported)

1840 Board #101 3:30 PM - 5:00 PM
Differences In Wearable Running Power On Three Different Surfaces During Submaximal Running
Mason Coppi, Lee Shearer, Nicholas Hayden, Jake Ogden, Frank Lara, Scott Murr, Eric Sobolewski, Randolph Hutchison. Furman University, Greenville, SC. (Sponsor: Anthony Caterisano, FACSM)
Email: randolph.hutchison@furman.edu
(No relevant relationships reported)
0102 Comparisons of Ankle and Knee Kinetics during Demi-Plié Ballet Movements
Morris Levy¹, Darren Dutto², Lila Ann White¹, ‘University of Minnesota, Duluth, MN; ‘Eastern Oregon University, La Grande, OR
(No relevant relationships reported)

0103 Technical Note: Measuring Muscle Activity During Plyometric Exercise In Shallow Water
Cordero Davion Roche, Leland Barker, John A. Mercer, FACSM, University of Nevada, Las Vegas, Las Vegas, NV. (Sponsor: John A. Mercer, FACSM)
Email: rochecl@unlv.nevada.edu
(No relevant relationships reported)

0104 Kinematic Comparison of Dolphin Kicking Performed in a Prone and Supine Body Position
Mickey B. Scharbrough, Taylor L. Adams, Peter E. Robinson, Kali T. Rose, Scott P McLean. Southwestern University, Georgetown, TX. (Sponsor: John Bartholomew, FACSM)
(No relevant relationships reported)

0105 Higher Vertical Stiffness Is Related To Greater Fifth Metatarsal Bone Mineral Density In Football Players
Thomas J. Hokenjos, Kevin R. Ford, FACSM, Justin P. Waxman, Anh-Dung Nguyen, Audrey E. Westbrook, Michelle A. Aube, Jeffrey B. Taylor, High Point University, High Point, NC. (Sponsor: Kevin Ford, FACSM)
(No relevant relationships reported)

0106 The Influence Of Load On Preferred Countermovement Depth During Jump Squats
Leland Barker, John Mercer, FACSM. UNLV, Las Vegas, NV. (Sponsor: John Mercer, PhD, FACSM, FACSM)
Email: barkel1@unlv.nevada.edu
(No relevant relationships reported)

0107 The Relationship Between 2D and 3D Biomechanics Data in a Single Leg Hurdle Task
Gaëlen Athanaze, Chelsey Roe, Samantha Price, Hayley Reed, Jessica Schilling, Brian Noehren, FACSM. University of Kentucky, Lexington, KY. (Sponsor: Brian Noehren, FACSM)
Email: gbart222@uky.edu
(No relevant relationships reported)

0108 Effects And Interactions Of Ncaa Di Basketball Participation On Measures Of Reactive Strength
Nile Banks¹, Dennis Dolny¹, Eadric Bressel², Talin Louder¹. ‘The University of South Dakota, Vermillion, SD; ‘Utah State University, Logan, UT
Email: nile.banks@coyotes.usd.edu
(No relevant relationships reported)

0109 Identifying the Effects of Sex on Reactive Strength Scores using Receiver Operating Characteristic (ROC) Curves
Lara Boman, Jordan Preuss, Jake Rosburg, Nile Banks, Talin Louder. The University of South Dakota, Vermillion, SD
Email: lara.boman@coyotes.usd.edu
(No relevant relationships reported)
P130 Final Program

1857 Board #118 3:30 PM - 5:00 PM
Stand And Deliver: Muscle Activity And Mechanical Energies Of The Lower Limb During Cycling
Ross D. Wilkinson, Glen A. Lichtwark, Andrew G. Cresswell. The University of Queensland, St Lucia, Queensland, Australia
Email: r.wilkinson@uq.edu.au
(No relevant relationships reported)

1858 Board #119 3:30 PM - 5:00 PM
Relationship Between Neurocognitive Testing and Saccadic Eye Movements in Symptom Free Division I Athletes
Sydni V. Wilhoite1, Brian J. Szekely1, Peter Chrysosferidis1, Kristen L. Neitz2, Douglas W. Powell1, Barry A. Munkasy1, Nicholas G. Murray1. 1Georgia Southern University, Statesboro, GA. 2University of Memphis, Memphis, TN
Email: cosnyd@me.com
(No relevant relationships reported)

1859 Board #120 3:30 PM - 5:00 PM
The Influence of Directional Compression Tights on Muscle Activity and Performance in Recreational Alpine Skiers
Cory J. Snyder, James Becker, John G. Seifert. Montana State University, Bozeman, MT
Email: cosnyd@me.com
(No relevant relationships reported)

1860 Board #121 3:30 PM - 5:00 PM
Narrowing The Gap In Movement Ability from the Perspective of the Female Athlete
Mike Decker1, Casey Myers1, Kevin Shelnut1, Matt Shaw1, Julie Graves1, Eric McCarty2, Michelle Wolcott3. 1University of Denver, Denver, CO. 2University of Colorado, Boulder, CO
Email: szanuso@gmail.com
(No relevant relationships reported)

1861 Board #122 3:30 PM - 5:00 PM
Biomechanical And Physiological Differences Between Two Rowing Ergometers
Silvano Zanuso1, Giuseppe Fedele2, Jonathan Folland, FACSM1, Matthew Black1, Simonetta Senni3, Horsham Esser Ethar4, Paolo Benvenuti5, Francesco Cuzzolino6. 1University of Coventry, Coventry, Italy. 2Technogym Scientific Dept, Cesena, Italy. 3Loughborough University, Loughborough, United Kingdom. 4University of Exeter, Exeter, United Kingdom. 5University of Verona, Verona, Italy. 6University of Padova, Padova, Italy
Email: szanuso@gmail.com
(No relevant relationships reported)

1862 Board #123 3:30 PM - 5:00 PM
Differences in Ground Reaction Forces When Collegiate Quarterbacks Throw Using Different Drop Patterns
Cailyn Schroeder, Samantha Bessert, John Seifert, James Becker. Montana State University, Bozeman, MT
Email: james.becker4@montana.edu
(No relevant relationships reported)

1863 Board #124 3:30 PM - 5:00 PM
Hip Joint Torques During the Golf Swing of Young and Senior Healthy Females
Judy Foxworth, Chris Wendt, Audrey L. Millar, FACSM. Winston-Salem State University, Winston-Salem, NC. (Sponsor: Audrey Lynn Millar, FACSM)
Email: foxworth@wssu.edu
(No relevant relationships reported)

1864 Board #125 3:30 PM - 5:00 PM
Effects of Metronomes Training on Timing of the Golf Putt and Neural Connectivity in Professional Golf Players
Jin Hyun Kim1, Joung Kyu Han2, Doug Hyun Han1. 1Kent state Univ, Kent, OH. 2Chung ang Univ, Seoul, Korea, Republic of
Email: jkim74@kent.edu
(No relevant relationships reported)

ACSM 65th Annual Meeting

1865 Board #126 3:30 PM - 5:00 PM
Reducing Lower Back Injury in Golf: Cross-sectional Assessment of Novel Swing Technique
Reeves Weeden1, Erich Petuske1, Katja Osterwald1, Sarah B. Clarke1, J. Bryan Dixon1, Chris Richter1. 1RW Golf Ltd, Epping, United Kingdom. 2Michigan State University, East Lansing, MI. 3Sports Surgery Clinic, Dublin, Ireland. 4Northern Michigan University, Marquette, MI. 5Advanced Center for Orthopedics and Plastic Surgery, Marquette, MI
Email: r.weeden@u.pacific.edu
(No relevant relationships reported)

1866 Board #127 3:30 PM - 5:00 PM
Trunk Flexibility, Balance, Muscle Endurance, And Contralateral Lean In Collegiate Baseball Pitchers
Kaitlin M. Ford, Karen Myrick, Juan Garbalosa, Rich Feinn. Quinnipiac University, Hamden, CT
Email: k福特@u.pacific.edu
(No relevant relationships reported)

1867 Board #128 3:30 PM - 5:00 PM
Sparta Testing and Vertical Jump Co-Predict Fastball Speed in Collegiate Pitchers
Email: w.lydon@u.pacific.edu
(No relevant relationships reported)

D-64 Free Communication/Poster - Disabilities

1868 Board #129 2:00 PM - 3:30 PM
Influence of Therapeutic Horseback Riding on Motor Proficiency in Youth with Sensory Processing Dysfunction
Brandon R. Rigby1, Ronald Davis1, Melissa Bittner1, Robin Harwell2, Eileen Leek3, Geoben Johnson2, David Nichols, FACSM1. 1Texas Woman's University, Denton, TX. 2California State University Long Beach, Long Beach, CA. 3ManeGait Therapeutic Horsemanship, McKinney, TX. (Sponsor: David Nichols, FACSM)
Email: brighty@twu.edu
(No relevant relationships reported)

1869 Board #130 2:00 PM - 3:30 PM
Adherence and Continued Participation In A Student-led Wellness Program For Individuals With Disabilities
Megan E. Ware, Kathleen P. Demarrais, Kevin K. McCully, FACSM. University of Georgia, Athens, GA
Email: mware@uga.edu
(No relevant relationships reported)

1870 Board #131 2:00 PM - 3:30 PM
Static Standing Balance Before And After A Maximal Treadmill Test In Adults With Intellectual Disabilities
Miriam Guerra-Balic1, Casimiro Javierre2, Guillermo Oviedo2. 1University Ramon Llull, Barcelona, Spain. 2University of Barcelona, Barcelona, Spain. (Sponsor: Bo Fernhall, PhD, FACSM, FACSM)
Email: miriamelisagbi@blancaquerma.url.edu
(No relevant relationships reported)

1871 Board #132 2:00 PM - 3:30 PM
A Multilevel Patient Engagement Model for Recruiting Hard-to-Reach Populations into Exercise Training Studies
Emily S. Goodner1, Whitney Neal2, Tracy Tracy3, Tapan Mehta3, J. Derek Rimmer1, Mohanraj Thirumalai3, William H. Neumeier1, Hui-Ju Young4, James H. Rimmer1. 1University of Alabama at Birmingham, Birmingham, AL. 2Lakeshore Foundation, Birmingham, AL. 3Tanner Foundation for Neurological Diseases, Birmingham, AL.
Email: emilysg@uab.edu
(No relevant relationships reported)

ACSM May 29 – June 2, 2018
Minneapolis, Minnesota
1872 Board #133 2:00 PM - 3:30 PM
Changes in Physical Activity during a Pilot Weight Loss Program before and After Knee Replacement
Christine A. Pellegrini1, Rowland W. Chang2, Dorothy D. Dunlop2, David E. Conroy3, Jungwha Lee2, Kenzie A. Cameron2. 1University of South Carolina, Columbia, SC. 2Northwestern University, Chicago, IL. 3The Pennsylvania State University, University Park, PA
Email: cpellegrini@sc.edu
(No relevant relationships reported)

1873 Board #134 2:00 PM - 3:30 PM
Use of Video Modeling to Teach Weight Lifting Techniques to Adults with Down Syndrome
Kathy Carter1, Alexandra Roberts2, Robert Pennington1, Elizabeth Ledford1. 1University of Louisville, Louisville, KY. 2Australian Institute of Sport, Canberra, Australia
Email: Kathleen.Carter@louisville.edu
(No relevant relationships reported)

1874 Board #135 2:00 PM - 3:30 PM
Changes in Physical Activity patterns among Down Syndrome Youth In a Weight-loss Randomized Control Trial
Qun Le1, Philimon Gona, Richard Fleming. U MASS Boston, Boston, MA
Email: qun.le001@gmail.com
(No relevant relationships reported)

1875 Board #136 2:00 PM - 3:30 PM
Influence of Pain and Mood on Physical Activity after Knee Replacement
Sara M. Rothberger, Courtney M. Monroe, Christine A. Pellegrini. University of South Carolina, Columbia, SC
(No relevant relationships reported)

1876 Board #137 2:00 PM - 3:30 PM
Noncompliance Patterns in Accelerometer-based Research for Children and Adolescents with a Developmental Disability
Jooyeon Jin1, Byungmo Ku2. 1University of Seoul, Seoul, Korea. 2University of Oregon State University, Corvallis, OR. (Sponsor: Stamatis Agiovlasitis, FACSM).
Email: jooyeong.jin13@gmail.com
(No relevant relationships reported)

1877 Board #138 2:00 PM - 3:30 PM
Feasibility of Underwater Treadmill Training to Improve Mobility: A Case Study of a Transitiabil Amputee
Shannon L. Mathis1, Ryan T. Conners1, Adan Vazquez2, David E. Walls2. 1The University of Alabama in Huntsville, Huntsville, AL. 2Fourroux Prosthetics, Huntsville, AL.
Email: shannon.mathis@uah.edu
(No relevant relationships reported)

1878 Board #139 2:00 PM - 3:30 PM
Qualitative Assessment of the Implementation of a 12-week Game-based At-home Intervention for Young Children
Paloma Pallante, Daniela A. Rubin, FACSM, Kasen M. Bras, Kathleen S. Wilson. California State University Fullerton, Fullerton, CA. (Sponsor: Daniela A Rubin, FACSM)
Email: palomapallante@csuf.fullerton.edu
(No relevant relationships reported)

1879 Board #140 2:00 PM - 3:30 PM
A Survey of Parents of Children With Mild Developmental Disabilities: Perspectives On Digital Health
Courtney M. Monroe1, Allison Brazendale2, Keith Brazendale2, Marie Knoll1, Catherine Ivey1, Michael W. Beets1. 1University of South Carolina, Columbia, SC. 2Autism Academy of South Carolina, Columbia, SC. 3Wofford College, Spartanburg, SC. (Sponsor: Sara Wilcox, FACSM)
Email: cmmonroe@mailbox.sc.edu
(No relevant relationships reported)
Free Communication/Poster - Physical Activity and Exercise in Children and Youth

Thursday, May 31, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

1886 Board #147 2:00 PM - 3:30 PM
Participation In Physical Education Classes And Physical Activity And Sedentary Behavior In Children
Diego A S Silva1, Jean-Philippe Chaput2, Peter T. Katzmarzyk, FACSM, Mikael Fogelholm3, Gang Hu4, Carol Maher5, Timothy Olde1, Vincent Onyewu4, Olga L. Sarniento5, Martyn Standage6, Catrine Tudor-Locke7, Mark S. Trembly, FACSM7. Federal University of Santa Catarina, Florianopolis, Brazil. 2Children’s Hospital of Eastern Ontario Research Institute, Ottawa, ON, Canada. 3Pennington Biomedical Research Center, Baton Rouge, LA. 4University of Helsinki, Helsinki, Finland. 5University of South Australia, Adelaide, Australia. 6Kenyatta University, Nairobi, Kenya. 7University of the Andes, Bogota, Colombia. 8University of Bath, Bath, United Kingdom. 9University of Massachusetts Amherst, Amherst, MA.

Email: diegoangustoss@yahoo.com.br
(No relevant relationships reported)

1887 Board #148 2:00 PM - 3:30 PM
Difference In Physical Activity Between Children Without Siblings And With Siblings
Chelsea L. Smith1, Emily Gusmarr1, Laura Hubbs-Tait1, Jennifer Graef2, Sandra Arnold2, Allen Knehans2, Susan B. Sisson, FACSM3. 1University of Oklahoma Health Sciences Center, Oklahoma City, OK. 2University of Wisconsin, Madison, WI. 3University of South Carolina, Columbia, SC.

Email: emily.smith@uokhsc.edu
(No relevant relationships reported)

1888 Board #149 2:00 PM - 3:30 PM
Parent Physical Activity Practices and Associations with Physical Activity and Sedentary Time in Preschool-Age Children
Emily C. Huber1, Jessica R. Meeandering2. 1Loras College, Dubuque, IA. 2South Dakota State University, Brookings, SD. (Sponsor: Matt Vukovich, FACSM)

Email: emily.huber@loras.edu
(No relevant relationships reported)

1889 Board #150 2:00 PM - 3:30 PM
The Relationship Between Screen Time and Sleep Duration in Children
Joseph Carlson1, Nara A. Paulsen1, Breanne Carlson1, Erich J. Petushok2, Karin A. Pfieffer, FACSM2. 1Michigan State University, East Lansing, MI. 2Northern Michigan University, Marquette, MI.

Email: carls122@msu.edu
(No relevant relationships reported)

1890 Board #151 2:00 PM - 3:30 PM
Lipoprotein Subclasses And Their Associations With Physical Activity, Cardiorespiratory Fitness And Adiposity In Norwegian Schoolchildren
Paul R. Jones1, Olav M. Kvalheim2, Geir K. Resaland3, Sigmund A. Anderssen2, Ulf Ekelund, FACSM2. 1Norwegian School of Sport Sciences, Oslo, Norway. 2University of Bergen, Bergen, Norway. 3Western Norway University of Applied Sciences, Sogndal, Norway. (Sponsor: Professor Ulf Ekelund, FACSM)

(No relevant relationships reported)

1891 Board #152 2:00 PM - 3:30 PM
Physical Activity does not Modify the Relationship between Asthma and Obesity in African American Youth
Matthew Nagy, Kelley McIlramphey, Erika Shaver, Rebecca Hasson, FACSM, University of Michigan, Ann Arbor, MI.

Email: mnagy@umich.edu
(No relevant relationships reported)

1892 Board #153 2:00 PM - 3:30 PM
Cardiovascular Fitness, Body Composition, And ADHD Diagnosis Among Youth In NHANES-2004
Lundon C. Burton, University of Illinois at Chicago, CHICAGO, IL. (Sponsor: Dr. Eduardo Bastamante, FACSM)

Email: iburto2@uic.edu
(No relevant relationships reported)

1893 Board #154 2:00 PM - 3:30 PM
Youth Participation in Competitive Sports Associates with Midlife Lean Body Mass and Physical Activity
Eija Laakkonen1, Janne Kulmalai, Tuija Tammelin2, Harto Hakonen2, Mirja Hirvensalo3, Urho Kujala4, Vuokko Kovanen1, Sarianna Siipil4, Urho Kujala1. 1University of Jyväskylä, Jyväskylä, Finland. 2LIKES Research Center for Physical Activity and Health, Jyväskylä, Finland.

Email: eija.k.laakkonen@jyu.fi
(No relevant relationships reported)

1894 Board #155 2:00 PM - 3:30 PM
Differences and Agreements in Physical Activity of Older Adolescents and Young Adults
Piroska Boros, Kathleen F. Janz, FACSM, Elena M. Letuchy, Steve M. Levy. University of Iowa, Iowa City, IA. (Sponsor: Kathleen Janz, FACSM)

Email: piroska-boros@uiowa.edu
(No relevant relationships reported)

1895 Board #156 2:00 PM - 3:30 PM
Associations of Short Bout Sedentary Behavior and Physical Activity with Adiposity and Fitness in Children
Melissa A. Jones1, Paula Skidmore2, Lee Stoner2, Harriet Harrex2, Pooya Saeedi2, Katherine Black2, Bethany Barone Gibbs1. 1University of Pittsburgh, Pittsburgh, PA. 2University of Otago, Dunedin, New Zealand. 3University of North Carolina, Chapel Hill, NC.

Email: maj133@pitt.edu
(No relevant relationships reported)

1896 Board #157 2:00 PM - 3:30 PM
Associations Between School Transport And Obesity By Gender, Grade, Physical Activity, Ethnicity, And Economic Disadvantage
Allen M. Hallett1, Nalini Ranjit1, Harold W. Kohl, III, FACSM1, Kelley Petee Gabriel, FACSM1, Natalie P. Archer1, Deanna M. Hoelscher1. 1University of Texas Health Science Center-Houston (UTHHealth) School of Public Health in Austin, Austin, TX. 2Texas Department of State Health Services, Austin, TX. (Sponsor: Harold W. (Bill) Kohl, III, FACSM)

Email: Allen.Hallett@uth.tmc.edu
(No relevant relationships reported)

1897 Board #158 2:00 PM - 3:30 PM
Freestyle Swimming Performance From Childhood To Adulthood Of Japanese Top-Class Swimmers.
Minoru Kunii1, Susumu S. Sawada, FACSM, Naofumi Yamamoto2, Yuko Gando2, Hisashi Naito2. 1Central Sports Co., Tokyo, Japan. 2National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan. 3Ehime University, Matsuyama, Japan. 4Hunendo University, Tokyo, Japan.

(No relevant relationships reported)

1898 Board #159 2:00 PM - 3:30 PM
Dose Response of Cardiorespiratory Fitness Interventions in Adolescents: A Systematic Review
Zezhao Chen, Jingyuan Zhu, Weimo Zhu, FACSM. University of Illinois at Urbana Campaign, Urbana, IL.

Email: zezhao.chen86@gmail.com
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Year</th>
<th>Board #</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
<th>Email/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1899</td>
<td>#160</td>
<td>2:00 PM - 3:30 PM</td>
<td>Dose-response Effects Of Exercises In Children With Asthma: A Review</td>
<td>Peidei Li, Zexiao Chen, Weimo Zhu, FACSM. University of Illinois at Urbana-Champaign, Champaign, IL</td>
<td><a href="mailto:pld28@illinois.edu">pld28@illinois.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1900</td>
<td>#161</td>
<td>2:00 PM - 3:30 PM</td>
<td>Exercise Interventions for Children with Autism: A Review</td>
<td>Samuel Streeter, Zexiao Chen, Weimo Zhu, FACSM. University of Illinois at Urbana-Champaign, Champaign-Urbana, IL</td>
<td>Email: <a href="mailto:slstree2@illinois.edu">slstree2@illinois.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1901</td>
<td>#162</td>
<td>2:00 PM - 3:30 PM</td>
<td>Differences in CVD Risk Factor Status and Micronutrient Intakes by Physical Activity Level in Youth</td>
<td>Jeanette M. Ricci, Joseph J. Carlsson, Erich Petushek, Karin A. Pfeiffer, FACSM. Michigan State University, East Lansing, MI</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>D-66</td>
<td></td>
<td>Free Communication/Poster - Population-Based Surveillance</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Thursday, May 31, 2018, 1:00 PM - 6:00 PM</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Room: CC-Hall B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1902</td>
<td>#163</td>
<td>2:00 PM - 3:30 PM</td>
<td>Research on Relationship between Chinese Female Students’ Height and Geographical Meteorological Indexes</td>
<td>zhiping zhen1, hanran f1, liangyi ha1, chao lu1. 1Beijing normal university, beijing, China. 2China University of Mining and Technology (Beijing, beijing, China</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1903</td>
<td>#164</td>
<td>2:00 PM - 3:30 PM</td>
<td>Thirty Years Secular Trend Of Rest Heart Rate In An Epidemiological Transition Society</td>
<td>Wesley Dornelas1, Victor KR Matsudo1, João P. Junior1, Timoteo L. Araujo2. 1CELAFLSCE, São Caetano do Sul, Brazil. 2CELAFLSC - FMU, São Caetano do Sul, Brazil</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1904</td>
<td>#165</td>
<td>2:00 PM - 3:30 PM</td>
<td>Knowledge of the Adult and Youth 2008 Physical Activity Guidelines for Americans</td>
<td>Eric T. Hyde, John D. O'mara, Kathleen B. Watson, Janet E. Fulton, FACSM, Susan A. Carlson. Centers for Disease Control and Prevention, Atlanta, GA</td>
<td>Email: <a href="mailto:mne7@cdc.gov">mne7@cdc.gov</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>1905</td>
<td>#166</td>
<td>2:00 PM - 3:30 PM</td>
<td>Member Movement Rates Of Fitness Facilities In England</td>
<td>Nadja Willinger1, Elizabeth Horton1, Lou Atkinson1, Tim William2, Alfonso Jimenez1, Steven Mann1. 1Coventry University, Coventry, United Kingdom. 2City University, London, United Kingdom. (Sponsor: Gary Liguori, FACSM)</td>
<td>Email: <a href="mailto:willingn@uni.coventry.ac.uk">willingn@uni.coventry.ac.uk</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

**Final Program P133**

<table>
<thead>
<tr>
<th>Year</th>
<th>Board #</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
<th>Email/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1906</td>
<td>#167</td>
<td>2:00 PM - 3:30 PM</td>
<td>Improving the Operationalization of Neighborhood Built Environment Exposures in Physical Activity Research: Houston TRAIN Study</td>
<td>Deborah Salvo1, Casey P. Durand2, Abiodun Oluwomu3, Kelley Pettee Gabriel, FACSM1, Alexandra van den Berg3, Adriana Perez2, Harold W. Kohl III, FACSM1. 1The University of Texas Health Science Center at Houston - School of Public Health (Austin), Austin, TX. 2The University of Texas Health Science Center at Houston - School of Public Health (Houston), Houston, TX. 3Baylor College of Medicine, Houston, TX</td>
<td>Email: <a href="mailto:deborah.salvo@uth.tmc.edu">deborah.salvo@uth.tmc.edu</a> (No relevant relationships reported) Kohl Presenting</td>
</tr>
<tr>
<td>1907</td>
<td>#168</td>
<td>2:00 PM - 3:30 PM</td>
<td>Objectively Measured Physical Activity and Self-Reported Screen Time Behaviors in Omani Children: A Cross-Sectional Study</td>
<td>Younguleok Kim1, Marc Lochbaum1, Azaa Al-Abri2, Majeed Al-Jafri1, Hafa Al-Sabti1, Sabah Almaqabali1, Suad Alfori1. 1Texas Tech University, Lubbock, TX. 2Ministry of Education, Muscat, Oman</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1908</td>
<td>#169</td>
<td>2:00 PM - 3:30 PM</td>
<td>Prevalence And Characteristics Of Us State-level Physical Activity And Public Health Planning</td>
<td>Harold W. Kohl, III, FACSM, Ashleigh M. Johnson1, Brooke C. Towner1, Erin E. Dooley2, Kurt Heirschmid1, Eloise Elliott1. 1University of Texas, Austin, TX. 2University of Texas School of Public Health, Austin, TX. 3West Virginia University, Morgantown, WV. 4University of South Carolina, Columbia, SC</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1909</td>
<td>#170</td>
<td>2:00 PM - 3:30 PM</td>
<td>Global Physical Inactivity</td>
<td>David Q. Thomas, FACSM, Lea J. Anderson, Monica N. Tyler, Rachel M. Sherman, Jennifer Spring. Illinois State University, Normal, IL</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1910</td>
<td>#171</td>
<td>2:00 PM - 3:30 PM</td>
<td>Differences In Park Plans And Policies Across US Municipalities</td>
<td>Erin L. Peterson. CDC, Atlanta, GA. (Sponsor: David R. Brown, FACSM)</td>
<td>Email: <a href="mailto:lwt0@cdc.gov">lwt0@cdc.gov</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

**D-67 Free Communication/Poster - Energy Availability and Expenditure**

<table>
<thead>
<tr>
<th>Year</th>
<th>Board #</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
<th>Email/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911</td>
<td>#172</td>
<td>2:00 PM - 3:30 PM</td>
<td>Lower Energy Availability Is Associated With Low Resting Energy Expenditure In Japanese Female Athletes.</td>
<td>Kuniko Moto1, Rie Ishizawa1, Machiko Otaka1, Suguru Torii1, Akira Namba1, Motoko Taguchi1. 1Waseda University, Saitama, Japan. 2Saitama Medical University, Saitama, Japan. 3Waseda University, Saitama, Japan.</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1912</td>
<td>#173</td>
<td>2:00 PM - 3:30 PM</td>
<td>Predicting Energy expenditure in Males And Females During High-intensity Functional Training</td>
<td>Jesse A. Stein1, Yuri Fieto, FACSM, Katie M. Heinrich1. 1Kansas State University, Manhattan, KS. 2Kennesaw State University, Kennesaw, GA</td>
<td>Email: <a href="mailto:jesse.stein.2@gmail.com">jesse.stein.2@gmail.com</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>
ACSM May 29 – June 2, 2018
Minneapolis, Minnesota

P134 Final Program

1913 Board #174 2:00 PM - 3:30 PM
Effect Of Training Periods On Energy Deficiency And Physical Activity Level In Male Runners
Erina Muramatsu1, Mizaho Adachi2, Keisuke Teramoto2, Shoji Igawa1. 1Suzuka National College of Technology, Mie, Japan. 2Nippon Sport Science University, Tokyo, Japan.
Email: muramatsu@genl.suzuka-ct.ac.jp
(No relevant relationships reported)

1914 Board #175 2:00 PM - 3:30 PM
Water Induced Thermogenesis
Robert M. Otto, FACSM, John Petrizzo, Melhaney Reichelt, Jessica Machaby, Glen Reid, Lauren Yanni, Abigail LeBlanc, Daniel Hagan, John Wygand, FACSM. Adelphi University, Garden City, NY
Email: otto@adelphi.edu
(No relevant relationships reported)

1915 Board #176 2:00 PM - 3:30 PM
Lessons Learned From Tennis Coaches’ Limited Disordered Weight Control Behaviors And Disordered Eating Knowledge
Brian P. Reagan1, Matt M. Beekley, FACSM2, Kirby Jones3. 1University of Indianapolis, Indianapolis, IN, 2Depauw University, Greencastle, IN, 3Sponsor: Matthew D. Beekley, FACSM, FACSM.
Email: reaganb@indy.edu
(No relevant relationships reported)

1916 Board #177 2:00 PM - 3:30 PM
Macronutrient Intake and Resting Metabolic Rate in Middle and Long Distance Recreational Female Runners
Joanne DiFrancisco-Donoghue1, Minna Divan1, Ashley DeLuca1, Courtney Baranek1, William G. Werners2, Hallie Zwi8el1. 1New York Institute of Technology College of Osteopathic Medicine, Old Westbury, NY. 2New York Institute of Technology, Old Westbury, NY
Email: jdonogh1@nyit.edu
(No relevant relationships reported)

1917 Board #178 2:00 PM - 3:30 PM
Current Energy Availability Is Not Associated With The Menstrual Status Among Japanese Female Athletes
Eri TAKAI, Rie ISHIZAWA, Mika GOSHOZONO, Machiko OTAKA, Suguru TORII, Motoko TAGUCHI. Waseda University, Tokorozawa, Saitama, Japan
(No relevant relationships reported)

1918 Board #179 2:00 PM - 3:30 PM
Effect Of Low Energy Availability During Three Consecutive Days Of Endurance Training On Muscle Glycogen Contents And Serum Hepcidin Levels In Male Long Distance Runners.
Aya Ishibashi1, Chihiro Kojima2, Akiko Kamei3, Kaito Iwayama2, Yoko Tanabe1, Goto Kazushige1, Hideyuki Takahashi1. 1Japan Institute of Sports Sciences, Tokyo. 2Ritsumeikan University, Shiga, Japan
(No relevant relationships reported)

1919 Board #180 2:00 PM - 3:30 PM
Development Of A Validated Energy Expenditure Prediction Equation In Asian Adults
Xi Jin, Paul DINNOE Loprinzi, Martha Ann Bass, Ling Xin, Teresa Carr Carithers, Mark Loftin, FACSM. The University of Mississippi, University, MS
Email: xjinn@gmail.com
(No relevant relationships reported)

1920 Board #181 2:00 PM - 3:30 PM
The Effects Of Wearing Cold Garments on Energy Expenditure
John P. Porcari, FACSM, Samuel Hartinger, Scott Doberstein, Kimberly Radtke, Abigail Ryskey, Carl Foster, FACSM. University of Wisconsin - La Crosse, La Crosse, WI
Email: jporcari@uwlaus.edu
(No relevant relationships reported)

1921 Board #182 2:00 PM - 3:30 PM
Test Of Two Distinct Protocols in Indirect Calorimetry
Andressa F. de Abreu, Anderson Santana, Domingos R. Pandelo Jr. Centro de Alta Paeformance, Santos, Brazil
Email: andressaanmutria@gmail.com
(No relevant relationships reported)

1922 Board #183 2:00 PM - 3:30 PM
Extending Traceable Validation To Metabolic Carts
Jon Moon1, Eric Ruud2, Erica Wohlers-Kariesch1, Christopher Boek1. 1MEI Research, Ltd, Edina, MN, 2Translation Research Institute for Metabolism and Diabetes, Florida Hospital and the Sanford Burnham Medical Research Institute, Orlando, FL
Email: jmoon@meienergy.com
(No relevant relationships reported)

1923 Board #184 2:00 PM - 3:30 PM
Comparison of Predicted and Measured Resting Metabolic Rate Methods Among CrossFit-Trained Athletes.
Aylisis Rodriguez, Isabel Fabacher, Kathryn Brown, Alyssa J. Holmes, Trisha A. VanDusseldorp, Gerald T. Mangine, Tiffany A. Estes, Yari Feito, FACSM. Kennesaw State University, Kennesaw, GA
(No relevant relationships reported)

1924 Board #185 2:00 PM - 3:30 PM
Priming Whole-room Calorimeters With Co2 To Improve Performance And Reduce Test Time
Michael Busa1, Eric Rudd2, Erica Wohlers-Kariesch1, Jon Moon2. 1University of Massachusetts Amherst, Amherst, MA, 2MEI Research, Ltd., Enida, MN, (Sponsor: Patty Freedson, FACSM)
Email: mbusa@umass.edu
(No relevant relationships reported)

D-68 Free Communication/Poster - Energy Balance and Weight Management

1925 Board #186 2:00 PM - 3:30 PM
The Effects Of Aerobic, Concurrent, And Resistance Exercise On Compensatory Eating Behaviors
Mark P. Takacs, Shawn Manford, Chad A. Witmer, Emily J. Sausers. East Stroudsburg University, East Stroudsburg, PA
Email: mtakacs2@live.esu.edu
(No relevant relationships reported)

1926 Board #187 2:00 PM - 3:30 PM
Leptin And Ghrelin Concentrations Differ At Fasting, Post-prandial, And Post-exercise In Active And Inactive Females
Dina Acosta, Mindy Patterson, Jerena Lin, Jonathan Craig, Alexis Ortiz, FACSM. Texas Woman’s University, Houston, TX
Email: dacosta@twu.edu
(No relevant relationships reported)

1927 Board #188 2:00 PM - 3:30 PM
The Effect Of Resistance Training On Morphology Of Rat Skeletal Muscle During Food Restriction
Kohei Sase, Satoru Ato, Yuna Katamoto, Satoshi Fujita. Ritsumeikan University, Kasatsu, Shiga, Japan
Email: sh0009iv@gmail.com
(No relevant relationships reported)
1928 Board #189 2:00 PM - 3:30 PM
Post-exercise Whole Body Cryotherapy Treatment Increases Energy Intake Among Well-trained Athletes
Chihiro Kojima1, Nobukazu Kawai1, Chika Kondo1, Yasushi Suzuki2, Kumiaki Ebi3, Kazushige Goto1. 1Ritsumeikan University, Shiga, Japan. 2Saraya Co., Ltd., Osaka, Japan. (Sponsor: Robert R Kraemer, FACSM)
Email: sh0007ck@ed.ritsumei.ac.jp
(No relevant relationships reported)

1929 Board #190 2:00 PM - 3:30 PM
MCT1 Gene Function on Percentage Fat Responses in Overweight and Obese Humans
Rocio Cupério1, Barbara Szendrei1, Teresa Amigé2, Pedro J. Benito1, Domingo González-Lamalle2. 1Universidad Politécnica de Madrid, Madrid, Spain. 2University of Cantabria IDIVAL, Santander, Spain
Email: rocio.cupiero@upm.es
(No relevant relationships reported)

1930 Board #191 2:00 PM - 3:30 PM
Effects Of Exhaustive Exercise On PHB1 Expression And Mitochondrial Function In Rats
Hong Feng1, Ze Li1, Wen Fang1, Zhaoming Liu1, Li Li1, FACSM1. 1Tianjin University of Sport, Tianjin, China. 2Binghua University, Beijing, China. 3University of Minnesota, Minneapolis, MN.
(Sponsor: Li Li Ji, FACSM)
Email: hong_feng2009@126.com
(No relevant relationships reported)

1931 Board #192 2:00 PM - 3:30 PM
Effects Of A Ketogenic Or A Whey Protein Supplement On Metabolism, Appetite And Energy Intake
Isabel L. Smith, Elizabeth K. Bailey, Therese Ramos, Takudzwa A. Madzima. Elon University, Elon, NC. (Sponsor: Paul C. Miller, FACSM)
(No relevant relationships reported)

1932 Board #193 2:00 PM - 3:30 PM
Changes In 6-Minute Walk Performance Is Associated With Weight Loss Following A 6-Month Weight Loss Program
Katherine A. Collins1, Sara J. Kovacs2, Shawn D. Rayback1, Audrey M. Collins1, Marissa L. Marcini1, Alexander L. Carne-Clark1, Alyssa M. Harris1, Gary D. Foster1, Alexis Wojtanowski1, John M. Jakicic1, FACSM1, Renee J. Rogers1. 1University of Pittsburgh, Pittsburgh, PA. 2Temple University, Philadelphia, PA. 3Weight Watchers International, Inc, New York, NY.
(Sponsor: John M. Jakicic, FACSM)
(No relevant relationships reported)

1933 Board #194 2:00 PM - 3:30 PM
Dietary Fat and Carbohydrate Intake and Physical Activity Independently Predict Android Fat in College Women
I. M. Castillo-Hernández1, M. Vishwanathan1, C.D. Beck2, M.V. Fedewa3, B.M. Das3, W.J. McConnell3, E.D. Hathaway3, S.D. Higgins1, M.D. Schmidt1, E.M. Evans, FACSM1. 1University of Georgia, Athens, GA. 2University of Alabama, Tuscaloosa, AL. 3East Carolina University, Greenville, NC. 4University of Tennessee Chattanooga, Chattanooga, TN. 5Elon University, Elon, NC.
(Sponsor: Ellen M. Evans, FACSM)
Email: imec28001@uga.edu
(No relevant relationships reported)

1934 Board #195 2:00 PM - 3:30 PM
Weight Gain and Changes in Cardiovascular and Metabolic Risk Factors Throughout the First Year of College
Kristle J. Sanders1, Nuo Hao1, Yi-Hung Liao2, Jeffrey R. Bernard1. 1California State University–Stanislaus, Turlock, CA. 2National Taipei University of Nursing and Health Sciences, Taipei, Taiwan
(No relevant relationships reported)

1935 Board #196 2:00 PM - 3:30 PM
Weight Loss, Physical Activity, And Conception In Obese Infertile Women
Anna M. Goreczya, Richard Washburn, FACSM, Felicia L. Steger, Courtney Marsh, Joseph E. Donnelly, FACSM. University of Kansas Medical Center, Kansas City, KS
Email: agorczyca@ku.edu
(No relevant relationships reported)

1936 Board #197 2:00 PM - 3:30 PM
The Affect Of Exercise On Hypothalamic Kiss-1 And Gpr54 In The Puberty Development Of Male Rats
RUI XU1,2, Yi Yan1,3, Minhao Xie1,2. 1Beijing Sport University, BEIJING, China. 2Sports Medicine Institute, General Administration of Sport of China, BEIJING, China
Email: ajiuweihu@126.com
(No relevant relationships reported)

1937 Board #198 2:00 PM - 3:30 PM
Patient Experience on Weight Management Advice Prior to Pregnancy from Physicians and Dietitians
Taniya S. Nagpal1, Praja Vaikunthanjan1, Barbra de Vijier1, Harry Papavassili2, Debbie Penava2, Michelle F. Mottola, FACSM.
1University of Western Ontario, London, ON, Canada. 2London Health Science Centre, London, ON, Canada. (Sponsor: Dr. Michelle F. Mottola, FACSM)
Email: nagpal@uwo.ca
(No relevant relationships reported)

D-69 Free Communication/Poster - Exercise Psychology- Cancer
Thursday, May 31, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

1938 Board #199 3:30 PM - 5:00 PM
The Relationship Of Cognitive Scores With Muscle Power, Strength, And 6-minute Walk In Breast Cancer Survivors
Rachael Hunt, Ashley Artese, Jeong-Su Kim, Lynn Panton, FACSM. Florida State University, Tallahassee, FL. (Sponsor: Lynn Panton, PhD, FACSM)
Email: rhl0@my.fsu.edu
(No relevant relationships reported)

1939 Board #200 3:30 PM - 5:00 PM
Perceptions on Exercise is Associated with Self-Reported Physical Activity in Hematopoietic Stem Cell Transplant Patients
(No relevant relationships reported)

1940 Board #201 3:30 PM - 5:00 PM
Structured Exercise in the Cancer Patient Improves Insomnia and Fatigue, but Not Depression
Chandee L. Pressnall1, Cynthia Villalobos1, Justin C. Brown2, Paul D. Vosti3, Courtney D. Jensen4. 1University of the Pacific, Stockton, CA. 2Harvard University, Cambridge, MA. 3St. Joseph’s Medical Center, Stockton, CA. (Sponsor: Kathryn H. Schmitz, FACSM)
Email: C_pressnall@u.pacific.edu
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Time</th>
<th>Location</th>
<th>Authors</th>
<th>Affiliations</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-70</td>
<td>Free Communication/Poster - Perception of Effort, Pain and Fatigue</td>
<td>Thursday, May 31, 2018, 1:00 PM - 6:00 PM</td>
<td>Room: CC-Hall B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1941</td>
<td>Board #202</td>
<td>3:30 PM - 5:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perceived Exertion Responses While Wearing Tight- and Loose-Fitting Powered Air-Purifying Respirators</td>
<td></td>
<td>Edward J. Sinkule, FACSM1, Jeffrey B. Powell2, Tyler D. Quinn2. 1Centers for Disease Control &amp; Prevention/NIOSH, Pittsburgh, PA. 2University of Pittsburgh, Pittsburgh, PA.</td>
<td>Email: <a href="mailto:esinkule@cdc.gov">esinkule@cdc.gov</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1942</td>
<td>Board #203</td>
<td>3:30 PM - 5:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Moderate-vigorous Intensity Run Vs. Walk On Hemodynamics, Metabolism And Perception Of Effort</td>
<td></td>
<td>Patrick M. Davitt, Troy Hartman, Steven Esteemera, Phil Barone, Jillian Grassano, Gregory Muy, Olivia Akers-Gooodwin, Andrew Marrero, Astrid Mel. Mercy College, Dobbs Ferry, NY. (Sponsor: M. Allison Williams, FACSM)</td>
<td>Email: <a href="mailto:pdavitt@mercy.edu">pdavitt@mercy.edu</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1943</td>
<td>Board #204</td>
<td>3:30 PM - 5:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Music With and Without Lyrics Improves Motivation, Affect, And Arousal During Moderate-intensity Cycling</td>
<td></td>
<td>Daniel Marshall, Scott B. Martin, FACSM, Ryan L. Olson. University of North Texas, Denton, TX. (Sponsor: Scott Martin, FACSM)</td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1944</td>
<td>Board #205</td>
<td>3:30 PM - 5:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Does Body-weight Circuit Training Have The Ability To Induce Hypoalgesia?</td>
<td></td>
<td>Panagiotis Koutakis1, Kelsey Uno2, Emily Pritchett2, Timothy Michael2, Nicholas Hanson2, Michael Miller2. 1Western Michigan University, Kalamazoo, MI. 2Western Michigan University, Kalamazoo, MI.</td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1945</td>
<td>Board #206</td>
<td>3:30 PM - 5:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Concurrent Validity Of The Children’s Omni Scale Of Perceived Exertion In A Field Setting</td>
<td></td>
<td>Timothy J. Michael, FACSM, Erin Berner, Carol Wideman, Nicholas Hanson, Sangwoo Lee, Michael Miller. Western Michigan University, Kalamazoo, MI.</td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1946</td>
<td>Board #207</td>
<td>3:30 PM - 5:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The Effect of Movement Speed on Mental Workload During a Simple Visually Guided Task</td>
<td></td>
<td>E. Daniel Syrett, Matthew E. Holman, Tanu Bhargava, Benjamin J. Darter. Virginia Commonwealth University, Richmond, VA.</td>
<td>Email: <a href="mailto:syretted@vcu.edu">syretted@vcu.edu</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1947</td>
<td>Board #208</td>
<td>3:30 PM - 5:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compression Sleeve Does Not Speed DOMS Recovery When Compared to Placebo Garment</td>
<td></td>
<td>Molly R. Winke, Celeste Harris. Hanover College, Hanover, IN. (Sponsor: Bryan Stanford, FACSM)</td>
<td>Email: <a href="mailto:winke@hanover.edu">winke@hanover.edu</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>1948</td>
<td>Board #209</td>
<td>3:30 PM - 5:00 PM</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relationship Between Perceived and Actual Hydration Levels in Recreationally Active College Students</td>
<td></td>
<td>Seth M. Sievers, Jason D. Waggener, Jeremy T. Barnes, Thomas J. Pujol, FACSM, Southeast Missouri State University, Cape Girardeau, MO. (Sponsor: Dr. Thomas J. Pujol, FACSM)</td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

D-71 | Free Communication/Poster - Endocrinology/Immunology | Thursday, May 31, 2018, 1:00 PM - 6:00 PM | Room: CC-Hall B | | |
1956 Board #217  
3:30 PM - 5:00 PM  
Hormonal, Steroidal and Inflammatory Responses in Collegiate Male Soccer Players and Female Cross-Country Runners  
William M. Adams1, Ryan M. Curtis1, Courteney L. Benjamin1, Abigail T. Colburn2, Virgilio Lopez2, Elaine C. Lee2, Douglas J. Casa, FACSM.  
1University of North Carolina at Greensboro, Greensboro, NC.  
2University of Connecticut, Storrs, CT. (Sponsor: Douglas J. Casa, FACSM)  
Email: wmadams@uncg.edu  
(No relevant relationships reported)

1957 Board #218  
3:30 PM - 5:00 PM  
Correlation Between Proinflammatory Cytokines And Cortisol In Female Soccer Players Carriers Of Premenstrual Syndrome  
Mauro W. Vaisberg1, Roberta Foster1, André L. Bachi1, Zsuzsanna I. Di Bella1, Juliana de Melo Batista dos Santos1.  
1Univesidade Federal de São Paulo, São Paulo, Brazil.  
2Univesidade Cruzeiro do Sul, São Paulo, Brazil  
Email: vaisbergmauro@gmail.com  
(No relevant relationships reported)

1958 Board #219  
3:30 PM - 5:00 PM  
Cd28 Expression On C4d+ T Cells Is Not Affected By Strenuous Exercise In Untrained Individuals  
Creighton University, Omaha, NE.  
(Sponsor: Joseph P. Wein, FACSM)  
(No relevant relationships reported)

1959 Board #220  
3:30 PM - 5:00 PM  
Neutrophil Extracellular Traps Engaged in Strenuous Exercise Induced Hyperfunction of Innate Immunity System  
Shi Yue, Chen Peijie, Wu Die, Wei Hongzhan.  
SHANGHAI UNIVERSITY OF SPORT, SHANGHAI, China  
Email: shiyue910@sina.com  
(No relevant relationships reported)

1960 Board #221  
3:30 PM - 5:00 PM  
Effects Of Exercise On The Expansion Of Myeloid-derived Suppressor Cells  
Jacob Garrison, James M. Haughian, Nicholas A. Pullen, Reid Hayward.  
University of Northern Colorado, Greeley, CO.  
Email: jacob.garrison@unco.edu  
(No relevant relationships reported)

1961 Board #222  
3:30 PM - 5:00 PM  
Acute Effects of Exhaustive Exercise and Cardio-Respiratory Fitness on Regulatory T Cell Homeostasis  
Cardiovascular Research and Sports Medicine, Cologne, Germany.  
(Sponsor: Prof. Dr. Steinacker Jürgen Michael, FACSM)  
(No relevant relationships reported)

D-72  
Free Communication/Poster - Concussion II  
Thursday, May 31, 2018, 1:00 PM - 6:00 PM  
Room: CC-Hall B

1962 Board #223  
3:30 PM - 5:00 PM  
Fatigue Influence On King-devick Test  
Adrian Aron, Rachel Andrews, Erica Boggs, Andrea Stanley, Olivia Wilson, Brent Harper.  
Radford University, Radford, VA. (Sponsor: Trent Hargens, FACSM)  
Email: aaron@radford.edu  
(No relevant relationships reported)

1963 Board #224  
3:30 PM - 5:00 PM  
Differences in Reporting: The Concussed Student Versus the Concerned Parent  
Gianna D. Maraglino1, Ileoma C. Agwuenu2, Margaret E. Bristow3, Vincent C. Nittoli1, Adam W. Shunk2, Courteny D. Jensen1.  
1University of the Pacific, Stockton, CA.  
2Saint Vincent Hospital, Indianapolis, IN  
Email: g_maraglino@u.pacific.edu  
(No relevant relationships reported)

1964 Board #225  
3:30 PM - 5:00 PM  
Depression Severity in Adolescent Male and Female Athletes Following Sports-Related Concussion  
Nikki Niewold, Stephanie Kliehe, Timothy McGuine.  
University of Wisconsin School of Medicine and Public Health, Madison, WI  
Email: niewold@wisc.edu  
(No relevant relationships reported)

1965 Board #226  
3:30 PM - 5:00 PM  
Are Subconcussive Impacts Harmless in Youth Soccer Players?  
Lucy R. Lopez-Román1, Yairamar I. Diaz-Rodriguez2.  
1Universidad del Sagrado Corazon, San Juan, PR.  
2Universidad del Turabo, Gurabo, PR  
Email: bbodyengineering3000@yahoo.com  
(No relevant relationships reported)

1966 Board #227  
3:30 PM - 5:00 PM  
No Relationship Between Head Impact Kinematics and Concussion Clinical Assessment Performance  
Thomas A. Buckley1, Katherine M. Breedlove2, Melissa S. DiFabio1, Jessie R. Oldham1.  
1University of Delaware, Newark, DE.  
2University of Wisconsin - Eau Claire, Eau Claire, WI  
Email: TBuckley@UDel.edu  
Reported Relationships: T.A. Buckley: Salary; Applied Cognitive Engineering.

1967 Board #228  
3:30 PM - 5:00 PM  
Test Setting and ADHD Influence Baseline Concussion Testing Neurocognitive Performance in Collegiate Student-Athletes  
Caroline A. Kelly, Caroline J. Ketcham, Kirtida Patel, Eric E. Hall, FACSM, Elon University, Elon, NC.  
(Sponsor: Eric Hall, FACSM)  
Email: ckkelly20@elon.edu  
(No relevant relationships reported)

1968 Board #229  
3:30 PM - 5:00 PM  
Ninds/nih and Dod Sport-related Concussion Common Data Elements: A Common Language For Clinical Research  
Anthony P. Kontos1, Steven Broglio, FACSM, Kathryn Schneider2, Elisabeth Wilde3, Kristen Joseph4, Sherita Ala’i, Joy Esterlitz5, Katelyn Gay6, Patrick Bellgowan7.  
1University of Pittsburgh, Pittsburgh, PA.  
2University of Michigan, Ann Arbor, MI.  
3University of Calgary, Calgary, AB, Canada.  
4Baylor College of Medicine, Houston, TX.  
5Emmes Corporation, Rockville, MD.  
6National Institute of Neurological Disorders and Stroke, Bethesda, MD.  
(Sponsor: Steven Broglio, FACSM)  
Email: akontos@pitt.edu  

1969 Board #230  
3:30 PM - 5:00 PM  
Cardiovascular and Cerebrovascular Responses to Central Hypervolemia in Recently Concussed College Athletes  
University at Buffalo, Buffalo, NY  
Email: blairjohn@buffalo.edu  
(No relevant relationships reported)
**D-73**

Free Communication/Poster - Exercise-Clinical Populations

Thursday, May 31, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

1970 Board #231 3:30 PM - 5:00 PM
Concussion Knowledge and Understanding in Guardians
Following Administration of Standardized Education Form.
Tamerah N. Hunt, FACSM, Chloe Salway, Steve Patterson, Jody Langdon. Georgia Southern University, Statesboro, GA
Email: tamerah07@gmail.com
Reported Relationships: T.N. Hunt: Royalty; SLACK Inc.

1971 Board #232 3:30 PM - 5:00 PM
Differences in Serial DTI Between 72 hours and 2 Weeks
Following Sports Related Concussion
Sophia Pollalis1, Michael Torry1, Wen Liu2, Dzung Dinh1, Michaelzagardo2, Lawrence Jiang2, Cristin Rassi2, Peggy Flannigan2.
1Illinois State University, Normal, IL. 2OSF HealthCare Saint Francis Medical Center, Peoria, IL.
(No relevant relationships reported)

1972 Board #233 3:30 PM - 5:00 PM
Effect of Soccer Headgear on Likelihood and Severity of
Non-concussive Injuries in High School Athletes
Mikayla Gallenberger, Tim Mcguine. University of Wisconsin School of Medicine and Public Health, Madison, WI
(No relevant relationships reported)

1973 Board #234 3:30 PM - 5:00 PM
Neuromechanical Factors Associated with Self-Reported
Concussion History among Elite Athletes
Gary B. Wilkerson1, Dustin C. Nabhan2, William J. Moreau2.
1University of Tennessee at Chattanooga, Chattanooga, TN. 2United States Olympic Committee, United States Coalition for the Prevention of Illness and Injury in Sport, Colorado Springs, CO.
(Sponsor: Daniel C. Herman, FACSM)
Email: Gary.wilkerson@utc.edu
Reported Relationships: G.B. Wilkerson: Consulting Fee; Traq Global, Ltd.

1974 Board #235 3:30 PM - 5:00 PM
Preliminary Normative Baseline Data for the Sport
Concussion Assessment Tool 5 (SCAT 5) in Adolescent
Athletes
Morgan N. Anderson, Tracey Covassin, Abigail C. Bretzin, Kyle M. Petit, Jennifer L. Savage. Michigan State University, East Lansing, MI
Email: ande1997@msu.edu
(No relevant relationships reported)

1975 Board #236 3:30 PM - 5:00 PM
A Portrait of the Concussed Student-Athlete: Grade and Sex
Affect Presentation of Symptoms
Joseph W. Mayhan, Cali A. VanValkenburg1, Vincent C. Nittoli1, Adam W. Shunk2, Courtney D. Jensen. 1University of the Pacific, Stockton, CA. 2St. Vincent Sports Performance, Indianapolis, IN
Email: jwvinbox@yahoo.com
(No relevant relationships reported)

1976 Board #237 3:30 PM - 5:00 PM
Single and Dual-Task Tandem Gait Performance
Throughout Concussion Recovery
Jessie R. Oldham1, Melissa S. DiFabio1, Kelsey Bryk1, Ryan M. DeWolfe1, Thomas W. Kaminski, FACSM1, Thomas A. Buckley2.
1University of Delaware, Newark, DE. 2MGH Institute of Health Professions, Boston, MA
Email: jroldham@udel.edu
(No relevant relationships reported)

1977 Board #238 3:30 PM - 5:00 PM
The Relationship Between Patient-Reported Visual
Symptoms and Visual Deficits After Concussion
Eileen P. Storey, Matthew F. Grady, Christina L. Master. The Children’s Hospital of Philadelphia, Philadelphia, PA
(No relevant relationships reported)

1978 Board #239 3:30 PM - 5:00 PM
Reliability of Five Novel Reaction Time and Cognitive Load
Protocols
Kelsey Picha, Carolina Quinata, Amanda Glueck, Nicholas Heebner, John Abt, FACSM, Scott Lephart, FACSM. The University of Kentucky, Lexington, KY
Email: kelsey.picha@uky.edu
(No relevant relationships reported)

1979 Board #240 3:30 PM - 5:00 PM
Normative Values and Effects of Fatigue on the King Devick
Test in Wheelchair Athletes
Angela Mickle, J.P. Barfield. Radford University, Radford, VA.
(Sponsor: Hank Williford, FACSM)
Email: annmickle@radford.edu
(No relevant relationships reported)
1984 Board #245  3:30 PM - 5:00 PM
Feasibility Of A Low Volume HIIT Intervention In HIV+ Hispanic Women With Neurocognitive Impairment
Email: romero.anmarlys@gmail.com
(No relevant relationships reported)

1985 Board #246  3:30 PM - 5:00 PM
Cardiopulmonary Profile Of Individuals With Intellectual Disabilities During Maximal Exercise
Thessa Hilgenkamp1, Anne Boenanmann1, Elizabeth Schroeder1, Maria Hopman1, Bo Fernhall, FACSM1, 2. Erasmus MC University Medical Center Rotterdam, Rotterdam, Netherlands. 1Radboudumc Nijmegen, Nijmegen, Netherlands. 1University of Illinois at Chicago, Chicago, IL
Email: thilgenkamp@erasmusmc.nl
(No relevant relationships reported)

1986 Board #247  3:30 PM - 5:00 PM
Associations of Sleep Patterns with Physical Functioning and Physical Activity in Adults with Down syndrome
Starratis Agiovlasitis1, FACSM1, Mallory Chapman1, Benjamin Carlson1, Jasmine S. Curtiss1, Marquelle Johnson1. (Mississippi State University, Mississippi State, MS. 1University of Wisconsin-Eau Claire, Eau Claire, WI
Email: sagiovlasitis@colled.mstate.edu
(No relevant relationships reported)

1987 Board #248  3:30 PM - 5:00 PM
Metabolic And Cardiovascular Effects Of Body Weight Support Treadmill Walking In Healthy Adults
Robert S. Van Zant, Wick Colchagoff, Michael Kunish, Tamara Kunz, Mark Marshall, Sara McDermott, Trevor Myers, Byron Senga. The University of Findlay, Findlay, OH
Email: vanzatt@findlay.edu
(No relevant relationships reported)

1988 Board #249  3:30 PM - 5:00 PM
Myotonic Dystrophy Alters Peripheral And Central Adaptations Involved With Movement Control
Aaron T. Buelow, Michael A. Petrie, Jinhyun Lee, Peg Nopoulos, Laurie Guttmann, Richard K. Shields. The University of Iowa, Iowa City, IA
(No relevant relationships reported)

1989 Board #250  3:30 PM - 5:00 PM
Bioimpedance Spectroscopy Measurements Comparing Different Body Positions and Electrode Types in Men and Women
Jordan R. Moon1, Michael T. Lane2, Lee A. Doernte2, Ryan M. Bear1, April M. Spears2, Zachary S. Cicone1, Clifton J. Holmes2, Bailey A. Welborn1, Todd Freedborn1, Michael R. Esco, FACSM1, 2. Impedimed, Inc., Carlsbad, CA. 3. Eastern Kentucky University, Richmond, KY. 1University of Alabama, Tuscaloosa, AL
Email: jmoon@impedimed.com
(No relevant relationships reported)

1990 Board #251  2:00 PM - 3:30 PM
Predicting Basal Metabolic Rate After Spinal Cord Injury
Ashraf S. Gorgey, FACSM, Thomas E. Nightingale. Hunter Holmes McGuire VA Medical Center, Richmond, VA
Email: ashraf.gorgey@va.gov
(No relevant relationships reported)

1991 Board #252  2:00 PM - 3:30 PM
Effects of Resistance Training on Vascular and Hemodynamic Responses to Standardized Workloads in Coronary Patients
Kerstin Grafe, Phillip Bendick, Margaret Burr, Judy Boura, Diadre Brunk, Barry Franklin, FACSM. Beaumont Health, Royal Oak, MI. (Sponsor: Barry Franklin, PhD, FACSM)
Email: kerstin.grafe@beaumont.org
(No relevant relationships reported)

1992 Board #253  2:00 PM - 3:30 PM
The Effects Of Multi-directional Exercise Training On Body Composition, Physical Fitness, And Mobility In Stroke Patients
Eunkyoung Park1, Younsun Son1, James Johnccori2, Kyungock Yi2, Jung-II Oh1. 1University of Texas Rio Grande Valley, McAllen, TX. 2University of Houston, Houston, TX. 3Baylor College of Medicine, Houston, TX. 4Ewha Womans University, Seoul, Korea, Republic of
Email: jennyjiang1004@gmail.com
(No relevant relationships reported)

1993 Board #254  2:00 PM - 3:30 PM
Blood Pressure in Subjects under Treatment for Knee Osteoarthritis: Role of Physical Activity Status
José Messias Rodrigues da Silva1, Marcia Uchoa de Rezende2, Emmanuel Gomes Cioc1. 1 São Paulo State University (UNESP), School of Sciences, Campus Bauru, São Paulo, Brazil. 2Traumatology, School of Medicine, University of São Paulo, São Paulo, Brazil. 1 São Paulo State University (UNESP), School of Sciences, Campus Bauru, Bauru, Brazil
Email: capoeiragafa@hotmail.com
(No relevant relationships reported)

1994 Board #255  2:00 PM - 3:30 PM
Endothelial Function Correlates With Aerobic Fitness In Adults With Fasting Hyperglycemia Plus Impaired Glucose Tolerance
Stephanie L. Miller, Natalie Z.M. Eichner, Nicole M. Gilbertson, Emily M. Heiston, Arthur Wettman, FACSM, Eugene J. Barrett, Steven K. Malin, FACSM. University of Virginia, Charlottesville, VA. (Sponsor: Steve Malin, FACSM)
(No relevant relationships reported)

1995 Board #256  2:00 PM - 3:30 PM
Six Weeks of Aerobic Exercise Improves Markers of Insulin Sensitivity and Metabolic Endotoxemia: Correlations with the Gut Microbiota
Lucy Mailing, Jacob Allen, Grace Niemiro, Josh Cohrs, Hannah Holscher, Michael De Lisio, Jeffrey Woods. University of Illinois at Urbana-Champaign, Urbana, IL
(No relevant relationships reported)

1996 Board #257  2:00 PM - 3:30 PM
Cardio-Ankle Vascular Index (CAVI) And Leisure-Time Physical Activity In Men With Type 1 Diabetes
Iisa K. Alho1, Juha E. Peltonen2, Antti-Pekka E. Rissanen3. 1University of Helsinki, Helsinki, Finland. 2University of Eastern Finland, School of Medicine, Helsinki, Finland. 3University of Eastern Finland, Kuopio, Finland. (Sponsor: Robert Petrella, FACSM)
(No relevant relationships reported)

1997 Board #258  2:00 PM - 3:30 PM
The Influence Of Physical Inactivity On Risk Of Type 2 Diabetes In University Staff
Ever Espino-González, María de Jesús Muñoz-Daw, Elsa Hinojos-Sáenz, José Luis Santiesteban-Parra, José Buenaventura Pardo-Rentería, Autonomous University of Chihuahua, Chihuahua, Mexico
Email: eseipino@uach.mx
(No relevant relationships reported)
D-75 Basic Science World Congress/Poster - Skeletal Muscle I

Thursday, May 31, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

1998 Board #259 2:00 PM - 3:30 PM Association Between Cardiovascular Markers And Physical Activity In Patients With Obstructive Sleep Apnea
Marcos Mônico-Neto, MSc, Hanna Karen Moreira Antunes, PhD, Ronaldo Vagner Thomateli dos Santos, PhD, Vânia D’Almeida, PhD, Lia Rita Azeredo Bittencourt, PhD, Sergio Tufik, PhD. Federal University of Sao Paulo, Sao Paulo, Brazil
Email: marcosmoniconeto@gmail.com
(No relevant relationships reported)

1999 Board #260 2:00 PM - 3:30 PM Obesity, Lower Extremity Soft Tissue Pain & Physical Functioning
Geoffrey E. Moore, FACSM1, Deborah L. King1, Jake Veigel2. 1Ithaca College, Ithaca, NY. 2Utah Sports Medicine, Salt Lake City, UT
Email: hlema@earthlink.net
(No relevant relationships reported)

2000 Board #261 2:00 PM - 3:30 PM Special Rehabilitation Treatment of Patients with Low Back Pain
Michaela Tomanová1, Lee Cabell2. 1Rehabilitation Institute Brandýs nad Orlicí, Brandýs nad Orlicí, Czech Republic. 2Arkansas Tech University, Russellville, AR
(No relevant relationships reported)

2001 Board #262 2:00 PM - 3:30 PM Exercise Effects On Health, Fitness, And Cardiometabolic Risk Factors Among Firefighters: A Meta-analysis
Katie L. Andrews, Stephen Gallagher, Matthew P. Herring. University of Limerick, Limerick, Ireland
(No relevant relationships reported)

