



May 31-June 4, 2016

Hynes Convention Center and
the Sheraton Boston Hotel
Boston, Massachusetts USA
#ACSM16

ADVANCE PROGRAM

Content current as of March 17, 2016



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

American College of Sports Medicine **63rd Annual Meeting • 7th World Congress on Exercise is Medicine® •**
**World Congress on The Basic Science of Energy Balance: A Global Perspective on the Combined Importance of
Diet and Physical Activity**



Dear Colleagues and Friends:

I am pleased to invite you to join professionals from around the globe for the 63rd Annual Meeting, 7th World Congress on Exercise is Medicine®, and World Congress on the Basic Science of Energy Balance, in Boston, Massachusetts.

The Program Committee has assembled an extraordinary schedule of clinical, applied and original

science sessions, which is based on registrant feedback and spans the breadth of ACSM member interests. Specifically, the 2016 program will include a strong clinical track (i.e., CAQ review, clinical workshops, case reports, and poster sessions) and a pre-conference for graduate students and early career professionals. A meeting highlight will be the World Congress on the Basic Science of Energy Balance. Please join us to learn more from the world's experts regarding cutting edge science addressing one of

the globe's most serious health issues. Don't forget to attend the prestigious Wolffe, Dill, and President's lectures (page 7) which promise to be informative, appealing and memorable.

Many networking events will allow you to meet and greet colleagues and make new friends. Unscheduled time blocks remain during the noon hour and evenings, allowing you to socialize, exercise, or enjoy the exceptional dining and recreation that Boston offers.

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

We look forward to seeing you in Boston!

*Elizabeth A. Joy, M.D., M.P.H., FACSM
2016 Program Committee Chair, ACSM President-elect*

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

2015-2016 PROGRAM COMMITTEE

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CALENDAR AT-A-GLANCE

Tuesday, May 31

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 11).
1:00-5:15 p.m.	World Congress on Exercise is Medicine®
5:30-6:15 p.m.	Morris/Paffenbarger EIM Keynote Lecture
7:00-10:00 p.m.	All Attendee Party

Wednesday, June 1

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 p.m.-6:00 p.m.	Exhibit Hall Open
5:00-6:30 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 2

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 3

6:00 a.m.	16th Annual Gisolfi Fun Run
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
7:10-10:00 p.m.	Evening at the Ballpark

Saturday, June 4

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

GENERAL INFORMATION

Advance Registration

Avoid long lines by pre-registering for the 63rd ACSM Annual Meeting by mail, fax, or at www.acsmannualmeeting.org. Discounted registration is available through April 20.

Pre-registration services are available through May 18. A \$50 processing fee will be applied to all professional onsite 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 20, 2016. A service charge of \$50 will be applied to all cancellations. Refunds will not be issued for cancellations made after April 20, 2016 or no shows.

Abstracts

A link will be emailed to all attendees in advance so that all presentation abstracts may be printed prior to the meeting. You will be able to plan your schedule and print only the abstracts that you'll need (printed copies of the abstracts will not be available on-site).

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 in U.S. entry requirements, please visit <http://travel.state.gov>.

Sheraton Boston Hotel and Hynes Convention Center

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



ACSM Service Center

ACSM's 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 Hynes Convention Center during the following hours:

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

Time Zone

Boston is part of the Eastern Time Zone.

Travel

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

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. Develop a treatment plan using current recommendations to prescribe effective exercise and physical activity plans to pediatric and adolescent patients in order to enhance health and prevent disease.
7. Evaluate appropriate treatment strategies for dancers with common injuries in order to prevent further injury and disability.
8. Develop a treatment plan for common sports related fractures and dislocations in order to enhance recovery and function.
9. Evaluate appropriate diagnostic and treatment strategies for athletes from special populations with concussions in order to provide safe return to play recommendations.
10. Evaluate controversies in implementation of cardiac screening programs in order to counsel communities regarding best practices.
11. Present strategies, processes and tools that clinicians can implement for assessing and prescribing exercise in clinical practice.

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®

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

Raising Today's Children:
Can We Launch an Active,
Fit and Healthy Generation?



Wednesday, June 1
8:00–9:15 a.m.

*Russell R. Pate, Ph.D., FACSM
University of South Carolina
Columbia, South Carolina*

The D.B. Dill Historical Lecture

Ηρόδικος to Joy: Musings of a
Sports Physician's Perspective of
the History of his Specialty



Friday, June 3
8:00–9:15 a.m.

*Robert J. Johnson, M.D., FACSM
University of Minnesota
Minneapolis, Minnesota*

Morris/Paffenbarger EIM Keynote Lecture

(Held at The Sheraton Boston)



The Economic Costs of Physical Inactivity
Tuesday, May 31
5:30-6:15 p.m.
Michael Pratt, M.D., M.P.H., FACSM
Emory University
Atlanta, Georgia

World Congress on the Basic Science of Energy Balance Keynotes



Regulation of Body Weight: Physics,
Physiology and Behavior
Wednesday, June 1
9:30-10:20 a.m.
Claude Bouchard, Ph.D., FACSM
Pennington Biomedical Research Center
Baton Rouge, Louisiana



Energy Balance: A Framework
for Appetite Regulation
Wednesday, June 1
10:40-11:30 a.m.
John Blundell, Ph.D.
University of Leeds
Leeds, United Kingdom

Presidents Lectures



Going for the Gold: Medical
and Scientific Conundrums in
Paralympic Sport
Thursday, June 2
10:30-11:20 a.m.
Cheri Blawwet, M.D.
*Spaulding Rehabilitation Hospital/
Brigham and Women's Hospital,
Harvard Medical School*
Boston, Massachusetts



Preventing Sudden Death in
Sport and Physical Activity:
The Struggles (and Successes)
to Implement Evidence into
Clinical Practice
Thursday, June 2
10:30-11:20 a.m.
Douglas J. Casa, Ph.D., FACSM
*Korey Stringer Institute,
University of Connecticut*
Storrs, Connecticut



Health-Promoting Effects of a
Low-Carbohydrate Lifestyle and
its Potential to Augment Human
Performance and Resiliency
Saturday, June 4
11:15 a.m.-12:05 p.m.
Jeff Volek, Ph.D., R.D.
The Ohio State University
Columbus, Ohio



Doping's Nemesis
Saturday, June 4, 2016
11:15 a.m.-12:05 p.m.
Arne Ljungqvist, M.D., Ph.D.
International Olympic Committee
Stockholm, Sweden

Named Lectures



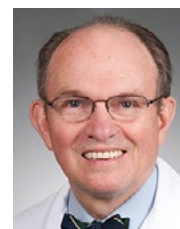
Priscilla M. Clarkson Tutorial Lecture

Optimizing Muscular Adaptations through
Nutrition: Do as I Say, Not as I Do
Wednesday, June 1
9:30-10:20 a.m.
Eric Rawson, Ph.D., FACSM
Bloomsburg University
Bloomsburg, Pennsylvania



Elsworth R. Buskirk Tutorial Lecture

Tibetan and Andean Patterns of
Adaptation to High-Altitude Hypoxia
Wednesday, June 1
9:30-10:20 a.m.
Cynthia M. Beall, Ph.D.
Case Western Reserve University
Cleveland, Ohio



John R. Sutton Clinical Lecture

Are There Clinical Cardiac
Complications from too Much Exercise?
Friday, June 3
1:00-1:50 p.m.
Paul D. Thompson, M.D., FACSM
Hartford Hospital
Hartford, Connecticut

Sponsored by:



HIGHLIGHTED SYMPOSIA

Athlete Care and Clinical Medicine

Neurocognitive Aspects of Sports Injury Risk, Prevention, and Rehabilitation

Wednesday, June 1, 9:30-11:30 a.m.

Chair: Kevin R. Vincent, FACSM
Daniel C. Herman
Charles (Buz) Swanik
Gary B. Wilkerson
Joseph Clark

Biomechanics and Neural Control of Movement

Use of Innovative Technologies and Novel Approaches for the Prevention and Management of Sport Concussion

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

Chair: Irene S. Davis, FACSM
Erik E. Swartz
Nicholas Murray
William Meehan
Kevin Guskiewicz, FACSM

Cardiovascular, Renal and Respiratory Physiology

Respiratory Limitations to Exercise: Too Young, Too Old, Too Bad?

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

Chair: J. Richard Coast, FACSM
Andrew T. Lovering
Craig A. Harms, FACSM
Yannick Molgat-Seon
Joseph W. Duke

Clinical Exercise Physiology

Who Wins: The Tortoise or the Hare in the Race for Health Benefits?

Saturday, June 4, 9:00-11:00 a.m.

Chair: Ann M. Swartz, FACSM
Genevieve N. Healy
Timothy S. Church
Ulrik Wisloff
Heather Chambliss, FACSM

Environmental and Occupational Physiology

Heat Tolerance Test: Relevance for Return to Duty, Return to Play

Saturday, June 4, 9:00-11:00 a.m.

Chair: Robert W. Kenefick, FACSM
Yoram Epstein, FACSM
Lisa R. Leon
Francis G. O'Connor, FACSM
Christina K. Cooper
Dale S. Bergquist-Turori

Epidemiology and Biostatistics

Wearables and Precision Medicine: Implications for the Sports Science Community

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

Chair: Kevin Patrick
Patty Freedson, FACSM
Job Godino
Margaret McKenna
Sarah Keadle

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

Leveling the Playing Field: Adapted Training for Individuals with Disabilities

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

Chair: Walter R. Thompson, FACSM
Nick A. Webbhorn, FACSM
Glen M. Davis, FACSM
Laurie A. Malone, FACSM
Eli A. Wolff

Immunology/Genetics/Endocrinology

Stress and Reproductive Dysfunction in Exercising Females: Neuroendocrine Mechanisms, Clinical Applications, and Why More Research is Necessary

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

Chair: Nancy I. Williams, FACSM
Judy Cameron
Sarah L. Berga
Mary Jane De Souza, FACSM

Metabolism and Nutrition

Translating Nutrigenomics and Sport Genomics into Practice – Ready for Prime Time?

Saturday, June 4, 9:00-11:00 a.m.

Chair: Stella L. Volpe, FACSM
Ahmed El-Sohemy
Nanci S. Guest
Christopher J. Womack, FACSM
David J. Bishop, FACSM

Psychology, Behavior and Neurobiology

Physical Activity, Sports or Fitness: Fighting Fatness or Finding Enjoyment? The Youth Dilemma

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

Chair: Erica M. Taylor, FACSM
Michelle Fortier
E. Whitney G. Moore
Corliss N. Bean
Angela S. Alberga

Skeletal Muscle, Bone and Connective Tissue

Controversial Exercise Applications to Disease Conditions

Saturday, June 4, 9:00-11:00 a.m.

Chair: John C. Quindry, FACSM
Joshua T. Selsby
Iraklis Pipinos
Anna Schwartz
Kenneth Wilund

Exercise is Medicine®

Physical Activity and Cancer in Children

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

Co-Chair: John P. Kirwan, FACSM
Co-Chair: Nora L. Nock
Joachim Boos
Adam J. Esbensen
Jeannie Huang

CLINICIANS

The Annual Meeting has a rich and diverse clinical program designed to provide 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 which many attendees have found to be essential for professional development.

To view the clinical programming with session date/times, click on the Clinicians link under Program at www.acsmannualmeeting.org.

Clinical Themes at the Conference Include:

- Advances in Sport Concussion
- Hot Topics
- Research and Biostatistics
- Clinical Decision Making, Injury Prevention and Return to Play
- Professional Development and Practice Management
- Physical Examination Skills
 - Spine and Core
 - Shoulder
 - Elbow, Hand Wrist
 - Hip and Pelvis
 - Knee
 - Leg
 - Foot and Ankle
- Musculoskeletal Topics
 - Spine
 - Shoulder
 - Elbow, Hand Wrist
 - Hip, Pelvis and Thigh
 - Knee
 - Leg
 - Foot and Ankle
 - Tendons, Ligaments and Cartilage
 - Bone
 - Fractures and Dislocations
 - Diagnostic Imaging
 - Special Workshop Topics
- Medical Topics
 - Recent Advances in Cardiology
 - Dermatology
 - Doping
 - Endocrine and Metabolism
 - Environmental Issues
 - Neurology
 - Nutrition and Hydration
 - Psychology
 - Renal
- Sport Specific Advances
 - Running, Endurance, and Extreme Sports
 - Dance
 - Figure Skating
 - Rugby
 - The Olympics
- Special Populations
 - Special Olympics and Disabled Athlete
 - The Pediatric Athlete
 - The Female Athlete
 - The Geriatric Athlete
- Exercise for Disease Prevention, Health Promotion, and Treatment of Chronic Conditions: World Congress on Exercise is Medicine®
- Bench to Bedside: World Congress on the Basic Science of Energy Balance



Clinical Highlights

Tuesday, May 31

My Annual Meeting 2016

6:20-7:30 p.m.

New for Clinicians: Making the most of your Annual Meeting. ACSM clinical members will be available for attendees to drop in for guidance on how to make the most out of your Annual Meeting. Members will highlight the clinical sessions and programmatic themes you are interested in as well as assisting attendees with navigating the Annual Meeting mobile app.

Wednesday, June 1

Highlighted Symposium

Neurocognitive Aspects of Sports Injury Risk, Prevention, and Rehabilitation

9:30-11:30 a.m.

Chair: Kevin R. Vincent, FACSM
Daniel C. Herman
Charles (Buz) Swanik
Gary B. Wilkerson
Joseph Clark

Thursday, June 2

Clinicians' Reception with Poster Presentations

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.

Presented by:



Friday, June 3

John R. Sutton Clinical Lecture

Are There Clinical Cardiac Complications from too Much Exercise?

1:00-1:50 p.m.

