



ADVANCE PROGRAM

For additional highlights and programming, visit
www.acsmannualmeeting.org

May 30-June 3, 2017
Hyatt Regency Denver
at the Colorado
Convention Center
Denver, Colorado USA

#ACSM17





Dear Friends and Colleagues:

I am pleased to invite you to join basic scientists, sports medicine clinicians, professors, students, health fitness professionals and policy experts from around the world to the 64th ACSM Annual Meeting, 8th World Congress on Exercise is Medicine®, and World Congress on the Basic

Science of Exercise and the Brain, in Denver, Colorado, USA.

The Program Planning Committee has constructed an extraordinary schedule of clinical, basic and applied original science and practical sessions, which are grounded in participant feedback and spans the breadth of member interests. The 2017 program will include a strong clinical track (CAQ review, clinical workshops, case reports and poster sessions) and a preconference for graduate students and early career professionals. A highlight will be the integration of the World Congress on the Basic Science of Exercise and the Brain into the Annual Meeting. Join

us to learn more from the world's experts on cutting-edge science addressing one of our most prevalent and serious health issues. Don't forget to attend the celebrated Wolffe, Dill and President's lectures (pages 6-7) which are always enlightening, appealing and memorable.

Countless networking events will allow you to meet and greet colleagues, make new friends and rub elbows with international scholars many of us only read about. Be sure to make time to socialize, exercise, or enjoy the exceptional dining and recreation offered in the Denver area.

Make your travel reservations today, and register early to get the discounted rate.

We look forward to seeing you in Denver!

Walt Thompson, Ph.D., FACSM
2017 Program Committee Chair, ACSM President-elect

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* Please note that the above organizations are not ACCME-defined commercial interests.

2016-2017 Program Committee

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Kathleen Woolf, Ph.D., FACSM

Calendar at-a-glance

Tuesday, May 30

9:00 a.m.-9:15 p.m.	Committee Meetings (refer to onsite schedule)
9:00 a.m.-8:00 p.m.	Registration Open
11:30 a.m.-7:00 p.m.	Preconference Sessions (see pages 12-13).
1:00-5:15 p.m.	World Congress on Exercise is Medicine®
5:30-6:15 p.m.	Morris/Paffenbarger World Congress on Exercise is Medicine® Keynote Lecture
7:00-10:00 p.m.	Kick-Off Party

Wednesday, May 31

6:00 a.m.-6:00 p.m.	Committee Meetings (refer to onsite schedule)
6:30 a.m.-6:00 p.m.	Registration Open
8:00-9:15 a.m.	Joseph B. Wolfe Memorial Lecture
9:30 a.m.-5:15 p.m.	Educational Sessions
1:30-6:00 p.m.	Exhibit Hall Open
5:00-7:00 p.m.	President's Cup Poster Competition viewing
5:00-6:00 p.m.	Exhibit Reception
5:30-7:00 p.m.	Student Colloquium
5:45-7:15 p.m.	Interest Group Meetings
7:05 p.m.	President's Cup winner announcement
7:30-9:00 p.m.	Student Bowl

Thursday, June 1

6:00 a.m.-7:00 p.m.	Committee Meetings (refer to onsite schedule)
6:00-7:45 a.m.	Josephine L. Rathbone Memorial Breakfast honoring ACSM's Women
7:30 a.m.-5:00 p.m.	Registration Open
8:00 a.m.-5:15 p.m.	Educational Sessions
9:30 a.m.-5:00 p.m.	Exhibit Hall Open
10:30-11:20 a.m.	President's Lectures
5:45-6:45 p.m.	Clinicians' Reception with Poster Presentations
5:45-7:00 p.m.	Basic Science Reception
5:45-7:15 p.m.	Interest Group Meetings
7:30-8:30 p.m.	Celebrating Diversity Reception (invitation only)
8:00-9:00 p.m.	International Reception (invitation only)
8:00-9:30 p.m.	Regional Chapter Events

Friday, June 2

6:00 a.m.	17th Annual Gisolfi Fun Run/Walk
6:00 a.m.-1:00 p.m.	Committee Meetings (refer to onsite schedule)
7:30 a.m.-4:00 p.m.	Registration Open
8:00-9:15 a.m.	D.B. Dill Historical Lecture
8:00 a.m.-5:15 p.m.	Educational Sessions
9:30 a.m.-2:00 p.m.	Exhibit Hall Open
12:00-12:45 p.m.	Student Meet the Expert Session
5:45-7:00 p.m.	New Fellow Reception (invitation only)
7:00-10:00 p.m.	Cocktail Reception and Awards Banquet

Saturday, June 3

6:30-7:15 a.m.	Committee Meetings (refer to onsite schedule)
8:00-11:00 a.m.	Educational Sessions
8:00-11:30 a.m.	Registration Open
11:15 a.m.-12:05 p.m.	President's Lectures
1:00-7:30 p.m.	U.S. Olympic Training Center Tour

General Information

Advance Registration

Avoid long lines by pre-registering for the 64th ACSM Annual Meeting by mail, fax or at the [ACSM Annual Meeting website](#). Discounted registration is available through April 19.

Pre-registration services are available through May 23. A \$50 processing fee will be applied to all professional on-site registration fees.

Cancellations

Cancellations will be accepted if sent in writing to the ACSM National Center and postmarked or e-mailed to meeting@acsm.org by April 19, 2017. A service charge of \$50 will be applied to all cancellations. Refunds will not be issued for no-shows or cancellations made after April 19, 2017.

Abstracts

You have three ways to access presentation abstracts.

1. Download a PDF from the website. All attendees will receive a link by email in advance of the meeting. 2. Online program planner 3. ACSM Conferences mobile app. Please view and/or print abstracts in advance of the conference. Printed copies of the abstracts will not be available onsite.

International Registrants

The U.S. State Department requires that all visitors traveling to the U.S. from visa waiver countries register online through the Electronic System for Travel Authorization. For detailed information on U.S. entry requirements, please visit <http://travel.state.gov>.

Hyatt Regency Denver at the Colorado Convention Center

Registration, exhibits and most educational sessions will be held in the Colorado Convention Center. Please review your final program onsite for specific locations of your favorite events.



Member Service Center

ACSM's Member Service Center is your one-stop resource for information on ACSM membership, certification, programs and meetings. ACSM staff will be available to answer your questions throughout the meeting. Not a member? Stop by to learn more about membership benefits—and remember... students join for just \$10!

Official Language

English is the official language of the meetings.

On-Site Registration Hours

Register on-site or pick up your materials at the Colorado Convention Center during the following hours:

Tuesday, May 30	9:00 a.m.-8:00 p.m.
Wednesday, May 31	6:30 a.m.-6:00 p.m.
Thursday, June 1	7:30 a.m.-5:00 p.m.
Friday, June 2	7:30 a.m.-4:00 p.m.
Saturday, June 3	8:00-11:30 a.m.

Time Zone

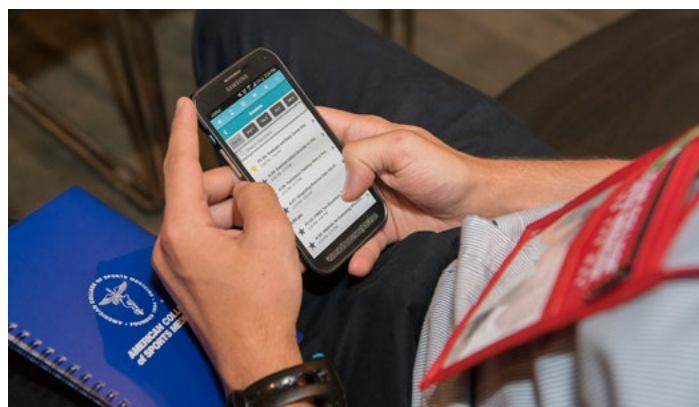
Denver is part of the Mountain Time Zone.

Travel

For assistance in making travel arrangements to Denver, consider using ACSM's preferred Travel Agency, ALTOUR. To explore your travel options, email indycorp@altour.com

Engage with ACSM on Social Media

Get Updates on Annual Meeting and Much More!



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Annual Meeting Objectives

At the conclusion of the Annual Meeting, participants should be able to:

1. Evaluate the biological, biomechanical, psychological and behavioral changes accompanying exercise in both normal and pathological states.
2. Analyze state-of-the art and innovative basic science, applied science, and clinical medicine in the areas of exercise, fitness, health, and physical performance.
3. Compare new approaches and perspectives concerning exercise science and sports medicine through interactive discussions with scientists and clinicians in related fields.
4. Recognize the importance of basic science research as it relates to diseases and conditions that exist due to physical inactivity
5. Assess how physical activity research and practice can contribute to public health.

Clinically Specific Objectives:

6. Incorporate new guidelines into the care of the female athlete to improve energy availability in order to safely return to play in their sport
7. Develop strategies to counsel patients with chronic diseases to participate in physical activity to improve function and quality of life.
8. Evaluate appropriate diagnostic and non-pharmacologic treatment strategies for young athletes with musculoskeletal pain in order to prevent further injury and return them to play.
9. Determine which patients with common congenital heart diseases are at risk for sudden cardiac death and refer for advanced cardiac care when appropriate.
10. Perform a comprehensive evaluation of an athlete with a concussion in order to determine a safe plan for rehabilitation and decrease the risk of post-concussive symptoms.
11. Develop a treatment plan using current recommendations to prescribe effective exercise and physical activity plans to children, adolescents and adults to enhance health and prevent disease.

Target Audience

ACSM members and professionals interested in the field of sports medicine and exercise science.

Earn Continuing Education Credits/ Continuing Medical Education Credits

Accreditation

The American College of Sports Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.



AMA/PRA Credits

The American College of Sports Medicine designates this live activity for a maximum of 30.25 *AMA PRA Category 1 Credit(s)*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

ACSM CECs

The American College of Sports Medicine's Professional Education Committee certifies that this continuing education offering meets the criteria for a maximum of 30.25 hours of ACSM Continuing Education credit.

BOC – CEUs

American College of Sports Medicine (BOC AP#P401) is approved by the Board of Certification, Inc. to provide continuing education to Athletic Trainers. This program is eligible for a maximum of 30.25 Category A hours/CEUs. ATs should claim only those hours actually spent in the educational program.



AAFP

Application for CME Credit has been filed with the American Academy of Family Physicians. **Determination of credit is pending.**

Be a Part of the **Most Comprehensive** Sports Medicine and Exercise Science Event in the World!

12 Topical Categories

Including Exercise is Medicine® and World Congress on the Basic Science of Exercise and the Brain

Educational Highlights

Renowned for its diversity, ACSM brings thousands of people together each year to learn from each other—top scientists, educators and clinicians. We are proud to spotlight the following lectures:

The Joseph B. Wolffe Memorial Lecture

Crossroads and Conflicts:
Olympics, Paralympics or
Cyborg Olympics?



Wednesday, May 31
8:00–9:15 a.m.

Yves C. Vanlandewijck, Ph.D., PT
KU Leuven, Belgium

The D.B. Dill Historical Lecture

Extreme Exercise and Cardiovascular
Health: Changing Paradigms and
Perceptions



Friday, June 2
8:00–9:15 a.m.

Barry A. Franklin, Ph.D., FACSM
William Beaumont Hospital

Morris/Paffenbarger Exercise is Medicine® Keynote Lecture

(Held at the Hyatt Regency Denver
at the Colorado Convention Center)



Physical Activity and Cardiovascular Prevention
Tuesday, May 30
5:30-6:15 p.m.
Mai-Lis Hellénius, M.D.
Karolinska Institute



Active Living for Healthy
Brains
Wednesday, May 31
2:10-3:00 p.m.
Marc J. Poulin, Ph.D.
University of Calgary



Exercise and
Neuroplasticity
Thursday, June 1
1:00-1:50 p.m.
Henriette van Praag, Ph.D.
NIH/NIA



Aging, Exercise and
Brain Plasticity
Thursday, June 1
2:10-3:00 p.m.
Kirk Erickson, Ph.D.
University of Pittsburgh

Presidents Lectures



The Impact of Exercise During
Pregnancy: A Call to Action to
Promote the Health of TWO
Generations
Thursday, June 1
10:30-11:20 a.m.
Michelle Mottola, Ph.D., FACSM
The University of Western Ontario



The Opioid Epidemic: How can
the Sports Medicine Community
Respond?
Thursday, June 1
10:30-11:20 a.m.
James C. Puffer, M.D., FACSM
*American Board of Family
Medicine*



Interval Training for Health:
Hype, Help and Hope
Saturday, June 3
11:15 a.m.-12:05 p.m.
Martin Gibala, Ph.D.
McMaster University



No Sweat: The Surprising
Science Behind Lasting
Motivation and Sustained
Physical Activity
Saturday, June 3
11:15 a.m.-12:05 p.m.
Michelle Segar, Ph.D., M.P.H.
University of Michigan

Named Lectures



Elsworth R. Buskirk Tutorial Lecture

Exercise, Muscle and CHO Metabolism
Wednesday, May 31
2:10-3:00 p.m.
Mark Hargreaves, Ph.D., FACSM
The University of Melbourne



Priscilla M. Clarkson Tutorial Lecture

Is Exercise Really Medicine?
Wednesday, May 31
2:10-3:00 p.m.
Barry Braun, Ph.D., FACSM
Colorado State University



John R. Sutton Clinical Lecture

Sport and Regenerative Medicine: What's All
the Hype About?
Friday, June 2
1:00-1:50 p.m.
Thomas Best, M.D., Ph.D., FACSM
University of Miami Miller School of Medicine

Sponsored by:



Highlighted Symposia

Athlete Care and Clinical Medicine

Controversies and Current Evidence in Pediatric Sports Medicine

Wednesday, May 31, 3:15-5:15 p.m.

Chair: Kevin R. Vincent, FACSM
Mary Lloyd Ireland, FACSM
Martha Murray
Kevin Shea

Biomechanics and Neural Control of Movement

Pathomechanics and Treatment of Osteoarthritis: Where Do We Go From Here?

Friday, June 2, 3:15-5:15 p.m.

Chair: Ajit Chaudhari, FACSM
Robert L. Sah
Stephen P. Messier, FACSM
Thomas Best, FACSM

Cardiovascular, Renal and Respiratory Physiology

Exercise Limitations in Heart Failure

Wednesday, May 31, 1:00-3:00 p.m.

Chair: Timothy Musch, FACSM
David C. Poole, FACSM
Russell S. Richardson
Mark Haykowsky
Daniel M. Hirai

Clinical Exercise Physiology

Should Cardiorespiratory Fitness be a Vital Health Measure?

Thursday, June 1, 1:00-3:00 p.m.

Chair: Ulrik Wisløff
Robert Ross, FACSM
Jonathan N. Myers, FACSM
Leonard A. Kaminsky, FACSM
Ross Arena, FACSM

Environmental and Occupational Physiology

Too Hot to Handle: Protective Clothing, Thermoregulation and Performance

Thursday, June 1, 3:15-5:15 p.m.

Chair: Caroline J. Smith
Co-Chair: Robert W. Kenefick, FACSM
Nigel A.S. Taylor
Emiel A. DenHartog
Margherita Raccuglia
Ronald Heus

Epidemiology and Biostatistics

Wake up! Optimizing Physical Activity, Sedentary Behavior, and Sleep for Better Health

Thursday, June 1, 8:00-10:00 a.m.

Chair: Charles E. Matthews, FACSM
William Haskell, FACSM
Michael Grandner
Mary Rosenberger
Matthew P. Buman, FACSM
David Buchner, FACSM

Fitness Assessment, Exercise Training, and Performance of Athletes and Healthy People

Training is Medicine: Practical Applications of 'Exercise is Medicine'

Friday, June 2, 3:15-5:15 p.m.

Chair: Steven K. Malin
Kim Huffman
Matthew C. Kostek

Immunology/Genetics/Endocrinology

MicroRNAs: Roles in Exercise Adaptations and Potential Biomarkers of Disease

Friday, June 2, 9:30-11:30 a.m.