2002 Board #263 2:00 PM - 3:30 PM Morphometric Parameters in Somatic and Branchiometric Muscles of Mdx Mice
Marina Cruz Lazzarin, Hananiah Tardivo Quintana, Vivianne Izabelle de Araújo Baptista, Flavia De Oliveira. Federal University of Sao Paulo, Santos, Brazil
Email: ma.lazzarin@gmail.com
(No relevant relationships reported)

2003 Board #264 2:00 PM - 3:30 PM Exercise Training Alleviates Murf1-mediated Muscle Atrophy By Activating The Sirt1-AMPK Pathway In Diabetic (db/db) Mice
HUNG-WEN LIU. National Taiwan Normal University, Taipei, Taiwan
Email: hwliu@ntnu.edu.tw
(No relevant relationships reported)

2004 Board #265 2:00 PM - 3:30 PM Ceramide Accumulation and Insulin Resistance During Hindlimb Suspension In Wheel-Running Mice Is TLR4 Dependent
(No relevant relationships reported)

2005 Board #266 2:00 PM - 3:30 PM Muscle Activation Patterns of Lower Body Musculature Among Three Traditional Lower Body Exercises in Trained Women
Adam Korak1, Max R. Paguette2, Dana K. Fuller1, Jennifer L. Caputo3. 1University of St. Thomas, St. Paul, MN. 2University of Memphis, Memphis, TN. 3Middle Tennessee State University, Murfreesboro, TN
Email: adam.korak@stthomas.edu
(No relevant relationships reported)

2006 Board #267 2:00 PM - 3:30 PM Effect of the In Vitro Mechanical Loading of Myotubes on their Myogenic Lineage Progression
Athanasios Moustogiannis, Anastassios Philippou, Orjona Taso, Evangelos Zevolis, Michael Koutsilieris. National and Kapodistrian University of Athens, Attiki, Greece
Email: moustogi@gmail.com
(No relevant relationships reported)

2007 Board #268 2:00 PM - 3:30 PM Glycogen Enhancement Augments Overload-Induced Protein Synthesis, Growth, and Myogenesis in Aged Skeletal Muscle.
Marcus M. Lawrence1, Josh R. Huet1, Bailey Peck2, Yuan Wen3, Michael Shields1, Raahal Madhiwala1, Alexander Skurat4, Peter J. Roach1, Eric Kane1, Adam Reitzel2, Benjamin F. Miller1, Karyn L. Hamilton1, Susan T. Arthur5, Scott E. Gordon, FACSM. 1UNC Charlotte, Charlotte, NC. 2University of Kentucky, Lexington, KY. 3Indiana University, Bloomington, IN. 4Colorado State University, Fort Collins, CO. 5Kennesaw State University, Atlanta, GA.
(Sponsor: Scott E. Gordon, PhD, FACSM)
Email: mlawre18@unc.edu
(No relevant relationships reported)

2008 Board #269 2:00 PM - 3:30 PM High versus Low doses of Anti-inflammatory Drugs Do Not Differentially Affect Muscle Molecular Response to Acute Resistance Exercise
Mats Lilja1, Marcus Moberg2, Mirko Mandić3, Thomas Gustafsson4, Tommy R. Lundberg5. 1Karolinska Institutet, Stockholm, Sweden. 2The Swedish School of Sport and Health Sciences, Stockholm, Sweden
Email: mats.lilja.1@ki.se
(No relevant relationships reported)

2009 Board #270 2:00 PM - 3:30 PM ULK2 Regulates Autophagic Cargo Recognition Impacting Contractile Function In Skeletal Muscle
Jordan D. Fugua, Caleb Mere, Jay Blomme, Dan Bae, Vitor de Melo, Estevão Scudese, Kristen Turner, Ana Kronemberger, Christopher M. Adams, Vitor A. Lira. University of Iowa, Iowa City, IA
Email: jordan-fugua@uiowa.edu
(No relevant relationships reported)

2010 Board #271 2:00 PM - 3:30 PM Mathematical Modeling of Skeletal Muscle Focal Adhesion Kinase Signaling in Response to Contraction
Sida Zhao, David C. Clarke. Simon Fraser University, Burnaby, BC, Canada
Email: jack_zhao@sfu.ca
(No relevant relationships reported)

2011 Board #272 2:00 PM - 3:30 PM Mathematical Modeling of Mammalian Target of Rapamycin following Leucine Ingestion
Taylor J. McColl, David C. Clarke. Simon Fraser University, Burnaby, BC, Canada
Email: tmcoll@sfu.ca
(No relevant relationships reported)
2012 Board #273 3:30 PM - 5:00 PM
Short-term Effect Of Ultrasound-guided Iliopsoas Peritendinous Injection In Athletes With Iliopsoas Tendonitis
Julie Han, Dai Sugimoto, Maxwell McKee-Proctor, Andrea Stracciolini, FACSM, Pierre d’Hemecourt, FACSM, Boston Children’s Hospital, Boston, MA. (Sponsor: Pierre d’Hemecourt, FACSM) (No relevant relationships reported)

2013 Board #274 3:30 PM - 5:00 PM
Pediatric and Adolescent Figure Skating Injuries: A 15-year Retrospective Chart Review
Agneszka Kowalczyk, Dai Sugimoto, Bridget Dahlberg, Lyle Micheli, FACSM, Ellen Geminiani. Boston Children’s Hospital, Boston, MA (No relevant relationships reported)

2014 Board #275 3:30 PM - 5:00 PM
Feasibility of a Novel Strategy for Cardiovascular Screening During the Preparticipation Physical Examination
Robert Dennison¹, Deanna Kerkhof¹, Trent Honda², Renato Calatroni³, Giannmicheal Corrado¹. Boston Children’s Hospital, Boston, MA ¹Northeastern University, Boston, MA (No relevant relationships reported)

2015 Board #276 3:30 PM - 5:00 PM
Medical Utilization Patterns Among Division I Collegiate Athletes
Christopher Fox¹, Emily Miller¹, Joshua Goldman¹, Peter Awad¹, Nisha Batta¹, Montana Duran¹, Glenda Marshall¹, Marissa Ogata¹, Phil Sundin¹. UCLA, Santa Monica, CA ¹UCLA, Westwood, CA. (Sponsor: Aurelia Nattiv, FACSM) (No relevant relationships reported)

2016 Board #277 3:30 PM - 5:00 PM
Youth Multi-sport Participation Is Associated With Higher Bone Mineral Density In Female Collegiate Distance Runners
Emily Miller¹, Michael Fredericson, FACSM¹, Andrea Kussman¹, Emily Krauss², Sonal Singh², Megan Deakins-Roche², Brian Kim³, Adam Tenforde³, Kristin Sainani³, Michael Fredericson, FACSM³, Palma Benjamin, FACSM. Stanford University, Stanford, CA ¹Stanford University, Los Angeles, CA ³University of California, Los Angeles, CA ³Harvard University, Boston, MA. (Sponsor: Aurelia Nattiv, FACSM) (No relevant relationships reported)

2017 Board #278 3:30 PM - 5:00 PM
Effects Of A 12-week Cycling Training Program On Clinical Parameters In Patients With Parkinson Disease
Zanta Zarins¹, Gary Smith¹, Robert Sallis, FACSM¹. Kaiser Fontana, Fontana, CA ¹Pomona College, Claremont, CA. (Sponsor: Dr. Robert Sallis, MD, FACSM) (No relevant relationships reported)

2018 Board #279 3:30 PM - 5:00 PM
Play Lifestyle And Activity Assessment In Children With Cerebral Palsy
Amy Rabatin, Rebecca Zwicker, Dai Sugimoto, Eric Nohelty, Jodie Shea, Benjamin Shore, Andrea Stracciolini, FACSM. Boston Children’s Hospital, Boston, MA. (Sponsor: Andrea Stracciolini, FACSM) (No relevant relationships reported)

D-76 Clinical Poster/Reception - Clinical Poster Reception

2021 Board #1 3:30 PM - 5:00 PM
The Prevalence Of NCAA Division III Athletes With Positive Depression Screening: A Retrospective Cohort Study
Mary Jalulli, DO¹, ¹Ula Lewandowski, MS IIF, Elizabeth Rothe, MD¹, Peter Sedgwick, MD, FACSM¹. ‘Evergreen Sports Medicine Fellowship, Augusta, ME. ¹Central Maine Medical Center, Lewiston, ME. ‘Evergreen Sports Medicine Fellowship, Lewiston, ME. (Sponsor: Pierre d’Hemecourt, FACSM) (No relevant relationships reported)

2020 Board #281 3:30 PM - 5:00 PM
Comparison of Running Mechanics in Healthy Female Runners Versus Those with Sacroiliac Pain
Kristin E. Schwarz¹, Dai Sugimoto¹, Charles A. d’Hemecourt², Duncan A. d’Hemecourt², Pierre A. d’Hemecourt, FACSM². Boston Children’s Hospital, Boston, MA. ‘The Micheli Center for Sports Injury Prevention, Waltham, MA. (Sponsor: Pierre d’Hemecourt, FACSM) (No relevant relationships reported)
2028 Board #8  
Are Subconcussive Impacts Harmless in Youth Soccer Players?  
Luis R. Lopez-Roman¹, Yarimar I. Diaz-Rodriguez². ¹Universidad del Sagrado Corazon, San Juan, PR. ²Universidad del Turabo, Gurabo, Puerto Rico  
(No relevant relationships reported)

2029 Board #9  
Test Setting and ADHD Influence Baseline Concussion Testing Neurocognitive Performance in Collegiate Student-Athletes  
Caroline A. Kelly, Caroline J. Ketcham, Kirtida Patel, Eric E. Hall, FACSM. Elon University, Elon, NC  
(No relevant relationships reported)

2030 Board #10  
Jump Training Improves Psychological Impairments and Facilitates Greater Sports Participation in Athletes with ACL Reconstruction  
Ryan L. Mizner, Audrey R. Elias. University of Montana, Missoula, MT  
(No relevant relationships reported)

2030b Board #11  
Long-term Functional Impact of Viscosupplementation Versus True Placebo in Symptomatic Hip Osteoarthritis: A Randomized Control Trial  
Jane Konidis¹, Philippe Corbeil¹, Antoine Cantin-Warren¹, Sylvie Turmel¹, Emile Cardinal-Soucy¹, Remi Lacroix¹, Etienne Belzile¹. ¹University Laval, Quebec City, QC, Canada. ²Center for Interdisciplinary Research in Rehabilitation and Social Integration (CIRRIS), Quebec City, QC, Canada. ³University Hospital Center of Quebec (CHUQ), Quebec City, QC, Canada  
(No relevant relationships reported)

2030c Board #12  
Lisa S. Krivickas Clinician/Scholar Travel Award - The Prevalence of Hypertension in a Population of Former Professional Football Players  
Jaime Kaplan, Genevieve E. Smith, Gregory W. Stewart, FACSM. Tulane University School of Medicine, New Orleans, LA  
(No relevant relationships reported)
The lungs have an intimate relationship with the heart. They are hemodynamically linked in series, accepting nearly all of the cardiac output, share a common surface area, compete for space in the thoracic cavity, are exposed to similar intrathoracic pressures and are neurally and humorally linked. Thus, as the heart remodels and function changes in patients with forms of chronic heart failure, the lungs become an important part of the heart failure syndrome. The interdependence is enhanced with exercise. This symposium will highlight current knowledge on the influence of heart failure on the pulmonary system and their interdependence at rest and during exercise.

**E-03  Symposium - Cardiometabolic Risk Across the Lifespan: Insulin Resistance, Metabolomics & Measurement**

Friday, June 1, 2018, 9:30 AM - 11:30 AM
Room: CC-Ballroom A

Cardiovascular disease (CVD) is the leading cause of death in people with Type 2 Diabetes (T2D). While most point toward skeletal muscle insulin resistance as a key contributor in the development of T2D and CVD, impaired vascular physiology may be causal. Herein, we discuss the importance of endothelial function as a precursor to metabolic disease as well as propose novel assessments of microparticles and cholesterol metabolism that provide insight to the genesis of CVD across the lifespan.

Lastly, we highlight evidence-based strategies to individualize exercise prescription for the prevention/treatment of cardiometabolic disease across the lifespan.

**E-04  Symposium - Exercise for Cancer Survivors in the Real World: Translating Research to Practice**

Friday, June 1, 2018, 9:30 AM - 11:30 AM
Room: CC-Ballroom B

While the safety and efficacy of exercise interventions for improving numerous health outcomes in cancer survivors is well established when implemented in scientific settings with trained research staff, information about how to translate this into “real-world” settings is lacking. This symposium will describe 1) what is known about effectiveness of exercise programming implemented in clinical and community
Implementing Exercise as a Standard of Care in Cancer Patients: A Comparison between the United States and Germany
Joachim Wiskemann, Heidelberg National Center for Tumor Diseases, Heidelberg, Germany

MoveMore UK - From Research to Implementation to Evaluation of a Behaviour Change Intervention for People Affected by Cancer
Anna M. Campbell, Edinburgh Napier University, Edinburgh, United Kingdom

Overall Discussion

---

**E-05 Thematic Poster - Firefighting**
Friday, June 1, 2018, 9:30 AM - 11:30 AM
Room: CC-Mezzanine M100C

**Board #1**
9:30 AM - 11:30 AM
Comparison of Firefighters and Instructors Physiological Responses Throughout a Day of Live-fire Training
Andrea Wilkinson, Patricia Fehling, FACSM, Leland Haigh, Denise L. Smith, FACSM, Skidmore College, Saratoga Springs, NY
Email: awilkins@skidmore.edu

**Board #2**
9:30 AM - 11:30 AM
Cardiorespiratory Responses to the USFS Wildland Firefighter Arduous Pack Test
Christopher J. Alfiero, Charles L. Dunke, FACSM, Brent C. Ruby, FACSM, Matthew W. Bundle, University of Montana, Missoula, MT. (Sponsor: Brent Ruby, FACSM)

---

**E-06 Thematic Poster - Moving Beyond Aerobic Exercise: New Science of Strength and Health**
Friday, June 1, 2018, 9:30 AM - 11:30 AM
Room: CC-Lower level L100C

**Board #1**
9:30 AM - 11:30 AM
Accelerometer-based Physical Activity And Sedentary Time Assessment In Brazilian Wildland Military Firefighters - Brasilia Firefighters Study
Daniel Saint Martin1, Leonardo Correia Segedi2, Edgard Von Koenig Soures3, Rosenkrantz Maciel Nogueira4, Keila Elizabeth Fontana5, Maria Korre1, Guillerme Eckhardt Molina1, Denise L. Smith6, Stefanos N. Kales7, Luiz Guillerme Grossi Porto8,9 University of Brasilia and GEAFS, Brasilia, Brazil. 1University of Brasilia, Brasilia Fire Department and GEAFS, Brasilia, Brazil, 2Harvard T.H. Chan School of Public Health, Boston, MA, 3Department of Health and Exercise Sciences, Skidmore College, Saratoga Springs, NY, 4University of Brasilia, 5Harvard T.H. Chan School of Public Health, Boston, MA, and GEAFS, Brasilia, Brazil
Email: danielsaintmartin@hotmail.com

---

**ACSM 65th Annual Meeting**

**Board #3**
9:30 AM - 11:30 AM
The Relationship Between Firefighters’ Physical Activity Levels and Cardiorespiratory Fitness
Allison M. Barry1, Nathan D. Dicks2, Kassian D. Landin1, Tanis J. Walch1, Kyle J. Hackney1, Katie J. Lynn1, 1North Dakota State University, Fargo, ND, 2University of North Dakota, Grand Forks, ND. (Sponsor: Donna J. Terbizan, FACSM)

**Board #4**
9:30 AM - 11:30 AM
Physical Factors Associated with Tower Stair Climbing In Firefighter Recruits
Kyle T. Ebersole1, Cody S. Tesch1, Robert J. Flees2, Michael H. Haischer1, Edward K. Smith1, David J. Cornell1 1University of Wisconsin-Milwaukee, Milwaukee, WI, 2City of Milwaukee Fire Department, Milwaukee, WI. (Sponsor: Terry Housh, FACSM)
Email: ebersole@uwm.edu

**Board #5**
9:30 AM - 11:30 AM
Cardiovascular Risk Factor Characterization and Isokinetic Muscle Strength in Overweight and Obese Male Firefighters
Gena Gerstner1, Andrew J. Tweedell1, Craig R. Kleinberg1, Hayden K. Giuliani1, Timothy J. Barnette1, Abbie E. Smith-Ryan, FACSM1, A. C. Hackney, FACSM1, Katie R. Hirsch1, Jacob A. Mota1, Eric D. Ryan1 1University of North Carolina at Chapel Hill, Chapel Hill, NC; 2Army Research Laboratory, Aberdeen Proving Ground, MD; 3Under Armour, Baltimore, MD. (Sponsor: Abbie E. Smith-Ryan, FACSM)

**Board #7**
9:30 AM - 11:30 AM
The Influence of Age and Adiposity on Functional Balance Performance in Career Firefighters
Jacob A. Mota1, Timothy J. Barnette1, Gena R. Gerstner1, Andrew J. Tweedell1, Craig R. Kleinberg1, Hayden K. Giuliani1, Eric D. Ryan1 1University of North Carolina at Chapel Hill, Chapel Hill, NC; 2Army Research Laboratory, Aberdeen Proving Ground, MD; 3Under Armour, Baltimore, MD. (Sponsor: Abbie Smith-Ryan, FACSM)
Email: jamota@unc.edu

---

**Final Program**

settings; 2) models of far-reaching clinical and community-based programming in the United States, Germany, and the UK; 3) how to better target exercise interventions to individual patients; and 4) future directions of implementation research.

---

**Board #2**
9:30 AM - 11:30 AM
Cardiorespiratory Responses to the USFS Wildland Firefighter Arduous Pack Test
Christopher J. Alfiero, Charles L. Dunke, FACSM, Brent C. Ruby, FACSM, Matthew W. Bundle, University of Montana, Missoula, MT. (Sponsor: Brent Ruby, FACSM)

(No relevant relationships reported)
American College of Sports Medicine

2058 Board #1 9:30 AM - 11:30 AM
Risk Of Metabolic Syndrome In Adulthood Attributable To Childhood Grip Strength
Brookyn Fraser1, Leigh Blizard1, Michael Schmidt1, Terence Dwyer2, Alison Venn3, Costan Magnusen4 1University of Tasmania, Hobart, Australia; 2University of Georgia, Athens, GA; 3Oxford University, Oxford, United Kingdom
Email: fraserbj@utas.edu.au
(No relevant relationships reported)

2059 Board #2 9:30 AM - 11:30 AM
Muscular Strength And Cardiovascular And All-cause Mortality In Adults With Hypercholesterolemia
Duck-chul Lee, FACSM1, Carl Lavie2, Xuemei Sui, FACSM3, Steven Blair, FACSM4 1Iowa State University, Ames, IA; 2Ochsner Health System, New Orleans, LA; 3University of South Carolina, Columbia, SC
Email: dlceee@iastate.edu
(No relevant relationships reported)

2060 Board #3 9:30 AM - 11:30 AM
The Time-Varying Longitudinal Associations Between Muscle Strength, Functional Limitations, and Mortality in Older Adults
Ryan McGrath1, Brenda Vincent2, I-Min Lee, FACSM3, William Kraemer, FACSM1, Mark Peterson, FACSM4 1University of Michigan, Ann Arbor, MI; 2VA Ann Arbor Healthcare System, Ann Arbor, MI; 3Harvard University, Boston, MA; 4The Ohio State University, Columbus, OH
Email: liran@iiss.cn
(No relevant relationships reported)

2061 Board #4 9:30 AM - 11:30 AM
Defining Gender-specific Cut-off Points Of Lower Extremity Muscle Strength For Predicting All-cause Mortality Among Us Older Adults
Ran Li1, Xi Zhang2, Jianjun Guo1, Yiqing Song3 1China Institute of Sport Science, Beijing, China; 2Xinhua Hospital affiliated to Shanghai Jiao Tong University School of Medicine, Shanghai, China; 3Richard M. Fairbanks School of Public Health, Indiana University, Indianapolis, IN
Email: liran@iiss.cn
(No relevant relationships reported)

2062 Board #5 9:30 AM - 11:30 AM
Strength Training versus Aerobic Exercise in Relation to Cause-Specific Mortality
Alpa V. Patel1, Erika Rees-Pumia2, James M. Hodges1, Lauren R. Taras1, Peter T. Campbell1, Susan M. Gapsipur1 1American Cancer Society, Atlanta, GA; 2University of Georgia, Athens, GA
Email: alpa.patel@cancer.org
(No relevant relationships reported)

2063 Board #6 9:30 AM - 11:30 AM
Strength Training in Older Cancer Survivors in Pennsylvania: What Role Does Multimorbidity Play?
Shirley M. Blauithmann, Wayne Foo, Joachim Wiskermann, Scherzede K. Mamma, William Calo, Kathryn H. Schmitz, FACSM 1Penn State College of Medicine, Hershey, PA (Sponsor: Kathryn Schmitz, FACSM)
Email: sbh332@psu.edu
(No relevant relationships reported)

2064 Board #7 9:30 AM - 11:30 AM
Muscle Strength And Prevalence Of Diabetes, A Cross-sectional Study Among Japanese Men
Rumi Miyamoto1, Susumu S. Sawada, FACSM2, Yoko Gando3, Munehiro Matsushita4, I-Min Lee, FACSM5, Steven N. Blair6, FACSM7, Shingo Muranaga8, Yumiko Osawa9, Kaori Ishii9, Kohichiro Oka10 1Kameda Medical Center, Kamogawa, Chiba, Japan; 2National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan; 3Tokyo Medical University, Tochigi, Japan; 4Harvard Medical School, Boston, MA; 5University of South Carolina, Columbia, SC; 6Waseda University, Saitama, Japan
Email: miyamoto1105@gmail.com
(No relevant relationships reported)

E-07 Thematic Poster - Nutritional Status of Athletes I
Friday, June 1, 2018, 9:30 AM - 11:30 AM
Room: CC-Lower level L100E

2066 Board #8 9:30 AM - 11:30 AM
Muscular Strength and Cardiorespiratory Fitness on Osteopenia in Older Adults
Hyun Soo Kim, Nathan Meier, Duck-chul Lee, FACSM1, Iowa State University, Ames, IA (Sponsor: Duck-chul Lee, FACSM)
Email: hskim@iastate.edu
(No relevant relationships reported)

2067 Board #1 9:30 AM - 11:30 AM
Effects Of A Ketogenic Diet On Triathlon’s Athletes Performance: A Pilot Trial.
Antonio Paoli, Davide Grigoletto, Fabio Zambolin, Giuseppe Marcolin. University of Padova, Padova, Italy
Email: antonio.paoli@unipd.it
(No relevant relationships reported)

2068 Board #2 9:30 AM - 11:30 AM
Comparative Analysis of the Gut Microbiota and Acute Changes in Exercise Among Collegiate Swimmers
Jarrad T. Hampton-Marcell. University of Illinois at Chicago, Chicago, IL
Email: jarrad.marcell@gmail.com
(No relevant relationships reported)

2069 Board #3 9:30 AM - 11:30 AM
Describing Weight Regain Methodologies of Male Competitive Natural Bodybuilders
Venny Lalu, Diane DellaValle. Marywood University, Scranton, PA
(No relevant relationships reported)

2070 Board #4 9:30 AM - 11:30 AM
Physical Performance is not Improved with Vitamin D Repletion
Shane D. Scholten1, Mikenzie Mikkelsen2, Jesse Springer2, Cortney Dowling3, Nathan Lucas3 1Augustana University, Sioux Falls, SD; 2Black Hills State University, Spearfish, SD; 3University of Sioux Falls, Sioux Falls, SD; 4Liberty University, Lynchburg, VA; 5Des Moines University, Des Moines, IA (Sponsor: Sherry Barkley, PhD, FACSM)
Email: sscholten@augie.edu
(No relevant relationships reported)
E-08 Thematic Poster - O2 Uptake Kinetics
Friday, June 1, 2018, 9:30 AM - 11:30 AM
Room: CC-Lower level L100F

2075 Board #5 9:30 AM - 11:30 AM
Antioxidant Intake, Adiposity, and Aerobic Capacity in An Athlete Population
Emily N. Werner, Sinclair A. Smith, Janell Mensinger, Brandy-Joe Milliron, Heather H. Betz, Stella L. Volpe, FACSM 1 Michigan State University, East Lansing, MI. 2 Drexel University, Philadelphia, PA. 3 Drexel University, Philadelphia, PA. Albion College, Albion, MI. (Sponsor: Stella L. Volpe, FACSM)
Email: erwerner34@gmail.com
(No relevant relationships reported)

2076 Board #6 9:30 AM - 11:30 AM
Relationship between In-Race Nutrition and Experience Level on Overall Finish Time for Ironman Triathletes
Stephanie Harpenau, Elaina Biechler. Loras College, Dubuque, IA.
(Sponsor: Vincent Paolone, FACSM)
Email: stephanie.harpenau@loras.edu
(No relevant relationships reported)

2077 Board #7 9:30 AM - 11:30 AM
Longitudinal Changes in Vitamin D and Body Composition in NCAA D1 Male Basketball Players
Carolyn Aprile, Terry Sauerbry, Lorenzo DiPace, Brigid ByrF, Lisa DeCucinck, Barb Ledin, Tamara Hew-Butler, FACSM 1 Oakland University, Rochester, MI. 2 Wayne State University, Detroit, MI. 3 Creighton Hospital, Rochester, MI. (Sponsor: Dr. Tamara Hew-Butler, FACSM)
Email: capril@oakland.edu
(No relevant relationships reported)

2078 Board #8 9:30 AM - 11:30 AM
Exploration of the Influences on Food Choices by a Culturally Diverse Cohort of International Athletes
Rachael Thurecht, Fiona Pelly. University of the Sunshine Coast, Sippy Downs, Australia
Email: Rachael.Thurecht@research.usc.edu.au
(No relevant relationships reported)

E-09 Thematic Poster - Training in Youth
Friday, June 1, 2018, 9:30 AM - 11:30 AM
Room: CC-Lower level L100H

2083 Board #1 9:30 AM - 11:30 AM
A Nonlinear Dynamics Approach To Oxygenation, Ventilation, and Heart Rate Dynamics During Exercise In Young Adults
Nathan S. Berry, Jessica Dollar, Lily Shanahan, Susan D. Callins, Susan P. Keane, Laurie Widenman, FACSM 1 University of North Carolina at Greensboro, Greensboro, NC. 2 University of Zurich, Zurich, Switzerland. (Sponsor: Laurie Widenman, FACSM)
Email: nberry11@gmail.com
(No relevant relationships reported)

2084 Board #2 9:30 AM - 11:30 AM
Validation of A Pacer Prediction Equation For Assessing Aerobic Capacity Of Visually Impaired Children
Monika Kaj, Katalin Kalbili, Anita Kiraly, Tamás Csányi. Hungarian School Sport Federation, Budapest, Hungary
Email: kaj.monika@mdsz.hu
(No relevant relationships reported)

2085 Board #3 9:30 AM - 11:30 AM
Development And Validation Of Sports Orientation Questionnaire For Chinese Adolescent Students
Jindong Chang, Xiaoli Liu, Ming Yang, Yi Liu, Mingxi Guan, Yang Li, Yunsai Chen, Xin Liu, Yan Peng, Hao Guo, Naiping Song. 1 Southwest University, Chongqing, China. 2 High School Affiliated to Southwest University, Chongqing, China. 3 Chongqing Business Vocational College, Chongqing, China. 4 Sichuan Aerospace Vocational College, Chengdu, China. 5 Chongqing College of Humanities, Science & Technology, Chongqing, China
Email: changlai@163.com
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:30 AM - 11:30 AM</td>
<td>Board #3</td>
<td>In-situ Testing Of Cardiorespiratory Fitness And Body Mass Index Of School Children In The UK</td>
<td>Samuel Tuvey, Elizabeth Horton, Alfonso Jimenez, Steven Mann</td>
<td>Coventry University, Coventry, United Kingdom, 1active Research Institute, London, United Kingdom. (Sponsor: Gary Luguiru, FACSM)</td>
</tr>
<tr>
<td>9:30 AM - 11:30 AM</td>
<td>Board #4</td>
<td>Effects Of Chronic Hypobaric Hypoxia, Biological Maturation And Training On The Hemoglobin Mass In Children And Adolescents</td>
<td>Erica Mabel Mancera-Soto, Diana Marcela Ramos-Caballero, Edgar Cristiancho, Walter Schmidt, Universidad Nacional de Colombia, Bogotá, Colombia. Bayreuth University, Bayreuth, Germany. (Sponsor: William Byrnes, FACSM)</td>
<td></td>
</tr>
<tr>
<td>9:30 AM - 11:30 AM</td>
<td>Board #5</td>
<td>Effect Of Cardiorespiratory Fitness And Muscular Strength On Gait Biomechanics In Obese Children</td>
<td>Bhupinder Singh, Melanie F. Niño, Jennifer D. Goulart, Amber Hammons. California State University, Fresno, CA</td>
<td></td>
</tr>
<tr>
<td>9:30 AM - 11:30 AM</td>
<td>Board #6</td>
<td>Effects Of A 5-day Sports/Fitness Camp On Walking Efficiency In Children With Cerebral Palsy</td>
<td>Adam R. Blanchard, Katherine Diniotopoulou, Paul Weiland, Kelly Boscarino, Amber Newell, Heakung Kim. Columbia University Medical Center, New York, NY. Chapter 126 Sports &amp; Fitness, Bristol, CT</td>
<td></td>
</tr>
<tr>
<td>9:30 AM - 11:30 AM</td>
<td>Board #7</td>
<td>Differences In Lean Mass And Strength In Adolescent ACLR Female Athletes: A Case-Control Study</td>
<td>Christiana J. Raymond-Pope, Donald R. Dengel, FACSM, John S. Fitzgeral, Bradley J. Nelson, Tyler A. Bosch. University of Minnesota, Minneapolis, MN. University of North Dakota, Grand Forks, ND. (Sponsor: Donald R. Dengel, FACSM)</td>
<td></td>
</tr>
<tr>
<td>9:30 AM - 11:30 AM</td>
<td>Board #8</td>
<td>Predictors of Initial Acceleration and Maximum Speed Phases of Sprint Running in Children and Adolescents</td>
<td>Lorena Correas-Gómez, José Ramón Alverco-Cruz, Jesús Barrera-Expósito, Elías A. Camero, University of Málaga, Málaga, Spain. “Nuestra Señora de la Victoria “Martiricas” High School, Málaga, Spain. Translational Research Institute for Metabolism and Diabetes, Florida Hospital, Orlando, FL.</td>
<td></td>
</tr>
</tbody>
</table>

**E-10 Free Communication/Slide - Athlete Assessment**

Friday, June 1, 2018, 9:30 AM - 11:30 AM

Room: CC-Mezzanine M100D

Chair: Erin H. Hartigan. University of New England, Portland, ME

(No relevant relationships reported)

2093 9:30 AM - 9:45 AM

Anthropometric Measures And Performance Tests In The Evaluation Of Performance And Injury Risk In Division 1 Collegiate Athletes

Alexander M. Camalli, Jennifer Bunn, John Mance. University of Memphis, Memphis, TN. Campbell University, Buies Creek, NC. (Sponsor: Dr. Mike Webster, FACSM)

Email: mcamalli@memphis.edu

(No relevant relationships reported)

2094 9:45 AM - 10:00 AM

Pre-Season Measures of Neurologic Function and Subsequent Head Impact Exposure in Youth Football

Thayne A. Munce, FACSM, Jason C. Dormann, Paul A. Thompson, Verle D. Valentine, FACSM, Sanford Sports Science Institute, Sioux Falls, SD. Sanford Research, Sioux Falls, SD

Email: thayne.munce@sanfordhealth.org

(No relevant relationships reported)

2095 10:00 AM - 10:15 AM

Kinematic Differences of the Single Leg Cross Over Triple Hop and Modified T-Test

David Mangone, Brandon Henley, Joshua Flores-Viti, Kathryn Young, Richard Feinn, Karen Myrick, Juan C. Garbulosa. Quinnipiac University, Hamden, CT

Email: david.mangone@quinnipiac.edu

(No relevant relationships reported)

2096 10:15 AM - 10:30 AM

Correlation of Hop Distance and Loading Symmetry during Return to Sport Testing in Healthy Subjects

Kristen Renner, Alex Peebles, Thomas K. Miller, Robin Queen, FACSM. Virginia Tech, Blacksburg, VA. Virginia Tech Carilion School of Medicine, Roanoke, VA. (Sponsor: Robin Queen, FACSM)

Email: hullberkt@vt.edu

(No relevant relationships reported)

2097 10:30 AM - 10:45 AM

Wobble Board Dynamic Assessment in Subjects with Chronic Ankle Instability

Andrea Fusco, Philip X. Fuchs, Giuseppe F. Giancotti, Marianna De Maio, Carlo Varalda, Herbert Wagner, Laura Capranica, Cristina Corti. University of Cassino e Lazio Meridionale, Cassino, Italy. University of Salzburg, Salzburg, Austria. Italian Weightlifting Federation FIPE, Roma, Italy. University of Rome Foro Italico, Roma, Italy. (Sponsor: Carl Foster, FACSM)

Email: andrea.fusco@unicas.it

(No relevant relationships reported)

2098 10:45 AM - 11:00 AM

Reliability and Performance Changes with the Addition of a Cognitive Task to Static and Dynamic Postural Stability Testing

Caroline Westwood, Carolyn Killelea, Mallory Faherty, Timothy Young, Richard Feinn, Karen Myrick, Juan C. Garbulosa. Quinnipiac University, Hamden, CT. (Sponsor: Timothy Sell, FACSM)

(No relevant relationships reported)

2099 11:00 AM - 11:15 AM

Effect of Training Level on a Visuomotor Balance Task in Youth with Previous Sport-Related Concussion

Katelyn Mitchell, Michael E. Cinelli. Wilfrid Laurier University, Waterloo, ON, Canada

Email: micbic0010@mylaurier.ca

(No relevant relationships reported)

2100 11:15 AM - 11:30 AM

Reliability of Evaluating the Single Leg Squat Using Multiple Assessment Methods

Carolyn Dartt, Sarah De La Motte, Patricia Deuster, Timothy Gribbin. Uniformed Services University, Bethesda, MD

(No relevant relationships reported)
E-11 Free Communication/Slide - Exercise Psychology - Pain

Friday, June 1, 2018, 9:30 AM - 11:30 AM
Room: CC-Mezzanine M100F

2101 Chair: Erica M. Taylor, FACSM. Delaware State University, Dover, DE
(No relevant relationships reported)

2102 9:30 AM - 9:45 AM
Physical Activity is Indirectly Associated with Pain in College-Aged Women: Somatization and Panic Symptom Pathways

Patric J. O'Connor, FACSM¹, Matthew P. Herring², Cillian P. McDowell³, Rodney K. Dishman, FACSM⁴ University of Georgia, Athens, GA; University of Limerick, Limerick, Ireland
Email: poconnor@uga.edu
(No relevant relationships reported)

2103 9:45 AM - 10:00 AM
Resistance Training Does Not Alter Pain Sensitivity in Gulf War Veterans With Chronic Musculoskeletal Pain

Jacob B. Lindheimer¹, Aaron J. Stegner², Stephanie M. VanRiper², Ryan J. Dougherty³, Neda E. Almassi¹, Jacob V. Ninneman¹, Laura D. Ellingson⁴, Patrick J. O'Connor, FACSM⁴, Dane B. Cook, FACSM⁵ US Department of Veterans Affairs, East Orange, NJ; US Department of Veterans Affairs, Madison, WI; University of Wisconsin-Madison, Madison, WI; Iowa State University, Ames, IA; University of Georgia, Athens, GA. (Sponsor: Dane B. Cook, FACSM)
Email: Jake.Lindheimer@gmail.com
(No relevant relationships reported)

2104 10:00 AM - 10:15 AM
Energy, Health, and Productivity Following a Sedentary Behavior Intervention in Workers with Low Back Pain

Tyler D. Quinn¹, Andrea L. Hergenroeder², Sophie J. Perdomo², John M. Jakicic, FACSM², Anthony Delitto³, Bethany Barone Gibbs⁴ University of Pittsburgh, Pittsburgh, PA; University of Kansas, Kansas City, KS. (Sponsor: John Jakicic, FACSM)
Email: tjdlq@pitt.edu
(No relevant relationships reported)

2105 10:15 AM - 10:30 AM
Pain Coping Skills of Female Ultrarunners

Mitchell W. Cushman, Ashley M. Bullers, Michael C. Meyers, FACSM. Idaho State University, Pocatello, ID
(No relevant relationships reported)

2106 10:30 AM - 10:45 AM
Exercise for Improving Pain Sensitivity: Comparing Moderate-Intensity Continuous and High-Intensity Interval Training (HIIT).

Stefan Håkansson. Karolinska Institutet, Stockholm, Sweden
Email: stefan.hakansson@stud.ki.se
(No relevant relationships reported)

2107 10:45 AM - 11:00 AM
Preferred Versus Novel Exercise Modalities on Endogenous Pain Inhibition Following Exercise

Jessica Peterson, Daniel Schubert, Michael Bemben, FACSM, Jason Campbell, Christopher Black, FACSM. University of Oklahoma, Oklahoma City, OK. (Sponsor: Christopher Black, FACSM)
(No relevant relationships reported)
American College of Sports Medicine

Friday, June 1, 2018, 9:30 AM - 11:10 AM
Room: CC-200E

Clinical Case Slide - Hip and Pelvis II

Friday, June 1, 2018, 9:30 AM - 11:30 AM
Room: CC-200E

E-13

Chair: John Hatzenbuehler, FACSM. St. Luke’s Family Medicine, South Portland, ME
(No relevant relationships reported)

Discussant: William W. Briner, FACSM. Hospital for Special Surgery, Uniondale, NY
(No relevant relationships reported)

2119 9:30 AM - 9:50 AM
Pelvic Injury - Weightlifting
Erin S. Barnes, Temple University, Philadelphia, PA. (Sponsor: Mark Lavallee, FACSM)
Email: esbarnes89@gmail.com
(No relevant relationships reported)

2120 9:50 AM - 10:10 AM
Groin Injury - Football
Amanda Chaney1, Amanda Goodale1, Richard Okragly1, Henry Stiene, FACSM1,2Trihealth Sports Medicine, Cincinnati, OH. 2Beacon Orthopedics and Sports Medicine, Cincinnati, OH. (Sponsor: Henry Stiene, MD, FACSM)
(No relevant relationships reported)

2121 10:10 AM - 10:30 AM
Testicular Pain - Football
Mary Iaculli, DO. Evergreen Sports Medicine Fellowship, Augusta, ME. (Sponsor: Peter Sedgwick, MD, FACSM)
Email: mary.iaculli@gmail.com
(No relevant relationships reported)

2122 10:30 AM - 10:50 AM
Hip Pain - Hiking
Cory Mitchell, Caitlin Waters, Herb Stevenson. UMass Memorial Medical Center, Worcester, MA. (Sponsor: Pierre Rouzier, FACSM)
(No relevant relationships reported)

E-14

Clinical Case Slide - Shoulder and Elbow

Friday, June 1, 2018, 9:30 AM - 10:50 AM
Room: CC-200F

2128 9:30 AM - 9:50 AM
Suprascapular Nerve Entrapment or Compression in a Kayaker
Christa L. LiBrizzi, Jorge Rojas, Unma Srikumaranan, Edward G. McFarland, The Johns Hopkins University, Lutherville, MD. (Sponsor: Brian Krabak, FACSM)
Email: clibriz1@jhu.edu
(No relevant relationships reported)

2129 9:50 AM - 10:10 AM
Shoulder Weakness In A 24-year-old Body Builder
Ryan Woods1, Edward R. Laskowski, FACSM1, James C. Presley1, Jeff Strauss1 Mayo Clinic, Rochester, MN. 2Mayo Clinic, Jacksonville, FL. (Sponsor: Edward R. Laskowski, FACSM)
Email: woods.ryan@mayo.edu
(No relevant relationships reported)

2130 10:10 AM - 10:30 AM
Shoulder - Why So Weak? - Track And Field
William L. Patterson Jr., Maine Medical Center, Portland, ME. (Sponsor: William Dexter, FACSM)
(No relevant relationships reported)

2131 10:30 AM - 10:50 AM
Management of a Patient with Lateral Elbow Pain Secondary to Acute Adverse Neural Irritation
Sean Harris1, James Gregory1, Alexis Ortiz, FACSM 1Memorial Hermann, Houston, TX. 2UT Health, Houston, TX. 3Texas Woman’s University, Houston, TX. (Sponsor: Alexis Ortiz, FACSM)
Email: sharris21@twu.edu
(No relevant relationships reported)

2132 11:10 AM - 11:30 AM
“Hip Pop”- Acute Anterior Thigh Pain in an Adolescent Soccer Player
Jonathan Koretoff. University of Minnesota, Minneapolis, MN. (Sponsor: Suzanne Hecht, FACSM)
(No relevant relationships reported)
P150 Final Program

2136 Discussant: Oluseun A. Okufade. Emory University, Johns Creek, GA
(No relevant relationships reported)

2138 9:30 AM - 9:50 AM
Wrist Pain and Hand Numbness -- Football
Jonathan Harvey. University of Minnesota Sports Medicine Fellowship, Minneapolis, MN. (Sponsor: Dr. Suzanne Hecht, FACSM, FACS)
(No relevant relationships reported)

2139 9:50 AM - 10:10 AM
Bilateral Cubital Tunnel Syndrome in a Female Ice Hockey Player
Kiran Bojedla, Damian Mosher. Millcreek Community Hospital, Erie, PA. (Sponsor: Patrick Leary DO, FACSM)
Email: kiran.bojedla@gmail.com
(No relevant relationships reported)

2140 10:10 AM - 10:30 AM
Wrist Injury - Tae Kwon Do
Claire Gross1, Holly J. Benjamin, FACSM, Daniel P. Mass2. 1MacNeal Hospital, Berwyn, IL. 2University of Chicago, Chicago, IL.
(Sponsor: Holly J. Benjamin, MD, FACSM)
Email: claire.a.gross@gmail.com
(No relevant relationships reported)

2141 10:30 AM - 10:50 AM
Forearm Pain - Gymnastics
Melissa Faubert1, Holly Benjamin, FACSM, Daniel Mass2. 1NorthShore University HealthSystem/University of Chicago, Chicago, IL. 2University of Chicago, Chicago, IL.
Email: mfaubert19@gmail.com
(No relevant relationships reported)

2142 10:50 AM - 11:10 AM
Metacarpal Stress fractures Presenting As Dorsal Hand Pain In A High School Tennis Player: A Case Report
John K. Evans, Keith A. Bengtson, Cara C. Prideaux, Edward R. Laskowski, FACS. Mayo Clinic, Rochester, MN
Email: evans.john2@mayo.edu
(No relevant relationships reported)

E-16 Colloquium - A Picture is Worth a Thousand Words, But Can Tell a Thousand Lies
Friday, June 1, 2018, 9:30 AM - 10:20 AM
Room: CC-205AB

Imaging, when used appropriately, is an important component in the diagnosis and treatment of athletes. Over-reliance on imaging can lead to misdiagnosis and inappropriate treatment. We will review the benefits and limitations of imaging.

2143 Jim Macintyre, FACSM. Center of Orthopedic and Rehabilitation Excellence, Salt Lake City, UT
(No relevant relationships reported)

2144 Robert Johnson, FACSM. University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

E-17 Tutorial Lecture - Designing the Future of the Exercise and Fitness Professions: A Systems Approach to Advancing Health and Healthcare
Friday, June 1, 2018, 9:30 AM - 10:20 AM
Room: CC-Auditorium 1

As the exercise professions move forward, the importance of academic program accreditation as a requirement for certification has become apparent. As more interest is expressed by individual states to regulate the profession, having certified professionals graduating from accredited programs has become the most decisive stumbling block. This session will inform participants of the value of CAAHEP Accreditation, the impact of ACSM Certification, and the necessary steps to apply for initial accreditation. Program Directors from accredited programs will be present for questions and discussion.

2145 Meir Magal, FACSM. North Carolina Wesleyan College, Rocky Mount, NC
(No relevant relationships reported)

2146 Susan M. Muller. Stephens College, Columbia, MO
(No relevant relationships reported)

2147 Francis B. Neric. American College of Sports Medicine, Indianapolis, IN
(No relevant relationships reported)

E-18 Tutorial Lecture - Food and Addiction: Energy Balance Implications
Friday, June 1, 2018, 9:30 AM - 10:20 AM
Room: CC-102EF

Chronic states of energy imbalances (i.e., obesity, anorexia nervosa, bulimia nervosa, and binge eating disorder) have been linked to alterations in neurotransmitters signaling that parallel those seen in drug addiction. The goal of this session is to describe the reported changes in dopamine and serotonin level and signaling in these conditions, compare and contrast these changes to drug addiction, and examine the arguments for and against whether food addiction is real. The session will conclude with implications on nutrition and exercise treatment guidelines and suggested direction for future research.

2148 Lynn Cialdella-Kam. Case Western Reserve University, Cleveland, OH
(No relevant relationships reported)

E-19 Tutorial Lecture - Foot Core: The Importance of Foot Intrinsic Muscle Strength for Runners
Friday, June 1, 2018, 9:30 AM - 10:20 AM
Room: CC-208AB

The foot is a complex structure with many articulations and multiple degrees of freedom that play an important role in static posture and dynamic activities. The evolutionary development of the arch of the foot was coincident with the greater demands placed on the footos humans began to run. The movement and stability of the arch is controlled by intrinsic and extrinsic muscles. However, the intrinsic muscles are largely ignored by Clinicians, researchers and areseldom addressed in rehabilitation programs. Interventions for foot-related problems are more often directed at externally supporting the foot rather than training these muscles to function as they are designed. We will present a description of the foot intrinsic muscles and their relationship to the extrinsic muscles. We will integrate the concept of the foot core into the assessment and treatment of the foot including the importance of the footcore stability to normal foot and lower extremity function.

2149 Kevin R. Vincent, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)

2150 Irene S. Davis, FACSM. Harvard Medical School, Cambridge, MA
(No relevant relationships reported)

E-20 Tutorial Lecture - Focusing Outside the Fiber: Extracellular Matrix and Skeletal Muscle Plasticity
Friday, June 1, 2018, 9:30 AM - 10:20 AM
Room: CC-Auditorium 2

Age and inactivity (due to injury, disability and disease) may negatively impact the beneficial adaptive response of skeletal muscle to exercise and mechanical loading. Development of effective rehabilitation strategies are dependent on understanding the basis for anabolic resistance and impaired skeletal muscle plasticity. In this symposium, speakers will share novel findings that suggest an important role for the extracellular matrix in the regulation of muscle growth and function.

2151 Mami D. Boppart, FACSM. University of Illinois, Urbana-Champaign, Urbana, IL
(No relevant relationships reported)
The purpose of this presentation is to provide professionals with an understanding into sporting competition and greater society. Since that time AAS use has spread, differences in examining the pediatric and the adult hip joint with clinically applied examination techniques on live patient models to achieve this goal. We will highlight the multifactorial nature of KOA pathogenesis, as well as future intervention strategies.

A aberrant gait biomechanics have long been implicated in the pathogenesis of knee osteoarthritis (KOA). Additionally, a history of traumatic knee injury and obesity increase the risk of KOA development and hasten KOA progression. There is emerging evidence of an interplay between aberrant gait biomechanics, neuromechanical factors such as muscle dysfunction and somatosensory complications, biochemical markers of joint health, and obesity that influences KOA development and progression. We will discuss evidence regarding the interplay between neuromechanical and biological factors associated with obesity and joint injury to highlight the multifactorial nature of KOA pathogenesis, as well as future intervention strategies.

The primary purpose of this session is to provide a hands-on, clinically relevant approach to examination of the hip and groin. We aim to use direct examination techniques on live patient models to achieve this goal. We will highlight differences in examining the pediatric and adult hip joint with clinically applied case examples. We offer both an allopathic and osteopathic point of view in viewing the hip examination.

The 2018 Physical Activity Guidelines Advisory Committee (PAGAC) Report summarized the available scientific research literature pertaining to physical activity and public health. This tutorial presents findings of the PAGAC regarding gaps in research as well as projections for consideration in future reports regarding measurement methods and other public health topics. NIH and CDC perspectives on research implications for ACSM members will be presented.

This workshop will teach musculoskeletal ultrasound clinical applications including diagnostic scanning, therapeutic and diagnostic procedures in the pediatric athlete and dynamic ultrasound developing techniques. The available new evidence surrounding this topic will be reviewed including when to consider diagnostic therapeutic injection and collaborative planning. In the young athlete, techniques and tips for clinical use, controversies surrounding use and collaboration for surgical planning.

Over 70 years have passed since anabolic-androgenic steroids (AAS) were introduced into sporting competition and greater society. Since that time AAS use has spread, in varying degrees, to all levels and types of sport and various aspects of society. The purpose of this presentation is to provide professionals with an understanding of important current and historically prominent literature concerning AAS use and practical considerations when working with exercising populations.
<table>
<thead>
<tr>
<th>E-27</th>
<th>Free Communication/Poster - Youth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Friday, June 1, 2018, 7:30 AM - 12:30 PM</strong></td>
<td><strong>Room: CC-Hall B</strong></td>
</tr>
<tr>
<td><strong>2174</strong></td>
<td><strong>Board #10</strong></td>
</tr>
<tr>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Acute Cardiometabolic Responses to Medicine Ball Exercise in Children</strong></td>
</tr>
<tr>
<td></td>
<td>Avery D. Faigenbaum, FACSM, Jie Kang, FACSM, Anne Farrell, Nicholas A. Ratamess, Nicole Ellis, Ira Vought, Jill Bush, FACSM. The College of New Jersey, Ewing, NJ</td>
</tr>
<tr>
<td>Email: <a href="mailto:faigenba@tcnj.edu">faigenba@tcnj.edu</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td><strong>2175</strong></td>
<td><strong>Board #11</strong></td>
</tr>
<tr>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Dynamic Stretching Can Improve Performance Of Adolescent Male handball Players For at Least 24 Hours.</strong></td>
</tr>
<tr>
<td></td>
<td>Monoorn Haddad¹, Mohammad Shoab Prince¹, Nidhal Zarrouk², Karim Chamari¹, David G Behn¹ ¹Qatar University, Doha, Qatar. ²Aspetar; Doha, Qatar. ³Memorial University of Newfoundland, Newfoundland, NL, Canada</td>
</tr>
<tr>
<td>Email: <a href="mailto:mhaddad@qca.edu.qa">mhaddad@qca.edu.qa</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td><strong>2176</strong></td>
<td><strong>Board #12</strong></td>
</tr>
<tr>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>What Kind Of Scenes And Situations Make Children Find Pleasure In Exercise</strong></td>
</tr>
<tr>
<td></td>
<td>Takahiro Nakano¹, Kosho Kasauga², Tomoeaki Sakai¹, Kazuo Ogari³ ¹Nagoya Gaikin University, Aichi, Japan. ²Gifu University, Gifu, Japan. ³Gifu Shotoku Gakuen University, Gifu, Japan. (Sponsor: Kiyoji Tanaka, FACSM)</td>
</tr>
<tr>
<td>Email: <a href="mailto:takai@ngu.ac.jp">takai@ngu.ac.jp</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td><strong>2177</strong></td>
<td><strong>Board #13</strong></td>
</tr>
<tr>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Development and Validation of the Chinese Assessment of Adolescent Physical Literacy</strong></td>
</tr>
<tr>
<td></td>
<td>Yan Peng¹, Ming Yang¹, Liangqiu Yang², Chuandong Wei¹, Jindong Chang³ ¹Shanghai Aerospace Vocational College, Chengdu, China. ²Southwest University, Chongqing, China. ³Northeast Normal University, Changchun, China</td>
</tr>
<tr>
<td>Email: <a href="mailto:1049685056@qq.com">1049685056@qq.com</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td><strong>2178</strong></td>
<td><strong>Board #14</strong></td>
</tr>
<tr>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Physical Activity Guideline Adherence and Physical Fitness: The NHANES National Youth Fitness Survey</strong></td>
</tr>
<tr>
<td></td>
<td>Matthew P. Smudde, Kelly R. Launson, Dale D. Brown, FACSM, Karen K. Dennis. Illinois State University, Normal, IL</td>
</tr>
<tr>
<td>(No relevant relationships reported)</td>
<td><strong>2179</strong></td>
</tr>
<tr>
<td><strong>Board #8</strong></td>
<td><strong>Physiological Responses to Swimming Pool and Swimming Flume Maximal Aerobic Power Protocols</strong></td>
</tr>
<tr>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td>Jackelyn N. Zera¹, Elizabeth Nagle, FACSM, Takashi Nagai², Mita Lovalekar¹, Christopher Connaboy¹, Anne Beeth¹, John Aht¹, FACSM², Scott Lephart³, FACSM⁴, Bradley Nindl, FACSM⁵. ¹John Carroll University, Cleveland, OH. ²University of Kentucky, Lexington, KY. ³University of Pittsburgh, Pittsburgh, PA. ⁴University of Cincinnati, Cincinnati, OH. ⁵University of Delaware, Newark, DE. (Sponsor: Elizabeth Nagle, FACSM)</td>
</tr>
<tr>
<td>Email: <a href="mailto:jzera@jcu.edu">jzera@jcu.edu</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td><strong>2180</strong></td>
<td><strong>Board #9</strong></td>
</tr>
<tr>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Changes in Collegiate Swim Anaerobic Performance Between Pre-season and Post-season</strong></td>
</tr>
<tr>
<td></td>
<td>Haoyan Wang¹, Guillaume Spielmann¹, Brian Irving¹, Jack Marucc¹, Shelly Mullenix¹, Brian Harrell², Rick Sharp, FACSM³, Neil Johannson¹ Louisiana State University, Baton Rouge, LA. ²Baton Rouge General Sport Medicine, Baton Rouge, LA. ³Iowa State University, Ames, IA. (No relevant relationships reported)</td>
</tr>
<tr>
<td><strong>2181</strong></td>
<td><strong>Board #15</strong></td>
</tr>
<tr>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td><strong>Three-Year Tracking of Moderate-to-Vigorous Physical Activity During Structured and Unstructured Play In Youth</strong></td>
</tr>
<tr>
<td></td>
<td>Michael J. Wierenga¹, Kimberly A. Clevenger¹, Rebecca W. Moore¹, Karin A. Pfeiffer, FACSM² Michigan State University, East Lansing, MI. ³Eastern Michigan University, Ypsilanti, MI. (Sponsor: Karin Pfeiffer, FACSM, FACSM)</td>
</tr>
<tr>
<td>(No relevant relationships reported)</td>
<td><strong>2182</strong></td>
</tr>
<tr>
<td><strong>Board #16</strong></td>
<td><strong>Association Between Tri-Ponderal Mass Index and FITNESSGRAM Aerobic Capacity Classification in Sixth-Grade Children</strong></td>
</tr>
<tr>
<td><strong>9:30 AM - 11:00 AM</strong></td>
<td>John L. Walker, FACSM¹, Tinker D. Murray, FACSM¹, James Eldridge, FACSM², William G. Squires, Jr., FACSM³ Texas State University, San Marcos, TX. ²University of Texas at the Permian Basin, Odessa, TX. ³Texas Lutheran University, Seguin, TX. (Sponsor: William Squires, Jr., FACSM, FACSM)</td>
</tr>
<tr>
<td>Email: <a href="mailto:jwl16@txstate.edu">jwl16@txstate.edu</a></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>
**ACSM 65th Annual Meeting**

**Board #38** 11:00 AM - 12:30 PM  
Aerobic Exercise Improved Cardiac and Mitochondrial Function in Chronic Heart Failure in Rats  
Yungang Zhao1, Can Li1, Xiayang Yao1, Lili Wang1, Li Ji2, FACSM1, Tianjin University of Sport, Tianjin, China. 2University of Minnesota, Minnesota, MN. (Sponsor: Li Ji, FACSM)  
Email: tsaoyi@hotmail.com  
(No relevant relationships reported)

**Board #39** 11:00 AM - 12:30 PM  
Waist Circumference and BMI Are Associated With Cardiovascular Disease Risk Markers In Police Officers  
John S. Green, FACSM, Steven E. Martin, Stephen F. Crouse, FACSM, Texas A&M Univ., College Station, TX  
(No relevant relationships reported)

**Board #40** 11:00 AM - 12:30 PM  
Pulmonary Artery Sling And Exercise Capacity : A Longitudinal Study In A Young Girl  
Merav Zucker Toledo1, Lea Bentur Bentur2, Gur Mainzer2, Ronen Bar-Yoseph1. 1Rambam Health Care Campus, Haifa, Israel. 2Rambam Health Care Campus, The Bruce Rappaport Faculty of Medicine, Technion-Israel Institute of Technology, Haifa, Israel.  
(No relevant relationships reported)

**Board #41** 11:00 AM - 12:30 PM  
Pulse Wave Analysis of HbA1C Categorized Prediabetes, Type 2 Diabetics and Normo-Glycemic Populations: A Pilot Study  
Jennifer J. Brown1, Kimberly G. Baskette2, Corey A. Rynders2, Aaron I. Vinik1, Sheri R. Colberg-Ochs, FACSM1, Elizabeth City State University, Elizabeth City, NC. 2Old Dominion University, Norfolk, VA. 1University of Colorado Denver-Anschutz Medical Campus, Denver, CO. 2Eastern Virginia Medical School, Norfolk, VA  
Email: jjbrown@ecsu.edu  
(No relevant relationships reported)

**Board #42** 11:00 AM - 12:30 PM  
Insulin Potentiates Neuronal Responses to Chemical Stimulation in Thin Muscle Afferents and Dorsal Root Ganglia  
Nori Hotta1, Kimitake Kato1, Kazue Mizumura2, Jere H. Mitchell, FACSM2. 1The Baruch Padeh Medical Center, Poriya, Israel. 2Texas A&M Univ., College Station, TX  
(No relevant relationships reported)

**Board #43** 11:00 AM - 12:30 PM  
High Intensity Treadmill Running Reduces Tumour Hypoxia in Mice.  
Simon Lombror, Pernille Bryilaens Elming, Thomas R. Wittenborn, Michael R. Horsman. Aarhus University Hospital, Aarhus C, Denmark  
Email: loenbro@oncology.au.dk  
(No relevant relationships reported)

**Board #44** 11:00 AM - 12:30 PM  
Preliminary Results of Vascular Function and Aerobic Capacity Profile of Breast Cancer Survivors  
Jordan T. Lee, Chad W. Wagner, Lee Stoner, Kirsten A. Nyrop, Hyman B. Muss, Erik D. Hanson, Aaron Pepmeier, Claudio L. Battaglini, FACSM. University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Claudio L. Battaglini, FACSM)  
Email: jlee25@elon.edu  
(No relevant relationships reported)
<p>| Board #45 | 11:00 AM - 12:30 PM | Seven Days Of Remote Ischemic Preconditioning Augmented Local-heating Induced Vasodilatation In Human Skin | Jahyun Kim, Warren Franke, FACSM, James Lang, Iowa State University, Ames, IA. (Sponsor: Warren Franke, FACSM) Email: <a href="mailto:jaykim@iastate.edu">jaykim@iastate.edu</a> | (No relevant relationships reported) |
| Board #46 | 11:00 AM - 12:30 PM | The Role of Melatonin In Exercise Enhanced Endothelium-dependent Vasorelaxation In Mesenteric Arteries of SHR | WU Ying, Shi Lijun. Beijing Sport University, Beijing, China Email: <a href="mailto:waying@bso.edu.cn">waying@bso.edu.cn</a> | (No relevant relationships reported) |
| Board #47 | 11:00 AM - 12:30 PM | The Effects Of Acute Bouts Of Whole Body Vibrate On Central Hemodynamics In The Frail Elderly: A Pilot Study | Katie Bumet. University of North Carolina at Chapel Hill, Chapel Hill, NC | (No relevant relationships reported) |
| Board #48 | 11:00 AM - 12:30 PM | Effects Of Habitual Isometric Handgrip Exercise On Central Blood Pressure In Older Adults | Takahide Okamoto1, Ryota Kobayashi2, Yuto Hashimoto1, Hiroyuki Hatakeya1. 1Nippon Sport Science University, Setagaya-ku, Tokyo, Japan. 2Tokyo University of Science, Adachi-ku, Tokyo, Japan Email: <a href="mailto:tokamto@nittai.ac.jp">tokamto@nittai.ac.jp</a> | (No relevant relationships reported) |
| Board #49 | 11:00 AM - 12:30 PM | Arterial Stiffness and Mitochondrial Oxidative Capacity in Obese African Americans | Joshua E. McGee, Terence E. Ryan, Gabriel S. Dubis, Savanna G. Barefoot, Patricia M. Biophy, Damon L. Swift. East Carolina University, Greenville, NC Email: <a href="mailto:mcgeej16@students.ecu.edu">mcgeej16@students.ecu.edu</a> | (No relevant relationships reported) |
| Board #50 | 11:00 AM - 12:30 PM | Skeletal Muscle Oxygenation During Plantarflexion Exercise In Young-old And Older-old Adults | Arun Maharaj1, Salvador J. Jaime2, Justin Mason3, Patrick Saracino4, Arturo Figueroa-Galvez, FACSM5. 1Texas Tech University, Lubbock, TX. 2University of Wisconsin - La Crosse, La Crosse, WI. 3Florida State University, Tallahassee, FL. 4Florida Atlantic University, Boca Raton, FL. 5Virginia Commonwealth University, Richmond, VA Email: <a href="mailto:arun.maharaj@ttu.edu">arun.maharaj@ttu.edu</a> | (No relevant relationships reported) |
| Board #51 | 11:00 AM - 12:30 PM | Assessment of Vascular Function throughout the Menstrual Cycle | Alexandra E. Hirt, Elissa K. Katulka, Megan M. Wenner, Melissa A.H. Witman. University of Delaware, Newark, DE Email: <a href="mailto:ahirt@udel.edu">ahirt@udel.edu</a> | (No relevant relationships reported) |
| Board #52 | 11:00 AM - 12:30 PM | Different Restrictive Devices to Achieve Blood Flow Restriction on Pulse Wave Reflection | Erica M. Marshall, Jason C. Parks, Yu Lun Tai, Alaina Glasgow, Leslie Sensibello, Kathryn Geither, J. Derek Kingsley, FACSM. Kent State University, Kent, OH | (No relevant relationships reported) |</p>
<table>
<thead>
<tr>
<th>Board #</th>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
</table>
| 60      | 11:00 AM - 12:30 PM | Racial Differences in Vascular Function in Response to Mental Stress | Byron M. Curtis, John D. Akins, Jordan C. Patik, Guillermo X. Olvera, Aida Nasirian, Jeremiah C. Campbell, R. Matthew Brothers.  
University of Texas at Arlington, Arlington, TX  
Email: byron.curtis@uta.edu  
(No relevant relationships reported) |
| 61      | 11:00 AM - 12:30 PM | The Effect Of Exercise On Endothelial Function And Glycemic Control In Type 2 Diabetes: Meta-analysis | Yoonjung Park¹, Junghoon Lee¹, Ruda Lee¹, Moon-Hyon Hwang⁵, Marc T. Hamill⁴  
University of Houston, Houston, TX.  
Korea National Sport University, Seoul, Korea, Republic of:  
Incheon National University, Incheon, Korea, Republic of:  
Email: ypark10@uh.edu  
(No relevant relationships reported) |
| 62      | 11:00 AM - 12:30 PM | High Aerobic Fitness And Muscular Strength Offset Aging-induced Deterioration Of Male Sexual Function | Hiroshi Kumagai¹, Toru Yoshikawa², Kanae Myoenzono³, Nobuhiko Akazawa⁴, Seiji Maeda⁵  
Juntendo University, Inzai, Japan.  
¹University of Tsukuba, Tsukuba, Japan.  
²Japan Institute of Sport Sciences, Kita-ku, Japan  
(No relevant relationships reported) |
| 63      | 11:00 AM - 12:30 PM | Reproducibility of a Ramping Protocol to Measure Cerebral Vascular Reactivity Using Functional Magnetic Resonance Imaging | Nicholas G. Evanoff¹, Kara L. Marlatt¹, Justin R. Geijer¹, Byron A. Mueller¹, Kelvin O. Lim¹, Donald R. Dengel, FACSM¹  
¹University of Minnesota, Minneapolis, MN.  
³Pennington Biomedical Research Center, Baton Rouge, LA.  
¹Winona State University, Winona, MN.  
(Sponsor: Donald R. Dengel, FACSM)  
Email: evan0012@umn.edu  
(No relevant relationships reported) |
| 64      | 11:00 AM - 12:30 PM | Impact of Acute Aerobic and Resistance Exercise on Postprandial Flow-Mediated Dilation in Overweight and Obese Adults | Conlan J. Varty, Craig W. Berry, Kristina B. Arslain, Kevin D. Ballard. Miami University, Oxford, OH.  
(Sponsor: Helaine Alessio, FACSM)  
Email: vartycj@miamioh.edu  
(No relevant relationships reported) |
| 65      | 11:00 AM - 12:30 PM | Effects of Obese Skeletal Muscle Cells on Endothelial Cell Angiogenesis | Christopher K. Kargl¹, Yaohui Nie², Ron T. Garner¹, Sheilaugh Evans¹, Zach R. Hettinger¹, Brian Sullivan¹, Tim P. Gavin, FACSM¹  
Purdue University, WEST LAFAYETTE, IN.  
²Harvard University, Cambridge, MA.  
(Sponsor: TP Gavin, FACSM)  
(No relevant relationships reported) |
| 66      | 11:00 AM - 12:30 PM | Perfusive and Diffusive Microvascular Oxygen Delivery During Simulated Hypovolemia and Dynamic Forearm Exercise | Shane M. Hammer, Jacob T. Caldwell, Kaylin D. Didier, Andrew M. Alexander, Carl J. Ade, Thomas J. Barstow, FACSM.  
Kansas State University, Manhattan, KS  
(No relevant relationships reported) |
| 67      | 11:00 AM - 12:30 PM | Influence of Short, Disrupted Sleep and High-Intensity Interval Exercise on Brachial Artery Vascular Responses | Zacharias Papadakis¹, Jeffrey S. Forrèse¹, Matthew N. Peterson¹, Fernando Gutierrez², J. Kyle Taylor², Peter W. Grandjean, FACSM³  
¹Baylor University, Waco, TX.  
²Auburn University, Montgomery, AL.  
³Ballard University, Indianapolis, IN.  
(Sponsor: Peter W. Grandjean, FACSM)  
Email: zacharias.papadakis@rice.edu  
(No relevant relationships reported) |
| 68      | 11:00 AM - 12:30 PM | Obesity Associated Hypertension in Admitted Patients: Treating Isolated Systolic Hypertension May Be Short Sighted | Kelly L. McKinnie¹, J. Mark VanNess¹, Michelle M. Amsar¹, Greg Roberts², Jonathan M. Saxe³, Lewis E. Jacobson², Courtney D. Jensen³  
¹University of the Pacific, Stockton, CA.  
²St. Vincent Hospital, Indianapolis, IN  
(No relevant relationships reported) |
| 69      | 11:00 AM - 12:30 PM | Changes in Scattering, Absorption, and Resulting Differential Pathlength Factor During Arterial Occlusion and Reperfusion | Lillie M. Huckaby¹, Shane M. Hammer¹, Dana K. Townsend¹, Thomas J. Barstow, FACSM²  
³Kansas State University, Manhattan, KS.  
²Wheaton College, Wheaton, IL  
(No relevant relationships reported) |
| 70      | 11:00 AM - 12:30 PM | Exercise-levels Of Laminar Shear Stress In Combination Of Aspirin And Celecoxib Normalize An Atherogenic Environment | Jan Kretzschmar¹, Heather Grimm¹, Micheal D. Brown, FACSM²  
¹King’s College, Wilkes Barre, PA.  
²Auburn University, Auburn, AL  
(No relevant relationships reported) |
| 71      | 11:00 AM - 12:30 PM | Abdominal Aorta Compliance and Distensibility Among Youth Ranging from Normal Weight to Severe Obesity | Michelle M. Harbin, Nicholas G. Evanoff, Aaron S. Kelly, Justin R. Ryder, Donald R. Dengel, FACSM. University of Minnesota, Twin Cities, Minneapolis, MN.  
(Sponsor: Donald R. Dengel, FACSM)  
Email: harbin085@umn.edu  
(No relevant relationships reported) |
| 72      | 11:00 AM - 12:30 PM | Effects Of Different Frequencies Of Electric Muscle Stimulation Of The Lower Limbs On The Vascular Endothelial Function | Hajime Miura, Miduki Ishikawa, Ayako Azuma, Yasuaki Tamura.  
Tokushima University, Tokushima, Japan  
Email: hajime-m@tokushima-u.ac.jp  
(No relevant relationships reported) |
| 73      | 11:00 AM - 12:30 PM | Exercise-levels Of Laminar shear Stress In Combination With Aspirin And Celecoxib On Tnf-a Induced Emp Formation | Heather Grimm¹, Jan Kretzschmar¹, Micheal D. Brown, FACSM²  
¹King’s College, Wilkes Barre, PA.  
²Auburn University, Auburn, AL  
(No relevant relationships reported) |
| 74      | 11:00 AM - 12:30 PM | Aerobic Fitness is not Protective of Endothelial Function with Menopause | Corinna Serviente¹, Sarah Wirtkowski²  
¹University of Massachusetts Amherst, Amherst, MA.  
²Smith College, Northampton, MA.  
(Sponsor: Jane Kent, FACSM)  
(No relevant relationships reported) |
American College of Sports Medicine