Paul D. Thompson, M.D., FACSM
Hartford Hospital
Hartford, Connecticut

WORLD CONGRESS ON THE BASIC SCIENCE OF ENERGY BALANCE: A Global Perspective on the Combined Importance of Diet and Physical Activity

This year's ACSM World Congress will focus on a comprehensive understanding of the biological and physiological mechanisms of energy balance. This comprehensive meeting with the world's leading experts will have a particular emphasis on factors that may regulate energy intake and energy expenditure, and how this may relate to chronic diseases.

Wednesday, June 1

Basic Science World Congress – Keynote

Regulation of Body Weight: Physics, Physiology and Behavior

9:30-10:20 a.m.

Claude Bouchard, FACSM

Basic Science World Congress – Keynote

Energy Balance: A Framework for Appetite Regulation

10:40-11:30 a.m.

John Blundell

Basic Science World Congress – Symposium

Do Changes in Energy Balance Contribute to the Problem of Obesity in Western Societies? An Evolutionary Perspective

1:00-3:00 p.m.

Edward L. Melanson, FACSM; David R. Bassett, FACSM; Amy Luke; Herman Pontzer

Basic Science World Congress – Symposium

Sleep, Circadian Physiology, and Body Weight Regulation

1:00-3:00 p.m.

Christopher E. Kline; Kenneth Wright, Frank Scheer

Basic Science World Congress – Symposium

Exercise and Energy Balance: Lessons Learned from the Mid-west Exercise Trial

3:15-5:15 p.m.

Joseph E. Donnelly, FACSM; Amanda N. Szabo-Reed; Erik A. Willis; Lauren T. Ptomey; Jeff J. Honas

Thursday, June 2

Basic Science World Congress – Symposium

Innovative Energy Balance Methodologies - From the Laboratory to the Community

8:00-10:00 a.m.

Edward Melanson, FACSM; James Delany; Brenda Davy, FACSM; Gregory J. Welk, FACSM

Basic Science World Congress – Symposium

Tissue Specific Considerations on Energy Balance

8:00-10:00 a.m.

Bret Goodpaster; Paul MacLean; Bradley Nindl, FACSM

Basic Science World Congress – Symposium

Influence of Sedentary Behavior on Mechanisms of Energy Balance

1:00-3:00 p.m.

Peter Katzmarzyk, FACSM; Audrey Bergouignan; Edward F. Coyle, FACSM; Il-Young Kim; Bethany Barone Gibbs

Basic Science World Congress - Tutorial Lecture

Energy Balance in Older Adults

1:00-1:50 p.m.

Todd Manini, FACSM

Basic Science World Congress - Tutorial Lecture

Influence of Sex Hormones on Metabolism and Energy Balance

2:10-3:00 p.m.

Deborah Clegg

Basic Science World Congress – Symposium

Mechanisms by Which Bariatric Surgery and Pharmacotherapy Influence Energy Balance

3:15-5:15 p.m.

Joseph A. Houmard, FACSM; John M. Jakicic, FACSM

PRECONFERENCES AND SATELLITE LECTURES

Visit www.acsmannualmeeting.org for more information regarding the preconferences and satellite lectures.

Preconferences: Tuesday, May 31

3rd ISB Symposium on Motor Control in Biomechanics

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

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

Dr. Paola Contessa, Delsys Inc. (USA)

The ISB Symposium on Motor Control in Biomechanics is a new 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 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)

Gatorade Sports Science Institute – Recovery Nutrition: An Integrated Approach

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

Presented by:



Recovery is a broad term, the definition of which varies for coaches, sports medicine staff, strength and conditioning coaches, and sports dietitians, and also depends on goals of the athlete. Various techniques and modalities are available to help promote recovery, some with more scientific backing than others. However, consideration of these modalities, particularly nutrition, often occurs in isolation. The aim of this symposium is to investigate the role of recovery nutrition as an integrated component of a holistic recovery program. The focus will be on in-season, day-to-day recovery for team sport athletes with the goal of maintaining performance throughout a competitive season.

11:30-11:35 a.m.	Welcome (James Carter Ph.D., GSSI, USA & UK)
11:35-11:50 a.m.	Introduction: Recovery Defined (Keith Baar Ph.D., UC Davis, California)
11:50 a.m.-12:30 p.m.	Recovery Modalities: From Scientific Evidence to Practical Application (Shona Halson Ph.D., Australian Institute of Sport, Australia)
12:30-1:10 p.m.	The Role of Nutrition as a Recovery Modality (Oliver Witard Ph.D., University of Stirling, UK)
1:10-1:45 p.m.	Lunch & Awards Presentation
1:45-2:25 p.m.	The Crossroads - Potential Interactions between Nutrition and Other Modalities to Optimize Recovery (David Martin Ph.D., Philadelphia 76ers, Pennsylvania)
2:25-3:25 p.m.	Discussion/Q&A (Keith Baar Ph.D., UC Davis, California)
3:25-3:30 p.m.	Wrap-Up (James Carter Ph.D., GSSI, USA & UK)

[Click here to register.](#)

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

ACSM Media Training: Delivering Your Message

1:00-3:00 p.m.

How you deliver your message is an art, science, and skill central to all in the sports medicine field. Whether approaching potential funders, advising athletes, counseling patients, or taking your message public through the media—you want to optimize your presentation. These necessary skills, enlivened in this highly interactive session, also inform potential ACSM spokespersons, and the new spokesperson program will be introduced in the preconference.

Graduate and Early Career Day

3:00-6:00 p.m. General Session and Breakout Sessions

6:00-7:00 p.m. Early Career Networking Reception

Graduate and Early Career Day is focused on the development of careers for graduate students and early career professionals. The session promotes networking and mentorship between early career members and senior investigators for scientific outreach and career building. The sessions are open to all attendees but will be specifically targeted to graduate and early career participants. The Graduate and Early Career Day requires no advance registration and attendance is free as part of your ACSM registration.

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

PINES Ten Questions, Ten Experts: Diet, Exercise and Appetite

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

Over the past decade, there has been a renewed interest in the role that exercise (intensity, duration, mode) has on subjective appetite, appetite regulatory hormones, and energy intake. The effect exercise may have on these factors may also depend on sex, level of fitness, body size and composition and age. To complicate the issue, the diet an active individual self-selects, post-exercise and typical diet (e.g. level of energy density), can also impact appetite and total energy consumed, which can ultimately impact body size. In this session, 10 experts will provide a summary of the latest research on this topic.

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

Satellite Lectures: Wednesday, June 1

AVP, The Water Sensitive Hormone That Acts as a Disease Predictor

5:30-7:00 p.m.

Chaired by Stavros Kavouras, Ph.D., FACSM

Danone Nutricia Research presents recent data on fluid intake in 15 countries and highlights clinical evidence of hydration on health.

Presented by



Session Topics and Speakers

- Fluid Intake and Vasopressin: key role for future research – Isabelle Guelinckx, Ph.D.
- Vasopressin, from regulator to disease predictor for diabetes and cardiometabolic risk – Olle Melander, Ph.D.
- Hydration and cognition: new frontier – Naiman Khan, Ph.D.
- Impact of fluid intake on glucose metabolism – Evan Johnson, Ph.D.

Please visit https://acsm.formstack.com/forms/danoneamsatellite_2016 to register.

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

Satellite Lectures: Friday, June 3

Nutrition, Exercise, & Cardiometabolic Health: New Concepts & Controversies

11:30 a.m.-1:00 p.m.

Chaired by Mitch Kanter, Ph.D.

Egg Nutrition Center's Satellite Lecture, featuring Drs. Dariush Mozaffarian and Robert Sallis, two preeminent experts in the fields of nutrition, heart disease, and exercise, will examine new evidence and current issues related to cardiometabolic diseases, and illustrate behaviors that favorably influence risk factor management.

Presented by
Egg Nutrition Center



Session Topics and Speakers

- Introductory Comments – Mitch Kanter, Ph.D.
- Dietary influences on cardiometabolic health risks – Dariush Mozaffarian, M.D., DrPH
- Physical activity and cardiometabolic health – Robert Sallis, M.D., FACSM

Luncheon items and refreshments will be served.

Please visit https://acsm.formstack.com/forms/encamsatellite_2016 to register.

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

PROGRAMMING Search categories below

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 Energy Balance

Athlete Care and Clinical Medicine

Symposium	Pre-participation Screening in Olympic and Paralympic Athletes: Why, How, and How Much	Wednesday	9:30-11:30 a.m.	Marco Bernardi, Sapienza, Università di Roma Benjamin D. Levine, FACSM, Institute for Exercise and Environmental Medicine/Texas Health Resources and UT Southwestern Medical Center William O. Roberts, FACSM, University of Minnesota Medical School Filippo M. Quattrini, Istituto di Medicine e Scienze dello Sport, CONI Paolo Emilio Adami, Istituto di Medicina e Scienza dello Sport, CONI
Clinical Workshop-Hands On Demonstration	Management of Acute Joint Dislocations and Subluxations in Sports Medicine	Wednesday	9:30-10:20 a.m.	Morteza Khodaei, FACSM, University of Colorado School of Medicine Jack Spittler, University of Colorado School of Medicine
Clinical Case Slide	Knee I	Wednesday	9:30-11:30 a.m.	
Clinical Case Slide	Medical Issues I	Wednesday	9:30-11:10 a.m.	
Clinical Case Slide	Upper Extremity- Hand/Wrist	Wednesday	9:30-11:30 a.m.	
Free Communication/Poster	Assessment of Injury Risk	Wednesday	7:30 a.m.-12:30 p.m.	
Clinical Workshop-Hands On Demonstration	Office-Based Management of Adult Fractures for the Primary Care Sports Physician	Wednesday	10:40-11:30 a.m.	Jack Spittler, University of Colorado Morteza Khodaei, FACSM, University of Colorado
Symposium	Advances in the Evaluation and Management of Tendinopathies in Athletes	Wednesday	1:00-3:00 p.m.	Michael Fredericson, FACSM, Stanford University James H-c Wang, University of Pittsburgh Adam Tenforde, Spaulding National Running Center Kentaro Onishi, University of Pittsburgh Medical Center Jacob L. Sellon, Mayo Clinic Rochester
Symposium	ACSM/AMSSM: CAQ Review Session (Part 1)	Wednesday	1:00-3:00 p.m.	Kevin R. Vincent, FACSM, University of Florida Carrie A. Jaworski, FACSM, NorthShore University Healthsystems William W. Dexter, FACSM, Maine Medical Center Jason L. Zaremski, University of Florida Ian Shrier, FACSM, McGill University, Montreal Scott A. Paluska, FACSM, Christie Clinic Sports Medicine Kathryn E. Ackerman, FACSM, Children's Hospital Boston

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Tutorial Lecture	The Return of Olympic Rugby	Wednesday	1:00-1:50 p.m.	Timothy E. Hewett, FACSM, Mayo Clinic Jeffrey M. Mjaanes, FACSM, Rush University Medical Center Jon Patricios, FACSM, Morningside Sports Medicine; Universities of Pretoria & The Witwatersrand Hamish A. Kerr, Albany Medical College
Clinical Workshop-Hands On Demonstration	Upper Extremity Examarama	Wednesday	1:00-1:50 p.m.	Mark R. Hutchinson, FACSM, University of Illinois at Chicago Melody Hrubes, University of Illinois at Chicago Matthew S. Marcus, University of Illinois at Chicago Terry Nicola, FACSM, University of Illinois at Chicago Amir El Shami, University of Illinois at Chicago
Clinical Case Slide	Knee Pain - Atypical Causes of Knee Pain: Remembering Your Differential	Wednesday	1:00-3:00 p.m.	
Clinical Case Slide	Pulmonary Issues	Wednesday	1:00-2:20 p.m.	
Clinical Case Slide	Upper Extremity - Shoulder I	Wednesday	1:00-2:40 p.m.	
Free Communication/Poster	Medical and Nutrition Issues	Wednesday	1:00-6:00 p.m.	
Tutorial Lecture	Exercise Associated Muscle Cramping (EAMC) - Risk, Causes, Diagnosis and Management	Wednesday	2:10-3:00 p.m.	Martin P. Schwellnus, FACSM, University of Pretoria
Clinical Workshop-Hands On Demonstration	Examination of the Shoulder	Wednesday	2:10-3:00 p.m.	Peter Gerbino, FACSM, Community Hospital of the Monterey Peninsula
Symposium	The Hypermobile Athlete - When Do We Worry?	Wednesday	3:15-5:15 p.m.	Peter Sedgwick, FACSM, Central Maine Sports Medicine Mark Lavalley, FACSM, WellSpan Sports Medicine/Family Medicine John Hatzenbuehler, FACSM, Intermed Health Care Elizabeth Rothe, Central Maine Sports Medicine Perry Tallman, Wellspan Rehabilitation Chris Lutzykowski, MaineGeneral Sports Medicine
Tutorial Lecture	The Pathologic Significance of Tau Deposits in the Brains of Former Athletes With a History of Multiple Concussions: Is This a Cause for Concern?	Wednesday	3:15-4:05 p.m.	Robert E. Sallis, FACSM, Kaiser Permanente Medical Center Rudolph Castellani, Western Michigan University Stryker School of Medicine Grant L. Iverson, Harvard Medical School
Clinical Case Slide	Knee II	Wednesday	3:15-5:15 p.m.	
Clinical Case Slide	Oncology I	Wednesday	3:15-5:15 p.m.	
Clinical Case Slide	Upper Extremity Issues	Wednesday	3:15-5:15 p.m.	