Chair: Monica Hubal, FACSM
Aaron Russell
Aaron L. Baggish, FACSM
J. Timothy Lightfoot, FACSM

Metabolism and Nutrition

Nutrition and Exercise Interactions to Impact Diabetes

Wednesday, May 31, 9:30-11:30 a.m.

Chair: Stella L. Volpe, FACSM
Co-Chair: Kathleen Woolf, FACSM
Co-Chair: Jennifer E. Fassbender
Laurie Goodyear, FACSM
Kristen J. Nadeau
William E. Kraus, FACSM
Maria Marco

Psychology, Behavior and Neurobiology

The Role of Exercise in Neuroplasticity: Intervention to Manage Stress and Promote Well-Being

Saturday, June 3, 9:00-11:00 a.m.

Chair: Erica M. Taylor, FACSM
Co-Chair: Steven J. Petruzzello, FACSM
Brandon L. Alderman
Christopher J. Brush
Peter J. Ehmann
Ryan Olson

Skeletal Muscle, Bone and Connective Tissue

Move to the Rhythm: Circadian Orchestration of Exercise and Muscle Biology

Friday, June 2, 1:00-3:00 p.m.

Chair: John C. Quindry, FACSM
Martin E. Young
Graham R. McGinnis
Karyn A. Esser, FACSM
Brian Hodge

Exercise is Medicine®

Sport and Physical Activity for Children and Adolescents: Translating Science to Clinical Medicine and Public Health

Wednesday, May 31, 1:00-3:00 p.m.

Chair: Felipe Lobelo
Charles H. Hillman
Joseph E. Donnelly, FACSM
James F. Sallis, FACSM
Natalie Muth

Clinicians

The Annual Meeting has a rich and diverse clinical program that provides learning opportunities for clinicians of all types and experience levels. The combination of clinicians and research scientists provides a robust learning experience and exchange of ideas that many attendees have found to be essential for professional development.

To view the clinical programming with session date/times, visit the clinicians page under the program tab at the [ACSM Annual Meeting website](#).

Clinical Themes at the Conference Include:

- Pediatric Orthopedics and Sports Medicine
- Updates on Concussion
- Pre-participation Evaluation/Periodic Health Assessment
- Research and Biostatistics
- Clinical Decision Making, Injury Prevention and Return to Play
- Professional Development and Practice Management
- Hot Topics
- Technology
- Musculoskeletal Topics
 - General
 - Spine
 - Shoulder
 - Elbow, Hand and Wrist
 - Hip, Pelvis and Thigh
 - Knee
 - Leg
 - Foot and Ankle
 - Tendons, Ligaments and Cartilage
 - Fractures and Dislocations
 - Diagnostic Imaging
- Medical Topics
 - Recent Advances in Cardiology
 - Doping
 - Endocrine and Metabolism
 - Environmental Issues
 - Hematology
 - Neurology
 - Nutrition and Hydration
 - Supplements
 - Sports Psychology and Mental Health
 - Pulmonary
 - Rheumatology
- Sport Specific Advances
 - Running, Endurance, and Extreme Sports
- Special Populations
 - Special Olympics and Disabled Athletes
 - The Female Athlete
 - The Geriatric Athlete
- Exercise is Medicine®
 - Exercise for Disease Prevention, Health Promotion, and Treatment of Chronic Conditions
 - EIM for Chronic Conditions
 - Strategies on Incorporating EIM into Clinical Practice



Clinical Highlights

Wednesday, May 31

Highlighted Symposium

Controversies and Current Evidence in Pediatric Sports Medicine

3:15-5:15 p.m.

Chair: Kevin R. Vincent, FACSM
Mary Lloyd Ireland
Martha Murray
Kevin Shea

Thursday, June 1

Clinician's Reception with Poster Presentations

Sponsored by:



5:45-6:45 p.m.

Network with top experts in your field at the clinical reception. The top eleven clinical abstracts and clinical case presentations have been selected for poster presentation during this event.

Friday, June 2

John R. Sutton Clinical Lecture

Sport and Regenerative Medicine: What's All the Hype About?

1:00-1:50 p.m.

Thomas Best, M.D., Ph.D., FACSM
University of Miami Miller School of Medicine
Miami, Florida

World Congress on the Basic Science of Exercise and the Brain

This year's ACSM World Congress focuses on biological and physiological mechanisms of exercise and the brain. The World Congress is a unique opportunity to bring together interdisciplinary investigators for the most comprehensive meeting ever held on this topic. The program includes keynote lectures, tutorials and symposia from leading experts in the field with an emphasis on how exercise changes the brain and how this may relate to chronic disease.

Wednesday, May 31

Basic Science World Congress - Symposium

Impacts of Exercise, the Gut Microbiome/ Metabolome and Immunity on the Brain

9:30-11:30 a.m.

Monika Fleshner; Christopher Lowry; Emeran Mayer

Basic Science World Congress - Symposium

Influences of Physical Activity/Exercise on Cognitive Health Across the Life Span

9:30-11:30 a.m.

Chhanda Dutta; Charles Hillman; Kirk Erickson; Jeffrey Burns; Molly Wagster

Basic Science World Congress - Tutorial Lecture

Ecological Approach to Cognitive Enhancement: Complex Motor Training

1:00-1:50 p.m.

Andrew Conway

Basic Science World Congress - Tutorial Lecture

How the Immune System Talks to the Brain

1:00-1:50 p.m.

Jeffrey Woods, FACSM

Basic Science World Congress - Keynote

Active Living for Healthy Brains

2:10-3:00 p.m.

Marc Poulin

Basic Science World Congress - Symposium

Brain Blood Flow and Exercise

3:15-5:15 p.m.

Kevin Shoemaker; James P. Fisher; Damian Bailey; Jose Gonzalez-Alonso

Basic Science World Congress - Symposium

Exercise in Movement Disorders

3:15-5:15 p.m.

Roger Enoka; Robert Motl; John Ahlskog; Kristen Pickett

Thursday, June 1

Basic Science World Congress - Symposium

Neurobiological Effects of Physical Exercise

8:00-10:00 a.m.

Ulrik Wisloff; Linda Ernstsens; Emrah Duzel; Christiane Wrann; Linda Bergersen; Nathan Scrimgeour

Basic Science World Congress - Symposium

Stress and the Brain

8:00-10:00 a.m.

Bradley Hatfield, FACSM; Romain Meeusen, FACSM; Karim Alkadhi; Benjamin Greenwood

Basic Science World Congress - Keynote

Exercise and Neuroplasticity

1:00-1:50 p.m.

Henriette van Praag

Basic Science World Congress - Keynote

Aging, Exercise and Brain Plasticity

2:10-3:00 p.m.

Kirk Erickson

Basic Science World Congress - Symposium

Novel Approaches to Understanding the Effects of Exercise on the Brain

3:15-5:15 p.m.

Marc-Andre Cornier; Alexis Stranahan; Takashi Tarumi; Katelyn Wood

Basic Science World Congress - Symposium

Physical Activity Induced Neuroplasticity

3:15-5:15 p.m.

J. Carson Smith, FACSM; Claire Sexton; Judy Cameron; Jeffrey Kleim



National Center Leaders Meeting



At the 2016 EIM World Congress in Boston, National Center Directors from over 20 countries came together to discuss their progress in implementing EIM in their health systems, as well as their successes, challenges and future plans. Join us again this year for the 2017 National Center Leaders meeting that will be held on Tuesday, May 30 from 9:00 a.m.-12:30 p.m.

There will also be an International Social for EIM National Center leaders on Wednesday, May 31 from 7:00-9:00 p.m. We look forward to seeing you there!

EIM Educational Sessions

May 30-June 1

As a part of the 2017 EIM World Congress, several outstanding symposia and colloquia are being hosted that describe the integration of physical activity into our health care systems. These sessions include the Morris/Paffenbarger EIM Keynote Lecture “Physical Activity and Cardiovascular Prevention” (Tuesday, May 30, 5:30-6:15 p.m.), as well as the Highlighted Symposium “Sport and Physical Activity for Children and Adolescents: Translating Science to Clinical Medicine and Public Health” (Wednesday, May 31, 1:00-3:00 p.m.).

See pages 29-32 for additional information on EIM sessions.

EIM Ambassador Program Training Session

Wednesday, May 31

12:00-1:30 p.m.

The mission of the EIM Ambassador Program is to develop and assist the next generation of physical activity and health professionals in spreading the mission and vision of EIM Ambassadors in their institutions and local communities. Individuals attending this training will learn more about EIM and have the opportunity to join the EIM Ambassador community. The presentation will be 35-40 minutes in length followed by Q&A. Individuals who attend the training session and pass a knowledge-based exam will have the opportunity to join the EIM Ambassador community, where they will receive exposure to the latest EIM developments, opportunities to get involved in the initiative and advanced professional training.

2017 Exercise is Medicine® on Campus Recognition Awards

Wednesday, May 31

5:30-6:30 p.m.

Exercise is Medicine® on Campus (EIM-OC) is a program that calls upon individuals at universities and colleges to engage in the promotion of physical activity as a vital sign through the health systems on their campuses. EIM-OC encourages faculty, staff and students to work together toward improving the health and well-being of the campus community, from promoting physical activity through campus workshops and events to providing patients with exercise prescriptions to connecting university health care providers with university exercise specialists through exercise referral systems. This event will highlight implementation strategies on different university campuses, concluding with the announcement of the 2017 EIM-OC Recognition Awardees.



Support for the Exercise is Medicine® Global Initiative is Provided By:



Preconferences and Satellite Lectures

Visit the [ACSM Annual Meeting website](#) for more information regarding the preconferences and satellite lectures.

Preconferences: Tuesday, May 30

Symposium on Motor Control in Biomechanics: ISB Working Group in Motor Control

9:00 a.m.-12:00 p.m.

This is a forum to foster the growing interest in scientific work that bridges the fields of Motor Control and Biomechanics.

The Symposium is organized by the ISB Working Group in Motor Control (www.mcgbweb.org/) and brings together internationally renowned speakers to introduce their work on the understanding of Motor Control in Biomechanics for a wide range of applications including Sports Medicine, Exercise Physiology, Rehabilitation, Kinesiology, Modeling, and more.

To register for the symposium and for more information, please visit the [ACSM Annual Meeting website](#).

(No AMA/PRA Category 1 Credits will be offered for this preconference)

4th Annual International Congress on Medicine & Science in Ultra-Endurance Sports

9:00 a.m.-5:00 p.m.

Prof. Carlo J. De Luca, Boston University and Delsys Inc. (USA)

Dr. Paola Contessa, Delsys Inc. (USA)

We invite you to join scientists and clinicians from around the globe for this Congress. The Foundation for Ultra Sports Science has assembled an exceptional schedule to assure you are provided an aggressive day of scientific and clinical presentations focused on the latest information relevant to ultra-endurance sports. Please join us!

Pre-registration and a modest registration fee are required. Registration details are available at www.ultrasportsscience.us.

(No AMA/PRA Category 1 Credits will be offered for this preconference)

Gatorade Sports Science Institute – Athlete Health: More than Meets the Eye

11:30 a.m.-3:30 p.m.

Today the convergence of science, technology and sport is moving forward more rapidly than ever before, and as a result, new and interesting ways in which nutrition and well-being impact performance are being uncovered. This session will review emerging research in three areas of athlete health: gut health, vitamin D and concussion prevention and provide insight on what this means for today and tomorrow's athletes.

Topics:

- Looking for the Edge: Gut Health and Athletic Performance – Nic West, Griffith University
- Vitamin D: Are We Measuring it Correctly? – Graeme Close, Liverpool John Moores University
- Nutrition Supplementation and Concussion Prevention – Jonathan Oliver, CSCS, USAW, Texas Christian University
- Practical Applications – Trent Stellingwerff, FACSM, Canadian Sport Institute Pacific

Separate registration is required to this preconference. Check back soon at the [ACSM Annual Meeting website](#) for the link to register.

(No AMA/PRA Category 1 Credits will be offered for this preconference)

Presented by:



ACSM Social Media Training Preconference: Learn Top Secrets from Social Media Experts

1:00-3:00 p.m.

Today ushers in a new era and a new normal for fitness professionals who seek to connect with consumers and colleagues. Find out how to define your own brand. Then get your messages out there through a whole host of must-do platforms—Facebook, Twitter, LinkedIn, Hootsuite. Then, tie it together and house it at your dynamic, newly branded website hub. Nationally renowned ACSM multi-media experts will share their top web-based and social media secrets for building catchy, clear and credible outreach to target audiences. Also, for those interested in becoming an ACSM media spokesperson, this pre-conference serves as required education for that program. Get ready to have fun during this pre-con filled with highly interactive and individualized learning. There's only room for 75 participants so preregistration with the communications department is strongly recommended. Please have at least one social media account opened in advance to join in because we're going to conduct on-the-spot live posting!

Visit the [ACSM Annual Meeting website](#) for more information.

(No AMA/PRA Category 1 Credits will be offered for this preconference)

Graduate and Early Career Day Preconference and Lab Fair

3:00-7:00 p.m.

The Graduate and Early Career Day Preconference and Lab Fair is designed to provide career guidance for graduate students and early career professionals. The session kicks off with a keynote address, then will offer breakouts in three lecture tracks—each with its own specific focus: Academic Careers; Clinical Careers; Professional Business and Industry Careers. Students can listen to the journeys and advice from these speakers, as well as participate in the question and answer period. To help promote career networking after the breakouts, students will have a unique opportunity to chat one-on-one with 20 different universities. Learn about the labs, make connections with the schools, and discover postdoctoral opportunities. A light reception will coincide with the networking portion.

This event is open to all attendees, but is targeted to graduate students and young professionals in the early stage of their career. This event is free as part of your ACSM registration. If you plan to join us, please check the appropriate box on the registration screen.

(No AMA/PRA Category 1 Credits will be offered for this preconference)

PINES Ten Questions, Ten Experts: Research that Changed Sports Medicine

4:00-6:00 p.m. followed by the PINES reception

Fifty years ago, sports nutrition was a sideline of exercise physiology research. Indeed, the NY Academy of Science's extensive conference on the Marathon in 1977 barely mentioned nutrition. Today, sports nutrition is recognized with its own journals, professional groups, and career pathways. Which publications have underpinned this evolution? Ten sports nutrition experts will unveil a paper which has sparked great impact in their area of interest, answering the questions: What did the study tell us? Why did this make such an impact on me? What greater insights do I now have on this paper after the passage of time?

Visit the [ACSM Annual Meeting website](#) for more information.