2239 Board #75 11:00 AM - 12:30 PM
Impact of Remote Ischemic Preconditioning Post-application Delay on Muscle Oxidation during Subsequent Cycling Intervals
Afton Seeley, Jesse S. Brennan, Kevin A. Jacobs, FACSM. University of Miami, Miami, FL. (Sponsor: Dr. Kevin A. Jacobs, FACSM)
Email: ads129@miami.edu
(No relevant relationships reported)

2240 Board #76 11:00 AM - 12:30 PM
Effects Of Aerobic Exercise Habit On Age-related Arterial Stiffening: A 10-year Longitudinal Study
Jun Sugawara, Tsubasa Tomoto, Naohiro Noda. National Institute of Advanced Industrial Science and Technology, Takuba, Japan
Email: jun.sugawara@aisit.go.jp
(No relevant relationships reported)

2241 Board #77 11:00 AM - 12:30 PM
Body Mass Index Does Not Influence the Endothelial Response to Acute Inflammation
Elizabeth C. Schroeder1, Abbi D. Lane-Cordova2, Sushant M. Ranadive1, Tracy Baynard, FACSM3, Bo Fernhall, FACSM4
1University of Illinois at Chicago, Chicago, IL; 2University of South Carolina at Columbia, Columbia, SC; 3University of Maryland, College Park, MD; (Sponsor: Bo Fernhall, FACSM)
Email: eesbh7@uic.edu
(No relevant relationships reported)

2242 Board #78 11:00 AM - 12:30 PM
Evidence of Racial Differences in Microvascular Function Among College-Aged Women
Jordan C. Patik, Bryon M. Curtis, Aida Nasrifar, Guillermo Olvera, R. Matthew Brothers. University of Texas Arlington, Arlington, TX
(No relevant relationships reported)

2243 Board #79 11:00 AM - 12:30 PM
Impact of Aerobic Capacity on Prolonged Sitting-Induced Vascular Dysfunction
Jennifer Weggan, Austin Hogwood, Richard Fralin, Kathryn LaRosa, Austin Michael, Ryan Garten. Virginia Commonwealth University, Richmond, VA
(No relevant relationships reported)

2244 Board #80 11:00 AM - 12:30 PM
The Effect of Lower Body Aerobic Exercise on Forward and Backward Pressure Wave Amplitude
Joseph M. Stock, David G. Edwards. University of Delaware, Newark, DE
(No relevant relationships reported)

2245 Board #81 11:00 AM - 12:30 PM
Resistance Exercise on Pulse Wave Reflection and Arterial Stiffness Between Trained and Untrained Individuals
Jason C. Parks, Erica M. Marshall, Yu Lun Tai, Alaina Glasgow, Leslie Sensibello, Kathryn Geithner, J. Derek Kingsley, FACSM. Kent State University, Kent, OH
(No relevant relationships reported)

2246 Board #82 11:00 AM - 12:30 PM
Effect of a High Fat Meal on Blood Flow and Endothelial Function during Passive Leg Movement
Morgan M. Monahan, Zakaria Alyousif, Britton C. Scheuermann, Timothy R. Rotarius, Christopher R. Sitele, Barry W. Scheuermann. The University of Toledo, Toledo, OH
(No relevant relationships reported)

Final Program P157

2247 Board #83 11:00 AM - 12:30 PM
Cardiorespiratory Fitness And Menopausal Symptoms: Effects On Quality Of Life And Cardiovascular Disease Risk
Sarah Witkowski1, Corinna Serviente2, Melody Chalvin1. Smith College, Northampton, MA. 1University of Massachusetts, Amherst, MA. (Sponsor: Jane Kent, FACSM)
Email: switkowski@smith.edu
(No relevant relationships reported)

2248 Board #84 11:00 AM - 12:30 PM
Arginase Activity in Red Blood Cells Is Not Altered with Sub-maximal Exercise.
Mirko Mandic, Anna Strömberg, Adrian Gonon, John Pernow, Eric Rulfman, Thomas Gustafsson. Karolinska Institutet, Stockholm, Sweden
Email: mirko.mandic@ki.se
(No relevant relationships reported)

2249 Board #85 11:00 AM - 12:30 PM
Muscular Strength is Inversely Associated with Central Hemodynamic Load in Young Women.
Keller P. Allison, Wesley K. Lefferts, Jacqueline A. Augustine, Jacob P. DeBlois, Kevin S. Heffernan. Syracuse University, Syracuse, NY. (Sponsor: Bo Fernhall, FACSM)
Email: allie.keller12@gmail.com
(No relevant relationships reported)

2250 Board #86 11:00 AM - 12:30 PM
Comparing Two Low-Intensity Strength Training Modalities on Vasodilatory Capacity in Postmenopausal Women
Salvador J. Jaime1, Arun Maharaj1, Stacey Alvarez-Alvarado2, Arturo Figueroa, FACSM. 1University of Wisconsin-La Crosse, La Crosse, WI; 2Texas Tech University, Lubbock, TX. (Sponsor: Arturo Figueroa, FACSM)
Email: sjaime@uwlax.edu
(No relevant relationships reported)

2251 Board #87 11:00 AM - 12:30 PM
Prolonged Standing Increases Lower Peripheral Arterial Stiffness Independent Of Walking Breaks
Aaron R. Caldwell, Benjamin T. Harris, Megan E. Rosa-Caldwell, Marcus Payne, Bryce Daniels, Kaftin M. Gallagher, FACSM, Matthew S. Ganto, FACSM. University of Arkansas, Fayetteville, AR
Email: acf390@email.uark.edu
(No relevant relationships reported)

2252 Board #88 11:00 AM - 12:30 PM
Hydrogen Sulfide Does Not Functionally Contribute to Acetylcholine-Mediated Vasodilation in Young Healthy Adults
Sean Shank, Jody Greeney, Lacy Alexander, FACSM. Penn State University, University Park, PA. (Sponsor: Lacy M. Alexander, FACSM)
Email: sqs6071@psu.edu
(No relevant relationships reported)

2253 Board #89 11:00 AM - 12:30 PM
Associations Between Leg Lean Mass And Arterial Function In Pre-menopausal And Post-menopausal Women.
Stephen Fischer, Arturo Figueroa, FACSM, Youngdook Kim, Joaquin Gonzales. Texas Tech University, Lubbock, TX. (Sponsor: Arturo Figueroa, FACSM)
(No relevant relationships reported)

2254 Board #90 11:00 AM - 12:30 PM
Increased Serum Irisin Level By Aerobic Training Is Involved In NO Production In Obese Rats
Kenichiro Ioue1, Shunpei Fujie1, Natsuki Hasegawa1, Naoki Horii2, Kiyoshi Sanada1, Takafumi Hamaoka, FACSM2, Motoyuki Iemitsu1
1Ritsumeikan University, Kusatsu, Japan; 2Tokyo Medical University, Shinjuku, Japan. (Sponsor: Takafumi Hamaoka, FACSM)
(No relevant relationships reported)

www.acsm.org
E-31 Free Communication/Poster - Basic Science and Skeletal Muscle
Friday, June 1, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

2255 Board #91 11:00 AM - 12:30 PM Cardiovascular Responses To Steady State Exercise In Well-healed Burned Survivors After Six Months Of Exercise Training
Gilbert Morales1, Steven A. Romero2, Matthew N. Cramer3, Amy N. Adams1, Manall F. Jaffrey3, Mu Huang4, Craig G. Crandall, FACSM5, 6 Institute for Exercise and Environmental Medicine Texas Health Presbyterian Hospital Dallas, Dallas, TX; 4University of North Texas Health Science Center, Fort Worth, TX. (Sponsor: Craig G. Crandall, FACSM) Email: GilbertoMorales@texashealth.org
(No relevant relationships reported)

2256 Board #92 11:00 AM - 12:30 PM Repeated Bouts of Passive Limb Movement Result in a Sustained Hyperemic Response in Those with Paraplegia
Keith J. Burns1, Brandon S. Pollock2, Jon Stavres3, John McDaniel4 1Wals University, North Canton, OH; 2Penn State University, Hershey, PA; 3Kent State University, Kent, OH Email: kburns@walsh.edu
(No relevant relationships reported)

2257 Board #93 11:00 AM - 12:30 PM Effects Of Physical Activity On Sympathetic, Cardiovascular, And Perceptual Responses To A Painful Stimulus
Danna V. Rodriguez Escobar, Appalachian State University, Boone, NC
(No relevant relationships reported)

Free Communication/Poster - Muscle Physiology Applications
Friday, June 1, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

2262 Board #98 9:30 AM - 11:00 AM Effect of Acute Exercise on Skeletal Muscle Exosome Biogenesis
Ron T. Garner1, Yaohui Nie2, Timothy P. Gavin, FACSM1, 3 Purdue University, West Lafayette, IN; 4Harvard University, Cambridge, MA (No relevant relationships reported)

2263 Board #99 9:30 AM - 11:00 AM Differential Musculoskeletal Adaptations to Exercise of the Soleus and Vastus Lateralis: A Pilot Proteomics Approach
Mauricio Martinez, YuanYu Lee, Evan E. Schick, Joshua A. Cotter. California State University of Long Beach, Long Beach, CA. (Sponsor: Dr. Vincent J. Caiozzo, FACSM) Email: mauricio.martinez901@student.csulb.edu
(No relevant relationships reported)

2264 Board #100 9:30 AM - 11:00 AM Whey Peptides Intake activates mTOR Signaling after Resistance Exercise Independent of Sex and Menstrual Cycle
Ryo Kawagi2, Noriko Ichinoseki-Seike3, Toshiharu Natsuume3, Tomoharu Kitada1, Toshinori Yoshihara1, Takamasa Tsuzuki1, Hiroyuki Kobayashi2, Shuichi Machida1, Hisashi Naito1 4Toutento University, Tokyo, Japan. 2The Open University of Japan, Chiba, Japan. 3Tsukuba University Hospital, Ibaraki, Japan (No relevant relationships reported)

2265 Board #101 9:30 AM - 11:00 AM Acute and Chronic Resistance-Training Downregulates Select Line-1 Retrotransposon Activity Markers in Human Skeletal Muscle
Matthew A. Romero1, C. Brooks Mobley2, Paul A. Roberson1, Cody T. Haun1, Wesley C. Kephart2, Petey W. Mannford3, James C. Healy3, Darren T. Beck1, Kaelin C. Young1, Jeffrey S. Martin1, Eric S. Folker1, Richard M. Lovering1 1University of Maryland School of Medicine, Baltimore, MD; 2University of California San Diego, La Jolla, CA; 3University of Maryland School of Medicine, Baltimore, MD. (No relevant relationships reported)

2266 Board #102 9:30 AM - 11:00 AM A Preliminary Comparison Of Muscle Penetration Angle Measures To Explain Variance In Maximal Force Production
Michaell J. Luera, Carlos A. Estrada, Jesus A. Hernandez Sarabia, Julia Truong, Tyler W. D. Muddle, Jason M. DeFreitas. Oklahoma State University, Stillwater, OK. Email: mike.luera@okstate.edu (No relevant relationships reported)

2267 Board #103 9:30 AM - 11:00 AM Contribution Of Mono- And Bi-articular Muscle Sizes Of Single- And Multi-joint Maximal Strength
Jesus A. Hernandez Sarabia, Michael J. Luera, Carlos Estrada, Jason M. DeFreitas. Oklahoma State University, STILLWATER, OK. Email: jesusahb@okstate.edu (No relevant relationships reported)

2268 Board #104 9:30 AM - 11:00 AM Flexor Pollicis Brevis Muscle Provides Another Eccentric Contraction Model In Human
Karina Kozaki1, Eiisuke Ochi2, Koichi Nakazato1 1Nippon Sport Science University, Tokyo, Japan; 2Hase University, Tokyo, Japan (No relevant relationships reported)
American College of Sports Medicine

Board #105  9:30 AM - 11:00 AM
Stimulated, but Not Voluntary Critical Torque Differs between Men and Women
Cameron L. Lohman, The University of Oklahoma, Norman, OK. (Sponsor: Chris D. Black, FACSM) (No relevant relationships reported)

Board #106  9:30 AM - 11:00 AM
Relationship Between Muscle Activation and Force Recovery Following Sustained Maximal Voluntary Isometric Contractions
Kade E. Kinney1, Ellen V. Sloan2, Katherine E. Houle1, William F. Brechue, FACSM1, J.T. Still University of Health Sciences, Kirksville, MO. 1University of Tennessee Health Science Center, Memphis, TN. (Sponsor: William F. Brechue, FACSM, FACSM) Email: kkiney@atsu.edu (No relevant relationships reported)

Board #107  9:30 AM - 11:00 AM
The Magnitude Of Hamstring Co-activation During A Knee Extension Is Dependent On Knee Flexor Strength
Cameron S. Mackey1, Ryan M. Thie1e, Eric C. Conchola1, Jason M. DeFreitas1, Oklahoma State University, Stillwater, OK. 2Kansas State University, Manhattan, KS Email: cameron.mackey@okstate.edu (No relevant relationships reported)

Board #108  9:30 AM - 11:00 AM
Acute EMD Responses of the Knee Extensors Following Free-Weight Back Squat Protocols
Eric C. Conchola1, Ryan M. Thie1e, Oklahoma State University, Stillwater, OK. 2Kansas State University, Manhattan, KS Email: cameron.mackey@okstate.edu (No relevant relationships reported)

Board #109  9:30 AM - 11:00 AM
Acute Effect of Localized Vibration on Reducing Masseter Stiffness as Measured by Elastography
Jeffrey Brent Feland, Jonathan Blatter, Cameron Smallwood, Jonathan DiPeri, Blake Cowan, Kylan Vanderpool, Aaron W. Johnson, Brigham Young University, Provo, UT. (Sponsor: J. Ty Hopkins, FACSM) Email: brent.feland@byu.edu (No relevant relationships reported)

Board #110  9:30 AM - 11:00 AM
Influence Of Various Forms Of Pressure Stimulation On Skeletal Muscle Condition
Masaki Deguchi, Tomonobu Sakurai. Toin University of Yokohama, Yokohama, Japan Email: sp17m02s@ust.toin.ac.jp (No relevant relationships reported)

Board #111  9:30 AM - 11:00 AM
Antagonist Coactivation During A Reactive Leg Drop In Young And Older Adults
Alejandra Barrera-Curiel1, Mitchel A. Magrini1, Ryan M. Thie1e, Jesus A. Hernandez-Sarabia1, Ryan J. Colquhoun1, Patrick M. Tomko1, Nathaniel D. M. Jenkins1, Jason M. DeFreitas1, Oklahoma State University, Stillwater, OK. 2Kansas State University, Manhattan, KS Email: ale.barrera_curiel@okstate.edu (No relevant relationships reported)

Board #112  9:30 AM - 11:00 AM
Variations of Acute Bouts of High-Intensity Training Programming Minimally Influence Biomarkers of Growth Brian Kliszczewicz1, Chad Markert2, Emily Bechlo1e, Cassie Williamson1, Michael McKenzie, FACSM, FACSM, Khalil Clemons1, Kennesaw State University, Kennesaw, GA. 2Winston-Salem State University, Winston-Salem, NC. (Sponsor: Michael McKenzie, FACSM) Email: bkliszcz@kennesaw.edu (No relevant relationships reported)

Board #113  9:30 AM - 11:00 AM
Impact of Sitting on Different Types of Stability Balls on EMGs During Arm Ergometry
Michelle Nguyen, Charles RC Marks, Hayley MacDonald. Oakland University, Rochester, MI. (Sponsor: Jonathan K. Ehrman, FACSM) (No relevant relationships reported)

Board #114  9:30 AM - 11:00 AM
Musculoskeletal Complaints Prevalence And Surface Electromyographic Recordings From Upper Limbs In Surgeons
Fernando Sotelo-Barroso, Karla S. Vera-Delgado, Sergio Márquez-Gamínó, Cipriana Caudillo-Cisneros. Universidad de Guanajuato, León, Mexico Email: fernandosh27@hotmail.com (No relevant relationships reported)

Board #115  9:30 AM - 11:00 AM
Pre-workout Supplementation Does Not Augment Intramuscular MAPK Phosphorylation Immediately Following an Acute Resistance Exercise Bout
Justin X. Nicoll, Andrew C. Fry, Eric M. Mosier. University of Kansas, Lawrence, KS Email: justin.nicoll@ku.edu (No relevant relationships reported)

Board #116  9:30 AM - 11:00 AM
Peripheral Fatigue Mechanisms During Voluntary and Stimulated Assessments of Critical Torque
Angelina M. Curiel, Natalie R. Janzen, Jason A. Campbell, Rebecca D. Larson, Christopher D. Black, FACSM. University of Oklahoma, Norman, OK. (Sponsor: Christopher D. Black, FACSM) (No relevant relationships reported)

Board #117  9:30 AM - 11:00 AM
Overstretch-Induced Reactive Oxygen Species Formation and Functional Decline in Skeletal Muscle
Li Zuo, FACSM1, Chia-Chen Chuang2, Tingyang Zhou1, Feng He2, Ohio State University, Columbus, OH. 2California State University, Chico, CA Email: zuo.4@osu.edu (No relevant relationships reported)

Board #118  9:30 AM - 11:00 AM
Downhill Running Impairs Strength And Activation Of The Elbow Flexors
Kyle J. Brandenberger, Christopher P. Ingalls, Jeff S. Otis, Gordon L. Warren, FACSM, James A. Doyle, FACSM, Georgia State University, Jonesboro, GA. (Sponsor: Dr. J. Andrew Doyle, FACSM) Email: kyle@fitness-ministry.com (No relevant relationships reported)

Board #119  9:30 AM - 11:00 AM
Motor Unit Action Potential Amplitude Vs Recruitment Threshold Relationships In Endurance Runners And Sedentary Females
Hannah L. Richardson, Jonathan D. Miller, Trent J. Herda. University of Kansas, Lawrence, KS Email: makenziestade@gmail.com (No relevant relationships reported)

Board #120  9:30 AM - 11:00 AM
The Effect of Compression Garments Worn During Resistance Exercise on Muscle Damage, Fatigability and Hemodynamics
Makenzie Stade, Bria Morse, Evan Schick, Joshua Cotter. California State University Long Beach, Long Beach, CA Email: makenziestade@gmail.com (No relevant relationships reported)
P160 Final Program

2285 Board #121 9:30 AM - 11:00 AM
Muscle Architecture, Central Fatigue, and Contractile Properties Do Not Explain Age-Related Differences in Muscle Fatigue
Liam F. Fitzgerald, Margaret M. Ryan, Sydney L. Connor, Julia D. Miehm, Miles F. Bartlett, Jane A. Kent, FACSM. University of Massachusetts Amherst, Amherst, MA
Email: lfitzgerald@kin.umass.edu
(No relevant relationships reported)

2286 Board #122 9:30 AM - 11:00 AM
Effects Of Lactate Administration On Intracellular pH And Contractile Performance During Rhythmic Muscle Contractions
Yoshinori Tanaka1, David C. Poole, FACSM; Yutaka Kano1
1University of Electro-Communications, Tokyo, Japan; 2Kansas State University, Manhattan, KS. (Sponsor: David C Poole, FACSM)
Email: tanaka@ecc.pc.uec.ac.jp
(No relevant relationships reported)

2287 Board #123 9:30 AM - 11:00 AM
Exercise Induced SOD2 as a Predictor of Fatigability in Healthy Adults
Zoe Williams1, Lisa Chin1, Rebekah Feng1, Loorey Saligari2, Leighton Chat1, Randall E. Keysery, FACSM1,2 "George Mason University, Fairfax, VA; 3National Institutes of Health, Bethesda, MD. (Sponsor: Randall Keysery, FACSM)
Email: zwilila7@gmu.edu
(No relevant relationships reported)

2288 Board #124 9:30 AM - 11:00 AM
Cross Validation of Different Equations to Predict Knee Extensors Isokinetic Strength in Brazilian Older Women
Juscelia C. Pereira, Silvia G.R. Neri, André B. Gadelha, Martim Bottaro, Ricardo M. Lima. University of Brasilia, Brasilia, Brazil
Email: zwilila7@gmu.edu
(No relevant relationships reported)

2289 Board #125 9:30 AM - 11:00 AM
The Effects Of Cross-education On Critical Torque And Time To Task Failure
Alwyn Quanshie, Robert E. Hight, Bree S. Baker, Samuel R. Buchanan, Debra A. Bembr, FACSM, Christopher D. Black, FACSM. University of Oklahoma, Oklahoma City, OK. (Sponsor: Christopher D. Black, FACSM)
(No relevant relationships reported)

2290 Board #126 9:30 AM - 11:00 AM
Heightened Sensory Signaling Does Not Alter Critical Torque
Darshini S. Patel, Natalie R. Janzen, Robert E. Hight, Christopher D. Black, FACSM. University of Oklahoma, Norman, OK. (Sponsor: Christopher D. Black, FACSM)
(No relevant relationships reported)

2291 Board #127 9:30 AM - 11:00 AM
The Effects of Repeated Shortening or Lengthening Muscle Actions on Knee Extensor Position Sense
Ryan M. Thiele1, Jason M. DeFreitas2, Kansas State University, Manhattan, KS; 3Kansas State University, Stillwater, OK
Email: magnim@setur.fo
(No relevant relationships reported)

2292 Board #128 9:30 AM - 11:00 AM
Muscle Acidification And Fatigue Kinetics During Intense Repeated Exhaustive Exercise
Magni Mohr1, Jonathan Fulford2, Joanna L. Bowtell1, Peter Krustup1,2 "University of the Faroe Islands, Torshavn, Faroe Islands; 3University of Exeter, Exeter, United Kingdom; 4University of Southern Denmark, Odense, Denmark
Email: magnim@setur.fo
(No relevant relationships reported)

2293 Board #129 9:30 AM - 11:00 AM
Interference In Emphasis Of Muscle Actions In The Maximum Dynamic Strength And The Maximum Volume Of Repetitions
Cintia C. Rocha1, Higao L. R. de Souza2, Yuri A. C. Campos3, Gaspar P. da Silva4, Miller P. Guimarães2, Osvaldo C. Moreira2, Sandro F. da Silva5. "Presbyterian College Gammon, Lavras, Brazil. 2Federal University of Triângulo Mineiro, Uberaba, Brazil. 3University of Vlaress, Lavras, Brazil. 4University of the Faroe Islands, Tórshavn, Faroe Islands
Email: cintiacadr@gmail.com
(No relevant relationships reported)

E-33 Free Communication/Poster - Motor Control

2294 Board #130 11:00 AM - 12:30 PM
The Effect of Exercise Intensity on the Kinematics of Reach Performance and Brain-Derived Neurotrophic Factor
Jessica F. Baird, Mary E. Gaughran, Heath M. Saffer, Mark A. Sarzynski, FACSM, Troy M. Herter, Stacy L. Fritz, Dirk B. den Ouden, Jill C. Stewart. University of South Carolina, Columbia, SC
Email: baerj@email.sc.edu
(No relevant relationships reported)

2295 Board #131 11:00 AM - 12:30 PM
Agility of Adolescents with Attention Deficit Hyperactivity Disorder Compared with Normal Controls: A Preliminary Investigation
Laurie Simard1,2, Tommy Chevrette1,2, Julie Bouchard1, Linda Pacquette1,2, Jacinthe Dion1, Claudia Verret1,2, Alain-Stève Comtois3, Jacques Leroux1,2 "LQ4C, Chicoutimi, QC, Canada; 3LQ4M, Montréal, QC, Canada. 2LQ4M, Montréal, QC, Canada; 4HRDP, Montréal, QC, Canada
Email: tommy.chevrette@uqac.ca
(No relevant relationships reported)

2296 Board #132 11:00 AM - 12:30 PM
A Muscle’s Functional Role Influences Movement Accuracy Before and After Eccentric Exercise
Kurt W. Kornatz1, Vasanth Subramaniam2, Yu-Kai Chang1 "Winston-Salem State University, Winston-Salem, NC; 2Rosalind Franklin University of Medicine and Science, North Chicago, IL. 3National Taiwan Sport University, Taoyuan City, Taiwan. (Sponsor: Michael McKenzie, FACSM)
(No relevant relationships reported)

2297 Board #133 11:00 AM - 12:30 PM
Alterations In Spinal Excitability And Descending Drive Following Cross-education
Robert E. Hight, Alwyn T. Quanshie, Samuel R. Buchanan, Bree S. Baker, Debra A. Bembr, FACSM, Christopher D. Black, FACSM. University of Oklahoma, Oklahoma City, OK. (Sponsor: Christopher D. Black, FACSM)
Email: robbitylight@oku.edu
(No relevant relationships reported)

2298 Board #134 11:00 AM - 12:30 PM
Acute Effects of Unilateral Static Stretching on Contralateral Limb Range of Motion and Isometric Strength
Xin Ye1, Benjamin Kilner2, Krista Zelizney1 "University of Mississippi, University, MS; 2University of Mississippi Medical Center, Jackson, MS. 3University of Mississippi Medical Center, Jackson, MS. 4Florida International University, Miami, FL
Email: xyel@olemiss.edu
(No relevant relationships reported)
Board #135 11:00 AM - 12:30 PM
Symmetry Loading After Knee Injury Appear Different During Leg Press And Squat Activities
Thomas W. Kernozek, FACSM,1 Becky Heiner1, Drew Rutherford1, Jeremie Schiedermayer1, Douglas Baumann1.1 University of Wisconsin-La Crosse, La Crosse, WI. 2Gunderson Health System, La Crosse, WI. (No relevant relationships reported)

Board #136 11:00 AM - 12:30 PM
Is Aiming a Handgun Like Pointing a Finger?
Kyle J. Kelleran1, Steven Morrison2, David P. Swain, FACSM2.2 Old Dominion University, Norfolk, VA. (Sponsor: David Swain, FACSM) (No relevant relationships reported)

Board #137 11:00 AM - 12:30 PM
Motor Cortex Function in Symptomatic and Asymptomatic Individuals Following Mild Traumatic Brain Injury
Alia L. Yasen, Eli K. Edwards, Geeta Eick, Kirstin Sterner, Anita D. Christie. University of Oregon, Eugene, OR. (Sponsor: David Gabriel, FACSM) (No relevant relationships reported)

Board #138 11:00 AM - 12:30 PM
Physical Functionality In Mexican Elderly With Gerontological Care
Karla S. Vera-Delgado, Sergio Márquez-Gamiño, Francisco J. Alcantar-Aranda, Fernando Sotoelo-Barroso, Cipriana Caudillo-Cisneros. Universidad de Guanajuato, León, Mexico Email: ksvera@ugto.mx (No relevant relationships reported)

Board #139 11:00 AM - 12:30 PM
Relationship Between Muscle Activity And Asymptomatic During Submersion In Shallow Water.
John Mercer, FACSM, Bryan Avendano, Andy Do, Leland Barker. University of Nevada, Las Vegas, Las Vegas, NV Email: john.mercer@unlv.edu (No relevant relationships reported)

Board #140 11:00 AM - 12:30 PM
Muscle Activation and Motor Unit Behavior in the First Dorsal Interosseous of Children and Adults
Jonathan D. Miller, Adam J. Sterczala, Mandy E. Wray, Hannah L. Dinnick, Michael A. Trevino, Trent J. Herda. University of Kansas, Lawrence, KS Email: j980m@ku.edu (No relevant relationships reported)

Board #141 11:00 AM - 12:30 PM
An Evaluation Of The Foot Tapping Test (ftt) In A Health Population
Brian A. Pribble, Daniel J. Larson, Christopher D. Black, Daniel J. Blackwood, Jacob Rookard, Rebecca D. Larson. University of Oklahoma, Norman, OK. (No relevant relationships reported)

Board #142 11:00 AM - 12:30 PM
Association Between Motor Control Activation And Excitability Of The Quadriceps: An FMRI And TMS Study
Adam S. Lepley1, Lindsey K. Lepley1, Julie P Burland1, Steven M. Dav1, Dustin R. Grooms2.1 University of Connecticut, Storrs, CT. 2Ohio University, Athens, OH Email: adam.lepley@ucconn.edu (No relevant relationships reported)

Board #143 11:00 AM - 12:30 PM
A History Of Sports-Related Concussions Does Not Influence Oculomotor Control
Kristen Neitz1, Brian Szekely1, Sydni Wiltöthe1, Peter Chrysosferidis2, Barry A. Munksay3, Nicholas G. Murray1, Doug W. Powell1.1 Georgia Southern University, Statesboro, GA. 2University of Memphis, Memphis, TN. (No relevant relationships reported)

Board #144 11:00 AM - 12:30 PM
Influence of Sex and Cross-Sectional Area on Motor Unit Recruitment Patterns of the Vastus Lateralis
Michael A. Trevino1, Trent Herda1, Jonathan Miller2, Adam Sterczala2, Hannah Dinnick2.2 Georgia Southern University, Armstrong Campus, Savannah, Savannah, GA. (No relevant relationships reported)

Board #145 11:00 AM - 12:30 PM
Simple Low-Cost Virtual Reality to Improve the Responsiveness of Clinical Balance Assessment
Janet E. Simon, Matt Rausch, Chad Starkey, Dustin Grooms. Ohio University, Athens, OH Email: simonj@ohio.edu (No relevant relationships reported)

Board #146 11:00 AM - 12:30 PM
Movement Variability and Accuracy Within the Temporal and Spatial Domains When Provided a Vibrotactile Stimulus
Matthew E. Holman, Benjamin J. Darter. Virginia Commonwealth University, Richmond, VA Email: holmanrne@vcu.edu (No relevant relationships reported)

Board #147 11:00 AM - 12:30 PM
The Effects of Resistance Training on Motor Unit Firing Rates and Muscle Activation
Adam J. Sterczala1, Jonathan D. Miller1, Mandy E. Wray1, Hannah L. Dinnick1, Michael A. Trevino1, Trent J. Herda1.1 University of Kansas, Lawrence, KS. 2Armstrong State University, Savannah, GA Email: adamb.sterczala@ku.edu (No relevant relationships reported)

Board #148 11:00 AM - 12:30 PM
Reproducibility Of Isokinetic Strength Assessment Of Knee Extensors And Flexors Adopting Concentric And Eccentric Contractions
João Pedro Duarte1, João Valente-dos-Santos1, Daniela Costa1, Paulo Sousa-e-Silva1, Diogo Martinho1, Edilson Cyrino1, André Seabra1, Rui Soles-Gonzalves1, Mauel Coelho-e-Silva1.1 University of Coimbra, Coimbra, Portugal. 2Londrina State University, Paraná, Brazil. 3University of Porto, Porto, Portugal. 4Polytechnic Institute of Coimbra, Coimbra, Portugal Email: joaoopedromarquesduarte@gmail.com (No relevant relationships reported)

E-34 Free Communication/Poster - Posture and Balance
Friday, June 1, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

Board #149 11:00 AM - 12:30 PM
Integration of a Complex Balance Task into a Concussion Management Protocol Specific to Dancers
Caroline J. Ketcham, Corinne M. Kenny, Lauren W. Kearns, Eric E. Hall, 27244, FACSM. Elon University, Elon, NC. (Sponsor: Eric E. Hall, FACSM) Email: cketcham@elon.edu (No relevant relationships reported)
2314 Board #150 11:00 AM - 12:30 PM  
Effects of Backpack Load and Load Height on Arm Reaching Ability in Several Directions  
Patrick O'Malley, Matthew D. Beckley, FACSM, DePauw University, Greencastle, IN  
Email: patrickommalley_2018@depauw.edu  
(No relevant relationships reported)

2315 Board #151 11:00 AM - 12:30 PM  
Muscle-specific Cortical Adaptations To Balance Training With Electromyographic Biofeedback In Able-bodied Individuals  
Alan R. Needle, Rachel A. Sledge, J. Horton Doughton, Mark C. Zurl, Appalachian State University, Boone, NC  
Email: needlearr@appstate.edu  
(No relevant relationships reported)

2316 Board #152 11:00 AM - 12:30 PM  
Anthropometrics are Associated with Static Balance Performance in Intercollegiate Athletes  
Amanda Robertson, Timothy Sell, FACSM, Mallory Faherty, Duke, Durham, NC. (Sponsor: Timothy Sell, FACSM)  
Email: amanda.robertson@duke.edu  
(No relevant relationships reported)

2317 Board #153 11:00 AM - 12:30 PM  
Cognitive Dual-tasking Augments Age-differences In Dynamic Balance While Walking On A Narrow Beam  
Azusa Uematsu, Kazushi Tsuchiya, Hajime Yokei, Shuji Suzuki, Tibor Hortobagyi, FACSM 1, Dokkyo Medical University, Shimosuga-gun, Japan. 2, Yamagata Prefectural University of Health Sciences, Yamagata, Japan. 3, Waseda University, Tokorozawa, Japan. 4, University of Groningen, Groningen, Netherlands. (Sponsor: Tibor Hortobagyi, FACSM)  
Email: auematsu@dokkyo-med.ac.jp  
(No relevant relationships reported)

2318 Board #154 11:00 AM - 12:30 PM  
Association between Y Balance Test Performance and Noncontact Lower Extremity Injury in High School Athletes  
MARY NADELEN, Emily Hildebrand, Kyle Leppert, Peter Lisman. TOWSON UNIVERSITY, TOWSON, MD  
(No relevant relationships reported)

2319 Board #155 11:00 AM - 12:30 PM  
Influence of Inflatable Anti-fatigue Mats on Center of Pressure Displacement during Prolonged Standing  
Sean E. Higionbotham 1, Adam E. Jagodinsky 1, John W. Fox 1, David C. Grieshaber 1, Illinois State University, Normal, IL. Methodist University, Fayetteville, NC. (Sponsor: David Thomas, FACSM)  
(No relevant relationships reported)

2320 Board #156 11:00 AM - 12:30 PM  
Effects of Stroboscopic Vision on Reactive Balance  
Kyu-Young Kim 1, Joo-Sang Kim 1, Dustin Grooms 1, University of Miami, Coral Gables, FL. 2, Ohio University, Athens, OH. (Sponsor: Arlette Perry, FACSM)  
Email: kmk154@miami.edu  
(No relevant relationships reported)

2321 Board #157 11:00 AM - 12:30 PM  
The Effects of Concussion History on Postural Control  
Brian J. Szekely 1, Sydni V. Wilhoite 1, Peter Chrysosferidis 1, Kristen L. Neitz 2, Douglas W. Powell 1, Barry A. Munkasy 1, Nicholas G. Murray 1, Georgia Southern University, Statesboro, GA. 2, University of Memphis, Memphis, TN  
Email: bsz0743s@georgiasouthern.edu  
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board</th>
<th>Title</th>
<th>Authors</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>2329</td>
<td>Sport-related Injuries In Elite Para Powerlifters: A Prospective Analysis Of 1410 Athlete-days At The Rio 2016 Summer Paralympic Games</td>
<td>Kimberly E. Ona Ayala, B.A., Patrick Huang, B.A., B.S., Yetsa A. Tuakli-Wosornu, M.D., M.P.H., Yale School of Medicine, New Haven, CT</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2330</td>
<td>Injuries Related To Fitness Trends: Is CrossFit The Newest Contributor?</td>
<td>Nicole D. Rynecki, Brianna L. Siracuse, Joseph A. Ippolito, Kathleen S. Beebe, Rutgers New Jersey Medical School, Newark, NJ</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2331</td>
<td>Epidemiology Of Upper Extremity Injuries In The National Collegiate Athletic Association: 2009/10 - 2015/16</td>
<td>Christy Collins, Erin B. Wasserman, Datalytics Center for Sports Injury Research and Prevention, Inc., Indianapolis, IN</td>
<td>Email: <a href="mailto:ecollins@datalyticscenter.org">ecollins@datalyticscenter.org</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2332</td>
<td>Ten-year Trends In Major Trauma Or Death Resulting From Sport And Recreation In Victoria, Australia</td>
<td>Christina L. Ekegren, Ben Beck, Pamela Simpson, Belinda J. Gabbie, Monash University, Melbourne, Australia</td>
<td>Email: <a href="mailto:christina.ekegren@monash.edu">christina.ekegren@monash.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2333</td>
<td>Epidemiology of Lower Extremity Musculoskeletal Injury in US High School Girls' Soccer and Basketball</td>
<td>Daniel R. Clifton¹, R. Dawn Comstock², Thomas Best³, Ajit Chaudhari⁴, Andrew Persch⁴, Jingheng Yang⁴, James A. Onate⁵, The Ohio State University, Columbus, OH; ¹University of Colorado-Anschutz, Aurora, CO; ²University of Miami, Coral Gables, FL; ³Nationwide Children's Hospital, Columbus, OH</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2334</td>
<td>Opiate Knowledge Among High School Athletes</td>
<td>Elton Li¹, Adam N. Van Horn¹, Jacob W. Paynter¹, Jonathan Im¹, Jennifer Heronema², Carol Janney³, Michigan State University, East Lansing, MI; ²The Legacy Center, Midland, MI</td>
<td>Email: <a href="mailto:lielton@msu.edu">lielton@msu.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2335</td>
<td>Anterior Cruciate Ligament Injuries in Missouri High School Male and Female Soccer Athletes</td>
<td>Aaron D. Gray, Scott Miller, Seth L. Sherman, Emily Leary, Brad W. Willis, University of Missouri, Columbia, MO</td>
<td>Email: <a href="mailto:grayad@missouri.edu">grayad@missouri.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2336</td>
<td>Prevalence Of Musculoskeletal Injuries And Dysfunction Amongst Physical Education Teachers In Singapore</td>
<td>Swanup Mukherjee, Muhammad Ridhuan Johari, Ying Hwa Kee, Nanyang Technological University, Singapore, Singapore</td>
<td>Email: <a href="mailto:swarup.mukherjee@nie.edu.sg">swarup.mukherjee@nie.edu.sg</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2337</td>
<td>Evaluating the Concussed Athlete: Co-occurring Psychiatric Conditions Predict Psychological Function and Recovery</td>
<td>Jeremy P. McConnell¹, Cali A. Van Valkenburgh³, Vincent C. Nittoli⁵, Adam W. Shunk², Courtney D. Jensen⁴, University of the Pacific, Stockton, CA; ²St. Vincent Sports Performance, Indianapolis, IN</td>
<td>Email: <a href="mailto:J.mcconnell1@u.pacific.edu">J.mcconnell1@u.pacific.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2338</td>
<td>Seasonal Distribution of Cold Weather Injuries in the U.S. Army</td>
<td>David W. DeGroot, FACSM¹, Catherine Rappole², Robyn Martin³, Tüpler Army Medical Center, Honolulu, HI; ¹Army Public Health Center, Aberdeen Proving Ground, MD; ²Naval Health Research Center, San Diego, CA</td>
<td>Email: <a href="mailto:david.w.degroot.mil@mail.mil">david.w.degroot.mil@mail.mil</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2339</td>
<td>Incidence and Severity of Game-Related College Football Thoracoabdominal Injuries on Artificial versus Natural Grass</td>
<td>Theresa M. Gustavson, Michael C. Meyers, FACSM, Shad K. Robinson, Idaho State University, Pocatello, ID</td>
<td>Reported Relationships: T.M. Gustavson: Contracted Research - Including Principle Investigator; Partial support by FieldTurf USA.</td>
</tr>
<tr>
<td>2340</td>
<td>Racquet Sport-related Injuries Treated in United States Emergency Departments, 2007-2016</td>
<td>Andrew McBride, Morteza Khodaeae, 80045, FACSM, University of Colorado - Denver, Aurora, CO: (Sponsor: Morteza Khodaeae, FACSM)</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2341</td>
<td>Head Impacts in Female Professional Mixed Martial Arts</td>
<td>Mark Jesunathadas, Elizabeth D. Edwards, Trenton E. Gould, Scott G. Piland, University of Southern Mississippi, Hattiesburg, MS</td>
<td>Email: <a href="mailto:mark.jesunathadas@usm.edu">mark.jesunathadas@usm.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2342</td>
<td>Anterior Cruciate Ligament Injuries in Missouri High School Male and Female Soccer Athletes</td>
<td>Aaron D. Gray, Scott Miller, Seth L. Sherman, Emily Leary, Brad W. Willis, University of Missouri, Columbia, MO</td>
<td>Email: <a href="mailto:grayad@missouri.edu">grayad@missouri.edu</a> (No relevant relationships reported)</td>
</tr>
<tr>
<td>2343</td>
<td>Injuries Resulting From Checking In United States High School Boy's Lacrosse, 2008-2015/16 School Years</td>
<td>E. Paige Harrell¹, Zachary Y. Kerr¹, Andrew E. Lincoln², Lauren A. Piepont³, Margot Putukian, FACSM⁴, Shane V. Caswell⁵, University of North Carolina at Chapel Hill, Chapel Hill, NC; ²MedStar Sports Medicine Research Center, Baltimore, MD; ³University of Colorado-Anschutz, Aurora, CO; ⁴Princeton University, Princeton, NJ; ⁵George Mason University, Manassas, VA.</td>
<td>(Sponsor: Margot Putukian, FACSM) Email: epaigeheblive.unc.edu (No relevant relationships reported)</td>
</tr>
<tr>
<td>2344</td>
<td>The Epidemiology Of DII Baseball, Basketball, and Soccer Injuries and Potential Preventive Strategies</td>
<td>Christopher P. Holdren, Andrea Fradkin, FACSM, Rutgers New Jersey Medical School, Newark, NJ</td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

---

American College of Sports Medicine

American College of Sports Medicine

Final Program P163
2345  Board #181  9:30 AM - 11:00 AM
Descriptive Epidemiology of Injuries Among Recreational Mountain Bikers
Lauren Samuels¹, Julia Kammel¹, Jonathan Finnoff, FACSM, Masaru Teramoto², Stuart Willick, FACSM ¹University of Utah, Salt Lake City, UT. ²Mayo Clinic, Rochester, MN
Email: laurensamuels@cme.com
(No relevant relationships reported)

2346  Board #182  9:30 AM - 11:00 AM
Incidence and Severity of College Football Hand and Wrist Injuries on Artificial versus Natural Grass
Marissa R. Chase, Michael C. Meyers, FACSM, Shad K. Robinson.
Idaho State University, Pocatello, ID
Reported Relationships: M.R. Chase: Contracted Research - Including Principle Investigator; Partial support by FieldTurf USA.

2347  Board #183  9:30 AM - 11:00 AM
Medical Attention Injury Rates in U.S. Women Rugby-7s Players by Positions
Christian Victoria¹, Victor Lopez Jr.¹, Richard Ma², Myrle G. Weinstein³, James L. Chen¹, Arun T. Gupta², Samuel Y. Haleem³, Answorth A. Allen⁴ New York University; New York, NY. ⁵Rugby Research and Injury Prevention Group, Inc; Hospital for Special Surgery, New York, NY. ⁶University of Missouri, Missouri Orthopaedic Institute & Thompson Laboratory for Regenerative Orthopaedics, Columbia, MO. ⁷University of California, San Francisco, San Francisco, CA. ⁸University of California, California, AB, Canada. ⁹City College of New York of the City University of New York, New York, NY. ¹⁰Hospital for Special Surgery, New York, NY. (Sponsor: Robert Cantu, FACSM)
Email: christian.victoria@nyu.edu
(No relevant relationships reported)

2348  Board #184  9:30 AM - 11:00 AM
The Epidemiology of Female Golfinjuries
Andrea Fradkin, FACSM. Bloomsburg University, Bloomsburg, PA
Email: afradkin@bloomu.edu
(No relevant relationships reported)

2349  Board #186  9:30 AM - 11:00 AM
A Cross-sectional Look At Injuries Among Individuals Engaged In Crossfit Training: A Four-Year Study.
Yuri Feito, FACSM, Evanette K. Burrows¹, Loni P. Tabb²
¹Kennesaw State University, Kennesaw, GA. ²Drexel University, Philadelphia, PA
(No relevant relationships reported)

2350  Board #187  9:30 AM - 11:00 AM
Incidence And Severity Of Collegiate Men’s Soccer Lower Leg Injuries On Artificial Versus Natural Grass
Shianne M. Blessing, Michael C. Meyers, FACSM, Shad K. Robinson. Idaho State University, Pocatello, ID
Reported Relationships: S.M. Blessing: Contracted Research - Including Principle Investigator; Partial support by FieldTurf USA.

2351  Board #188  9:30 AM - 11:00 AM
Epidemiology Of Sports-related Facial Injuries Treated In The United States Emergency Departments Between 1997-2016.
Natalie Ronshaugen, Morteza Khodaeef, FACSM. University of Colorado, Aurora, CO
Email: natalie.ronshaugen@ucdenver.edu
(No relevant relationships reported)

2352  Board #189  9:30 AM - 11:00 AM
Profile Of Non-time-loss Conditions/injuries In U.S. Men’S Rugby-7s Players
Richard Ma¹, Victor Lopez Jr.¹, Myrle G. Weinstein¹, Christian Victoria¹, James L. Chen¹, Arun T. Gupta², Martena T. Mettry³, Answorth A. Allen⁴ University of Missouri, Missouri Orthopaedic Institute & Thompson Laboratory for Regenerative Orthopaedics, Columbia, MO. ⁵Rugby Research and Injury Prevention Group, Inc., Hospital for Special Surgery, New York, NY. ⁶New York University, New York, NY. ⁷University of California, San Francisco, San Francisco, CA. ⁸University of California, California, AB, Canada. ⁹City College of New York of the City University of New York, New York, NY. ¹⁰Hospital for Special Surgery, New York, NY. (Sponsor: Robert Cantu, FACSM)
Email: richardmamd@gmail.com
Reported Relationships: R. Ma: Contracted Research - Including Principle Investigator; USA Rugby New England and Empire GU Rugby Football Unions and the National Operating Committee on Standards for Athletic Equipment grant (ID 44-16), Chapel Hill, NC, USA.

2353  Board #190  9:30 AM - 11:00 AM
Perfectionist Concerns Predict Injury Risk In Collegiate Distance Runners - Preliminary Findings From A Prospective Study
Lace E. Luedke¹, Brian J. Wallace¹, Maya L. Puleo¹, Mitchell J. Rauh, FACSM. ¹University of Wisconsin - Oshkosh, Oshkosh, WI. ²San Diego State University, San Diego, CA. (Sponsor: Mitchell J Rauh, FACSM)
Email: luedkel@uwosh.edu
(No relevant relationships reported)

2354  Board #191  9:30 AM - 11:00 AM
Video Corroboration Of Player Incurred Impacts Using Trunk Worn Sensors Among National Ice-hockey Team Members
Aaron Piloti-Riley, Davor Stoyanov, Muhammad Sohaib Arif, Stephen J. McGregor. Eastern Michigan University, Ypsilanti, MI. (Sponsor: Mark Peterson, FACSM)
Email: apilotti@emich.edu
(No relevant relationships reported)

2355  Board #192  9:30 AM - 11:00 AM
Pain and Overuse in High School Baseball Pitchers During a Season
Michael P. McNally¹, James A. Onate², Jingzhen G. Yang³, Kevin E. Klingele¹, Ajit MW Chaudhari, FACSM. ¹Ohio State University College of Medicine, Columbus, OH. ²Nationwide Children’s Hospital, Columbus, OH. ³University of Utah, Salt Lake City, UT. (Sponsor: Ajit Chaudhari, FACSM)
Email: michael.mcnally@osumc.edu
(No relevant relationships reported)

2356  Board #193  9:30 AM - 11:00 AM
Evaluating Methods For Utilizing Time-loss Data In Sports Settings Using A Sample Of US Collegiate Soccer-related Injury Observations
Avinash S. Chandran, Angelo Elmi, Heather Young, Loretta DiPietro, FACSM. The George Washington University, Washington DC, DC. (Sponsor: Dr. Loretta DiPietro, FACSM)
(No relevant relationships reported)

2357  Board #194  9:30 AM - 11:00 AM
Perception about Running and Knee Joint Health among the Public and Healthcare Practitioners
Email: jean-francois.esculier@ubc.ca
(No relevant relationships reported)
Board #195 9:30 AM - 11:00 AM
Concussion and Mental Health among United States Service Academy Cadets
Jonathan C. Jackson1, C. Dain Allred2, Bonnie M. Anderson3, Kevin J. Baldovici4, Darren E. Campbell5, Christopher J. D’Lauro6, Megan N. Houston7, Brian R. Johnson8, Tim Kelly9, Gerald T. McGinity9, Kathryn L. O’Connor10, Patrick G. O’Donnell11, Karen Y. Peck12, Joel B. Robb13, Steven J. Svoboda14, Michael F. Zupan15, Paul Pasqua1121, Thomas M’Allister16, Michael McCormac17, Steven P. Broglio, FACSM18
1United States Air Force Academy, Colorado Springs, CO. 2United States Military Academy, West Point, NY. 3University of Michigan, Ann Arbor, MI. 4United States Coast Guard Academy, New London, CT. 5Uniformed Services University of the Health Sciences, Bethesda, MD. 6Indiana University, Indianapolis, IN. 7Medical College of Wisconsin, Milwaukee, WI. (Sponsor: Steven P Broglio, FACSM)
Email: jonathan.c.jackson10@mil@mail.mil
(No relevant relationships reported)

Board #196 9:30 AM - 11:00 AM
Classification Accuracy Of A Moderate Intensity Cadence (steps/min) Threshold During Overground Walking
Zachary R. Gould1, Elroy J. Aguair2, Scott W. Ducharme3, Christopher C. Moore4, John M. Schunza5, Tiago V. Barreir6, Stuart R. Chipkin7, Catrine Tudor-Locke, FACSM8, Catrine Tudor-Locke, FACSM1
1University of Massachusetts Amherst, Amherst, MA. 2Oregon State University, Corvallis, OR. 3Syracuse University, Syracuse, NY. (Sponsor: Dr. Catrine Tudor-Locke, FACSM)
(No relevant relationships reported)

Board #197 9:30 AM - 11:00 AM
Aerobic Physical Activity Does Not Mediate the Association of Neighborhood Walkability with Overweight/Obesity in Latino Adults
Rosenda Murillo1, Layton M. Reesor2, Daphne C. Hernandez3, Ezenmanu M. Obsai4. University of Houston, Houston, TX
(No relevant relationships reported)

Board #198 9:30 AM - 11:00 AM
Physical Activity Levels of Students Walking Shelter Dogs in an Activity Course: A Pilot Study
Melanie Sartore-Baldwin1, Bihuba M. Das1, Lacey Schwab1, Katrina DuBose, FACSM2. East Carolina University, Greenville, NC.
(Sponsor: Katrina DuBose, FACSM)
Email: sartorem@ecu.edu
(No relevant relationships reported)

Board #199 9:30 AM - 11:00 AM
The Effect of a Web-based Physical Activity Promotion Program on Sedentary Behavior: The Walk 2.0 Trial
Gregory S. Kolt1, FACSM2, Tanya Wood3, Mitch J. Duncan4, Cristina M. Carperi\textsuperscript{chone5, Anthony J. Maeder6, Richard R. Rosenkranz7, FACSM8, Trevor N. Savage9, Anetta Van Italie10, W. Kerry Mummary11, Comel Vandeanateau12, Emma S. George13. Western Sydney University, Sydney, Australia. 14University of Newcastle, Newcastle, Australia. 15University of British Columbia, Kelowna, BC, Canada. 16Flinders University, Adelaide, Australia. 17Kings State University, Manhattan, KS. 18Griffith University, Gold Coast, Australia. 19Central Queensland University, Rockhampton, Australia. 20University of Alberta, Edmonton, AB, Canada
Email: g.kolt@westernsydney.edu.au
(No relevant relationships reported)

American College of Sports Medicine
www.acsm.org
E-37 Free Communication/Poster - Ergogenic Aids I - Proteins, Amino Acids, Peptides

Friday, June 1, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

2372 Board #208 11:00 AM - 12:30 PM
Creatine Hc in Elite Gymnastic Athletes
Caroline Ayne Yoshioka1, Renata Furlan Viebig2, Paulo Carrara3, Jeferson Oliveira Santana1, Diana Madureira1, Elias de França1, Iris Callado Sanches1, Eroco Caperuto1 1 São Judas Tadeu University, São Paulo, Brazil. 2 Mackenzie Presbiterian University, São Paulo, Brazil. 3 São Paulo University, São Paulo, Brazil. Email: carolyoshiba@yahoo.com.br (No relevant relationships reported)

2373 Board #209 11:00 AM - 12:30 PM
Preliminary Analysis - Modifying the Stress Perception of Collegiate Distance Runners Using Branched-Chain Amino Acids
Tara K. Whiton, Kimitake Sato, Asher Flynn, Joseph Walters, Caleb Bazyler, Michael H. Stone, Brad DeWeese. East Tennessee State University, Johnson City, TN Email: tara.k.whiton@gmail.com (No relevant relationships reported)

2374 Board #210 11:00 AM - 12:30 PM
Effect Of B-Hydroxy B-Methylbutyrate Supplementation On Sprint Kinetics Across A Collegiate Rugby Season
Jennifer M. Julian, Katy L. Hayes, Trisha A. VanDusseldorp, Garrett M. Hester, Yuri Feito, FACSM, Gerald T. Mangine. Kennesaw State University, Kennesaw, GA. (Sponsor: Dr. Yuri Feito, FACSM) Email: JULIO.CALLEJA.GONZALEZ@GMAIL.COM (No relevant relationships reported)

2375 Board #211 11:00 AM - 12:30 PM
Effect Of β-hydroxy-β-methylbutyrate And Creatine Supplementation On Muscle Recovery In Elite Rowers As Measured By Anabolic And Catabolic Hormones Calleja-González Julio1, Ana Martha Espinosa-Uribe1, Juan Mielgo-Ayuso2, Jeffrey Mjanes, FACSM3. 1Faculty of Sports Sciences. University of the Basque Country, Vitoria, Spain. 2Kaiari Noro Donostiarra, San Sebastian, Spain. 3Northwestern University, Chicago, IL. (Sponsor: Dr. Jeffrey Mjanes, MD, FACSM) Email: JULIO.CALLEJA.GONZALEZ@GMAIL.COM (No relevant relationships reported)

2376 Board #212 11:00 AM - 12:30 PM
Effect of Preand Post-Exercise Creatine Supplementation on Bone Mineral in Aging Adults
Darren Glenn Candow, Sarah Johannsmeyer. University of Regina, Regina, SK, Canada Email: Darren.Candow@uregina.ca (No relevant relationships reported)

2377 Board #213 11:00 AM - 12:30 PM
No Impact of HMB Supplementation on Muscle or Strength Gains During an Undulating Periodized Resistance Training Program in Trained, Young Men
Josie S. Jakubowski1, Edwin P. Wong1, Everson A. Nunes2, Josh Vandeweerd3, Kenneth S. Noguchi1, Kevin T. Murphy1, Robert W. Morton1, Steven K. Baker1, Stuart M. Phillips, FACSM1. 1McMaster University, Hamilton, ON, Canada. 2University of Santa Catarina, Florianópolis, SC, Brazil. (Sponsor: Stuart Phillips, FACSM) Email: vescojo@mcmaster.ca (No relevant relationships reported)
**American College of Sports Medicine**

**E-38**  
**Free Communication/Poster - Ergogenic Aids II - Beetroot and Nitrates**

Friday, June 1, 2018, 7:30 AM - 12:30 PM  
Room: CC-Hall B

**2386**  
**Board #222**  
**11:00 AM - 12:30 PM**  
**Sucrose But Not Nitrate Ingestion Reduces High-intensity Exercise-induced Gut Injury**

Kristin L. Jonvik1, Kaatje Lenaerts2, Jocy SJ Smeets1, Jeroen Kolkman1, Luc JC van Loon1, Lex B. Verdijk1  
1Maastricht University, Maastricht, Netherlands. 2Medisch Spectrum Twente and University Medical Center, Groningen, Netherlands. (Sponsor: Professor Janice L Thompson, PhD, FACSM)  
Email: kristin.jonvik@maastrichtuniversity.nl  
(No relevant relationships reported)

**2387**  
**Board #223**  
**11:00 AM - 12:30 PM**  
**The Effect Of Nitrate Supplementation Through Powdered Beetroot Juice In Endurance Athletes Over The Time Required To Complete A 10-km Bicycle Time-trial.**

Alexia Wiegandt Rohde. Universidad Iberoamericana Mexico City, Mexico City, Mexico  
Email: alexia.wiegandt@gmail.com  
(No relevant relationships reported)

**2388**  
**Board #224**  
**11:00 AM - 12:30 PM**  
**The Effects of Beetroot Juice Supplementation on Cycling Time-Trial Performance in Normoxia and Moderate Hypoxia**

Samuntha Fessler. East Stroudsburg University, East Stroudsburg, PA. (Sponsor: Shala Davis, FACSM)  
(No relevant relationships reported)

**2389**  
**Board #225**  
**11:00 AM - 12:30 PM**  
**Effect Of Inorganic Nitrate Supplementation On O2 Uptake And Quadriceps Deoxygenation During The Onset And Offset Of Exercise.**

Brynnor Breese1, David Poole, FACSM1, Dai Okushima2, Stephen Bailey2, Andrew Jones, FACSM2, Narhiiko Kondo2, Tatsumo Amano2, Shunsaku Koga2  
1Plymouth University, Plymouth, United Kingdom. 2Kansas State University, Manhattan, KS. (Sponsor: Dave Dill, FACSM)  
Email: brynmorbreese@gmail.com  
(No relevant relationships reported)

**2390**  
**Board #226**  
**11:00 AM - 12:30 PM**  
**Beetroot Juice Supplementation Lowers Oxygen Cost of Vigorous Intensity Aerobic Exercise in Trained Endurance Athletes**

Ryan E. Fiddler1, Erik Lind1, Nathaniel S. Ashton1, Joanna L. Fiddler2  
1SUNY-Cortland, Cortland, NY. 2Cornell University, Ithaca, NY  
Email: ryan.fiddler@cortland.edu  
(No relevant relationships reported)

**2391**  
**Board #227**  
**11:00 AM - 12:30 PM**  
**Acute Dietary Nitrate Supplementation has No Significant Effect on Wasted Left Ventricular Energy in Young Healthy Individuals**