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Colloquium	Sun Safety in Youth Sports: It's About More than Just a Little Sunscreen!	Wednesday	4:25-5:15 p.m.	Michael F. Bergeron, FACSM, Youth Sports of the Americas Cindy J. Chang, FACSM, University of California San Francisco Elliot J. Coups, Rutgers Cancer Institute of New Jersey Frank Perna, National Cancer Institute
Tutorial Lecture	Concussion Research: Understanding the Gaps so we Can Move Forward	Wednesday	4:25-5:15 p.m.	Matthew Gammons, Vermont Orthopaedic Clinic
Tutorial Lecture	Shortness of Breath in the Athlete	Wednesday	4:25-5:15 p.m.	Andrew Getzin, FACSM, Cayuga Medical Center
Clinical Workshop-Hands On Demonstration	Lower Extremity Examarama	Wednesday	4:25-5:15 p.m.	Bill Moreau, United States Olympic Committee Terry Nicola, FACSM, University of Illinois at Chicago Mark R. Hutchinson, FACSM, University of Illinois at Chicago
Symposium	Caring for Largest Amateur Sports Organization in the World: Special Olympics	Thursday	8:00-10:00 a.m.	Peter H. Seidenberg, FACSM, Penn State University Timothy Shriver, Special Olympics International Matthew Holder, Special Olympics International Aaron Rubin, FACSM, Kaiser-Permanente
Symposium	Endurance Race Event Coverage: International Institute of Race Medicine	Thursday	8:00-10:00 a.m.	Pierre A. d'Hemecourt, FACSM, Boston Children's Hospital Martin Schwellnus, FACSM, University of Pretoria Christopher Troyanos, Boston Athletic Association William Roberts, FACSM, University of Minnesota Medical School Douglas Casa, FACSM, Korey Stringer Institute, University of Connecticut
Tutorial Lecture	Pediatric Knee Injury Mechanism, Comorbidity, Intervention, and Management	Thursday	8:00-8:50 a.m.	Benton Heyworth, Boston Children's Hospital/The Micheli Center for Sports Injury Prevention Dennis Kramer, Boston Children's Hospital/The Micheli Center for Sports Injury Prevention
Clinical Workshop-Hands On Demonstration	Dry Needling: A Technique to Release Myofascial Pain in Athletes	Thursday	8:00-8:50 a.m.	Johannes Fleckenstein, Goethe University
Clinical Case Slide	Lower Extremity - Foot and Ankle	Thursday	8:00-9:20 a.m.	
Clinical Case Slide	Neurology	Thursday	8:00-10:00 a.m.	
Clinical Case Slide	Upper Extremity - Elbow	Thursday	8:00-10:00 a.m.	
Free Communication/Poster	Rehabilitation and Therapeutic Modalities	Thursday	7:30 a.m.-12:30 p.m.	

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Exchange Lecture	American Orthopaedic Society for Sports Medicine Exchange Lecture - Anterior Cruciate Ligament Injury in Young Athletes - Current Concepts: Diagnosis, Treatment, Prevention	Thursday	9:10-10:00 a.m.	Lyle J. Micheli, FACSM, Boston Children's Hospital
Tutorial Lecture	Challenges Associated With Delivering Concussion Education Programs	Thursday	9:10-10:00 a.m.	Jeff G. Konin, FACSM, University of Rhode Island
Tutorial Lecture	A Call to Action for Clinicians: Making Physical Activity Assessment and Prescription a Medical Standard of Care	Thursday	9:10-10:00 a.m.	Robert E. Sallis, FACSM, Kaiser Permanente Medical Center Aaron L. Baggish, FACSM, Massachusetts General Hospital Jason Matuszak, Excelsior Orthopaedics
Symposium	The Healthy Dancer: Maintaining Health and Performance at all Ages	Thursday	1:00-3:00 p.m.	Lyle J. Micheli, FACSM, Boston Children's Hospital/Harvard Medical School Andrea Straccioli, FACSM, Boston Children's Hospital/Harvard Medical School Ellen Geminiani, Boston Children's Hospital/Harvard Medical School Bridget Quinn, Boston Children's Hospital/Harvard Medical School Ruth Solomon, UC Santa Cruz
Colloquium	The Youth Sports Machine: Destructive Juggernaut or Vehicle for Success (Athletic, Academic, Career)?	Thursday	1:00-1:50 p.m.	James MacDonald, FACSM, Nationwide Children's Hospital
Tutorial Lecture	Concussion Management in Diverse Populations	Thursday	1:00-1:50 p.m.	Tamerah Nicole Hunt, FACSM, Georgia Southern University Stan A. Herring, FACSM, University of Washington
Clinical Workshop-Hands On Demonstration	Examination of the Foot and Ankle	Thursday	1:00-1:50 p.m.	Stephen M. Simons, FACSM, Saint Joseph Regional Medical Center
Clinical Case Slide	Cardiovascular Issues I	Thursday	1:00-2:40 p.m.	
Clinical Case Slide	Lower Extremity Issues I	Thursday	1:00-2:40 p.m.	
Clinical Case Slide	Spine I	Thursday	1:00-2:40 p.m.	
Free Communication/Poster	Age, Gender, and Special Populations	Thursday	1:00-6:00 p.m.	
Free Communication/Poster	Concussion I	Thursday	1:00-6:00 p.m.	
Free Communication/Poster	Concussion II	Thursday	1:00-6:00 p.m.	
Exchange Lecture	American Academy of Pediatrics Exchange Lecture - Generalist or Specialist: Helping Young Athletes Choose	Thursday	2:10-3:00 p.m.	Michele LaBotz, InterMed
Tutorial Lecture	Post-concussive Headache: What a Pain in the Neck!	Thursday	2:10-3:00 p.m.	Matthew Maxwell, MedStar National Rehabilitation Network Eric R. Helm, University Of Pittsburgh Medical Center

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Clinical Workshop-Hands On Demonstration	Examination of the Knee	Thursday	2:10-3:00 p.m.	Robert J. Johnson, FACSM, University of Minnesota
Symposium	On Pace with the World: The Scientific, Medical, and Social History of the Boston Marathon	Thursday	3:15-5:15 p.m.	Lawrence E. Armstrong, FACSM, University of Connecticut Sandra J. Hoffmann, FACSM, Idaho State University Arne Ljungqvist, International Olympic Committee Amby Burfoot, Runner's World Martin Peter Schwellnus, FACSM, University of Pretoria Pierre d'Hemecourt, FACSM, Children's Hospital of Boston, Harvard University Aaron L. Baggish, FACSM, Massachusetts General Hospital Christopher Troyanos, Sports Medicine Consultants K. Sophia Dyer, Boston University Medical Center Bill Rodgers, Marathon Athlete Kathrin Switzer, Marathon Athlete
Tutorial Lecture	Challenging Return to Play Cases: Heat Stroke, Rhabdomyolysis and Sick Cell Trait	Thursday	3:15-4:05 p.m.	Francis O'Connor, FACSM, USUHS
Clinical Workshop-Hands On Demonstration	Approach to the Injured Dancer: A Hands-on Workshop	Thursday	3:15-4:05 p.m.	Carrie A. Jaworski, FACSM, NorthShore University HealthSystem Andrea Straccioli, FACSM, Boston Children's Hospital Clay D. Miller, Sports Medicine North
Thematic Poster	Concussion Research and Policy	Thursday	3:15-5:15 p.m.	
Clinical Case Slide	Lower Extremity Issues II	Thursday	3:15-4:55 p.m.	
Clinical Case Slide	Oncology II	Thursday	3:15-4:35 p.m.	
Clinical Case Slide	Spine II	Thursday	3:15-4:35 p.m.	
Exchange Lecture	National Athletic Trainers' Association Foundation Exchange Lecture - Purposeful Heading in Soccer - Will these Subconcussive Blows to the Head Spell Doom for this Soccer Skill?	Thursday	4:25-5:15 p.m.	Thomas W. Kaminski, FACSM, University of Delaware
Tutorial Lecture	Pearls on Pain Generators in Sports Medicine	Friday	9:30-10:20 a.m.	Kevin R. Vincent, FACSM, University of Florida Daniel C. Herman, University of Florida Jason L. Zaremski, University of Florida
Tutorial Lecture	Team Physician Consensus Conference Update - Psychological Issues in Athletes and the Team Physician	Friday	9:30-10:20 a.m.	Stanley A. Herring, FACSM, University of Washington
Tutorial Lecture	Update on Urinary Incontinence in the Female Athlete	Friday	9:30-10:20 a.m.	Susan D. Carter, FACSM, Banner Health, University of Northern Colorado, University of Colorado

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Clinical Workshop-Hands On Demonstration	Challenging Hip and Pelvis Cases	Friday	9:30-10:20 a.m.	Peter H. Seidenberg, FACSM, Penn State University Jimmy D. Bowen, Southeast Missouri State University
Clinical Case Slide	Cardiovascular Issues II	Friday	9:30-10:50 a.m.	
Clinical Case Slide	Head and Neck I	Friday	9:30-11:30 a.m.	
Clinical Case Slide	Lower Extremity - Hip/Pelvis	Friday	9:30-11:10 a.m.	
Exchange Lecture	American Medical Society for Sports Medicine Exchange Lecture - Righting the Gyroscope with Vision Therapy: An Approach to Post-Concussion Syndrome	Friday	10:40-11:30 a.m.	Jon Divine, FACSM, University of Cincinnati Athletics
Tutorial Lecture	Myofascial Pain Disorders in Sports Medicine	Friday	10:40-11:30 a.m.	Johannes Fleckenstein, Goethe University
Tutorial Lecture	Transgender Athletes: Can There be a Level Playing Field?	Friday	10:40-11:30 a.m.	Jonathan C. Reeser, FACSM, Marshfield Clinic William Briner, FACSM, Hospital for Special Surgery Myron Genel, Yale Child Health Research Center
Clinical Workshop-Hands On Demonstration	Ultrasound of the Hip	Friday	10:40-11:30 a.m.	Pierre d'Hemecourt, FACSM, Children's Hospital of Boston, Harvard University
John R. Sutton Clinical Lecture	Are There Clinical Cardiac Complications from too Much Exercise?	Friday	1:00-1:50 p.m.	Paul D. Thompson, FACSM, Hartford Hospital
Tutorial Lecture	Novel Approaches to Chronic Exertional Leg Pain - From Training Room to Battlefield	Friday	2:10-3:00 p.m.	Peter H. Seidenberg, FACSM, Penn State University Franklyn Miller, Sports Surgery Clinic Francis G. O'Connor, FACSM, Uniformed Service University of Health Sciences
Tutorial Lecture	Sexual Harassment and Abuse in Sport	Friday	2:10-3:00 p.m.	Margo L. Mountjoy, FACSM, FINA Sports Medicine Committee
Tutorial Lecture	Standing at the Cross Roads: Implementing Preparticipation Cardiovascular Screening	Friday	2:10-3:00 p.m.	Aaron L. Baggish, FACSM, Cardiovascular Performance Program, Massachusetts General Hospital
Clinical Workshop-Hands On Demonstration	Basics of Reading MRIs of the Lumbar Spine	Friday	2:10-3:00 p.m.	Joseph Ihm, FACSM, Rehabilitation Institute of Chicago
Clinical Workshop-Hands On Demonstration	Symposium for the Treatment of Endurance Athletes	Friday	2:10-3:00 p.m.	Timothy L. Miller, Ohio State Endurance Medicine Team Kendra McCamey, The Ohio State University, Endurance Medicine Team

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Symposium	ACSM/AMSSM: CAQ Review Session (Part 2)	Friday	3:15-5:15 p.m.	William W. Dexter, FACSM, Maine Medical Center Kevin R. Vincent, FACSM, University of Florida Peter H. Seidenberg, FACSM, Penn State University Garrett S. Hyman, FACSM, Lake Washington Sports & Spine Heather Gillespie, FACSM, Maine Medical Partners Orthopedics and Sports Medicine John T. Devlin, Mercy Hospital
Symposium	Let Her Play! Sports Medicine Updates for the Female Olympic and Paralympic Athlete	Friday	3:15-5:15 p.m.	Walter R. Thompson, FACSM, International Paralympic Committee Connie Lebrun, FACSM, University of Alberta Cheri Blauwet, Spaulding Rehabilitation Hospital/Brigham and Women's Hospital, Harvard Medical School Leslie Morse, Brigham and Women's Hospital Elizabeth Broad, United States Olympic Committee Marjorie A. Snyder, Women's Sports Foundation
Symposium	Protecting the Heart of the American Athlete: State by State (or One State at a Time)	Friday	3:15-5:15 p.m.	Christine E. Lawless, FACSM, Sports Cardiology Consultants Rudy R. Navarro, University of Texas Health Science Center at San Antonio Stephen G. Rice, FACSM, Jersey Shore University Medical Center William O. Roberts, FACSM, University of Minnesota Medical School
Clinical Workshop-Hands On Demonstration	Reviving the Sick Sesamoid	Friday	3:15-4:05 p.m.	Jeffrey A. Ross, FACSM, Baylor College of Medicine
Clinical Workshop-Hands On Demonstration	US vs MRI: Imaging Challenges in the Upper Extremity	Friday	3:15-4:05 p.m.	Dustin Nabhan, United States Olympic Committee Michael Bresler, University of Illinois at Chicago
Clinical Case Slide	Cardiovascular Issues III	Friday	3:15-4:55 p.m.	
Clinical Case Slide	Head and Neck II	Friday	3:15-5:15 p.m.	
Clinical Case Slide	Medical Issues II	Friday	3:15-5:15 p.m.	
Clinical Case Slide	Upper Extremity- Shoulder II	Friday	3:15-5:15 p.m.	
Clinical Workshop-Hands On Demonstration	Approach to Skin Infections in Athletes	Friday	4:25-5:15 p.m.	Brian Adams, University of Cincinnati