(No AMA/PRA Category 1 Credits will be offered for this preconference)

Athlete Care and Clinical Medicine	Biomechanics and Neural Control of Movement	Cardiovascular, Renal and Respiratory Physiology	Clinical Exercise Physiology	Environmental and Occupational Physiology
Epidemiology and Biostatistics	Exercise is Medicine®	Fitness Assessment, Exercise Training, and Performance of Athletes and Healthy People	Immunology/Genetics/Endocrinology	Metabolism and Nutrition
Physical Activity/Health Promotion Interventions	Professional Development/Organizational Information	Psychology, Behavior and Neurobiology	Skeletal Muscle, Bone and Connective Tissue	World Congress on the Basic Science of Exercise and the Brain

Athlete Care and Clinical Medicine

A-15	Symposium	Current Concepts in Hip Preservation for the Athlete	Wed.	9:30-11:30 a.m.	Pierre d'Hemecourt, FACSM, Boston Children's Hospital/Harvard Medical School Andrea Straccioli, FACSM, Boston Children's Hospital - Harvard Medical School Cara L. Lewis, Boston University Yi-Meng Yen, Boston Children's Hospital - Harvard Medical School Eduardo Novais, Boston Children's Hospital - Harvard Medical School
A-17	Symposium	Updates in Management and Return to Play of the Female Athlete Triad – Translating Science to Best Practice	Wed.	9:30-11:30 a.m.	Aurelia Nattiv, FACSM, University of California, Los Angeles Mary Jane De Souza, FACSM, Pennsylvania State University Nancy Williams, FACSM, Pennsylvania State University Elizabeth Joy, FACSM, Intermountain Healthcare
A-27	Clinical Case Slide	Cardiovascular I	Wed.	9:30-11:10 a.m.	
A-28	Clinical Case Slide	Head	Wed.	9:30-11:30 a.m.	
A-29	Clinical Case Slide	Shoulder I	Wed.	9:30-11:30 a.m.	
A-33	Clinical Workshop-Hands On Demonstration	Physical Assessment of Oculomotor and Vestibular Dysfunction in Concussion	Wed.	9:30-10:20 a.m.	Ann McNamara, CU Sports Medicine and Performance Center
A-37	Clinical Workshop-Hands On Demonstration	Sports Vision: The Final Frontier for Improved Performance	Wed.	10:40-11:30 a.m.	Daniel M. Laby, State University of New York College of Optometry
A-54	Free Communication/Poster	Preparticipation and Injury Risk Assessment	Wed.	7:30 a.m.-12:30 p.m.	
B-03	Symposium	Minds Matter: Comprehensive Concussion Care and Rehabilitation	Wed.	1:00-3:00 p.m.	Christina L. Master, The Children's Hospital of Philadelphia Matthew F. Grady, The Children's Hospital of Philadelphia David R. Howell, Boston Children's Hospital John J. Leddy, University at Buffalo UBMD Orthopaedics and Sports Medicine

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B-15	Clinical Case Slide	Lumbosacral Spine I	Wed.	1:00-2:40 p.m.	
B-20	Tutorial Lecture	Unique Characteristics of Overhead Athletes and Prevention of Injury	Wed.	1:00-1:50 p.m.	Jason L. Zaremski, FACSM, University of Florida William F. Micheo, FACSM, University of Puerto Rico Ashwin N. Babu, Spaulding Rehabilitation Hospital
B-21	Clinical Workshop- Hands On Demonstration	Examination of the Knee	Wed.	1:00-1:50 p.m.	Scott A. Magnes, FACSM U.S. Navy Robert Johnson, FACSM, University of Minnesota
B-28	Colloquium	Shoulder: From MRI Scanner to OR Table... Does the Read Match the Surgical Findings?	Wed.	2:10-3:00 p.m.	Mary Lloyd Ireland, FACSM, University of Kentucky Michael Otte, Radiology Imaging Associates
B-29	Clinical Workshop- Hands On Demonstration	Practical Sports Ultrasound of the Knee	Wed.	2:10-3:00 p.m.	Adam Tenforde, Spaulding Rehabilitation Hospital Christine Eng, Spaulding Rehabilitation Hospital Lauren Elson, Spaulding Rehabilitation Hospital
B-40	Thematic Poster	Distance Running Issues	Wed.	3:15-5:15 p.m.	
B-46	Clinical Case Slide	Foot and Ankle I	Wed.	3:15-4:55 p.m.	
B-47	Clinical Case Slide	Lumbosacral Spine II	Wed.	3:15-5:15 p.m.	
B-48	Clinical Case Slide	Shoulder IV	Wed.	3:15-5:15 p.m.	
B-50	Tutorial Lecture	The Pressure Is On	Wed.	3:15-4:05 p.m.	Aaron L. Baggish, FACSM, MGH Cardiovascular Performance Program
B-51	Clinical Workshop- Hands On Demonstration	Pediatric and Adult Hip Examination	Wed.	3:15-4:05 p.m.	Jeffrey M. Mjaanes, FACSM, Northwestern University Joshua Blomgren, Rush University
B-54	Tutorial Lecture	Hey Doc, I am Going to Hike Machu Picchu; What do You Think?	Wed.	4:25-5:15 p.m.	William O. Roberts, FACSM, University of Minnesota
B-55	Colloquium	Medical Coverage of Ultramarathons	Wed.	4:25-5:15 p.m.	Morteza Khodaei, FACSM, University of Colorado School of Medicine Martin D. Hoffman, FACSM, VA Northern California Health Care System and University of California Davis Geoff Clover, Hardrock 100 Ultramarathon Race
B-56	Clinical Workshop- Hands On Demonstration	Static and Dynamic Exam of the Hip Picchu; What do You Think?	Wed.	4:25-5:15 p.m.	Pierre d'Hemecourt, FACSM, Children's Hospital of Boston, Harvard University
B-76	Free Communication/ Poster	Medical Issues	Wed.	1:00-6:00 p.m.	

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C-07	Symposium	Periodic Health Examination and Performance Assessment of Elite Athletes: Optimizing Performance while Preventing Illness	Thurs. 8:00–10:00 a.m.	William O. Roberts, FACSM, University of Minnesota Benjamin Levine, FACSM, UT Southwestern Medical Center Marco Bernardi, Sapienza Università di Roma Paolo Emilio Adami, Sports Medicine and Sciences Institute, CONI
C-09	Symposium	Updates on Achilles Tendon and Plantar Fascia Injuries in Athletes	Thurs. 8:00–10:00 a.m.	Kentaro Onishi, University of Pittsburgh Medical Center James H-C Wang, University of Pittsburgh Adam Tenforde, Spaulding National Running Center Irene S. Davis, FACSM, Harvard Medical School
C-17	Clinical Case Slide	Knee II	Thurs. 8:00–10:00 a.m.	
C-18	Clinical Case Slide	Medical Issues I	Thurs. 8:00–9:40 a.m.	
C-19	Clinical Case Slide	Wrist and Hand	Thurs. 8:00–9:40 a.m.	
C-21	Clinical Workshop-Hands On Demonstration	Clinical Examinations of Wrist and Hand Injuries in Sports	Thurs. 8:00–8:50 a.m.	Jeff G. Konin, FACSM, University of Rhode Island
C-25	Tutorial Lecture	NYSHSI/ACSM Think Tank Update – Regenerative Medicine and Youth Sports: Current Status and Future Directions for Research and Clinical Practice	Thurs. 9:10–10:00 a.m.	Thomas Best, FACSM, University of Miami Miller School of Medicine
C-26	Clinical Workshop-Hands On Demonstration	Gymnastics: A New Olympic Quadrennium	Thurs. 9:10–10:00 a.m.	Emily A. Stuart, Children's Hospital Colorado
C-39	Free Communication/Poster	Concussion I	Thurs. 7:30–12:30 p.m.	
D-14	Clinical Case Slide	Elbow	Thurs. 1:00–3:00 p.m.	
D-15	Clinical Case Slide	Foot and Ankle II	Thurs. 1:00–2:40 p.m.	
D-16	Clinical Case Slide	Hip and Pelvis I	Thurs. 1:00–3:00 p.m.	
D-19	Colloquium	Do Sports Injuries Unmask a Rheumatological Disease?	Thurs. 1:00–1:50 p.m.	Dina C. Janse van Rensburg, FACSM, University of Pretoria Cathy Speed, The Cambridge Centre for Health and Performance & The Fortius Clinic
D-22	Tutorial Lecture	Update on Female Athlete Issues for the Team Physician: A Consensus Statement	Thurs. 1:00–1:50 p.m.	Stanley A. Herring, FACSM, University of Washington
D-23	Clinical Workshop-Hands On Demonstration	Examination of the Shoulder	Thurs. 1:00–1:50 p.m.	Eric C. McCarty, University of Colorado Denver

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D-25	Tutorial Lecture	Evidence Based Return-to-Play after ACL Reconstruction: Which Tests Are Best and How Do We Use Them?	Thurs. 2:10-3:00 p.m.	Mary Lloyd Ireland, FACSM University of Kentucky Medical Center Jeremy M. Burnham, University of Pittsburgh Medical Center
D-27	Tutorial Lecture	Injury and Risk of Osteoarthritis in Para-Athletes – Is it Time for a Lifetime Prevention Model?	Thurs. 2:10-3:00 p.m.	Wayne E. Derman, Stellenbosch University Cheri Blauwet, Brigham and Women's Hospital and Spaulding Rehabilitation Hospital, Harvard Medical School
D-28	Tutorial Lecture	Mental Health and Athletes: Depression and Suicide	Thurs. 2:10-3:00 p.m.	Ashwin L. Rao, University of Washington Eugene Hong, Drexel University College of Medicine
D-30	Clinical Workshop- Hands On Demonstration	Practical Sports Ultrasound of the Shoulder and Elbow	Thurs. 2:10-3:00 p.m.	Adam Tenforde, Spaulding Rehabilitation Hospital Ashwin N. Babu, Massachusetts General Hospital, Sports Medicine Service Steven A. Makovitch, Spaulding Rehabilitation Hospital
D-34	Symposium	Beyond Meniscectomy: Nonoperative and Operative Treatment Strategies for Meniscal Tears	Thurs. 3:15-5:15 p.m.	Mary Lloyd Ireland, FACSM, University of Kentucky Medical Center Mark Hutchinson, FACSM, University of Illinois College of Medicine Brian Noehren, FACSM, University of Kentucky BioMotion Laboratory Jeremy M. Burnham, University of Pittsburgh Medical Center
D-35	Symposium	ACSM/AMSSM: CAQ Review Session (Part 1)	Thurs. 3:15-5:15 p.m.	Kevin R. Vincent, FACSM, University of Florida Aaron Rubin, FACSM, Kaiser Permanente Sports Medicine Program William W. Dexter, FACSM, Maine Medical Center Mark Bouchard, FACSM, Maine Medical Center William O. Roberts, FACSM, University of Minnesota
D-46	Free Communication/ Slide	Concussion	Thurs. 3:15-5:15 p.m.	
D-48	Clinical Case Slide	Cardiovascular II	Thurs. 3:15-4:55 p.m.	
D-49	Clinical Case Slide	Leg	Thurs. 3:15-5:15 p.m.	

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D-50	Clinical Case Slide	Shoulder III	Thurs.	3:15–5:15 p.m.	
D-53	Clinical Workshop- Hands On Demonstration	Physical Exam of the Lumbar Spine	Thurs.	3:15–4:05 p.m.	Joseph Ihm, FACSM, Rehabilitation Institute of Chicago Samuel Chu, Rehabilitation Institute of Chicago
D-55	Exchange Lecture	AOSSM Exchange Lecture - Factors Affecting Surgical Outcomes After ACL Reconstruction: What We Have Learned from the Kaiser Permanente ACL Registry	Thurs.	4:25–5:15 p.m.	Gregory Maletis, Kaiser Permanente Hospital
D-57	Clinical Workshop- Hands On Demonstration	Hinge Theory: Low Back Pain, and Its Relationship to Shoulder and Hip Flexibility in the Performing Arts Athlete	Thurs.	4:25–5:15 p.m.	Holly J. Benjamin, FACSM University of Chicago, Gina Pongetti, Achieve Orthopedic Rehab Institute Sports Medicine
D-60	Free Communication/ Poster	Concussion II	Thurs.	1:00–6:00 p.m.	
E-07	Symposium	Women are from Venus: Issues Faced by Active Adult Females	Fri.	9:30–11:30 a.m.	Kevin R. Vincent, FACSM, University of Florida Sheila Dugan, FACSM, Rush University Medical Center Susan Carter, FACSM, Northern Colorado Medical Center Carrie Jaworski, FACSM, Northshore Medical Group
E-08	Symposium	Venous Thromboembolism in Athletes: Risk Factors, Treatment, and Prevention	Fri.	9:30–11:30 a.m.	Benjamin Levine, FACSM, University of Texas Southwestern Medical Center Paul D. Thompson, FACSM, Hartford Hospital Beth A. Taylor, University of Connecticut Stephan Moll, University of North Carolina School of Medicine Joshua N. Berkowitz, UNC Sports Medicine
E-16	Clinical Case Slide	Foot and Ankle III	Fri.	9:30–11:10 a.m.	
E-17	Clinical Case Slide	Hip and Pelvis II	Fri.	9:30–11:30 a.m.	
E-18	Clinical Case Slide	Knee I	Fri.	9:30–11:30 a.m.	
E-20	Tutorial Lecture	You Find What You Look For and You Look For What You Know: Expanding What You Look For	Fri.	9:30–10:20 a.m.	Jim Macintyre, FACSM, CORE
E-21	Clinical Workshop- Hands On Demonstration	Examination of the Foot and Ankle	Fri.	9:30–10:20 a.m.	Jeffrey A. Ross, FACSM, Baylor College of Medicine

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E-22	Colloquium	Conditions That Are Not What They Seem: Case Based Show Stoppers	Fri.	10:40-11:30 a.m.	Mark Hutchinson, FACSM, University of Illinois Chicago Margot Putukian, FACSM, Princeton University Mary Lloyd Ireland, FACSM, University of Kentucky
E-23	Clinical Workshop- Hands On Demonstration	Musculoskeletal Ultrasound of the Ankle and Foot	Fri.	10:40-11:30 a.m.	Peter H. Seidenberg, FACSM, Penn State University Jimmy D. Bowen, Southeast Missouri State University Philip J. Bosh, Penn State University
E-25	Free Communication/ Poster	Age and Gender Issues	Fri.	7:30 a.m.-12:30 p.m.	
F-19	Colloquium	The Effect of Running on Joint Health	Fri.	2:10-3:00 p.m.	Mark E. Batt, Arthritis Research UK Centre for Sport, Exercise and Osteoarthritis Richard D. Leech, Arthritis Research UK Centre for Sport, Exercise and Osteoarthritis
F-20	Tutorial Lecture	ACL Injury Prevention Programs Best Practice	Fri.	2:10-3:00 p.m.	Thomas Trojjan, FACSM, Drexel College of Medicine Lindsay DiStefano, University of Connecticut Jeffrey Driban, Tufts Medical Center
F-23	Clinical Workshop- Hands On Demonstration	Sport Cardiology: 2017 – Common Issues and Management	Fri.	2:10-3:00 p.m.	Aaron L. Baggish, FACSM, Massachusetts General Hospital Cardiovascular Performance Program Paul D. Thompson, FACSM, Hartford Hospital
F-26	Symposium	ACSM/AMSSM: CAQ Review Session (Part 2)	Fri.	3:15-5:15 p.m.	Carrie A. Jaworski, FACSM, NorthShore University Healthsystems Benjamin D. Levine, FACSM, Texas Health Presbyterian Hospital Dallas Heather Gillespie, FACSM, Maine Medical Partners Orthopedics and Sports Medicine Heather K. Vincent, FACSM, University of Florida Eugene Hong, Drexel University College of Medicine

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F-27	Symposium	Exercise, Sports, and Physical Activity Prescription in Children and Adults with Common and Uncommon Congenital Heart Disease	Fri.	3:15–5:15 p.m.	Carol Ewing Garber, FACSM, Teachers College, Columbia University Merle Myerson, Basset Medical Center, College of Physicians and Surgeons, Columbia University Silvana Molossi, Texas Children's Hospital, Baylor College of Medicine Kimberly G. Harmon, FACSM, University of Washington
F-37	Clinical Case Slide	Pulmonary	Fri.	3:15–5:15 p.m.	
F-38	Clinical Case Slide	Shoulder II	Fri.	3:15–5:15 p.m.	
F-40	Exchange Lecture	National Athletic Trainers' Association Foundation Exchange Lecture – A Criterion Based Approach for Determining Readiness for Return to Sport following ACL Injury	Fri.	3:15–4:05 p.m.	Darin A. Padua, University of North Carolina at Chapel Hill
F-43	Clinical Workshop-Hands On Demonstration	How are your DXA Skills? Common Pitfalls of DXA Interpretation in Young Athletes	Fri.	3:15–4:05 p.m.	Suzanne S. Hecht, FACSM, University of Minnesota Sports Medicine Amanda Weiss Kelly, University Hospitals Solon Health Center
F-44	Clinical Workshop-Hands On Demonstration	Lower Extremity Examamara	Fri.	3:15–4:05 p.m.	Mark R. Hutchinson, FACSM, University of Illinois at Chicago Terry L. Nicola, University of Illinois at Chicago Melody Hrubes, University of Illinois at Chicago
F-49	Clinical Workshop-Hands On Demonstration	Implementing ACL Injury Prevention Program	Fri.	4:25–5:15 p.m.	Cynthia R. LaBella, Ann & Robert H. Lurie Children's Hospital of Chicago
F-50	Clinical Workshop-Hands On Demonstration	MRI vs US: Options in the Lower Extremity	Fri.	4:25–5:15 p.m.	Mark R. Hutchinson, FACSM, University of Illinois at Chicago Michael Bresler, University of Illinois at Chicago Dustin Nabhan, United States Olympic Committee
F-61	Free Communication/Poster	Musculoskeletal	Fri.	1:00–6:00 p.m.	
G-01	Exchange Lecture	American Medical Society for Sports Medicine Exchange Lecture – Why We Shouldn't Prevent Sports Injuries: A Perspective on the Risks and Benefits of Sports Participation	Sat.	8:00–8:50 a.m.	Matthew Gammons, Vermont Ortho Clinic/Killington Medical Center