Jozelyn Rascon1, Francisco J. Morales1, Brycen J. Ratcliffe1, Caleb D. Harrison1, Evan J. Bockover1, Sierra Crowe1, Colin R. Carriker2, Alvaro N. Gurovich, FACSM1  
1The University of Texas at El Paso, El Paso, TX. 2Indiana State University, Terre Haute, IN.  
Email: jrascon3@miners.utep.edu  
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board #</th>
<th>Title</th>
<th>Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>#235</td>
<td>Effects Of Tetrahydrobiopterin On Limb Blood Flow And Muscle Metabolism In Patients With COPD</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#236</td>
<td>The Acute Effect Of Energy Shots On 5K Run Performance</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#237</td>
<td>Optimising Sodium Bicarbonate Supplementation: Are Gastro-resistant Capsules The Answer?</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#238</td>
<td>Double-blind, Placebo Controlled, Randomized Crossover Pilot Study Evaluating The Impacts Of Sodium Bicarbonate in a Transdermal Delivery System on Physiological Parameters and Exercise Performance</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#239</td>
<td>Double-blind, Placebo Controlled, Randomized Crossover Pilot Study Evaluating the Impacts of Sodium Bicarbonate in a Transdermal Delivery System on Delayed Muscle Onset Soreness</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#240</td>
<td>Effects of a Thermogenic Pre-Workout Supplement on Fat Oxidation Rates During Moderate-Intensity Running in Females</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#241</td>
<td>The Effects Of Caffeine On Time-trial Performance And Associated Physiological Responses: a Meta-analysis</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#242</td>
<td>Caffeine Mouth Rinsing in the Fed State Does Not Enhance 3-km Cycling Performance</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#243</td>
<td>Acute Caffeine Ingestion Enhances Upper and Lower Body Torque During Isometric and Isokinetic Muscle Actions</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#244</td>
<td>The Effects of Caffeine Gum Administered in a Divided Dose on Cycling Performance</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#245</td>
<td>Neither Coffee Nor A Stimulant Containing “Pre-workout” Drink Alter Cardiovascular Drift During Walking In Young Men</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#246</td>
<td>Effects of Varying Caffeine Dosage on Free Throw Accuracy Before and After Exhaustive Intermittent Exercise</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#247</td>
<td>Caffeine and Citrate Aurantium Supplementation Alter Resting Cardiac Autonomic Function but Not During Recovery</td>
<td>CC-Hall B</td>
</tr>
<tr>
<td>#248</td>
<td>Effects of Energy Drinks on Resting Cardiovascular Measures</td>
<td>CC-Hall B</td>
</tr>
</tbody>
</table>
American College of Sports Medicine

Board #249 11:00 AM - 12:30 PM
Menstrual Phase Influence and Oral Contraceptive Use on the Ergogenic Effects of Caffeine during Cycling
David L. Wenos, Annette M. Lemanski, Nicholas D. Luden, Christopher J. Womack, FACSM, Michael J. Saunders, FACSM. James Madison University, Harrisonburg, VA. (Sponsor: Michael J. Saunders, FACSM)
(No relevant relationships reported)

Board #250 11:00 AM - 12:30 PM
The Influence Of Caffeine And A CYP1A2 Polymorphism On The Ventilatory Threshold - A Pilot Study
Paul R. Nagelkirk, Liam F. Fitzgerald, James Sackett, Ahmed El-Sohemy, Christopher J. Womack, FACSM, Ball State University, Muncie, IN. "University of Toronto, Toronto, ON, Canada." James Madison University, Harrisonburg, VA. (Sponsor: Christopher J. Womack, FACSM)
Email: prnagelkirk@bsu.edu
(No relevant relationships reported)

Board #251 11:00 AM - 12:30 PM
Caffeine Does Not Increase Heat Stress during Endurance Exercise in a Hot, Humid Environment
Christopher W. Bach, Jack W. Ransone, FACSM. University of Nebraska - Lincoln, Lincoln, NE
(No relevant relationships reported)

Board #252 11:00 AM - 12:30 PM
Caffeine Intake Maintains 3-km Cycling Time Trial Performance the Morning Following Sleep Restriction
Jeremy Via, Erin Horil, Michael Saunders, FACSM, Trent Hargens, FACSM, Christopher Womack, FACSM, Nicholas Luden. James Madison University, Harrisonburg, VA. (Sponsor: Michael Saunders, FACSM)
(No relevant relationships reported)

Board #253 11:00 AM - 12:30 PM
Acute Effect of Different Doses of Caffeine on Strength and Calcium Release
Email: lboikoferreira@gmail.com
(No relevant relationships reported)

E-40 Free Communication/Poster - Endocrinology
Friday, June 1, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

Board #254 9:30 AM - 11:00 AM
The Associations Between metabolic Syndrome and Thyroid Function In U.S. Adolescents: Nhanes III
Jonathan Austin, Kelly Larsson. Illinois State University, Normal, IL
Email: jmaust1@ilstu.edu
(No relevant relationships reported)

Board #255 9:30 AM - 11:00 AM
Evidence of Hypothalamic Regulation by AVP and CRH on Running-Induced Stress Response
Kanako Takahashi, Takeru Shimaa, Jangsoo Yook, Mariko Soya, Hikaru Koizumi, Masahiro Okamoto, Subrina Jesmin, Hideaki Soya. University of Tsukuba, Tsukuba, Japan
Email: t_kanako531@yahoo.co.jp
(No relevant relationships reported)

Board #256 9:30 AM - 11:00 AM
Changes in Muscle Strength Following Cross-sex Hormone Treatment in Transgender Individuals
Anna Wiik, Tammmy L. Lundberg, Mats Lilja, Daniel P. Andersson, Stefan Arve, Thomas Gustafsson. Karolinska Institutet, Stockholm, Sweden
Email: Anna.Wiik@ki.se
(No relevant relationships reported)

Board #257 9:30 AM - 11:00 AM
Soy Protein Supplementation Is Not Adipogenic Or Estrogenic In Young Men When Combined With Resistance Training
Cody Haun, C. Brooks Mobley, Christopher Vann, Matthew Romero, Paul Roberson, Petey Murrand, Wesley Kerpath, James Healy, Romil Patel, Shelby Osburn, Darren Beck, Michael Roberts. Auburn University, Auburn, AL
Email: chb0023@auburn.edu
(No relevant relationships reported)

Board #258 9:30 AM - 11:00 AM
Relationship Between Wnt Signaling Inhibitors And Muscle Function In Young And Middle-aged Premenopausal Women
Pragya Sharma Ghimire, Samuel Buchanan, Michael G. Bemben, FACSM, Debra A. Bemben, FACSM, Lander University, Greenwood, SC. "The University of Oklahoma, Norman, OK." (Sponsor: Dr. Debra A Bemben, FACSM)
Email: pharshaghimire@lander.edu
(No relevant relationships reported)

Board #259 9:30 AM - 11:00 AM
Acute Resistance Exercise on Bioactive and Immunoreactive Growth Hormone in Women.
Emily M. Post, Matthew K. Boede, William H. Dupont, Lydia K. Caldwell, John P. Anders, Vincent H. Hardesty, Emily C. Barnhart, Emily C. Border, Jeff S. Volek, Wesley C. Hymer, William J. Kraemer, FACSM, "The Ohio State University, Columbus, OH." "The Pennsylvania State University, University Park, PA." (Sponsor: Dr. William J. Kraemer, FACSM)
(No relevant relationships reported)

Board #260 9:30 AM - 11:00 AM
The Reliability And Criterion Validity Of A Novel Dorsiflexion Range Of Motion Screen
Kyle B. Kiesel, Kate Schwartzkopf-Pifer, Bethany Huebner, Garrett S. Bullock, Mary Beth Garner, Joshua Hayden, Kyle Matsel, Risa Ricard, Philip J. Pinsky. "University of Evansville, Evansville, IN." "Mountain River PT, Chatham, VA" (No relevant relationships reported)

Board #261 9:30 AM - 11:00 AM
Validation of a Modified Functional Movement Screen Test for Division III Female Soccer Players
Tiffany R. Widseth, Ana B. Freire Ribeiro. Mountain River PT, Chatham, VA. (Sponsor: Dr. Mark Blegen, FACSM)
(No relevant relationships reported)

Board #262 9:30 AM - 11:00 AM
Effect of Instability in Legpress Testing on Strength & Muscle Activity in Functional Ankle Instability
Mina Khajoei, Chiao-l Lin, Müller Steffan, Frank Mayer. Potsdam University, Potsdam, Germany
Email: khajoei@uni-potsdam.de
(No relevant relationships reported)

www.acsm.org
Board #270 9:30 AM - 11:00 AM  The Development of a Single Leg Hurdle Test To Assess Return to Sport Readiness  Hayley Reed, Chelsey Roe, Samantha Price, Gaelen Athanaze, Jessica Schilling, Brian Noehren, FACSM. University of Kentucky, Lexington, KY. (Sponsor: Brian Noehren, FACSM)  Email: here222@g.uky.edu  (No relevant relationships reported)

Board #271 9:30 AM - 11:00 AM  Development of a Lateral Hop Endurance Test  Jessica Schilling, Chelsey Roe, Samantha Price, Gaelen Athanaze, Hayley Reed, Brian Noehren, FACSM. University of Kentucky, Lexington, KY. (Sponsor: Brian Noehren, FACSM)  Email: jmsc255@g.uky.edu  (No relevant relationships reported)

Board #272 9:30 AM - 11:00 AM  Jump Training Improves Psychological Impairments and Facilitates Greater Sports Participation in Athletes with ACL Reconstruction  Ryan L. Mizner, Audrey R. Elias. University of Montana, Missoula, MT  Email: ryan.mizner@umontana.edu  (No relevant relationships reported)

Board #273 9:30 AM - 11:00 AM  An Evaluation of Star Excursion Balance Test In Identifying Athletes At Risk For Injury  Mackenzie Pearson1, Karlee Burns2, Mimi Nakajima2. The University of North Carolina at Greensboro, Greensboro, NC. 2.California State University Long Beach, Long Beach, CA  Email: mapirso@uncg.edu  (No relevant relationships reported)

Board #274 9:30 AM - 11:00 AM  Limb Asymmetries in Post-ACL Reconstruction Patients  Mark Vorensky1, Nicole Veltri2, Jamie Kronenberg2, Joshua M. Torne2, Rumit Singh Kakar2. NYU Langone Health Orthopedic Center, New York, NY. 1.Ithaca College, Ithaca, NY  Email: mark.vorensky@nymc.org  (No relevant relationships reported)

Board #275 9:30 AM - 11:00 AM  The Relationship Between The Half Kneeling Ankle Dorsiflexion And A Novel Weight Bearing Lunge Tests  Garrett S. Bullock1, Phillip J. Piskly2, Kyle Matsel1. NYU Langone Health Orthopedic Center, New York, NY. 1.Mountain River PT, Chatham, VA. 2.University of Evansville, Evansville, IN. 1.ProRehab-PC, Evansville, IN  (No relevant relationships reported)

Board #276 9:30 AM - 11:00 AM  Assessing Psychological Readiness After ACL Reconstruction: Is It Possible With One Questionnaire?  Adam Meierbachtol, Michael Obermeier, Terese Chmielewski. TRIA Orthopedic Center, Bloomington, MN  Email: adam.meierbachtol@tria.com  (No relevant relationships reported)

Board #277 9:30 AM - 11:00 AM  Closed Kinetic Chain Upper Extremity Stability Test (CKCUEST) in DIII Collegiate Baseball and Softball Players  Aaron Mallass, David Schilling, Ashraf Elazzazi. Utica College, Utica, NY  Email: aamallac@utica.edu  (No relevant relationships reported)

Board #278 9:30 AM - 11:00 AM  Asymmetry Of Knee Extension Strength And Single-leg Landing Impact In ACL reconstructed Athletes  Junya Aizawa, Kenji Hirohata, Shunsuke Ohji, Takehiro Ohmi, Kazuyoshi Yagishita. Tokyo Medical and Dental University, Tokyo, Japan  Email: aizawa.spt@tmd.ac.jp  (No relevant relationships reported)
Board #279 9:30 AM - 11:00 AM
Relations Between Return to Play Unilateral Knee Extension Strength and Triple-Hop Tests
Lauren E. McIntosh1, Alexander J. Hron2, Benjamin C. Noonan3, Colin W. Bond4. 1North Dakota State University, Fargo, ND. 2Sanford Health, Fargo, ND.
(No relevant relationships reported)

Board #280 9:30 AM - 11:00 AM
Knee Extensor Strength In The Uninjured Leg Following Anterior Cruciate Ligament Reconstruction: A Meta-analysis
Christopher M. Jeanfreau, Katherine A. Hamblin, Gordon L. Warren, FACSM, Sharon L. Leslie, Liang-Chung Tsai. Georgia State University, Atlanta, GA. (Sponsor: Gordon L. Warren, FACSM)
Email: cjjeanfreau1@student.gsu.edu
(No relevant relationships reported)

Board #281 9:30 AM - 11:00 AM
Comparison of Handheld and Human Norm Dynamometry for Lower Extremity Muscle Strength Measurements
Karlee Burns1, Mackenzie Pierson1, Will Wu2, Mimi Nakajima3. 1California State University, Long Beach, Long Beach, CA. 2UNC, Greensboro, Greensboro, NC
Email: burns_karlee@yahoo.com
(No relevant relationships reported)

Board #282 9:30 AM - 11:00 AM
Quantification of Three Clinical Tests for the Assessment of the Femoroacetabular Impingement : Preliminary Results
Marc-Olivier St-Pierre1, Stephane Sobczak1, Naomi Fontaine1, Nour Saade1, Karine Boivin1. 1University of Quebec in Trois-Rivieres, Trois-Rivieres, QC, Canada
Email: marc-olivier.st-pierre@uqtr.ca
(No relevant relationships reported)

Free Communication/Poster - Obesity and Exercise
Friday, June 1, 2018, 7:30 AM - 12:30 PM
Room: CC-Hall B

Board #283 9:30 AM - 11:00 AM
Interindividual Variability For Change In Waist Circumference And Body Weight In Response To Standardized Exercise
Matthew W. Nelms1, Brittany P. Hammond1, Andrea M. Brennan1, Andrew Day1, Paula J. Stotz2, Benoit Lamarche2, Robert Ross, FACSM3. 1Queen’s University, Kingston, ON, Canada. 2Laval University, Quebec City, QC, Canada
Email: mnelms@queensu.ca
(No relevant relationships reported)

Board #284 9:30 AM - 11:00 AM
Effects Of Exercise Training On Strength And Functionality In Obese Subjects Undergoing Bariatric Surgery: Preliminary Findings
Hamilton Roschel, Saulo Gil, Wagner S. Dantas, Igor H. Murai, Carlos Merege, Filho, Marco A. Santo, Roberto Cleva, Bruno Gualliano. University of Sao Paulo, Sao Paulo, Brazil
Email: harms@usp.br
(No relevant relationships reported)

Board #285 9:30 AM - 11:00 AM
Modifications Taken in a Yoga Practice in Overweight versus Normal Weight Individuals
Sally A. Sherman, Renee J. Rogers, Kelliann K. Davis, John M. Jakicic, FACSM. University of Pittsburgh, Pittsburgh, PA. (Sponsor: John M. Jakicic, PhD., FACSM)
Email: sally.sherman@pitt.edu
(No relevant relationships reported)
Regenerative medicine is a field of cutting edge medicine focused on developing therapies that provide, repair, replace or restore structures and functions of cells, tissues, or organs that are lost due to congenital defects, ageing, disease, or damage. This symposium highlights the utility of exercise training as a therapeutic strategy to achieve this goal.

**F-01 Highlighted Symposium - Exercise is Regenerative Medicine: Leveraging Solutions from Within**

Friday, June 1, 2018, 1:00 PM - 3:00 PM
Room: CC-Ballroom A

Regenerative medicine is a field of cutting edge medicine focused on developing therapies that provide, repair, replace or restore structures and functions of cells, tissues, or organs that are lost due to congenital defects, ageing, disease, or damage. This symposium highlights the utility of exercise training as a therapeutic strategy to achieve this goal.

**F-02 Symposium - Can We Get Blood Glucose Under Control?**

Friday, June 1, 2018, 1:00 PM - 3:00 PM
Room: CC-101AB

Poor glycemic control (or hyperglycemia) is associated with diabetes and many cardiovascular complications. Lifestyle changes, particularly exercise, is frequently recommended as not only a first line of defense but also in conjunction with pharmacotherapy. This symposium will present the most recent findings concerning the various exercise therapies being studied to help individuals with impaired glucose tolerance and type 2 diabetes control glucose levels.

**Symposium - From Laboratory to Pavement to Policy: Advances in Measurement and Modulation of Walking Behavior**

Friday, June 1, 2018, 1:00 PM - 3:00 PM
Room: CC-102EF

We apply the concept of translational research to updating breakthroughs in walking-related research since Hardman and Morris' seminal 1997 publication, “Walking to Health”. This land-breaking paper provided a compelling scientific case for walking, spanning evidence from laboratory to pavement and policy. Its impact on the young discipline of physical activity and health was considerable, sparking the interest and careers of researchers worldwide. Charlie Foster provides a contextual review, Catrine Tudor-Locke summarizes measurement evolution and best practices, William Kraus shares insights from clinical interventions where walking is better than running and Janet Fulton updates advances in public health intervention.

**Symposium - Impact of Exercise in Patients with Hematological Cancers**

Friday, June 1, 2018, 1:00 PM - 3:00 PM
Room: CC-103

The symposium will deal with the capability of exercise approaches in patients with hematological malignancies. Four internationally well-known researchers will provide an overview about how important exercise (capacity) is with regard to risk stratification, treatment-related side effects, quality of life and treatment outcome prior, during and after anticancer treatment. Speakers will provide a broad interdisciplinary perspective on the topic due to the educational background as a physician, exercise physiologist, PT or Nurse. Presented data will be based on ongoing or recently finished large RCTs or cohort studies that are led by mentioned researchers.
American College of Sports Medicine

F-05 Thematic Poster - **Fitness Assessment**
Friday, June 1, 2018, 1:00 PM - 3:00 PM
Room: CC-Lower level L100C

**Board #1**
1:00 PM - 3:00 PM
Cardiometabolic Risk Factors, Muscular Fitness, and Cardiorespiratory Fitness in Apparently Healthy Young Adult Females
Ryan Tyler, Timothy A. Rengers, Samantha C. Orr, Mary A. Elssesser, Evan Eschker, Tamara Hew-Butler, FACSM, Charles R.C. Marks, Myung D. Choi, Kristin R. Landis-Piwowar, Elise C. Brown. Oakland University, Rochester, MI
Email: rtyler@oakland.edu
(No relevant relationships reported)

**Board #2**
1:00 PM - 3:00 PM
Exercise Thresholds on Trial: Are They Really Equivalent?
Kevin Caen. Ghent University, Ghent, Belgium
Email: kevin.caen@ugent.be
(No relevant relationships reported)

**Board #3**
1:00 PM - 3:00 PM
Altered Kinematics Over a 2-minute Continuous Push-up Assessment
Jennifer Hewit. United States Military Academy, West Point, NY
(No relevant relationships reported)

**Board #4**
1:00 PM - 3:00 PM
Free Weight Bench Press Muscular Fitness Normative Data for Adults Aged 20-29 Years
Young Sub Kwon1, Robert A. Roberge2, Hosung So1, Christine M. Mermier1, 2Humboldt State University, Arcata, CA. 1Queensland University of Technology, Brisbane, Australia. 3California State University, San Bernardino, CA. 4University of New Mexico, Albuquerque, NM. (Sponsor: Ann Gibson, FACSM)
Email: yongsubkwon@hotmail.com
(No relevant relationships reported)

**Board #5**
1:00 PM - 3:00 PM
Lower Limb Peak Power As A Predictor Of Radial Trabecular Bone Strength
Priscilla Franson, Kimberly D. Espartero, Andrew Denys, Maria G. Alvarez, Arianna M. Mazzarini, Rebekkah J. Reichert, Vanessa R. Yingling, FACSM. California State University, East Bay, Hayward, CA. (Sponsor: Vanessa R Yingling, FACSM)
Email: vanessa.yingling@csueastbay.edu
(No relevant relationships reported)

**Board #6**
1:00 PM - 3:00 PM
Hemodynamic and Metabolic Responses to Self-Paced and Ramp Graded Exercise Protocols
Nicholas Beltz1, Fabiano T. Amorim2, Ann L. Gibson, FACSM2, Jeffrey M. Janot1, Len Kravitz3, Christine M. Mermier1, Nathan Cole2, Terence A. Moriarty2, Tony P. Nunez2, Sam Trigg4, Lance C. Dalleck4. 1University of Wisconsin-Eau Claire, Eau Claire, WI. 2University of New Mexico, Albuquerque, NM. 3Metropolitan State University of Denver, Denver, CO. 4Western State Colorado University, Gunnison, CO
Email: beltznm@uwec.edu
(No relevant relationships reported)

**Board #7**
1:00 PM - 3:00 PM
Revisiting The ACSM Metabolic Equation For Walking: Development Of A Cadence (steps/min) Metabolic Equation
Christopher C. Moore1, Scott W. Ducharme2, Elroy J. Aguirre2, John Staudenmayer1, Stuart R. Chipkin1, John M. Schuna Jr.1, Tiago V. Barreira1, Catrine Tudor-Locke, FACSM. 1University of Massachusetts Amherst, Amherst, MA. 2Oregon State University, Corvallis, OR. 3Syracuse University, Syracuse, NY. (Sponsor: Catrine Tudor-Locke, FACSM)
Email: ccmoore@umass.edu
(No relevant relationships reported)

**Board #8**
1:00 PM - 3:00 PM
Validity of My Jump App to Measure Vertical Jump Height of the Elderly
Iránse Oliveira-Silva1, Rejane M. Cruvinel-Cabral2, André R. Medeiros2, Daniel A. Boullosa. 1UnI EVANGÉLICA, Anápolis, Brazil. 2UCB, Brasília, Brazil. (Sponsor: Carl Foster, FACSM)
Email: iranseoliveira@hotmail.com
(No relevant relationships reported)

**Board #9**
1:00 PM - 3:00 PM
Altered Kinematics Over a 2-minute Continuous Push-up Assessment
Jennifer Hewit. United States Military Academy, West Point, NY
(No relevant relationships reported)

**Chair:** Enette Larson Meyer. University of Wyoming
(No relevant relationships reported)
F-07 Thematic Poster - Physical Activity and Healthy Aging

Friday, June 1, 2018, 1:00 PM - 3:00 PM
Room: CC-Lower level L100E

2493 Board #8 1:00 PM - 3:00 PM
Examination of Female Athlete Triad Components in Collegiate Equestrian Athletes
Toni M. Torres-McGehee1, Kyra Dodson2, Dawn M. Emerson2, Kelly Pritchett3, Erin M. Moore1, Monica Kimmel1. 1University of South Carolina, Columbia, SC. 2University of Kansas, Lawrence, KS. 3Central Washington University, Ellensburg, WA
Email: torresmc@mailbox.sc.edu
(No relevant relationships reported)

2494 Chair: Loretta DiPietro, FACSM. The George Washington University School of Public Health and Health Services, Washington, DC
(No relevant relationships reported)

2495 Board #1 1:00 PM - 3:00 PM
Gender-Specific Effects in Cognition and Mobility Following Exercise in Older Adults at Risk for Dementia
Narlon C. Boa Sorte Silva, Dawn P. Gill, Ashleigh De Cruz, Robert J. Petrella, FACSM. Western University, London, ON, Canada.
(Sponsor: Robert J. Petrella, FACSM)
Email: nbosorte@uwo.ca
(No relevant relationships reported)

2496 Chair: Robert J. Petrella, FACSM.

2497 Board #3 1:00 PM - 3:00 PM
A Comparison Of Two Community Based Exercise Interventions For Reducing Falls Risk In Older Adults
Jessica Pope1, Steven Morrison2, Amanda Estep1, Shane Caswell1, Jatin Ambegaonkar3, Kathryn Helwig2, Nelson Cortes1. 1George Mason University, Manassas, VA. 2Old Dominion University, Norfolk, VA
Email: nrosort@uwo.ca
(No relevant relationships reported)

2498 Board #4 1:00 PM - 3:00 PM
Square-stepping Exercise For Older Adults With Chronic Disease To Improve Cognition and Mobility
Erin M. Shellington, Dawn P. Gill, Sonja M. Reichert, Matthew Heath, Robert J. Petrella, FACSM. University of Western Ontario, London, ON, Canada
Email: ncortes@gmu.edu
(No relevant relationships reported)

2499 Board #5 1:00 PM - 3:00 PM
Physical Activity, Physical Fitness Related To Quality Of Life For Older Adults In Beijing China
CAILIANG ZHOU, Hong REN. BELLING SPORT UNIVERSITY, BEIJING, China
Email: cailiang_zhou@126.com
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board #2</th>
<th>1:00 PM - 3:00 PM</th>
<th>Physical Fitness Performance and Normative Score of Elderly Male Rural Dwellers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pei-Sung Chin¹, Meng-Tzu Hou², Chih-Hsing Wu¹. University of Taipei, Taipei, Taiwan. ²National Yang-Ming University, Taipei, Taiwan. ¹Department of Family Medicine, National Cheng Kung University Hospital, Taipei, Taiwan.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Email: <a href="mailto:scorpio75111@hotmail.com">scorpio75111@hotmail.com</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #7</th>
<th>1:00 PM - 3:00 PM</th>
<th>Efficacy of High-Intensity Resistance and Sprint Interval Training in Older Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #8</th>
<th>1:00 PM - 3:00 PM</th>
<th>Heart Rate Increase and Recovery as Predictors of Mobility Decline in Well-Functioning Older Adults</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Eleanor M. Simonsick¹, Gerald J. Jerome, FACSM², Jennifer A. Schrak², Stephanie A. Studenski², Luigi Ferrucci³. ¹National Institute on Aging, Baltimore, MD. ²Towson University, Towson, MD. ³Johns Hopkins Bloomberg School of Public Health, Baltimore, MD. (Sponsor: Gerald J. Jerome, FACSM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Email: <a href="mailto:simonsickel@mail.nih.gov">simonsickel@mail.nih.gov</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

F-08  Thematic Poster - Thermoregulatory Sweating
Friday, June 1, 2018, 1:00 PM - 3:00 PM  Room: CC-Lower level L106F

<table>
<thead>
<tr>
<th>Board #1</th>
<th>1:00 PM - 3:00 PM</th>
<th>Relation between Regional and Whole Body Sweat Sodium Concentration and the Effect of Exercise Intensity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Email: <a href="mailto:lindsay.baker@pepsico.com">lindsay.baker@pepsico.com</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #2</th>
<th>1:00 PM - 3:00 PM</th>
<th>Sport Specific Normative Data for Sweating Rate and Sweat Sodium Loss in Athletes: An Update</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Kelly A. Barnes¹, James M. Carter, FACSM¹, Melissa L. Anderson¹, John R. Stefan¹, Matthew D. Pahnke¹, Rebecca K. Randull², Lindsay B. Baker, FACSM². ¹Gatorade Sports Science Institute; PepsiCo, Inc, Barrington, IL. ²Gatorade Sports Science Institute; PepsiCo, Inc, Bradenton, FL.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Email: <a href="mailto:kelly.barnes1@pepsico.com">kelly.barnes1@pepsico.com</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

F-09  Free Communication/Slide - Athlete Care: Amateur, Olympic and Professional
Friday, June 1, 2018, 1:00 PM - 3:00 PM  Room: CC-200E

<table>
<thead>
<tr>
<th>Board #6</th>
<th>1:00 PM - 3:00 PM</th>
<th>Body Sweat Mapping of Untrained Males during Exercise-Induced Hyperthermia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Caroline J. Smith¹, George Havenith, FACSM², Appalachian State University, Boone, NC. ²Loughborough University, Loughborough, United Kingdom. (Sponsor: George Havenith, FACSM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #3</th>
<th>1:00 PM - 3:00 PM</th>
<th>Trapped Sweat in Various Sports Uniforms During Sport-Specific, Laboratory-Based Exercise</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Bridget C. Sopena, Kelly A. Barnes, Ryan P. Nuccio, Adam J. Reimel, John R. Stefan, Lindsay B. Baker, FACSM. Gatorade Sports Science Institute, BARRINGTON, IL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Email: <a href="mailto:bridget.sopena@pepsico.com">bridget.sopena@pepsico.com</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #4</th>
<th>1:00 PM - 3:00 PM</th>
<th>Prolonged Work in the Heat Impairs Heat Loss on the Next day in Older Men</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Sean R. Notley, Robert D. Meade, Andrew W. D’Souza, Brian J. Friesen, Glen P. Kenny. University of Ottawa, Ottawa, ON, Canada</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Email: <a href="mailto:snotley@uottawa.ca">snotley@uottawa.ca</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #5</th>
<th>1:00 PM - 3:00 PM</th>
<th>No Evidence Of Thermoregulatory Impairment In Donor Skin During Exercise-induced Hyperthermia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Matthew N. Craner, Gilbert Moralez, Mu Huang, Craig G. Crandall, FACSM. Institute for Exercise and Environmental Medicine, Dallas, TX. (Sponsor: Craig Crandall, FACSM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #7</th>
<th>1:00 PM - 3:00 PM</th>
<th>No Evidence Of Thermoregulatory Impairment In Donor Skin During Exercise-induced Hyperthermia</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Matthew N. Craner, Gilbert Moralez, Mu Huang, Craig G. Crandall, FACSM. Institute for Exercise and Environmental Medicine, Dallas, TX. (Sponsor: Craig Crandall, FACSM)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chair: Leonardo P. Oliveira. University of Chicago, Chicago, IL</th>
<th>1:00 PM - 1:15 PM</th>
<th>Lower-Extremity Vibration Threshold, But Not Proprioception Or Mobility, Distinguishes Non-Progressive From Progressive Multiple Sclerosis Sub-Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Julia D. Miche³, Juliana L. Averill³, Jongi Lim¹, John Buonaccorsi¹, Carolina Ionete², Jane A. Kent, FACSM¹, Richard van Emmerik¹. ¹University of Massachusetts Amherst, Amherst, MA. ²University of Massachusetts Medical School, Worcester, MA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:jmi4ehn@umass.edu">jmi4ehn@umass.edu</a> (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

FRIDAY, JUNE 1, 2018  www.acsm.org
**F-10 Free Communication/Slide - Cardiometabolic Health**

**Friday, June 1, 2018, 1:00 PM - 3:00 PM**

**Room: CC-200F**

**2520**

**Chair:** Stella L. Volpe, FACSM. Drexel University, Philadelphia, PA

(No relevant relationships reported)

**2521**

**1:00 PM - 1:15 PM**

**Oral Consumption of Bisphenol A Increases Glucose Responses in Adults**

Sean Stanelle, Alyssa Bird, Leana Mosesian, Garrett Grant, Julie Pollard, Eduardo Uribe, Dana Williams, Suzanne Phelan, Todd Hagobian, FACSM. California Polytechnic State University, San Luis Obispo, San Luis Obispo, CA. (Sponsor: Todd Hagobian, FACSM)

(No relevant relationships reported)

**2522**

**1:15 PM - 1:30 PM**

**The Influence of Metabolic Syndrome on Carotid Intima Media Thickness in Children**

Robert E. Downing, Rebecca Place, Paul Visich. University of New England, Biddeford, ME

Email: rdowing@une.edu

(No relevant relationships reported)

**2523**

**1:30 PM - 1:45 PM**

**Combining Short-Term Interval Training With Caloric-Restiction Improves β-Cell Function In Obese Adults**

Monique E. Francois, Nicole M. Gilbertson, Natalie Z.M. Eichner, Emily M. Heistone, James H. Mehaffey, Taryn E. Hassinger, Peter T. Hallowell, Steven K. Malin, FACSM. University of Virginia, Charlottesville, VA. (Sponsor: Steve Malin, FACSM)

Email: monique.francois@virginia.edu

Gilbertson Presenting

(No relevant relationships reported)

**2524**

**1:45 PM - 2:00 PM**

**Exercise-induced Energy Deficit Lowers Glycemia At Breakfast The Next Day, But Not Over 24-hours.**

Michael Schleh, Lisa Guth, Haoja Jing, Jeffrey F. Horowitz, FACSM. University of Michigan, Ann Arbor, MI

Email: mschleh@umich.edu

(No relevant relationships reported)

**2525**

**2:00 PM - 2:15 PM**

**Components of Metabolic Flexibility Improved 48 hours After High Intensity Interval Exercise.**

Timothy D. Allerton, Brian Irving, Guillaume Spielmann, Stefany Primeaux, Arnold Nelson, FACSM; Dennis Landin, Neil Johansen; Pennington Biomedical Research Center, Baton Rouge, LA; Louisiana State University, Baton Rouge, LA. (Sponsor: Arnold Nelson, FACSM)

Email: rdowning@une.edu

(No relevant relationships reported)

**2526**

**2:15 PM - 2:30 PM**

**Relationship between Cardiorespiratory Fitness and Relative Gut Microbiota Composition in Healthy Adults**


Email: rdowning@une.edu

(No relevant relationships reported)
American College of Sports Medicine

2527 2:30 PM - 2:45 PM
Effects of Maternal Exercise on Hepatic Steatosis in Young Adult Rats
Rory P. Cunningham¹, Grace M. Meers¹, Greg Ruegsegger², Frank Booth, FACSM³, R. Scott Rector, FACSM³. ¹University of Missouri & Truman VA, Columbia, MO. ²University of Missouri, Columbia, MO. (Sponsor: R. Scott Rector, FACSM) Email: row40@mail.missouri.edu (No relevant relationships reported)

2528 2:45 PM - 3:00 PM
Physical Activity during Pregnancy Alters Gene Expression in Neonatal Tissue
Leryn J. Reynolds¹, Niraj R. Chavari², Brittany B. Rice³, Hannah F. Maddox⁴, Joshua D. Preston⁵, Logan B. DeHoff⁶, Kevin J. Pearson⁷. ¹Old Dominion University, Norfolk, VA. ²University of Kentucky, Lexington, KY. (Sponsor: David Swain, FACSM) Email: leynold@odu.edu (No relevant relationships reported)

F-11 Free Communication/Slide - Exercise and Neuroscience
Friday, June 1, 2018, 1:00 PM - 3:00 PM
Room: CC-Mezzanine M100D

2529 Chair: J. Carson Smith, FACSM. University of Maryland, College Park, MD
(No relevant relationships reported)

2530 1:00 PM - 1:15 PM
Exercise Training Alters Expression of Acid Sensing Ion Channels (ASICs) in Sensory Pathways
Tahsin Khataei¹, Anne Marie S. Harding², Mahyar Janahmadi³, Hamid Agha alinejad¹, Christopher J. Benson¹. ¹Tarbiat Modares University, Tehran, Iran. ²Islamic Republic of. ³University of Iowa, Iowa city, IA. (Sponsor: David Swain, FACSM) Email: tahsin-khataei@uiowa.edu (No relevant relationships reported)

2531 1:15 PM - 1:30 PM
Functional Brain Plasticity Following Physical Training in Amnestic Mild Cognitive Impairment: A Neuroimaging Study
Tamir Eisenstein, Galit Yoge-Seligmann, Nir Giladi, Elissa Ash, Talma Hendler, Yulia Lerner. Tel Aviv Sourasky Medical Center, Tel Aviv, Israel Email: tamir1e@mail.tau.ac.il (No relevant relationships reported)

2532 1:30 PM - 1:45 PM
The Impact of Imperceptible Vibratory Noise on the Spinal Motor Reflex
Matthew S. Tenan, Maxwell Alander, Courtney A. Haynes, Antony D. Passaro. U.S. Army Research Laboratory, Research Triangle Park, NC. Email: matthew.s.tenan.civ@mail.mil (No relevant relationships reported)

2533 1:45 PM - 2:00 PM
Aerobic Exercise and Cerebral White Matter Integrity in MCI Patients: A 1-Year Randomized Controlled Trial
Takashi Tarami¹, Binu P. Thomas¹, Ciwen Wang², Tsubasa Tomoto², Evan Pasha², Rong Zhang³. ¹The University of Texas Southwestern Medical Center, Dallas, TX. ²Texas Health Presbyterian Hospital Dallas, Dallas, TX. Email: takatr@gmail.com (No relevant relationships reported)

2534 2:00 PM - 2:15 PM
Aerobic Exercise Regulates Synaptic Transmission by Attenuating Oxidative Stress in the Paraventricular Nucleus of Spontaneously Hypertensive Rats
Li ZHAO, Yan LI, Boya GU, Yuanyuan LV. Beijing Sport University, Beijing, China Email: zhaolispring@126.com (No relevant relationships reported)

2535 2:15 PM - 2:30 PM
Effect of Acute Exercise on Salience Network Functional Connectivity and Affect in Healthy Older Adults
Alfonso J. Alfini¹, Lauren R. Weiss², Junyeon Won², Corey Michelson³, Daniel Callow³, Caroline Simon³, Adam P. Spira¹. ¹University of Maryland, College Park, MA, ²University of Pennsylvania, Philadelphia, PA. (Sponsor: David Swain, FACSM) Email: alfini1@jhu.edu (No relevant relationships reported)

2536 2:30 PM - 2:45 PM
Probing the Therapeutic Potential of Brain Stimulation for Functional and Corticospinal Deficits Following Traumatic Musculoskeletal Injury
Shawn Flanagan. University of Pittsburgh, Pittsburgh, PA. (Sponsor: William Kraemer, FACSM) Email: sfd29@pitt.edu (No relevant relationships reported)

2537 2:45 PM - 3:00 PM
Are Exercise Effects on Valence-Modulation of the Acoustic Startle Eyeblink Response Trait Dependent?
Kathryn Elizabeth Wilson¹, Jianchun Yin², Rodney King Dishman, FACSM³. ¹University of Nebraska Medical Center, Omaha, NE. ²Shanghai Normal University, Shanghai, China. ³University of Georgia, Athens, GA. (Sponsor: Rodney K. Dishman, FACSM) Email: wilsonkat08@gmail.com (No relevant relationships reported)

F-12 Free Communication/Slide - Gait and Biomechanics
Friday, June 1, 2018, 1:00 PM - 3:00 PM
Room: CC-Mezzanine M100F

2538 Chair: Julia Freedman Silvernail. University of Nevada, Las Vegas, Las Vegas, NV
(No relevant relationships reported)

2539 1:00 PM - 1:15 PM
Effect Of Forefoot Type On Self-reported Pain In Minimalist and Traditionally Shod Runners
Jean L. McCory, FACSM, Lauren K. Cline¹, Erica Casto², Kyla M. Gilbreath³. ¹West Virginia University, Morgantown, WV. ²University of Massachusetts, Amherst, MA. ³University of South Carolina, Columbia, SC. Email: jlmccory@hsc.wvu.edu (No relevant relationships reported)

2540 1:15 PM - 1:30 PM
Sagittal Plane Gait Mechanics are Associated with Femoral Cartilage Thickness After ACL Reconstruction
Derek N. Pamukoff¹, Tyler J. Moffitt¹, Michael N. Vakula², Skylar C. Holmes¹, Steven A. Garcia¹, Melissa M. Montgomery¹, Daniela Rubin, FACSM. ¹University of California, Fullerton, Fullerton, CA. (Sponsor: Daniela Rubin, FACSM) Email: dpamukof@fullerton.edu (No relevant relationships reported)
Inactivity in the United States

Minneapolis, Minnesota

Friday, June 1, 2018

1:30 PM - 1:45 PM
Intrinsic and Extrinsic Muscle Function in Rearfoot Strikers During Barefoot and Shod Treadmill Running
Summer Neborsky, Monika Patel, Nathan Ramer, Kahleigh Quinn, Thomas Martin, Juan C. Garbalosa. Quinnipiac University, Hamden, CT
Email: Summer.Neborsky@quinnipiac.edu
(No relevant relationships reported)

1:45 PM - 2:00 PM
Barefoot Gait Adaptations Remain With Use of the Barefoot Orthotic
Melissa Thompson1, Christopher Bent1, Kelsey Pryor1, Kristine Hoffmann2. 1Fort Lewis College, Durango, CO. 2Denver Health Medical Center, Denver, CO
Email: mathompson@fortlewis.edu
(No relevant relationships reported)

2:00 PM - 2:15 PM
The Influence of Maximal Running Shoes on Biomechanics Prior to and Following a 5K Run
Christine D. Pollard, Justin Ter Har, JI Hanninger, Marc F. Norcross. Oregon State University-Cascades, Bend, OR
Email: christine.pollard@osuccascades.edu
(No relevant relationships reported)

2:15 PM - 2:30 PM
Kinematics And Muscle Activity While Running In Minimalist, Neutral, And Ultra-cushioning Shoes
James Becker1, Brianne Borgia1. 1Montana State University, Bozeman, MT. 2University of Nevada, Las Vegas, Las Vegas, NV
Email: james.becker4@montana.edu
(No relevant relationships reported)

2:30 PM - 2:45 PM
Sex and Speed Influence Frontal Plane Kinematics During Running
Email: joachim@ortho.wisc.edu
(No relevant relationships reported)

2:45 PM - 3:00 PM
Lower Extremity Strength & Kinematic Variability in Healthy Runners During a Prolonged Run: Preliminary Analysis
Amanda Estep1, Steven Morrison1, Shane Caswell1, Nelson Cortes1. 1George Mason University, Manassas, VA. 2Old Dominion University, Norfolk, VA
Email: ncortes@gmu.edu
(No relevant relationships reported)

F-13 Free Communication/Slide - Physical Activity, Sedentary Behavior and Health: New Epidemiologic Findings
Friday, June 1, 2018, 1:00 PM - 3:00 PM
Room: CC-101CD

Chair: Charles E. Matthews, FACSM. National Cancer Institute, Rockville, MD
(No relevant relationships reported)

1:00 PM - 1:15 PM
Mortality Attributable to Sedentary Behavior and Physical Inactivity in the United States
Peter T. Katzmarzyk, FACSM, Emily F. Mire. Pennington Biomedical Research Center, Baton Rouge, LA
Email: peter.katzmarzyk@pbrc.edu
(No relevant relationships reported)

1:15 PM - 1:30 PM
Physical Activity Throughout Adulthood And Medicare Expenditures In Us Adults
Diamuid Coughlan1, Pedro Saint-Maurice, FACSM1, Susan Carlson2, Janet Fulton, FACSM2, Charles E. Matthews, FACSM2. 1National Cancer Institute, Bethesda, MD. 2Centers for Disease and Prevention, Atlanta, GA
Email: diamuid.coughlan@nih.gov
(No relevant relationships reported)

1:30 PM - 1:45 PM
Sitting Time And Quality Of Life In Office Workers Undergoing A Sedentary Behavior Intervention
Nirjhar Dutta1, Nathan R. Mitchell2, Sarah A. Rydell1, Meynard L. Toledo3, Sarah L. Mullane4, Miranda L. Larouche5, Matthew P. Buman, FACSM6, Mark A. Pereira7. 1University of Minnesota, Minneapolis, MN. 2Arizona State University, Phoenix, AZ. (Sponsor: Matthew P. Buman, FACSM)
Email: dutt0038@umn.edu
(No relevant relationships reported)
Sports Medicine has been a term used by many to describe different skills, research, of the puzzle in order to better inform the audience about both sides of the equation for fetal, child outcomes, is related to nutrition. This session will bring to surface this piece that is inextricably intertwined with this population exercising and maternal, We have had presentations and symposia regarding exercise during pregnancy. The big question that is inextricably intertwined with this population exercising and maternal, Physiologic and anatomic changes occur as athletes age. Life long physical activity affects these changes. Personal observation of this process will be explored and explained based on current scientific evidence. Editorial comments from a “Mature” athlete complement the presentation.

F-14 John R. Sutton Clinical Lecture - If I'd Known I Was Going to Live This Long, I'd Have Taken Better Care of Myself!
Friday, June 1, 2018, 1:00 PM - 1:50 PM
Room: CC-Ballroom B
Physiologic and anatomic changes occur as athletes age. Life long physical activity affects these changes. Personal observation of this process will be explored and explained based on current scientific evidence. Editorial comments from a “Mature” athlete complement the presentation.

F-15 Tutorial Lecture - The Untold Tale about Exercise and Pregnancy: What are They Eating?
Friday, June 1, 2018, 1:00 PM - 1:50 PM
Room: CC-Auditorium 2
We have had presentations and symposia regarding exercise during pregnancy. The big question that is inextricably intertwined with this population exercising and maternal, fetal, child outcomes, is related to nutrition. This session will bring to surface this piece of the puzzle in order to better inform the audience about both sides of the equation for improved pregnancy and child outcomes.

F-16 Exchange Lecture - American Medical Society for Sports Medicine Exchange Lecture- What is Sports Medicine?
Friday, June 1, 2018, 2:10 PM - 3:00 PM
Room: CC-205AB
Sports Medicine has been a term used by many to describe different skills, research, healthcare experience. The exchange lecture explores perceptions, relationships and healthcare culture around this term.

F-17 Tutorial Lecture - Influence of Respiratory vs Locomotor Muscle Blood Flow on Fatigue and Exercise Performance: A Two-way Street?!
Friday, June 1, 2018, 2:10 PM - 3:00 PM
Room: CC-101G
Competition for the available blood flow during high intensity exercise occurs between limb locomotor and respiratory muscles with implications for muscle fatigue and exercise performance. We review findings in humans and animal models in health and CHF in support of the postulate that sympathetic mediation of vascular conductance and blood flow distribution during exercise is regulated via the activation of metaboreflexes from both respiratory and limb musculature, thereby contributing to their exercise-induced fatigue.

F-18 Tutorial Lecture - Periodisation of CHO Intake for Training Adaptation and Performance - Where Does the Current Evidence Sit?
Friday, June 1, 2018, 2:10 PM - 3:00 PM
Room: CC-Auditorium 1
In the recent decade, we have developed a greater understanding of the cellular mechanisms of adaptation to training, leading to the concept of a periodised approach to carbohydrate (CHO) availability within the cycles and daily nutrition practices of athletes. This session will examine the current science behind the integration of various approaches (“train low”, “sleep/recover low”, and “train high”) to CHO availability in the athlete’s diet from the separate perspectives of evidence for beneficial cellular/whole body changes and the transfer to enhanced performance.

F-19 Colloquium - Periods, Performance, and the Pill- Effects of the Menstrual Cycle on Performance and Contraception Choices for the Modern Female Athlete
Friday, June 1, 2018, 2:10 PM - 3:00 PM
Room: CC-208AB
Emphasis has been placed on the dire consequences of oligoamenorrhea. However, at the other end of the spectrum, 1/3 of female athletes experience heavy menstrual bleeding (HMB) associated with negative performance effects. The hormonal nadir of menses may be an ideal time for achieving optimal sports performance, but effects of HMB often lead to self-sidelining of athletes. Positive and negative consequences of menstrual phase timing on performance will be explored. While oral contraceptive pills (OCPs) should not be given to “fix” oligoamenorrhea or HMB, appropriate indications for OCP prescriptions, available OCP formulations, and other contraceptive options will be discussed.
Mental health and well-being of collegiate athletes has a renewed focus by the NCAA. Athlete’s sleep quality and duration is increasingly recognized as contributing to emotional well-being & cognitive efficiency, but also to performance quality. In this session, we review recent related literature in the context of our experience/data from athletes at Roanoke College in assessing psychological and performance effects of relative sleep deprivation across the semester. Emphasis is on equipping sports medicine staff to recognize potential sleep-related diagnosis requiring further work up, assessment & testing, and risks/benefits of pharmacologic and non-pharmacologic interventions.

F-20 Tutorial Lecture - Too Tired to Perform: Sleep Deprivation and its Effect on Mood and Performance in the College Athlete
Friday, June 1, 2018, 2:10 PM - 3:00 PM
Room: CC-Ballroom B

Physical activity provides health benefits in persons across ages from children of preschool age to older adults in their ninth decade. Different research methods used to study the effects of physical activity on health across age groups have led to different paradigms to establish physical activity guidelines, and existing guidelines are characterized by abrupt differences across the transitions between broad age categories such as “youth” and “adult.” In this session members of the 2018 Physical Activity Guidelines Advisory Committee will discuss the challenges encountered in considering such as “youth” and “adult.” In this session members of the 2018 Physical Activity Guidelines Advisory Committee will discuss the challenges encountered in considering the types and amounts of physical activity associated with important health benefits in persons at three “transition” ages: preschoolers to school-age youth, school-age youth to young adults, and from young-old to old-old adults. Implications for public health guidance on physical activity and physical fitness will be discussed.

F-21 Tutorial Lecture - Transitional Ages in the Physical Activity Guidelines for Americans
Friday, June 1, 2018, 2:10 PM - 3:00 PM
Room: CC-Auditorium 2

Interactive, case-based, physical exam work-shop where attendees work in small groups led our associate faculty to demonstrate exam pearls, learn from each other and learn from the group at large.

F-22 Clinical Workshop-Hands On Demonstration - Examination of the Foot and Ankle:
Friday, June 1, 2018, 2:10 PM - 3:00 PM
Room: CC-200B

The workshop will present a short didactic introduction to foot and ankle injuries, followed by a hands-on demonstration of recognizing and diagnosing injuries to the foot and ankle as well as a focus on etiology and gait pathology. Conditions that will be addressed will be tibial stress syndrome, shin splints, posterior tibial tenosynovitis and dysfunction, inversion and eversion mechanism high and common ankle sprains, Achilles tendinitis and insertion calcific Achilles tendinosis, plantar fasciitis, functional structural hallux limits, sesamoiditis, turf toe injuries, stress fractures, Morton’s neuroma, tarsal tunnel syndrome, and other entities. The conclusion will demonstrate an abnormal gait pattern that was seen in the examination for the foot and ankle.

F-23 Clinical Workshop-Hands On Demonstration - Examination of the Foot and Ankle:
Friday, June 1, 2018, 2:10 PM - 3:00 PM
Room: CC-200H

The immune system is complex, distributed throughout the body, and highly active. Nutrients are necessary for the varied cells of the immune system to function optimally and respond appropriately to injury and invading viruses and bacteria. Immuno-nutrition is defined as the use of specific nutritional elements to support and modulate the immune system in a way that benefits a certain physiological stress condition, disease state, or injury. There is growing interest in immunonutrition support for athletes during heavy training cycles and competitive periods. Athletes undergo regular phases of physiological stress, and the immune system reflects this stress with transient decrements in immunosurveillance, increased inflammation, and correspondingly elevated risks of upper respiratory tract infections (URTIs). There is a growing appreciation for high quality nutrition support to mitigate the influence of demanding training schedules on the immune system of athletes.

F-24 Highlighted Symposium - Impact of Nutrition on Immune System Recovery from Heavy Exertion
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-Ballroom A

The workshop will present a short didactic introduction to foot and ankle injuries, followed by a hands-on demonstration of recognizing and diagnosing injuries to the foot and ankle as well as a focus on etiology and gait pathology. Conditions that will be addressed will be tibial stress syndrome, shin splints, posterior tibial tenosynovitis and dysfunction, inversion and eversion mechanism high and common ankle sprains, Achilles tendinitis and insertion calcific Achilles tendinosis, plantar fasciitis, functional structural hallux limits, sesamoiditis, turf toe injuries, stress fractures, Morton’s neuroma, tarsal tunnel syndrome, and other entities. The conclusion will demonstrate an abnormal gait pattern that was seen in the examination for the foot and ankle.

F-23 Clinical Workshop-Hands On Demonstration - Examination of the Foot and Ankle:
Friday, June 1, 2018, 2:10 PM - 3:00 PM
Room: CC-200H

The workshop will present a short didactic introduction to foot and ankle injuries, followed by a hands-on demonstration of recognizing and diagnosing injuries to the foot and ankle as well as a focus on etiology and gait pathology. Conditions that will be addressed will be tibial stress syndrome, shin splints, posterior tibial tenosynovitis and dysfunction, inversion and eversion mechanism high and common ankle sprains, Achilles tendinitis and insertion calcific Achilles tendinosis, plantar fasciitis, functional structural hallux limits, sesamoiditis, turf toe injuries, stress fractures, Morton’s neuroma, tarsal tunnel syndrome, and other entities. The conclusion will demonstrate an abnormal gait pattern that was seen in the examination for the foot and ankle.
F-25 Symposium - ACSM/AMSSM: CAQ Review Session (Part 2)
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-208AB

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.

2577 3:15 PM - 3:20 PM
Co-Chair: Kevin R. Vincent, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)

2578 3:15 PM - 3:20 PM
Co-Chair: Jason L. Zarenski, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)

2579 3:20 PM - 3:40 PM
Female Athlete Triad
Nailah Coleman, FACSM. Children's National Health System, Alexandria, VA
(No relevant relationships reported)

2580 3:40 PM - 4:00 PM
Sudden Cardiac Death and Hypertrophic Cardiomyopathy
Kimberly Harmon, FACSM. University of Washington, Seattle, WA
(No relevant relationships reported)

2581 4:00 PM - 4:20 PM
Apophysitis
Anastasia (Stacy) Fischer, FACSM. Nationwide Children’s Hospital, Columbus, OH
(No relevant relationships reported)

2582 4:20 PM - 4:40 PM
Shoulder Instability
Mederic M. Hall. University of Iowa, Iowa City, IA
(No relevant relationships reported)

2583 4:40 PM - 5:00 PM
Elbow
Tracy R. Ray, FACSM. Duke University, Durham, NC
(No relevant relationships reported)

5:00 PM - 5:15 PM
Overall Discussion

F-26 Symposium - Emerging Mechanisms for Exercise Effects on Muscle Wasting and Anabolic Resistance
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-101AB

Skeletal muscle wasting and resistance to anabolic stimuli are commonplace aspects to many chronic disease conditions. Importantly, the loss of muscle mass contributes not only to functional impairments but also increased mortality rates during many disease states. In this symposium we will discuss emerging mechanisms for muscle wasting and the resistance to anabolic stimuli including nutrients and exercise conditions such as cancer cachexia. Specifically, we will highlight the emerging role of skeletal muscle oxidative metabolism and stress response genes in regulation of skeletal muscle mass.

2584 3:15 PM - 3:20 PM
Chair: Nicholas P. Greene, University of Arkansas, Fayetteville, AR
(No relevant relationships reported)
Recent research findings and athletic performances exhibit how individuals with amputations can achieve levels of function not previously thought possible. Considerable research in device development and rehabilitation has focused on transforming a prosthesis from an external tool used by a person to an integrated surrogate that becomes a part of a person. We will discuss the interplay between what goes onto and into a person after a lower limb amputation to return them to an active lifestyle. We will also focus on how prostheses and rehabilitation interact to optimize quality of movement for injury prevention and performance.

**Room:** CC-101G

**Chair:** Elizabeth Russell Esposito, Center for the Intrepid, Ft. Sam Houston, TX

**Reported Relationships:** A.H. Hansen: Intellectual Property; Disclosures: I am an inventor on several patents related to the technologies.

---

**Room:** CC-Ballroom B

**Chair:** Dane B. Cook, FACSM. William S. Middleton Memorial Veterans Hospital, Madison, WI

**Reported Relationships:** No relevant relationships reported

---

**Room:** CC-Ballroom B

**Chair:** Matthew P. Buman, FACSM. Arizona State University, Phoenix, AZ

**Reported Relationships:** No relevant relationships reported
American College of Sports Medicine

2608 4:10 PM - 4:35 PM
Cardiorespiratory Responses to Exercise in Chronic Multisymptom Illness
Michael J. Falvo, VA NJ Health Care System, East Orange, NJ
(No relevant relationships reported)

2609 4:35 PM - 5:00 PM
Investigating the Neural Substrates of the Effect of Acute Physical Exercise on Cognitive Fatigue: A Pilot Study
Glenn R. Wylie, Kessler Foundation, West Orange, NJ
(No relevant relationships reported)

5:00 PM - 5:15 PM
Overall Discussion

F-31  Thematic Poster - Cardiac Physiology
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-Lower level L100C

2610 Chair: Tracy Baynard, FACSM. University of Illinois at Chicago, Chicago, IL
(No relevant relationships reported)

2611 Board #1 3:15 PM - 5:15 PM
Effects of Increased Preload on Cardiac Function in Younger vs Older Women
David N. Proctor, FACSM, Samuel J. Ridout, Zhaoxue Gao, Joaquín U. González, Daniela Jin-Kwang Kim, Matthew D. Muller, FACSM, Urs A. Leuenberger, Penn State University, University Park, PA; Kaiser Permanente, San Jose, CA; Milton S. Hershey Medical Center, Hershey, PA; Texas Tech University, Lubbock, TX; Case Western Reserve University School of Medicine, Cleveland, OH
(No relevant relationships reported)

2612 Board #2 3:15 PM - 5:15 PM
Critical Speed in Heart Failure Rats: The Central Determinant of Performance
Jesse C. Craig, Joseph H. Merino, Daniel M. Hirai, Trenton D. Colburn, Ayaka Tabuchi, Jacob T. Caldwell, Carl J. Ade, Timothy I. Musch, FACSM, David C. Poole, FACSM. Kansas State University, Manhattan, KS (Sponsor: David C. Poole, FACSM)
(No relevant relationships reported)

2613 Board #3 3:15 PM - 5:15 PM
Non-invasive Assessment Of Right And Left Ventricular Cardiac Output After Changes In Gravity And Posture
Uwe Hoffmann, Jessica Koschate, Uwe Drescher, Lutz Thieschafer, Daniel Dumitrescu, Andreas Werner. German Sport University, Koeln, Germany; University of Cologne, Koeln, Germany; German Air Force - Centre of Aerospace Medicine, Koenigsbrueck, Germany
Email: u.hoffmann@dsds-koeln.de
(No relevant relationships reported)

2614 Board #4 3:15 PM - 5:15 PM
Right Ventricular Remodeling In Olympic Athletes During 8 Years Of High-intensity Training
Vincent L. Aengevaeren, Stefano Caselli, Maria T.E. Hopman, FACSM; Thijs M.H. Eijsvogels, Antonio Pellegrin, Radboud University Medical Center, Nijmegen, Netherlands; Institute of Sports Medicine and Science, Rome, Italy (Sponsor: Maria Hopman, FACSM)
Email: Vincent.Aengevaeren@radboudumc.nl
(No relevant relationships reported)

F-32  Thematic Poster - Military Physiology: Energy Expenditure
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-Lower level L100F

2618 Chair: David DeGroot, FACSM. Tripler Army Medical Center, Tripler AMC, HI
(No relevant relationships reported)

2619 Board #1 3:15 PM - 5:15 PM
Prediction Equation For Estimating Total Daily Energy Requirements Of Special Operations Personnel
Lee M. Margolis, Nicholas D. Barringer, Holly L. McCung, Aaron P. Crombie, Stefan M. Pasiakos, FACSM. United States Army Research Institute of Environmental Medicine, Natick, MA; US Military-Baylor University Graduate Program in Nutrition, US Army Medical Department Center & School US Army Health Readiness Center of Excellence, San Antonio, TX (Sponsor: Stefan M. Pasiakos, FACSM)
Email: lee.m.margolis.ctr@mail.mil
(No relevant relationships reported)

2620 Board #2 3:15 PM - 5:15 PM
Comparison of Pandolf Equation and Measured Metabolic Cost of Load Carriage in UK Military Personnel
Christopher A J Vine, Sarah L. Coakley, Stephen D. Myers, Ella F. Walker, Carla A. Rue, Ben J. Lee,essa R. Flood, Julianne Doherty, Beverley Hale, Mark Rayson, Joseph J. Knulpik, FACSM, Deborah Gebhardt, FACSM, Bradley C. Nind, FACSM, Pietro E H Brown, Sarah Jackson, Julie P. Greeses, Sam D. Blacker, University of Chichester, Chichester, United Kingdom; Mark Rayson Consulting Limited, Bristol, United Kingdom; Fitness, Injury, and Performance Analysis, Abingdon, MD; Human Resources Research Organization, Alexandria, VA; University of Pittsburgh, Pittsburgh, PA; Institute of Naval Medicine, Royal Navy, Gosport, United Kingdom; Army Personnel Research Capability, Army HQ, Andover, United Kingdom
(No relevant relationships reported)

www.acsm.org
<table>
<thead>
<tr>
<th>Paper Number</th>
<th>Title</th>
<th>Authors</th>
<th>Email(s)</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>P184</td>
<td>Final Program</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2621</td>
<td>Board #3 3:15 PM - 5:15 PM Pandora Equation Efficacy In Predicting Gender-Specific Energy Expenditure Differences While Carrying Light To Heavy Loads</td>
<td>Victoria A. Gregory, Charles S. Fulco, Peter N. Frykman, Rebecca E. Fellin, Nathaniel I. Smith, Joseph F. Seay. U.S. Army Institute of Environmental Medicine, Natick, MA</td>
<td><a href="mailto:vgregf6@gmail.com">vgregf6@gmail.com</a></td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2622</td>
<td>Board #4 3:15 PM - 5:15 PM Comparison of Training Intensity, Energy Balance, and Sleep Duration in British Army Officer Cadets between Base and Field Exercise</td>
<td>Sarah C. Needham-Beck¹, Andrew G. Siddall, Jane E.S. Thompson, Steven D. Powell¹, Victoria C. Edwards¹, Sam D. Blacker¹, Sarah Jackson¹, Julie P. Greaves¹, Steve D. Myers¹. ¹University of Chichester, Chichester, United Kingdom. ²Army Personnel Research Capability, Army HQ, United Kingdom. Email: <a href="mailto:s.needham-beck@chi.ac.uk">s.needham-beck@chi.ac.uk</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>2623</td>
<td>Board #5 3:15 PM - 5:15 PM Timing of Energy and Macronutrient Intake of British Army Officer Cadets during Military Training</td>
<td>Victoria C. Edwards¹, Steve D. Myers¹, Andrew G. Siddall¹, Jane E.S. Thompson¹, Steven D. Powell¹, Sarah Jackson¹, Julie P. Greaves¹, Sophie L. Wardle¹, Sam D. Blacker¹. ¹University of Chichester, Chichester, United Kingdom. ²Army HQ, Andover, United Kingdom. Email: <a href="mailto:v.edwards@chi.ac.uk">v.edwards@chi.ac.uk</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>2624</td>
<td>Board #6 3:15 PM - 5:15 PM Comparison of Research- and Consumer-grade Energy Expenditure Estimation Methods during 10 Days of Military Training</td>
<td>Andew G. Siddall¹, Jane E.S. Thompson¹, Steven D. Powell¹, Victoria C. Edwards¹, Sarah S. Kefleyale¹, Priya A. Singh¹, Elise R. Orford¹, Michelle C. Venables¹, Sarah Jackson¹, Julie P. Greaves¹, Sam D. Blacker¹, Steve D. Myers¹. ¹University of Chichester, Chichester, United Kingdom. ²Medical Research Council, Cambridge, United Kingdom. ³Army HQ, Andover, United Kingdom. Email: <a href="mailto:a.siddall@chi.ac.uk">a.siddall@chi.ac.uk</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>2625</td>
<td>Board #7 3:15 PM - 5:15 PM Comparison Of Daily Energy Expenditure And Weekly Physical Activity Exposure Estimated Using Consumer And Research-grade Physical Activity Monitors During Officer Cadet Initial Military Training</td>
<td>Steven D. Powell¹, Andrew G. Siddall¹, Jane E.S. Thompson¹, Victoria C. Edwards¹, Sarah S. Kefleyale¹, Priya A. Singh¹, Elise R. Orford¹, Michelle C. Venables¹, Sarah Jackson¹, Julie P. Greaves¹, Sam D. Blacker¹, Steve D. Myers¹. ¹University of Chichester, Chichester, United Kingdom. ²Army HQ, Andover, United Kingdom. Email: <a href="mailto:s.powell@chi.ac.uk">s.powell@chi.ac.uk</a></td>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
<tr>
<td>2626</td>
<td>Board #8 3:15 PM - 5:15 PM The Use of Modern Technology to Evaluate Shipboard Metabolic Rate Aboard a U.S. Navy Ship While Deployed in the Persian Gulf</td>
<td>Jay H. Heaney¹, Douglas M. Jones¹, Katherine M. Wilson¹, Eric S. Duckworth¹, Melissa D. Laird¹, Magnus Perkins¹. ¹Naval Health Research Center, San Diego, CA. ²Leidos Inc, San Diego, CA. ³USS Nimitz, Bremerton, WA</td>
<td><a href="mailto:jay.h.heaney.civ@mail.mil">jay.h.heaney.civ@mail.mil</a></td>
<td>(No relevant relationships reported)</td>
</tr>
</tbody>
</table>

### Thematic Poster - Movement Biomechanics in People with Obesity

**F-33**

**Friday, June 1, 2018, 3:15 PM - 5:15 PM**

**Room:** CC-Lower level L100E

**Chair:** Clare E. Milner, FACSM. Drexel University, Philadelphia, PA

(No relevant relationships reported)

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

**Differences in Jump Landing Mechanics, Strength, and Vertical Jump Height Between Obese and Non-Obese Children**

Bradley Bowser, Claire Sylvestre, Christopher Kaddatz. South Dakota State University, Brookings, SD. (Sponsor: Matt Vukovich, FACSM)