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Clinical Workshop-Hands On Demonstration	Examination of the SI Joint	Friday	4:25-5:15 p.m.	Kelly Lynne Roberts Lane, FACSM, Fix It Physical Therapy Jim Macintyre, FACSM, Center for Orthopedic and Rehabilitation Excellence
Tutorial Lecture	Lumbosacral Radiculopathy in the Athlete	Saturday	8:00-8:50 a.m.	Monica Rho, Rehabilitation Institute of Chicago Ellen Casey, University of Pennsylvania
Tutorial Lecture	Movement on 4 mm: The Art and Science of Figure Skating	Saturday	8:00-8:50 a.m.	Sherrie L. Ballantine-Talmadge, CU Sports Medicine and Performance Center Ellen Geminiani, Boston Children's Hospital
Clinical Workshop-Hands On Demonstration	Electrodiagnostics for the Sports Medicine Physician	Saturday	8:00-8:50 a.m.	Cindy Lin, University of Washington Medical Center Dorothy Weiss Tolchin, Spaulding Rehabilitation Hospital/Harvard Medical School
Symposium	Team Tactics in Sports Medicine to Optimize Athlete Performance	Saturday	9:00-11:00 a.m.	Robert J. Butler, Duke University Jon Torine, EXOS Nik Wald, Portland Timbers FC
Symposium	The Adolescent Throwing Elbow: Prevention of Injury and New Areas of Research	Saturday	9:00-11:00 a.m.	Jason L. Zaremski, University of Florida Neeru Jayanthi, Loyola University Health System Daryl C. Osbahr, Orlando Health
Symposium	Clinical Research	Saturday	9:00-11:00 a.m.	M. Alison Brooks, University of Wisconsin
Clinical Workshop-Hands On Demonstration	Physical Exam of the Cervical and Lumbar Spine	Saturday	9:00-9:50 a.m.	Joseph Ihm, FACSM, Rehabilitation Institute of Chicago Gary Chimes, Lake Washington Sports & Spine
Free Communication/Slide	Emerging Concepts on the Assessment and Treatment of Athletes	Saturday	9:00-11:00 a.m.	
Clinical Workshop-Hands On Demonstration	Got your Back: Hands on Application of Spine Hinge Theory	Saturday	10:10-11:00 a.m.	Holly J. Benjamin, FACSM, University of Chicago Gina Pongetti Angeletti, Achieve Orthopedic Physical Therapy Sports Medicine

Biomechanics and Neural Control of Movement

Tutorial Lecture	New Frontiers in Musculoskeletal Research: Neurophysiological Testing in Sports Medicine	Wednesday	9:30-10:20 a.m.	Adam S. Lepley, University of Connecticut Alan R. Needle, Appalachian State University Dustin Grooms, Ohio University
Thematic Poster	Running Footwear: Less or More?	Wednesday	9:30-11:30 a.m.	
Free Communication/Slide	Soccer Anyone?	Wednesday	9:30-11:30 a.m.	
Free Communication/Poster	Posture/Balance	Wednesday	7:30 a.m.-12:30 p.m.	

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Free Communication/ Poster	Sports I- Lower Extremity	Wednesday	1:00-6:00 p.m.	
Thematic Poster	ACL	Wednesday	3:15-5:15 p.m.	
Thematic Poster	Fatigue	Thursday	8:00-10:00 a.m.	
Free Communication/ Poster	Movement Disorders	Thursday	7:30 a.m.-12:30 p.m.	
Free Communication/ Poster	Neuromuscular Control	Thursday	7:30 a.m.-12:30 p.m.	
Tutorial Lecture	Insights on Sports Injury and Prevention from Musculoskeletal Simulation	Thursday	1:00-1:50 p.m.	James H. Buffi, Los Angeles Dodgers Brian R. Umberger, University of Massachusetts Ajit MW Chaudhari, FACSM, The Ohio State University
Free Communication/ Slide	Loading and Unloading	Thursday	1:00-3:00 p.m.	
Free Communication/ Poster	Running Stride Mechanics	Thursday	1:00-6:00 p.m.	
Free Communication/ Poster	Sports II: Upper Extremity	Thursday	1:00-6:00 p.m.	
Thematic Poster	IMU's - More than Step Counters	Thursday	3:15-5:15 p.m.	
Clinical Workshop- Hands On Demonstration	An Evidence Based Approach to Determining Pointe (Toe) Shoe Readiness for Dancers	Thursday	4:25-5:15 p.m.	Marijeanne Liederbach, Harkness Center for Dance Injuries, NYU Langone Medical Center Hospital for Joint Diseases
Free Communication/ Poster	Foot and Ankle Mechanics	Friday	7:30 a.m.-12:30 p.m.	
Free Communication/ Poster	Hop, Skip, Jump	Friday	7:30 a.m.-12:30 p.m.	
Free Communication/ Poster	Technology in Biomechanics	Friday	7:30 a.m.-12:30 p.m.	
Symposium	Minimal Footwear Running: What does the Evidence Tell Us?	Friday	1:00-3:00 p.m.	Irene S. Davis, FACSM, Harvard Medical School Jason Bonacci, Deakin University Sarah T. Ridge, Brigham Young University Joseph P. Warne, Institute of Technology
Free Communication/ Slide	Brain Power	Friday	1:00-3:00 p.m.	
Free Communication/ Poster	Aging Gracefully	Friday	1:00-6:00 p.m.	
Free Communication/ Poster	Knee Mechanics	Friday	1:00-6:00 p.m.	
Thematic Poster	EMG	Friday	3:15-5:15 p.m.	
Symposium	Joint Loading In and Outside the Gait Lab as a Risk Factor for Knee Osteoarthritis	Saturday	9:00-11:00 a.m.	Ross H. Miller, University of Maryland Paul DeVita, FACSM, East Carolina University David T. Felson, Boston University School of Medicine Monica R. Maly, McMaster University

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Thematic Poster	Does Symmetry Matter?	Saturday	9:00–11:00 a.m.	
Free Communication/Poster	Running Mechanics	Saturday	7:30–11:00 a.m.	

Cardiovascular, Renal and Respiratory Physiology

Thematic Poster	VO₂ Kinetics	Wednesday	9:30–11:30 a.m.	
Free Communication/Poster	Cardiac	Wednesday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Exercise Physiology and Cancer	Wednesday	1:00–6:00 p.m.	
Free Communication/Poster	Cardiovascular I	Wednesday	1:00–6:00 p.m.	
Tutorial Lecture	Exercise-induced Autophagy: Metabolic Implications in Cardiac and Skeletal Muscle	Wednesday	3:15–4:05 p.m.	Vitor A. Lira, University of Iowa
Thematic Poster	Cardiovascular I	Wednesday	3:15–5:15 p.m.	
Free Communication/Poster	Cardiovascular II	Thursday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Respiratory	Thursday	7:30 a.m.–12:30 p.m.	
Tutorial Lecture	Stem Cells, Cardiomyogenesis and Aerobic Exercise Training	Thursday	9:10–10:00 a.m.	Joseph R. Libonati, University of Pennsylvania
Thematic Poster	Cardiac	Thursday	1:00–3:00 p.m.	
Free Communication/Poster	Renal	Thursday	1:00–6:00 p.m.	
Tutorial Lecture	Physiological Geroscience: Targeting Function to Increase Healthspan	Thursday	2:10–3:00 p.m.	Douglas R. Seals, University of Colorado Boulder
Symposium	Retraining the Vasculature for Cardio-metabolic Health after Spinal Cord Injury	Friday	9:30–11:30 a.m.	Kevin K. McCully, FACSM, University of Georgia David R. Dolbow, University of Southern Mississippi Lee Stoner, Massey University Daniel P. Credeur, University of Southern Mississippi Ashraf S. Gorgey, FACSM, Hunter Holmes McGuire VA Hospital
Free Communication/Slide	Cardiorespiratory Physiology	Friday	9:30–11:30 a.m.	
Free Communication/Poster	Cellular/Molecular	Friday	7:30 a.m.–12:30 p.m.	
Tutorial Lecture	Exercise in Renal Disease: Physiological Foundations to Exercise Prescription	Friday	1:00–1:50 p.m.	Danielle Kirkman, University of Delaware
Thematic Poster	Cardiovascular II	Friday	1:00–3:00 p.m.	
Free Communication/Poster	Clinical Cardiorespiratory	Friday	1:00–6:00 p.m.	
Tutorial Lecture	Exercise-induced Asthma in the Elite Athlete: Diagnosis, Management, Performance	Saturday	8:00–8:50 a.m.	Donald C. McKenzie, University of British Columbia
Free Communication/Poster	Cardiovascular III	Saturday	7:30–11:00 a.m.	

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Clinical Exercise Physiology

Free Communication/Poster	Exercise and Cardiovascular Disease	Wednesday	1:00–6:00 p.m.	
Free Communication/Poster	Pulmonary Disease - Exercise	Wednesday	1:00–6:00 p.m.	
Symposium	Back to Basics: Applying Training Principles for Effective Exercise Prescription in Cancer Patients	Wednesday	3:15–5:15 p.m.	Kristin Campbell, University of British Columbia Amy Kirkham, University of Alberta Joachim Wiskemann, National Center for Tumor Diseases Prue Cormie, Australian Catholic University Kathryn Schmitz, FACSM, University of Pennsylvania
Thematic Poster	Exercise Therapy in Cancer	Thursday	8:00–10:00 a.m.	
Free Communication/Poster	Body Composition	Thursday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Obesity - Exercise	Thursday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Diabetes - Exercise	Thursday	1:00–6:00 p.m.	
Free Communication/Slide	Exercise Training in Chronic Disease	Thursday	3:15–5:15 p.m.	
Thematic Poster	Cardiovascular Disease - Exercise Rehabilitation	Friday	9:30–11:30 a.m.	
Free Communication/Poster	Aerobic Capacity Testing	Friday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Disease - Disability - Exercise	Friday	7:30 a.m.–12:30 p.m.	
Symposium	Physical Activity and Exercise for Individuals with Type 1 Diabetes	Friday	1:00–3:00 p.m.	David M. Pober, Joslin Diabetes Center Stephanie D'Eon, Joslin Diabetes Center Jeffrey J. Richard, Joslin Diabetes Center Rafael Castol, Novo Nordisk Hillary A. Keenan, Joslin Diabetes Center
Free Communication/Poster	Cancer - Exercise	Friday	1:00–6:00 p.m.	
Free Communication/Poster	Children - Exercise	Saturday	7:30–11:00 a.m.	

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Environmental and Occupational Physiology

Tutorial Lecture	Thermal Afferent Feedback and Sensation, from TRP Channels to Comfort, Fatigue and Performance	Wednesday	10:40-11:30 a.m.	George Havenith, FACSM, Loughborough University Davide Filingeri, University of California Alex Lloyd, Loughborough University
Thematic Poster	Rehydration/Hydration Assessment	Wednesday	1:00-3:00 p.m.	
Free Communication/Slide	Thermoregulatory Sweating	Wednesday	1:00-2:45 p.m.	
Free Communication/Poster	Military Physiology	Wednesday	1:00-6:00 p.m.	
Thematic Poster	Altitude/Hypoxia	Wednesday	3:15-5:15 p.m.	
Thematic Poster	Military Physiology	Thursday	1:00-3:00 p.m.	
Free Communication/Poster	Heat/Cold Exposure	Thursday	1:00-6:00 p.m.	
Free Communication/Poster	Hydration	Thursday	1:00-6:00 p.m.	
Free Communication/Poster	Hypoxia/Altitude/Dive/Space Physiology	Thursday	1:00-6:00 p.m.	
Free Communication/Poster	Occupational/Firefighting Physiology	Thursday	1:00-6:00 p.m.	
Thematic Poster	Firefighting	Thursday	3:15-5:15 p.m.	
Symposium	Heat Stress and the Aged Cardiovascular System	Friday	9:30-11:30 a.m.	W. Larry Kenney, FACSM, Pennsylvania State University Christopher T. Minson, FACSM, University of Oregon Lacy M. Alexander, FACSM, Pennsylvania State University Jody Greaney, Pennsylvania State University Daniel Gagnon, Institute for Exercise and Environmental Medicine
Thematic Poster	Thermoregulation and Heat Stress	Friday	1:00-3:00 p.m.	
Symposium	70-Day Bed Rest Simulation of the Next Generation Exercise Protocol for Spaceflight	Friday	3:15-5:15 p.m.	Scott Trappe, FACSM, Human Performance Laboratory Lori Ploutz-Snyder, FACSM, NASA - Universities Space Research Association Todd Trappe, FACSM, Human Performance Laboratory Jessica Scott, NASA - Universities Space Research Association Melinda Sheffield-Moore, University of Texas Medical Branch

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Epidemiology and Biostatistics

Thematic Poster	Advancing Physical Activity Assessment Methods - Part I	Wednesday	9:30-11:30 a.m.	
Thematic Poster	Sleep	Wednesday	9:30-11:30 a.m.	
Symposium	Breast Tissue: A Novel Biomarker for Breast Cancer Prevention and Survivorship Research	Wednesday	1:00-3:00 p.m.	Kristin L. Campbell, University of British Columbia Kathryn Schmitz, FACSM, University of Pennsylvania Melinda Irwin, FACSM, Yale Jennifer Ligibel, Dana Faber/Harvard Cancer Centre
Thematic Poster	Health Disparities/Equity	Wednesday	1:00-3:00 p.m.	
Free Communication/Poster	Epidemiology of Physical Activity and Health in Adults	Wednesday	1:00-6:00 p.m.	
Free Communication/Poster	Epidemiology of Physical Activity and Health in Youth	Wednesday	1:00-6:00 p.m.	
Free Communication/Slide	Advancing Physical Activity Assessment Methods - Part I	Wednesday	3:15-5:15 p.m.	
Thematic Poster	Advancing Physical Activity Assessment Methods - Part II	Thursday	8:00-10:00 a.m.	
Thematic Poster	Physical Activity in Persons with Disabilities	Thursday	1:00-3:00 p.m.	
Free Communication/Poster	Epidemiology of Physical Activity and Health in Older Adults	Thursday	1:00-6:00 p.m.	
Free Communication/Poster	Physical Activity in Older Adults	Thursday	1:00-6:00 p.m.	
Symposium	Individual Response to Regular Exercise: Extent, Implications and Study Designs	Thursday	3:15-5:15 p.m.	Claude Bouchard, FACSM, Pennington Biomedical Research Center, Human Genomics Laboratory Steven N. Blair, FACSM, University of South Carolina Robert Ross, FACSM, Queen's University, School of Kinesiology and Health Studies Tuomo Rankinen, FACSM, Pennington Biomedical Research Center, Human Genomics Laboratory Tim Meyer, FACSM, Saarland University, Institute of Sports and Preventive Medicine Anne Hecksteden, Saarland University, Institute of Sports and Preventive Medicine
Free Communication/Poster	Physical Activity in Adults	Friday	7:30 a.m.-12:30 p.m.	
Free Communication/Poster	Population Based Surveillance	Friday	7:30 a.m.-12:30 p.m.	
Free Communication/Poster	Research Methodology	Friday	7:30 a.m.-12:30 p.m.	
Tutorial Lecture	CDC/ACSM Roundtable on Physical Activity Surveillance: A Strategic Roadmap	Friday	1:00-1:50 p.m.	Susan A. Carlson, CDC Janet E. Fulton, FACSM, CDC