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G-06	Clinical Workshop- Hands On Demonstration	Functional Dry Needling for the Orthopedic Patient	Sat.	8:00-8:50 a.m.	Allison Nicklin, Revolution Rehabilitation
G-07	Clinical Workshop- Hands On Demonstration	The Essential Role of Hip Evaluation in the Diagnosis and Management of PFPS	Sat.	8:00-8:50 a.m.	E. James Swenson Jr., FACSM, University of Rochester
G-13	Symposium	Optimal Fluid Management for Sport Safety: What is the “Right” Amount of Fluid for Athletes?	Sat.	9:00-11:00 a.m.	James MacDonald, FACSM, Nationwide Children’s Hospital Stavros A. Kavouras, FACSM, University of Arkansas Martin Schwellnus, FACSM, University of Pretoria, South Africa; IOC Research Centre Tamara Hew-Butler, FACSM, Oakland University William O. Roberts, FACSM, University of Minnesota
G-18	Clinical Case Slide	Cervical Spine	Sat.	9:00-11:00 a.m.	
G-19	Clinical Case Slide	Medical Issues II	Sat.	9:00-10:40 a.m.	
G-20	Tutorial Lecture	NASS Lecture: A Rational Approach to Rehabilitation of Low Back Pain in Athletes	Sat.	9:00-9:50 a.m.	Leah G. Concannon, University of Washington Stanley A. Herring, FACSM, University of Washington
G-21	Clinical Workshop- Hands On Demonstration	Management of Acute Fractures for the Primary Care Sports Medicine Physician – Pearls and Pitfalls	Sat.	9:00-9:50 a.m.	Jack Spittler, University of Colorado Morteza Khodae, FACSM, University of Colorado
G-22	Clinical Workshop- Hands On Demonstration	The Clinical and Functional Evaluation of the Running Athlete	Sat.	9:00-9:50 a.m.	Robert Wilder, FACSM, University of Virginia Runner’s Clinic Siobhan Statuta, University of Virginia Runner’s Clinic David J. Hryvniak, University of Virginia Runner’s Clinic
G-24	Clinical Workshop- Hands On Demonstration	Management of Acute Joint Dislocations and Subluxations in Sports Medicine	Sat.	10:10-11:00 a.m.	Morteza Khodae, FACSM, University of Colorado School of Medicine Jack Spittler, University of Colorado School of Medicine
G-25	Clinical Workshop- Hands On Demonstration	Neural Control of Movement for the Evaluation and Treatment of Musculoskeletal Issues	Sat.	10:10-11:00 a.m.	Kelly Roberts Lane, FACSM, Fix It Physical Therapy

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A-56	Free Communication/ Poster	Running	Wed.	7:30 a.m.-12:30 p.m.	
B-11	Thematic Poster	Landing Biomechanics	Wed.	1:00-3:00 p.m.	
B-14	Free Communication/ Slide	Walking Biomechanics	Wed.	1:00-3:00 p.m.	
B-36	Symposium	Making Strides Towards Understanding Stride Length: Physiological, Biomechanical, and Clinical Perspectives	Wed.	3:15-5:15 p.m.	Allison H. Gruber, Indiana University John A. Mercer, FACSM, University of Nevada Las Vegas W. Brent Edwards, University of Calgary D. S. Blaise Williams, FACSM, Virginia Commonwealth University
B-42	Thematic Poster	Muscle Activation During Sport and Exercise	Wed.	3:15-5:15 p.m.	
B-75	Free Communication/ Poster	Instrumentation and Assessment Tools	Wed.	1:00-6:00 p.m.	
C-30	Free Communication/ Poster	ACL Injury	Thurs.	7:30 a.m.-12:30 p.m.	
C-32	Free Communication/ Poster	Biomechanics in Ball Sports	Thurs.	7:30 a.m.-12:30 p.m.	
C-33	Free Communication/ Poster	Biomechanics of Cycling	Thurs.	7:30 a.m.-12:30 p.m.	
C-34	Free Communication/ Poster	Biomechanics of Jumping, Landing, and Cutting	Thurs.	7:30 a.m.-12:30 p.m.	
C-35	Free Communication/ Poster	Biomechanics of Resistance Training	Thurs.	7:30 a.m.-12:30 p.m.	
C-50	Free Communication/ Poster	Sports Biomechanics	Thurs.	7:30 a.m.-12:30 p.m.	
D-12	Free Communication/ Slide	Biomechanics after ACL Reconstruction	Thurs.	1:00-3:00 p.m.	
D-42	Thematic Poster	Biomechanical Effects of Fatigue	Thurs.	3:15-5:15 p.m.	
D-45	Thematic Poster	Neuromechanics of Ankle Instability	Thurs.	3:15-5:15 p.m.	
D-75	Free Communication/ Poster	Posture and Balance	Thurs.	1:00-6:00 p.m.	
E-15	Free Communication/ Slide	Balance, Slips, and Falls	Fri.	9:30-11:30 a.m.	
E-31	Free Communication/ Poster	Gait Biomechanics	Fri.	7:30 a.m.-12:30 p.m.	
E-35	Free Communication/ Poster	Musculoskeletal Mechanics and Modeling	Fri.	7:30 a.m.-12:30 p.m.	

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F-07	Symposium	Jumping Performance of the Maasai People	Fri.	1:00–3:00 p.m.	Dirk Lund Christensen, University of Copenhagen Per Aagaard, University of Southern Denmark Jens Bojsen-Møller, Norwegian School of Sport Sciences
F-12	Thematic Poster	Neuromechanics of Concussion	Fri.	1:00–3:00 p.m.	
G-14	Thematic Poster	Biomechanics of Prolonged Running	Sat.	9:00–11:00 a.m.	
G-23	Tutorial Lecture	Wearable Technology: Moving Exercise Science Out of the Lab into the Real World	Sat.	10:10–11:00 a.m.	John A. Mercer, FACSM, University of Nevada, Las Vegas James Navalta, University of Nevada, Las Vegas
G-29	Free Communication/ Poster	Motor Control Across the Lifespan	Sat.	7:30–11:00 a.m.	

Cardiovascular, Renal and Respiratory Physiology

A-25	Free Communication/ Slide	Respiratory Physiology	Wed.	9:30–11:15 a.m.	
A-44	Free Communication/ Poster	Cardiovascular Responses to Exercise	Wed.	7:30 a.m.–12:30 p.m.	
B-07	Thematic Poster	Cardiac Physiology	Wed.	1:00–3:00 p.m.	
B-34	Symposium	Deranged Cardiovascular Stress Responses in Individuals with Insulin Resistance	Wed.	3:15–5:15 p.m.	Christopher T. Minson, FACSM, University of Oregon J Chris Baldi, FACSM, University of Otago, Dunedin Paul J. Fadel, FACSM, University of Texas at Arlington Genevieve A. Wilson, University of Otago William G. Schrage, University of Wisconsin-Madison Brett R. Ely, University of Oregon
B-64	Free Communication/ Poster	Blood Flow	Wed.	1:00–6:00 p.m.	
B-69	Free Communication/ Poster	Cellular/Molecular	Wed.	1:00–6:00 p.m.	
C-05	Symposium	Exercise and the Pulmonary Circulation: Can the Lung Deal with All That We Ask of It?	Thurs.	8:00–10:00 a.m.	Susan R. Hopkins, University of California-San Diego Michael K. Stickland, University of Alberta André La Gerche, Baker Heart & Diabetes Institute
C-14	Thematic Poster	Sex Differences in Cardiovascular Physiology	Thurs.	8:00–10:00 a.m.	
C-38	Free Communication/ Poster	Cardiorespiratory Physiology and Rehabilitation	Thurs.	7:30 a.m.–12:30 p.m.	

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D-02	Symposium	Oxygen Uptake in the Elite: A Comparative Perspective	Thurs. 1:00–3:00 p.m.	Andrew William Sheel, FACSM, University of British Columbia Michael J. Joyner, FACSM, Mayo Clinic David C. Poole, FACSM, Kansas State University William K. Milsom, University of British Columbia
D-51	Tutorial Lecture	Motoring with the MoTrPAC: Update on NIH's Molecular Transducers of Physical Activity Consortium	Thurs. 3:15–4:05 p.m.	Charlotte A. Peterson, National Institutes of Health Karyn A. Esser, FACSM, University of Florida Wendy M. Kohrt, FACSM, University of Colorado Denver Marcas M. Bamman, FACSM, University of Alabama at Birmingham John M. Jakicic, FACSM, University of Pittsburgh
D-52	Tutorial Lecture	Respiratory Symptoms in Athletes – State of the Art	Thurs. 3:15–4:05 p.m.	James Hull, Royal Brompton Hospital Thomas Halvorsen, University of Bergen John Dickinson, University of Kent
D-73	Free Communication/ Poster	Oxygen Uptake Kinetics	Thurs. 1:00–6:00 p.m.	
D-77	Free Communication/ Poster	Renal Physiology	Thurs. 1:00–6:00 p.m.	
E-28	Free Communication/ Poster	Cardiac Physiology	Fri. 7:30 a.m.–12:30 p.m.	
E-37	Free Communication/ Poster	Respiratory	Fri. 7:30 a.m.–12:30 p.m.	
E-40	Free Communication/ Poster	Vascular Function	Fri. 7:30 a.m.–12:30 p.m.	
F-09	Thematic Poster	Cardiovascular Regulation	Fri. 1:00–3:00 p.m.	
F-29	Symposium	Physiological Impact of Inactivity and Prolonged Sitting: Implications for Cardiovascular Health	Fri. 3:15–5:15 p.m.	Paul J. Fadel, FACSM, University of Texas at Arlington Leryn J. Reynolds, University of Kentucky Jaume Padilla, University of Missouri Jennifer R. Vranish, University of Texas at Arlington Daniel P. Credeur, University of Southern Mississippi
F-54	Free Communication/ Poster	Cardiorespiratory Responses to Acute Exercise	Fri. 1:00–6:00 p.m.	
G-17	Thematic Poster	Vascular Function	Sat. 9:00–11:00 a.m.	

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A-35	Tutorial Lecture	Benefits of Physical Activity With and Without Weight Loss	Wed.	10:40-11:30 a.m.	Carol Ewing Garber, FACSM, Teachers College, Columbia University
A-36	Tutorial Lecture	Health and Wellness Coaching: Evidence, Applications, and Emerging Professional Opportunities	Wed.	10:40-11:30 a.m.	Gary A. Sforzo, Ithaca College
A-43	Free Communication/ Poster	Cardiovascular Disease	Wed.	7:30 a.m.-12:30 p.m.	
B-08	Thematic Poster	Exercise, Obesity, and Diabetes	Wed.	1:00-3:00 p.m.	
B-38	Symposium	Resistance Exercise in a Cancer Population, Current and Future Strategies to Optimize Survivorship	Wed.	3:15-5:15 p.m.	Kathryn H. Schmitz, FACSM, Penn State Cancer Institute Ciaran M. Fairman, The Ohio State University Brian C. Focht, FACSM, The Ohio State University Riggs Klika, FACSM, Pepperdine University Bobby Cheema, Western Sydney University
B-66	Free Communication/ Poster	Cancer	Wed.	1:00-6:00 p.m.	
B-78	Free Communication/ Poster	Obesity	Wed.	1:00-6:00 p.m.	
C-11	Thematic Poster	Exercise and Cancer	Thurs.	8:00-10:00 a.m.	
D-04	Symposium	Community-based Physical Activity and Health Education Programs for Clinical Populations	Thurs.	1:00-3:00 p.m.	J. Larry Durstine, FACSM, University of South Carolina Geoffrey E. Moore, FACSM, Healthy Living & Exercise Medicine Associates Jason R. Jagers, University of Louisville Amelia Dodd, Murray State University Madison Demello, University of South Carolina
D-40	Symposium	Health Disparities in Pressure: Does Exercise Matter?	Thurs.	3:15-5:15 p.m.	Bo Fernhall, FACSM, University of Illinois at Chicago Peter Kokkinos, FACSM, Veterans Affairs Medical Center Shane Phillips, University of Illinois at Chicago Michael Brown, FACSM, University of Illinois at Chicago
D-67	Free Communication/ Poster	Exercise Testing	Thurs.	1:00-6:00 p.m.	
D-72	Free Communication/ Poster	Neuromuscular – Musculoskeletal	Thurs.	1:00-6:00 p.m.	

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E-29	Free Communication/ Poster	Children – Exercise Responses	Fri.	7:30 a.m.-12:30 p.m.	
E-41	Free Communication/ Poster	Women – Exercise Responses	Fri.	7:30 a.m.-12:30 p.m.	
F-14	Free Communication/ Slide	Exercise and Chronic Disease	Fri.	1:00-3:00 p.m.	
F-55	Free Communication/ Poster	Clinically-related Exercise Responses	Fri.	1:00-6:00 p.m.	
G-32	Free Communication/ Poster	Pulmonary Diseases	Sat.	7:30-11:00 a.m.	

Environment and Occupational Physiology

A-26	Free Communication/ Slide	Thermoregulation in Clinical Populations	Wed.	9:30-10:45 a.m.	
A-49	Free Communication/ Poster	Military Physiology	Wed.	7:30 a.m.-12:30 p.m.	
A-52	Free Communication/ Poster	Occupational/Firefighter Physiology	Wed.	7:30 a.m.-12:30 p.m.	
B-18	Tutorial Lecture	Paradigm Shift: Operationally-Relevant Physical Fitness Tests and Standards for the Military – International Progress	Wed.	1:00-1:50 p.m.	Tara Reilly, Human Performance Research and Development, Canadian Armed Forces Neal Baumgartner, U.S. Air Force Exercise Science Unit Jace Drain, Defence Science and Technology Group Stephen D. Myers, Occupational Performance Research Group
B-27	Colloquium	Science, Economics, and the Arts in ActiveEarth Projects	Wed.	2:10-3:00 p.m.	Melissa Bopp, FACSM, The Pennsylvania State University Robert A. Oppliger, FACSM, Helaine M. Alessio, FACSM, Miami University
B-35	Symposium	Integrating Omics and Physiology to Understand Human Adaptation to Hypoxia	Wed.	3:15-5:15 p.m.	Robert Roach, FACSM, University of Colorado AMC Andrew Subudhi, FACSM, University of Colorado Tom D. Brutsaert, Syracuse University Emilia Huerta-Sánchez, University of California
B-63	Free Communication/ Poster	Altitude/Hypoxia	Wed.	1:00-6:00 p.m.	
B-70	Free Communication/ Poster	Cold/Dive/Space Physiology	Wed.	1:00-6:00 p.m.	
C-12	Thematic Poster	Military Physiology	Thurs.	8:00-10:00 a.m.	