Email: bradley.bowser@sdsstate.edu

(No relevant relationships reported)

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

**Gait Characteristics In Persons With COPD Who Have Obesity**

Micah J. Munoz, Ann Marie N. Wilson, Christian P. Manhard, Stephen Bailey, FACSM, Gyts Balitones, Srikant Vallabhajosula. Elon University, Elon, NC. (Sponsor: Dr. Stephen Bailey, FACSM)

Email: mmunoz3@elon.edu

(No relevant relationships reported)

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

**Kinetic Features and Recent History of Lower Extremity Injury in Overweight and Obese Runners**

Heather K. Vincent, FACSM, Cong Chen, Michelle L. Bruner, Daniel C. Herman, FACSM, Joseph G. Wasser, Kevin R. Vincent, FACSM, University of Florida, Gainesville, FL

Email: vincveh@ortho.ufl.edu

(No relevant relationships reported)

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

**Relative Muscle Strength Is Associated With Obesity-induced Biomechanical Adaptations Of The Trunk During Sit-to-stand**

Lance M. Bollinger, Amanda L. Ransom, Rebekah F. Seay. University of Kentucky, Lexington, KY

Email: lance.bollinger@uky.edu

(No relevant relationships reported)

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

**Fatigability of the Dorsiflexor Muscles in People with Type 2 Diabetes and Controls**

Kevin Ryan, Jonathon Senefeld, Sarah D’Astice, Bonnie Schlimmer-Delap, Sandra Hunter, FACSM. Marquette University, Milwaukee, WI. (Sponsor: Dr. Sandra Hunter, FACSM)

Email: kevin.ryan@marquette.edu

(No relevant relationships reported)

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

**Quadriiceps Impairment Is Associated With Knee Mechanics During Gait In Obese Young Adults**

Michael N. Vakula¹, Koren L. Fisher¹, Pablo B. Costa¹, Derek N. Pamukoff². ¹Utah State University, Logan, UT. ²California State University, Fullerton, Fullerton, CA. (Sponsor: Daniela Rubin, PhD, FACSM)

(No relevant relationships reported)
Thematic Poster - Muscle Physiology in Muscular Dystrophy and Cancer
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-Lower level L100H

F-34
Chair: Dawn Lowe, FACSM. University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

Board #1
3:15 PM - 5:15 PM
Structural Mechanism For Small-molecule Activation Of The Sera Calcium Pump In Muscular Dystrophy
Email: carlf4763@umn.edu
(No relevant relationships reported)

Board #2
3:15 PM - 5:15 PM
Isometric Training Increases Strength and Improves Pathophysiology Of Dystrophic Skeletal Muscle
Angus Lindsay, James M. Ervasti, Dawn A. Lowe, FACSM. University of Minnesota, Minneapolis, MN. Georgia State University, Atlanta, GA
Email: alindsay@umn.edu
(No relevant relationships reported)

Board #3
3:15 PM - 5:15 PM
Recovery of Membrane Excitability in Dystrophic Skeletal Muscle Following Eccentric Contractions
Cory W. Baumann1, Gordon L. Warren, FACSM1, Dawn A. Lowe, FACSM.1 University of Minnesota, Minneapolis, MN.2 Georgia State University, Atlanta, GA
Email: cbumann@umn.edu
(No relevant relationships reported)

Board #4
3:15 PM - 5:15 PM
The Effect of Exercise Interventions on Muscle Fiber Type in mdx Mice
Matthew C. Kostek, FACSM, Kailey Omstead. Duquesne University, Pittsburgh, PA
Email: kostekm@duq.edu
(No relevant relationships reported)

Board #5
3:15 PM - 5:15 PM
The Effect of Creatine and Creatinine on Myocellular Injury in Doxorubicin-Treated Skeletal Muscle Myoblasts
Eric Bredahl1, Wisam Najdawi2, Sarah Hook1, Joan Eckerson, FACSM1, Jake Siedlik1, Kristen Drescher1. Creighton University, Omaha, NE. Creighton University School of Medicine, Omaha, NE. (Sponsor: Dr. Joan M. Eckerson, FACSM)
Email: ericb Redahl@creighton.edu
(No relevant relationships reported)

Board #6
3:15 PM - 5:15 PM
Effect of Resistance Training on Contractile Force Production during Doxorubicin-Treatment
Mikayla Kaufenberg1, Allison Tigner1, Sarah Hook1, MacKenzie Twaddell1, Meghan Wagner1, Eric Bredahl1, Jake Siedlik1, Joan Eckerson, FACSM1, Kristen Drescher1. Creighton University, Omaha, NE. Creighton University School of Medicine, Omaha, NE. (Sponsor: Dr. Joan M. Eckerson, FACSM)
Email: mikayla_kaufenberg@creighton.edu
(No relevant relationships reported)

Board #7
3:15 PM - 5:15 PM
Cancer Environments Effect on Skeletal Muscle mTORC1 Regulation by Physical Activity and Feeding in Mice
Brittany Counts, Brandon VanderVeen, Justin Hardee, Dennis Fix, Ryan Montvalt, James Carson, FACSM. University of South Carolina, Columbia, SC. (Sponsor: Dr. James Carson, FACSM)
(No relevant relationships reported)
2649 3:15 PM - 5:15 PM
Blunted Muscle Protein Synthetic Response To Feeding And Resistance Exercise In Obese Young Adults
Email: bealsjw@gmail.com
(No relevant relationships reported)

2650 3:15 PM - 5:15 PM
The Effect of Pre Sleep Casein Protein Consumption on Next Morning Resting Metabolic Rate in Resistance Trained Women
Brittany R. Allman, Margaret C. Morrissey, Michael J. Ormsbee, FACSM, Florida State University, Tallahassee, FL.
(No relevant relationships reported)

2651 3:15 PM - 5:15 PM
Higher Protein Intakes Enhance Whole Body Protein Metabolism and Exercise Performance in Endurance-Trained Males
Eric Williamson, Hiroyuki Kato, Kimberly A. Volterman, Daniel R. Moore. University of Toronto, Toronto, ON, Canada
Email: eric.williamson@mail.utoronto.ca
(No relevant relationships reported)

F-36 Free Communication/Slide - Physical Activity Promotion and Intervention Strategies
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-Mezzanine M100D

Chair: Catrine Tudor-Locke, FACSM. University of Massachusetts Amherst, Amherst, MA
(No relevant relationships reported)

3:15 PM - 3:30 PM
Physical Activity Maintenance Among African American Women: Factors Associated with Lapses and Recovery
Amber W. Kinsey1, Melicia C. Whitt-Glover, FACSM2, Michelle Segar2. 1University of Alabama at Birmingham, Birmingham, AL. 2Gramercy Research Group, Winterton-Salem, NC. (Sponsor: Olivia Affuso, FACSM)
Email: akinsey@uab.edu
(No relevant relationships reported)

3:30 PM - 3:45 PM
African American Women and Outdoor Physical Activity: Understanding Patterns and Group Engagement
Olivia Affuso, FACSM1, Amber W. Kinsey1, Melicia C. Whitt-Glover, FACSM2, Michelle Segar2. 1University of Alabama at Birmingham, Birmingham, AL. 2Gramercy Research Group, Winterton-Salem, NC. (Sponsor: Olivia Affuso, FACSM)
Email: oaffuso@uab.edu
(No relevant relationships reported)

3:45 PM - 4:00 PM
Incentivizing Physical Activity in American Indian Adolescents At Risk For Metabolic Disorders
Kevin R. Short1, Jennifer Q. Chadwick2, Mary A. Tullier1, Lisa Wolbert1, Charlotte Coleman2, David F. Wharton1, Dannielle E. Branam2, Tamela K. Cannady2, Kenneth C. Copeland1. 1University of Oklahoma Health Sciences Center, Oklahoma City, OK. 2Chocotaw Nation of Oklahoma, Tahkina, OK. (Sponsor: Olivia Affuso, FACSM)
Email: kevin-short@ouhsc.edu
(No relevant relationships reported)

4:00 PM - 4:15 PM
Effect Of An Exercise Counselling Clinic On Exercise Behaviour In Men With Prostate Cancer.
Sarah Weller1, Phil Pollock2, Maria Spillane1, Eugenia Wu2, Monita Sundar1, Larry Goldenberg1, Celestia Higano1, Kristin L. Campbell1. 1University of British Columbia, Vancouver, BC, Canada. 2Vancouver Prostate Centre, Vancouver, BC, Canada. (Sponsor: Washington, Seattle, WA)
Email: sarah.weller@uhc.ca
(No relevant relationships reported)

4:15 PM - 4:30 PM
Exercise Prescription in Cancer Survivors: What Explains Poor Retention?
Nicole J. Richards1, Cynthia Villalobos1, Justin C. Brown2, Paul D. Vosti3, Courtney D. Jensen1. 1University of the Pacific, Stockton, CA. 2Harvard University, Cambridge, MA. 3St. Joseph’s Medical Center, Stockton, CA. (Sponsor: Kathryn H. Schmitz, FACSM)
Email: n_richards1@u.pacific.edu
(No relevant relationships reported)

4:30 PM - 4:45 PM
Effects Of Three-stage Training Program On Functional Fitness And Physical Activity For Community-dwelling Old-old Japanese
Hirosi Kohn2, Hidenori Asai2. 1TOYO University Faculty of HUMAN Life Design, Asako-shi, Saitama, Japan. 2Ehime University, Matsuyama-shi, Ehime, Japan
Email: kohno@toyo.jp
(No relevant relationships reported)

4:45 PM - 5:00 PM
Lifestyle Strategies to Support Sustained Physical Activity after Intentional Weight Loss: Results from MAINTAIN-PE Trial
Molly B. Conroy, FACSM1, Bethany B. Gibbs2, Margaret P. Lott2, Rachel Hess2, Cindy Bryce2, Gary S. Fischer2, Dana Tudorascu1, Diane Corner1, Laurey Simkin-Silverman3, Kimberly Huber2, Kathleen M. McGinty1. 1University of Utah, Salt Lake City, UT. 2University of Pittsburgh, Pittsburgh, PA. 3University of Miami, Miami, FL.
Email: Molly.Conroy@upmc.edu
(No relevant relationships reported)

5:00 PM - 5:15 PM
Perceived Physical Fatigability Improves after a Weight Management Intervention in Obese Older Adults
Email: epidnwg@pitt.edu
(No relevant relationships reported)

F-37 Free Communication/Slide - Strength Testing/Training
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-Mezzanine M100F

Chair: Kyle Sunderland. High Point University, High Point, NC
(No relevant relationships reported)

3:15 PM - 3:30 PM
Comparison of the Firefighter Candidate Physical Ability Test to Weight Lifting Exercises in Firefighters
Charity Lane, Dustin Hardwick, Thomas Janus, O’Dane Brady, John Mayer, FACSM. University of South Florida, Tampa, FL. (Sponsor: John Mayer, FACSM)
Email: charitylane@health.usf.edu
(No relevant relationships reported)
American College of Sports Medicine

F-38 Clinical Case Slide - Hip and Pelvis III
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-200E

Chair: Benjamin Hasan, Northwestern Community Hospital Medical Group, Arlington Heights, IL
(No relevant relationships reported)

F-39 Clinical Case Slide - Knee IV
Friday, June 1, 2018, 3:15 PM - 5:15 PM
Room: CC-200F

Chair: Mark E. Lavallee, FACSM. Wellspan York Hospital, South Bend, IN
(No relevant relationships reported)

Discussant: Ashley Zapf, Andrews Institute, Woodbridge, VA
(No relevant relationships reported)

Discussant: Jessie R. Fudge, FACSM. Kaiser Permanente Washington, Everett, WA
(No relevant relationships reported)
A Rare Cause of Knee Pain in a Healthy Male Ultrasound Runner
Pierre L. Viviers, FACSM, Riaan Dreyer, Jeandré Viljoen, Wayne Derman. Stellenbosch University, Stellenbosch, South Africa
Email: plviviers@sun.ac.za
(No relevant relationships reported)

Unusual Knee Pain in a Volleyball Player
Adam Lewno, Daniel R. Laeders. University of Michigan, Ann Arbor, MI. (Sponsor: Robert Kinningham, FACSM)
(No relevant relationships reported)

Knee Pain in a High School Soccer Player
Brian J. Schutzbach1, Robert Gillis2. Wellspan Health, York, PA. 1Wellspan Health, Gettysburg, PA. (Sponsor: Mark Lavallee M.D., FACSM)
Email: brian.j.schutzbach@gmail.com
(No relevant relationships reported)

Knee Injury - Soccer
Matthew C. Hess, Garry W. K. Ho, FACSM. VCU-Fairfax Family Practice Sports Medicine Fellowship, Fairfax, VA. (Sponsor: Garry W. K. Ho, MD, FACSM, RMSK, FACSM)
(No relevant relationships reported)

Knee Snapping After Arthroscopy Diagnosed With Ultrasound In A Runner And Weightlifter: A Case Report
(No relevant relationships reported)

Snapping Knee After Knee Arthroplasty In Recreational Athlete
Angela N. Cortez, Tracy Hoeg, Brian A. Davis, FACSM. University of California at Davis, Sacramento, CA. (Sponsor: Brian Adam Davis, FACSM)
Email: ancoretz@ucdavis.edu
(No relevant relationships reported)

Clinical Case Slide - Medical Issues IV
Friday, June 1, 2018, 3:15 PM - 4:55 PM
Room: CC-101CD

Chair: Shawn F. Kane, FACSM. US Army, Carthage, NC
(No relevant relationships reported)

Discussant: Poonam P. Thaker, FACSM. Presence Resurrection Sports Medicine Fellowship, Chicago, IL
(No relevant relationships reported)

Discussant: George Gunter Pujaalte, FACSM. Mayo Clinic, Jacksonville, FL
(No relevant relationships reported)

Recurrent Chest Pain in an 18 Year Old Male with a History of Viral Perimyocarditis
Paul C. Goleb, Jr, Kyle Yost, Andrew Tucker. University of Maryland Medical Center, Baltimore, MD
Email: paul.goleb@gmail.com
(No relevant relationships reported)
F-43  Tutorial Lecture - Thinking Outside the Block: Monitoring Walkability Using Traditional and Novel Approaches
Friday, June 1, 2018, 3:15 PM - 4:05 PM
Room: CC-Auditorium 2

Communities can support physical activity for people of all ages and abilities by promoting walkability. The purpose of this tutorial is to describe three different approaches for conducting surveillance of walkability in the United States. First, speakers will review existing data sources and associated estimates from traditional (e.g., health surveys) and non-traditional sources (e.g., GIS data). Second, speakers will explore options for conducting on-the-ground audits for surveillance. Finally, speakers will discuss how to advance surveillance in this area through employing new methods, such as citizen science and automated photo analysis.

2700  Susan A. Carlson. Centers for Disease Control and Prevention, Atlanta, GA
(No relevant relationships reported)

2701  J. Aaron Hipp. North Carolina State University, College of Natural Resources, Raleigh, NC
(No relevant relationships reported)

F-44  Clinical Workshop-Hands On Demonstration - Shoulder Exam
Friday, June 1, 2018, 3:15 PM - 4:05 PM
Room: CC-200B

In this session, participants will review shoulder anatomy and physical examination. In the workshop groups we will demonstrate and have the participants practice the various shoulder exam techniques and specialized tests. There will be time to answer specific questions and diagnose problems that the participants have encountered.

2702  Peter Gerbino, FACSM. Monterey Sports Medicine, Monterey, CA
(No relevant relationships reported)

F-45  Clinical Workshop-Hands On Demonstration - Wearable Sensors and the Instrumented Assessment of Balance and Gait after Concussion
Friday, June 1, 2018, 3:15 PM - 4:05 PM
Room: CC-200H

The proposed clinical workshop will provide a hands on demonstration using wearable sensors to measure balance and gait. It will provide clinicians, athletic trainers and researchers with a working example of how objective measurement can aid in the assessment of concussion and track the recovery after injury. Description on the strengths and weaknesses of balance testing, tandem gait testing, and gait testing under single-, dual- and more complex task(s) will be discussed. This workshop will provide attendees with up-to-date information on the emerging role of wearable technology in concussion care.

2703  Laurie King. Oregon Health & Science University, PORTLAND, OR
(No relevant relationships reported)

2704  Lucy Parrington. Oregon Health & Science University, PORTLAND, OR
(No relevant relationships reported)

F-46  Exchange Lecture - European College of Sport Science Exchange Lecture - Exercise is Medicine at the Workplace: A Feasible Option?
Friday, June 1, 2018, 4:25 PM - 5:15 PM
Room: CC-Auditorium 1

The prevalence of lifestyle-related, chronic disease is still on the rise. Physical inactivity is the 4th leading cause of death due to lifestyle-related diseases, according to the WHO. Therefore, it is important to enhance population levels of physical activity worldwide. This is easier said than done, since human nature is geared towards the preservation of energy. Interventions to enhance levels of physical activity can be directed at either the individual (such as through the ‘Exercise is Medicine’ initiative), or at the environment (or both). These interventions are probably best delivered to a ‘captive’ audience, to maximize intervention effect. Two clear examples of such a captive audience are found in the healthcare setting and in the workplace. The purpose of this presentation is to present research findings of interventions that have been carried out in the medical office setting and at the workplace both for people and places, with the aim to enhance levels of daily physical activity. Also, the results will be presented of worksite exercise interventions for disabled workers with non-specific low back pain, with the aim to have them return-to-work. Finally, some issues related to barriers and facilitators of both healthcare and worksite physical activity promotion will be discussed.

2705  Robert E. Sallis, FACSM. Kaiser Permanente Medical Center, Fontana, CA
(No relevant relationships reported)

2706  Willem van Mechelen, FACSM. VU University Medical Center, Amsterdam Public Health Research Institute, Amsterdam, Netherlands
Reported Relationships: W. van Mechelen: Honoraria; non-executive board member of Arbo Uni eV, shareholder-director of VUmc spin-off company Evalua Nederland B.V.

F-47  Colloquium - Controversies in Anterior Cruciate Ligament Injury Prevention, Management and Rehabilitation
Friday, June 1, 2018, 4:25 PM - 5:15 PM
Room: CC-102EF

This session will explore several areas of controversy regarding ACL injury, including questions such as the need/efficacy for injury risk screening, the need for surgical reconstruction after injury vs non-operative care, the role of the Anterolateral Ligament in ACL injured knees and the need for reconstruction, and factors for return play decision-making and the impact on recurrent injury rates. This will be approached by a round table discussion among experts with a range of backgrounds and viewpoints with short quick-hitting presentations by the submitter to introduce new questions for debate. Audience participation will be highly encouraged.

2707  Daniel C. Herman, FACSM. University of Florida, Gainesville, FL
(No relevant relationships reported)

2708  Mark R. Hutchinson, FACSM. University of Illinois at Chicago, Chicago, IL
(No relevant relationships reported)

2709  Timothy Hewett, FACSM. Mayo Clinic, Rochester, MN
(No relevant relationships reported)

2710  Darin A. Padua. University of North Carolina at Chapel Hill, Chapel Hill, NC
(No relevant relationships reported)

2711  Peter Gerbino, FACSM. Monterey Joint Replacement and Sports Medicine, Monterey, CA
(No relevant relationships reported)

F-48  Tutorial Lecture - Prescribing Exercise For Frail Cancer Survivors: How Do We Do It?
Friday, June 1, 2018, 4:25 PM - 5:15 PM
Room: CC-Auditorium 2

There is overwhelming evidence for positive effects of exercise in cancer survivors. However, most research focuses on younger and curatively treated patients whereas more than half of the cancer population is older and/or suffers from advanced disease. These frail survivors also benefit from exercise, but training interventions are more challenging. The present symposium provides a provocative scientific overview and practical advice on how to prescribe exercise interventions to meet frail cancer survivors’ needs, improve physical functioning and quality of life, prevent falls, reverse frailty and deal with bone metastases, a potential contraindication for exercise.

2712  Kerri Winters-Stone, FACSM. Oregon Health & Science University, Portland, OR
(No relevant relationships reported)

2713  Friederike Rosenberger. National Center for Tumor Diseases, Heidelberg University Hospital, Heidelberg, Germany
(No relevant relationships reported)
Clinical Workshop-Hands On Demonstration - Care of the Professional Musician

Friday, June 1, 2018, 2:00 PM - 3:30 PM
Room: CC-200B

This session will feature local musicians who will perform, discuss common medical issues and then be examined by local performing arts medicine specialists. The session will include three different instrumentalists / vocalists and the participants will rotate through stations to understand the nuances of each genre. Currently scheduled are Nina Tso-Ning Fan, Violinist, St Paul Chamber Orchestra https://content.thespco.org/people/nina-tso-ning-fan/; Robert Dorer, Trumpet, Minnesota Orchestra, and John De Haan, Operatic Tenor and Associate Voice Professor, University of MN School of Music, https://cla.umn.edu/about/directory/profile/dehaa006. Please join us and explore the challenges that these elite musicians face.

Paul Schaefer. HealthPartners/Allina, Twin Cities, MN
(No relevant relationships reported)

Melody Hubris. University of Illinois at Chicago, Chicago, IL
(No relevant relationships reported)

Clinical Workshop-Hands On Demonstration - Hand/Wrist Exam

Friday, June 1, 2018, 4:25 PM - 5:15 PM
Room: CC-200B

Hand and wrist acute injuries and chronic conditions are commonly seen in a sports medicine practice. This workshop will review a comprehensive hand and wrist exam with case based special tests and a chance for everyone to practice their skills.

William W. Dexter, FACSM. Maine Medical Center, South Portland, ME
(No relevant relationships reported)

Heather Gillespie, FACSM. Maine Medical Partners Orthopedics and Sports Medicine, South Portland, ME
(No relevant relationships reported)

Free Communication/Poster - Energetics

Friday, June 1, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

Energetic Profile of a Wheelchair Racing 1500 m Simulation Test
Lingling Zhang1, Xueping Wu1, Yongming Li1; Shanghai University of Finance and Economics, Shanghai, China. 1Shanghai University of sport, Shanghai, China
(No relevant relationships reported)

Leucocyte Telomere Length of Master Endurance Athletes is Associated to Resting Nitrice Oxide: Possible Role of Redox Balance.
Email: cvsousa89@gmail.com
(No relevant relationships reported)

The Energy Expenditure and Relative Exercise Intensity During Pund
Abigail L. Ryskey, John P. Porcari, 54601, FACSM, Kimberly Radlje, Susan Brannwell, Carl Foster, FACSM. University of Wisconsin - La Crosse, La Crosse, WI. (Sponsor: John Porcari, FACSM)
Email: ryskey.abigail@uwlax.edu
(No relevant relationships reported)

Validation of Overall Energy Expenditure Measurements in the Fitbit Charge HR 2 and Apple Watch
Kaigang Li, Kayla Nuss, Elizabeth A. Thomson, Ashley Comstock, Sophie Blake, Steven Reinwald, Richard E. Pimentel, Brian Tracy, FACSM. Colorado State University, Fort Collins, CO
Email: kaigang.li@colostate.edu
(No relevant relationships reported)

Comparison of Reported Energy Expenditure from Polar M430 vs. Polar V800 vs. Actual Energy Expenditure
Olivia Hanzel, Grace Shryack, Joshua Patterson, Courtney Willoughby, Bryan Smith. Southern Illinois University Edwardsville, Edwardsville, IL
(No relevant relationships reported)

Predicting Energy Expenditure of an Acute Bout of Resistance Exercise in Men and Women
Danielle M. Kravits1, Brad S. Lambert2, Jason R. Lytle3, Stephen E. Martin2, John S. Green, FACSM4, Stephen F. Crouse, FACSM5.
‘Texas A&M University, College Station, TX. 1Houston Methodist, Houston, TX. (Sponsor: Stephen F. Crouse, FACSM)
Email: brwashell@coastal.edu
(No relevant relationships reported)

Brandi R. Washell, Coastal Carolina University, Conway, SC. (Sponsor: George Lyerly, FACSM)
Email: brwashell@coastal.edu
(No relevant relationships reported)

Validation of Overall Energy Expenditure Measurements in the Fitbit Charge HR 2 and Apple Watch
Kaigang Li, Kayla Nuss, Elizabeth A. Thomson, Ashley Comstock, Sophie Blake, Steven Reinwald, Richard E. Pimentel, Brian Tracy, FACSM. Colorado State University, Fort Collins, CO
Email: kaigang.li@colostate.edu
(No relevant relationships reported)

Comparison of Exercise Energy Expenditure Values Obtained from the Garmin Forerunner 230 and 235
Courtney A. Willoughby, Olivia Hanzel, Joshiau Patterson, Grace Shryack, Bryan Smith. Southern Illinois University Edwardsville, Edwardsville, IL
(No relevant relationships reported)

Predicting Energy Expenditure of an Acute Bout of Resistance Exercise in Men and Women
Danielle M. Kravits1, Brad S. Lambert2, Jason R. Lytle3, Stephen E. Martin2, John S. Green, FACSM4, Stephen F. Crouse, FACSM5.
‘Texas A&M University, College Station, TX. 1Houston Methodist, Houston, TX. (Sponsor: Stephen F. Crouse, FACSM)
Email: brwashell@coastal.edu
(No relevant relationships reported)

Brandi R. Washell, Coastal Carolina University, Conway, SC. (Sponsor: George Lyerly, FACSM)
Email: brwashell@coastal.edu
(No relevant relationships reported)

Validation of Overall Energy Expenditure Measurements in the Fitbit Charge HR 2 and Apple Watch
Kaigang Li, Kayla Nuss, Elizabeth A. Thomson, Ashley Comstock, Sophie Blake, Steven Reinwald, Richard E. Pimentel, Brian Tracy, FACSM. Colorado State University, Fort Collins, CO
Email: kaigang.li@colostate.edu
(No relevant relationships reported)

Comparison of Exercise Energy Expenditure Values Obtained from the Garmin Forerunner 230 and 235
Courtney A. Willoughby, Olivia Hanzel, Joshiau Patterson, Grace Shryack, Bryan Smith. Southern Illinois University Edwardsville, Edwardsville, IL
(No relevant relationships reported)

Predicting Energy Expenditure of an Acute Bout of Resistance Exercise in Men and Women
Danielle M. Kravits1, Brad S. Lambert2, Jason R. Lytle3, Stephen E. Martin2, John S. Green, FACSM4, Stephen F. Crouse, FACSM5.
‘Texas A&M University, College Station, TX. 1Houston Methodist, Houston, TX. (Sponsor: Stephen F. Crouse, FACSM)
Email: brwashell@coastal.edu
(No relevant relationships reported)

Brandi R. Washell, Coastal Carolina University, Conway, SC. (Sponsor: George Lyerly, FACSM)
Email: brwashell@coastal.edu
(No relevant relationships reported)

Validation of Overall Energy Expenditure Measurements in the Fitbit Charge HR 2 and Apple Watch
Kaigang Li, Kayla Nuss, Elizabeth A. Thomson, Ashley Comstock, Sophie Blake, Steven Reinwald, Richard E. Pimentel, Brian Tracy, FACSM. Colorado State University, Fort Collins, CO
Email: kaigang.li@colostate.edu
(No relevant relationships reported)

Comparison of Exercise Energy Expenditure Values Obtained from the Garmin Forerunner 230 and 235
Courtney A. Willoughby, Olivia Hanzel, Joshiau Patterson, Grace Shryack, Bryan Smith. Southern Illinois University Edwardsville, Edwardsville, IL
(No relevant relationships reported)

Predicting Energy Expenditure of an Acute Bout of Resistance Exercise in Men and Women
Danielle M. Kravits1, Brad S. Lambert2, Jason R. Lytle3, Stephen E. Martin2, John S. Green, FACSM4, Stephen F. Crouse, FACSM5.
‘Texas A&M University, College Station, TX. 1Houston Methodist, Houston, TX. (Sponsor: Stephen F. Crouse, FACSM)
Email: brwashell@coastal.edu
(No relevant relationships reported)

Brandi R. Washell, Coastal Carolina University, Conway, SC. (Sponsor: George Lyerly, FACSM)
Email: brwashell@coastal.edu
(No relevant relationships reported)
Board #17 2:00 PM - 3:30 PM
Diagnostic Value Of An Impedance-technology Based Health Risk Assessment For Hypertension, Hyperglycemia And Hyperlipidemia
Wang xiaofei1, Zhu Weimo, FACSMD, Zhang Bing1. Tsinghua University, Beijing, China. 1University of Illinois, Urbana, IL
Email: 15652662676@163.com  
(No relevant relationships reported)

Board #13 2:00 PM - 3:30 PM
Determining Consistency And Agreement Of Scores Across Two Measurements Of The Visual System: Test-retest Reliability
Stephanie Long1, Suzanne Leclerc2, David Tinjust1, Russell Steele1, Tibor Schuster1, Ian Shrier, FACSMD. 1McGill University, Montreal, QC, Canada. 2Institut National du Sport du Quebec, Montreal, QC, Canada.  
Email: stephanie.long@mail.mcgill.ca  
(No relevant relationships reported)

Board #14 2:00 PM - 3:30 PM
Hit Or Miss: Kinematic Predictors Of In-game Performance In Collegiate Pitching
Email: v.mitchell3@u.pacific.edu  
(No relevant relationships reported)

Board #15 2:00 PM - 3:30 PM
Gender Differences In The Association Of Grip Power With Other Physical Strength Among Japanese
Yasuhi Sera, Koichiro Azuma, Shiori Horisawa, Shogo Tabata, Masafumi Nagano, Hinoyuki Ishida, Hideo Matsutomo. KEIO UNIVERSITY SCHOOL OF MEDICINE, Tokyo, Japan
Email: azumaks@keio.jp  
(No relevant relationships reported)

Board #16 2:00 PM - 3:30 PM
The Validity Of Age-based Maximal Heart Rate Equations In Youth: A Systematic Review And Meta-analysis
Zackary S. Cicone, Clifton J. Holmes, Michael V. Fedewa, Haley V. MacDonald, Michael R. Esco, FACSMD. University of Alabama, Tuscaloosa, AL.
(No relevant relationships reported)

Board #17 2:00 PM - 3:30 PM
Effect Of Cold Water Immersion versus Phase Change Material Cooling On Core and Intramuscular Temperature
Susan Y. Kwiecien1, Malachy P. McHugh, FACSMD, Stuart Goodall1, Kirsty M. Hicks1, Angus M. Hunter1, Glynn Howatson, FACSMD. 1Lenox Hill Hospital, New York, NY. 2Northumbria University, Newcastle upon Tyne, United Kingdom. 1University of Stirling, Scotland. (Sponsor: Malachy P. McHugh, FACSMD)
Email: susan.sismat.org  
(No relevant relationships reported)

Board #18 2:00 PM - 3:30 PM
Validity Of A High Incline V0 max Walk Test
David E. Lankford, FACSMD, Alexes D. Gidley, Nate Lewis, Keegan Huntsman, Tyler Hook, Cody Pexton, Haley Dimond, Justin Harris. Brigham Young University Idaho, Rexburg, ID
Email: lankfordc@byui.edu  
Reported Relationships: D.E. Lankford: Consulting Fee; Icon Health and Fitness.

Board #19 2:00 PM - 3:30 PM
Validity of Heart Rate Measurements for the Apple Watch and Fitbit Charge HR 2
Elizabeth Thomson. Colorado State University, Fort Collins, CO
Email: elizabeth.thomson@colostate.edu  
(No relevant relationships reported)
### P192  Final Program

| Board #27 | 2:00 PM - 3:30 PM | Comparison of Physiological Stress in Two Different Step Test Exercise Protocols in Elderly People.  
Lutz Baumgärtel, Martin Weigert, Nico Nitsche, Christiane Lösch, Henry Schulz. Chemnitz University of Technology, Chemnitz, Germany.  
Email: lutz.baumgaertel@hsw.tu-chemnitz.de |
| Board #28 | 2:00 PM - 3:30 PM | The Reliability of the Anaerobic Dummy Throw Test in High School Wrestlers: A Pilot Study.  
Eric Lopez, Abigail Larson, Ryan Luke, Chad Harris. FACSM.  
Kent J. Adams, FACSM, Mark DeBeliso, FACSM.  
Southern Utah University, Cedar City, UT.  
*California State University Monterey Bay, Seaside, CA.*  
Metropolitan State University of Denver, Denver, CO.  
(Sponsor: Mark DeBeliso, FACSM) |
| Board #29 | 2:00 PM - 3:30 PM | Test-retest Reliability of Velocity Assessments for Free Weight and Machine Exercises.  
Karolina J. Koziol, Ryan M. Miller, Eduardo D. Freitas, Aaron D. Heishman, Japneet Kaur, Michael G. Bemben. FACSM.  
The University of Oklahoma, Norman, OK.  
(Sponsor: Dr. Michael G. Bemben, FACSM) |
| Board #30 | 2:00 PM - 3:30 PM | Development and Validation of an Equation to Estimate Peak Power from Vertical Jump in Youth.  
Matthew T. Mahar, FACSM, Gregory J. Welk, FACSM, Patrick M. Rider, Michael J. Duncan.  
San Diego State University, San Diego, CA.  
Iowa State University, Ames, IA.  
East Carolina University, Greenville, NC.  
Coventry University, Coventry, United Kingdom.  
Email: mmahar@isu.edu |
| Board #31 | 2:00 PM - 3:30 PM | Countermovement Jump Reliability when Performed With and Without an Arm Swing in NCAA Division I Basketball Players.  
Aaron D. Heishman, Ryan M. Miller, Eduardo D.S. Freitas, Japneet Kaur, Bianca A.R. Galletti, Karolina J. Kozioi, Michael G. Bemben. FACSM.  
The University of Oklahoma, Norman, OK.  
(Sponsor: Michael Bemben, FACSM)  
Email: aaronheishman@ou.edu |
| Board #32 | 2:00 PM - 3:30 PM | Characterizing The Ventilatory Response To Constant Load Exercise Above And Below Critical Power.  
Keren Constantini, Cameron A. Nowrouzi, Courtney E. Wheelock, Robert F. Chapman, FACSM.  
Indiana University, Bloomington, IN.  
(Sponsor: Robert F Chapman, FACSM)  
Email: kerenon@iu.edu |
| Board #33 | 2:00 PM - 3:30 PM | Evaluation Of The Accuracy Of The ACSM Walking Metabolic Equations During The Bruce Protocol.  
Kayla Brennan, Kristofer Wisniewski, Patricia Fitzgerald.  
Saint Francis University, Loretto, PA.  
(Sponsor: Robert F Chapman, FACSM) |

### F-53  Free Communication/Poster - Monitoring

| Board #38 | 2:00 PM - 3:30 PM | Adapted Wii Fit Controller for Active Videogaming in Individuals with Mobility Impairments.  
Laurie A. Malone, FACSM, Sangeetha Padalabalananayanan, Mohanraj Thirumalai. UAB/Lakeshore Research Collaborative, Birmingham, AL.  
Email: lamalone@uab.edu |
| Board #39 | 2:00 PM - 3:30 PM | Differences of Skin Temperature during a Treadmill Test in High vs Moderately Fit Male Triathletes.  
Jonathan Galan Carracedo, Myriam Guerra Balic, Andrea Suarez Segade.  
Blanquerna, Ramon Llull University, Barcelona, Spain.  
Clinical Center, Cornellà, Barcelona, Spain.  
(Sponsor: Dr. Bo Fernhall, FACSM)  
Email: jonathang@ciblanquerna.url.edu |
| Board #40 | 2:00 PM - 3:30 PM | Use Of Player Worn Sensors To Identify Fatigue During A USA Select National Hockey Development Camp.  
D Stoianov, K Martel, A Workman, S J. McGregor. Eastern Michigan University, Ypsilanti, MI.  
(Sponsor: Mark Peterson, FACSM)  
Email: dstoianov@emich.edu |

---

### ACSM 65th Annual Meeting

| Board #54 | 2:00 PM - 3:30 PM | Reproducibility of Force-Velocity Test Outputs Using 10-s Sprints Against Different Braking Forces.  
Faculty of Physical Education and Sport, Lasiplana University of Humanities and Technologies, Lisbon, Portugal.  
CIDAP (UID/DTP/04213/2016), University of Coimbra, Coimbra, Portugal.  
*School of Health and Technology, Politecnico Institute of Coimbra, Coimbra, Portugal.*  
Email: j.valente-dos-santos@hotmail.com |

---

**Room:** CC-Hall B  
**Friday, June 1, 2018, 1:00 PM - 6:00 PM**
American College of Sports Medicine

F-54 Free Communication/Poster - Injury/Injury Prevention/Recovery/Rehabilitation

Friday, June 1, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

2758 Board #41 2:00 PM - 3:30 PM
The Accuracy Of Wrist-Worn Heart Rate Monitors Across A Range of Exercise Intensities
Paul Hough, St Mary’s University, Twickenham, United Kingdom
Email: paul.hough@stmarys.ac.uk
(No relevant relationships reported)

2759 Board #42 2:00 PM - 3:30 PM
Validity And Reliability Of A Shirt-based Integrated Gps Sensor
Email: gabrielle.giersch@uconn.edu
(No relevant relationships reported)

2760 Board #43 2:00 PM - 3:30 PM
Using the Hexoskin Smart Garment to Measure Cardiorespiratory Variables During High Intensity Functional Training
Terence A. Moriarty1, Yuri Feito, FACSM2, Jessica Monahan2, Cassie Williamson1. 1University of New Mexico, Albuquerque, NM. 2Kennesaw State University, Kennesaw, GA. (Sponsor: Dr Yuri Feito, FACSM)
Email: moria1ta@unm.edu
(No relevant relationships reported)

2761 Board #44 2:00 PM - 3:30 PM
Not All Are Created Equal: A Meta-Analysis of Wearable Devices for Tracking Physical Activity.
Jaehun Jung, Chun Wai Leung, Layne Katherine Case, Joonkoo Yun. Oregon State University, Corvallis, OR
(No relevant relationships reported)

2762 Board #45 2:00 PM - 3:30 PM
Accuracy Of The Polar M430 To Predict VO2 max, Using Optical Technology
Grace Shryack, Joshua Patterson, Olivia Hanzel, Courtney Willoughby, Bryan Smith. Southern Illinois University - Edwardsville, Edwardsville, IL
Email: gshryac@siue.edu
(No relevant relationships reported)

2763 Board #46 2:00 PM - 3:30 PM
Comparison of Two Heart Rate Technologies to Predict VO2 max
Joshua Patterson, Olivia Hanzel, Grace Shryack, Courtney Willoughby, Bryan Smith. Southern Illinois University Edwardsville, Edwardsville, IL
(No relevant relationships reported)

2764 Board #47 2:00 PM - 3:30 PM
Comparing Positional Differences In Physical and Performance Assessments Among Acrobatics and Tumbling Athletes
Nicole J. Uccello, Courtney L. Stack, Michael J. Ryan, Paul D. Reneau, Shinichi Asano. Fairmont State University, Fairmont, WV
(No relevant relationships reported)

2765 Board #48 2:00 PM - 3:30 PM
Accuracy Of VO2 max Prediction Using A GPS Watch Following A 15-minute And Three Subsequent Runs
Andrew G. Pearson, Brandon Bastianelli, Andrea D. Workman, Christopher W. Herman, Jeff Schulz, Andrew Comett, Rebecca W. Moore. Eastern Michigan University, Ypsilanti, MI. (Sponsor: Lanay Mudd, FACSM)
Email: apears12@emich.edu
(No relevant relationships reported)

2766 Board #49 2:00 PM - 3:30 PM
The Validity Of A Commercially-available, Low-cost Accelerometer In A Free-living Setting
Andrew Newton1, Ellen Glickman, FACSM; Curtis Fennell2, Jacob E. Barkley2. 1Jacksonville State University, Jacksonville, AL. 2Kent State University, Kent, OH. (Sponsor: Lanay Mudd, FACSM)
Email: mryan3@fairmontstate.edu
(No relevant relationships reported)

2767 Board #50 2:00 PM - 3:30 PM
Validating Heart Rate In The Garmin Vivosmart HR Monitor Versus The Cosmed K4b2 Metabolic Backpack
Alexandra Lucas. Coastal Carolina University, Conway, SC. (Sponsor: George Lyerly, FACSM)
Email: aplucas@coastal.edu
(No relevant relationships reported)

2768 Board #51 2:00 PM - 3:30 PM
Validation Of Step Frequency Estimation From A Wearable Device On A Treadmill And Indoor Track
Rhiannon M. Seneli, Stephanie N. Driskell. St. Ambrose University, Davenport, IA
(No relevant relationships reported)

2769 Board #52 3:30 PM - 5:00 PM
Use of Mesenchymal Stem Cells to Treat Muscle Strain Injuries
Megan Lerner, Sharna R. Iyer, Joseph P. Stains, Frank Henn, III, Craig H. Bennett, Richard M. Lovering. University of Maryland School of Medicine, Baltimore, MD. (Sponsor: E.G. McFarland, FACSM)
(No relevant relationships reported)

2770 Board #53 3:30 PM - 5:00 PM
The Effect of Tissue Temperature on Ligament Laxity in Healthy Individuals
Stacey Chen, Everett Plocek, Kathy Liu. University of Evansville, Evansville, IN
(No relevant relationships reported)

2771 Board #54 3:30 PM - 5:00 PM
Artificial CO2-water Leg-bath Facilitates Recovery From Muscle Hardness Caused By Resistance Exercise
Noriyuki Yamamoto1, Tadashi Wada2, Fumiko Takenoya2, Masaaki Hashimoto1. 1Japanese Red Cross Hokkaido College of Nursing, Kitami, Japan. 2Kokushikan Univ., Tokyo, Japan. 3Hoshi Univ., Tokyo, Japan. (Sponsor: George Lyerly, FACSM)
(No relevant relationships reported)

2772 Board #55 3:30 PM - 5:00 PM
Cold-Water Immersion Attenuated Muscle Soreness after Plyometric Training while having no Impact on Sprint Performance.
Michael J. Ryan, Courtney Webb, Shinichi Asano, Paul Reneau. Fairmont State University, Fairmont, WV
Email: mryan3@fairmontstate.edu
(No relevant relationships reported)
2773 Board #56 3:30 PM - 5:00 PM
Effects of Two Maximal Isometric Contractions Attenuate Eccentric Exercise-induced Muscle Damage on Surface Electromyographic Activity
Ming-Ju Lin1, Chin-Yun Huang2, Jia-Jhen Cai1, Jia-Wei Chen1, Ching-Fei Wang1, Yu-Wei Hsu2, Fu-Chen Yang1. 1National Chiai University, Chiai County, Taiwan. 2Nanhua University, Chiai County, Taiwan
Email: minggrulin@gmail.com
(No relevant relationships reported)

2774 Board #57 3:30 PM - 5:00 PM
Systemic and Local Alterations in Extracellular RNA (exRNA) Following Traumatic Knee Injury Implicate Catabolic and Inflammatory Pathways
Anthony J. Griswold, Natalia K. Hofmann, Thomas M. Best, Jeffery M. Vance, Margaret A. Pericak-Vance, Lee D. Kaplan. University of Miami, Miami, FL. (Sponsor: Thomas Best, FACSM)
(No relevant relationships reported)

2775 Board #58 3:30 PM - 5:00 PM
Effects of Isometric Contractions on Eccentric Exercise-induced Muscle Damage of the Knee Extensors
Kun-Xian Lin1, Hsu-Hua Wang2, Kuo-Wei Tseng1, Wei-Chin Tseng1, Ming-Ju Lin1. 1University of Taipei, Taipei City, Taiwan. 2National Chung Cheng University, Chiai County, Taiwan.
(No relevant relationships reported)

2776 Board #59 3:30 PM - 5:00 PM
Nitric Oxide Donor Treatment Affects Skeletal Muscle Myeloperoxidase And Fibronectin After Contusion Injury In Rats
Kathryn H. Myburgh, FACSM, Christopher Reeves, Carine Smith. Stellenbosch University, Stellenbosch, South Africa
Email: kkhm@sun.ac.za
(No relevant relationships reported)

2777 Board #60 3:30 PM - 5:00 PM
The Effect Of Nitric Oxide Donor Treatment On Skeletal Muscle Repair Following Contusion Injury In Rats
Tracey Ollewagen, Kathryn H. Myburgh, FACSM. Stellenbosch University, Stellenbosch, South Africa. (Sponsor: Prof KH Myburgh, FACSM)
Email: 19687052@sun.ac.za
(No relevant relationships reported)

2778 Board #61 3:30 PM - 5:00 PM
Myotonometric Effect of Foam Rolling Following Strength Training
Ruediger Reer1, Jan Schroeder1, Linda Lueters1, Mike Schmidt1, Serge P. von Duvillard, FACSM2, Klaus-Michael Braumann1. 1University of Hamburg, Hamburg, Germany. 2University of Salzburg, Salzburg, Austria
Email: ruediger.reer@uni-hamburg.de
(No relevant relationships reported)

2779 Board #62 3:30 PM - 5:00 PM
Dysregulated Inflammation And MAPK Signaling In Aged Human Muscle Following Exercise-induced Damage
Jacob R. Sorensen, Caitlin Skousen, Alex Holland, Kyle Williams, Robert D. Hylldahl. Brigham Young University, Provo, UT (Sponsor: Allen Parcell, FACSM)
Email: jross.sorensen@gmail.com
(No relevant relationships reported)

2780 Board #63 3:30 PM - 5:00 PM
Risk Factors for Knee Arthroplasty in Patients with Knee Osteoarthritis Treated with Hylan G-F 20
Maria Rund1, Kevin Ong1, Edmund Lau1, William Daley1, Roy Altman4, Exponent Inc., Philadelphia, PA. 2Exponent Inc., Menlo Park, CA. 3Sanofi, Bridgewater, NJ. 4University of California, Los Angeles, Los Angeles, CA
Email: mruna@exponent.com
Reported Relationships: M. Runa: Salary; Exponent Inc.

2781 Board #64 3:30 PM - 5:00 PM
Efficient Concentration of Plasma and Platelet-WBC-Rich Plasma Proteins Using a Polyacrylamide Device
Sean M. Muir, Michael Baria, Natalie Reising, Christopher C. Kaeling, FACSM, Alicia L. Bertone. The Ohio State University, COLUMBUS, OH. (Sponsor: James Borchers, FACSM)
(No relevant relationships reported)

2782 Board #65 3:30 PM - 5:00 PM
Hip Muscle Strength Analysis of Individuals with Chronic Low Back Pain
Minja wang, Yushi Hu, Yuanpeng Liao, Kaiwen Li, Siqì Song, Xiaofan Pang. Chengdu Sport Institute, Chengdu, China
Email: 349957217@qq.com
(No relevant relationships reported)

2783 Board #66 3:30 PM - 5:00 PM
High Incidence Of Lumbar Intervertebral Disk And A Possible Risk Factor For Collegiate Weightlifters
Kenshiro Ohya1, Koichi Nakazato2, Koji koyama1, Kazuo Funato1, Naoyuki Kobatake1, Toshiya Kita1, Seiji Kubo1, Fukuju Goto1, Kenji Hiranuma1. 1Nippos sport science university, tokyo, Japan. 2Tokyo Ariake University of Medical and Health Science, tokyo, Japan
Email: kenshi0813@gmail.com
(No relevant relationships reported)

2784 Board #67 3:30 PM - 5:00 PM
Relationship Between Rotator Cuff Strength & Functional Scores After Bankart Repair
Geon Park1, Wonhah Park2, Dookyng Kim1, Abhishek Gupta2. 1Samsung Medical Center, Seoul, Korea, Republic of. 2JLN Medical College, Rajasthan, India
(No relevant relationships reported)

2785 Board #68 3:30 PM - 5:00 PM
Kinesio Tape Fails to Affect Characteristics of Skeletal Muscle Recruitment
(No relevant relationships reported)

2786 Board #69 3:30 PM - 5:00 PM
Comparison Between Platelet-rich Plasma Hyaluronic Acid Treatment For Talar Osteochondral Lesions: A Network Meta-analysis Of Randomized Controlled Trials
Wei Li. Taipei medical university hospital, Taipei, Taiwan
Email: a4910131@gmail.com
(No relevant relationships reported)
### Free Communication/Poster - Chronic Ankle Instability

**Friday, June 1, 2018, 1:00 PM - 6:00 PM**

<table>
<thead>
<tr>
<th>Board</th>
<th>Time</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>#70</td>
<td>3:30 PM - 5:00 PM</td>
<td>Influence of Prophylactic Ankle Tapes on Lower Extremity Kinematics during Stop-jump in Chronic Ankle Instability</td>
</tr>
<tr>
<td>#71</td>
<td>3:30 PM - 5:00 PM</td>
<td>Bracing Effects on Lower Extremity Movement Dynamics in Individuals With and Without Chronic Ankle Instability</td>
</tr>
<tr>
<td>#72</td>
<td>3:30 PM - 5:00 PM</td>
<td>History of Ankle Sprains Related to Hindered Proprioception in College-Age Male Soccer Players</td>
</tr>
<tr>
<td>#73</td>
<td>3:30 PM - 5:00 PM</td>
<td>Effects of Three Prophylactic Tape Methods on Kinematics and Muscle Pre-activation in Chronic Ankle Instability</td>
</tr>
<tr>
<td>#74</td>
<td>3:30 PM - 5:00 PM</td>
<td>Prolonged Kinesiotaping Does Not Improve Balance and Functional Performances in People with Chronic Ankle Instability</td>
</tr>
<tr>
<td>#75</td>
<td>3:30 PM - 5:00 PM</td>
<td>Altered Movement Dynamics Between Individuals With and Without Chronic Ankle Instability Before and After Bracing</td>
</tr>
<tr>
<td>#76</td>
<td>3:30 PM - 5:00 PM</td>
<td>Effects of Three Tape Methods on Static Postural Control of Individuals with Chronic Ankle Instability</td>
</tr>
</tbody>
</table>

### Free Communication/Poster - Jumping and Landing

**Friday, June 1, 2018, 1:00 PM - 6:00 PM**

<table>
<thead>
<tr>
<th>Board</th>
<th>Time</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>#82</td>
<td>3:30 PM - 5:00 PM</td>
<td>Force- and Velocity-Profile Differences Between Good and Poor Countermovement Vertical Jumpers</td>
</tr>
<tr>
<td>#83</td>
<td>3:30 PM - 5:00 PM</td>
<td>Medial Post Foot Orthotic Influences Knee Valgus Angle Excursions During a Vertical Jump Task</td>
</tr>
</tbody>
</table>

---

**American College of Sports Medicine**

**Final Program**

P195 Board #77 3:30 PM - 5:00 PM Altered Movement Neuromechanics during Jump Landing and Cutting in Patients with Chronic Ankle Instability

Hyunsoo Kim1, S. Jun Son2, Matthew K. Seeley2, J. Ty Hopkins, FACSIM1. West Chester University, West Chester, PA. 2 Brigham Young University, Provo, UT. (Sponsor: J. Ty Hopkins, FACSIM)

Email: hkim@wcupa.edu

(No relevant relationships reported)

P195 Board #78 3:30 PM - 5:00 PM Dorsiflexion Range of Motion Alters Energy Absorption and Generation during Landing/Cutting in Chronic Ankle Instability

Andrew Harris, S. Jun Son, Dustin Bruening, Brent Feland, Matthew Seeley, Ty Hopkins, FACSIM. Brigham Young University, Provo, UT. (Sponsor: J. Ty Hopkins, FACSIM)

Email: drewharris993@gmail.com

(No relevant relationships reported)

P195 Board #79 3:30 PM - 5:00 PM Immediate Effects of Ankle Tapes on Dynamic Postural Control and Kinematics in Chronic Ankle Instability

Enri Takahashi1, Youngmin Chun1, Jinah Kim2, Adrian Pettaway1, Russell Baker1, Sae Yong Lee1, Hyung-pil Jun1. University of Idaho, Moscow, ID. 1Yonsei University, Seoul, Korea, Republic of. (Sponsor: Lee Brown, FACSIM)

Email: emi.takahashi0808@gmail.com

(No relevant relationships reported)

P195 Board #80 3:30 PM - 5:00 PM Joint Stiffness Alterations, Grouped by Movement Strategy, in Chronic Ankle Instability

J. Ty Hopkins, FACSIM1, S. Jun Son1, Hyunsoo Kim1, Matthew K. Seeley2. Brigham Young University, Provo, UT. 1West Chester University, West Chester, PA.

Email: tyhopkins@byu.edu

(No relevant relationships reported)

P195 Board #81 3:30 PM - 5:00 PM Recommended Number of Trials for Balance and Hopping Tests between Male and Female CAI Subjects

Jordan R. Read1, S. Jun Son2, Dustin Bruening3, Brent Feland3, Matthew Seeley2, Ty Hopkins, FACSIM. University of North Texas Health Science Center, Fort Worth, TX. 1Brigham Young University, Provo, UT. (Sponsor: Ty Hopkins, FACSIM)

Email: jordanread31@gmail.com

(No relevant relationships reported)

P195 Board #82 3:30 PM - 5:00 PM Force- and Velocity-Profile Differences Between Good and Poor Countermovement Vertical Jumpers

John R. Harry1, Leland A. Barker2, Janet S. Dufek, FACSIM. Texas Tech University, Lubbock, TX. 1University of Nevada, Las Vegas, Las Vegas, NV. 2Texas Tech University Health Sciences Center, Lubbock, TX. (Sponsor: Janet S. Dufek, FACSIM)

Email: john.harry@ttu.edu

(No relevant relationships reported)

P195 Board #83 3:30 PM - 5:00 PM Medial Post Foot Orthotic Influences Knee Valgus Angle Excursions During a Vertical Jump Task

Jerry Zoubek, Timothy Kranz, Lindsay Perotti, Elle Stark, Michelle Stella, Adam S. Lepley. University of Connecticut, Storrs, CT

Email: jerry.zoubek@uconn.edu

(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board</th>
<th>Title</th>
<th>Time</th>
<th>Authors</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>2801</td>
<td>Influence of Holding a Lacrosse Stick on Jump Landing Mechanics</td>
<td>3:30 PM - 5:00 PM</td>
<td>Kylie Calandra, Dr. Matthew Moran, Sacred Heart University, Fairfield, CT</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2802</td>
<td>Mechanical Differences between Adolescents and Adults during Two Landing Phases of a Drop Jump Task</td>
<td>3:30 PM - 5:00 PM</td>
<td>Gavin L. Moir, Shawn N. Munford, Brandon W. Snyder, Shala E. Davis, FACSM, East Stroudsburg University, East Stroudsburg, PA</td>
<td>(Sponsor: Shala E. Davis, FACSM)</td>
</tr>
<tr>
<td>2803</td>
<td>Alternate Forms Reliability of Reactive Strength Assessments during Depth and Repetitive Countermovement Jumping</td>
<td>3:30 PM - 5:00 PM</td>
<td>Jake Rosburg, Nile Banks, Jordan Preuss, Lam Bomun, Talin Louder, The University of South Dakota, Vermillion, SD</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2804</td>
<td>Differences in Joint Mechanics Between Adolescent and Adult Males Performing Countermovement and Drop Jump Tasks</td>
<td>3:30 PM - 5:00 PM</td>
<td>Shawn N. Munford, Brandon W. Snyder, Gavin L. Moir, Shala E. Davis, FACSM, East Stroudsburg, East Stroudsburg, PA</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2805</td>
<td>Effect of Fatigue on Leg Muscle Activation and Tibial Acceleration during a Jumping Task</td>
<td>3:30 PM - 5:00 PM</td>
<td>Michelle A. Sandrey, Yu-Jen Chang, Krista Meder, Jean L. McCrory, FACSM, West Virginia University, Morgantown, WV</td>
<td>(Sponsor: Jean L. McCrory, FACSM)</td>
</tr>
<tr>
<td>2806</td>
<td>L5S1 Excursion Reflects Knee Flexion Angle During A Drop Landing Task</td>
<td>3:30 PM - 5:00 PM</td>
<td>Yunae Lee, Ming-Sheng Chan, SM Sigward, University of Southern California, Los Angeles, CA</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2807</td>
<td>Sagittal And Frontal Plane Knee Angles Between Pre-adolescent Sexes Are Not Different During Jump-landing</td>
<td>3:30 PM - 5:00 PM</td>
<td>Kenneth C. Holford, Michael Torry, Adam Jagodinsky, Jeff Cowley, Steve McCaw, Illinois State University, Bloomington, IL</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2808</td>
<td>Mechanics of Countermovement and Drop Jump Tasks Performed by Adolescent and Adult Males</td>
<td>3:30 PM - 5:00 PM</td>
<td>Brandon W. Snyder, Shawn N. Munford, Gavin L. Moir, Shala E. Davis, FACSM, East Stroudsburg University, East Stroudsburg, PA</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2809</td>
<td>Patellofemoral Joint Loading During a Variation in Jump-landing Movements</td>
<td>3:30 PM - 5:00 PM</td>
<td>Naghmeh Gheidi, Thomas W. Kornozek, FACSM, Katie L. Hanson, Cheyanne N. Massie, UWL, La-Crosse, WI</td>
<td>(Sponsor: Thomas Kornozek, FACSM)</td>
</tr>
<tr>
<td>2810</td>
<td>Knee Kinematics During a Single-Leg Backwards Jump-Landing With and Without External Load</td>
<td>3:30 PM - 5:00 PM</td>
<td>Colin W. Bond, Alexander J. Hron, Benjamin C. Noonan, Sanford Health, Fargo, ND</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2811</td>
<td>Trunk Muscle Fatigue and Activation are Associated with Drop Jump Performance</td>
<td>3:30 PM - 5:00 PM</td>
<td>Yasuyuki Uchida, Makoto Iguchi, Norihiro Shimako, Yohei Shimokochi, Osaka University of Health and Sport Sciences, Osaka, Japan</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2812</td>
<td>Effect of Cognitive Dual Tasks on Lower Extremity Kinematics and Ground Reaction Force during Repeated Tuck Jump Landings</td>
<td>3:30 PM - 5:00 PM</td>
<td>Jie P. Yom, Amber Schnittjer, Janet Simon, Dustin Grooms, Ohio University, Athens, OH</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2813</td>
<td>Effect of External Load on Lower Extremity Stiffness and Time to Stabilization During Jump-Landing</td>
<td>3:30 PM - 5:00 PM</td>
<td>Alexander J. Hron, Benjamin C. Noonan, Colin W. Bond, University of North Dakota, Grand Forks, ND</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2814</td>
<td>Effects of Increased Gluteus Muscle Activation on Hip and Trunk Kinematics during Single-leg Landing</td>
<td>3:30 PM - 5:00 PM</td>
<td>Yohei Shimokochi, Kanae Hosaki, Akiko Takiguchi, Issei Ogawaara, Osaka University of Health and Sport Sciences, Suita-gun, Osaka, Japan</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2815</td>
<td>Relationship between Take-Off Force Profiles and Single Leg Hop Distance</td>
<td>3:30 PM - 5:00 PM</td>
<td>Christopher Ballance, Maria Talarico, Daniel Clifton, Michael McNally, James Onate, The Ohio State University, Columbus, OH</td>
<td>(No relevant relationships reported)</td>
</tr>
<tr>
<td>2816</td>
<td>The Relationship Between Side Hop Test Endurance And Energy Absorption</td>
<td>3:30 PM - 5:00 PM</td>
<td>Samantha Price, Chelsey Roe, Haeley Reed, Gaeleen Athenaze, Jessica Schilling, Kyle Davis, Brian Noehren, FACSM, University of Kentucky, Lexington, KY</td>
<td>(Sponsor: Brian Noehren, FACSM)</td>
</tr>
</tbody>
</table>
American College of Sports Medicine

| Board #100 | 3:30 PM - 5:00 PM | Relationship between Single Leg Hop Distance and Descending Phase Force Variables | Maria Talarico, Christopher Ballance, Daniel Clifton, Michael McNally, James Onute. The Ohio State University, Columbus, OH (No relevant relationships reported) |
| Board #101 | 2:00 PM - 3:30 PM | Evaluation Of The Implementation Of An Academically-integrated Intervention Targeting Obesity-related Health Behaviors In Preschool-age Children | Christine W. St Laurent, Sarah Burkart, Sofiya Alhassan, FACSM. University of Massachusetts Amherst, Amherst, MA. (Sponsor: Sofiya Alhassan, FACSM) Email: estlaurent@umass.edu (No relevant relationships reported) |
| Board #102 | 2:00 PM - 3:30 PM | Mixed-method Analysis Of An After-school Program To Increase Physical Activity | Kelly R. Rice, John Schuma, Tim Behrens, FACSM. Eastern Oregon University, La Grande, OR. Oregon State University; Corvallis, OR. Northern Arizona University; Flagstaff, AZ. (Sponsor: Tim Behrens, FACSM) (No relevant relationships reported) |
| Board #103 | 2:00 PM - 3:30 PM | Changes On Neuroendocrine Parameters (cortisol, Melatonin) And Anxiety Levels After A School-based Exercising And Nutrition Counseling Intervention In School-aged Obese Adolescents From Monterrey méxicoMarco A. Enriquez Martínez, 1 Oswaldo Ceballos Gurrola, 2 Raúl Lomas Acosta, 1 José Alberto Valadez Lira, 1, Armando Cocca, 1 Benemérita Escuela Normal Manuel Ávila Camacho, Zacatecas, Mexico. 2 Universidad Autónoma de Nuevo León, San Nicolás de los Garza, Nuevo León, Mexico. 3 Secretaría de Educación Coahuila, Saltillo, Coahuila, Mexico Email: mantoenmar4@hotmail.com (No relevant relationships reported) |
| Board #104 | 2:00 PM - 3:30 PM | Impact of After-School Jump Rope Program on Psychological Outcomes | Jessica Albers. Minnesota State University Mankato, Mankato, MN Email: Jessica.albers@mnstate.edu (No relevant relationships reported) |
| Board #105 | 2:00 PM - 3:30 PM | Cardiorespiratory Fitness Moderate the Prospective Association Between Physical Activity & Cardiometabolic Risk Factors in Children | Turid Skrede, 1 Eivind Aadland, Lars Bo Andersen, Mette Stavishov, 1 Sigmund Alfred Andreassen, Geir Kåre Resaland, 1, Ulf Ekelund, FACSM, 2 Western Norway University of Applied Sciences, Sogndal, Norway. 3 Norwegian School of Sport Sciences, Oslo, Norway Email: turid.skrrede@hvl.no (No relevant relationships reported) |