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Free Communication/Slide	Advancing Physical Activity Assessment Methods - Part II	Friday	1:00-3:00 p.m.	
Free Communication/Poster	Dance	Friday	1:00-6:00 p.m.	
Free Communication/Poster	Injury Epidemiology	Friday	1:00-6:00 p.m.	
Free Communication/Poster	Pregnancy	Friday	1:00-6:00 p.m.	
Colloquium	A Hands on with Sports Injury Research Methods	Friday	3:15-4:05 p.m.	Ian Shrier, FACSM, Centre for Clinical Epidemiology, Lady Davis Institute, Jewish General Hospital Steven Stovitz, FACSM, Department of Family Medicine and Community Health, University of Minnesota
Tutorial Lecture	Should Physical Activity Guidelines be the Same for Boys and Girls?	Friday	4:25-5:15 p.m.	John M. Schuna Jr., Oregon State University Tiago V. Barreira, Syracuse University
Free Communication/Poster	Physical Activity in Youth	Saturday	7:30-11:00 a.m.	

Exercise is Medicine®

Exercise is Medicine® - Symposium	Approaches to Integrating Physical Activity Training into Medical School Settings	Tuesday	1:00-3:00 p.m.	Mark Stoutenberg, University of Miami Jennifer Trilk, University of South Carolina Greenville John Duperly, Universidad de los Andes Ben Tan, Changi General Hospital Hamish Osborne, University of Otago
Exercise is Medicine® - Symposium	Resistance Training: Role in Prevention and Treatment of Chronic Disease I	Tuesday	1:00-3:00 p.m.	Maria A. Fiatarone Singh, University of Sydney Prue Cormie, Australian Catholic University Belinda Parmenter, University of New South Wales Bobby Cheema, University of Western Sydney
Exercise is Medicine® - Tutorial Lecture	Diabetes Prevention: Program Implementation and Outcomes in a Healthcare System	Tuesday	1:00-1:50 p.m.	Elizabeth A. Joy, FACSM, Intermountain Healthcare
Exercise is Medicine® - Tutorial Lecture	Doc, am I Clear to Exercise? Translating the New ACSM Exercise Screening Guidelines	Tuesday	2:10-3:00 p.m.	Barry Franklin, FACSM, Department of Preventive Cardiology, Beaumont Health Center Felipe Lobelo, Emory University

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Exercise is Medicine® - Symposium	Exercise Deficit Disorder in Children (EDD)	Tuesday	3:15-5:15 p.m.	Lyle J. Micheli, FACSM, Boston Children's Hospital/Harvard Medical School Avery D. Faigenbaum, FACSM, The College of New Jersey Andrea Straccioli, FACSM, Boston Children's Hospital/Harvard Medical School Gregory D. Myer, FACSM, Cincinnati Children's Hospital Medical Center
Exercise is Medicine® - Symposium	Resistance Training: Role in Prevention and Treatment of Chronic Disease II	Tuesday	3:15-5:15 p.m.	Maria A. Fiatarone Singh, University of Sydney Michael Baker, Australian Catholic University Yorgi Mavros, University of Sydney Guy Wilson, University of Sydney
Exercise is Medicine® - Tutorial Lecture	Integrating Exercise Data into Electronic Medical Records: Advancements in Oncology	Tuesday	3:15-4:05 p.m.	Stacy Cutrono, University of Miami Daniel Santa Mina, University of Guelph-Humber
Exercise is Medicine® - Tutorial Lecture	Methods for Evaluating Effectiveness of Promoting Physical Activity in Healthcare	Tuesday	4:25-5:15 p.m.	Trever J. Ball, Intermountain Healthcare
Exercise is Medicine® - Symposium	Exercise and Cancer: Novel Insights from Whole Body Cardiovascular Effects Through the Tumor Microenvironment	Wednesday	9:30-11:30 a.m.	Brad Behnke, FACSM, Kansas State University Jessica Scott, NASA Johnson Space Center Lee Jones, Memorial Sloan Kettering Cancer Center Dietmar Siemann, University of Florida Health Cancer Center
Exercise is Medicine® - Symposium	Helping Our Kids Move: Current Approaches and Obstacles	Wednesday	9:30-11:30 a.m.	Carrie A. Jaworski, FACSM, NorthShore University HealthSystem Tom Farrey, Aspen Institute Project Play Felipe Lobelo, EIM Gregory J. Welk, FACSM, Iowa State University
Exercise is Medicine® - Symposium	Optimal Dose of Running for Health - Is More Better or Worse?	Wednesday	9:30-11:30 a.m.	Steven N. Blair, FACSM, University of South Carolina Paul T. Williams, Lawrence Berkeley National Laboratory Duck-chul Lee, Iowa State University Carl J. Lavie, John Ochsner Heart and Vascular Institute
Exercise is Medicine® - Tutorial Lecture	Reduced Walking Speed and Distance as Harbingers of the Approaching Grim Reaper	Wednesday	9:30-10:20 a.m.	Barry A. Franklin, FACSM, Beaumont Hospital
Exercise is Medicine® - Poster	Exercise Across the Life Span and General Aspects	Wednesday	7:30 a.m.-12:30 p.m.	
Exercise is Medicine® - Poster	Exercise and the Cardiovascular, Respiratory and Bone Systems	Wednesday	7:30 a.m.-12:30 p.m.	
Exercise is Medicine® - Poster	Exercise and Metabolic Factors	Wednesday	7:30 a.m.-12:30 p.m.	

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Exercise is Medicine® - Poster	EIM in Clinical Practice, Universities and Communities	Wednesday	7:30 a.m.-12:30 p.m.	
Exercise is Medicine® - Tutorial Lecture	The Newly Approved NIH Common Fund Physical Activity Research Initiative	Wednesday	10:40-11:30 a.m.	Maren R. Laughlin, NIDDK-NIH
Exercise is Medicine® - Colloquium	ACSM/Society of Behavioral Medicine Co-Sponsored Colloquium: Exercise is Medicine Models for Integrating Behavioral Strategies	Wednesday	1:00-1:50 p.m.	Matthew P. Buman, FACSM, Arizona State University Michael G. Goldstein, U.S. Veterans Health Administration, National Center for Health Promotion and Disease Prevention Robert Scales, Mayo Clinic Arizona Melissa Napolitano, The George Washington University
Exercise is Medicine® - Tutorial Lecture	EIM Evaluation: Adapting the RE-AIM Framework	Wednesday	1:00-1:50 p.m.	Paul Estabrooks, University of Nebraska
Exercise is Medicine® - Colloquium	Linking Patients to Community Resources: The Role of Physical Activity Referral Scheme	Wednesday	2:10-3:00 p.m.	Mark Stoutenberg, University of Miami Anita Hobson-Powell, Exercise & Sport Science Australia (ESSA) Jennifer Carroll, University of Colorado
Exercise is Medicine® - Tutorial Lecture	Exercise is Medicine for Individuals with Physical Disabilities	Wednesday	2:10-3:00 p.m.	Jennifer Lee Trilk, University of South Carolina School of Medicine Ann Kennedy, University of South Carolina School of Medicine
Exercise is Medicine® - Symposium	Exercise is Medicine® for Mental Illness: Implementation of Evidence-Based Approaches	Wednesday	3:15-5:15 p.m.	Philip B. Ward, University of New South Wales Felipe B. Schuch, Universidade Federal do Rio Grande do Sul Sarah McEwen, UCLA Department of Psychiatry and Biobehavioral Sciences Ahmed J. Romain, Research Center of the University Hospital of Montreal Simon Rosenbaum, University of New South Wales
Exercise is Medicine® - Symposium	Implementation Science: A Key to Dissemination of Exercise is Medicine® in Underserved Populations	Wednesday	3:15-5:15 p.m.	Margaret (Molly) B. Conroy, FACSM, University of Pittsburgh Russell R. Pate, FACSM, University of South Carolina Felipe Lobelo, Emory University Eduardo Bustamante, Medical College of Georgia NiCole Keith, FACSM, Indiana University - IUPUI
Exercise is Medicine® - Tutorial Lecture	Moving Kids to Learn: Adding Recess and Running to the 3 R's	Wednesday	3:15-4:05 p.m.	Elizabeth A. Joy, FACSM, Intermountain Healthcare
Exercise is Medicine® - Clinical Workshop-Hands On Demonstration	Exercise Physiology in 50 Minutes	Wednesday	3:15-4:05 p.m.	Edward T. Howley, FACSM, University of Tennessee Carl Foster, FACSM, University of Wisconsin-La Crosse

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Exercise is Medicine® - Colloquium	Using Exercise in the Treatment of Eating Disorders	Wednesday	3:15-4:05 p.m.	Solfrid Bratland-Sanda, Telemark University College Therese F. Mathisen, Norwegian School of Sport Sciences Kjersti Karoline Danielsen, The Norwegian School of Sport Sciences Jorunn Sundgot-Borgen, FACSM, Norwegian School of Sport Sciences
Exercise is Medicine® - Colloquium	The Exercise Vital Sign: An Overview of the Kaiser Permanente Experience	Wednesday	4:25-5:15 p.m.	Robert E. Sallis, FACSM, Kaiser Permanente Medical Center Karen J. Coleman, Kaiser Permanente Deborah R. Young, FACSM, Kaiser Permanente Southern California
Exercise is Medicine® - Symposium	Taking the 'Pulse' of Kids' Exercise Patterns: Guidance for Implementing a Physical Activity Vital Sign for Pediatric Populations	Thursday	8:00-10:00 a.m.	Felipe Lobelo, Emory University James P. MacDonald, FACSM, Nationwide Children's Hospital Amy Valasek, Nationwide Children's Hospital Deborah R. Young, FACSM, Kaiser Permanente Southern California
Exercise is Medicine® - Symposium	The Disability and Physical Inactivity Conundrum - Does EIM Apply to All?	Thursday	8:00-10:00 a.m.	Cheri Blauwet, Spaulding Rehabilitation Hospital/Brigham and Women's Hospital, Harvard Medical School Dianna Carroll, Centers for Disease Control and Prevention Wayne E. Derman, Institute of Sport and Exercise Medicine, Stellenbosch University Seanna Kringen, Beneficial Designs, Inc. Amy E. Rauworth, Lakeshore Foundation
Exercise is Medicine® - Tutorial Lecture	ACSM/ACC Joint Session - Exercise is Medicine®: What's New, What's Debated, and What You Should Do	Thursday	8:00-8:50 a.m.	Carol Ewing Garber, FACSM, Columbia University Merle Myerson, Columbia University Silvana Molossi, Baylor College of Medicine
Exercise is Medicine® - Poster	Exercise and Various Health States	Thursday	7:30 a.m.-12:30 p.m.	

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

Free Communication/Poster	Aging	Wednesday	7:30 a.m.-12:30 p.m.	
Free Communication/Poster	Fitness Assessment	Wednesday	7:30 a.m.-12:30 p.m.	
Free Communication/Poster	Youth Sports	Wednesday	7:30 a.m.-12:30 p.m.	
Thematic Poster	HIIT	Wednesday	1:00-3:00 p.m.	
Free Communication/Slide	Running	Wednesday	1:00-3:00 p.m.	

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Free Communication/ Poster	Perception	Wednesday	1:00–6:00 p.m.	
Free Communication/ Poster	Training Assessment - Cardiovascular	Wednesday	1:00–6:00 p.m.	
Thematic Poster	Running	Thursday	8:00–10:00 a.m.	
Free Communication/ Slide	Special Populations	Thursday	8:00–10:00 a.m.	
Free Communication/ Poster	Hockey	Thursday	7:30 a.m.–12:30 p.m.	
Free Communication/ Poster	Predictive Modeling	Thursday	7:30 a.m.–12:30 p.m.	
Free Communication/ Poster	Running	Thursday	7:30 a.m.–12:30 p.m.	
Free Communication/ Poster	Skeletal Muscle	Thursday	7:30 a.m.–12:30 p.m.	
Free Communication/ Slide	Training Strategies	Thursday	1:00–3:00 p.m.	
Symposium	A Recognition of Barbara Drinkwater's Research on Women in Sport	Thursday	3:15–5:15 p.m.	Barbara E. Ainsworth, FACSM, Arizona State University Anne Loucks, FACSM, Ohio University Patty S. Freedson, FACSM, University of Massachusetts Rosemary Agostini, FACSM, Group Health Bellview Medical Center Susan D. Carter, FACSM, Banner Health
Tutorial Lecture	High Intensity Functional Training (HIFT): A Look at its Physiological Effects	Thursday	3:15–4:05 p.m.	Yuri Feito, FACSM, Kennesaw State University
Tutorial Lecture	The Making of Messi: Talent Identification and Development in Elite Youth Soccer	Thursday	4:25–5:15 p.m.	Viswanath Unnithan, FACSM, Staffordshire University Daniel Medina, FC Barcelona
Thematic Poster	Soccer	Friday	9:30–11:30 a.m.	
Free Communication/ Slide	Exercise Training in Health/Disease	Friday	9:30–11:30 a.m.	
Free Communication/ Poster	Cycling	Friday	7:30 a.m.–12:30 p.m.	
Free Communication/ Poster	Soccer	Friday	7:30 a.m.–12:30 p.m.	
Thematic Poster	Skeletal Muscle	Friday	1:00–3:00 p.m.	
Free Communication/ Poster	Elite Athletes	Friday	1:00–6:00 p.m.	
Free Communication/ Poster	Fatigue	Friday	1:00–6:00 p.m.	
Free Communication/ Poster	HIIT	Friday	1:00–6:00 p.m.	
Free Communication/ Poster	Training Techniques	Friday	1:00–6:00 p.m.	
Thematic Poster	Training Techniques	Friday	3:15–5:15 p.m.	