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C-45	Free Communication/ Poster	Heat Exposure/Hydration	Thurs.	7:30 a.m.-12:30 p.m.	
D-09	Thematic Poster	Heat Exposure/Cooling Methods	Thurs.	1:00-3:00 p.m.	
E-10	Thematic Poster	Cardiovascular Responses to Heat Exposure	Fri.	9:30-11:30 a.m.	
F-11	Thematic Poster	Hydration	Fri.	1:00-3:00 p.m.	
F-30	Thematic Poster	Altitude/Hypoxia/Supplementation	Fri.	3:15-5:15 p.m.	
G-05	Colloquium	Skin Blood Flow and Heat Stress: Re-examining its Meaning and Measurement	Sat.	8:00-8:50 a.m.	Ollie Jay, FACSM, University of Sydney Craig Crandall, FACSM, IEEM, University of Texas Southwestern Medical Center

Epidemiology and Biostatistics

A-30	Colloquium	A Debate: Are Accelerometers the Answer for National Surveillance of Physical Activity?	Wed.	9:30-10:20 a.m.	Mark Tremblay, FACSM, Children's Hospital of Eastern Ontario/University of Ottawa Adrian Bauman, University of Sydney
A-45	Free Communication/ Poster	Chronic Disease and Disability	Wed.	7:30 a.m.-12:30 p.m.	
B-10	Thematic Poster	Growing Up Active: Physical Activity in Youth	Wed.	1:00-3:00 p.m.	
C-31	Free Communication/ Poster	Activity Trackers and Smartwatches	Thurs.	7:30 a.m.-12:30 p.m.	
C-40	Free Communication/ Poster	Epidemiology of Injury and Illness	Thurs.	7:30 a.m.-12:30 p.m.	
C-49	Free Communication/ Poster	Physical Activity Assessment in Youth	Thurs.	7:30 a.m.-12:30 p.m.	
D-11	Thematic Poster	Wearables: Applications in Research and Practice	Thurs.	1:00-3:00 p.m.	
D-21	Tutorial Lecture	Hot off the Presses: A Revised Youth Compendium of Physical Activities	Thurs.	1:00-1:50 p.m.	Kathleen B. Watson, Centers for Disease Control and Prevention Karin Pfeiffer, FACSM, Michigan State University Stephen D. Herrmann, Sanford Research
D-39	Symposium	Catastrophic Sports Injury and Illnesses Among US College and High School Athletes	Thurs.	3:15-5:15 p.m.	Robert Cantu, FACSM, Emerson Hospital Kristen L. Kucera, National Center for Catastrophic Sport Injury Research, University of North Carolina at Chapel Hill Kevin Guskiewicz, FACSM, University of North Carolina at Chapel Hill Kimberly Harmon, FACSM, University of Washington Douglas Casa, FACSM, University of Connecticut

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D-44	Thematic Poster	Move More, Sit Less, What's Best?	Thurs.	3:15-5:15 p.m.	
D-47	Free Communication/ Slide	Free-Living Validation Studies	Thurs.	3:15-5:00 p.m.	
D-58	Tutorial Lecture	Findings from the First National Survey of the Built Environment	Thurs.	4:25-5:15 p.m.	David Berrigan, National Cancer Institute Susan A. Carlson, Centers for Disease Control and Prevention
D-74	Free Communication/ Poster	Physical Activity Assessment in Adults	Thurs.	1:00-6:00 p.m.	
E-04	Symposium	Device-Based Assessments of Physical Activity in Epidemiologic Cohort Studies: Early Findings	Fri.	9:30-11:30 a.m.	Janet Fulton, FACSM, CDC John Jakicic, FACSM, University of Pittsburgh Virginia Howard, University of Alabama at Birmingham David Buchner, FACSM, University of Illinois at Urbana-Champaign I-Min Lee, FACSM, Harvard Medical School
E-36	Free Communication/ Poster	Physical Activity and Health in Adults	Fri.	7:30 a.m.-12:30 p.m.	
E-39	Free Communication/ Poster	Systematic Reviews and Meta-Analysis	Fri.	7:30 a.m.-12:30 p.m.	
F-10	Thematic Poster	Don't be a Cry Baby: Research in Pregnancy, Child Birth, and Early Life	Fri.	1:00-3:00 p.m.	
F-16	Free Communication/ Slide	Prospective Studies of Physical Activity and Health	Fri.	1:00-3:00 p.m.	
F-34	Thematic Poster	Sports Injuries: Friend or Foe?	Fri.	3:15-5:15 p.m.	
F-41	Tutorial Lecture	ActivEarth: Design and Health in the Public Realm	Fri.	3:15-4:05 p.m.	Steve Durrant, Alta Planning + Design
F-56	Free Communication/ Poster	Descriptive Epidemiology and Surveillance	Fri.	1:00-6:00 p.m.	
F-63	Free Communication/ Poster	Physical Activity and Health in Youth	Fri.	1:00-6:00 p.m.	
F-64	Free Communication/ Poster	Pregnancy	Fri.	1:00-6:00 p.m.	
G-12	Symposium	Novel Computational Methods to Classify Sedentary Behavior and Physical Activity: Evaluating Progress and Building Consensus	Sat.	9:00-11:00 a.m.	Charles Matthews, FACSM, National Cancer Institute Stewart Trost, FACSM, Queensland University of Technology John Staudenmayer, University of Massachusetts Jacqueline Kerr, University of California San Diego Sarah Kozey Keadle, Cal Poly
G-33	Free Communication/ Poster	Research Methods	Sat.	7:30-11:00 a.m.	

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A-01	Exercise is Medicine® - Symposium	A Cross Disciplinary Approach to Integrating Physical Activity into the Training of Exercise Professionals and Medical Practice	Tues.	1:00-3:00 p.m.	Rachele Pojednic, Simmons College & Harvard Medical School Richard Weiler, University College London Allison Bowersock, Jefferson College of Health Sciences, Virginia Tech Carilion School of Medicine Phil Page, FACSM, Performance Health Marilyn Moffat, NYU
A-02	Exercise is Medicine® - Symposium	Exercise is Medicine for Mental Illness: Developing Feasible and Effective Interventions for Real-world Clinical Settings	Tues.	1:00-3:00 p.m.	Philip B. Ward, UNSW Australia Oscar Lederman, South Eastern Sydney Local Health District Solfrid Bratland-Sanda, University College of Southeast Norway Simon Rosenbaum, UNSW Australia
A-03	Exercise is Medicine® - Colloquium	Clinical Exercise Physiologists and Physical Therapists-Teammates in an Evolving U.S. Public/Community Health Paradigm	Tues.	1:00-1:50 p.m.	Irene Davis, FACSM Harvard Medical School
A-04	Exercise is Medicine® - Tutorial Lecture	The Truth in Prioritizing and Assessing Health Outcomes Relevant to the Oldest-old	Tues.	2:10-3:00 p.m.	Todd Manini, FACSM, University of Florida Barbara Nicklas, Wake Forest School of Medicine
A-05	Exercise is Medicine® - Symposium	Exercise and Lifestyle Medicine: “The Greenville (SC) Way!”	Tues.	3:15-5:15 p.m.	Irfan M. Asif, Greenville Health System Jennifer L. Trilk, University of South Carolina School of Medicine Greenville, W. Franklin Sease, FACSM, Greenville Health System Robert Masocol, Greenville Health System Ann Blair Kennedy, University of South Carolina School of Medicine Greenville Scot Baddley, YMCA of Greenville

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A-06	Exercise is Medicine® - Symposium	Exercise is Medicine for the Brain	Tues.	3:15-5:15 p.m.	Stanley A. Herring, FACSM, University of Washington Margot Putukian, FACSM, Princeton University Robert E. Sallis, FACSM, Kaiser Permanente Elizabeth A. Joy, FACSM, Intermountain Medical Group Melinda M. Manore, FACSM, Oregon State Ross ZaFonte, Harvard
A-07	Exercise is Medicine® - Tutorial Lecture	Embracing Diversity and Making JTAs a Part of the Daily EIM Campus Culture	Tues.	3:15-4:05 p.m.	Melanie Poudevigne, FACSM, Clayton State University Chris Pitsikoulis, Aurora University
A-08	Exercise is Medicine® - Tutorial Lecture	Physical Activity/Exercise and Diabetes: Updates from the 2016 Diabetes Association Position Statement	Tues.	4:25-5:15 p.m.	Sheri Colberg-Ochs, FACSM, Old Dominion University
A-18	Exercise is Medicine® - Symposium	Resistance Training as Medicine for Chronic Disease	Wed.	9:30-11:30 a.m.	Maria A. Fiatarone Singh, University of Sydney Michael Inskip, University of Sydney Matthew Hollings, University of Sydney Belinda Parmenter, University of NSW
A-19	Exercise is Medicine® - Symposium	Active Women During the Lifespan: The Impact of Exercise for Health and Well-being	Wed.	9:30-11:30 a.m.	Jorunn Sundgot-Borgen, FACSM, The Norwegian School of Sport Sciences Lene Annette Hagen Haakstad, The Norwegian School of Sport Sciences Elin Kolle, The Norwegian School of Sport Sciences Solfrid Bratland-Sanda, University College of Southeast Norway Monica K. Torstveit, The University of Agder Hilde Lohne-Seiler, University of Agder
A-23	Exercise is Medicine®/ Thematic Poster	EIM On Campus	Wed.	9:30-11:30 a.m.	
A-34	Exercise is Medicine® - Tutorial Lecture	Integrating Wellness Referrals, Fitness Testing, and Coaching in a Public Hospital System	Wed.	9:30-10:20 a.m.	NiCole R. Keith, FACSM, Indiana University Center for Aging Research Ryan Bojrab, Eskenazi Health

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A-38	Exercise is Medicine® - Tutorial Lecture	Exercise is Medicine for Patients with Advanced Cancer	Wed.	10:40-11:30 a.m.	Kathryn H. Schmitz, FACSM, Penn State Cancer Institute
B-06	Exercise is Medicine® - Symposium	The Role of Exercise in Cancer-related Cognitive Impairment	Wed.	1:00-3:00 p.m.	Aaron Piepmeier, University of North Carolina, Chapel Hill Jeffrey S. Wefel, The University of Texas MD Anderson Cancer Center Andra Smith, University of Ottawa Teresa Liu-Ambrose, University of British Columbia Kristin Campbell, University of British Columbia
B-22	Exercise is Medicine® - Tutorial Lecture	Exercise is Medicine for Depression	Wed.	1:00-1:50 p.m.	Rod Dishman, FACSM, University of Georgia
B-30	Exercise is Medicine® - Colloquium	Healthy New Albany: An Innovative Community-Based Health Initiative Incorporating Exercise is Medicine	Wed.	2:10-3:00 p.m.	Thomas Best, FACSM, University of Miami Miller School of Medicine Amy Valasek, Nationwide Childrens Hospital Philip Heit, Philip Heit Center for New Albany
B-52	Exercise is Medicine® - Tutorial Lecture	I Feel Good! - Physical Activity and Quality of Life	Wed.	3:15-4:05 p.m.	Eszter Füzéki, Goethe University Frankfurt
B-53	Exercise is Medicine® - Tutorial Lecture	The Importance of Fitness as a Clinical Vital Sign	Wed.	3:15-4:05 p.m.	Robert Ross, FACSM, Queen's University
B-57	Exercise is Medicine® - Tutorial Lecture	Reimbursement Strategies for Healthcare Providers and Exercise Professionals	Wed.	4:25-5:15 p.m.	Cherie Pettitt, Minnesota State University Mankato Elizabeth A. Joy, FACSM, Intermountain Medical Group
B-58	Exercise is Medicine® - Tutorial Lecture	What We Think We Know About Exercise and Why It Might Be Wrong	Wed.	4:25-5:15 p.m.	Linda S. Pescatello, FACSM, University of Connecticut Beth A. Taylor, University of Connecticut
B-72	Exercise is Medicine®/ Poster	EIM - Health Professionals and Vital Signs	Wed.	1:00-6:00 p.m.	
C-04	Symposium	Exercise is Medicine: Current Insights from C.M. Tipton's Scientific Grandchildren	Thurs.	8:00-10:00 a.m.	Kenneth M. Baldwin, FACSM Ronald Terjung, FACSM, University of Missouri David A. Hood, York University Vince Caiozzo, FACSM, University of California, Irvine James W.E. Rush, University of Waterloo Christian Roberts, FACSM, Occidental College

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C-22	Exercise is Medicine® - Tutorial Lecture	Active Rehabilitation Following Sport- Related Concussion: Current Status and Future Directions	Thurs.	8:00-8:50 a.m.	Douglas W. Powell, University of Memphis Robert J. Elbin, University of Arkansas Kevin Guskiewicz, FACSM, University of North Carolina Chapel Hill
C-23	Exercise is Medicine® - Tutorial Lecture	Moving from our Reactive “Sick Care” Model to Proactive Healthcare: Changing Paradigms and Perceptions	Thurs.	8:00-8:50 a.m.	Barry A. Franklin, FACSM, Beaumont Health - Royal Oak
C-24	Exercise is Medicine® - Tutorial Lecture	Should Physicians Develop Their Own Fitness Communities?	Thurs.	8:00-8:50 a.m.	Jordan D. Metz, Hospital for Special Surgery
C-27	Exercise is Medicine® - Tutorial Lecture	The HERITAGE Family Study: Implications for Clinical Practice and Exercise Prescription	Thurs.	9:10-10:00 a.m.	James Skinner, FACSM
C-28	Exercise is Medicine® - Tutorial Lecture	Navigating the Challenges of Musculoskeletal Pain with Exercise in Obese Children	Thurs.	9:10-10:00 a.m.	Heather K. Vincent, FACSM, University of Florida
C-29	Exercise is Medicine® - Tutorial Lecture	Implementing Exercise is Medicine in a Healthclub: The Claremont Club Experience	Thurs.	9:10-10:00 a.m.	Robert E. Sallis, FACSM, Kaiser Permanente Medical Center Mike G. Alpert, The Claremont Club
C-41	Exercise is Medicine®/ Poster	EIM - Physical Activity, Training and Lifestyle	Thurs.	7:30 a.m.-12:30 p.m.	
C-42	Exercise is Medicine®/ Poster	EIM - Psychological Aspects, Bone, Muscle and Cartilage	Thurs.	7:30 a.m.-12:30 p.m.	
D-65	Exercise is Medicine®/ Poster	EIM - Chronic Health Conditions	Thurs.	1:00-6:00 p.m.	
D-66	Exercise is Medicine®/ Poster	EIM - Older Adults	Thurs.	1:00-6:00 p.m.	
F-22	Clinical Workshop - Hands On Demonstration	Potential use of HIFT for Kids	Fri.	2:10-3:00 p.m.	Victor Andrews, Kansas State University

Fitness Assessment, Exercise Training, and Performance of Athletes and Healthy People

A-16	Symposium	The “S” in ACSM: New Insights into Physiological Limitations to Sports Performance	Wed.	9:30-11:30 a.m.	Robert F. Chapman, FACSM, Indiana University/ USA Track & Field Peter Weyand, Southern Methodist University Philo Saunders, Australian Institute of Sport Keenan Robinson, USA Swimming Asker Jeukendrup, FACSM, Loughborough University
A-21	Thematic Poster	Children and Adolescents	Wed.	9:30-11:30 a.m.	
A-41	Free Communication/ Poster	Aging	Wed.	7:30 a.m.-12:30 p.m.	