F-57 Free Communication/Poster - Children and Youth

Friday, June 1, 2018, 1:00 PM - 6:00 PM
Room: CC-Hall B

<p>| Board #106 | 2:00 PM - 3:30 PM | Physical Activity Influence On Behavior Of Children With ADHD &amp; DBD During Instruction Using Classroom Observation | Jared D. Ramer, 1, Catherine L. Davis, 2, Stacy L. Frazier, 1, David X. Marquez, FACSM, 1 Eduardo E. Bustamante, FACSM, 1. University of Illinois at Chicago, Chicago, IL. 2 Augusta University, Augusta, GA. 1 Florida International University, Miami, FL. (Sponsor: Dr. Eduardo Bustamante, FACSM) Email: <a href="mailto:jramer2@uic.edu">jramer2@uic.edu</a> (No relevant relationships reported) |
| Board #107 | 2:00 PM - 3:30 PM | The Strong Influence of Vigorous Physical Activity on Cardiorespiratory Fitness in Children | Corey A. Selland, 1 Jessica R. Meeendering, 1 Matthew D. Vukovich, FACSM, 1 Black Hills State University, Spearfishi, SD. 2 South Dakota State University, Brookings, SD. (Sponsor: Matthew D. Vukovich, FACSM) Email: <a href="mailto:corey.selland@bhsu.edu">corey.selland@bhsu.edu</a> (No relevant relationships reported) |
| Board #108 | 2:00 PM - 3:30 PM | The Correlations Between Families’ SES and Physical Activity Levels of School-aged Children in China | Fan Xiang, 1 Cao Zhen-bo, 2 Chen Peijie, 1 Shanghai Jiao Tong University, Shanghai, China. 2 Shanghai University of Sport, Shanghai, China Email: <a href="mailto:fansheva@sjtu.edu.cn">fansheva@sjtu.edu.cn</a> (No relevant relationships reported) |
| Board #109 | 2:00 PM - 3:30 PM | Physical Activity in Latina Caregivers of Children with Developmental Disabilities | Jacqueline Guzman, 1 Sandra Magaña, 2 Judith S. Rocha, 1 Mariana García Torres, 1 Miguel Morales, 1 David X. Marquez, FACSM, 1 University of Illinois at Chicago, Chicago, IL. 2 University of Texas at Austin, Austin, TX. (Sponsor: David X. Marquez, FACSM) Email: <a href="mailto:jguzma38@uic.edu">jguzma38@uic.edu</a> (No relevant relationships reported) |
| Board #110 | 2:00 PM - 3:30 PM | Weight Status Influences Effectiveness of Need-Supportive Physical Activity Summer Camp in Girls | Megha Vishwanathan, Marlyse Sifre, Sophie Waller, Mika Manninen, Ellen M. Evans, FACSM, Sami Yli-Piipari. University of Georgia, Athens, GA Email: <a href="mailto:ma21638@uga.edu">ma21638@uga.edu</a> (No relevant relationships reported) |
| Board #111 | 2:00 PM - 3:30 PM | Safety and Health Outcomes of a Physical Activity Program for Adolescents with Type I Diabetes | Garrett I. Ash, 1 Kevin L. Joiner, 1 Mary Savoye, 1 Julien S. Baker, 1 James Gerosa, 1 Emma Kleck, 1 Neha S. Patel, 2 Matthew Stults-Kolehmainen, 2 Stuart A. Weinzimer, 1 Margaret Grey, 1 Yale University, New Haven, CT. 2 University of Michigan, Ann Arbor, MI. 3 University of the West of Scotland, Lanarkshire, United Kingdom. 4 Southern Connecticut State University, New Haven, CT. 5 Penn State Milton S. Hershey Medical Center, Hershey, PA. 6 Yale New Haven Hospital, New Haven, CT. (Sponsor: William J. Kraemer, Ph.D., FACSM, FACSM) Email: <a href="mailto:garrett.ash@yale.edu">garrett.ash@yale.edu</a> (No relevant relationships reported) |</p>
<table>
<thead>
<tr>
<th>Board #112</th>
<th>2:00 PM - 3:30 PM</th>
<th>Board #119</th>
<th>2:00 PM - 3:30 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variability In Implementation Of A Classroom-based Physical Activity Intervention: Implications For Disparities In Pediatric Physical Activity Participation</strong>&lt;br&gt;Lexie R. Beemer, Tiwaloluwa A. Ajibewa, Molly P. O’Sullivan, Matthew R. Nagy, Ben Ramsier, Darin Stockdill, U. Sean Vance, Natalie Colabianchi, Rebecca E. Hasson, FACSM. University of Michigan, Ann Arbor, MI&lt;br&gt;Email: <a href="mailto:abeemer@umich.edu">abeemer@umich.edu</a>&lt;br&gt;(No relevant relationships reported)</td>
<td><strong>The Association Of Blood Lipids With Selected Other CVD Risk Factors In Michigan Adolescents</strong>&lt;br&gt;Asihlynd Fendro1, Brenae R. Carlson1, Erich J. Petushek1, Karin A. Pfeiffer, FACSM1, Joseph J. Carlson1.1 Northern Michigan University, Marquette, MI. 2Michigan State University Extension, East Lansing, MI. 3Michigan State University, East Lansing, MI. (Sponsor: Karin Pfeiffer, FACSM)&lt;br&gt;Email: <a href="mailto:ajendro@umn.edu">ajendro@umn.edu</a>&lt;br&gt;(No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #113</td>
<td>2:00 PM - 3:30 PM</td>
<td>Board #120</td>
<td>2:00 PM - 3:30 PM</td>
</tr>
<tr>
<td><strong>Effect Of School-based Physical Activity Programs On Hamstring Flexibility: A Meta-analysis</strong>&lt;br&gt;Sonia Montero-Bricheza, Iesaura M. Castilho-Hernandez. University of Costa Rica, San José, Costa Rica. (Sponsor: Ellen M. Evans, FACSM)&lt;br&gt;Email: <a href="mailto:soniaimonterob@yahoo.es">soniaimonterob@yahoo.es</a>&lt;br&gt;(No relevant relationships reported)</td>
<td><strong>Changes in Physical Activity Enjoyment following HIIT Training in Adolescents</strong>&lt;br&gt;Elizabeth K. Bailey, Christine Tassitiano, Lexi Byrd, Brianna Marino, Taylor McMaster, Bre’anna Warren, Megan Farrell, Stephen P. Bailey, FACSM. Elon University, Elon, NC. (Sponsor: Stephen P. Bailey, FACSM)&lt;br&gt;(No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #114</td>
<td>2:00 PM - 3:30 PM</td>
<td>Board #121</td>
<td>2:00 PM - 3:30 PM</td>
</tr>
<tr>
<td><strong>Interventions for Increasing Physical Activity in Low-Income, Ethnic Minority Children and Youths: Meta Analysis</strong>&lt;br&gt;Kyungun Kim1, Seung Ho Chang2, Jihyun Lee2, Sukho Lee3. 1University of Central Missouri, Warrensburg, MO. 2San Jose State University, San Jose, CA. 3Texas A&amp;M University-San Antonio, San Antonio, TX. (Sponsor: Minsoo Kang, FACSM)&lt;br&gt;Email: <a href="mailto:kykim@ucmo.edu">kykim@ucmo.edu</a>&lt;br&gt;(No relevant relationships reported)</td>
<td><strong>Effects Of A Weight Bearing Exercise Program On Bone Mineral Density Of Adolescent Female Athletes</strong>&lt;br&gt;Kayla Daniel1, Kelsey Conrad2, Jaqueline Buell3, Julie Young4, Lihong Huang5, Anastasia Fischer, FACSM6. 1Nationwide Children’s Hospital, Columbus, OH. 2Ohio State University, Columbus, OH. (Sponsor: Anastasia Fischer, FACSM)&lt;br&gt;Email: <a href="mailto:Kayla.Daniel@nationwidechildrens.org">Kayla.Daniel@nationwidechildrens.org</a>&lt;br&gt;(No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #115</td>
<td>2:00 PM - 3:30 PM</td>
<td>Board #122</td>
<td>2:00 PM - 3:30 PM</td>
</tr>
<tr>
<td><strong>Standing Desk Intervention In Elementary School Children: Effects On Physical Activity And Sedentary Behavior</strong>&lt;br&gt;Ann M. Swartz, FACSM, Nathan Tokarek, Chris C. Cho, Nora E. Miller, Hotaka Maeda, Krista Lisdahl, Scott J. Strath, FACSM. University of Wisconsin-Milwaukee, Milwaukee, WI&lt;br&gt;Email: <a href="mailto:awszwart@uw.edu">awszwart@uw.edu</a>&lt;br&gt;(No relevant relationships reported)</td>
<td><strong>Objectively Measured Physical Activity in Parent-Child Dyads Exercising Together in Five Activities.</strong>&lt;br&gt;Patrick Filanowski1, Noelle Merchant2, Ronald J. Iannotti3, Sarah M. Camhi4, Jessica A. Whiteley5, Laurie Milliken, FACSM6. 1University of Massachusetts Boston, Boston, MA. 2CDM Group, Inc., Bethesda, MD. (Sponsor: Laurie Milliken, FACSM)&lt;br&gt;Email: <a href="mailto:Patrick.Filanowski001@umb.edu">Patrick.Filanowski001@umb.edu</a>&lt;br&gt;(No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #116</td>
<td>2:00 PM - 3:30 PM</td>
<td>Board #123</td>
<td>2:00 PM - 3:30 PM</td>
</tr>
<tr>
<td><strong>Impact Of Coordinated-bilateral Physical Activities On Attention And Concentration In School-aged Children</strong>&lt;br&gt;Weiyun Chen, Heidi Harris. University of Michigan, Ann Arbor, MI&lt;br&gt;Email: <a href="mailto:chenwy2@umich.edu">chenwy2@umich.edu</a>&lt;br&gt;(No relevant relationships reported)</td>
<td><strong>The Contribution Of A Community-Based Gym And Aquatics Program To Physical Activity In Children</strong>&lt;br&gt;Mark R. Scudder, Neil P. Sharma, Sharon E. Taverno Ross, John M. Jakicic, FACSM. University of Pittsburgh, Pittsburgh, PA&lt;br&gt;Email: <a href="mailto:mas721@pitt.edu">mas721@pitt.edu</a>&lt;br&gt;(No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #117</td>
<td>2:00 PM - 3:30 PM</td>
<td>Board #124</td>
<td>2:00 PM - 3:30 PM</td>
</tr>
<tr>
<td><strong>The Impact Of Stand-biased Desks On After-school Physical Activity Behaviors In Children</strong>&lt;br&gt;Nathan R. Tokarek, Chi C. Cho, Hotaka Maeda, Scott J. Strath, FACSM, Nora E. Miller, Ann M. Swartz, FACSM. University of Wisconsin - Milwaukee, Milwaukee, WI. (Sponsor: Ann M Swartz, FACSM)&lt;br&gt;Email: <a href="mailto:ntokarek@uwm.edu">ntokarek@uwm.edu</a>&lt;br&gt;(No relevant relationships reported)</td>
<td><strong>Physical Activity Enjoyment in Different Physical Activities In Parent-Child Dyads When They Exercise Together</strong>&lt;br&gt;Noelle Merchant1, Patrick Filanowski2, Ronald J. Iannotti3, Sarah M. Camhi4, Jessica A. Whiteley5, Laurie Milliken, FACSM6. 1University of Massachusetts Boston, Boston, MA. 2CDM Group, Inc., Bethesda, MD. (Sponsor: Laurie Milliken, FACSM)&lt;br&gt;Email: <a href="mailto:noelle.merchant001@umb.edu">noelle.merchant001@umb.edu</a>&lt;br&gt;(No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #118</td>
<td>2:00 PM - 3:30 PM</td>
<td>Board #125</td>
<td>2:00 PM - 3:30 PM</td>
</tr>
<tr>
<td><strong>Evaluation of Physical Activity and Flexibility Metrics in Children with Congenital Heart Diseases or Obesity Attending a Golf Camp</strong>&lt;br&gt;Christopher Kist, Amanda Gier, Nicole Weisner, Seth Gray, Bob Siegel, Clifford Chin. Cincinnati Children’s Hospital, Cincinnati, OH&lt;br&gt;Email: <a href="mailto:christopher.kist@chcm.org">christopher.kist@chcm.org</a>&lt;br&gt;(No relevant relationships reported)</td>
<td><strong>Effects Of An Educational, Nutritional And Recreational Camp Intervention In Health Parameters In Overweight Children</strong>&lt;br&gt;Carmen Silvia Grubert Campbell1, Suliane Beatriz Rauher1, Henrique Lima Ribeiro1, Isabella Reis Prada1, Joyce Bondfin Vicente1, Geiziane Melo2, Zelia Vargas dos Reis1, Valeria Pedrosa1, Pablo Cididino1, Daniel Fernandes Barbosa1, Eric Vale1, Alisson Luiz Aquino da Silva2, Herbert Gustavo Simões2. 1Catholic University of Brasilia, Taguatinga, Brazil. 2Catholic University of Brasilia, Águas Claras, Brazil&lt;br&gt;Email: <a href="mailto:campbellcs@gmail.com">campbellcs@gmail.com</a>&lt;br&gt;(No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Six-month Sustained Improvement In Motor Proficiency In Youth After A 24-week Home-based Intervention
Daniela A. Rubin, FACSM\(^1\), Kathleen S. Wilson\(^1\), Debra J. Rose\(^1\), Marilyn Dumont-Driscoll\(^1\), \(^1\)California State University Fullerton, Fullerton, CA. \(^2\)University of Florida Gainesville, Gainesville, FL
Email: drubin@fullerton.edu
(No relevant relationships reported)

Are Graded Task-based Interventions The New Remedy For Unfit Overweight And Obese Female Adolescents?
Emmanuel Bonney, Gillian Ferguson, Bouwien Smits-Engelsman. University of Cape Town, Cape Town, South Africa
Email: ebonney10@gmail.com
(No relevant relationships reported)

The Effect of Education on Perceived Risk of Diabetes in Traditional-Age College Students
Heather E. Webb, Shannon Strawn, Mikaela Boham, Liana Davis. Texas A&M Corpus Christi, Corpus Christi, TX
Email: heather.webb@tammucc.edu
(No relevant relationships reported)

Associations between Chinese College Students' Social Cognitive Beliefs, Physical Activity, and Health: Sex Differences
Jichao Liu\(^1\), Nan Zeng\(^1\), Kun Tao\(^2\), Qingwen Peng\(^3\), Xianxiong Li\(^4\), Shanying Xiong\(^5\), Zachary Pope\(^6\), Zan Gao, FACSM\(^7\). \(^1\)University of Minnesota, Minneapolis, MN. \(^2\)Huaibian University, Hulaibian, China. \(^3\)Hunan Normal University, Changsha, China. \(^4\)Shenzhen Polytechnic University, Shenzhen, China. \(^5\)Hunan Normal University, Changsha, China. \(^6\)Shanghai University of Sport, Shanghai, China. \(^7\)University of Vermont, Burlington, VT
Email: luxx4327@umn.edu
(No relevant relationships reported)

Use And Acceptance Of Sit-to-stand Workstations In The College Classroom
Jeremy A. Steeves, Colby Beach. Maryville College, Maryville, TN.
(Sponsor: David R. Bassett, FACSM)
Email: jeremy.steeves@maryvillecollege.edu
(No relevant relationships reported)

Examining the Relationships between Physical Activity Participation and Sleep Quality in Chinese College Students
Nan Zeng\(^1\), Kun Tao\(^2\), Qingwen Peng\(^3\), Shanying Xiong\(^4\), Xianxiong Li\(^5\), Zan Gao, FACSM\(^6\). \(^1\)University of Minnesota, Minneapolis, MN. \(^2\)Huaibian University, Hulaibian, China. \(^3\)Shenzhen Polytechnic University, Shenzhen, China. \(^4\)Hunan Normal University, Changsha, China. \(^5\)Shanghai University of Sport, Shanghai, China. \(^6\)University of Vermont, Burlington, VT
Email: zengx185@umn.edu
(No relevant relationships reported)

Research of the Perceived Exertion Scale of Physical Activity Intensity for Chinese Preschool Children
Qing Sha, Luo Dong mei, Yao Tian cong. Beijing Sport University, Beijing, China
Email: s447844724@126.com
(No relevant relationships reported)

Effect of Physical Activity Over 1-Week on Peak Expiratory Flow in Asthmatic Children
Alexandra B. Pracek, Gina M. Besenyi, Craig A. Harms, FACSM. Kansas State University, Manhattan, KS. (Sponsor: Craig A. Harms, FACSM)
Email: abpracek@ksu.edu
(No relevant relationships reported)

Are Latino Preschool Children Meeting Recommendations Related To The 5-2-1-0 Message?
Neil P. Sharma, Sharon E. Taverno Ross, Bethany B. Gibbs, Patricia I. Domènec. University of Pittsburgh, Pittsburgh, PA. (Sponsor: Dr. Russell Pate, FACSM)
(No relevant relationships reported)

A Multi-level Analysis Of The Effects Of Epoch Length On Children’S Physical Activity Pattern
Han Chen. Valdosta State University, Valdosta, GA
Email: hanchen@valdosta.edu
(No relevant relationships reported)

The Development And Testing Of A Direct Observation Protocol For Children’S Free-play Activity
Melanna F. Cox, Gregory J. Petracci, Jr, Brittany R. Masteller, John R. Sirand. University of Massachusetts Amherst, Amherst, MA
Email: mfeox@umass.edu
(No relevant relationships reported)

Associations Of Physical Activity And Screen Time With Obesity In Chinese Children And Adolescents
Zheng Zhu\(^1\), Shengxia Ma\(^1\), Yang Bai\(^1\), Yan Tang\(^1\), Jie Zhuang\(^1\), Yang Liu\(^1\), Peijie Chen\(^1\), Zhen-Bo Cao\(^2\). \(^1\)Shanghai University of Sport, Shanghai, China. \(^2\)University of Vermont, Burlington, VT
Email: suszhuzheng@126.com
(No relevant relationships reported)

Teaching Styles in Physical Education: The Effects on Physical Activity Levels of Middle School Students with Different Motivation Types
Yongiu Hwang, Jooyeon Jui. \(^1\)University of Wisconsin-La crosse, Onalaska, WI. \(^2\)University of Seoul, Seoul, Korea, Republic of
Email: hwang.yongiu@uwlax.edu
(No relevant relationships reported)

Relationships of Physical Activity and Academic Achievement in the College Student Attending a Two -Year Institution
Gwendolyn Plucar, David Barrett. Southwest Minnesota State University, Bloomington, MN
Email: gwenplucar@gmail.com
(No relevant relationships reported)

Changes In Student Perceptions of Interdisciplinary Collaboration After Community Health Fair Volunteer Experiences
Mary C. Stenson, Mark Glen, Nicole Lang, Julie Strelow. College of St. Benedict/ St. John’s University, Saint Joseph, MN
Email: mcsstenson@csbjug.edu
(No relevant relationships reported)

Who Are the Undergraduate Equestrians in the Intercollegiate Horseshows Association, and What Are Their Lifestyle Habits?
Jessie Bitler, Helen Battisti, Shelby Yeager, Diane DellaValle. Marywood University, Scranton, PA
Email: jmbitler@m.marywood.edu
(No relevant relationships reported)
**F-58** Free Communication/Poster - Physical Activity and Cancer

**F-58**

**Board #142**

**2:00 PM - 3:30 PM**

**Mid-term Effectiveness Of An Unsupervised Exercise Prescription Program In Breast Cancer Survivors**

Gabriele Mascherini, Benedetta Tosi, Leonardo Osti, Giorgio Galanti. University of Florence, Florence, Italy

Email: gabriele.mascherini@unifi.it

(No relevant relationships reported)

**Board #143**

**2:00 PM - 3:30 PM**

**The Effects of Smart Watch Intervention on Breast Cancer Survivors’ Biomarkers and Health Outcomes**

Nan Zeng1, Chunyan Han2, Ning Liao3, Zan Gao, FACSM4.

1 University of Minnesota, Minneapolis, MN. 2 South China University of Technology, Guangzhou, China. 3 Guangdong People’s General Hospital, Guangzhou, China. (Sponsor: Zan Gao, FACSM)

Email: zengx185@umn.edu

(No relevant relationships reported)

**Board #144**

**2:00 PM - 3:30 PM**

**Changes in Sedentary Time and Physical Activity of Cancer Survivors Participating in an Exercise Program**

Sarah Greterman. Concordia College, Moorhead, MN

Email: sgreterman@cord.edu

(No relevant relationships reported)

**Board #145**

**2:00 PM - 3:30 PM**

**Effect Of Self-control Exercise Practice Dose On Lymphocyte Subsets Of Lung Cancer Patients**

Jibing Wang1, Weimo Zhu, FACSM2, Renwei Wang3, Jiaying Lang1, Ruirui Xing1, Shuhao Qian3. Tongji University, Shanghai, China. 2 University of Illinois at Urbana-Champaign, Urbana, IL. 3 Shanghai University of Sport, Shanghai, China

Email: benwangking@126.com

(No relevant relationships reported)

**Board #146**

**2:00 PM - 3:30 PM**

**An Investigation Of Physical Activity And Cardiorespiratory Fitness In Childhood Cancer Survivors.**

David Miznazi1, Claire E. Wakefield1, Joanna E. Fardell1, David Siman1, Ann Maguire1, Gill Hubbard1, James McBride1, Penelope Field1, Richard J. Cohn1. 1 University of New South Wales, Sydney, Australia. 2 The Children’s Hospital at Westmead, Sydney, Australia.

Email: d.miznazi@unsw.edu.au

(No relevant relationships reported)

**Board #147**

**2:00 PM - 3:30 PM**

**Association Between Cancer Screening and Physical Activity in Cancer Survivors**

Kathlynn M. Mathis. Pennsylvania State University, State College, PA

Email: kathlynn.mathis@gmail.com

(No relevant relationships reported)

**Board #148**

**2:00 PM - 3:30 PM**

**Neuropathy And Fine-motor-function In Survivors Of Childhood Acute Lymphoblastic Leukemia: A Report From St. Jude Life**


Email: robynpartin@stjude.org

(No relevant relationships reported)
Board #156 2:00 PM - 3:30 PM
Time-Course of Muscle Performance Recovery of Hodgkin’s Lymphoma Survivors After a Resistance Exercise Session: A Preliminary Study
Email: sandronobrec@gmail.com
(No relevant relationships reported)

Board #157 2:00 PM - 3:30 PM
Objectively Quantified Doses of Activity and Inactivity and Subjective Well-Being in Breast Cancer Survivors
Amanda Hickey1, Richard Viskochil2, Patty Freedson, FACSM2, Barry Braun, FACSM3, 1Keene State College, Keene, NH. 2University of Massachusetts, Amherst, MA. 3Colorado State University, Fort Collins, CO.
(No relevant relationships reported)

Board #158 2:00 PM - 3:30 PM
Effects of a Lifestyle Intervention on Select Social Cognitive Outcomes in Prostate Cancer Patients Undergoing Androgen Deprivation Therapy
Brian C. Focht, FACSM1, Alexander R. Lucas2, Elizabeth Grainger1, Christina Simpson1, Ciaran M. Fairman1, Jennifer M. Thomas-Alner1, Jessica Bowman1, Victoria R. DeScenza1, Zachary L. Chaplow1, Steven K. Clanton1. 1The Ohio State University, Columbus, OH. 2Wake Forest University, Winston Salem, NC.
Email: focht.10@osu.edu
(No relevant relationships reported)

Board #159 2:00 PM - 3:30 PM
Changes in Quality of Life of Cancer Survivors Participating in a Group Exercise Program
Sarah Greterman. Concordia College, Moorhead, MN.
Email: sgreterman@cord.edu
(No relevant relationships reported)

Board #160 2:00 PM - 3:30 PM
Age, Mobility Performance, and Physical Activity in Prostate Cancer Patients Undergoing Prolonged Androgen Deprivation Therapy
Victoria R. DeScenza1, Brian C. Focht, FACSM1, Alexander R. Lucas2, Elizabeth Grainger1, Christina Simpson1, Ciaran M. Fairman1, Jennifer M. Thomas-Alner1, Jessica Bowman1, Zachary L. Chaplow1, Steven K. Clanton1. 1The Ohio State University, Columbus, OH. 2Wake Forest University, Winston Salem, NC.
(Sponsor: Brian C. Focht, FACSM)
(No relevant relationships reported)

Board #161 2:00 PM - 3:30 PM
Aquatic Exercise Training Program Outcomes on Quality Of Life and Lower Limb Lymphedema: Pilot Study
Andrée Dionne1, Tarik Aiaz1, Sandra Morales1, Serge Goulet2, Mario Leone1, Alain Steve Comtois1. 1University of Quebec in Montreal, Montreal, QC, Canada. 2University of Sherbrooke, Montreal, QC, Canada.
Email: dionne.andree@uqam.ca
(No relevant relationships reported)

Board #162 - 2:00 PM - 3:30 PM
The Importance of Adiposity to the Cancer Patient Initiating Exercise
Alexia Amo1, Cynthia Villalobos1, Justin C. Brown2, Paul D. Vosti2, Courtney D. Jensen3. 1University of the Pacific, Stockton, CA. 2Harvard University, Cambridge, MA. 3St. Joseph’s Hospital, Stockton, CA.
(Sponsor: Kathryn L. Schmitz, FACSM)
Email: 1.amo@u.pacific.edu
(No relevant relationships reported)

Board #163 2:00 PM - 3:30 PM
Cancer Stage Does Not Affect Fatigue or VO2peak Improvements Following an Exercise-Based Cancer Rehabilitation Program
Daniel Y.K. Shackelford1, Jessica M. Brown1, Brent M. Peterson2, Reid Hayward1, Carroll University, Waukesha, WI. 1Biola University, La Mirada, CA. 2University of Northern Colorado, Greeley, CO.
Email: dshackel@carrollu.edu
(No relevant relationships reported)

Board #164 2:00 PM - 3:30 PM
Recruitment Strategies for Cluster Randomized Controlled Trials Targeting Workplace Sedentary Behavior: a Retrospective Review
Sarah L. Mullane1, Sarah A. Rydell1, Miranda L. Larouche1, Meynard John L. Toledo1, Linda H. Feltz2, Brenna Vuong1, Noe C. Crespo1, Mark A. Pereira2, Matthew P. Buman, FACSM3. 1Arizona State University, Phoenix, AZ. 2University of Minnesota, Minneapolis, MN. 3Minnesota Department of Health, Minneapolis, MN.
(Sponsor: Matthew P. Buman, FACSM)
Email: smullan@asu.edu
(No relevant relationships reported)

Board #165 2:00 PM - 3:30 PM
Validation Of Two Physical Activity And Sedentary Behavior Questionnaires In Orthopedic Trauma Patients
William G. Veitch1, Rachel E.D. Climie1, Belinda J. Gabbe1, David W. Dunstan1, Neville Owen1, Christina L. Ekegren2. 1Monash University, Melbourne, Australia. 2Baker Heart and Diabetes Institute, Melbourne, Australia.
Email: bill.veitch@monash.edu
(No relevant relationships reported)

Board #166 2:00 PM - 3:30 PM
Informing Workplace Sedentary Behavior Interventions Through Momentary Affective States And Email-based Prompts.
Meynard John L. Toledo, Sarah L. Mullane, Sayali S. Phutak, 85004, Marios Hadjimichael, Eric B. Hecker, Matthew P. Buman. Arizona State University, Phoenix, AZ. (Sponsor: Matthew P Buman, FACSM)
Email: mtoledo@asu.edu
(No relevant relationships reported)

Board #167 2:00 PM - 3:30 PM
Impact of 3-Month Changes in Sedentary Time and Light-Intensity Physical Activity on Subjective Sleep Quality
Miranda L. Larouche1, Meynard John L. Toledo1, Sarah L. Mullane1, Kristina Hasanaj1, Sarah A. Rydell1, Mark A. Pereira2, Matthew P. Buman, FACSM3. 1Arizona State University, Phoenix, AZ. 2University of Minnesota, Minneapolis, MN.
(Sponsor: Matthew Buman, FACSM)
Email: mlarouch@asu.edu
(No relevant relationships reported)

Board #168 2:00 PM - 3:30 PM
Patterns of Sedentary Behavior in Pregnant Women
Anya Odabasic, Meghan Barath, Rebecca A. Schlafl, Samantha J. Deere. Saginaw Valley State University, University Center, MI.
Email: aodabasi@svsu.edu
(No relevant relationships reported)
ACSM May 29 – June 2, 2018 Minneapolis, Minnesota

FRIDAY, JUNE 1, 2018

P202 Final Program

2886 Board #169 2:00 PM - 3:30 PM
Associations Between Sedentary Behavior And Metabolic Syndrome Are Mediated By Cardiorespiratory Fitness But Not Mvpa
Katrina Taylor1, Megan C. Nelson1, Chantel A. Vella, FACSM2.
1Eastern Washington University, Cheney, WA. 2University of Idaho, Moscow, ID
Email: kaylor31@ewu.edu
(No relevant relationships reported)

2887 Board #170 2:00 PM - 3:30 PM
Adapting Sedentary Video Games to Require Physical Activity
(Sponsor: Dr. Stella Volpe, FACSM)
Email: cmj375@drexel.edu
(No relevant relationships reported)

2888 Board #171 2:00 PM - 3:30 PM
Impact of HeatTheLses Lifestyle Prescription Program on Healthful Eating and Sedentary Time in At-Risk Adults
Dawn P. Gill1, Wendy Blunt1, Roseanne W. Palfiord1, Adam Gavarkovs2, Narlon C. Boa Sorte Silva1, Cassandra Bartol1, P Karen Simmnavong1, Ashleigh De Cruz1, Guangyong Zou1, Robert J. Petrella, FACSM. 1Western University, London, ON, Canada. 2Harvard University, Cambridge, MA
Email: dawn.gill@uwo.ca
(No relevant relationships reported)

2889 Board #172 2:00 PM - 3:30 PM
Reproducibility Of Free-living Physical Activity/sedentary Behaviors In College Undergraduates
Justin M. Moren, Jesse A. Goodrich, Jeffrey C. Higdon, Marissa Holliday, Miguel A. Rueda, Sourav Podder, Theresa D. Hernandez, Matthew B. McQueen, Kenneth P. Wright Jr., William C. Byrnes, FACSM. University of Colorado- Boulder: Boulder, CO.
(Sponsor: William C. Byrnes, FACSM)
Email: justin.moren@colorado.edu
(No relevant relationships reported)

2890 Board #173 2:00 PM - 3:30 PM
The Effect Of A Sit And Resistance Training Program On Sedentary Behavior
Danielle D. Wadsworth, David Pascoe, FACSM, James McDonald, Mynor Rodriguez Hernandez. Auburn University, Auburn, AL
Email: wadswd@auburn.edu
(No relevant relationships reported)

2891 Board #174 2:00 PM - 3:30 PM
Accelerometer-determined Physical Activity and Sedentary Behavior among Majority-minority Sample of Adults: The Houston Train Study
Ashleigh M. Johnson1, Kelley Pettee Gabriel, FACSM2, Deborah Salvo1, Erin E. Dooley1, Casey P. Durand1, Gregory Knell1, Samantha J. Kreis1, Harold W. Kohl, III, FACSM3. 1The University of Texas Health Science Center at Houston (UTHealth) School of Public Health in Austin, Austin, TX. 2The University of Texas Health Science Center at Montevallo, Montevallo, AL. 3Kent State University, Kent, OH.
Email: ashleigh.johnson@uthsc.edu
(No relevant relationships reported)

2892 Board #175 2:00 PM - 3:30 PM
The Effectiveness of Standing on a Balance Board for Increasing Energy Expenditure while Performing Sedentary Work
Megan C. Nelson, Madeline P. Casanova, Katie Eason, Elizabeth Biancosino, Chantel A. Vella, FACSM. University of Idaho, Moscow, ID
Email: meganm@uidaho.edu
(No relevant relationships reported)

ACSM 65th Annual Meeting

2893 Board #176 2:00 PM - 3:30 PM
Intervention Targeting Reductions In Sedentary Time In Older Cancer Survivors: Characteristics Of Responders Versus Non-responders
Elizabeth Harding, Amy Tarnower, Charles Wiggins, Emily Williams, Matthew Schwartz, David Medrano, Anita Y. Kinney, Cindy K. Blair. University of New Mexico, ALBUQUERQUE, NM
Email: hardinge@unm.edu
(No relevant relationships reported)

2894 Board #177 2:00 PM - 3:30 PM
Effects of a 16-Week Treadmill Exercise on Physical Activity and Sedentary Time in Older Women
(Sponsor: Steven N. Blair, FACSM)
Email: jsrsparks@email.sc.edu
(No relevant relationships reported)

2895 Board #178 2:00 PM - 3:30 PM
Accelerometer-Assessed Physical Activity And Sedentary Time Profiles Of Kidney Transplant Recipients
Jeff K. Valiance1, Steven T. Johnson1, Kevin Wer1, Ngaan N. Lam2, Stephanie Thompson3, Terry Boyle1, Sorosh Shojaie4. 1Athabasca University, Athabasca, AB, Canada. 2University of Alberta, Edmonton, AB, Canada. 3University of South Australia, Adelaide, Australia
(No relevant relationships reported)

2896 Board #179 2:00 PM - 3:30 PM
Comparison Of ActiWap And Actigraph On Detecting Sitting Vs. Standing In Three Classroom Postures
Saori Braun, Marquell Johnson, Jeffrey Janot, Sarah Reischel, Joshua Stewart, Chelsea Alger, Bo Casper. University of Wisconsin-Eau Claire, Eau Claire, WI.
(Sponsor: Don Bredle, FACSM)
Email: brauns@uwec.edu
(No relevant relationships reported)

2897 Board #180 2:00 PM - 3:30 PM
Sedentary Time And Steps Across Methods For Determining End Of Daytime During 24-hour Actigraph Monitoring
Bethany Barone Gibbs, Melissa A. Jones, Tyler D. Quinn, Subashan Perera, Christopher E. Kline. University of Pittsburgh, Pittsburgh, PA
Email: bbarone@pitt.edu
(No relevant relationships reported)

2898 Board #181 2:00 PM - 3:30 PM
The Relationship between Cell Phone Use, Physical Activity, and Sedentary Behavior in Adults Aged 18-80
Curtis Fennell1, Jacob E. Barkley2, Andrew Lepp2. 1University of Montevallo, Montevallo, AL. 2University of Alberta, Edmonton, AB, Canada. 3University of South Australia, Adelaide, Australia
(No relevant relationships reported)

2899 Board #182 2:00 PM - 3:30 PM
Impact Of Sit-stand Workstation Progressions On Stress, Focus, And Productivity In University Staff Members
Mark A. Schafer, K. Jason Crandall, T. Scott Lyons, FACSM, Kolbi Edens, Lydia Blankenship, Nuha Shaker, Robert Vondy. Western Kentucky University, Bowling Green, KY.
(Sponsor: Ellen Glickman, FACSM)
Email: mark.schafer@wku.edu
(No relevant relationships reported)

2900 Board #183 2:00 PM - 3:30 PM
The Physical And Psychological Effects Of Standing Desks In Office Workers
Hannah E. Dohm, Dale D. Brown, FACSM, Kristen M. Lagally, FACSM, Kelly R. Laurson. Illinois State University, Normal, IL.
(Sponsor: Drs. Dale D. Brown and Kristen M. Lagally, FACSM)
(No relevant relationships reported)
2901 Board #184  2:00 PM - 3:30 PM  
Effects Of Isotemporal Substitution Of Sedentary Time (total And Prolonged Bouts) On Mental Wellbeing  
Jacob Meyer1, Laura Ellingson, FACSM, Matthew Bunnan, FACSM2, Robin Shook1, Gregory Hand, FACSM, Steven Blair, FACSM. 1Iowa State University, Ames, IA. 2Arizona State University, Tempe, AZ. *Children's Mercy Hospital, Kansas City, MO. 1West Virginia University, Morgantown, WV. *University of South Carolina, Columbia, SC. (Sponsor: Steven Blair, FACSM)
Email: jmeyere3@iastate.edu  
(No relevant relationships reported)

2902 Board #185  2:00 PM - 3:30 PM  
Racial and Ethnic Differences in Time Spent Sitting - The Booster Break Study  
Matthew D. Leatherwood1, Raheem J. Paxton1, John C. Higginbotham1, Wendell C. Taylor2. 1The University of Alabama, Tuscaloosa, AL. 2The University of Texas Health Science Center, Houston, TX  
Email: mi leatherwood@crimson.ua.edu  
(No relevant relationships reported)

2903 Board #186  2:00 PM - 3:30 PM  
Changes In Leisure Sedentary Behavior Across Retirement Transition: Finnish Retirement And Aging Study (FIREA)  
Tuula Leskinnen1, Anna Pulakkari1, Olli Heinonen1, Jaana Pentti1, Mikael Kivimäki2, Jussi Vähära3, Sari Stenholm1. 1University of Turku, Turku, Finland. 2University of Helsinki, Helsinki, Finland  
Email: tuula.leskinnen@utu.fi  
(No relevant relationships reported)

2904 Board #187  2:00 PM - 3:30 PM  
Objectively-measured And Self-reported Sedentary Behavior And Its Association With Mental Wellbeing In College Students  
Keith M. Thraen-Borowski1, Alex J. Hofstetter1, Elizabeth G. Mills1, Mackenzie R. Anderson1, Rachel A. Valente1, Laura D. Ellingson1, Jacob D. Meyer2. 1Iowa State University, Ames, IA  
Email: tuula.leskinnen@utu.fi  
(No relevant relationships reported)

2905 Board #188  2:00 PM - 3:30 PM  
Determinants Of Sedentary Behavior In Adults: Who Is At Risk Of High Sedentary Time?  
Esmée A. Bakker1, Duck-chul Lee, FACSM2, Maria TE Hopman1, FACSM, André LM Verbeek1, Dick HJ Thijssen1, Thijs MH Eijsvogels1. 1Radboud university medical centre, Nijmegen, Netherlands. 2Iowa State University, Nijmegen, NL. *Liverpool John Moores University, Liverpool, United Kingdom. (Sponsor: Prof. Dr. Maria Hopman, FACSM)
Email: Esme.Bakker@radboudumc.nl  
(No relevant relationships reported)

2906 Board #189  2:00 PM - 3:30 PM  
Sedentary Time and Cumulative Risk of Preserved and Reduced Ejection Fraction Heart Failure: MESA  
Brandi S. Rariden1, Michael R. Richardson1, Tammie M. Johnson1, Clinton A. Brawner, FACSM2, Sherry O. Pinkstaff3, James R. Churilla1. FACSM. 1University of North Florida, Jacksonville, FL. 2Henry Ford Hospital, Detroit, MI. (Sponsor: James R. Churilla, FACSM)
Email: n00774738@unf.edu  
(No relevant relationships reported)

2907 Board #190  2:00 PM - 3:30 PM  
Sitting Is The New Smoking And Teens Report Doing A Lot Of It  
Sarah G. Sanders, Betty J. Skipper, Karen Scherzinger, Elizabeth Yakes Jimenez, Alberta S. Kong. University of New Mexico, Albuquerque, NM  
Email: scinfu@salud.unm.edu  
(No relevant relationships reported)

2908 Board #191  2:00 PM - 3:30 PM  
“Health-enhancing” Breaks From Sitting- Variations By Gender, Age, Adiposity And Diabetes Status  
Jennifer Blankenship1, Elisabeth Winkler2, Genevieve Healy2, Neville Owen1, David Dunstan1. 1University of Colorado Anschutz Medical Campus, Aurora, CO. 2The University of Queensland, Brisbane, Australia. 3Baker Heart and Diabetes Institute, Melbourne, Australia
Email: jblanken702@gmail.com  
(No relevant relationships reported)

2909 Board #192  3:30 PM - 5:00 PM  
The Effects of 6 weeks of Cissus Quadrangularis Supplementation and High Intensity Exercise Training  
Eric E. Noreen, Jaclyn Turet, Daniel Mallozzi. Gettysburg College, Gettysburg, PA  
Email: enoreen@gettysburg.edu  
(No relevant relationships reported)

2910 Board #193  3:30 PM - 5:00 PM  
The Effects Of Resveratrol-based Polyphenol Supplementation On Indices Of Exercise-induced Muscle Damage  
Samantha Silva, Rachel Wes, Adam Osmond, Edward Jo. Cal Poly Pomona, Pomona, CA  
(No relevant relationships reported)

2911 Board #194  3:30 PM - 5:00 PM  
Dietary Antioxidants-contained Foods Promote Skeletal Muscle Adaptation And Reduce Fatigue Induced By Resistance Training  
Aki Kawanura. Kyoto prefectural university, Kyoto, Japan  
(No relevant relationships reported)

2912 Board #195  3:30 PM - 5:00 PM  
Effect of New Zealand Blackcurrant Extract on Substrate Oxidation and Cycling Performance in Normobaric Hypoxia  
Mark E. Willems1, Tim Berendsen2, Mehmet A. Sahin3, Stephen D. Myers1, Sam D. Blacker2, Matthew D. Cook1. 1University of Chichester, Chichester, United Kingdom. 2Maastricht University, Maastricht, Netherlands. 1Hacettepe University, Ankara, Turkey
Email: m.willems@chi.ac.uk  
(No relevant relationships reported)

2913 Board #196  3:30 PM - 5:00 PM  
Effects Of Montmorency Tart Cherry (L. Prunus Cerasus) Consumption On Nitric Oxide Biomarkers And Exercise Performance.  
Karen M. Keane1, Stephen J. Bailey2, Anni Vanhatalo, FACSM3, Andrew M. Jones, FACSM3, Glyn Howatson, FACSM1, 2Northumbria University, Newcastle Upon Time, United Kingdom. 2Loughborough University, Loughborough, United Kingdom. 3University of Exeter, Exeter, United Kingdom. (Sponsor: Professor Glyn Howatson, FACSM)
Email: k.keane@northumbria.ac.uk  
(No relevant relationships reported)
2914  Board #197  3:30 PM - 5:00 PM
Effects Of Blackcurrant Extract On Peripheral Blood Flow And Muscular Endurance
Matthew J. Barnes¹, Blake G. Perry², Roger D. Hurst¹, Dominic Lomwięs³. ¹Massey University, Palmerston North, New Zealand. ²Massey University, Wellington, New Zealand. ³Plant and Food Research, Palmerston North, New Zealand
Email: m.barnes@massey.ac.nz
(No relevant relationships reported)

2915  Board #198  3:30 PM - 5:00 PM
Effects Of Acute Golden Root Extract (rhodiola Rosea) Supplementation On Anaerobic Exercise Capacity
Christopher G. Ballmann, Shelby Maze, Abby Wells, Mallory Marshall, John Petrella, FACSM, Rebecca Rogers, Sanford University, Birmingham, AL. (Sponsor: John Petrella, FACSM)
Email: chballman@samford.edu
(No relevant relationships reported)

2916  Board #199  3:30 PM - 5:00 PM
Nutritional Analysis of Ginger (Zingiber officinale) Drink: Potentials for Sport Performance
Muhammed A. Muhammed¹, Olufunmilola L. Dominice¹, Iliau Y. Seidina¹, Emmanuel O. Saprong², Adetayo E. Talabi¹. ¹University of Ibori, Ibori, Nigeria. ²University of Education, Winneba, Winneba, Ghana
Email: mciroma@yahoo.com
(No relevant relationships reported)

2917  Board #200  3:30 PM - 5:00 PM
The Effect of Curcumin on Inflammation and Exercise Induced Muscle Damage in Healthy Adults
Alexa Gerchman¹, Angela Hillman², Erin O’Hara¹. ¹Marywood University, Scranton, PA. ²Ohio University, Athens, OH
Email: agerchman@m.marywood.edu
(No relevant relationships reported)

2918  Board #201  3:30 PM - 5:00 PM
The Effects of Blueberry Supplementation on Exercise-Induced Muscle Damage
Lyndsay J. Lee, Paul C. Miller, FACSM, Takudzwa A. Madzima. Elon University, Elon, NC
(No relevant relationships reported)

2919  Board #202  3:30 PM - 5:00 PM
The Effects Of Rhodiola Rosea Supplementation On Time To Fatigue And Recovery After Exercise In Rats
Gerseli Angeli¹, Turbio Barros Neto¹, Donald Kirkendall, FACSM². ¹São Paulo Federal University, São Paulo, Brazil. ²Duke University, Durham, NC. (Sponsor: Donald Kirkendall, FACSM)
(No relevant relationships reported)

2920  Board #203  3:30 PM - 5:00 PM
Curcuma Longa Extract Reduces Muscle Soreness And Myoglobin Following A Half-marathon: A Double-blind, Placebo-controlled, Randomized
João Felipe Mota¹, Flávia Rasmussen Faria¹, Aline Corado Gomes¹, Kennia Rocha Rezende¹, Gustavo Duarte Pinnetel¹, Camila Lemos Pinto¹, Marcelo Saldanha Aoki¹. ¹Federal University of Goias, Goiânia, Brazil. ²University of Alberta, Edmonton, AB, Canada. ³University of São Paulo, São Paulo, Brazil
Email: jfemota@gmail.com
(No relevant relationships reported)

2921  Board #204  3:30 PM - 5:00 PM
Grain fermented beverage treatment induces mitochondrial biogenesis in C2C12 myotubes
Tsuhasa Shibusuguchi¹, Atsushi Tsuji¹, Yuya Yamazaki¹, Keizo Matsumi¹, Kazumi Masuda¹. ¹Kanazawa University, Kanazawa City, Japan. ²Industrial Research Institute of Ishikawa, Kanazawa City, Japan. ³Fukumitsuaya Sake Brewery, Kanazawa City, Japan
Email: shiba-t@staff.kanazawa-u.ac.jp
(No relevant relationships reported)
2928  Board #211  3:30 PM - 5:00 PM
Allyl Isothiocyanate Enhances Brain Neuronal Plasticity
Proteins Via Inhibition Of Inflammation Proteins
Vijaya Juturu1, Berrak Caglayan2, Ergüntug Kilic1, Arman Dalay1, Mehmet Tuzcu1, Fusun Ertan1, Mehmet Yalcin Gunal1, Serdar Altunay1, Cemal Orhan1, Kazım Sahin1. 1OmnitecHealth Technologies Inc, Morristown, NJ. 2Istanbul Medipol University, Istanbul, Turkey. 1Firat University, Elazig, Turkey
Email: v.juturu@omnitec.com
(No relevant relationships reported)

2929  Board #212  3:30 PM - 5:00 PM
Carbohydrate Mouth Rinse Improves Peak Treadmill Speed
and Time to Exhaustion in Overweight Adults
Mohaf F. Batane1, Ayeshas A. Al Dhaferi1. 1Hashemite University, Zarqa, Jordan. 2United Arab Emirates University, Al Ain, United Arab Emirates
(No relevant relationships reported)

2930  Board #213  3:30 PM - 5:00 PM
Short-term DHEA Intake And Hormonal Responses In
Young Recreationally Trained Athletes
Katia Colom1, Corinne Buisson1, Nicolas Gravisse1, Soraya Belgherb1, Zakaria Labry1, Mansu-Cuong Do1, Olivier Gagey2, Sophie Dufay2, Nancy Viharel-Rebo1, Michel Audran2. 1University of Orleans, Orleans, France. 2AEFL, Chatenay-Malabry, France.
1University of Paris Sud, Orsay, France. 4AGEPS, Paris, France
(No relevant relationships reported)

2931  Board #214  3:30 PM - 5:00 PM
Neuroprotective Effect of Omega-3 Fatty Acids on Head
Trauma in African American Football Athletes
K. Michele Kirk1, David A. Gable1, Jason D. Stone1, Anthony J. Anzalone1, Stephanie M. Turner1, Andy T. Askol1, Joel A. Luedke1, Andrew Jagim1, Margaret T. Jones, FACS1, Jonathan M. Oliver1. 1Texas Christian University, Fort Worth, TX. 2University of Wisconsin - La Crosse, La Crosse, TX. 3Lindenwood University, St. Charles, MO. 4George Mason University, Fairfax, VA. (Sponsor: Margaret Jones, FACS)
(No relevant relationships reported)

2932  Board #215  3:30 PM - 5:00 PM
A Pre-Workout Supplement Does Not Improve 400 M
Sprint Running or Bicycle Wingate Test Performance in
Recreationally Trained Individuals
Gregory A. Brown, FACS1, Brianna Jackson1, Brian Szekely1, Trevor Schramm1, Brandon S. Shaw2, Iha Shaw1. 1The University of Nebraska at Kearney, Kearney, NE. 2AT Still University, Mesa, AZ.
1Georgia Southern University, Statesboro, GA. 2Southern College of Optometry, Memphis, TN. 3University of Zululand, Kwazulu-Natal, South Africa
Email: brownpg@unk.edu
(No relevant relationships reported)

2933  Board #216  3:30 PM - 5:00 PM
Acute Effects Of A Multi-ingredient Pre-workout
Supplement On 5-km Running Performance In
Recreationally-trained Athletes
Taylor Musgjerd1, Nora Johnston1, Andrew Jagim1, Clayton Camic1. 1University of Wisconsin-La Crosse, La Crosse, WI. 2University of Northern Colorado, Greeley, CO. 3Lindenwood University, St. Charles, MO. 4Northern Illinois University, DeKalb, IL. (Sponsor: John Porcari, FACS)
Email: musgjerd.tay@gmail.com
(No relevant relationships reported)

2934  Board #217  3:30 PM - 5:00 PM
Effects of Multi-Ingredient Ergogenic Supplement
Consumption on Performance Adaptations to High-Volume
Resistance Training
Michael Wong, Dean Directo, Adam Osmond, Edward Jo. Cal Poly Pomona, Pomona, CA
(No relevant relationships reported)

2935  Board #218  3:30 PM - 5:00 PM
The Effects Of A Multi-ingredietn Ergogenic Supplement
On Body Composition Following High-volume Resistance
Training
Dean Directo, Michael Wong, Adam Osmond, Edward Jo. Cal Poly Pomona, Pomona, CA
(No relevant relationships reported)

2936  Board #219  3:30 PM - 5:00 PM
Cannabis Use Habits In Relation To Timing Of Physical
Activity
(No relevant relationships reported)

2937  Board #220  3:30 PM - 5:00 PM
An Examination of Supplement Use in Volunteer Firefighters
Melitza Ramirez1, Brittany S. Hollerbach, 665021, Sara A. Jahneke1, Christopher M. Kaipust1, Katie M. Heinrich1. 1Kansas State University, Manhattan, KS. 2National Development and Research Institutes, Leawood, KS. 3University of Texas Houston, Houston, TX
Email: melitzar@ksu.edu
(No relevant relationships reported)

2938  Board #221  3:30 PM - 5:00 PM
Use Of Analgesics For Exercise-associated Pain In Collegiate
Athletes
Christi Brewer. Eastern Washington University, Cheney, WA
(No relevant relationships reported)

2939  Board #222  3:30 PM - 5:00 PM
Specific Bioactive Collagen Peptides in Combination
with Resistance Training Improve Body Composition in
Untrained Subjects
Steffen Oesser1, Denise Zdziablicki2, Michael Schunck1, Daniel König2. 1Cologne Research Institute, Kiel, Germany. 2University of Freiburg, Freiburg, Germany
(No relevant relationships reported)

2940  Board #223  3:30 PM - 5:00 PM
30 Days of Probiotic Supplementation: The Effect Up On
Athletes Immunity After a Marathon Race
Cesovana SP Leite1, Edgar Tavares1, Helena AP Batatinha1, Ayane S. Resende2, Martina C. Seelaender1, Ricardo A. Fock1. 1国立 Research and Development Institute, Brazil. 2University of Sao Paulo, Sao Paulo, Brazil
Email: cesovanaleite@usp.br
(No relevant relationships reported)

2941  Board #224  3:30 PM - 5:00 PM
Short-Term Medium Chain Triglyceride Consumption Does
Not Affect Executive Cognitive Function in Healthy Adults.
Laura Q. Jimenez1, Kay Feldman1, Brian Arwani1. 1Longwood University, Farmville, VA. 2University of Miami, Coral Gables, FL
Email: jimenezla@longwood.edu
(No relevant relationships reported)

2942  Board #225  3:30 PM - 5:00 PM
28-Days Hydrogen-Rich Water Supplementation Affects
Exercise Capacity in Mid-Age Overweight Women
Email: sergej.ostojic@chess.edu.rs
(No relevant relationships reported)

American College of Sports Medicine
Board #226 3:30 PM - 5:00 PM
Single versus Split Dose of Iron Optimizes Haemoglobin Mass Gains at 2,106m Altitude
Rebecca Hall1, Peter Peeling1, Walter T. P. McCluskey1, Dan Bergland1, Trent Stellingwerff1, FACSM1. 1Canadian Sports Institute Pacific, Vancouver & Victoria, BC, Canada. 2University of Western Australia, Crawley, Australia. *Hypo2 High Performance Center; Flagstaff, AZ. (Sponsor: Dr Trent Stellingwerff, FACSM)
(No relevant relationships reported)

Board #227 3:30 PM - 5:00 PM
Antioxidant Supplementation Attenuates Muscle Performance Adaptations In Young Women: A Randomized Placebo-controlled Trial
Maurilio T. Dutra1, Sávio Alex1, Alyson F. Silva1, Nathalia B. Sales1, Marco A. Dourado1, Andrew Fonseca1, Filipe D. Lima1, Lee E. Brown, FACSM1, Martim Bottaro1. 1University of Brasilia, Brasilia, Brazil. 2California State University at Fullerton, Fullerton, CA. (Sponsor: Lee E. Brown, FACSM)
Email: mauriliotiradentes@gmail.com
(No relevant relationships reported)

Board #228 3:30 PM - 5:00 PM
Vitamin D Supplementation Improves Health Related Quality of Life in Children with Sickle Cell Disease
Kelly A. Dougherty1, Chiana Bertolase2, Joan J. Schall1, Kim Smith-White1, Virginia A. Stalling1. 1Stockton University, Galloway, NJ. 2University Hospital Umberto I, Sapienza University, Rome, Italy. 3The Children’s Hospital of Philadelphia, Philadelphia, PA. 4The Children’s Hospital of Philadelphia and University of Pennsylvania, Philadelphia, PA
(No relevant relationships reported)

Board #229 3:30 PM - 5:00 PM
Vitamin D Supplementation on Immune Functions and Upper Respiratory Track Infection in Male Taekwondo Athletes
Hyun Chul Jung1, Myong Won Seo2, Sukho Lee1, Sung Woo Kim2, Jong Kook Song1. 1University of Louisiana at Monroe, Monroe, LA. 2Kyung Hee University, Yong-In, Korea. Republic of. 3Texas A&M University-San Antonio, San-Antonio, TX
Email: jung@cum.edu
(No relevant relationships reported)

Board #230 3:30 PM - 5:00 PM
Impact of a Carbohydrate Mouth Rinse on Muscle and Functional Power in Older Adults.
Logan E. Chaffin1, Kayla Holder1, Chioma Ichoku1, Gabriel K. Harris1, Sristikant Vallabhajosula1, Stephen Bailey, FACSM. 1Elon University, Elon, NC. 2North Carolina State University, Raleigh, NC. (Sponsor: Dr. Stephen Bailey, FACSM)
Email: Ichaflin@elon.edu
(No relevant relationships reported)

Board #231 3:30 PM - 5:00 PM
Greater Fitness is Associated with Reduced Injury Risk in Specialized Military Men
Lisa M. Hernández1, Stephanie D. Coffin1, Marcus K. Taylor1, FACSM1. 1Leidos, San Diego, CA. 2Naval Health Research Center; San Diego, CA. (Sponsor: Marcus K. Taylor, PhD, FACSM)
Email: lisa.m.hernandez75.ctr@mail.mil
(No relevant relationships reported)

Board #232 3:30 PM - 5:00 PM
Adrenal Stress and Performance during Military Survival Training
Tunde K. Szivak1, Elaine C. Lee1, Cathy Saenz1, Brian C. Focht, FACSM1, Jeff S. Volek, FACSM1, Carl M. Maresh, FACSM1, William J. Kraemer, FACSM1. 1 Merrimack College, North Andover, MA. 2University of Connecticut, Storrs, CT. 3The Ohio State University, Columbus, OH
(No relevant relationships reported)

Board #233 3:30 PM - 5:00 PM
Differences between U.S. Army Trainees and Active Duty Soldiers in Performing Physically Demanding Occupational Tasks
Maria C. Canino, Bruce S. Cohen, Stephen A. Foulis, Peter N. Frykman, Jan E. Redmond, Edward J. Zambrauskis, Marilyn A. Sharp.
U.S. Army Research Institute of Environmental Medicine, Natick, MA
(No relevant relationships reported)

Board #234 3:30 PM - 5:00 PM
Effect of a Simulated Tactical Occupation Stressor on Physiological Strain Index and Blood Pressure
Cody E. Morris1, Lee J. Winchester1, Andrew J. Hussey1, Ariel S. Tomes1, Wesley A. Neal1, Damon M. Wilcoxen1, MiRanda N. Anderson1, William J. Bradshaw1, Dana N. Lucas1, Harish Chandler1, Scott W. Arnett1. 1Western Kentucky University, Bowling Green, KY. 2Mississippi State University, Mississippi State, MS. (Sponsor: Scott Lyons, FACSM)
Email: cody.morris@wku.edu
(No relevant relationships reported)

Board #235 3:30 PM - 5:00 PM
Effect of a Simulated Tactical Occupation Stressor on Perceived Exertion and Blood Lactate
Wesley A. Neal1, Cody E. Morris1, Lee J. Winchester2, Andrew J. Hussey1, Ariel S. Tomes1, Damon M. Wilcoxen1, MiRanda N. Anderson1, William J. Bradshaw1, Dana N. Lucas1, Harish Chandler1, Scott W. Arnett1. 1Western Kentucky University, Bowling Green, KY. 2Mississippi State University, Mississippi State, MS. (Sponsor: Scott Lyons, FACSM)
Email: wesley.neal852@topper.wku.edu
(No relevant relationships reported)

Board #236 3:30 PM - 5:00 PM
Effect of a Simulated Tactical Occupation Stressor on Immune System Markers of Physiological Stress and Inflammation
Ariel S. Tomes1, Cody E. Morris1, Lee J. Winchester2, Andrew J. Hussey1, Wesley A. Neal1, Damon M. Wilcoxen1, MiRanda N. Anderson1, William J. Bradshaw1, Dana N. Lucas1, Harish Chandler1, Scott W. Arnett1. 1Western Kentucky University, Bowling Green, KY. 2Mississippi State University, Mississippi State, MS. (Sponsor: Scott Lyons, FACSM)
Email: ariel.tomes082@topper.wku.edu
(No relevant relationships reported)

Board #237 3:30 PM - 5:00 PM
Effect of a Simulated Tactical Occupation Stressor on Reaction Time
Andrew J. Hussey1, Cody E. Morris1, Lee J. Winchester2, Ariel S. Tomes1, Wesley A. Neal1, Damon M. Wilcoxen1, MiRanda N. Anderson1, William J. Bradshaw1, Dana N. Lucas1, Harish Chandler1, Scott W. Arnett1. 1Western Kentucky University, Bowling Green, KY. 2Mississippi State University, Mississippi State, MS. (Sponsor: Scott Lyons, FACSM)
Email: andrew.hussey153@topper.wku.edu
(No relevant relationships reported)
| Board #238 | 3:30 PM - 5:00 PM | Heart Rate Reserve: An Objective Measure of Soldiers’ Physical Exertion During Field Operations  
Leif Hasselquist, Clifford L. Hancock, Carolyn K. Bensel, Natick Soldier Research, Development, and Engineering Center, Natick, MA  
Email: leif.hasselquist.civ@mail.mil  
(No relevant relationships reported) |
|---|---|---|
| Board #239 | 3:30 PM - 5:00 PM | Effect of Long-term Elite Military Training and Operations on Hormonal Profile  
Andrew E. Jensen¹, Laura J. Arrington¹, Lorraine P. Turcotte, FACSM, Karen R. Kelly¹, ¹University of Southern California, Los Angeles, CA. ²Leidos, Inc., San Diego, California, ³Naval Health Research Center, San Diego, CA  
Email: karen.kelly@usmc.mil  
(No relevant relationships reported) |
| Board #240 | 3:30 PM - 5:00 PM | Psychological Hardiness And Success On The Occupational Physical Assessment Test In Army Combat Arms Recruits  
Bruce Cohen, Stephen Fouls, Maria Canino, Jan Redmond, Edward Zambraski, Marilyn Sharp, USARIEM, Natick, MA  
Email: Bruce.s.cohen@ct.gov  
(No relevant relationships reported) |
| Board #241 | 3:30 PM - 5:00 PM | Evaluation Of Occupational Heat Strain Under Dry And Humid Conditions With Equivalent WBGT  
Jeffrey B. Powell, Yongsuak Seo, Amanda Strauch, Raymond Roberge, Jung-Hyun Kim, NIOSH/CDC/NPPTL, Pittsburgh, PA  
(Sponsor: Dr. Edward Sinkule, FACSM)  
Email: efs6@cdc.gov  
(No relevant relationships reported) |
| Board #242 | 3:30 PM - 5:00 PM | Combat Exposure Blunts Sympathetic Response to Acute Exercise Stress in Explosive Ordnance Disposal Personnel  
Marcus K. Taylor, FACSM, Shiloeh A. Kviatkovsky, Lisa M. Hernández, Naval Health Research Center, San Diego, CA  
Email: marcus.k.taylor2.civ@mail.mil  
(No relevant relationships reported) |
| Board #243 | 3:30 PM - 5:00 PM | Factors Impacting Field March Performance of U.S. Service Academy Cadets  
Todd A. Crowder¹, Scott K. Rapuano², ¹US Military Academy, West Point, NY, ²3rd Infantry Division, Fort Stewart, GA  
Email: todd.crowder@usma.edu  
(No relevant relationships reported) |
| Board #244 | 3:30 PM - 5:00 PM | Change in Measures of Moral Function Following Acute Boots of Marine Corps Martial Arts Training  
Jacob A. Siedlik¹, John P. Vardiman², Jake A. Deckert³, Trent J. Herda¹, Joseph P. Wein³, FACSM, Aaron W. Clpton¹, Philip M. Gallagher¹, ¹Creighton University, Omaha, NE, ²Kansas State University, Manhattan, KS, ³University of Kansas, Lawrence, KS  
(No relevant relationships reported) |
| Board #245 | 3:30 PM - 5:00 PM | Prediction of Lower Extremity Musculoskeletal Injuries for Naval Special Warfare Operators: A Machine Learning Approach  
Kim Beals, Karen A. Keenan, Nicholas J. Kissel, Lucas Mentch, Wuxin Yang, Bradley C. Nindl, FACSM, Qi Mi, University of Pittsburgh, Pittsburgh, PA  
(Sponsor: Bradley C. Nindl, FACSM)  
Email: Beals.kim@pitt.edu  
(No relevant relationships reported) |
| Board #246 | 3:30 PM - 5:00 PM | Abdominal Circumference Measurements in a US Navy Active Duty Population  
Katherine M. Wilson¹, Douglas M. Jones³, Matthew P. Mandel¹, Rebecca S. Weller², Melissa D. Laird³, Jay H. Heaney¹, ¹Leidos, San Diego, CA, ²Innovative Employee Solutions, San Diego, CA, ³NHRC, San Diego, CA  
(No relevant relationships reported) |
| Board #247 | 3:30 PM - 5:00 PM | Evaluation of The US Navy’s Physiological Heat Exposure Limits during Deployment in The Persian Gulf  
Douglas M. Jones³, Katherine M. Wilson¹, Eric Duckworth², Magnus Perkins², Melissa Laird³, Jay H. Heaney¹, ¹Leidos Inc., San Diego, CA, ²USS Nimitz, Bremerton, WA, ³Naval Health Research Center, San Diego, CA  
(No relevant relationships reported) |
| Board #248 | 3:30 PM - 5:00 PM | Fitness and Body Composition Characteristics of Special Weapons and Tactics Team Members of Law Enforcement  
Rafael A. Alamillo¹, ², Jong T. Romero¹,³, Kong Tu¹, Christina N. Cooper²,³, Gary W. Berwick III¹,³, Matthew C. Jackson¹,⁴, Guillermo Escalante², Nicole C. Dabbs¹, Jason Ng¹, ¹California State University, San Bernardino, San Bernardino, CA, ²California State University, Long Beach, San Bernardino, CA.  
(Sponsor: Bryan Haddock, FACSM)  
(No relevant relationships reported) |

---

**Free Communication/Poster - Occupational/ Firefighter Physiology**

**P207 F-64**

**Board #252**  
3:30 PM - 5:00 PM  
Effects of Wrist Cooling on Recovery from Exercise-Induced Heat Stress with Firefighting Personal Protective Equipment  
Monique D. Dudar, Ronald Caruso, Emily Schlicht, Kelsey Denby, Alexis A. Matias, Stephen J. Ives, Skidmore College, Saratoga Springs, NY  
Email: mdudar@skidmore.edu  
(No relevant relationships reported)
2970 Board #253 3:30 PM - 5:00 PM
Longitudinal Changes in Dynamic Balance Ability Among Firefighter Recruits: A Multivariate Analysis Perspective
David J. Cornell1, Stacy L. Gnaicinski1, Kyle T. Ebersole1. 1University of Wisconsin - Milwaukee, Milwaukee, WI. 2Drake University, Des Moines, IA. (Sponsor: Terry J. Housh, FACSM)
Email: dcornell@uwm.edu
(No relevant relationships reported)

2971 Board #254 3:30 PM - 5:00 PM
Physical Activity Intensity Of Brazilian Military Firefighters During A 24h On-duty Period
Leonardo Correa Segedi1, Daniel Saint Martin1, Edgard Koenig Soares1, Maciel Rosennkranz Nogueira1, Keila Elizabed Fontana1, Gilliard Lago Garcia1, Maria Korre1, Guilherme Eckhardt Molina2, Denise L. Smith1, Stefanos N. Kales1, Luiz Guiherme Grossi Porto1. 1University of Brasilia and Brasilia Fire Department and GEAFS, Brasilia, Brazil. 2University of Brasilia and GEAFS, Brasilia, Brazil. 3Havard T.H Chan School of Public Health, Boston, MA. 4Department of Health and Exercise Sciences, Skidmore College, Saratoga Springs, NY. 5University of Brasilia and Havard T.H. Chan School of Public Health, Boston, MA and GEAFS, Brasilia, Brazil.
Email: bsgeedi@gmail.com
(No relevant relationships reported)