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Exchange Lecture	European College of Sport Science Exchange Lecture - Sports Science Problems to Solve for the 2016 Olympics	Saturday	8:00-8:50 a.m.	Randall L. Wilber, FACSM, United States Olympic Committee Kamiel Maase, Netherlands Olympic Committee
Symposium	Do Physiological Sex-differences Affect Exercise Performance?	Saturday	9:00-11:00 a.m.	Daniel Gagnon, Institute for Exercise and Environmental Medicine Erin Howden, Institute for Exercise and Environmental Medicine Jordan Guenette, The University of British Columbia Sandra K. Hunter, FACSM, Marquette University
Free Communication/ Poster	Body Composition	Saturday	7:30-11:00 a.m.	
Free Communication/ Poster	Performance	Saturday	7:30-11:00 a.m.	
Free Communication/ Poster	Recovery	Saturday	7:30-11:00 a.m.	
Immunology/Genetics/Endocrinology				
Free Communication/ Poster	Exercise Immunology	Wednesday	7:30 a.m.-12:30 p.m.	
Tutorial Lecture	Exosomes: Inter-organ Crosstalk Mediators	Wednesday	1:00-1:50 p.m.	John J. McCarthy, University of Kentucky Monica J. Hubal, FACSM, George Washington University
Symposium	The Physiologic Interactions of Growth, Maturation, and Sport	Wednesday	3:15-5:15 p.m.	Alan D. Rogol, FACSM, University of Virginia Robert M. Malina, FACSM, University of Texas at Austin Kathryn E. Ackerman, FACSM, Boston Children's Hospital
Free Communication/ Poster	Immunology/Endocrinology	Thursday	7:30 a.m.-12:30 p.m.	
Thematic Poster	Hormone Responses and Physical Activity	Thursday	3:15-5:15 p.m.	
Free Communication/ Poster	Genetics	Friday	7:30 a.m.-12:30 p.m.	
Free Communication/ Poster	Immunology I	Friday	7:30 a.m.-12:30 p.m.	
Free Communication/ Slide	Exercise Immunology	Friday	1:00-3:00 p.m.	
Symposium	Exercise and Stem Cells: Thinking Beyond Skeletal Muscle	Saturday	9:00-11:00 a.m.	Michael De Lisio, University of Illinois at Urbana-Champaign Sarah Witkowski, University of Massachusetts Janet Rubin, University of North Carolina Gianni Parise, McMaster University
Free Communication/ Poster	Immunology II	Saturday	7:30-11:00 a.m.	

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Metabolism and Nutrition

Thematic Poster	Protein Metabolism I	Wednesday	9:30–11:30 a.m.	
Free Communication/Poster	Ergogenic Aids I	Wednesday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Ergogenic Aids II	Wednesday	7:30 a.m.–12:30 p.m.	
Thematic Poster	Military Nutrition	Wednesday	1:00–3:00 p.m.	
Free Communication/Poster	Ergogenic Aids III	Wednesday	1:00–6:00 p.m.	
Free Communication/Poster	Ergogenic Aids IV	Wednesday	1:00–6:00 p.m.	
Free Communication/Slide	Nutritional Status of Athletes	Thursday	8:00–10:00 a.m.	
Free Communication/Poster	Fat Metabolism	Thursday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Protein Metabolism II	Thursday	7:30 a.m.–12:30 p.m.	
Symposium	Mitochondria and Energy Balance: What are the Cellular Players?	Thursday	1:00–3:00 p.m.	Lorraine P. Turcotte, FACSM, University of Southern California Andrea Hevener, University of California, Los Angeles Benjamin Bikman, Brigham Young University Mark A. Tarnopolsky, McMaster University Changhan Lee, University of Southern California
Thematic Poster	Nutrition, Physical Activity, and Chronic Disease	Thursday	1:00–3:00 p.m.	
Free Communication/Poster	Carbohydrate Metabolism in Athletes	Thursday	1:00–6:00 p.m.	
Free Communication/Poster	Carbohydrate Metabolism in Health/Disease	Thursday	1:00–6:00 p.m.	
Tutorial Lecture	Exercise Benefits and Drugs: Do Current Pharmacological Therapies Help or Interfere with Endogenous Exercise Signaling?	Thursday	3:15–4:05 p.m.	David A. Brown, East Carolina University
Tutorial Lecture	Dietary Supplement Contamination and Sports Drug Testing	Thursday	4:25–5:15 p.m.	Bob Murray, FACSM, Sports Science Insights, LLC Amy B. Cadwallader, Aegis Sciences Corporation

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Symposium	Bengt Saltin and 50 years of Exercise Science	Friday	9:30–11:30 a.m.	Michael J. Joyner, FACSM, Mayo Clinic Mark Hargreaves, FACSM, University of Melbourne Carsten Lundby, Institute of Physiology Benjamin D. Levine, FACSM, Inst for Exercise and Environmental Medicine/Texas Health Resources and UT Southwestern Bente K. Pedersen, University of Copenhagen
Free Communication/Poster	Micronutrients and Fluids	Friday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Nutrition and Supplements	Friday	7:30 a.m.–12:30 p.m.	
Tutorial Lecture	What is Optimal Nutritional Fueling for Training and Performance?	Friday	1:00–1:50 p.m.	Stefan M. Pasiakos, U.S. Army Research Institute of Environmental Medicine Stuart M. Phillips, FACSM, McMaster University Louise M. Burke, FACSM, Australian Institute of Sport
Free Communication/Slide	Macronutrient Metabolism	Friday	1:00–3:00 p.m.	
Free Communication/Poster	Nutrition and Aging	Friday	1:00–6:00 p.m.	
Free Communication/Poster	Nutrition and Chronic Disease	Friday	1:00–6:00 p.m.	
Free Communication/Poster	Nutritional Status of Athletes	Friday	1:00–6:00 p.m.	
Tutorial Lecture	Dietary Nitrate and Exercise Performance: What's New?	Friday	2:10–3:00 p.m.	Andrew M. Jones, FACSM, University of Exeter Lee J. Wylie, University of Exeter
Symposium	Dietary Protein in Support of Exercise Adaptations and Health	Friday	3:15–5:15 p.m.	Stuart M. Phillips, FACSM, McMaster University Luc JC van Loon, University of Maastricht Daniel R. Moore, University of Toronto Douglas Paddon-Jones, FACSM, University of Texas Medical Branch
Thematic Poster	Energy Balance and Weight Control	Friday	3:15–5:15 p.m.	
Colloquium	Disordered Eating in the Active Population	Friday	4:25–5:15 p.m.	Therese F. Mathisen, Norwegian School of Sport Sciences Anna Melin, University of Copenhagen Monica K. Torstveit, The University of Agder Jorunn Sundgot-Borgen, FACSM, Norwegian School of Sport Sciences

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Tutorial Lecture	Substrate Utilization Following Exercise: Does it Assist in Maintaining Energy Balance	Saturday	8:00–8:50 a.m.	Lorraine P. Turcotte, FACSM, University of Southern California
Thematic Poster	Ergogenic Aids	Saturday	9:00–11:00 a.m.	
Free Communication/Poster	Energy Availability and Expenditure	Saturday	7:30–11:00 a.m.	
Free Communication/Poster	Nutritional Status and Anthropometry	Saturday	7:30–11:00 a.m.	

Physical Activity/Health Promotion Interventions

Symposium	Effective Methods of Engaging Low SES Populations: From the Clinic to the Community	Wednesday	9:30–11:30 a.m.	Tamerah N. Hunt, FACSM, Georgia Southern University Lauren A. Reid, University of South Carolina Valerie E. Cothran, University of Maryland Department of Family and Community Medicine Beverly D. Pittman, Northern Virginia Community College
Tutorial Lecture	Natural Experiments of the Built Environment and Active Transportation	Wednesday	9:30–10:20 a.m.	Janet Rankin, FACSM, Virginia Polytechnic Institute and State University Harold W. Kohl, FACSM, University of Texas, School of Public Health David R. Bassett, FACSM, University of Tennessee
Free Communication/Poster	Physical Activity Interventions in Older Populations	Wednesday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Physical Activity Promotion Programming/ Intervention Strategies in Adults	Wednesday	7:30 a.m.–12:30 p.m.	
Symposium	What's Up With Step It Up! The Surgeon General's Call to Action?	Wednesday	3:15–5:15 p.m.	Jackie Epping, FACSM, U.S. Centers for Disease Control and Prevention Richard Troiano, National Institutes of Health Susan A. Carlson, U.S. Centers for Disease Control and Prevention Janet Fulton, FACSM, U.S. Centers for Disease Control and Prevention
Symposium	Exercise and Pregnancy	Thursday	8:00–10:00 a.m.	Kirsty Elliott-Sale, Nottingham Trent University Craig Sale, Nottingham Trent University Raul Artal, FACSM, Saint Louis University Laurie Goodyear, FACSM, Joslin Diabetes Center Harvard Medical School

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Symposium	Targeting Sitting to Increase Activity and Improve Health	Thursday	8:00–10:00 a.m.	Charles E. Matthews, FACSM, National Cancer Institute Sarah Kozey Keadle, National Cancer Institute David W. Dunstan, Baker IDI Heart and Diabetes Institute David E. Conroy, The Pennsylvania State University Matthew Buman, FACSM, Arizona State University
Tutorial Lecture	So, Where Have All the Men Gone?	Thursday	8:00–8:50 a.m.	Steven P. Hooker, FACSM, Arizona State University David O. Garcia, University of Arizona
Free Communication/Poster	Physical Activity Interventions in Adults - Part I	Thursday	7:30 a.m.–12:30 p.m.	
Symposium	Impact of Prenatal Exercise on Maternal/Offspring Cardiovascular Health	Thursday	1:00–3:00 p.m.	Linda E. May, East Carolina University Margie H. Davenport, University of Alberta Martin Bahl, University Medicine Greifswald and German Centre for Cardiovascular Research Julie L. Lavoie, University of Montreal/CRCHUM
Free Communication/Poster	Cancer	Thursday	1:00–6:00 p.m.	
Free Communication/Poster	Physical Activity Interventions in Adults - Part II	Thursday	1:00–6:00 p.m.	
Tutorial Lecture	Physical Activity Technology Research in Diverse Populations	Thursday	3:15–4:05 p.m.	Nicole R. Keith, FACSM, Indiana University Michelle Martin, University of Tennessee Health Science Center Alicia Tatum Bryan, Columbus State University Albert Mendoza, University of Massachusetts
Free Communication/Slide	Oh Baby! Physical Activity and Pregnancy	Thursday	3:15–5:15 p.m.	
Symposium	Beyond the Games: Global Health Legacies of the Olympic and Paralympic Games	Friday	9:30–11:30 a.m.	Margo Mountjoy, FACSM, IOC Medical Commission Arne Ljungqvist, International Olympic Committee Richard Budgett, IOC Medical and Scientific Commission Cheri Blauwet, IPC Medical Committee

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Symposium	Stressed Out?... Get Moving!	Friday	9:30–11:30 a.m.	Rebecca E. Hasson, FACSM, University of Michigan David X. Marquez, FACSM, University of Illinois at Chicago James N. Roemmich, FACSM, United States Department of Agriculture Daheia J. Barr-Anderson, FACSM, University of Minnesota
Symposium	Are your Boots Made for Walking? Assessing the Walkability of Communities - Federal, State, and Local Perspectives	Friday	9:30–11:30 a.m.	Janet E. Fulton, U.S. Centers for Disease Control and Prevention John Thomas, U.S. Environmental Protection Agency Josh M. Geyer, U.S. Department of Housing and Urban Development Joshua Grzegorzewski, U.S. Department of Transportation John D. Omura, U.S. Centers for Disease Control and Prevention Rachel A. Millstein, Massachusetts General Hospital
Thematic Poster	Physical Activity Promotion Programming/Intervention Strategies - Health Disparities/Equity	Friday	9:30–11:30 a.m.	
Free Communication/Poster	Physical Activity Promotion Programming/Intervention Strategies in Older Adults	Friday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Physical Activity Promotion Programming/Intervention Strategies in Youth	Friday	7:30 a.m.–12:30 p.m.	
Symposium	Enhancing Children's Health and Academic Performance	Friday	1:00–3:00 p.m.	Heather McKay, The University of British Columbia Joseph Donnelly, FACSM, The University of Kansas Medical Center Sigmund Alfred Anderssen, Norwegian School of Sport Sciences Patti-Jean Naylor, University of Victoria
Free Communication/Poster	Physical Activity Interventions in Youth	Friday	1:00–6:00 p.m.	
Symposium	Walking: Steps to Promote Health for All - Leaps to Improve Health Disparities	Friday	3:15–5:15 p.m.	David X. Marquez, FACSM, University of Illinois at Chicago David Brown, FACSM, Centers for Disease Control and Prevention JoEllen Wilbur, Rush University College of Nursing Janet E. Fulton, FACSM, Centers for Disease Control and Prevention Christina Economos, Tufts University
Free Communication/Slide	Novel Approaches for Physical Activity Interventions	Friday	3:15–5:15 p.m.	
Tutorial Lecture	Why are Australia's Physical Activity Guidelines a Little Different?	Saturday	8:00–8:50 a.m.	Wendy J. Brown, FACSM, University of Queensland
Thematic Poster	Physical Activity Promotion for Persons with Disabilities	Saturday	9:00–11:00 a.m.	