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A-42	Free Communication/ Poster	Blood Flow Restriction	Wed.	7:30 a.m.-12:30 p.m.	
A-55	Free Communication/ Poster	Resistance Training	Wed.	7:30 a.m.-12:30 p.m.	
A-57	Free Communication/ Poster	Running and Swimming	Wed.	7:30 a.m.-12:30 p.m.	
B-13	Free Communication/ Slide	Fitness Assessment and Training	Wed.	1:00-3:00 p.m.	
B-26	Tutorial Lecture	Motorsport Physiology: More than Just Turning Left	Wed.	2:10-3:00 p.m.	Ed Potkanowicz, Ohio Northern University David Ferguson, Michigan State University
B-43	Thematic Poster	Running	Wed.	3:15-5:15 p.m.	
B-65	Free Communication/ Poster	Body Composition	Wed.	1:00-6:00 p.m.	
B-68	Free Communication/ Poster	Cardiovascular	Wed.	1:00-6:00 p.m.	
C-08	Symposium	RIO 2016: Olympic and Paralympic Sports Medicine Strategies and Lessons Learned for TOKYO 2020	Thurs.	8:00-10:00 a.m.	Scott Magnes, FACSM, Captain James A. Lovell Health Care Center William Moreau, FACSM, United States Olympic Committee Cheri Blauwet, Brigham and Women's Hospital and Spaulding Rehabilitation Hospital, Harvard Medical School Randall Wilber, FACSM, United States Olympic Committee RIO 2016 Olympic Medalist RIO 2016 Paralympic Medalist, United States Olympic & Paralympic Teams
C-10	Thematic Poster	Bioenergetics and Training	Thurs.	8:00-10:00 a.m.	
C-15	Free Communication/ Slide	Aging	Thurs.	8:00-10:00 a.m.	
C-44	Free Communication/ Poster	Functional Strength and Fitness	Thurs.	7:30 a.m.-12:30 p.m.	
C-47	Free Communication/ Poster	Muscle Dynamics	Thurs.	7:30 a.m.-12:30 p.m.	
D-18	Exchange Lecture	European College of Sport Science Exchange Lecture – Exercise Immunology	Thurs.	1:00-1:50 p.m.	Neil Walsh, FACSM, Bangor University David C. Nieman, FACSM, Appalachian State University

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D-38	Symposium	Olympic and Paralympic Nordic Skiing: Lessons to Learn	Thurs.	3:15–5:15 p.m.	Walter R. Thompson, FACSM, Georgia State University Stefan J. Lindinger, University of Salzburg Vesa Linnamo, University of Jyväskylä Yves Vanlandewijck, KU Leuven
D-43	Thematic Poster	Measurement and Modeling	Thurs.	3:15–5:15 p.m.	
D-62	Free Communication/ Poster	Cycling and Soccer	Thurs.	1:00–6:00 p.m.	
D-68	Free Communication/ Poster	Fitness Assessment	Thurs.	1:00–6:00 p.m.	
D-70	Free Communication/ Poster	Interval Training	Thurs.	1:00–6:00 p.m.	
D-71	Free Communication/ Poster	Modeling	Thurs.	1:00–6:00 p.m.	
E-06	Symposium	Optimizing Performance During Long Endurance Events	Fri.	9:30–11:30 a.m.	Anni Vanhatalo, FACSM, University of Exeter Andrew M. Jones, FACSM, University of Exeter Guillaume Y. Millet, University of Calgary Brett S. Kirby, Nike Ronald J. Maughan, FACSM, St Andrews University
E-30	Free Communication/ Poster	Elite Athletes	Fri.	7:30 a.m.–12:30 p.m.	
E-32	Free Communication/ Poster	Methodology	Fri.	7:30 a.m.–12:30 p.m.	
E-33	Free Communication/ Poster	Monitoring	Fri.	7:30 a.m.–12:30 p.m.	
F-04	Symposium	Benefits of Different Exercise Modes During Pregnancy on Perinatal Outcomes	Fri.	1:00–3:00 p.m.	Linda E. May, East Carolina University Kelly R. Evenson, FACSM, University of North Carolina Michelle Mottola, FACSM, University of Western Ontario Paul L. Hofman, The University of Auckland Maria Perales, Camilo Jose Cela University
F-13	Free Communication/ Slide	Cardiovascular Assessment and Training Responses	Fri.	1:00–3:00 p.m.	
F-33	Thematic Poster	Special Populations	Fri.	3:15–5:15 p.m.	
F-57	Free Communication/ Poster	Energetics	Fri.	1:00–6:00 p.m.	
F-62	Free Communication/ Poster	Performance	Fri.	1:00–6:00 p.m.	

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G-03	Tutorial Lecture	Individual Non-response to High Intensity Interval Training	Sat.	8:00-8:50 a.m.	Brendon J. Gurd, Queen's University Todd A. Astorino, CSU-San Marcos
G-10	Symposium	Female Elite Athletes: The Impact of Participation in Competitive Sport	Sat.	9:00-11:00 a.m.	Jorunn Sundgot-Borgen, FACSM, The Norwegian School of Sport Sciences Trine Stensrud, The Norwegian School of Sport Sciences Monica Klungland Torstveit, University of Agder Therese F. Mathisen, The Norwegian School of Sport Sciences Ina Garthe, The Norwegian Olympic and Paralympic Committee and Confederation of Sport Anna Melin, University of Copenhagen, Nutrition, Exercise and Sports
G-15	Thematic Poster	High Intensity Training	Sat.	9:00-11:00 a.m.	
G-31	Free Communication/ Poster	Perception	Sat.	7:30-11:00 a.m.	
G-34	Free Communication/ Poster	Training and Recovery	Sat.	7:30-11:00 a.m.	
G-35	Free Communication/ Poster	Youth Sports	Sat.	7:30-11:00 a.m.	

Immunology/Genetics/Endocrinology

A-47	Free Communication/ Poster	Genetics	Wed.	7:30 a.m.-12:30 p.m.	
B-44	Free Communication/ Slide	Immunology	Wed.	3:15-4:45 p.m.	
C-46	Free Communication/ Poster	Immunology I	Thurs.	7:30 a.m.-12:30 p.m.	
D-10	Thematic Poster	High Intensity Exercise in Blood Marker Responses	Thurs.	1:00-3:00 p.m.	
F-05	Symposium	Interactions of Glucose Regulation and Bone Health	Fri.	1:00-3:00 p.m.	Vanessa D. Sherk, University of Colorado Anschutz Medical Campus Viral Shah, University of Colorado Anschutz Medical Campus Sue Shapses, Rutgers University

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F-06	Symposium	Immunometabolism: The Use of Metabolomics and Proteomics to Interpret the Influence of Exercise on the Immune System	Fri.	1:00–3:00 p.m.	David C. Nieman, FACSM, Appalachian State University Arnoud J. Groen, University of Cambridge Kirk Pappan, Metabolon, Inc.
G-28	Free Communication/ Poster	Immunology II	Sat.	7:30–11:00 a.m.	

Metabolism and Nutrition

A-24	Thematic Poster	Energy Availability and Expenditure	Wed.	9:30–11:30 a.m.	
A-46	Free Communication/ Poster	Ergogenic Aids I	Wed.	7:30 a.m.–12:30 p.m.	
A-51	Free Communication/ Poster	Nutrition and Athletes	Wed.	7:30 a.m.–12:30 p.m.	
B-04	Symposium	Update on Low Carbohydrate High Fat – Help or Hindrance for Sports Performance in Competitive Athletes?	Wed.	1:00–3:00 p.m.	Louise M. Burke, FACSM, Australian Institute of Sport Steve Phinney, UC Davis Trent Stellingwerff, FACSM, Canadian Sport Institute Pacific Lawrence L. Spriet, University of Guelph
B-41	Thematic Poster	Macronutrient Metabolism in Athletes	Wed.	3:15–5:15 p.m.	
B-67	Free Communication/ Poster	Carbohydrate Metabolism and Exercise	Wed.	1:00–6:00 p.m.	
B-71	Free Communication/ Poster	Ergogenic Aids II	Wed.	1:00–6:00 p.m.	
B-77	Free Communication/ Poster	Nutrition and Health	Wed.	1:00–6:00 p.m.	
C-16	Free Communication/ Slide	Chronic Disease and Health	Thurs.	8:00–10:00 a.m.	
C-20	Tutorial Lecture	Pre-sleep Nutrition: To Eat or Not to Eat	Thurs.	8:00–8:50 a.m.	Michael J. Ormsbee, FACSM, Florida State University Luc JC van Loon, Maastricht University Medical Centre, Maastricht, Netherlands
C-36	Free Communication/ Poster	Body Composition	Thurs.	7:30 a.m.–12:30 p.m.	
C-43	Free Communication/ Poster	Fat Metabolism and Exercise	Thurs.	7:30 a.m.–12:30 p.m.	
D-07	Thematic Poster	Body Composition and Health	Thurs.	1:00–3:00 p.m.	
D-20	Tutorial Lecture	Energy Dysregulation: From Obesity to Anorexia	Thurs.	1:00–1:50 p.m.	Lynn Cialdella-Kam, Case Western Reserve University
D-26	Tutorial Lecture	Healthy Adipose Tissue: New Insights into Mechanisms Underlying the Beneficial Effects of Exercise on Metabolism	Thurs.	2:10–3:00 p.m.	Laurie Goodyear, FACSM, Joslin Diabetes Center/ Harvard Medical School

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D-29	Colloquium	The Effect of an Anti-Doping Program in Reducing the use of Performance-Enhancing Drugs	Thurs. 2:10-3:00 p.m.	Gary A. Green, FACSM, Major League Baseball Jonathan D. Coyles, Major League Baseball
D-36	Symposium	Do Common Cardiometabolic Medications Accentuate or Oppose Exercise Benefits?	Thurs. 3:15-5:15 p.m.	Barry Braun, FACSM, Colorado State University Jane Reusch, University of Colorado Denver Medical Campus Christopher Bell, Colorado State University Beth A. Taylor, University of Connecticut
D-37	Symposium	Exercise, Nutrition, and the Gut Microbiome	Thurs. 3:15-5:15 p.m.	Mary P. Miles, FACSM, Montana State University Jeffrey A. Woods, FACSM, University of Illinois/ Urbana-Champaign Lucy Mailing, University of Illinois at Urbana-Champaign Paul J. Wisniewski II, Rutgers University Jacob M. Allen, University of Illinois, Sara C. Campbell, FACSM, Rutgers University
D-63	Free Communication/ Poster	Energy Metabolism and Expenditure	Thurs. 1:00-6:00 p.m.	
D-64	Free Communication/ Poster	Ergogenic Aids IV	Thurs. 1:00-6:00 p.m.	
D-76	Free Communication/ Poster	Protein Metabolism and Exercise	Thurs. 1:00-6:00 p.m.	
E-05	Symposium	Optimizing Exercise and Diet for Insulin Sensitivity and Mitochondrial Function	Fri. 9:30-11:30 a.m.	John P. Kirwan, FACSM, Cleveland Clinic Steven K. Malin, University of Virginia Gordon Fisher, University of Alabama at Birmingham Brian A. Irving, Louisiana State University
E-13	Thematic Poster	Nutritional Status of Athletes I	Fri. 9:30-11:30 a.m.	
F-18	Tutorial Lecture	Obesity Disparities are Partially Explained by Ghrelin and Leptin Levels, Energy Balance and Nutrients	Fri. 1:00-1:50 p.m.	Leslie J. Brandon, FACSM, Georgia State University Calvin L. Cole, Wilmot Cancer Institute, Cancer Control, University of Rochester
F-31	Thematic Poster	Nutritional Status of Athletes II	Fri. 3:15-5:15 p.m.	
F-36	Free Communication/ Slide	Weight Management	Fri. 3:15-5:15 p.m.	

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F-58	Free Communication/ Poster	Ergogenic Aids III	Fri.	1:00-6:00 p.m.	
F-59	Free Communication/ Poster	Ergogenic Aids V	Fri.	1:00-6:00 p.m.	
F-66	Free Communication/ Poster	Weight Control	Fri.	1:00-6:00 p.m.	
G-02	Tutorial Lecture	Breakfast, Fasting and Caloric Restriction: Interactions with Exercise and Health	Sat.	8:00-8:50 a.m.	James A. Betts, FACSM, University of Bath Javier T. Gonzalez, University of Bath
G-11	Symposium	Novel Applications for Current Dietary Supplements	Sat.	9:00-11:00 a.m.	Stella L. Volpe, FACSM, Drexel University Trent Stellingwerff, FACSM, Canadian Sport Institute Pacific Eric S. Rawson, FACSM, Messiah College Craig Sale, FACSM, Nottingham Trent University Andrew M. Jones, FACSM, University of Exeter
G-27	Free Communication/ Poster	Chronic Disease and Nutrition	Sat.	7:30-11:00 a.m.	

Physical Activity/Health Promotion Interventions

A-20	Thematic Poster	A Wonder Drug for Healthy Aging: Physical Activity	Wed.	9:30-11:30 a.m.	
A-31	Tutorial Lecture	Hot Fitness Trends to Promote Health and Physical Activity in Minority Communities	Wed.	9:30-10:20 a.m.	Daheia J. Barr-Anderson, FACSM, University of Minnesota Lauren Reid, University of South Carolina Lyndsey M. Hornbuckle, University of Tennessee, Knoxville
A-32	Tutorial Lecture	The Biology of Lifestyle and Cancer Prognosis	Wed.	9:30-10:20 a.m.	Kathryn H. Schmitz, FACSM, Penn State Cancer Institute Justin C. Brown, Dana-Farber Cancer Institute Nicole Culos-Reed, University of Calgary
A-40	Free Communication/ Poster	Activity Interventions and Programming in Adults I	Wed.	7:30 a.m.-12:30 p.m.	
B-19	Tutorial Lecture	Squat, Curl, Flexion, EXTENSION: How the USDA Promotes Physical Activity	Wed.	1:00-1:50 p.m.	Katherine B. Gunter, FACSM, Oregon State University Anne R. Lindsay, University of Nevada
B-45	Free Communication/ Slide	School-oriented Interventions	Wed.	3:15-5:15 p.m.	

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B-49	Tutorial Lecture	The Impact of Active Learning on Activity, Behavior, and Academic Performance: The Texas I-CAN Results	Wed.	3:15-4:05 p.m.	John Bartholomew, FACSM, The University of Texas Esbel Jowers, The University of Texas
B-61	Free Communication/ Poster	Activity Interventions and Programming in Adults II	Wed.	1:00-6:00 p.m.	
C-06	Symposium	It's Simple, Right? Conducting Exercise Clinical Trials in Co-Morbid Older Adults	Thurs.	8:00-10:00 a.m.	Thomas W. Buford, University of Florida Daniel Corcos, Northwestern University Neil Alexander, University of Michigan/Ann Arbor VA Marcas Bamman, FACSM, University of Alabama Birmingham
D-03	Symposium	Remote Delivery and Cost Analysis of Physical Activity and Weight Management Interventions	Thurs.	1:00-3:00 p.m.	Joseph E. Donnelly, FACSM, University of Kansas Medical Center Erik Willis, National Cancer Institute Lauren T. Ptomey, University of Kansas Medical Center Renee Rogers, University of Pittsburgh Robert Lee, University of Kansas Medical Center
D-59	Free Communication/ Poster	Activity Interventions and Programming in Older Adults	Thurs.	1:00-6:00 p.m.	
E-09	Symposium	Wiggle It, Just a Little Bit! Interventions to Promote Physical Activity in Preschool Children: Lessons Learned	Fri.	9:30-11:30 a.m.	Melicia C. Whitt-Glover, FACSM, Gramercy Research Group Russell R. Pate, FACSM, University of South Carolina Debra M. Vinci, University of West Florida Sofiya Alhassan, FACSM, University of Massachusetts - Amherst Sharon Taverno Ross, University of Pittsburgh
E-12	Thematic Poster	Moving Beyond Cancer	Fri.	9:30-11:30 a.m.	

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F-02	Symposium	The World reSHAPED	Fri.	1:00–3:00 p.m.	Carl Lavie, John Ochsner Heart and Vascular Institute Frank Booth, FACSM, School of Veterinary Medicine, University of Missouri Leonard Kaminsky, FACSM, Fisher Institute of Health and Well-Being Ulrik Wisloff, Norwegian University of Science and Technology Pamela Peeke, FACSM, University of Maryland
F-28	Symposium	Optimizing Female Youth Sport Participation: Bring Back the “Youth”	Fri.	3:15–5:15 p.m.	Alicia Bryan, FACSM, Columbus State University Alex Ortiz, FACSM, Texas Women’s University Jamie Clark, Oklahoma State University Julio Morales, Lamar University
F-35	Free Communication/ Slide	Physical Activity Intervention Trials	Fri.	3:15–5:15 p.m.	
F-42	Tutorial Lecture	CDC’s Vision for Increasing Physical Activity Across the Nation: Looking Behind the Curtain	Fri.	3:15–4:05 p.m.	Janet Fulton, FACSM, CDC Ruth Petersen, CDC Susan A. Carlson, CDC
F-45	Tutorial Lecture	Health-related Quality of Life: An Outcome Measure in Cardiac Rehabilitation	Fri.	4:25–5:15 p.m.	Neil Oldridge, FACSM, University of Wisconsin-Milwaukee
F-48	Tutorial Lecture	The Perfect Storm: Catalysts for a U.S. Physical Activity Movement	Fri.	4:20–5:15 p.m.	Susan A. Carlson, CDC Janet Fulton, FACSM, CDC Russell R. Pate, FACSM, University of South Carolina
F-52	Free Communication/ Poster	Activity Interventions and Programming in Youth	Fri.	1:00–6:00 p.m.	
F-53	Free Communication/ Poster	Cancer	Fri.	1:00–6:00 p.m.	
G-26	Free Communication/ Poster	Beyond the Bounds Category!	Sat.	7:30–11:00 a.m.	