2972 Board #255 3:30 PM - 5:00 PM
Firefighting Influences Cognition Performance: The Heart of the Matter
Tina A. Greenlee1, Daniel R. Greene2, R. Mia Kaim1, Annmarie Chizewski1, Kathryn M. Rougeau1, Gavin P. Horn1, Steven J. Petruzzello, FACSM. 1The Geneva Foundation, San Antonio, TX. 2Augusta University, Augusta, GA. 3University of Illinois at Urbana-Champaign, Urbana, IL. 4Oakland University, Rochester, MI. 5Illinois Fire Service Institute, Champaign, IL.
Email: tmattila27@gmail.com
(No relevant relationships reported)

2973 Board #256 3:30 PM - 5:00 PM
Firefighting Exercises, Heat Stress, And The Cardiovascular System In Recovery
Sarah Bergstrom1, Summer Cook, FACSM1, Robert Kenefick, FACSM1, Timothy Quinn, FACSM1. 1University of New Hampshire, Durham, NH. 2US Army Research Institute of Environmental Medicine, Natick, MA. (Sponsor: Timothy Quinn, FACSM)
(No relevant relationships reported)

2974 Board #257 3:30 PM - 5:00 PM
Effectiveness Of Cold, Wet Towels As A Cooling Modality For Fireground Rehab
Rebeccal L. Stansbery, Lindsey N. Russo, David Hostler, FACSM. University at Buffalo, BUFFALO, NY. (Sponsor: Dave Hostler, FACSM)
Email: rlstansb@buffalo.edu
(No relevant relationships reported)

2975 Board #258 3:30 PM - 5:00 PM
The Effect of Personal Protective Equipment on Firefighter Occupational Performance
Ashley Y. Lesnik1, Haley Bergstrom1, Jody L. Classy2, Arnold J. Stromberg2, Mark Abe1. 1Lynchburg College, Lynchburg, VA. 2University of Kentucky, Lexington, KY.
(No relevant relationships reported)

2976 Board #259 3:30 PM - 5:00 PM
The Influence Of Wildland Fire Operations On Adipose Tissue, Skeletal Muscle And Lipids
Michelle M. Johannsen1, Grant Galvin1, Colin Campbell1, Carl J. Murphy1, Brent C. Ruby, FACSM. 1University of Alaska - Fairbanks, Fairbanks, AK. 2University of Montana, Missoula, MT. (Sponsor: Robert H. Coker, FACSM)
Email: mjohannsen@ualaska.edu
(No relevant relationships reported)

2977 Board #260 3:30 PM - 5:00 PM
Prediction Of Heat Strain Using Trunk Posture While Wearing Personal Protective Clothing: A Pilot Study
(No relevant relationships reported)

2978 Board #261 3:30 PM - 5:00 PM
Comparison between Six Hours of Continuous Walking to Six Hours of Intermittent Walking
Charli D. Aguilar, Nathaniel G. Bodell, Jeffrey Montes, Elizabeth A. Tanner, Andrea Woita, Jessica Knarrick, James W. Navalta, FACSM. University of Nevada Las Vegas, Las Vegas, NV. (Sponsor: Dr. James Navalta, FACSM)
(No relevant relationships reported)

2979 Board #262 3:30 PM - 5:00 PM
Pilot Project: Energy Expenditure Comparison of Active Dance Video Games Pauses in Work Place
Andrée-Anne A. Parent, Joséphine Sans, Alain-Steve Comtois. Université du Québec à Montréal, Montréal, QC, Canada.
Email: parent.andree-anne@courrier.uqam.ca
(No relevant relationships reported)

2980 Board #263 3:30 PM - 5:00 PM
An Analysis of the Physical Demands of National Ambulance Resilience Unit (NARU) Roles
Sam D. Blacker1, Mark P. Rayson1, Ella Walker1, Carla Rue1, Jane E.S Thompson1, Julienne Doherty1, Stephen D. Myers1. 1University of Chichester, Chichester, United Kingdom. 2Mark Rayson Consulting Limited, Bristol, United Kingdom.
Email: s.blacker@chi.ac.uk
(No relevant relationships reported)
| Board #266 | 3:30 PM - 5:00 PM | Body Composition Changes in Male Collegiate Lacrosse Players from Preseason to Postseason | Caroline Varlotta¹, Hallie Zwiebel², Joanne DiFrancisco-Donoghue³. ¹New York Institute of Technology College of Osteopathic Medicine, Old Westbury, NY. ²New York Institute of Technology College of Osteopathic Medicine, Old Westbury, NY. ³New York Institute of Technology College of Osteopathic Medicine, Northport, NY. (Sponsor: Gerard P Varlotta, FACSM) Email: cvarlott@nyit.edu (No relevant relationships reported) |
| Board #267 | 3:30 PM - 5:00 PM | Stress Urinary Incontinence in Female Powerlifting: A Survey | John Petrizzo, Rori Alter-Petrizzo, John Wygand, FACSM, Robert M. Otto, FACSM. Adelphi University, Garden City, NY. (Sponsor: John Wygand, FACSM) Email: JPetrizzo@adelphi.edu (No relevant relationships reported) |
| Board #268 | 3:30 PM - 5:00 PM | Differential Sweat And Urine Electrolyte Responses In Collegiate Football Players With Sickle Cell Trait | Nathaniel Lemoine, Jr², Michael E. Owens³, Haoyuan Wang⁴, Jack Marucci⁵, Shelly Mullieni⁶, Derek Calvert⁷, Arnold Nelson⁸, FACSM⁹, Ralph R. Castle¹⁰, Brian Irving¹¹, Guillaume Spielberg¹², Jennifer Rood¹³, Timothy Church¹⁴, Brian Harrell¹⁵, Neil Johannsen¹⁶. ¹¹Louisiana State University, Baton Rouge, LA. ¹²Pennington Biomedical Research Center, Baton Rouge, LA. ¹³Baton Rouge General Sports Medicine, Baton Rouge, LA. (Sponsor: Arnold Nelson, FACSM) Email: nlemoi3@lsu.edu (No relevant relationships reported) |
| Board #269 | 3:30 PM - 5:00 PM | Cardiometabolic Changes During The Hormonal Transition Of A Male-to-female Athlete: A Case Study | Shannon L. Wilson¹, Andrew C. D’Lugos², Theresa M. Jorgensen³, Joanna Harper⁴, Corrie M. Whisner⁵, Jared M. Dickinson, FACSM⁶, Glenn A. Gaesser, FACSM⁷, Siddhartha S. Angadi, FACSM⁸, ¹Arizona State University, Phoenix, AZ. ²Providence Portland Hospital, Portland, OR. (No relevant relationships reported) |
| Board #270 | 3:30 PM - 5:00 PM | Low Energy Availability Associated With Lower BMD And Bone Stress Injury Site In Female Athletes | Bryan Holtzman¹, Allyson L. Parziale², Katherine M. Cooper², Erin Flynn³, Adam S. Tenforde⁴, Kathryn E. Ackerman, FACSM⁵. ¹Boston Children’s Hospital, Boston, MA. ²Spaulding National Running Center, Cambridge, MA. (Sponsor: Kathryn E. Ackerman, FACSM) Email: bryanholtzman@gmail.com (No relevant relationships reported) |
| Board #271 | 3:30 PM - 5:00 PM | Reflected Ultraviolet Radiation Exposure in Athletes | Charlotte Adams¹, Brian Adams², Walnut Hills High School, Cincinnati, OH. ³University of Cincinnati, Cincinnati, OH. (Sponsor: Jon Divine, FACSM) Email: brianadams91@gmail.com (No relevant relationships reported) |
| Board #272 | 3:30 PM - 5:00 PM | Differences In Return To Play Guidelines Using Red-s Cat And Triad Risk Assessment Guidelines For Female Athletes | Allyson L. Parziale¹, Bryan Holtzman¹, Katherine M. Cooper¹, Erin Flynn¹, Adam S. Tenforde⁴, Kathryn E. Ackerman, FACSM⁵. ¹Boston Children's Hospital, Waltham, MA. ²Spaulding National Running Center, Cambridge, MA. (Sponsor: Dr. Kathryn E. Ackerman, FACSM) Email: allyson.parziale@childrens.harvard.edu (No relevant relationships reported) |
# Final Program

## ACSM 65th Annual Meeting

### FRIDAY, JUNE 1, 2018

<table>
<thead>
<tr>
<th>Board #280</th>
<th>3:30 PM - 5:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessing Body Composition With Dual-energy X-ray Absorptiometry And Bio-electrical Impedance In Breast Cancer Survivors</strong></td>
<td></td>
</tr>
<tr>
<td>Kyuwan Lee, Nathalie Sami, Christina Dieli-Conwright, FACSM. U of Southern California, Los Angeles, CA. (Sponsor: Christina Dieli-Conwright, FACSM)</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:kyuwanle@usc.edu">kyuwanle@usc.edu</a></td>
<td></td>
</tr>
<tr>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #281</th>
<th>3:30 PM - 5:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Muscle Strength and Fasting Insulin Levels Following a Combined Exercise Intervention in Breast Cancer Survivors</strong></td>
<td></td>
</tr>
<tr>
<td>Nathalie Sami, Kaylie Zapanta, Kyuwan Lee, Christina Dieli-Conwright, FACSM. University of Southern California, Los Angeles, CA</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:kzapanta@usc.edu">kzapanta@usc.edu</a></td>
<td></td>
</tr>
<tr>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

## F-67 Basic Science World Congress/Poster - Skeletal Muscle II

- **Friday, June 1, 2018, 1:00 PM - 6:00 PM**
- **Room: CC-Hall B**

<table>
<thead>
<tr>
<th>Board #282</th>
<th>3:30 PM - 5:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex Differences In Objectively Measured Physical Activity Among Individuals With ACL Reconstruction</strong></td>
<td></td>
</tr>
<tr>
<td>Christopher Kuenze(^1), Lisa Cadmus-Bertram(^2), Karin Pfeiffer, FACSM(^1), Caroline Lisee, FACSM(^1), Stephanie Trugste(^1), Dane Cook(^2), David Bell(^1). (^1)Michigan State University, East Lansing, MI. (^2)University of Wisconsin - Madison, Madison, WI. (Sponsor: Karin Pfeiffer, FACSM)</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:kuenzech@msu.edu">kuenzech@msu.edu</a></td>
<td></td>
</tr>
<tr>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #283</th>
<th>3:30 PM - 5:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Road Bicycle Saddle Shape Preference and its Potential Determinants</strong></td>
<td></td>
</tr>
<tr>
<td>Sewan Kim(^1), James E. Peterman(^1), Todd M. Carver(^2), Garrett Y.D. Getter(^1), William C. Byrnes, FACSM(^1). (^1)University Colorado Boulder; Boulder, CO. (^2)Specialized Bicycle Components, Boulder, CO. (Sponsor: William Byrnes, FACSM)</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:sewan.kim@colorado.edu">sewan.kim@colorado.edu</a></td>
<td></td>
</tr>
<tr>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #284</th>
<th>3:30 PM - 5:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Associations of Intracortical Facilitation and Inhibition of the Soleus with Popliteal Venous Flow</strong></td>
<td></td>
</tr>
<tr>
<td>Masafumi Terada, Keisuke Seno, Kaede Kaneda, Syunsuke Nonoyama, Tadao Isaka. Ritsumeikan University, Kusatsu, Japan (No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #285</th>
<th>3:30 PM - 5:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agreement Of Heart Rate Monitoring With A Smartwatch In Persons Using Wheelchairs</strong></td>
<td></td>
</tr>
<tr>
<td>Daniel Moreno, Evan Glasheen, Antonette Domingo, Brian Panaligan, Jochen Kressler. San Diego State University, San Diego, CA</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:morneozul40@gmail.com">morneozul40@gmail.com</a></td>
<td></td>
</tr>
<tr>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #286</th>
<th>3:30 PM - 5:00 PM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Maturation Related Change in Neuromuscular Component of Force Production in Trained and Untrained Girls</strong></td>
<td></td>
</tr>
<tr>
<td>rana fayazmilani, Aynaz Pourmotahari. Shahid Beheshti University, Tehran, Iran, Islamic Republic of</td>
<td></td>
</tr>
<tr>
<td>Email: <a href="mailto:r.milani@sbu.ac.ir">r.milani@sbu.ac.ir</a></td>
<td></td>
</tr>
<tr>
<td>(No relevant relationships reported)</td>
<td></td>
</tr>
</tbody>
</table>
G-04  Tutorial Lecture - Relative Energy Deficiency in Sport (RED-S): Conundrums, Pitfalls and Solutions
Saturday, June 2, 2018, 8:00 AM - 8:50 AM
Room: CC-101G

Is your athlete underperforming? Injured? Depressed? Have you assessed his/her energy balance? Relative Energy Deficiency in Sport is defined as being: a syndrome resulting from RED that affects many aspects of physiological + psychological function beyond menstrual cycle and bone health. The prevalence, screening and laboratory diagnosis of RED-s will be reviewed based on the latest scientific evidence. The relationship between eating disorders, disordered eating and RED-S will also be addressed. Finally, a practical clinical guide to the management of the athlete with RED-S will integrate the scientific evidence into a ‘user-friendly’ physician guide for the clinician who works with athletes in the real world.

3011 Louise M. Burke, FACSM. Australia Institute of Sport, Belconnen, Australia
(No relevant relationships reported)

3012 Margo Mountjoy, FACSM. McMaster University, Hamilton, ON, Canada
(No relevant relationships reported)

G-05  Tutorial Lecture - Rigor and Reproducibility in Science: An NIH Perspective
Saturday, June 2, 2018, 8:00 AM - 8:50 AM
Room: CC-208AB

Two of the cornerstones of science advancement are rigor in designing and performing scientific research and the ability to reproduce biomedical research findings. When a result can be reproduced by multiple scientists, it validates the original results and readiness to progress to the next phase of research. This Tutorial Lecture will focus on the efforts underway by NIH to enhance rigor and reproducibility in scientific research.

3013 Vanessa D. Sherk. University of Colorado Anschutz Medical Campus, Aurora, CO
(No relevant relationships reported)

3014 Amanda Boyce. National Institutes of Health-NIAMS, Bethesda, MD
(No relevant relationships reported)

G-06  Colloquium - Standup Paddle Boarding- New Sport, New Athletes and New Injuries
Saturday, June 2, 2018, 8:00 AM - 8:50 AM
Room: CC-101CD

Standup paddle boarding is a new sport that has become popular in the last 5-10 years. The sport involves different disciplines- recreation and touring, surf, yoga, and river riding to name a few. Recently, race and endurance oriented events have emerged as well. These elite level athletes often are paddling for miles and subject to environmental exposure and overuse injuries. Some events mix in running and paddling through heavy surf, which can increase the risk of acute injuries as well. In this session we will review the history of stand up paddle boarding, race equipment and description, physiology of paddling at the elite level and available injury surveillance information. We will also review injury prevention that should be encouraged for these athletes.

3015 John P. Batson, FACSM. Lowcountry Spine & Sport, Hilton Head Is, SC
(No relevant relationships reported)

G-07  Tutorial Lecture - Transgender in Sport
Saturday, June 2, 2018, 8:00 AM - 8:50 AM
Room: CC-102EF

Transgender and Sport

3016 Benjamin J. Ingram. US Army, Monterey, CA
(No relevant relationships reported)
It is essential to understand the importance of fundamental motor skills as they relate to physical activity, health-related fitness, and weight status. More importantly, the childhood years are a critical time for the development of these skills which enable engagement in various types of physical activity across the lifespan. Thus, effective interventions that bring about positive change in fundamental motor skills through improved motor competence are warranted. This session will provide a theoretical orientation of why fundamental motor skills are essential, discuss effective interventions designed to improve motor competence, and provide suggestions for future, well-designed trials.

3017  Rebecca A. Battista, FACSM. Appalachian State University, Boone, NC  
(No relevant relationships reported)

3018  Leah E. Robinson, FACSM. University of Michigan, Ann Arbor, MI  
(No relevant relationships reported)

3019  Dawn P. Coe, FACSM. University of Tennessee, Knoxville, TN  
(No relevant relationships reported)

3020  Karin A. Pfeiffer, FACSM. Michigan State University, East Lansing, MI  
(No relevant relationships reported)

This session will cover common lower extremity neurological complaints seen in athletes and review how to distinguish between lumbar radiculopathy, peripheral neuropathy, or other causes. Physical exam findings and guidelines for imaging and electrodiagnostics will be discussed. Common presenting complaints will include foot drop, foot paresthesias and thigh paresthesias.

3021  Stanley A. Herrling, FACSM. University of Washington, Seattle, WA  
(No relevant relationships reported)

3022  Melinda S. Loveless. University of Washington, Seattle, WA  
(No relevant relationships reported)

3023  Scott A. Magnes, FACSM. Dept. of Orthopaedic Surgery, Fort Belvoir Community Hospital, Fort Belvoir, VA  
(No relevant relationships reported)

3024  Robert J. Johnson, FACSM. University of Minnesota, Minneapolis, MN  
(No relevant relationships reported)

Let’s discuss what we know about the neural control of movement and use these principles to treat chronic musculoskeletal pain. When we consider treating a movement dysfunction, pain becomes an experience rather than the primary issue. As an experience, the education of pain shifts from drug treatment to an element of recovery. Rather than a threat; as a secondary phenomenon pain guides the evaluation, treatment and recovery. Neural control of movement principles have a significant potential to decrease pain medication use for chronic pain as we successfully treat the primary movement dysfunction and secondary pain experience.

3025  Kelly Roberts Lane, FACSM. Fix It physical therapy, Mahtomedi, MN  
(No relevant relationships reported)

G-11 Clinical Workshop-Hands On Demonstration - Neural Control of Movement for the Treatment of Chronic Musculoskeletal Pain  
Saturday, June 2, 2018, 8:00 AM - 8:50 AM  
Room: CC-200H

G-12 Highlighted Symposium - Mental Health and Athletes: Select Clinical Psychological Issues in Athletes  
Saturday, June 2, 2018, 9:00 AM - 11:00 AM  
Room: CC-102EF

Chair: Eugene Hong. Medical University of South Carolina, Charleston, SC  
(No relevant relationships reported)

3026  9:00 AM - 9:15 AM  
Eugene Hong. Medical University of South Carolina, Charleston, SC  
(No relevant relationships reported)

3027  9:15 AM - 9:30 AM  
Depression in Athletes  
Eugene Hong. Medical University of South Carolina, Charleston, SC  
(No relevant relationships reported)

3028  9:30 AM - 9:45 AM  
Mental Health in Youth Athletes  
Michele LaBotz. InterMed, South Portland, ME  
(No relevant relationships reported)

3029  9:45 AM - 10:00 AM  
A Psychiatrist Perspective on Mental Health in Athletes  
Claudia Reardon. University of Wisconsin - Madison, Madison, WI  
(No relevant relationships reported)

3030  10:00 AM - 10:15 AM  
Mental Health Aspects of Athletes with Sports Related Concussion  
Anthony P. Kontos. University of Pittsburgh School of Medicine, Pittsburgh, PA  

3031  10:25 AM - 10:40 AM  
Screening for Mental Health Concerns in Athletes  
Andrew Wolanin. Wolanin Consulting and Assessment Inc., Bala Cynwyd, PA  
(No relevant relationships reported)

10:45 AM - 11:00 AM  
Overall Discussion
Symposium - Dietary Supplements and Elite Athletes: An Update from the International Olympic Committee Consensus Meeting

Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-101G

In 2016, the International Olympic Committee (IOC) assembled and hosted an expert panel to address the complex issues concerning dietary supplements and elite athletes. Lectures and discussion included issues of efficacy, safety, contamination, current practices, and what should be best practices. The results of this meeting will be published as an IOC endorsed consensus statement in the BJSM and the JISNEM, along with a series of comprehensive review articles published in JISNEM. IOC Meeting Press Release and meeting participants/attendees: https://www.olympic.org/news/IOC-tackles-the-topic-of-nutritional-supplements-their-use-and-their-effects

This symposium will summarize the findings of expert panel and will be applicable to researchers, clinicians, and practitioners.

3032 9:00 AM - 9:05 AM
Chair: Ronald Maughan, FACSM. St Andrews University, Fife, Scotland, United Kingdom
(No relevant relationships reported)

3033 9:05 AM - 9:15 AM
Supplements and the Brain
Romain Meeusen, FACSM. Vrije Universiteit Brussel, Brussels, Belgium
(No relevant relationships reported)

3034 9:15 AM - 9:45 AM
Assessment of Nutrient Status and the Need for Supplementation in Athletes
D. Enette Larson-Meyer, FACSM. University of Wyoming, Laramie, WY
(No relevant relationships reported)

3035 9:45 AM - 10:15 AM
Methodologies for Investigating Performance Changes with Supplement Use
Louise M. Burke, FACSM. Australian Institute of Sport, Belconnen, Australia
(No relevant relationships reported)

3036 10:15 AM - 10:45 AM
Evidence-based Supplements for Performance
Peter Peeling, The University of Western Australia, Perth, WA, Australia
(No relevant relationships reported)

10:45 AM - 11:00 AM
Overall Discussion

Symposium - Enhancing Higher-Order Thinking in Health and Exercise Science Students

Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-205AB

Many studies by cognitive scientists and learning experts have identified problems with the methods that we often use to assess and learn information, and many advocate a greater focus on higher-order thinking such as that at higher levels of Bloom’s Taxonomy. The purpose of this session will be to first discuss how you can use Bloom’s Taxonomy to determine the challenge level of your exams and to monitor your teaching methods. We will then discuss the importance of both metacognition and retrieval practice and how they can be used to enhance higher-order thinking in your health and exercise science students.

3037 9:00 AM - 9:05 AM
Chair: John Dobson. Georgia Southern University, Statesboro, GA
(No relevant relationships reported)

Symposium - From ‘Aerobics’ to ‘Clinical Vital Sign’: A Half-Century’s Journey

Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-103

In 1968, Dr. Kenneth H. Cooper published the first exercise prescription book “Aerobics” and started the worldwide aerobic movement. Dr. Cooper then in 1970 founded the Cooper Institute for Aerobics Research and began the Cooper Center Longitudinal Study (CCLS), also known as the Aerobics Center Longitudinal Study (ACLS). In December, 2016, the American Heart Association published a scientific statement calling for the utilization of aerobic fitness as a clinical vital sign. By going over the journey of “Aerobics” with Dr. Cooper, this symposium examines the contributions of “Aerobics”; as well as its scientific, social, and global impacts.

3041 9:00 AM - 9:05 AM
Chair: Weino Zhu, FACSM. University of Illinois at Urbana-Champaign, Urbana, IL
(No relevant relationships reported)

3042 9:05 AM - 9:30 AM
50 years’ Journey of “Aerobics”
Kenneth H. Cooper, FACSM. Cooper Aerobics, Dallas, TX
(No relevant relationships reported)

3043 9:30 AM - 9:55 AM
The Cooper Center Longitudinal Study: The “Soul” of “Aerobics”
Laura F. DeFina. The Cooper Institute, Dallas, TX
(No relevant relationships reported)

3044 9:55 AM - 10:20 AM
Scientific Perspective and Impact of “Aerobics”
Harold W. Kohl, III, FACSM. University of Texas Health Science Center at Houston, Austin, TX
(No relevant relationships reported)

3045 10:20 AM - 10:45 AM
Social and Global Perspective and Impact of “Aerobics”
Weino Zhu, FACSM. University of Illinois at Urbana-Champaign, Urbana, IL
(No relevant relationships reported)

10:45 AM - 11:00 AM
Overall Discussion
G-16 Symposium - Musculoskeletal Health after Paralysis and Limb Loss
Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-208AB

This symposium will highlight the evidence related to bone and muscle loss after amputation and paralysis, mostly focusing on spinal cord injury. Possible underlying mechanisms for the musculoskeletal complications and potential therapies will also be discussed. Basic, preclinical, and clinical evidence will be described.

3046 9:00 AM - 9:10 AM
Chair: Vanessa Sherk. University of Colorado Anschutz Medical Campus, Aurora, CO
(No relevant relationships reported)

3047 9:10 AM - 9:40 AM
Bone and Muscle Loss after Amputation
Vanessa Sherk. University of Colorado Anschutz Medical Campus, Aurora, CO
(No relevant relationships reported)

3048 9:40 AM - 10:10 AM
Spinal Cord Injury Induced Musculoskeletal Deficits: More than Dusise
Joshua F. Yarrow. VA Medical Center / University of Florida, Gainesville, FL
(No relevant relationships reported)

3049 10:10 AM - 10:40 AM
TBA (Related to SCI)
Ricardo Battaglino. University of Colorado Anschutz Medical Campus, Aurora, CO
(No relevant relationships reported)

Overall Discussion

G-17 Symposium - Occupational Exposure to Hot Environments: Current Recommendations on Exposure Limits and Hydration Requirements
Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-200F

Recent work demonstrates that current recommended exposure limits for work in the heat under-protect workers, especially in heat vulnerable groups (older adults) and when work is performed over consecutive work shifts. In this symposium, we will present new evidence outlining the shortcomings of current heat stress guidelines and discuss new leading edge work directed at redefining exposure limits for work in the heat, as well as fluid intake guidelines, which consider workers of all ages and state of health. We will also examine new innovative strategies integrating behavioral modification to protect the health and safety of workers in hot environments.

3050 9:00 AM - 9:05 AM
Chair: Glen P. Kenny. University of Ottawa, Ottawa, ON, Canada
(No relevant relationships reported)

3051 9:05 AM - 9:30 AM
Underlying Risk Profiles of WBGT-based Occupational Heat Exposure Limits
Thomas E. Bernard. University of South Florida, Tampa, FL
(No relevant relationships reported)

3052 9:30 AM - 9:55 AM
Defining Exposure Limits for Work in Hot Conditions: New Directions and Strategies
Glen P. Kenny. University of Ottawa, Ottawa, ON, Canada
(No relevant relationships reported)

G-18 Symposium - Unlocking the Secrets of Study Sections: Working to Increase Your Chance of Funding
Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-Mezzanine M100F

This Symposium is proposed by the ACSM Scientific Integration/Leadership Committee. The scientific merit review after NIH proposal submission is critical to the success of the proposal. This review is completed by NIH Internal Review Groups (aka: Study Sections). Understanding Study Sections can markedly improve the chances for an application’s success. This symposium’s goal is to offer an inside look at how Study Sections function, providing ACSM members with information that can be incorporated into their approach to their applications. The speakers are all former NIH Study Section Chairs and thus, bring insight that is not normally available to our members.

3053 9:55 AM - 10:20 AM
Update and Application of Occupational Water Planning Factors
Samuel N. Cheuvront, FACSM. U.S. Army Research Institute of Environmental Medicine, Natick, MA
(No relevant relationships reported)

3054 10:20 AM - 10:45 AM
Behavioral Considerations during Occupational Heat Exposure: Implications for Health and Safety
Zachary J. Schlader. University at Buffalo, Buffalo, NY
(No relevant relationships reported)

10:45 AM - 11:00 AM
Overall Discussion

G-19 Thematic Poster - Aging/Lifecycle
Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-Mezzanine M100C

3059 9:00 AM - 9:10 AM
Chair: Steven K. Malin, FACSM. University of Virginia, Charlottesville, VA
(No relevant relationships reported)

3060 9:10 AM - 9:20 AM
Board #1
9:00 AM - 11:00 AM
Changes In Vitamin D Status Before And After Nordic Summer In Overweight Middle-aged Participants
Petra Lundström, Maria J. Eriksson, Kenneth Caidahl, Anette Rickenlund. Karolinska Institutet, Stockholm, Sweden
Email: petra.lundstrom@ki.se
(No relevant relationships reported)
G-20  Thematic Poster - Altitude/Hypoxia: Training and Performance

Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-Lower level L100C

3067  Chair: Roy Salgado. USARIEM, Natick, MA
(No relevant relationships reported)

3068  Board #1  9:00 AM - 11:00 AM
Impact Of Altitude On Sample Size Estimations For Exercise Performance:Implications For Research
Roy Salgado, Samuel Cheuvront, FACSM. US Army Research Institute of Environmental Medicine, Natick, MA
Email: roy.m.salgado.civ@mail.mil
(No relevant relationships reported)

3069  Board #2  9:00 AM - 11:00 AM
Ischemic Preconditioning and Cycling Time Trial Performance in Hypoxia
Chad C. Wiggins, Keren Constantini, Timothy D. Mickleborough, Robert F. Chapman, FACSM. Indiana University, Bloomington, IN.
(Sponsor: Robert F. Chapman, FACSM)
Email: chcwiggi@indiana.edu
(No relevant relationships reported)

3070  Board #3  9:00 AM - 11:00 AM
Muscle Oxygenation & Systemic Metabolic Responses during Maximal Sprint Exercise in Hypoxia among Athletes
Nobukazu Kasai, Yuka Motomura, Akiko Ikutomo, Kazushige Goto. Ritsumeikan University, Kusatsu, Japan.
(Sponsor: Robert Kraemer, FACSM)
Email: sh0004c@ed.ritsumei.ac.jp
(No relevant relationships reported)

3071  Board #4  9:00 AM - 11:00 AM
Cardiac Function and SMO, During HIIT at Altitude and Sea Level with Oxygen Contrast Training
Frank Wojcik1, Craig Broder, FACSM, Peter Chomentowski1, Anthony Delaini1, Northern Illinois University, DeKalb, IL. Loyola University, Chicago, IL.
(Sponsor: Craig Broder, Ph.D., FNAASO, FACSM)
Email: fwojan1@gmail.com
(No relevant relationships reported)

3072  Board #5  9:00 AM - 11:00 AM
Effects Of HIIT Training While Using A Breathing-restrictive Mask Compared To Increased Environmental Altitude
Bryanne N. Bellovary1, Kelli E. King1, Tony P. Nuhe2, James J. McCormick2, Andrew D. Wells1, Kelsey C. Bourbeau1, Zachary J. Fennel2, Zidong Li1, Kelly E. Johnson1, Terence Moriarty1, Christine Mermier1, University of New Mexico, Albuquerque, NM.
2Metropolitan State University of Denver; Denver, CO. 3University of Saint Mary, Leavenworth, KS.
(Sponsor: Dr. Ann L. Gibson, FACSM)
Email: bbellovary@umn.edu
(No relevant relationships reported)

3073  Board #6  9:00 AM - 11:00 AM
Muscle Oxygenation During Repeated Double-poling Sprint Exercise Under Hypoxic Condition
(Sponsor: Robert R Kraemer, FACSM)
Email: sh0114ef@ed.ritsumei.ac.jp
(No relevant relationships reported)
### Thematic Poster - Bone Quality in Athletes and Special Populations

**Saturday, June 2, 2018, 9:00 AM - 11:00 AM**

**Room: CC-Lower level L100E**

#### Chair: George A. Kelley, FACSM, West Virginia University, Morgantown, WV

(no relevant relationships reported)

#### Board #1

**9:00 AM - 11:00 AM**

**Changes in Bone Mineral Density of Middle and Long Distance Runners Across an Indoor Season**

Ronald Otterstetter, FACSM; Jordan T. Olson, Marissa N. Baranauskas, Brian Miller, Michelle M. Boltz, Laura Richardson, Matthew Juravich; The University of Akron, Akron, OH; Indiana University, Bloomington, IN

Email: ro5@uakron.edu

(no relevant relationships reported)

#### Board #2

**9:00 AM - 11:00 AM**

**Bone Mineral Density in Master Olympic Weightlifters**

Kayleigh Erickson, Mara Mercado, Kailey Goins, Monica R. Lining, Bryan Riemann; Armstrong State University, Savannah, GA; Northern Arizona University, Flagstaff, AZ

Email: erickson912@gmail.com

(no relevant relationships reported)

#### Board #3

**9:00 AM - 11:00 AM**

**Effect Of Symmetric Weight Training On Imbalanced Humerus Bone Mineral Density Of Arms In Baseball Pitchers**

Maryam Rahmani, Chen-Wei Chang, Chia-Hua Kuo, FACSM; Islamic Azad University, Science and Branch, Tehran, Iran, Islamic Republic of; Shih Hsin University, Taipei, Taiwan; University of Taipei, Taipei, Taiwan. (Sponsor: Chia-Hua Kuo, FACSM)

Email: MaryannRahmani366@gmail.com

(no relevant relationships reported)

#### Board #4

**9:00 AM - 11:00 AM**

**A 9-month Jumping Intervention to Improve Bone Acquisition in Adolescent Male Athletes: The PRO-BONE Study**

Dimitris Vlachopoulos, Alan R. Barker, Esther Ubage-Guisado, Craig A. Williams, FACSM, Luis Gracia-Marco; University of Exeter, Exeter, United Kingdom

Email: dv231@exeter.ac.uk

(no relevant relationships reported)

#### Board #5

**9:00 AM - 11:00 AM**

**Calcium, PTH, and CTX Responses to Treadmill Walking During Different Thermal Environments in Older Adults**

Sarah J. Wherry, Christine M. Swanson, Pamela Wolfe, Rebecca S. Boxer, Rpheber S. Schwartz, Wendy M. Kohrt, FACSM; University of Colorado Anschutz Medical Campus, Aurora, CO. (Sponsor: Wendy Kohrt, FACSM)

Email: sarah.wherry@ucdenver.edu

(no relevant relationships reported)

### Thematic Poster - Exercise and Sport Psychology - Applications of Technology

**Saturday, June 2, 2018, 9:00 AM - 11:00 AM**

**Room: CC-Lower level L100F**

#### Chair: Chris Pitsikoulis, Aurora University, Aurora, IL

(no relevant relationships reported)

#### Board #1

**9:00 AM - 11:00 AM**

**The Effect of Treadmill Walking, Smartphone Use and School Work on Positive and Negative Affective States in College Students**

Jacob E. Barkley, Andrew Lepp, Ashlyn Grone; Kent State University, Kent, OH. (Sponsor: Ellen Glickman, FACSM)

Email: jabrkle1@kent.edu

(no relevant relationships reported)

#### Board #2

**9:00 AM - 11:00 AM**

**Physical Activity And Tablet-based Stem Learning: Effects On Children’S Executive Function In Low-income Childcare**

April Bowling, Chris Marcella, Sarah Boucher, Katherine Donnelly, Samantha Durand, Jacqueline Ochoa, Kevin Finn, FACSM; Merrimack College, North Andover, MA. (Sponsor: Kevin Finn, FACSM)

Email: bowlinga@merrimack.edu

(no relevant relationships reported)

#### Board #3

**9:00 AM - 11:00 AM**

**Chronic Systemic Inflammation Moderates the Relationship Between Adiposity and Behavioral and Neuroelectric Indices of Attention**

Grace M. Niemiro, Anne M. Walk, Caitlyn G. Edwards, Melissa A. Bailey, Sarah K. Skinner, Michael De Lisio, Nicholas A. Bars, Hannah D. Holcher, Naiman Khan; University Of Illinois at Urbana - Champaign, Urbana, IL; University Of Ottawa, Ottawa, ON, Canada

Email: niemiro1@illinois.edu

(no relevant relationships reported)
G-23  Thematic Poster - Jumping and Landing
Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-Lower level L100H

3093  Board #4  9:00 AM - 11:00 AM
Adults’ Smartphone Use Predicts Being an Active Couch Potato
Andrew Leppl¹, Jacob E. Barkley¹, Curtis Fennell¹, ¹Kent State University, Kent, OH. ²University of Montevallo, Montevallo, AL. (Sponsor: Ellen Glickman, FACSM)
Email: aleppl1@kent.edu
(No relevant relationships reported)

3094  Board #5  9:00 AM - 11:00 AM
Factors Related to Accelerometer-determined Patterns of Physical Activity in Adults: The Houston Train Study
Erin E. Dooley¹, Deborah Salvo¹, Kelley Pettee Gabriel, FACSM¹, Ashleigh M. Johnson¹, Casey F. Daran¹, Gregory Knell¹, Samantha J. Kreit¹, Ipck N. Sener², Harold W. Kohl, III, FACSM¹. ¹The University of Texas Health Science Center at Houston (UTHealth) School of Public Health in Austin, Austin, TX. ²The University of Texas Health Science Center at Houston (UTHealth) School of Public Health in Houston, Houston, TX. ³Texas A&M Transportation Institute, Texas A&M University System, Austin, TX
Email: erin.dooley@uth.tmc.edu
(No relevant relationships reported)

3096  Board #3  9:00 AM - 11:00 AM
Reliability And Between-limb Symmetry Of Joint Kinetics And Kinematics During A Countermovement Jump
(No relevant relationships reported)

3097  Board #4  9:00 AM - 11:00 AM
Biomechanical Risk Factors For Recurrent Ankle Sprains During Landing/Cutting In Ankle Instability Patients: 6-month Follow-up
S. Jun Son, Dustin Bruening, Brent Feland, Matthew Seeley, Ty Hopkins, FACSM. Brigham Young University, Provo, UT. (Sponsor: J. Ty Hopkins, FACSM)
Email: seongjunson@gmail.com
(No relevant relationships reported)

3098  Board #5  9:00 AM - 11:00 AM
The Biomechanical Pattern Of Multidirectional Single-leg Landing In Professional Dancers And Non-dancers
Ana M. Azevedo¹, Raul Oliveira¹, Joao R. Vaz², Nelson Cortes¹. ¹University of Lisbon, Lisbon, Portugal. ²University of Nebraska at Omaha, Omaha, NE. ³George Mason University, Manassas, VA
Email: ncortes@gmu.edu
(No relevant relationships reported)

3099  Board #6  9:00 AM - 11:00 AM
The Relationship Between Vertical Ground Reaction Force And Audio Characteristics During A Single-Leg Landing
Caroline Linee, Thomas Birchmeier, Arthur Yan, Brent Geers, Kaitlin O’Hagan, Caitlin Davis, Christopher Kuenze. Michigan State University, East Lansing, MI
Email: liseecar@msu.edu
(No relevant relationships reported)

3100  Board #7  9:00 AM - 11:00 AM
Limited Dorsiflexion Range of Motion Alters Joint Kinematics during Landing/Cutting in Chronic Ankle Instability Patients
Kaitland Garner, S. Jun Son, Dustin Bruening, Brent Feland, Matthew Seeley, Ty Hopkins, FACSM. Brigham Young University, Provo, UT. (Sponsor: J. Ty Hopkins, FACSM)
Email: kaitland.garner@gmail.com
(No relevant relationships reported)

G-24  Free Communication/Slide - New Strategies to Increase Physical Activity in Youth
Saturday, June 2, 2018, 9:00 AM - 11:00 AM
Room: CC-Mezzanine M100D

3101  Chair: John R. Sirard, FACSM. University of Massachusetts Amherst, Amherst, MA
(No relevant relationships reported)

3102  Board #1  9:00 AM - 11:00 AM
Association Of Flexibility And Jump Landing Kinematics On The Recovery Of Lower Body Power And Strength Following Exhaustive Exercise
Thomas Kopeć¹, Mark Richardson², Phillip Bishop², Lizzie Hibbert², James Leeper², Bailey Welborn², Mike Esco, FACSM. ¹Sanford University, Birmingham, AL. ²University of Alabama, Tuscaloosa, AL. ³Liberty University, Lynchburg, VA. (Sponsor: Mike Esco, FACSM)
Email: tkopec@samford.edu
(No relevant relationships reported)

3103  Board #2  9:00 AM - 11:00 AM
Countermovement Jump Kinetics and Performance Changes from 1st to 4th year in Division I Collegiate Athletes
(No relevant relationships reported)
3103  9:15 AM - 9:30 AM  
Effects of Integrating Physical Activity into Early Education Learning Standards on Preschoolers’ Physical Activity Levels
Sofiya Alhassan, FACSM, Christine St. Laurent, Sarah Burkart, Cory J. Greever, Matthew Ahmad. University of Massachusetts, Amherst, Amherst, MA
Email: alhassan@kin.umass.edu
(No relevant relationships reported)

3104  9:30 AM - 9:45 AM  
Fueling Learning Through Exercise (FLEX) - Long-term Impact Of School-based Programs On Children’s Moderate-to-Vigorous Physical Activity
Jennifer M. Sacheck, FACSM1, Sarah Amin1, Stephanie Anzman-Frasca2, Virginia Chomitz3, Kenneth Chui1, Paula Duquesnay1, Miriam Nelson, FACSM4, Catherine Wright1, Christina Economos1.
1Tufts University, Boston, MA 2University of Buffalo, Buffalo, NY. 3University of New Hampshire, Durham, NH
(No relevant relationships reported)

3105  9:45 AM - 10:00 AM  
Effect of the Kiddie Cats on the Move Intervention On Preschoolers’ Physical Activity
Connie Tompkins, Lori E. Meyer, Erin K. Shoulberg, Caroline Martin, Marissa Dennis, Allison Krasner, Betsy Hoza. University of Vermont, Burlington, VT
Email: Connie.Tompkins@uvm.edu
(No relevant relationships reported)

3106  10:00 AM - 10:15 AM  
Physical Fitness Changes are Independent of Adiposity in an Afterschool Translational Health Program
Carolina Velasquez, Emily W. Flanagan, Kara Bolon, Arlette C. Perry, FACSM. University of Miami, Coral Gables, FL
Email: cvx308@miami.edu
(No relevant relationships reported)

3107  10:15 AM - 10:30 AM  
Impact of Social Support on Changes in Physical Activity among Children Participating in School-based Programs
Sarah A. Amin, Kenneth Chui, Paula J. Duquesnay, Catherine M. Wright, Virginia R. Chomitz, Christina D. Economos, Jennifer M. Sacheck, FACSM. Tufts University, Boston, MA
Email: s.amin@tufts.edu
(No relevant relationships reported)

3108  10:30 AM - 10:45 AM  
Changes In Ability, Confidence, And Motivation Among Children In A Novel School-based Physical Literacy Intervention
Erin Hennessy1, Daniel P. Hatfield1, Kenneth Chui2, Stephanie Herrick1, Christine Odalen1, Teri West1, Rachel Pratt1, Catherine Wright1, Jennifer Sacheck, FACSM1.
1Tufts University Friedman School of Nutrition Science and Policy, Boston, MA. 2Tufts University School of Medicine, Boston, MA. 3New York Road Runners, New York, NY.
(No relevant relationships reported)

3109  10:45 AM - 11:00 AM  
Physical Activity and Screen Time Recommendation Compliance in Preschoolers
Sarah Burkart, Christine W. St. Laurent, Sofiya Alhassan, FACSM. University of Massachusetts Amherst, Amherst, MA.
(Sponsor: Sofiya Alhassan, FACSM)
Email: stburkart@kin.umass.edu
(No relevant relationships reported)

3110  9:00 AM - 9:20 AM  
Left Anterior Arm Pain in a 79 year old Female Pilates Method Strength Trainer
Brittany J. Moore1, Elena J. Jelsing2, Jonathan T. Finnoff, FACSM1, 2Mayo Clinic, Rochester, MN. 3Mayo Clinic, Minneapolis, MN. 4Mayo Clinic College of Medicine and Science, Rochester, MN.
(Sponsor: Jonathan T. Finnoff, FACSM)
Email: moore.brittany@mayo.edu
(No relevant relationships reported)

3111  9:20 AM - 9:40 AM  
Left Arm Pain and Numbness-Recreational Athlete
Paul A. Krebs, Clinton Hartz. The Ohio State University, Columbus, OH.
(No relevant relationships reported)

3112  9:40 AM - 10:00 AM  
Bilateral Wings
Nina Yahfali, Rush, Chicago, IL
(No relevant relationships reported)

3113  10:00 AM - 10:20 AM  
Shoulder Weakness- Football
Daniel Sisk, Mindy Loveless. University of Washington, Seattle, WA
Email: dan sinsk @uw.edu
(No relevant relationships reported)

3114  10:20 AM - 10:40 AM  
Forearm Pain- Diving
Dorcas Copa, Jaime Aparicio. Memorial Hermann Ironman, Houston, TX
Email: dorcas.copa@memorialhermann.org
(No relevant relationships reported)

3115  10:40 AM - 10:50 AM  
Clinical Case - Arm
Vic Bouveret, FACSM.
(No relevant relationships reported)

3116  10:50 AM - 11:10 AM  
Clinical Case - Arm
Laura Choi, FACSM.
(No relevant relationships reported)

3117  11:10 AM - 11:30 AM  
Clinical Case - Arm
Catherine Vittorio, FACSM.
(No relevant relationships reported)
G-27  Tutorial Lecture - Rules and Ethics of Authorship; Not As Easy As It Looks
Saturday, June 2, 2018, 9:00 AM - 9:50 AM
Room: CC-Auditorium 2

Every year thousands of abstracts are presented at the ACSM annual meeting. How is authorship membership and order decided? Beyond abstracts/presentations, are authorship rules different when a paper is written? What do the journals say? My 10+ years as Research Integrity Officer (RIO) for my University indicate this is a timely and important topic. Research integrity is increasingly being questioned, and often for good reason. Authorship is the number one issue I, and other RIOs deal with on a daily basis. My experience as RIO provides a unique and well-qualified perspective to present an authorship tutorial to annual meeting attendees.

3119  James M. Pivarnik, FACSM. Michigan State University, East Lansing, MI
(No relevant relationships reported)

G-28  Tutorial Lecture - Strategies for Improving the Estimation of Body Weight Change, RMR, and Compensation for Exercise Energy Expenditure
Saturday, June 2, 2018, 9:00 AM - 9:50 AM
Room: CC-Auditorium 1

Useful estimations of body weight, resting metabolic rate, and energy expenditure are critical components of any prescription for healthy lifestyle changes. This symposium will provide a discussion of challenges to valid estimations of these components and current and practical strategies to address their limitations.

3120  Gregory A. Hand, FACSM. West Virginia University, Morgantown, WV
(No relevant relationships reported)

3121  Daniel P. O’Connor. University of Houston, Houston, TX
(No relevant relationships reported)

3122  Robin P. Shook. Children’s Mercy Kansas City, Kansas City, KS
(No relevant relationships reported)

G-29  Clinical Workshop-Hands On Demonstration - How are your DXA skills? Common Pitfalls of DXA Interpretation in Young Athletes
Saturday, June 2, 2018, 9:00 AM - 9:50 AM
Room: CC-200B

This interactive session will review the current DXA interpretation guidelines for young athletes and present examples of common misinterpretations of DXA scans in this population. The audience will participate by practicing DXA interpretations of scans performed in young athletes.

3123  Suzanne Hecht, FACSM. University of Minnesota Sports Medicine, Minneapolis, MN
(No relevant relationships reported)

3124  Amanda Weiss Kelly. Rainbow Babies and Children’s Hospital, Cleveland, OH
(No relevant relationships reported)

G-30  Colloquium - Exercise for Health - One University’s Contribution Across First and Third World Communities
Saturday, June 2, 2018, 10:10 AM - 11:00 AM
Room: CC-Auditorium 2

The University of the Witwatersrand in Johannesburg, South Africa, offers a number of health promoting exercise interventions. These span the spectrum of staff wellness to sophisticated first world patients with financial resources, to poor and disadvantaged communities with little or no resources. We will showcase how we use students, interns and professionals to use exercise and physical activity in health promotion and at the same time integrate these activities with teaching and research.

3125  Demitri Constantinou. University of the Witwatersrand, Johannesburg, South Africa
(No relevant relationships reported)

G-31  Tutorial Lecture - Injury and Injury Reduction Strategies in the “State of Hockey”
Saturday, June 2, 2018, 10:10 AM - 11:00 AM
Room: CC-101CD

Minnesota is known as the “State of Hockey” and the ice hockey culture is strongly embedded in the metropolitan and rural areas. The age of participants ranges from 4 to 94 years old and there are vibrant leagues at all levels of play. From youth hockey to the pros, Minnesota has contributed players to all levels of the game. Ice hockey is a fast paced collision sport and with that comes the risk of injury. This symposium will address the injury research and rule changes that have impacted game safety and sport culture issues that complicate the safety of ice hockey.

3126  William O. Roberts, FACSM. University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

3127  Robert Johnson, FACSM. University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

3128  Suzanne Hecht, FACSM. University of Minnesota, Minneapolis, MN
(No relevant relationships reported)

G-32  Tutorial Lecture - Load, Overload and Recovery Issues in the Athlete: A Team Physician Consensus Statement
Saturday, June 2, 2018, 10:10 AM - 11:00 AM
Room: CC-Auditorium 1

3129  Stanley A. Herring, FACSM. University of Washington, Seattle, WA
(No relevant relationships reported)

G-33  Clinical Workshop-Hands On Demonstration - Hinge Theory: Low Back Pain and its Relationship to Shoulder and Hip Flexibility in the Performing Arts Athlete
Saturday, June 2, 2018, 10:10 AM - 11:00 AM
Room: CC-200B

Gymnastics, dance, figure skating and cheer are all activities that mix sport and art. They require a delicate balance of strength and flexibility of joints and soft tissue in order to maximize and properly execute skill performance. The lack of available range of motion for the scapula, ribs, thoracic spine articulations and hip capsule/flexor complex lead directly to focused intersegmental stress to the lower lumbar spine. Key examination observations and physical diagnosis techniques will be demonstrated interactively with the audience in the context of athlete assessment for facet sprains, spondylolysis and spinal overload injuries.

3130  Holly J. Benjamin, FACSM. University of Chicago, Chicago, IL
(No relevant relationships reported)

3131  Gina Pongetti Angeletti. Achieve Orthopedic Rehab Institute Sports Medicine, Burr Ridge, IL
(No relevant relationships reported)

www.acsm.org
ACSM May 29 – June 2, 2018

**G-34 Free Communication/Poster - High Intensity Interval Training**
Saturday, June 2, 2018, 8:00 AM - 9:30 AM
Room: CC-Hall B

<table>
<thead>
<tr>
<th>Board #1</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sports Related Fitness Evaluation and High Intensity Interval Training in Table Tennis Players</strong></td>
<td></td>
</tr>
<tr>
<td>Pei-Fan Wang, Mei-Hua Tu, Li-Lan Fu. National Taiwan Sport University, Taoyuan, Taiwan</td>
<td>Email: <a href="mailto:peifan9019@gmail.com">peifan9019@gmail.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #2</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Biomarkers of Inflammation and Angiogenesis Following Short Vs. Long Bouts of High-Intensity Training</strong></td>
<td></td>
</tr>
<tr>
<td>Chad D. Marken, Khala N. Clemons, Emily E. Bachke, Cassie M. Williamson, Michael J. McKenzie, FACSM, Brian M. Kliszczewicz, Winston Salem State University, Winston Salem, NC.</td>
<td>Email: <a href="mailto:psongsm@gmail.com">psongsm@gmail.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #3</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effect of Reducing Sprint Duration in A REHIT Protocol on Changes in VO₂ max and Mood</strong></td>
<td></td>
</tr>
<tr>
<td>Preeyaphon Songsorn, Gulbin Naclćakan, Richard Metcalfe, Niels Vollaard. 1 University of Stirling, Stirling, United Kingdom, 2 University of Essex, Lexham, United Kingdom</td>
<td>Email: <a href="mailto:s0017hv@ed.ritsumei.ac.jp">s0017hv@ed.ritsumei.ac.jp</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #4</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chlorella Intake Further Enhances Anaerobic And Aerobic Capacities Increased By High Intensity Intermittent Training</strong></td>
<td></td>
</tr>
<tr>
<td>Shampui Fujii, Natsuki Hasegawa, Naoki Horii, Moe Oshiden, Katsunori Tsuji, YuZhong Xu, Toru Mizoguchi, Eri Okumura, Izumi Tabata, FACSM, Mototoki Iemitsu, Ritsumeikan University, Kusatsu, Japan, San Chlorella Corp., Kyoto, Japan. (Sponsor: Izumi Tabata, FACSM)</td>
<td>Email: <a href="mailto:s0017hv@ed.ritsumei.ac.jp">s0017hv@ed.ritsumei.ac.jp</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #5</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effect Of A Short-term Hiit Program On Systemic Brain-derived Neurotrophic Factor In Healthy Males</strong></td>
<td></td>
</tr>
<tr>
<td>Iván Rentería, Patricia C. García-Suárez, David O. Martínez-Corona, Luis M. Gómez-Miranda, Alberto Jiménez-Maldonado. 1 Universidad Autónoma de Baja California, Ensenada, Baja California, Mexico, 2 Universidad Autónoma de Baja California, Tijuana, Baja California, Mexico.</td>
<td>Email: <a href="mailto:reza_seyedi99@yahoo.com">reza_seyedi99@yahoo.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #6</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Effects of High Intensity Interval Training on Anaerobic Performance &amp; Aerobic Power on Male Basketball Players</strong></td>
<td></td>
</tr>
<tr>
<td>Seyed reza Seyedi. Wuhan sport university, Wuhan, China</td>
<td>Email: <a href="mailto:Reza_seyedi99@yahoo.com">Reza_seyedi99@yahoo.com</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #7</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>The Effects Of A Three-week Hiit Program On Physiological And Physical Performance Parameters</strong></td>
<td></td>
</tr>
<tr>
<td>Linghao Kong, Qingsui Jie, Susan Sotir, Vincent Paalone, FACSM, Jeff Gagnon, Samuel Headley, FACSM. Springfield College, Springfield, MA. Tianjin University of Sports, Tianjin, China. (Sponsor: Samuel Headley, FACSM)</td>
<td>Email: <a href="mailto:lkong@springfieldcollege.edu">lkong@springfieldcollege.edu</a></td>
</tr>
</tbody>
</table>

**ACSM 65th Annual Meeting**

<table>
<thead>
<tr>
<th>Board #8</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Acute Physiological Responses During Steady State and High Intensity Interval Training in Inactive Men</strong></td>
<td></td>
</tr>
<tr>
<td>Toshi LaSala, Jordan L. Cola, Racine R. Emmons, Michael A. Figueroa, Francis Frabasile. William Paterson University, Wayne, NJ. (Sponsor: Gorden Schmidt, FACSM)</td>
<td>Email: <a href="mailto:gparadi@phed.ualu.ca">gparadi@phed.ualu.ca</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #9</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Testosterone and Cortisol Responses after Short-term High-intensity Interval Exercise Training in Healthy Humans</strong></td>
<td></td>
</tr>
<tr>
<td>Giorgios Paradis, Anastassios Philippou, Popi Stavrinou, Gregory Bogdanis, Maria Maridaki. National and Kapodistrian University of Athens, Athens, Greece</td>
<td>Email: <a href="mailto:gparadi@phed.ualu.ca">gparadi@phed.ualu.ca</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #10</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physiological Effects of Increasing Battling Rope Weight During 6 weeks of High Intensity Interval Training</strong></td>
<td></td>
</tr>
<tr>
<td>Derek PD Bornath, Kevin J. Milne, Kenji A. Kenno. University of Windsor, Windsor, ON, Canada</td>
<td>Email: <a href="mailto:cshervheim01@hamline.edu">cshervheim01@hamline.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #11</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hormonal Responses after Short-term High-intensity Interval Exercise Training in Healthy Humans</strong></td>
<td></td>
</tr>
<tr>
<td>Maria Maridaki, Roxane Tenta, Popi Stavrinou, Gregory Bogdanis, Anastassios Philippou. National and Kapodistrian University of Athens, Athens, Greece, School of Health Science and Education, Harokopio University, Greece, Athens, Greece</td>
<td>Email: <a href="mailto:cshervheim01@hamline.edu">cshervheim01@hamline.edu</a></td>
</tr>
</tbody>
</table>

G-35 Free Communication/Poster - Running
Saturday, June 2, 2018, 8:00 AM - 9:30 AM
Room: CC-Hall B

<table>
<thead>
<tr>
<th>Board #13</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Longitudinal Comparison Of Polarized Vs. High Intensity Multimodal Training In Recreational Runners</strong></td>
<td></td>
</tr>
<tr>
<td>Andrew Cames. Bellarmine University, Louisville, KY. (Sponsor: Sara E. Mahoney, FACSM)</td>
<td>Email: <a href="mailto:acames@bellarmine.edu">acames@bellarmine.edu</a></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Board #14</th>
<th>8:00 AM - 9:30 AM</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Optimal Inspiratory Muscle Training Dose(s) to Enhance Respiratory Function Characteristics and Running Performance</strong></td>
<td></td>
</tr>
<tr>
<td>Kyle R. Barnes, Sara M. Dansforth, Katie G. Smyth. Grand Valley State University, Allendale, MI. (Sponsor: Stephen Glass, FACSM)</td>
<td>Email: <a href="mailto:barnesk@gvsu.edu">barnesk@gvsu.edu</a></td>
</tr>
</tbody>
</table>
3149 Board #18
8:00 AM - 9:30 AM
Relationship Between Running Economy and Achilles Tendon Length.
Jacquelyn Crow, Eric Sobolewski, Randolph Hutchison, Scott Murr. Fairmont University, Greenville, SC. (Sponsor: Tony Caterisano, FACSM) (No relevant relationships reported)

3150 Board #19
8:00 AM - 9:30 AM
Impact of Wearing Compression Pants on HR, RPE, Lactic Acid During a Submaximal Run
Jacob Whitmore, Mike Ryan, Shinichi Asano, Paul Reneau. Fairmont State University, Fairmont, WV (No relevant relationships reported)

3151 Board #20
8:00 AM - 9:30 AM
Modeling Critical Speed and D&8242; in Elite Track & Field Athletes
Timothy J. Fulton, Robert F. Chapman, FACSM. Indiana University, Bloomington, IN (No relevant relationships reported)

3152 Board #21
8:00 AM - 9:30 AM
Heart Rate Variability in middle-aged Sprinters and Endurance Runners
Lysleine Alves de Deus, Thiago dos Santos Rosa, Caio Victor de Sousa, Samuel da Silva Aguar, José Morais Souto Filho, Patrick Anderson dos Santos, Lucas Duarte Barbosa, Herbert Gustavo Simões. Universidade Católica de Brasília, Brasília, Brazil Email: lys.deus@gmail.com (No relevant relationships reported)

3153 Board #22
8:00 AM - 9:30 AM
A Comparison of Two VO2max Treadmill CPETs in Highly Trained Distance Runners
Ryan A. Vanhoy, Stephanie A. Sullivan, Claudio L. Battaglini, FACSM. 1University of Mississippi, University, MS 1University of North Carolina at Chapel Hill, Chapel Hill, NC. (Sponsor: Claudio Battaglini, FACSM) (No relevant relationships reported)

3154 Board #23
8:00 AM - 9:30 AM
Effects of Hip Strengthening on Running Mechanics and Chronic Leg Pain in Recreational Athletes
Jennifer Bossi1, Samantha Everett2, Vanessa Rettinger1, Adam Keath1. 1Anderson University, Anderson, SC. 2Elon University, Elon, NC Email: jbossi@andersonuniversity.edu (No relevant relationships reported)

3155 Board #24
8:00 AM - 9:30 AM
Relationship between Daily Mileage and Upper Respiratory Illnesses in Collegiate Cross Country Runners
Joshua S. Hogg, Keith D. Randazzo, Suzanne L. McDonough, Michael C. Washam. Mississippi College, Clinton, MS (No relevant relationships reported)

3156 Board #25
8:00 AM - 9:30 AM
The Effect of Workload on Exercise Volume during Exhaustive Anaerobic Treadmill Running
Taylor Kennon, Taylor Blooden, Boe Burrus, Young Sub Kwon. Humboldt State University, Arcata, CA (No relevant relationships reported)

3157 Board #26
8:00 AM - 9:30 AM
The Acute and Chronic Effects of Highly Cushioned Shoes on Loading Characteristics in Recreational Runners
Jessica L. Corkin, Sarah Clarke, Michael J. Bohne, Michael Stoolmiller. Scott N. Drum, FACSM. 1Northern Michigan University, Marquette, MI. 2Utah Valley University, Orem, UT. 3Michigan State University, East Lansing, MI. (Sponsor: Scott Drum, FACSM) (No relevant relationships reported)

3158 Board #27
8:00 AM - 9:30 AM
Association Between Race Time, Body Mass, and Total Body Water in Ultramarathon Runners
Julie M. Cousins, Heather H. Betz. Albion College, Albion, MI. (Sponsor: Helaine Alessio, FACSM) Email: juliemcousins@gmail.com (No relevant relationships reported)

3159 Board #28
8:00 AM - 9:30 AM
Does Stance Time Predict Running Economy at Relative Speeds in Highly Trained Distance Runners?
Stephen T. Hammond, Timothy R. Lindsay, Stephen J. McGregor. Eastern Michigan University, Ypsilanti, MI. (Sponsor: Andrew Coggan, FACSM) Email: shannon7@emich.edu (No relevant relationships reported)

3160 Board #29
8:00 AM - 9:30 AM
Run Performance is the Primary Factor in Determining Olympic Distance Triathlon Performance
Tyler J. Noble, Robert F. Chapman, FACSM. Indiana University-Bloomington, Bloomington, IN Email: tynoble@indiana.edu (No relevant relationships reported)

3161 Board #30
8:00 AM - 9:30 AM
Acute-Chronic Workload Ratio is a Better Predictor of Running Injury than Average Weekly Running Volume
Allison H. Gruber, Emily G. Wagoner, Jacob E. Vollmar, Ashley B. Nguyen, Andrea K. Chomistek. Indiana University, Bloomington, IN. (Sponsor: Joseph Hamill, FACSM) Email: ahgruber@indiana.edu (No relevant relationships reported)

www.acsm.org
### Board #31
**8:00 AM - 9:30 AM**

**Generalized Assessments of Mobility in Professional Soccer Athletes: Should Other Physiologic Characteristics Be Considered?**

Bradley Lambert¹, Tyler Heimdal², Justin Vickery³, Corbin Hedd¹, Joshua Harris⁴, Michael Moreno⁵, Stephen Crouse, FACSM⁶, Patrick McCallough⁷, Houston Methodist Hospital, Houston, TX; Texas A&M University; College Station, TX (Sponsor: Stephen Crouse, FACSM)

Email: bslambert@houstonmethodist.org

(No relevant relationships reported)

### Board #32
**8:00 AM - 9:30 AM**

**Profiles And Correlation Between Sprint And Agility K-test Of Elite Young Soccer Players As A Function Of Age**

Lee Cabell¹, Frantisek Zahalka², Tomas Malý³, Lucia Malá³, Michal Dragusky², Arnold Baca¹. *Arkansas Tech University, Russellville, AR.* *Charles University, Prague, Czech Republic.* *University of Vienna, Vienna, Austria.* (Sponsor: Kevin Ford, FACSM)

Email: lsabell@atu.edu

(No relevant relationships reported)

### Board #33
**8:00 AM - 9:30 AM**

**Changes in Lower Extremity Musculoskeletal Characteristics Associated with Ankle Sprain History in Intercollegiate Soccer Athletes**

Mallory Faherty¹, Jennifer Csonka¹, Karl Salesi², Tara Moore¹, Robert Zarzour¹, Timothy Sell, FACSM¹. *Duke University, Durham, NC.* *University of Pittsburgh, Pittsburgh, PA.* (Sponsor: Timothy Sell, FACSM)

Email: msf37@duke.edu

(No relevant relationships reported)

### Board #34
**8:00 AM - 9:30 AM**

**Knee Alignment And Muscle Strength Ratios In Division III Female Soccer Players With Reconstructed Anterior Cruciate Ligament**

Nina M. Robinson, Ana B. Freire Ribeiro. *Augsburg University, Minneapolis, MN.* (Sponsor: Dr. Mark Blegen, FACSM)

(No relevant relationships reported)

### Board #35
**8:00 AM - 9:30 AM**

**Knee Biomechanics in Division III Female Soccer Players With Reconstructed Anterior Cruciate Ligament (ACLR)**

Marissa Guillou, Ana B. Freire Ribeiro. *Augsburg University, Minneapolis, MN.* (Sponsor: Dr. Mark Blegen, FACSM)

(No relevant relationships reported)