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Professional Development/Organizational Information

Colloquium	Enhancing the Undergraduate Exercise Science Research Experience: A Model to Share	Wednesday	10:40-11:30 a.m.	Sean Walsh, FACSM, Central Connecticut State University Kimberly Kostelis, Central Connecticut State University
Tutorial Lecture	From Labs to Communities: Diverse Research Contributions of ACSM's Leadership and Diversity Training Program Participants	Wednesday	10:40-11:30 a.m.	Eduardo E. Bustamante, University of Illinois at Chicago Maria Enid Santiago-Rodriguez, University of Puerto Rico Cardyl Trionfante, Louisiana State University Susan Aguiñaga, University of Illinois at Chicago David O. Garcia, University of Arizona
Tutorial Lecture	Introduction of the Translational Journal	Wednesday	10:40-11:30 a.m.	Joseph E. Donnelly, FACSM, University of Kansas Medical Center
Tutorial Lecture	ACSM Certification and CAAHEP Accreditation: Moving the Profession Forward	Thursday	4:25-5:15 p.m.	William F. Simpson, FACSM, University of Wisconsin-Superior M. Allison Williams, FACSM, CUNY Queens College

Psychology, Behavior and Neurobiology

Free Communication/Poster	Behavioral and Psychological Aspects of Sport	Wednesday	7:30 a.m.-12:30 p.m.	
Free Communication/Poster	Perception of Effort, Pain & Fatigue	Wednesday	7:30 a.m.-12:30 p.m.	
Symposium	Perceptions of Fatigue in Exercise and Disease	Wednesday	3:15-5:15 p.m.	Roger M. Enoka, University of Colorado Benjamin K. Barry, University of New South Wales Carolina X. Sandler, University of New South Wales Jos J. de Koning, FACSM, VU University Amsterdam
Thematic Poster	Behavioral Aspects and Correlates of Physical Activity	Wednesday	3:15-5:15 p.m.	
Free Communication/Slide	Exercise Psychology - Mental Health, Emotion and Perception	Wednesday	3:15-5:15 p.m.	
Symposium	Conducting Randomized Controlled Trials in Exercise and Mental Health	Thursday	8:00-10:00 a.m.	Chad D. Rethorst, UT Southwestern Medical Center Lynda H. Powell, Rush University Matthew P. Herring, University of Limerick Valerie Myers, Klein Buendel
Thematic Poster	Behavioral and Psychological Aspects of Sport and Performance	Thursday	8:00-10:00 a.m.	
Free Communication/Poster	Physical Activity, Cognition, and Emotion	Thursday	7:30 a.m.-12:30 p.m.	

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Symposium	Etiology and Treatment of Exercise Associated Muscle Cramps: Emerging Research	Thursday	1:00–3:00 p.m.	Bob Murray, FACSM, Sports Science Insights, LLC Kevin C. Miller, Central Michigan University Thomas C. Wessel, FlexPharma, Inc. Bruce P. Bean, Harvard Medical School
Symposium	Applying Cognitive Science to Enhance Learning in Exercise Science	Thursday	1:00–3:00 p.m.	John Dobson, Georgia Southern University - School of Health and Kinesiology Andrew Butler, University of Texas at Austin Adam Persky, FACSM, University of North Carolina at Chapel Hill
Symposium	Physical Activity, Exercise, and Pain Sensitivity	Thursday	3:15–5:15 p.m.	Christopher D. Black, University of Oklahoma Laura D. Ellingson, Iowa State University Aaron J. Stegner, University of Wisconsin Kelli F. Koltyn, FACSM, University of Wisconsin
Thematic Poster	Physical Activity, Mental Health, and Cognition - Youth	Thursday	3:15–5:15 p.m.	
Thematic Poster	Exercise Psychology and Women's Health	Friday	9:30–11:30 a.m.	
Free Communication/Poster	Correlates and Behavioral Aspects of Physical Activity	Friday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Exercise Science Pedagogy	Friday	7:30 a.m.–12:30 p.m.	
Exchange Lecture	American Psychological Association Exchange Lecture - Substance Abuse and Athletes	Friday	1:00–1:50 p.m.	LaTisha L. Bader, University of Colorado Health, CeDAR
Free Communication/Slide	Neuroscience	Friday	1:00–2:30 p.m.	
Free Communication/Poster	Cognition, Emotion, and Sport	Friday	1:00–6:00 p.m.	
Free Communication/Poster	Exercise Psychology - Neuroscience	Friday	1:00–6:00 p.m.	
Free Communication/Poster	Mental Health and Athletes	Friday	1:00–6:00 p.m.	
Free Communication/Poster	Neuroscience and Sport	Friday	1:00–6:00 p.m.	
Tutorial Lecture	Physical Activity as a Treatment and Prevention of Sleep Problems	Friday	2:10–3:00 p.m.	Christopher E. Kline, University of Pittsburgh Shawn D. Youngstedt, Arizona State University

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Tutorial Lecture	Physical Literacy in Diverse Populations of Children and Youth: A Call to Action	Friday	3:15–4:05 p.m.	Dawn P. Coe, FACSM, The University of Tennessee Karin A. Pfeiffer, FACSM, Michigan State University Leah E. Robinson, FACSM, University of Michigan Rebecca A. Battista, FACSM, Appalachian State University
Tutorial Lecture	Promoting Physical Activity in Adolescents with Intellectual Disabilities (IDD)	Saturday	8:00–8:50 a.m.	Lauren Ptomey, University of Kansas Medical Center Heidi Stanish, University of Massachusetts Boston
Symposium	Managing Chronic Pain: Mechanisms to Applications of Exercise	Saturday	9:00–11:00 a.m.	Benjamin Barry, University of New South Wales School of Medical Sciences Kelli F. Koltyn, FACSM, University of Wisconsin-Madison Robert E. Sorge, University of Alabama at Birmingham Matthew Jones, University of South Wales Dane B. Cook, FACSM, University of Wisconsin-Madison
Free Communication/Poster	Physical Activity and Cognition in Youth and Young Adults	Saturday	7:30–11:00 a.m.	
Free Communication/Poster	Physical Activity and Mental Health	Saturday	7:30–11:00 a.m.	

Skeletal Muscle, Bone and Connective Tissue

Symposium	Bone Health in the Adolescent Athlete	Wednesday	9:30–11:30 a.m.	Michael Fredericson, FACSM, Stanford University Medical Center Adam Tenforde, Spaulding National Running Center Aurelia Nattiv, FACSM, UCLA Michelle Barrack, California State University, Long Beach Madhusmita Misra, Massachusetts General Hospital for Children
Free Communication/Slide	Muscle - Molecular Biology	Wednesday	9:30–11:30 a.m.	
Free Communication/Poster	Neuromuscular Biology	Wednesday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Women's Exercise - Bone, Muscle and Connective Tissue	Wednesday	7:30 a.m.–12:30 p.m.	
Free Communication/Poster	Aging - Skeletal Muscle, Connective Tissue, and Bone	Wednesday	1:00–6:00 p.m.	
Free Communication/Poster	Bone, Bone Mineral Density, and Connective Tissue	Wednesday	1:00–6:00 p.m.	
Tutorial Lecture	Blood Flow Restriction: Applying the Science to Sports Idols and Military Heroes	Wednesday	2:10–3:00 p.m.	Jeremy P. Loenneke, University of Mississippi Johnny Owens, Center for the Intrepid, Joint Base San Antonio

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Symposium	Cell Signaling in Muscle and Tendon	Wednesday	3:15-5:15 p.m.	Christopher Mendias, University of Michigan Sean A. Newsom, Oregon State University Scott Trappe, FACSM, Ball State University Chad C. Carroll, Midwestern University Alice Huang, Icahn School of Medicine at Mount Sinai
Thematic Poster	Bone/Bone Mineral Density	Wednesday	3:15-5:15 p.m.	
Symposium	New Insights into Exercise-induced Mitochondrial Adaptations	Thursday	8:00-10:00 a.m.	David Bishop, FACSM, Victoria University Jeff S. Coombes, FACSM, University of Queensland Zhen Yan, University of Virginia
Free Communication/Poster	Cancer, Exercise, and Muscle	Thursday	7:30 a.m.-12:30 p.m.	
Free Communication/Poster	Gender Differences - Skeletal Muscle, Connective Tissue and Bone	Thursday	7:30 a.m.-12:30 p.m.	
Free Communication/Poster	Resistance Exercise/Strength Training/HIIT	Thursday	7:30 a.m.-12:30 p.m.	
Thematic Poster	Women's Physiology - Skeletal Muscle, Connective Tissue, and Bone	Thursday	1:00-3:00 p.m.	
Free Communication/Poster	Muscle Molecular Biology Applications	Thursday	1:00-6:00 p.m.	
Free Communication/Poster	Osteoarthritis, Knee Pain, Sports Injuries, and Rehabilitation	Thursday	1:00-6:00 p.m.	
Symposium	Biomechanical and Biological Contributors to Bone Stress Injuries in Runners	Friday	9:30-11:30 a.m.	Irene Davis, FACSM, Spaulding National Running Center Adam Tenforde, Spaulding National Running Center Mary Boussein, Beth Israel Deaconess Medical Center Kathryn Ackerman, FACSM, Boston Children's Hospital, Massachusetts General Hospital
Free Communication/Poster	Age and Muscle	Friday	7:30 a.m.-12:30 p.m.	
Free Communication/Poster	Muscle Mitochondria and Metabolism	Friday	7:30 a.m.-12:30 p.m.	

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Symposium	Multisystem Impact of Estrogen-deficiency with Aging and Physical Activity	Friday	1:00–3:00 p.m.	Dawn A. Lowe, FACSM, University of Minnesota Vuokko Kovanen, University of Jyväskylä Gordon L. Warren, FACSM, Georgia State University Espen Spangenburg, East Carolina University Eija Laakkonen, University of Jyväskylä Wendy M. Kohrt, FACSM, University of Colorado - Anschutz Medical Campus
Thematic Poster	Innovative Techniques to Assess Skeletal Muscle, Bone and Connective Tissue	Friday	1:00–3:00 p.m.	
Free Communication/Poster	Muscle Atrophy, Hypertrophy, Fatigue and Function	Friday	1:00–6:00 p.m.	
Free Communication/Poster	Muscle Damage/Musculoskeletal Injury	Friday	1:00–6:00 p.m.	
Tutorial Lecture	Pericytes as Mediators of Skeletal Muscle Adaptation	Friday	2:10–3:00 p.m.	Marni D. Boppart, FACSM, University of Illinois at Urbana-Champaign Sarah Witkowski, University of Massachusetts, Amherst
Tutorial Lecture	Bone Turnover Markers: Utility and Responses to Exercise and Feeding	Friday	3:15–4:05 p.m.	Kathryn Ackerman, FACSM, Boston Children's Hospital Craig Sale, Nottingham Trent University, Nottingham
Thematic Poster	Muscle - Fiber Type, Quality, and Function	Friday	3:15–5:15 p.m.	
Tutorial Lecture	Exercise-induced Oxidative Stress: Cause and Consequences	Saturday	8:00–8:50 a.m.	Scott K. Powers, FACSM, University of Florida
Tutorial Lecture	Mechanisms of Resistance Training-induced Muscular Hypertrophy in Humans	Saturday	8:00–8:50 a.m.	Stuart M. Phillips, FACSM, McMaster University
Thematic Poster	Muscle Atrophy and Hypertrophy	Saturday	9:00–11:00 a.m.	
Free Communication/Poster	Bone/Bone Mineral Density in Athletes	Saturday	7:30–11:00 a.m.	
Free Communication/Poster	Muscle Blood Flow	Saturday	7:30–11:00 a.m.	

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World Congress on the Basic Science of Energy Balance

Basic Science World Congress - Symposium	Do Changes in Energy Balance Contribute to the Problem of Obesity in Western Societies? An Evolutionary Perspective	Wednesday	1:00-3:00 p.m.	Edward L. Melanson, FACSM, University of Colorado Denver David R. Bassett, FACSM, University of Tennessee Amy Luke, Loyola University Herman Pontzer, Hunter College
Basic Science World Congress - Symposium	Sleep, Circadian Physiology, and Body Weight Regulation	Wednesday	1:00-3:00 p.m.	Christopher E. Kline, University of Pittsburgh Kenneth Wright, University of Colorado Frank Scheer, Brigham and Women's Hospital
Basic Science World Congress - Thematic Poster	Energy Balance: Innovative Approaches	Wednesday	1:00-3:00 p.m.	
Basic Science World Congress/Poster	Energy Balance and Expenditure: Physical Activity	Wednesday	1:00-6:00 p.m.	
Basic Science World Congress/Poster	Energy Balance, Appetite, and Energy Intake	Wednesday	1:00-6:00 p.m.	
Basic Science World Congress - Symposium	Exercise and Energy Balance: Lessons Learned from the Mid-west Exercise Trial	Wednesday	3:15-5:15 p.m.	Joseph E. Donnelly, FACSM, University of Kansas Lauren T. Ptomey, University of Kansas Medical Center Jeff J. Honas, University of Kansas Medical Center Erik A. Willis, University of Kansas Medical Center Amanda N. Szabo-Reed, Kansas University Medical Center
Basic Science World Congress - Symposium	Innovative Energy Balance Methodologies - From the Laboratory to the Community	Thursday	8:00-10:00 a.m.	Edward Melanson, FACSM, University of Colorado James Delany, University of Pittsburgh Gregory J. Welk, FACSM, Iowa State University Brenda Davy, FACSM, Virginia Tech University
Basic Science World Congress - Symposium	Tissue Specific Considerations on Energy Balance	Thursday	8:00-10:00 a.m.	Bret Goodpaster, Florida Hospital, Sanford Burnham Paul MacLean, University of Colorado Anschutz Medical Campus Bradley Nindl, FACSM, University of Pittsburgh
Basic Science World Congress/Poster	Energy Balance: Pediatrics and Children	Thursday	7:30 a.m.-12:30 p.m.	
Basic Science World Congress/Poster	Energy Balance: Selective Populations	Thursday	7:30 a.m.-12:30 p.m.	