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A-14	Symposium	Clinical Research Can Be for Everyone – Tips and Traps for Trainees	Wed.	9:30–11:30 a.m.	Alison Brooks, University of Wisconsin-Madison Daniel Herman, FACSM, University of Florida Andrew Watson, University of Wisconsin-Madison Irfan Asif, University of South Carolina Greenville
D-05	Symposium	Mentoring Matters: ACSM and National Efforts to Mentor Trainees from Diverse and Underrepresented Backgrounds Effectively	Thurs.	1:00–3:00 p.m.	Eduardo Bustamante, University of Illinois, Chicago John Quindry, FACSM, University of Montana Rebecca Hasson, FACSM, University of Michigan NiCole Keith, FACSM, Indiana University-Purdue University Indianapolis Elizabeth Ofili, Morehouse University School of Medicine
D-54	Tutorial Lecture	Using Twitter to Advance Science and Your Career	Thurs.	3:15–4:05 p.m.	Kathryn H. Schmitz, FACSM, Penn State Cancer Institute Caitlin Kinser, American College of Sports Medicine Shawn M. Arent, FACSM, Rutgers University Carol Ewing Garber, FACSM, Columbia University
F-21	Tutorial Lecture	ACSM Certification and CAAHEP Accreditation: Moving The Profession Forward	Fri.	2:10–3:00 p.m.	William Simpson, FACSM, University of Wisconsin-Superior M. Allison Williams, FACSM, Mercy College Richard Cotton, ACSM
F-47	Tutorial Lecture	What's New in the 10th Edition of <i>ACSM's Guidelines for Exercise Testing and Prescription</i>	Fri.	4:25–5:15 p.m.	Deborah Riebe, FACSM, University of Rhode Island Gary Liguori, FACSM, University of Tennessee

Psychology, Behavior and Neurobiology

A-53	Free Communication/ Poster	Perception of Effort, Pain and Fatigue	Wed.	7:30 a.m.–12:30 p.m.	
B-09	Thematic Poster	Exercise Psychology and Clinical Populations	Wed.	1:00–3:00 p.m.	
B-12	Free Communication/ Slide	Exercise Psychology	Wed.	1:00–3:00 p.m.	
B-39	Thematic Poster	Behavioral Aspects and Correlates of Physical Activity in College Students	Wed.	3:15–5:15 p.m.	
B-73	Free Communication/ Poster	Exercise Psychology - Cognition and Emotion	Wed.	1:00–6:00 p.m.	
B-74	Free Communication/ Poster	Exercise Psychology - Neuroscience	Wed.	1:00–6:00 p.m.	

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C-48	Free Communication/ Poster	Physical Activity and Mental Health	Thurs.	7:30 a.m.-12:30 p.m.	
D-61	Free Communication/ Poster	Correlates and Behavioral Aspects of Physical Activity	Thurs.	1:00-6:00 p.m.	
E-03	Symposium	ACSM/SBM Co-Sponsored Symposium: Exercise as an Integrative Approach to the Management of Chronic Pain and Addiction	Fri.	9:30-11:30 a.m.	Francis O'Connor, FACSM, Uniformed Services University Martin Cheate, University of Pennsylvania Dane Cook, University of Wisconsin Madison Marie Hoeger Bement, Marquette University
E-11	Thematic Poster	Exercise Psychology – Cognition and Emotion	Fri.	9:30-11:30 a.m.	
E-26	Free Communication/ Poster	Behavioral Aspects of Sport	Fri.	7:30 a.m.-12:30 p.m.	
F-03	Symposium	Creating Positive Developmental Trajectories in Young Children	Fri.	1:00-3:00 p.m.	Karin A. Pfeiffer, FACSM, Michigan State University Leah E. Robinson, FACSM, University of Michigan Dawn P. Coe, FACSM, University of Tennessee Rebecca A. Battista, FACSM, Appalachian State University
F-15	Free Communication/ Slide	Perception of Effort, Pain and Fatigue	Fri.	1:00-3:00 p.m.	
F-32	Thematic Poster	Physical Activity and Mental Health	Fri.	3:15-5:15 p.m.	
F-39	Exchange Lecture	American Psychological Association Exchange Lecture – Ethical Practice in a Diverse World: The Challenges of Sports Professionals Working with Differences and the Psychological Consequences for NCAA College Student-Athletes	Fri.	3:15-4:05 p.m.	Michael L. Sachs, Temple University
F-46	Colloquium	Thank You, Professor! Creating Engaging Pedagogy for Enhanced Student Learning of Exercise Physiology	Fri.	4:25-5:15 p.m.	Tamerah Hunt, FACSM, Georgia Southern University Patrice C. Elder, Delaware State University

Skeletal Muscle, Bone and Connective Tissue

A-22	Thematic Poster	Diseased Muscle: Cancer and Muscle Dystrophy	Wed.	9:30-11:30 a.m.	
A-48	Free Communication/ Poster	Hypoxic Exercise	Wed.	7:30 a.m.-12:30 p.m.	
A-50	Free Communication/ Poster	Muscle and Mitochondria	Wed.	7:30 a.m.-12:30 p.m.	

Athlete Care and
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Biomechanics and Neural
Control of Movement

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and Respiratory Physiology

Clinical Exercise Physiology

Environmental and
Occupational Physiology

Epidemiology and Biostatistics

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Training, and Performance of
Athletes and Healthy People

Immunology/Genetics/
Endocrinology

Metabolism and Nutrition

Physical Activity/Health
Promotion Interventions

Professional Development/
Organizational Information

Psychology, Behavior and
Neurobiology

Skeletal Muscle, Bone
and Connective Tissue

World Congress on the
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B-02	Symposium	Interrogation of Mitochondrial Function from the Organelle to the Whole Body	Wed.	1:00–3:00 p.m.	Andreas N. Kavazis, FACSM, Auburn University Brian Glancy, National Heart Lung and Blood Institute, National Institute of Arthritis and Musculoskeletal and Skin Diseases L. Bruce Gladden, FACSM, Auburn University Kevin K. McCully, FACSM, University of Georgia
B-37	Symposium	Recent Insights Into Mechanisms of the Repeated Bout Effect	Wed.	3:15–5:15 p.m.	Robert D. Hyldahl, Brigham Young University Monica J. Hubal, FACSM, George Washington University Glyn Howatson, FACSM, Northumbria University Kazunori Nosaka, Edith Cowan University
B-62	Free Communication/ Poster	Aging in Skeletal Muscle and Bone	Wed.	1:00–6:00 p.m.	
C-13	Thematic Poster	Muscle Basic Science	Thurs.	8:00–10:00 a.m.	
C-37	Free Communication/ Poster	Bone, Bone Mineral Density, and Microarchitecture	Thurs.	7:30 a.m.–12:30 p.m.	
D-06	Symposium	Muscle and Bone Interactions	Thurs.	1:00–3:00 p.m.	Craig Sale, FACSM, Nottingham Trent University Kathryn E. Ackerman, FACSM, Boston Children's Hospital Wendy M. Kohrt, FACSM, University of Colorado Kristin L. Popp, Massachusetts General Hospital and Harvard Medical School
D-08	Thematic Poster	Bone Quality in Special Populations	Thurs.	1:00–3:00 p.m.	
D-13	Free Communication/ Slide	Mechanisms of Muscle Atrophy and Hypertrophy	Thurs.	1:00–3:00 p.m.	
D-56	Tutorial Lecture	What is the Appropriate Age to Begin Contact Sports?	Thurs.	4:25–5:15 p.m.	Andrew Gregory, FACSM, Vanderbilt University M. Alison Brooks, University of Wisconsin
D-69	Free Communication/ Poster	Integrative Exercise Physiology	Thurs.	1:00–6:00 p.m.	
E-14	Thematic Poster	Rehab and Recovery in Skeletal Muscle and Connective Tissue	Fri.	9:30–11:30 a.m.	
E-19	Tutorial Lecture	Emerging Extreme Sports Injuries in Children	Fri.	9:30–10:20 a.m.	John Batson, FACSM, Lowcountry Spine & Sport Andrew Gregory, FACSM, Vanderbilt University

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Skeletal Muscle, Bone
and Connective Tissue

World Congress on the
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E-27	Free Communication/ Poster	Blood Flow Restriction	Fri.	7:30 a.m.-12:30 p.m.	
E-34	Free Communication/ Poster	Muscle Adaptations, Atrophy, and Hypertrophy	Fri.	7:30 a.m.-12:30 p.m.	
E-38	Free Communication/ Poster	Skeletal Muscle	Fri.	7:30 a.m.-12:30 p.m.	
F-60	Free Communication/ Poster	Injury Prevention, Recovery, and Rehab in Skeletal Muscle and Connective Tissue	Fri.	1:00-6:00 p.m.	
F-65	Free Communication/ Poster	Ultrasound and Spectroscopy Applications	Fri.	1:00-6:00 p.m.	
G-04	Tutorial Lecture	Ribosomal Biogenesis: Building the Machines that Build Muscle	Sat.	8:00-8:50 a.m.	Michael Roberts, Auburn University John J. McCarthy, University of Kentucky
G-09	Symposium	Current Evidence on Cartilage Injury and Repair	Sat.	9:00-11:00 a.m.	Thomas Best, FACSM, University of Miami Miller School of Medicine Clifton L. Page, University of Miami Sports Medicine Institute Diego Correa, University of Miami UHealth Sports Medicine Lee Kaplan, University of Miami UHealth Sports Medicine
G-16	Thematic Poster	Muscle Physiology	Sat.	9:00-11:00 a.m.	
G-30	Free Communication/ Poster	Neuromuscular Physiology	Sat.	7:30-11:00 a.m.	

World Congress on the Basic Science of Exercise and the Brain

A-12	Basic Science World Congress - Symposium	Impacts of Exercise, the Gut Microbiome/ Metabolome and Immunity on the Brain	Wed.	9:30-11:30 a.m.	Monika Fleshner, University of Colorado - Boulder Christopher A. Lowry, University of Colorado Boulder Emeran Mayer, UCLA
A-13	Basic Science World Congress - Symposium	Influences of Physical Activity/Exercise on Cognitive Health Across the Life Span	Wed.	9:30-11:30 a.m.	Chhanda Dutta, National Institute on Aging, NIH Charles H. Hillman, Northeastern University Kirk Erickson, University of Pittsburgh Jeffrey M. Burns, University of Kansas Alzheimer's Disease Center Molly Wagster, National Institute on Aging, NIH
A-39	Basic Science World Congress/Poster	Motor Control and Movement Disorders	Wed.	7:30 a.m.-12:30 p.m.	

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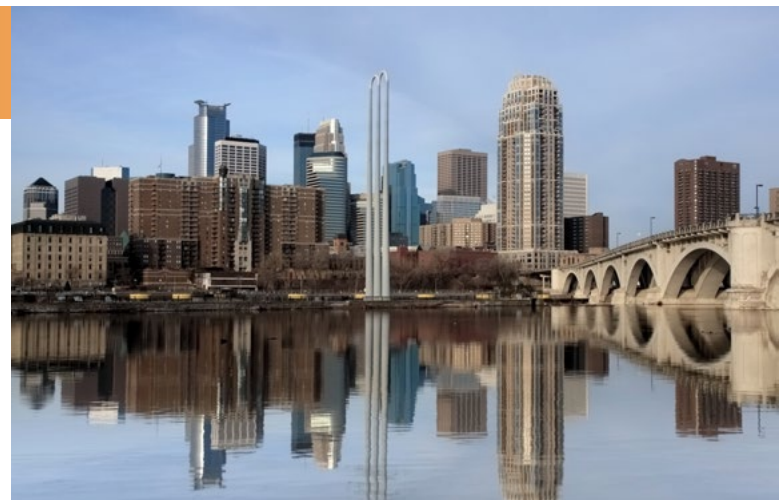
B-16	Basic Science World Congress - Tutorial Lecture	Ecological Approach to Cognitive Enhancement: Complex Motor Training	Wed.	1:00-1:50 p.m.	Andrew Conway, Claremont Graduate University
B-17	Basic Science World Congress - Tutorial Lecture	How the Immune System Talks to the Brain	Wed.	1:00-1:50 p.m.	Jeffrey A. Woods, FACSM, University of Illinois
B-32	Basic Science World Congress - Symposium	Brain Blood Flow and Exercise	Wed.	3:15-5:15 p.m.	Kevin Shoemaker, The University of Western Ontario James P. Fisher, University of Birmingham Damian M. Bailey, FACSM, University of South Wales Jose Gonzalez-Alonso, Brunel University London
B-33	Basic Science World Congress - Symposium	Exercise in Movement Disorders	Wed.	3:15-5:15 p.m.	Roger Enoka, University of Colorado Robert W. Motl, University of Alabama at Birmingham John Eric Ahlskog, Mayo Clinic Kristen A. Pickett, University of Wisconsin-Madison
B-59	Basic Science World Congress/Poster	Cognition, Intelligence, and Learning	Wed.	1:00-6:00 p.m.	
B-60	Basic Science World Congress/Poster	Sports, Performance and Injury	Wed.	1:00-6:00 p.m.	
C-02	Basic Science World Congress - Symposium	Neurobiological Effects of Physical Exercise	Thurs.	8:00-10:00 a.m.	Linda Ernstsén, Norwegian University of Science and Technology Emrah Duzel, Otto-von Guericke University Magdeburg Christiane Wrann, Massachusetts General Hospital and Harvard Medical School Linda H. Bergersen, University of Oslo Nathan Scrimgeour, Norwegian University of Science and Technology
C-03	Basic Science World Congress - Symposium	Stress and the Brain	Thurs.	8:00-10:00 a.m.	Bradley D. Hatfield, FACSM, University of Maryland Romain Meeusen, FACSM, Vrije Universiteit Brussel Karim Alkadhi, University of Houston Benjamin Greenwood, University of Colorado-Denver

Athlete Care and Clinical Medicine	Biomechanics and Neural Control of Movement	Cardiovascular, Renal and Respiratory Physiology	Clinical Exercise Physiology	Environmental and Occupational Physiology
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Physical Activity/Health Promotion Interventions	Professional Development/Organizational Information	Psychology, Behavior and Neurobiology	Skeletal Muscle, Bone and Connective Tissue	World Congress on the Basic Science of Exercise and the Brain

D-32	Basic Science World Congress - Symposium	Novel Approaches to Understanding the Effects of Exercise on the Brain	Thurs. 3:15-5:15 p.m.	Marc-Andre Cornier, University of Colorado Alexis M. Stranahan, Augusta University Takashi Tarumi, UT Southwestern Medical Center Dallas Katelyn N. Wood, Western University
D-33	Basic Science World Congress - Symposium	Physical Activity Induced Neuroplasticity	Thurs. 3:15-5:15 p.m.	J. Carson Smith, FACSM, University of Maryland Claire Sexton, University of Oxford Judy Cameron, University of Pittsburgh Jeffrey Kleim, Arizona State University
D-41	Basic Science World Congress - Thematic Poster	Exercise, Neuroplasticity, and Cognition in Youth	Thurs. 3:15-5:15 p.m.	
E-24	Basic Science World Congress/Poster	Neurobiological Effects of Exercise	Fri. 7:30 a.m.-12:30 p.m.	
F-08	Basic Science World Congress - Thematic Poster	Neuroplasticity and Cerebral Perfusion	Fri. 1:00-3:00 p.m.	
F-51	Basic Science World Congress/Poster	Stress and Behavior	Fri. 1:00-6:00 p.m.	