### Board #36
**8:00 AM - 9:30 AM**

**Sweat Loss in Association With Measures of External Load in Adolescent Soccer Players**


Reported Relationships: T.J. Roberts: Salary; This study was funded by the Gatorade Sports Science Institute. The views expressed in this abstract are those of the authors and do not necessarily reflect the position or policy of PepsiCo, Inc.
American College of Sports Medicine

3175 Board #44  8:00 AM - 9:30 AM
Acute Hypoxic Exposures On Submaximum And Maximum Physical Performance In Soccer Players
Rungruchai C. chaunchayakul, mahidol university, Nakonpathom, Thailand. (Sponsor: Professor Chia-Hua Kuo, FACS.M)
Email: gmrungruchai@gmail.com
(No relevant relationships reported)

3176 Board #45  8:00 AM - 9:30 AM
Unstable Surface Training Effects on Balance and Lower Limb Power in Adolescent Female Soccer Players
Ieng Si Chan, Li-Lan Fu. National Taiwan Sport University, Taoyuan City, Taiwan
(No relevant relationships reported)

3177 Board #46  8:00 AM - 9:30 AM
Heart rate Variability, Stress Tolerance and Performance Outcomes to Intensification and Tapering in Soccer Players
Luiz Claudio Reberg Stanganelli, Diego H. Figueiredo, Diogo H. Figueiredo, Helcio R. Goncalves. State University of Londrina, Londrina-Parana, Brazil
Email: stanga@sercomtel.com.br
(No relevant relationships reported)

G-37 Free Communication/Poster - Training
Saturday, June 2, 2018, 7:30 AM - 11:00 AM
Room: CC-Hall B

3178 Board #47  8:00 AM - 9:30 AM
Training Strategies Maintain Performance Characteristics in Marines Selected for Marine Corps Special Operations Individualized Training Course
Scott D. Royer1, Joshua D. Winters, FACSM1, Kathleen Poploski2, John Abt, FACSM1, Andrejs Zalaistsknie, Scott LeFhart, FACSM1.
1University of Kentucky, Lexington, KY; 2United States Marine Corps Forces Special Operations Command, Camp Lejeune, NC. (Sponsor: John Abt, FACSM)
Email: s.royer@uky.edu
(No relevant relationships reported)

3179 Board #48  8:00 AM - 9:30 AM
The Influence Of Four-week Of EnduranceTraining With Periodic CO Inhalation On Aerobic Capacity
Jun WANG, Yang HU. Beijing Sport University, Beijing, China
Email: wj430079@126.com
(No relevant relationships reported)

3180 Board #49  8:00 AM - 9:30 AM
Emmet Crowley, Andrew J. Harrison, Mark Lyons. University of Limerick, Ireland, Limerick, Ireland. (Sponsor: Giles Warrington, FACSM)
Email: emmet.crowley@ul.ie
(No relevant relationships reported)

3181 Board #50  8:00 AM - 9:30 AM
Changes in Muscular Strength and Endurance Following Various Resistance Training Frequencies and Protocols in Untrained Females
Murat Karabulut1, P. Gage Murphy1, Ulku Karabulut1, Michael G. Bemben, FACSM1. 1University of Texas Rio Grande Valley, Brownsville, TX; 2University of Oklahoma, Norman, OK. (Sponsor: Michael G. Bemben, FACSM)
Email: murat.karabulut@umbg.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>3191</td>
<td>8:00 AM - 9:30 AM</td>
<td>Effects of Manipulating Stride Length on Ground Reaction Form and Wrist Velocity During Baseball Pitching</td>
<td>Kevin Riteshe, Garrison Roy, Wendt Christoper, Kurt Kornatz, Winston-Salem State University, Winston-Salem, NC. (Sponsor: Michael McKenzie, FACSM)</td>
</tr>
<tr>
<td>3192</td>
<td>8:00 AM - 9:30 AM</td>
<td>Six-week Pilates Program Improves Postural Stability, Balance, and Isometric Back Strength in College-aged Athletes</td>
<td>Melinda B. Smith, Tyler Mitchelltree, H. Scott Kieffer, FACSM, Douglas K. Miller, Messiah College, Mechanicsburg, PA. (Sponsor: Dr. Diane Gill, FACSM)</td>
</tr>
<tr>
<td>3193</td>
<td>8:00 AM - 9:30 AM</td>
<td>Effect of Suspension Training on Selected Health-Related Fitness and Functional Movement</td>
<td>Kelsey D. Bryan, A Tamlyn Shields, Alex T. McDaniel, Rachel E. Williams, Ryan Swiezy, Adrian Gonzalez, Andrew L. Ortiz, Brad H. Hollingsworth, Sarah A. Noland, Christa Douros, Raechel M. Santee, Phillip V. Moree, Lauren A. Ackerman, Emma C. Schmid, Tiago V. Barreia, Wayland Tsai, University of North Carolina, Wilmington, NC. (Sponsor: Robert Wilkes Boyce, FACSM)</td>
</tr>
<tr>
<td>3194</td>
<td>8:00 AM - 9:30 AM</td>
<td>The Effects of Ballistic Exercise on Cognitive Function</td>
<td>Allan Shook, Joshua A. Logan, Toria A. Crispin, Slippery Rock University, Slippery Rock, PA</td>
</tr>
<tr>
<td>3195</td>
<td>8:00 AM - 9:30 AM</td>
<td>The Effects of Pilates Training on Functional Movement</td>
<td>Yu-chen Chung, Nai-Jen Chang, Kaohsiung Medical University, Kaohsiung City, Taiwan</td>
</tr>
<tr>
<td>3196</td>
<td>8:00 AM - 9:30 AM</td>
<td>Assessing Changes in Absolute and Relative One-repetition Maximum Bench Press After a Six-week Blindfold Training</td>
<td>Ali Booolani, Masoud Moghadami, Timothy Baghurst, Timothy Jones, Essameldin Hamido, Bert Jacobson, FACSM. (Sponsor: Clarkson University, Potsdam, NY.)</td>
</tr>
<tr>
<td>3197</td>
<td>8:00 AM - 9:30 AM</td>
<td>Cardiovascular Adaption From Altitude 3500-6400m Among Trekkers With Different Endurance Genotype Scores</td>
<td>YUTAO DU, LEI KUANG, JUN CAO, MENG LI, SPORT GENOMICS INSTITUTE, BGI, SHENZHEN, China</td>
</tr>
<tr>
<td>3198</td>
<td>8:00 AM - 9:30 AM</td>
<td>Optimal Load For High-Speed Exercise</td>
<td>Ling Bai, Ema A. Selinovic, Rebecca Mueller, Samantha Beatty, Kathy A. Carter, Thorburn B. Symons, George Pantalos, John F. Caruso, 40292, University of Louisville, Louisville, KY</td>
</tr>
<tr>
<td>3199</td>
<td>8:00 AM - 9:30 AM</td>
<td>A Preceding Bout of Endurance Exercise Decreases Peak Power of the Arm Extensor Muscles</td>
<td>Luke Olsen, Bjorn Hansson, Tommy R. Lundberg, University of Kansas, Lawrence, KS, The Swedish School of Sport and Health Sciences (GIH), Stockholm, Sweden. (Sponsor: Karolinska Institute, Stockholm, Sweden)</td>
</tr>
<tr>
<td>3200</td>
<td>8:00 AM - 9:30 AM</td>
<td>Quality of Life Improved by Adequate Physical Activity Levels Among University Employees</td>
<td>Gustavo Mendoza, Kenneth R. Ecker, FACSM, University of Wisconsin, River Falls, WI. (Sponsor: Kenneth Ecker, FACSM)</td>
</tr>
<tr>
<td>3201</td>
<td>8:00 AM - 9:30 AM</td>
<td>Lower VO2max In Individuals With A Family History Of Diabetes is normalized After 8-weeks Exercise</td>
<td>Mario Garcia, Manuel Amador, Cesar Meza, Christopher Figueroa, Andrew McAinchi, Sudip Bajpeyi, University of Texas at El Paso, El Paso, TX. (Sponsor: Victoria University, St. Albuans Campus, Melbourne, Australia)</td>
</tr>
<tr>
<td>3202</td>
<td>8:00 AM - 9:30 AM</td>
<td>Effects Of Chronic Endurance Exercise Training On Serum 25(OH)D Concentrations In Elderly Japanese Men</td>
<td>Xiaomin Sun, Zhen-Bo Cao, Kunpei Tanisawa, Hirokazu Taniguchi, Takafumi Kabo, Mitsuru Higuchi, FACSM. (Sponsor: School of Public Health, Xi’an Jiaotong University Health Science Center, Xi’an, China. (Sponsor: School of Kinesiology, Shanghai University of Sport, Shanghai, China. (Sponsor: Department of Physical Activity Research, National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan. (Sponsor: Faculty of Agriculture, Rikoku University, Shiga, Japan. (Sponsor: Graduate School of Sport Sciences, Waseda University, Saitama, Japan. (Sponsor: Faculty of Sport Sciences, Waseda University, Saitama, Japan. (Sponsor: Mitsuru Higuchi, FACSM)</td>
</tr>
<tr>
<td>3203</td>
<td>8:00 AM - 9:30 AM</td>
<td>The Effect of Hyperthermic Whole Body Heat Stimulus (Sauna) on Heat Shock Protein 70 and Skeletal Muscle Hypertrophy in Young Males</td>
<td>Brandon Jones, Scott Drum, FACSM, Northern Michigan University, Marquette, MI. (Sponsor: Scott Drum, FACSM)</td>
</tr>
<tr>
<td>3204</td>
<td>8:00 AM - 9:30 AM</td>
<td>Cost-Effective Personal Training Aid to Improve Leg Function Using Smart Exercise Application: Pilot Study</td>
<td>Byungjoo Noh, Eric Vasey, Kevin Phillips, Derek Verbrigghe, Myounghoon Jeon, Tejin Yoon, Michigan Technological University, Houghton, MI. (Sponsor: Sandra Hunter, FACSM)</td>
</tr>
<tr>
<td>3205</td>
<td>8:00 AM - 9:30 AM</td>
<td>Changes In Upper-body Strength Are Dependent On Training Mode And Independent Of Strength Level</td>
<td>Jerry L. Mayhew, Jensynn Kasper, 63501, William F. Breechue, FACSM, Juna L. Arabais, Truman State University, Kirkville, MO. (Sponsor: Jana L. Arabas, Truman State University, Kirksville, MO)</td>
</tr>
<tr>
<td>3206</td>
<td>8:00 AM - 9:30 AM</td>
<td>A Preceding Bout of Endurance Exercise Decreases Peak Power of the Arm Extensor Muscles</td>
<td>Luke Olsen, Bjorn Hansson, Tommy R. Lundberg, University of Kansas, Lawrence, KS, The Swedish School of Sport and Health Sciences (GIH), Stockholm, Sweden. (Sponsor: Karolinska Institute, Stockholm, Sweden)</td>
</tr>
<tr>
<td>3207</td>
<td>8:00 AM - 9:30 AM</td>
<td>Quality of Life Improved by Adequate Physical Activity Levels Among University Employees</td>
<td>Gustavo Mendoza, Kenneth R. Ecker, FACSM, University of Wisconsin, River Falls, WI. (Sponsor: Kenneth Ecker, FACSM)</td>
</tr>
<tr>
<td>3208</td>
<td>8:00 AM - 9:30 AM</td>
<td>Lower VO2max In Individuals With A Family History Of Diabetes is normalized After 8-weeks Exercise</td>
<td>Mario Garcia, Manuel Amador, Cesar Meza, Christopher Figueroa, Andrew McAinchi, Sudip Bajpeyi, University of Texas at El Paso, El Paso, TX. (Sponsor: Victoria University, St. Albuans Campus, Melbourne, Australia)</td>
</tr>
<tr>
<td>3209</td>
<td>8:00 AM - 9:30 AM</td>
<td>Effects Of Chronic Endurance Exercise Training On Serum 25(OH)D Concentrations In Elderly Japanese Men</td>
<td>Xiaomin Sun, Zhen-Bo Cao, Kunpei Tanisawa, Hirokazu Taniguchi, Takafumi Kabo, Mitsuru Higuchi, FACSM. (Sponsor: School of Public Health, Xi’an Jiaotong University Health Science Center, Xi’an, China. (Sponsor: School of Kinesiology, Shanghai University of Sport, Shanghai, China. (Sponsor: Department of Physical Activity Research, National Institutes of Biomedical Innovation, Health and Nutrition, Tokyo, Japan. (Sponsor: Faculty of Agriculture, Rikoku University, Shiga, Japan. (Sponsor: Graduate School of Sport Sciences, Waseda University, Saitama, Japan. (Sponsor: Faculty of Sport Sciences, Waseda University, Saitama, Japan. (Sponsor: Mitsuru Higuchi, FACSM)</td>
</tr>
<tr>
<td>3210</td>
<td>8:00 AM - 9:30 AM</td>
<td>The Effect of Hyperthermic Whole Body Heat Stimulus (Sauna) on Heat Shock Protein 70 and Skeletal Muscle Hypertrophy in Young Males</td>
<td>Brandon Jones, Scott Drum, FACSM, Northern Michigan University, Marquette, MI. (Sponsor: Scott Drum, FACSM)</td>
</tr>
<tr>
<td>3211</td>
<td>8:00 AM - 9:30 AM</td>
<td>Cost-Effective Personal Training Aid to Improve Leg Function Using Smart Exercise Application: Pilot Study</td>
<td>Byungjoo Noh, Eric Vasey, Kevin Phillips, Derek Verbrigghe, Myounghoon Jeon, Tejin Yoon, Michigan Technological University, Houghton, MI. (Sponsor: Sandra Hunter, FACSM)</td>
</tr>
<tr>
<td>3212</td>
<td>8:00 AM - 9:30 AM</td>
<td>Changes In Upper-body Strength Are Dependent On Training Mode And Independent Of Strength Level</td>
<td>Jerry L. Mayhew, Jensynn Kasper, 63501, William F. Breechue, FACSM, Juna L. Arabais, Truman State University, Kirkville, MO. (Sponsor: Jana L. Arabas, Truman State University, Kirksville, MO)</td>
</tr>
</tbody>
</table>
American College of Sports Medicine

Board #87 8:00 AM - 9:30 AM
Testosterone Response Following Five CrossFit® Open Workouts
Paul Serafini1, Trisha VanDusseldorp1, Yuri Feito, FACSM1, Alyssa Holmes1, Adam Gonzales1, Gerald Mangine1. 1Kennesaw State University, Kennesaw, GA. 2Hofstra University, Hempstead, NY. (Sponsor: Yuri Feito, FACSM) (No relevant relationships reported)

Board #86 8:00 AM - 9:30 AM
A Preliminary Investigation of the Relationship Between Training Volume and Body Fat in Triathletes
Barbara S. McClanahan1, Michelle Stockton1, Christopher Vukadinovich1. 1University of Memphis, Memphis, TN. 2St. Jude Children’s Research Hospital, Memphis, TN. (Sponsor: Lawrence Weiss, FACSM) Email: bcmclnnh@memphis.edu (No relevant relationships reported)

Board #88 8:00 AM - 9:30 AM
The Effects of Gender and Training Status on Optimal Loads for Developing Muscular Power
Ryan M. Miller, Eduardo D.S. Freitas, Aaron D. Heishman, Michael G. Bemben, FACSM. University of Oklahoma - Department of Health & Exercise Science, Norman, OK. (Sponsor: Michael G Bemben, FACSM) Email: bmcclnhn@memphis.edu (No relevant relationships reported)

Board #89 8:00 AM - 9:30 AM
The Effects of High Concentration Oxygen Intervention on Physiological Recovery From High Intensity Hammer Throwing Training
Chung-Wen Chen1, Szu-Kai Fu2, Jen-Chan Lo2, Kuo-Wei Tseng2, Chang-Chi Lai1. 1National Taiwan Sport University, Taoyuan City, Taiwan. 2University of Taipei, Taipei City, Taiwan. (No relevant relationships reported)

G-38
Free Communication/Poster - Performance
Saturday, June 2, 2018, 7:30 AM - 11:00 AM
Room: CC-Hall B

Board #80 8:00 AM - 9:30 AM
Effects Of A Caffeine-carbohydrate Mouth Rinsing On Sprinting Kinetics And Kinematics In Fasted Athletes
JAD-ADRIAN WASHI1, CHRISTOPHER MARTYN BEAVEN2. 1NATIONAL SPORTS INSTITUTE OF MALAYSIA, KUALA LUMPUR, Malaysia. 2UNIVERSITY OF WAIKATO, HAMILTON, New Zealand (No relevant relationships reported)

Board #81 8:00 AM - 9:30 AM
Association of Performance Physiology Measures with Sports Performance Tests
Therese Wichmann, Marissa Burnsed-Torres, Michael Hahn. University of Oregon, Eugene, OR Email: wichhm060@umn.edu (No relevant relationships reported)

Board #82 8:00 AM - 9:30 AM
Effects of Depth Jump Implementation on Sprint Performance in Collegiate and Club Sport Athletes
Ryan Bean, Michael Lane, Aaron Sciascia, Matthew Sabib, Eastern Kentucky University, Richmond, KY Email: ryan.bean4@mymail.eku.edu (No relevant relationships reported)

Board #83 8:00 AM - 9:30 AM
Comparison Of The Effects Of A Novel Structured Nanotechnology Water On Physical Performance.
ALI K. M. SAMI1, Gary Liguori, FACSM. 1College of Medicine/University of Sulaymaniy, Sulaymaniy, Iraq. 2University of Rhode Island/College of Health Sciences, Kingston, RI Email: alikamal22@yahoo.com (No relevant relationships reported)

Board #84 8:00 AM - 9:30 AM
The Effects Of A Six-week Ketogenic Diet On The Performance Of Short-duration, High-intensity Exercise: A Pilot Study
Emily M. Miele1, Steven Vitti1, Laura Christopli1, Elizabeth C. O’Neill1, Tracey D. Matthews1, Richard J. Wood1. 1Springfield College, Springfield, MA. 2Holyoke Community College, Holyoke, MA (No relevant relationships reported)

Board #85 8:00 AM - 9:30 AM
Inconsistency of Bilateral Asymmetry Between Sprinting and Jumping Performance: Rethinking Leg Dominance
Nathan T. Gorman1, Jerry L. Mayhew2, William F. Brechue, FACSM. 1Rocky Vista University College of Osteopathic Medicine, Parker, CO. 2Truman State University, Kirkville, MO. 2A.T. Still University, Kirksville, MO. (Sponsor: William F. Brechue, Ph.D., FACSM, FACSM) Email: nathan.gorman1@rvu.edu (No relevant relationships reported)

Board #86 8:00 AM - 9:30 AM
Acute Effects of Beta-Alanine on Exercise Performance Variables.
Emmanuel Lavarias, Zinong Li, Yumae Lee, E. Todd Schroeder, FACSM. University of Southern California, Los Angeles, CA (No relevant relationships reported)

Board #87 8:00 AM - 9:30 AM
The Influence of Different Walking Conditions on Walking Parameters
Torinouk Sakai1, Takahiro Nakano2, Kosho Kasuga1, Kazuo Oguri1. 1Nagoya Gakushuin University, Seto, Aichi, Japan. 2Nagoya Gakuin University, Seto, Aichi, Japan. (Sponsor: Kiyoji Tanaka, FACSM) Email: tsakai@ngu.ac.jp (No relevant relationships reported)

Board #88 8:00 AM - 9:30 AM
Physiological Performance Predictions Based on Simple Assessments
Lindsie S. Rogers, J. Mark VanNess, Roman Musselman, Courtney D. Jensen. University of the Pacific, Stockton, CA Email: 1_rogers3@u.pacific.edu (No relevant relationships reported)

Board #89 8:00 AM - 9:30 AM
Relationship Between Clock Gene Expression, MEQ Score, and Exercise Performance
Karina Ando1, Masaki Takahashi2, Shigenobu Shibata2, Hideyuki Takahashi1. 1Japan Institute of Sports Sciences, Tokyo, Japan. 2Waseda University, Tokyo, Japan Email: karina.andor@jpnport.go.jp (No relevant relationships reported)
Board #90 8:00 AM - 9:30 AM
Changes in Blood pH and Ammonia Following Repeat Sprint Performance
Gregory R. Davis, Jordan Perett, Danielle Rudesill, David Bellar. University of Louisiana at Lafayette, Lafayette, LA
Email: gavasis@louisiana.edu
(No relevant relationships reported)

Board #91 8:00 AM - 9:30 AM
Impact of Calf Temperature Changes on Neuromuscular Function in Elite Taekwondo Athletes
Bo Geun Lee¹, So Mi June¹, Yun Bin Lee¹, Mingi Jung¹, Dapye Lim¹, Ah Reum Jung¹, Woong Hee Lee¹, Eunjin Hwang¹, Ik Jin Kwon¹, Daewon Lee¹. Kookmin University, Seoul, Korea, Republic of. ¹Chung-Ang University, Seoul, Korea, Republic of.
Email: wqldlkwkd@gmail.com
(No relevant relationships reported)

Board #92 8:00 AM - 9:30 AM
No Effects of Skin Pressure Depth on Reaction Time
Taylor L. Curtis, Landyn Van Overbeke, Antonio Meikel, Jeffrey W. Bell. Southwest Minnesota State University, Marshall, MN.
(Sponsor: Serge P. von Davillard, Ph.D., FACSM, FESCS, FACSAM)
Email: Taylor.Curtis@mys.msum.edu
(No relevant relationships reported)

Board #93 8:00 AM - 9:30 AM
Acute Cognitive Anxiety is Positively Related to Maximal Strength Performance
Joseph P. Carzoli¹, Michael H. Haischer¹, Daniel M. Cooke¹, Amber M. Shipherd², Trevor K. Johnson¹, Edward P. Davis¹, Dan J. Belcher¹, Robert F. Zoeller¹, Michael Whitehurst¹, FACSAM¹, Michael C. Zourdos¹. ¹Florida Atlantic University, Boca Raton, FL. ²Texas A&M University-Kingsville, Kingsville, TX
Email: jcarzoli2016@fau.edu
(No relevant relationships reported)

Board #94 8:00 AM - 9:30 AM
A 3-year Analysis of Game Demands in Women’s Division I College Basketball
Lynda B. Ransdell, FACSM¹, Teena Murray¹, Dietrtra Bycura¹, Paul Jones¹. ¹Northern Arizona University, Flagstaff, AZ. ²University of Louisville, Louisville, KY. ³University of Louisville, Louisville, KY
Email: Lynda.Ransdell@nau.edu
(No relevant relationships reported)

Board #95 8:00 AM - 9:30 AM
Assessing The Impact Of A Governed Focal Point On Broad Jump Performance In Collegiate Females
Madeline Phillips, Robert T. Sanders, Jared R. Feister, Andy M. Bosak, Hannah E. Nelson, Russell K. Lowell, Brandon M. Ziebell. Liberty University, Lynchburg, VA. (Sponsor: Dr. James Schoffstall, FACSM)
Email: mmpillips@liberty.edu
(No relevant relationships reported)

Board #96 8:00 AM - 9:30 AM
Effect Of Exercise On Cognitive Performance And Systemic Bdnf Levels In An Elderly Mexican Population
ERMILO CANTON MARTINEZ, IVAN RENTERIA, PATRICIA GARCIA SUAREZ, DAVID MARTINEZ CORONA, ALBERTO JIMENEZ-MALDONADO. Universidad Autónoma de Baja California, Ensenada, Mexico
(No relevant relationships reported)

Board #97 8:00 AM - 9:30 AM
Associations Between Off-Season Player-Tracking Data and Changes in Vertical Jump Parameters in Female Basketball Players
Sandra Dahling, John Krzyzsowski, Marguerite Smith, Kristof Kipp. Marquette University, Milwaukee, WI. (Sponsor: Paula Papanek, FACSM)
Email: sandra.dahling@marquette.edu
(No relevant relationships reported)
Board #115 8:00 AM - 9:30 AM
An Assessment of a 15 vs. 30 Second Recovery Period on Vertical Jump Performance
Hannah E. Nelson, Andy Bosak, Russell K. Lowell, Branden M. Ziebell, Robert T. Sanders, Jared Feister, Madeline M. Phillips, Liberty University, Lynchburg, VA. (Sponsor: Dr. James Schoffstall, FACSM)
Email: feister@liberty.edu
(No relevant relationships reported)

Board #116 8:00 AM - 9:30 AM
The Effect Of Varying Self-myoFascial Release Duration On Subsequent Athletic Performance
Jake Phillips, David Diggin, Deborah L. King, Gary A. Sforzo, FACSM, Ithaca College, Ithaca, NY. (Sponsor: Gary Sforzo, FACSM)
Email: hnelson4@liberty.edu
(No relevant relationships reported)

Board #117 8:00 AM - 9:30 AM
Fascia Stretch Training-7 Induces Similar Metabolic Response, But Lower Mechanical Stress
Filipe Dinato de Lima1, Ubiratan Contreia Padilha1, Amilton Vieira1, Marco A. Dourado1, Lee E. Brown, FACSM2, Martim Bottaro1, 1University of Brasilia, Brasilia, Brazil. 2California State University, Fullerton, CA. (Sponsor: Lee E. Brown, FACSM)
Email: fdinatolima@gmail.com
(No relevant relationships reported)

Board #118 8:00 AM - 9:30 AM
Could Knee Extension And Leg Press Exercises Induce Different Time Course Of Muscle Recovery?
Marco A. Dourado1, Filipe Dinato de Lima1, Amilton Vieira1, Lee E. Brown, FACSM2, Martim Bottaro1, 1University of Brasilia, Brasilia, Brazil. 2California State University, Fullerton, CA. (Sponsor: Lee E. Brown, FACSM)
Email: douradopersonal@gmail.com
(No relevant relationships reported)

Board #119 8:00 AM - 9:30 AM
Jumping To Conclusions: The Recovery-Monitoring Service ‘Jump Test’ Is Sensitive To Neuromuscular Fatigue in Recreational Runners
Luke J. Montzingo1, Kyler Eastman1, Kris Homsi1, Jeff Knight1.
1Under Armour, Connected Fitness, Austin, TX. 2Under Armour, Athlete Performance and Innovation, Portland, OR.

Board #120 8:00 AM - 9:30 AM
Evaluating The Potential Impact Of Fatigue On Ultimate Frisbee Players During Tournament Play
Jared Feister, Robert T. Sanders, Chris Carver, Hannah E. Nelson, James Kelly, Andy Bosak, James Schoffstall, FACSM, Liberty University, Lynchburg, VA. (Sponsor: Dr. James Schoffstall, FACSM)
Email: feister@liberty.edu
(No relevant relationships reported)
3250 Board #119  8:00 AM - 9:30 AM
Assessment of Countermovement Jump Performance Recovery in Professional Soccer Players Using an Inertial Sensor
Malachy P. McHugh, FACSM1, Tom Clifford2, Will Abbott2, Susan Y. Kwiecien3, Ian J. Kremeniec2, Joseph J. Devita1, Glyn Howatson, FACSM1, Nicholas Institute of Sports Medicine and Athletic Trauma, Lenox Hill Hospital, New York, NY 1; Newcastle University, Newcastle, United Kingdom 2; Brighton and Hove Albion FC, Lancing, United Kingdom 3; Northumbria University, Newcastle, United Kingdom
Email: mchughij@nismat.org
(No relevant relationships reported)

3251 Board #120  8:00 AM - 9:30 AM
Effect Of Cold Water Immersion On Skin Temperature: A Thermography Study
Braulio Sánchez-Ureña1, Daniel Rojas-Valverde1, Randall Gutiérrez-Vargas2, Juan Carlos Gutiérrez-Vargas3, Christopher T. Minson, FACSM1,1 National University of Costa Rica, Heredia, Costa Rica 2; University of Oregon, Oregon, OR 3; Florida Atlantic University, Boca Raton, FL
Email: brauf9@hotmail.com
(No relevant relationships reported)

3252 Board #121  8:00 AM - 9:30 AM
Reproducibility of the RMSSD Index of Heart Rate Variability in Recovery After Exercise
Lucieli T. Cambri, Jaqueline A. Araújo, César S.A. Mello, Geovane J. Tolazzi, Fabiana I. Novelli, Gisela Arsa. Federal University of Mato Grosso, Cuiabá, Brazil
(No relevant relationships reported)

3253 Board #122  8:00 AM - 9:30 AM
Perceived Recovery Status is Associated with Back Squat One-Repetition Maximum Self-Efficacy
Michael H. Haischer1, Daniel M. Cooke1, Joseph P. Carzoli1, Amber M. Shipford1, Trevor K. Johnson1, Edward P. Davis1, Dan J. Belcher1, Robert F. Zoeller2, Michael Whitehurst, FACSM1, Michael C. Zourdos1, Florida Atlantic University, Boca Raton, FL 2; Texas A&M University-Kingsville, Kingsville, TX
Email: mhnischer24@gmail.com
(No relevant relationships reported)

3254 Board #123  8:00 AM - 9:30 AM
Electromagnetic Field Application Effects on Recovery and Power after Sport-Specific Exercise Intervention: Feasibility Study
Nauris Tamulevicius1, Tamj Tawfidi2, Emily A. Daniels1, Guillermo R. Oviedo2, Stephen Baeder1, The University of Tampa, Tampa, FL 2; University of Ramon Llull, Barcelona, Spain
Email: ntamulevicius@ut.edu
(No relevant relationships reported)

3255 Board #124  8:00 AM - 9:30 AM
Effects of Recovery Type on Blood Lactate and Performance Following Repeated Wingate Tests in Females
Madison L. Kirkpatrick, Boe M. Burnus. Humboldt State University, Arcata, CA. (Sponsor: Vincent J Paolone, FACSM)
Email: milk313@humboldt.edu
(No relevant relationships reported)

3256 Board #125  8:00 AM - 9:30 AM
Respiratory Impedance Enhances Recovery and Performance During Repeated Bouts of High-Intensity Exercise
Peggy A. Plato, Isabel L. Romero, Olivia M. Nierzake, Andrew W. Tsoa, San Jose State University, San Jose, CA. (Sponsor: Craig Cisar, FACSM)
(No relevant relationships reported)

3257 Board #126  8:00 AM - 9:30 AM
The Effect Of Self-myofascial Release As A Warm-up On Muscular Strength And Power
Theodore M. DeConne, IL Marc Robertson, William Lunn. Southern Connecticut State University, New Haven, CT
Email: deconne11@soctc.edu
(No relevant relationships reported)

3258 Board #127  8:00 AM - 9:30 AM
The Effects of a Proprietary Resistance Garment Technology on Exercise and Recovery Energy Expenditure
John Paul M. Arreglado, Samantha Silva, Edward Jo. Cal Poly Pomona, Pomona, CA
(No relevant relationships reported)

3259 Board #128  8:00 AM - 9:30 AM
Sleeping Patterns of NCAA D1 Collegiate Athletes: A Sex Comparison
Courteney L. Benjamin1, William M. Adams2, Ryan M. Curtis1, Yasuki Sekiguchi1, Gabrielle E.W. Giersch1, Anne M. Muholland1, Douglas I. Casa, FACSM2, University of Connecticut, Storrs, CT 1; University of Connecticut, Storrs, CT and University of North Carolina, Greensboro, NC
Email: courteney.mincy@uconn.edu
(No relevant relationships reported)
<table>
<thead>
<tr>
<th>Board #148</th>
<th>9:30 AM - 11:00 AM</th>
<th>Resistance Training-induced Decrease In Circulating C1q Is Associated With Attenuated Muscle Degradation In Senescent Mice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Naoki Horii¹, Masataka Uchida¹, Natsuki Hasagawa¹, Shunpei Fujie¹, Eri Oyanagi², Hiromi Yano³, Takeshi Hashimoto, FACSM, FACSM, Motoyuki Iemitsu¹, Ritsumeikan University, Kusatsu, Japan. (Sponsor: Takeshi Hashimoto, FACSM) (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #150</td>
<td>9:30 AM - 11:00 AM</td>
<td>Different Elbow Positions Do Not Interfere In Handgrip Strength In Parkinson’s Disease</td>
</tr>
<tr>
<td>Kerry J. Bollen, Clinton J. Wutzke, Caitlin A. Bryson, John P. Collins. George Mason University, Fairfax, VA. (Sponsor: Randall E. Keyser, FACSM, FACSM) (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #151</td>
<td>9:30 AM - 11:00 AM</td>
<td>Analysis Of Cortical Hemodynamics During Dual Task Walking In Individuals With Parkinson’s Disease</td>
</tr>
<tr>
<td>Takuto Fujii, Taeyeu Jung, Ovande Furtado, Travis Watkins, Justin Shamunee, Eunbi Lee. California State University, Northridge, Northridge, CA (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #152</td>
<td>9:30 AM - 11:00 AM</td>
<td>Differences in Muscle Activity During Cycling in Healthy Aging and Parkinson’s Disease: Pilot</td>
</tr>
<tr>
<td>Rebecca J. Daniels, Christopher A. Knight. University of Delaware, Newark, DE. (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #153</td>
<td>9:30 AM - 11:00 AM</td>
<td>Spatial Measures Of Straight-line Walking And Walking With A Turn In People With Parkinson’s Disease</td>
</tr>
<tr>
<td>Caitlin A. Bryson. George Mason University, Fairfax, VA. (Sponsor: Randall Keyser, FACSM) (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #154</td>
<td>9:30 AM - 11:00 AM</td>
<td>Breathing And Vision Effects On Balance, Attention, And Respiratory Complexity During Standing In Parkinson’s Patients</td>
</tr>
<tr>
<td>Luis Hernandez, John Manning, Christina Odeh, Shuqi Zhang. Northern Illinois University, Dekalb, IL. Email: <a href="mailto:lhernandez6@niu.edu">lhernandez6@niu.edu</a> (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Board #155</td>
<td>9:30 AM - 11:00 AM</td>
<td>The Effects of Cadence on Torque Asymmetry</td>
</tr>
<tr>
<td>Ashley N. Fox, John W. Farrell, III, Rebecca D. Larson. University of Oklahoma, Norman, OK. (Sponsor: Christopher Black, Ph.D., FACSM) (No relevant relationships reported)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
American College of Sports Medicine

Board #163 9:30 AM - 11:00 AM
The Effect of Change on Stride Length on Muscular Activity and Energy Cost during Walking
Hae Ryong Chung1, Travet Witherspoon Jr1, Moroni de Moos1, Jin hee Jeong2, Chris Petsikoulis2. 1Clayton State University, Morrow, GA. 2Augusta University, Augusta, GA. 3Aurora University, Aurora, IL.
Email: hchung@clayton.edu
(No relevant relationships reported)

Board #164 9:30 AM - 11:00 AM
Does Music-Based Rhythmic Auditory Cuing Alter the Correlation Structure of Stride Times?
Scott W. Ducharme, Dylan C. Perry, Colleen J. Sands, Elroy J. Aguilar, Christopher C. Moore, Catherine Tudor-Locke, FACSM. University of Massachusetts, Amherst, Amherst, MA. (Sponsor: Catrine Tudor-Locke, FACSM)
Email: sducharm@umass.edu
(No relevant relationships reported)

Board #165 9:30 AM - 11:00 AM
Does Arm Swing Frequency Match Alterations in Stride Frequency during Treadmill Walking?
Sarah M. Garcia, Jacqueline T. Brine-Doyle, Marcella J. Myers. St Catherine University, St. Paul, MN. (Sponsor: Mark Blegen, FACSM)
(No relevant relationships reported)

Board #166 9:30 AM - 11:00 AM
Local Dynamic Stability is Affected by Soldier- Relevant Torso Loads and Gait Speeds
Kari L. Lovejoy1, Elliot Saltzman1, Leif Hasselquist2, Cara L. Lewis1. 1Boston University, Boston, MA. 2Natick Soldier Research Development and Engineering Center, Natick, MA.
Email: kloveryo@bu.edu
(No relevant relationships reported)

Board #167 9:30 AM - 11:00 AM
Long Term Functional Metrics Following Direct Anterior Total Hip Arthroplasty
Brianne Borgia1, Julia Freedman Silvernail1, Cass Nakasone2, Christopher Stickle2, Ronald Hetzler, FACSM1, Kara Radzak1. 1University of Nevada, Las Vegas, Las Vegas, NV. 2Shrinah Hospital, Honolulu, HI. 3University of Hawaii, Manoa, Honolulu, HI.
(Sponsor: Ronald Hetzler, FACSM)
(No relevant relationships reported)

Board #168 9:30 AM - 11:00 AM
Concurrent Validity Of A Gait Analysis Application Vs. Slow-motion Video For The Assessment Of A 400 M Walk Test
Nathan W. Saunders, Alexandra Colacino, Meghan Hess, Brianna Gassman, Uriel Ibarra-Moreno, Alyssa Braun, Morgan Kiser, Kennady Miller, Abigail Matsushima, Megan Salvatore. University of Mount Union, Alliance, OH.
Email: saunderw@mountunion.edu
(No relevant relationships reported)

Board #169 9:30 AM - 11:00 AM
Amputee’s Gait Assessment for Successive Steps by Miniature Triaxial Load Cells
Harcharan S. Ranu, FACSM. American Orthopaedic Biomechanics Research Institute, ATLANTA, GA.
Email: president@aobri.org
(No relevant relationships reported)

Board #170 9:30 AM - 11:00 AM
Non-linear Lower Extremity Joint Torque Changes Observed during Preparation for Walk-to-run Gait Transition
Li Li, FACSM1, Jiahao Pan2. 1Georgia Southern University, Statesboro, GA. 23611 (CHINA) CO., LTD, Xiamen, China.
Email: lili@georgiasouthern.edu
(No relevant relationships reported)
3309 Board #178 9:30 AM - 11:00 AM
Influence Of Muscle Action On Energy Expenditure: Concentric Vs. Eccentric Vs. Both
Ben M. Meister, Zackery J. Valenti, Colleen E. Lynch, Cody B. Revel, Alison C. Schwartz, Michael E. Quarrantillo, Samantha R. Guarnera, William A. Fountain, Nicholas A. Carlini, Kerry E. Lynch, Nicole C. Lindner, Amar L. Naboulsi, Paola J. Paco, Scott A. Mazzetti. Salisbury University, Salisbury, MD (No relevant relationships reported)

3310 Board #179 9:30 AM - 11:00 AM
The Effects Of Exercise To Bmp-4-mediated Browning On White Adipose Tissue In Obese Rats
Liang Chanyu, Yan Yi. Beijing Sport University, Beijing, China (No relevant relationships reported)

3311 Board #180 9:30 AM - 11:00 AM
Acute Exposure to a High-Fat High-Sugar Diet Affects Wheel Running Activity
Katherine A. Stiegel, Aylard C. Letsinger, Jorge Z. Granados, Cedric Cerda, J. Timothy Lightfoot, FACSM. Texas A&M University; College Station, TX. (Sponsor: J. Timothy Lightfoot, FACSM) (No relevant relationships reported)

3312 Board #181 9:30 AM - 11:00 AM
The Effect Of Interval Training On Aerobic Capacity In Mice Growth Restricted In Early Life
Olivia S. Lord, William J. Clark, Ashley N. Triplett, David P. Ferguson. Michigan State University, East Lansing, MI (No relevant relationships reported)

3313 Board #182 9:30 AM - 11:00 AM
Effects Of High-fat Diet And Exercise On Total Plasma Macronutrient Contents By Fourier-transform Infrared Spectroscopy
Jarrett Walbolt, Raegan Chunin, David Greshc, Arish Bheraiya, Susanna Hamsley, Olaitunde Olademehin, Sung Kim, Yusuk Koh. Baylor University, Waco, TX Email: Jarrett.Walbolt1@baylor.edu (No relevant relationships reported)

3314 Board #183 9:30 AM - 11:00 AM
Methodological Considerations to Evaluate the Effect of Physical Activity on Fluoride Metabolism in Children
Liane B. Azevedo, Fatemeh Vida Zohoori, Lilian Aparecida Ferreira, Larissa Grizzo, Melissa Thiemi Kato, Marilia Afonso Rabelo Buzalaf, Anne Maguire, Ruth A. Valentim, Sandra L. Amaral. Teesside University, Middlesbrough, United Kingdom. (Sponsor: Teesside University, Middlesbrough, United Kingdom) (No relevant relationships reported)

3315 Board #184 9:30 AM - 11:00 AM
Relationships Among Fatigue Thresholds Derived From Neuromuscular, Metabolic, and Ventilatory Parameters
Rachel N. Tauber, Blake J. Moulton, Peter J. Chomontowski, Clayton L. Canic. Northern Illinois University; Dekalb, IL Email: rauber1@niu.edu (No relevant relationships reported)

3316 Board #185 9:30 AM - 11:00 AM
Hemodynamic and Body Fluid Response to Water Ingestion
John Wygand, FACSM, Robert M. Otto, FACSM, John Petrizco, Melhaney Reichelt, Jessica Machaby, Abigail LeBlanc, Daniel Hagan, Lauren Yanni, Glen Reid. Adelphi University; Garden City, NY Email: wygand@adelphi.edu (No relevant relationships reported)

ACS May 29 – June 2, 2018
Minneapolis, Minnesota
### G-47  Free Communication/Poster - Clinical Exercise Physiology - Other

**Saturday, June 2, 2018, 7:30 AM - 11:00 AM**

**Room: CC-Hall B**

<table>
<thead>
<tr>
<th>Board #211</th>
<th>9:30 AM - 11:00 AM</th>
<th>Hammstrands Muscle Activation During Different Strengthening Exercises</th>
</tr>
</thead>
<tbody>
<tr>
<td>Darren Z. Nin¹, Pui W. Kong¹, Matthew T G Pain¹, Jonathan P. Folland, FACSM²</td>
<td>¹Namraig Technenical University, Singapore, Singapore; ²Loughborough University, Loughborough, United Kingdom</td>
<td>Email: <a href="mailto:z.d.nin@lboro.ac.uk">z.d.nin@lboro.ac.uk</a> (No relevant relationships reported)</td>
</tr>
</tbody>
</table>
Board #220 9:30 AM - 11:00 AM
Relationships Between Quadriceps Femoris Quality And Locomotor Functions In Disabled Patients
Hisashi Maeda1, Ken Imada1, Koji Ishida1, Hiroshi Akima1. 1Nagoya University, Nagoya, Japan. 2Kinkai Rehabilitation Hospital, Tottori, Japan. (Sponsor: Katsumi Asano, FACSM)
Email: hisashi.gogo.tfl@gmail.com
(No relevant relationships reported)

Board #221 9:30 AM - 11:00 AM
Long-term Electrically Induced Muscle Exercise Duration Modulates Distinct Gene Signaling Pathways In People With Spinal Cord Injury
Michael A. Petrie, Manish Sureja, Richard K. Shields. The University of Iowa, Iowa City, IA
(No relevant relationships reported)

Board #222 9:30 AM - 11:00 AM
Low Frequency Electrically Induced Muscle Exercise Modulates Glucose Tolerance In People With SCI
Richard K. Shields, Michael A. Petrie, Jingyuan Lee, Jessica R. Woelfel. The University of Iowa, Iowa City, IA
(No relevant relationships reported)

Board #223 9:30 AM - 11:00 AM
Muscle-tendon Elasticity: Friend or Foe When Measuring Activity-related Energy Expenditure following Exercise Training
Stephen J. Carter1, Laura Q. Rogers, FACSM, Heather R. Bowles2, Gary R. Hunter, FACSM2. 1University of Alabama at Birmingham, Birmingham, AL. 2National Cancer Institute, Bethesda, MD. (Sponsor: Gary R. Hunter, FACSM)
(No relevant relationships reported)

Board #224 9:30 AM - 11:00 AM
The Test-retest Reliability And Exercise-driven Changes Of UCH-L1 In Healthy, Recreationally Active College Students
Grant H. Cabell1, Elizabeth F. Teel1, Erik D. Hanson1, Jason P. Mihalik2, Kevin M. Guakewicz, FACSM2. 1The University of North Carolina at Chapel Hill, Chapel Hill, NC. 2McGill University, Montreal, QC, Canada
Email: gcabell@live.unc.edu
(No relevant relationships reported)

Board #225 9:30 AM - 11:00 AM
Effects of Body Position and Electrode Type on the Reliability of Bioimpedance Spectroscopy
Michael Lane1, Lee A. Doemte2, April M. Spears1, Ryan M. Bean3, Jordan R. Moon4.1Eastern Kentucky University, Richmond, KY. 2Impedimed, Inc., Carlsbad, CA
Reported Relationships: 1M. Lane: Contracted Research - Including Principle Investigator; I am conducting funded research by a manufacturer of BIS technology.

Board #226 9:30 AM - 11:00 AM
Pulmonary Testing and Exercise-Induced Bronchoconstriction in Collegiate Baseball Players
Matthew J. Garver1, Molly A. Jennings1, Dustin W. Davis1, Brian J. Hughes1, Steve Burns1, Taylor K. Dinyer2, Alex Rickard2, Justin L. Colf3, Jenna L. Carducci2, Anna L. Blazer2, Laura A. Wilson3, Dave M. Burnett4. 1University of Central Missouri, Warrensburg, MO. 2University of Kentucky, Lexington, KY. 3University of Kansas Medical Center, Kansas City, KS
Email: garver@ucmo.edu
(No relevant relationships reported)

Board #227 9:30 AM - 11:00 AM
Decreased Aerobic Efficiency in Pediatric and Young Patients with Sickle Cell Disease : Race Comparison
Sandra K. Knecht, Wayne A. Mays, Mallorcé C. Rice, Andrea L. Grzeszczak, Adam W. Powell, Clifford Chin, Puram Malik, Tarek Alsaid. Cincinnati Children’s Hospital, Cincinnati, OH
Email: sandy.knecht@cchmc.org
(No relevant relationships reported)
### G-48b Late-Breaking Abstracts

Saturday, June 2, 2018, 7:30 AM - 11:00 AM  
Room: CC-Hall B

<table>
<thead>
<tr>
<th>Abstract Number</th>
<th>Time: 9:30 AM - 11:00 AM</th>
<th>Title</th>
<th>Authors</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>3366</td>
<td>9:30 AM - 11:00 AM</td>
<td>Does Habituation To High Protein Intake Affect Amino Acid Handling?</td>
<td>Grith Hojfeldt, Jacob Bülow, Lene Rørdam, Peter Schjerling, Jens Bülow, Gerrit van Hal, Lars Holm</td>
<td><a href="mailto:grithwh@gmail.com">grithwh@gmail.com</a></td>
</tr>
<tr>
<td>3367</td>
<td>9:30 AM - 11:00 AM</td>
<td>Effect Of An Unhealthy Lipoprotein Distribution On Muscle Protein Synthesis Response To Whey Protein Feeding</td>
<td>Jakob Agergaard, Mie C F Zillmer, Kenneth Mertz, Grith Hojfeldt, Peter Schjerling, Lars Holm</td>
<td><a href="mailto:jakobagergaard@hotmail.com">jakobagergaard@hotmail.com</a></td>
</tr>
<tr>
<td>3368</td>
<td>9:30 AM - 11:00 AM</td>
<td>The Effects of Protein Type and Added Leucine on Myofibrillar Protein Synthesis Following Concurrent Exercise</td>
<td>Tyler A. Churchward-Venne, Philippe J.M. Pinckaers, Joel E. Smeets, Wouter M. Peeters, Ian Rollo, Luc J.C. van Loon</td>
<td><a href="mailto:tyleronline@gmail.com">tyleronline@gmail.com</a></td>
</tr>
<tr>
<td>3369</td>
<td>9:30 AM - 11:00 AM</td>
<td>The Effect of Whey Protein Supplementation on the Recovery of Contractile Function following Resistance Training</td>
<td>Robert W. Davies, Joseph J. Bass, Brian P. Carson, Catherine Norton, Marta Kozior, Matthew S. Brook, Daniel J. Wilkinson, Philip J. Atherton, Ken Smith, Philip M. Jakeman</td>
<td><a href="mailto:robert.davies@ul.ie">robert.davies@ul.ie</a></td>
</tr>
</tbody>
</table>
3376 Board #245 9:30 AM - 11:00 AM
Safety Of Sub-maximal Aerobic Exercise During The Sub-acute Phase Of Recovery Following Sport-related Concussion
Phillip R. Worts, Scott O. Burkhardt, S. Daniel Petty, Lynn B. Panton, FACSM, Michael J. Oomsbee, FACSM, Cathy W. Levenson, FACSM, Jeong-Su Kim, FACSM. 1Florida State University, Tallahassee, FL. 2Children’s Health Andreus Institute, Plano, TX. 3Centre Pointe Health and Rehabilitation, Tallahassee, FL.
Email: prw113@my.fsu.edu
(No relevant relationships reported)

3377 Board #246 9:30 AM - 11:00 AM
Erik A. Willis, Pedro F. Saint-Maurice, Herman Pontzer, Charles E. Matthews, FACSM. 1National Cancer Institute, Bethesda, MD. 2Hunter College, New York, NY.
Email: erik.willis@nih.gov
(No relevant relationships reported)

3378 Board #247 9:30 AM - 11:00 AM
Associations Of Skeletal Muscle And Appendicular Lean Body Mass With Blood Pressure And Hypertension
Sunyue Ye, Chaoran Zhu, Chen Wei, Da Gan, Shankuan Zhu. Zhejiang University, Hangzhou, China
Email: yesunya@zju.edu.cn
(No relevant relationships reported)

3379 Board #248 9:30 AM - 11:00 AM
Optimal Level of Objectively Measured Physical Activity for Long-Term Weight Loss
Danielle M. Ostendorf, Janet K. Snell-Bergeon, Jan P. Lande, Anna E. Baron, Angela D. Bryan, Sarah J. Schmiege, Dawn Comstock, Edward L. Melanson, FACSM, Victoria A. Catenauci. 1University of Colorado Anschutz Medical Campus, Aurora, CO. 2University of Colorado Boulder, Boulder, CO.
Email: danielle.ostendorf@ucdenver.edu
(No relevant relationships reported)

3380 Board #249 9:30 AM - 11:00 AM
Prevalence Of Rash Suspicious For Tinea Among Minnesota High School Wrestlers -2017-18 Season
Mark A. Berg, William O. Roberts, FACSM. University of Minnesota, St. Paul, MN.
Email: Bergx004@umn.edu
(No relevant relationships reported)

3381 Board #250 9:30 AM - 11:00 AM
Current Practices Of Concussion Management in Primary Care: A Survey
William L. Patterson Jr., Kristine Karlson, William Dexter, FACSM, Deborah Johnson, Christina Holt, Ardis Olson, Amy Haskins. 1Maine Medical Center, Portland, ME. 2Dartmouth Hitchcock, Lebanon, NH.
Email: patterson87@gmail.com
(No relevant relationships reported)

3382 Board #251 9:30 AM - 11:00 AM
Effects of 6 Months Endurance Training on Quality of Life and Work Ability
Hedwig Stemmer, Lena Grams, Monmme Kück, Julian Eigendorf, Sven Haufe, Uwe Tegtbur, Anette Melk, Andres Hiltlíker, Axel Haverich, Meike Stiesch-Scholz. Institute of Sports Medicine, Hannover, Germany.
Email: stemmer.hedwig@mh-hannover.de
(No relevant relationships reported)

3383 Board #252 9:30 AM - 11:00 AM
From the Perspective of Mitophagy: Study the Mechanism of Sustained Aerobic Exercises Alleviate Brain Aging
Wang Lu, Deng Wenqian, Li Xue. Chengdu Sports Institute, Chengdu, China
Email: wanglingdu@163.com
(No relevant relationships reported)

3384 Board #253 9:30 AM - 11:00 AM
Nurse Amie (Addressing Metastatic Individuals Everyday)
Erica Schleicher, Leah Cream, Rena Kaas, Michelle Farnan, Xiaochen Zhang, Kaylunn Mathis, Jessica Moyer, Kathryn Schmitz, FACSM. 1Pennsylvania State University, Hershey, PA. 2Ohio State University, Columbus, OH
Email: ericaschleicher@gmail.com
(No relevant relationships reported)

3385 Board #254 9:30 AM - 11:00 AM
Interindividual Variability and Adverse Responses to Body Composition with Exercise Training in Adolescents with Obesity
Jeremy J. Walsh, Gary Goldfield, Glen Kenny, Ronald Sigal, Steven Doucette, Brendon J. Gard. 1Children’s Hospital of Eastern Ontario, Ottawa, ON, Canada. 2University of Ottawa, Ottawa, ON, Canada. 3University of Calgary, Calgary, AB, Canada. 4Nova Scotia Health Authority, Halifax, NS, Canada. 5Queen’s University, Kingston, ON, Canada.
Email: jeremywalsh16@gmail.com
(No relevant relationships reported)

3386 Board #255 9:30 AM - 11:00 AM
Effects of Resistance Training and Doxorubicin on Creatine Transporter and Creatine Kinase Expression in Fast Muscle
Sahlehedin Sharifi, David S. Hydock, Mackenzie Twaddell, Allison Tigner, Meghan Wagner, Eric C. Bredahl. 1University of Northern Colorado, Greeley, CO. 2Creighton University, Omaha, NE.
Email: salehedin.sharifi@unce.edu
(No relevant relationships reported)

3387 Board #256 9:30 AM - 11:00 AM
Exercise In All Chemotherapy (EnACT) Study: Implementation Of Exercise Oncology In A Clinical Setting
Natasha Burse, Kathleen Stargoog, Cathy Bryan, Wayne Foo, Katlynn Mathis, Jessica Moyer, Renate Winkels, Joachim Wiskenmann, Kathryn Schmitz, FACSM. Pennsylvania State University, Hershey, PA.
Email: nburse@phs.psu.edu
(No relevant relationships reported)

3388 Board #257 9:30 AM - 11:00 AM
Effect Of 10 Weeks Of Low-load High-repetition Resistance Exercise Training On Human Skeletal Muscle
Chang Hyun Lim, Tae Soek Jeong, Chang Keun Kim. 1Korea National Sport University, Seoul, Korea. Republic of. 2SPK Sport Medicine Clinic and Performance Center, Seoul, Korea. Republic of.
Email: lnhch87@hanmail.net
(No relevant relationships reported)

3389 Board #258 9:30 AM - 11:00 AM
Expression Of Markers Of Browning In White Adipose Tissue In Life-long Endurance Trained Athletes
Stefan Markus Reitzner, Seraphina Kissling, Mark Chapman, Carl Johan Sundberg. 1Karolinska Institutet, Stockholm, Sweden. 2University of Zürich, Zürich, Switzerland.
Email: stefan.reitzner@ki.se
(No relevant relationships reported)

3390 Board #259 9:30 AM - 11:00 AM
In-vivo Measurement Of Strain In The Iliotibial Band In Motion
Kuntal Chowdhury. Oakland University William Beaumont School of Medicine, Rochester, MI.
Email: kchowdhury@oakland.edu
(No relevant relationships reported)
P238 Final Program

Board #260 9:30 AM - 11:00 AM
Applied Assessment and Interventional Energy And It's Effects In A Clinical Setting
Gerardo Hizon, FACSM, Nikk Suneniratne. University of California Riverside, Riverside, CA
Email: info@quantumclinicalstudy.com
(No relevant relationships reported)

Board #261 9:30 AM - 11:00 AM
Forced PGC1a1 Expression Improves Oxidative Capacity And Partially Rescues Strength Following Volumetric Muscle Loss Injury
William M. Southern1, Anna S. Nichenko1, Anita E. Qualls1, Amelia Yir1, Hang Yir1, Sarah Greising1, Jarrod A. Call1. 1University of Georgia - Athens, GA
Email: wmsouthern@gmail.com
(No relevant relationships reported)

Board #262 9:30 AM - 11:00 AM
Myoneural Transcriptional Rate Differences In Young versus Mature Mice
Email: samuel.crow@uky.edu
(No relevant relationships reported)

Board #263 9:30 AM - 11:00 AM
Relationships Between Muscular Strength And Body Composition In Adults With Cerebral Palsy
Pooya Pal, Cory E. Low, Rachel L. Christensen, Stephanie V. Rosales, Areum K. Jensen. San Jose State University, San Jose, CA
Email: pooyadba12@gmail.com
(No relevant relationships reported)

Board #264 9:30 AM - 11:00 AM
Alterations in Musculoskeletal Function and Functional Mobility in Adults with Cerebral Palsy
Rachel L. Christensen, Pooya Pal, Cory E. Low, Tiffany N. Raczyński, Areum K. Jensen. San Jose State University, San Jose, CA
Email: rachelchristensen8@gmail.com
(No relevant relationships reported)

Board #265 9:30 AM - 11:00 AM
Alterations in Skeletal Architecture, Bone Mineral Density, and Muscular Strength in Adults with Cerebral Palsy
Cory E. Low, Pooya Pal, Rachel L. Christensen, Areum K. Jensen. San Jose State University, San Jose, CA
Email: corylow95@gmail.com
(No relevant relationships reported)

Board #266 9:30 AM - 11:00 AM
The Effect Comparison of Foam Rolling with Passive Stretching After High Intensity Training
Yuanpeng Liao, Yu Xia, Minjia Wang. ChengDu Sports Institute, ChengDu, China
Email: hypercy@163.com
(No relevant relationships reported)

Board #267 9:30 AM - 11:00 AM
A Novel Application of Altitude Training Masks and High-Intensity Interval Training to Improve Exercise Performance
Email: ehuqvst@wgu.edu
(No relevant relationships reported)

Board #268 9:30 AM - 11:00 AM
Novel Use of Respiratory Conditioning Masks during High-Intensity Interval Training to Improve Respiratory Function in Healthy Adults
Email: Brycen@wgu.edu
(No relevant relationships reported)

Board #269 9:30 AM - 11:00 AM
Feasibly Measuring Sitting And Physical Activity In The Office Using Bluetooth Sensing
Elisabeth A. Winkler1, Nyssa Hagedorf2, Takenni Sugiyama2, Bronwyn Clark1. 1The University of Queenslands, Herston, Australia. 2Swinburne University, Melbourne, Australia. 1Australian Catholic University, Melbourne, Australia
Email: e.winkler@sph.uq.edu.au
(No relevant relationships reported)

Board #270 9:30 AM - 11:00 AM
Absence of Functional Left Ventricular Adaption With Short-Term Resistance Exercise Training in Young Men
Jason Au1, Sara Okawa2, Robert Mortoni, Stuart Phillips, FACSM3. 1University of the Sunshine Coast, Sunshine Coast, Australia. 2Minneapolis, Minnesota. 3University of Arizona, Tuscon, AZ
Email: jonjoe@med.uncich.edu
(No relevant relationships reported)

Board #271 9:30 AM - 11:00 AM
Impaired Exercise Capacity In cTnT-delta160E Mice Validates Pre-clinical Model To Assess Exercise Interventions For HCM
Jonathan J. Herrera1, Kate Szczesniak, C. Peer, Shalini Joshi. 1University of Michigan, Ann Arbor, MI, 2University of Arizona, Tuscon, AZ
Email: jonjoe@med.uncich.edu
(No relevant relationships reported)

Board #272 9:30 AM - 11:00 AM
The Influence of EMG-based Maximal Voluntary Contraction (MVCEMG) Intensity on Middle Cerebral Artery Velocity
Hedeiuk Lee1, Seongdaeh Kim1, Myungjin Oh, Ilgyu Jeong1, 1Hannam University, Daejeon, Korea, Republic of. 2Kaekseok University, Cheonan, Korea, Republic of.
Email: w3416@hanmail.net
(No relevant relationships reported)

Board #273 9:30 AM - 11:00 AM
Muscle Afferent Blockade Improves Endurance Exercise Performance When O2 Transport To Locomotor Muscles Is Preserved
Thomas J. Hureau1, Joshua C. Weavil, Taylor S. Thurston1, Hsuan-Yu Wang1, Jayson R. Gifford1, Jacob E. Jessop1, Michael J. Buys2, Russell S. Richardson3, Markus Amann2. 1University of Strasbourg, Strasbourg, France. 2University of Utah, Salt Lake City, UT. 3Australian Catholic University, Melbourne, Australia
Email: thureau@unistra.fr
(No relevant relationships reported)

Board #274 9:30 AM - 11:00 AM
Highly Cushioned Shoes Increase Leg Stiffness And Amplify Impact Loads During Running
Juhua-Pekka Kulmala1, Jukka Kosonen2, Jussi Nummenen3, Janne Avela1. 1Harvard University, Cambridge, MA. 2University of Jyväskylä, Jyväskylä, Finland. 3Helsinki University Hospital, Helsinki, Finland.
Email: jkulmala@seas.harvard.edu
(No relevant relationships reported)
3406 Board #275 9:30 AM - 11:00 AM
Quantifying Head Impact Dynamics In Community Level Australian Rules Football
Alan Pearce, La Trobe University, Melbourne, Australia.
Email: Alan.Pearce@latrobe.edu.au
(No relevant relationships reported)

G-49 President's Lecture - Is it Time for Heart Failure Patients to HIIT the Weights?
Saturday, June 2, 2018, 11:15 AM - 12:05 PM
Room: CC-Auditorium 1

Traditional endurance exercise training programs have been shown to be highly effective at improving exercise tolerance, QOL, as well as numerous vascular and muscular abnormalities in heart failure (HF) patients with both a preserved or reduced ejection fraction. Growing evidence suggests that alternative exercise interventions may provide a more optimal stimulus given the pathophysiological derangements that limit these patients. Studies employing alternative approaches, including high intensity interval training (HIIT) and/or resistance exercise, as well as strategies to implement these emerging approaches in stable HF with be discussed in this presentation.

3407 Peter H. Brubaker, FACSM. Wake Forest University, Winston Salem, NC
(No relevant relationships reported)

G-50 President's Lecture - Seeking Gold: The Evolution of Nutrition Strategies for Creating a Champion
Saturday, June 2, 2018, 11:15 AM - 12:05 PM
Room: CC-Auditorium 2

Historical nutrition strategies followed by elite athletes were based on beliefs and sport-specific traditions that had little to do with any consideration of human biology and physiology. Over the past 30 years, however, the science- and evidence-based understanding of sports nutrition has radically expanded to provide athletes, and those who work with them, important tactics for gaining optimal benefits from training, for achieving performances that match the athlete’s capacity, and for recovering from physical activity to improve the athlete’s capacity to perform at high levels on sequential days. The high specificity of current recommendations now focuses as much on timing of food intake as content of intake. This session will provide important new information on how optimal nutrition strategies related to hydration, energy substrate consumption, and micronutrient intakes have evolved to help athletes compete at their very best.

3408 Dan Benardot, FACSM. Georgia State University, Atlanta, GA
(No relevant relationships reported)
Beekley, Matthew D. 1358, 2314
Becker, James 125, 204, 1823
Beals, Joseph W. 2646
Beach, Kimberly 1359
Beach, Colby 2847
Bazmi, Kameron
Baynard, Tracy 401, 432, 436, 670
Baumgartner, Neal
Baumgartner, Morgan P. 122
Baumann, Douglas 229
Bataineh, Moath F.
Bastianelli, Brandon
Bass, Martha A. 1919
Baskette, Kimberly G. 2205
Bartholomae, Eric
Bartee, Roderick T.
Barstow, Thomas
Official Journal of the American College of Sports Medicine
Numbers listed next to each individual represent the presentation number associated with the presentation. Bold numbers represent primary author.
P252  Author Index

MEDICINE & SCIENCE IN SPORTS & EXERCISE®

Listed numbers next to each author represent the page number on which the author made a contribution with the bolded text.
P254    Author Index

MEDICINE & SCIENCE IN SPORTS & EXERCISE®

Ransier, Ben  2829
Rankin, Janet W.
Randazzo, Keith D.  3155
Ranadive, Sushant M.  2241
Ramsook, Andrew H.  538
Ramprasad, Arjun K.
Ramos-Jiménez, Arnulfo  931
Ramlogan, Vashisht
Ramirez-González, Angelica
Ramirez, Melitza
Ramer, Jared D.
Radtke, Kimberly L.
Rabatin, Amy
Quist, Morten
Quinn, Laurie  1465
Quarantillo, Michael E.  3309
Qu, Chaoyi  1427
Qiu, Jun  864
Qin, Xiong
Qian, Li  3304
Qazi, Shayaan  392
P254 Author Index

Numbers listed next to each individual represent the presentation number associated with the presentation.  Bold numbers represent primary author.

ACSM May 29 – June 2, 2018

 Minneapolis, Minnesota