PROGRAMMING Search categories below

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 Energy Balance

Basic Science World Congress - Symposium	Influence of Sedentary Behavior on Mechanisms of Energy Balance	Thursday	1:00-3:00 p.m.	Audrey Bergouignan, University of Colorado Denver Bethany Barone Gibbs, University of Pittsburgh Edward F. Coyle, FACSM, University of Texas at Austin Il-Young Kim, The University of Texas at Austin Peter Katzmarzyk, FACSM, Pennington Biomedical Research Center
Basic Science World Congress - Tutorial Lecture	Energy Balance in Older Adults	Thursday	1:00-1:50 p.m.	Todd Manini, FACSM, University of Florida
Basic Science World Congress/ Poster	Energy Balance: Body Composition, Muscle, and Weight Regulation	Thursday	1:00-6:00 p.m.	
Basic Science World Congress/ Poster	Energy Balance: Methodology	Thursday	1:00-6:00 p.m.	
Basic Science World Congress - Tutorial Lecture	Influence of Sex Hormones on Metabolism and Energy Balance	Thursday	2:10-3:00 p.m.	Deborah Clegg, Cedars-Sinai Medical Center
Basic Science World Congress - Symposium	Mechanisms by Which Bariatric Surgery and Pharmacotherapy Influence Energy Balance	Thursday	3:15-5:15 p.m.	Joseph A. Houmard, FACSM, East Carolina University John M. Jakicic, FACSM, University of Pittsburgh

**Session speakers subject to change.*

Save the Date 2017 ACSM Annual Meeting



May 30-June 3, 2017 • Denver, Colorado USA



May 30-June 3, 2017
Denver, Colorado

AWARDS

The Awards and Tributes Committee is pleased to announce the 2016 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 3 from 8:00-10:00 p.m.

2016 Honor Award Recipient



**Arthur S. Leon,
M.D., FACSM**
University of Minnesota
Minneapolis, Minnesota

2016 Citation Award Recipients



Adrian Bauman, M.D., Ph.D.
University of Sydney
Sydney, Australia



Melinda M. Manore, Ph.D., R.D., FACSM
Oregon State University
Corvallis, Oregon



Susan A. Bloomfield, Ph.D., FACSM
Texas A&M University
College Station, Texas



Francis G. O'Connor, M.D., M.P.H., FACSM
Uniformed Services University of the Health Sciences
Bethesda, Maryland



Rodney K. Dishman, Ph.D., FACSM
University of Georgia
Athens, Georgia



Margot Putukian, M.D., FACSM
Princeton University
Princeton, New Jersey

STUDENTS



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, and meet fellow students, make new friends, and begin a bond that will last a lifetime.

Graduate and Early Career Day Preconference and Networking Opportunity

Tuesday, May 31, 3:00-7:00 p.m.

See page 11 and www.acsmannualmeeting.org for details

Student Colloquium: The Ins and Outs of Applying to DO, PT, and MD School

Wednesday, June 1, 5:30-7:00 p.m.

We recommend you build this one-of-a-kind colloquium into your schedule. Are you still deciding on various healthcare graduate school options? If so, this year's colloquium will be worth your while!

Each speaker will be given an allotted time to discuss their path (15 minute talk followed by a 5 minute Q&A period). Once all speakers have presented, students will have the opportunity to engage further conversations with the speakers post event.

- Osteopathic Medical School
Bridget Peters, Auburn University
- PT School and the Application Process
Aimee Winston, Boston University
- Applying to Medical School
Erica Greenberg, Massachusetts General Hospital

We will also be honoring the winner of the "Get Moving! Student Contest to Promote Activity" at the end of this session.

Meet the Expert Networking Session

Friday, June 3, 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:

Luis Aragon Vargas, FACSM
Mike Bergeron, FACSM
Nancy Clark, FACSM
Yuri Feito, FACSM
Carol Ewing Garber, FACSM
Sandra Hoffmann, FACSM
Carol Kennedy-Armbruster, FACSM
Francis O'Connor, FACSM
Deborah Riebe, FACSM
Brad Roy, FACSM

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

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

President's Cup Poster Competition

We are very excited to announce this inaugural event for students by students. Come and wish your regional chapter competitors luck toward winning the first ever "president's cup award."

The winning posters from each regional chapter will be on display outside the student colloquium from 5:00-6:30 p.m. Wednesday, June 1. Judges will be onsite after that time, and we will announce the 2016 president's cup winner immediately following the student colloquium at 7:05 p.m.



DON'T MISS THESE SOCIAL EVENTS

Tuesday, May 31

Preconferences

(see pages 11-12 for more details)

All Attendee Party

7:00-10:00 p.m.

Please accept this invitation to an opening social for all attendees. Visit with colleagues, meet new friends, and celebrate ACSM's 63rd anniversary, while enjoying a rocking live band.

Wednesday, June 1

Exhibit Hall Opening Reception

5:00-6:00 p.m.

President's Cup Poster Competition

5:30-6:30 p.m.

See page 45 for details.

Interest Group Meetings

Wednesday, June 1–Thursday, June 2 from 5:45-7:15 p.m.

Meet members who share your interests at an Interest Group meeting at the Hynes Convention Center. The complete schedule will be available on site or at www.acsmannualmeeting.org in May.

9th Annual Student Bowl

7:30 p.m.

Cheer on your Regional Chapter at the 9th 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 2

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 3



Sponsored by:



6:00 a.m.

Join 350+ ACSM runners and walkers on a scenic course on the Charles River Esplanade. Returning for its 16th consecutive year, the Gisolfi 5k Fun Run has become an Annual Meeting tradition, and promises to be a great morning of exercise and enjoyment. Registration will be onsite at the Hynes Convention Center.

Awards Banquet

7:00-10:00 p.m.

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

Sponsored by:



Join Us for an Evening at the Ballpark!

The New England ACSM Regional Chapter invites you to join us at Fenway Park as the Boston Red Sox take on the Toronto Blue Jays. An evening at the ballpark is a great way to enjoy one of Boston's historic venues and relax with your ACSM friends! The cost, per person, for a game ticket in the reserved ACSM ticket block is \$38.00 USD. Reservations will be accepted through Monday, May 9, 2016 or until tickets run out. Tickets are limited—reserve your spot today! Register at www.acsm.org/ballgame

Saturday, June 4

ACSM-IPC Paralympic Sports Medicine and Science Symposium

9:00 a.m.

Sponsored by:



The ACSM-IPC Paralympic Sports Medicine and Science Symposium, supported by the Spaulding Rehabilitation Network, will bring together a team of global experts to provide cutting edge updates on clinical and research topics at the forefront of the Paralympic Movement. Topics such as injury and illness epidemiology, concussion, autonomic dysreflexia/boosting, and the female athlete triad will be discussed, particularly as related to their unique impact on athletes with an impairment. Heading into Rio 2016 and as increasing numbers of athletes with a disability become involved in Paralympic sport, these topics are germane to all involved in sports medicine and science.

HOUSING AND REGISTRATION

Meeting Hotels

ACSM has reserved blocks of rooms at several hotels near the Hynes Convention Center. Reserve online at www.acsmannualmeeting.org or call 1-888-665-1367 (U.S. Toll-free) or (801) 505-5258 International. Rooms are available on a first-come first-served basis until May 3, 2016, or until the block sells out, whichever comes first. The Sheraton Boston Hotel is the headquarter hotel. Visit www.acsmannualmeeting.org for more hotel information.

Sheraton Boston Hotel - Headquarter Hotel	King/Double - \$224
Marriott Boston Copley Place	King/Double - \$224
Westin Copley Place	King/Double - \$224
Boston Park Plaza - Student Hotel	King/Double - \$149/\$159
Midtown Hotel - Student Hotel	King/Double - \$149

Register today at www.acsmannualmeeting.org. Pre-registration ends May 18. 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.

Registration Fees

Current ACSM Members

(dues must be current at time of meeting)

	Register by 3/16/16	Register by 4/20/16	Register by 5/18/16
Professional or 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 20, 2016. A service charge of \$50 will be applied to all cancellations. Refunds will not be issued for cancellations made after April 20, 2016 or no shows.

WORLD CONGRESS ON EXERCISE IS MEDICINE®

National Center Leaders Meeting



At the 2015 EIM World Congress in San Diego, 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 2016 National Center Leaders Meeting that will be held on Tuesday, May 31 from 9:00 a.m.-12:30 p.m. (Open to EIM Advisory Board leadership and staff from all countries).

There will also be an International Social for EIM National Center leaders on Wednesday, June 1 from 7:00-9:00 p.m. We look forward to seeing you there!

EIM Educational Sessions

May 31-June 2

As a part of the 2016 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 “The Economic Costs of Physical Inactivity” on Tuesday, May 31 from 5:30-6:15 p.m., as well as the Highlighted Symposium “Physical Activity and Cancer in Children” on Wednesday, June 1 from 1:00-3:00 p.m.

See pages 25-28 for additional EIM sessions.

EIM Ambassador Program

Wednesday, June 1

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. At the 2016 Annual Meeting, individuals can come and learn more about EIM and take the steps to become an EIM Ambassador, which includes attending a presentation on EIM and taking an exam after the meeting. Presentation will be 35-40 minutes in

length followed by Q&A. Exam will be administered within the following week for those who attended. Individuals who attend the training session and pass the exam will have the opportunity to join the EIM Ambassador community, where they receive exposure to the latest EIM developments, opportunities to get involved in the initiative, and advanced professional training.

Exercise is Medicine® on Campus 2016 Recognition Awards

Wednesday, June 1

5:30-6:30 p.m.

Exercise is Medicine® on Campus (EIM-OC) is a program that calls

upon universities and colleges to engage in the promotion of physical activity as a vital sign 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 the implementation strategies on different campuses around the US and around the world, and will conclude with the announcement of the 2016 EIM-OC Recognition Awardees.



EIM Workshop for Healthcare Providers

Saturday, June 4

8:00 a.m.-4:00 p.m.

The Exercise is Medicine® Workshop for Healthcare Providers is designed to provide physicians and other healthcare professionals training on implementing evidence-based strategies for integrating physical activity counseling as a regular part of their clinical practice. The workshop curriculum will give healthcare providers a greater knowledge of the benefits physical activity, increased confidence to engage patients in conversations about physical activity, and the necessary tools to affect sustained behavior change leading to greater levels of physical activity, cardiorespiratory fitness, and improvements in their overall health. The EIM Workshop for Healthcare Providers will provide attendees with standardized, pragmatic approaches for providing patients with medical clearance to begin an exercise program, assessing their physical activity levels, providing an exercise prescription, and referring patients to appropriate resources for physical activity support and guidance.

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



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:
June 1-3, 2016

Exhibit Hours:

Wednesday, June 1
1:30-6:00 p.m.
(Reception: 5:00-6:00 p.m.)

Thursday, June 2
9:30 a.m.-5:00 p.m.

Friday, June 3
9:30 a.m.-2:00 p.m.



Exhibitors (as of February 24, 2016)

ACCUSPLIT
Accusport/Sports Resource Group
Actigraph
Activinsights
ADInstruments
AEI Technologies
AMTI
American Physiological Society
Army Medical Recruiting
Artinis
AtCor Medical
BD (formerly CareFusion)
Bertec
Biodex
BIOPAC
Biosensics, LLC
BODYCAP
CamNtech
CardeaScreen/Cardiac Insight
CEPA
C-Motion
Cortex
COSMED
Creative Health Products
CSMi
Dartfish
Delsys
DJO Global
dod Fitness
Egg Nutrition Center
F.A. Davis Co
FASEB
Fitabase
Fitlight Sports/gforce tracker

Forrest T. Jones & Company, Inc.
Functional Movement System
GEICO
Graduate Studies at Merrimack College
Gatorade Sports Science Institute
GymAware
h/p cosmos
Hapad
Hawaiian Moon
HealthCare International
Hologic
Human Kinetics
Hydralyte
ImPACT
InBody
IntelaMetrix
ISS
Journal of Athletic Training
Jones & Bartlett
Keiser
Kistler
KORR
Lafayette Instrument
LightForce
Lode
MGC Diagnostics
Medtronic Zephyr Performance Systems
The Micheli Center for Sports Injury Prevention
Motion Analysis
MuscleSound, LLC
National Center on Health, Physical Activity & Disability (NCHPAD)
Nebraska Methodist College

Norland at Swissray
Noraxon
novel
National Strength and Conditioning Association (NSCA)
On
OPTITRACK
PAL
ParvoMedics
Philips Respironics
PowerLung
ProtoKinetics Gait Analysis Walkways
Qualisys Sports Performance
RacerMate
Randex Laboratories
RBM elektronik-automation GmbH
Recovery Pump
Rocky Mountain Diagnostics
Routledge
Sable
seca
Simi
Simmons College
StepsCount, Inc.
Technogym
Tekscan
Terason
VacUmed
Vicon
Wellcoaches
Wolters Kluwer
Wolters Kluwer UpToDate
Woodway
Xsens