Save the Date

2018 ACSM Annual Meeting



**May 29-June 2, 2018
Minneapolis, Minnesota**

Awards

The Awards and Tributes Committee is pleased to announce the 2017 Honor and Citation Award recipients. These individuals are recognized for their significant contributions to the exercise science and sports medicine fields. They will be recognized during the Awards Banquet on Friday, June 2 from 8:00-10:00 p.m.

2017 Honor Award Recipient



Peter B. Raven
Ph.D., FACSM
University of
North Texas Health
Sciences Center
Fort Worth, Texas

2017 Citation Award Recipients



Jack W. Berryman, Ph.D., FACSM
University of Washington
Seattle, Washington



Michael Pratt, M.D., M.S.P.E., M.P.H., FACSM
University of California San Diego
San Diego, California



Loretta DiPietro, Ph.D., M.P.H., FACSM
George Washington University
Washington, D.C.



Stephen Rice, M.D., Ph.D., M.P.H., FACSM
Jersey Shore University Medical Center
Neptune, New Jersey



Mark Hargreaves, Ph.D., FACSM
University of Melbourne
Melbourne, Australia



Robert Ross, Ph.D., FACSM
Queen's University
Ontario, Canada

Students



Graduate and Early Career Day Preconference and Lab Fair

Tuesday, May 30, 3:00-7:00 p.m.

See page 13 for details

President's Cup Poster Competition

Wednesday, May 31, 5:00-7:00 p.m.

Come and wish your regional chapter competitors luck toward winning the annual "president's cup award." Over the past six months, each regional chapter selected a student winner from their annual meeting who will have the opportunity to showcase their research at the ACSM Annual Meeting. The winning posters will be on public display where judges will have the opportunity to hear the students explain their research, ask questions and evaluate presentations. Judges will then announce the winners by 7:00 p.m.

Student Colloquium: Finding, Applying, and Hiring: How to Transition to an Employee in Academia and Industry

Wednesday, May 31, 5:30-7:00 p.m.

This session is designed to show students the application and hiring process so that they understand what their job search will entail. Experts will present about proper materials (CV, cover letter), what a search committee looks like, industry HR, and salary negotiation.

- John Harvey Kindred, Colorado State University
- Barry Braun, FACSM, Colorado State University
- Monika Fleshner, University of Colorado-Boulder
- Jennifer Sacheck, FACSM, Tufts University

Meet the Expert Networking Session

Friday, June 2, 12:00-12:45 p.m.

Set yourself apart from your peers by attending the session that could change your career. Several of ACSM's esteemed leaders have agreed to be a part of this hour lunch/networking session:

Barry Braun, FACSM
William W. Dexter, FACSM
Dixie Stanforth, FACSM
Leonard A. Kaminsky, FACSM
Judith A. Flohr, FACSM
Monika Fleshner
Jennifer M. Sacheck, FACSM
Lanay Mudd, FACSM
Henriette van Praag
James Hill

You must check off and purchase a spot for this event when you register for the ACSM Annual Meeting. Limited to first 100 students!

(CVs of experts will be available at the Student Help Desk in the ACSM Registration area prior to the event)

Student Lounge

There will be a special area in the convention center where students can gather. Look for signage on-site, so you can stop by, take a load off, meet fellow students, make new friends and begin a bond that will last a lifetime.



Don't Miss These Social Events

Tuesday, May 30

Preconferences

(see pages 12-13 for more details)

Kick-Off Party

7:00-10:00 p.m.



All attendees—you're invited to the ACSM Annual Meeting Kick Off Party! This don't-miss event will feature a BMX Stunt Bike show from local performers Yellow Design Stunt Team, as seen on America's Got Talent.

Appetizers will be served and one complimentary drink ticket will be offered to the first 200 guests. Mark your calendars today to check out this outstanding Denver-area group perform incredible stunts, reconnect with old colleagues and make new connections as we kick off the 2017 meeting.

Wednesday, May 31

Exhibit Hall Opening Reception

5:00-6:00 p.m.

President's Cup Poster Competition

5:00-7:00 p.m.

See page 48 for details.

Interest Group Meetings

Wednesday, May 31-Thursday, June 1 from 5:45-7:15p.m.

Meet members who share your interests at an Interest Group meeting at the Colorado Convention Center. The complete schedule will be available on site or at the [ACSM Annual Meeting website](#) in May.

10th Annual Student Bowl

7:30-9:00 p.m.



Cheer on your Regional Chapter at the 10th Annual Student Bowl. In this popular event, students face off in a friendly, Jeopardy-style competition showcasing their sports medicine and exercise science knowledge. A light reception is included.

Thursday, June 1

International Reception

8:00-9:00 p.m.

For international guests, only. Meet and network with your international peers at this special reception. Invitations are required for this event and will be distributed at registration.

Regional Chapter Socials

8:00-9:30 p.m.

Make lasting connections with professionals and students from your state or region at a Regional Chapter social event. If you aren't already a member, you'll learn more about the benefits of Regional Chapter membership.

Friday, June 2



Presented by:
GATORADE
THE SPORTS FUEL COMPANY



6:00 a.m.

Join 350+ ACSM runners and walkers on a scenic course of City Park. Returning for its 17th consecutive year, the Gisolfi 5k Fun Run and Walk has become an Annual Meeting tradition, and promises to be a great morning of exercise and enjoyment. Registration will be on-site at the Colorado Convention Center.

Healthy Happy Hour – Walking Tour of Denver

5:30-7:00 p.m.

Sponsored by:



Join fellow Annual Meeting attendees on a complimentary 90-minute walking tour of downtown Denver, where the city's past and present come together in utterly unique ways. The tour, co-sponsored by adidas and the ACSM Rocky Mountain Regional Chapter, gives you an opportunity to network with fellow attendees and participate in a knowledgeable, fun tour around Denver's iconic neighborhoods and sites. Online pre-registration will be required to reserve your spot.

Awards Banquet

7:00-10:00 p.m.

Sponsored by:



Join a time-honored tradition by attending the Awards Banquet at the Hyatt Regency Hotel at the Colorado Convention Center on Friday evening. Tickets are \$85 each, and guests can purchase tickets in advance (via the registration form) or on site for \$90.

Saturday, June 3

Tour of the U.S. Olympic Training Center in Colorado Springs



Cost: \$30 per person (includes transportation to/from)

Bus Departure: 1:00 p.m. from the Colorado Convention Center

Bus Return: 7:30 p.m. to the Colorado Convention Center

The United States Olympic Committee and ACSM invites you to take part in a special tour of the USOTC in Colorado Springs. This unique professional experience will allow you to tour the USOTC training facilities and to interact with professional staff in the areas of Sports Medicine and Sport Science (Physiology, Nutrition/Dietetics, Sport Psychology, Strength & Conditioning).

Participants will begin the tour at the OSOTC Visitors Center where they will be given an overview of the USOTC and its mission. Then the tour will rotate among several stations in the Senator Ted Stevens Sports Medicine and Sport Science Center, thereby allowing participants to view unique training facilities and to ask questions of professional staff. The tour will conclude by allowing participants an opportunity to pick up some mementos at the Team USA Gift Shop.

Space is limited so please sign up today via the [ACSM Annual Meeting website](#).

Highlighted Events

Wednesday, May 31

What's Next with Wearables? Industry Experts Discuss the Rapidly Evolving Technology Landscape and Its Implications for Physical Activity and Sport

11:45 a.m.-12:45 p.m.

Sponsored by:



Wearable technologies, including those for consumer, sports, and clinical purposes, continue to grow rapidly. This creates both great promise and potential opportunities but also myriad challenges. For example, it is not clear how to balance the differing paces of technology development, scientific methods, and healthcare practices. Further, there are challenges with finding the “right” tool for each person’s personal needs, while acknowledging the need for standardized measures and protocols, which are foundational for robust science.

The purpose of this session is to discuss the challenges and opportunities posed by wearable sensors for clinical care, research, and sports medicine. This includes a panel Q&A with “on-the-ground” industry experts actively creating these tools for these uses.

Moderator:

Eric Hekler, Assistant Professor, School of Nutrition and Health, Arizona State University

Panelists:

Stacey Burr, adidas; General Manager, Digital Sports

Todd Monrad, Technogym; Sales Director, Health, Corporate and Public

Mark Gorelick, MioGlobal; Chief Science Officer

Mark Santini, Medtronic; Sr. Global Product Manager, Zephyr Performance Systems

Wednesday, May 31 (continued)

A Tribute to the Career of Enzo Cafarelli, Ph.D., FACSM

5:30-7:30 p.m.

This Symposium Tribute is to honor the life and professional career of Dr. Enzo Cafarelli (1942-2016) who was a Fellow of the College for over 40 years. Dr. Cafarelli received his Ph.D. from the University of Pittsburgh in 1974, completed a four-year Post-Doctoral Fellowship at Yale University School of Medicine and the John B. Pierce Laboratory from 1974-1977, and spent his entire professional career at York University in Toronto, Canada. Enzo presented numerous papers at ACSM Annual Meetings, was an Associate Editor and an Editorial Board Member of *MSSE* from 2000-2005, and published nearly 100 papers in the open-literature over his career.

Chair:

Loretta DiPietro, FACSM

Presenters:

Dr. Cafarelli’s Doctoral Study at the University of Pittsburgh-
Kent B. Pandolf, FACSM

Dr. Cafarelli’s Post-Doctoral Work at the John B. Pierce
Laboratory- Gary W. Mack, FACSM

Dr. Cafarelli’s Student Advising, Teaching and Research at York
University- Jennifer M. Jakobi

Thursday, June 1

Ergogenic Aids: The Scientific Legacy of Mel Williams

5:30-6:30 p.m.

Mel Williams was a runner, scholar, and a gentleman. Mel played a greater role than any other individual in establishing sport and exercise nutrition as a recognized field of scientific endeavor. Part of that was achieved through his prolific research, his thoughtful scientific publications and the broad-ranging books that he wrote or edited, and these undoubtedly enriched the professional lives of countless people around the world: for a great number of people, though, Mel was a mentor, an inspiration and a personal friend. He was also a great supporter of the College and it is fitting that we mark his untimely passing with a Symposium in his honor.

Reception Honoring Barbara Drinkwater

5:30-7:30p.m.

A symposium dedicated to Barbara Drinkwater’s groundbreaking research contributions in sports science was held last year at ACSM’s Annual Meeting. The speakers from that symposium are hosting a reception to honor Dr. Drinkwater. Please join them on Thursday evening at 5:30 p.m. to honor and visit with Dr. Drinkwater.

Meeting Hotels

ACSM has reserved blocks of rooms at several hotels near the Colorado Convention Center (CCC). Reserve online at the [ACSM Annual Meeting website](#) or call (888) 665-1367 (U.S. Toll-free) or (801)505-5258 International. Rooms are available on a first-come first-served basis until May 1, 2017, or until the block sells out, whichever comes first. The Hyatt Regency Denver at the Colorado Convention Center is the headquarter hotel. Visit the [ACSM Annual Meeting website](#) for more hotel information.

Hyatt Regency at the CCC (Headquarter Hotel)	King/Queen: \$215	Hampton Inn & Suites CCC*	King/Queen: \$169
Denver Marriott City Center	King/Queen: \$204	Homewood Suites CCC*	King/Queen: \$169
Embassy Suites at the CCC	King/Queen: \$189	Hyatt House Denver*	King/Queen: \$174
Sheraton Denver Downtown Hotel	King/Queen: \$204	Hyatt Place Denver*	King/Queen: \$174
		Magnolia*	King/Queen: \$179

*Student Hotel

Registration Fees

Current ACSM Members

(dues must be current at time of meeting)

	Register by 3/15/17	Register by 4/19/17	Register by 5/23/17
Professional, Fellow	\$230	\$265	\$335
Single day rate	\$150	\$150	\$150
Professional-in-Training	\$205	\$240	\$310
Single day rate	\$150	\$150	\$150
ACSM student members	\$100	\$110	\$120
Single day/student rate	\$ 45	\$ 45	\$ 45
ACSM Alliance members	\$480	\$515	\$585
Single day rate	\$185	\$185	\$185
ACSM Student Alliance members	\$120	\$135	\$150
Single day/Student Alliance rate	\$ 75	\$ 75	\$ 75

Join ACSM now! (first time members)

(fee includes ACSM membership and meeting registration fees)

Professional	\$470	\$505	\$575
Professional-in-Training	\$360	\$395	\$465
Student (student ID required)	\$110	\$120	\$130

Non-ACSM member

Non-member Professional	\$480	\$515	\$585
Single day rate	\$185	\$185	\$185
Non-member Student (student ID required)	\$120	\$135	\$150
Single day/student rate	\$ 75	\$ 75	\$ 75

Cancellation policy: Cancellations will be accepted if sent in writing to the ACSM National Center and postmarked or e-mailed to meeting@acsm.org by April 19, 2017. A service charge of \$50 will be applied to all cancellations. Refunds will not be issued for cancellations made after April 19, 2017 or no shows.

Register today at www.acsmannualmeeting.org. Pre-registration ends May 23 A \$50 processing fee will be applied to all professional onsite registration fees. If you do not have access to a computer, contact our registration coordinator at (317) 637-9200 x 141.

Exhibit Hall

Exhibitors represent the wide range of products and services supporting sports medicine, research, education, and services. In addition to the companies you've come to know and access, many not-for-profit organizations, government agencies, and project-based groups exhibit.

Exhibit Dates:
May 30-June 2, 2017

Exhibit Hours:

Wednesday, May 31

1:30-6:00 p.m. Exhibits Open
(with Reception
5:00-6:00 p.m.)

Thursday, June 1

9:30 a.m.-5:00 p.m. Exhibits Open

Friday, June 2

9:30 a.m.-2:00 p.m. Exhibits Open



Exhibitors (as of February 21, 2017)

ACCUSPLIT

ACSM American Fitness Index®

ACSM Store/Healthy Learning

Actigraph

Activinsights

ADInstruments

AEI Technologies

Altra Footwear

American Physiological Society

AMTI

Army Medical Recruiting

Artinis

ASU (Arizona State University)

AtCor Medical

Bertec

Bio-Botanical Research

Biodex

Biopac

BiPro USA

Books of Discovery

California University of Pennsylvania

Carestream

CEPA (Clinical Exercise Physiology
Association)

C-Motion

The Commission on Dietetic Registration

CorTemp

CORTEX

COSMED

Creative Health Products

CSMi

Cyclus 2 RBM elektronik-
automation GmbH

Delsys

Depomed

FASEB

Fitabase

Fitlight corp & Gforce Tracker

FixYourAchingBack.com

FujiFilm Sonosite

Functional Movement Systems

Globus Sport & Health Technologies

GSSI (Gatorade Sports Science Institute)

GymAware

Hapad

Health & Exercise Science at Colorado

State University

HealthCare Intl

Henhat LLC

High Tech Health Intl Inc

Hologic

HOTSHOT

Human Kinetics

InBody

ISS

iWorx

Journal of Athletic Training

Kistler

KORR

Lactate.com/Sports Resource Group

Lafayette Instrument

LifeLine Sciences

Lode

Marasco & Associates

Masters in Kinesiology at PLNU

Microbiome Labs

MioGlobal

MGC Diagnostics

Motion Analysis Corp

The MotionMonitor

MuscleSound

NCCOR (National Collaborative on
Childhood Obesity Research)

NeuMedX

New York Chiropractic College

Noraxon

Norland at Swissray

NormaTec

Nova Biomedical

novel

NSCA (National Strength & Conditioning
Association)

On

PAL Technologies

ParvoMedics

Polar

Protokinetics Gait Analysis Walkways

Qualisys

Rocky Mountain Diagnostics

Routledge

Sable

seca

Taiyo Nippon Sanso

Technogym

Tekscan

VacuMed

Vicon

Vyaire Medical (CareFusion)

Wolters Kluwer

Woodway