

NEACSM Spring Conference  
**Sex & Gender in  
Sports & Exercise**

Friday March 27, 2020  
University of Massachusetts –  
Lowell Inn & Conference Center  
5.0 ACSM CECs



## Description

The New England Chapter of the American College of Sports Medicine and the University of Massachusetts – Lowell Physical Therapy and Kinesiology Department invite you to the NEACSM spring conference Sex & Gender in Sports & Exercise. The program is focused on how sex and gender affect responses to exercise and nutrition interventions, disease and injury risk, biomechanics of running, and exercise performance.

## Schedule

8:00-9:00 a.m.	Registration
9:00-9:05 a.m.	Welcome <i>Dain LaRoche, Ph.D., FACSM   Past-President, NEACSM</i>
9:05-10:00 a.m.	Exercise and Nutrition - Let's Talk About Sex <i>Abbie E. Smith-Ryan, Ph.D., CSCS*D, FACSM, FNCSA, FISSN</i>
10:05-11:00 a.m.	Sex Differences in Cardiovascular Disease Risk and Exercise-Mediated Risk Reduction <i>Sarah Witkowski, Ph.D., FACSM</i>
11:05 a.m.-12:00 p.m.	Athletic Gender - Analytics of Transgender and Intersex Athletes <i>Joanna Harper, M.S.</i>
12:00-1:25 p.m.	Lunch (Provided)
1:30-2:25 p.m.	Sex Specific Risk Factors for Bone Stress Injuries <i>Adam Tenforde, M.D.</i>
2:30-3:25 p.m.	Running Injury Differences Between Venus and Mars <i>Irene Davis, Ph.D., PT, FACSM, FAPTA, FASB</i>

## Other Information

### Objectives

1. Explore the modifying effect of sex on exercise and nutrition outcomes including body composition, aerobic and anaerobic capacities, and disease risk.
2. Appreciate the differences between men and women in the role exercise plays in cardiovascular disease risk and cardiovascular health.
3. Learn about the controversy of transgender and intersex athlete inclusion in sport, current policy, endocrinology, and physical performance characteristics.
4. Compare the hormonal, nutritional, body composition, and exercise participation factors that affect risk for bone stress injuries in male and female athletes.
5. Evaluate gait mechanics that predispose male and female runners to injury and the ability of gait retraining to reduce risk.

### Location

UMass - Lowell Inn & Conference Center  
50 Warren St., Lowell, MA 01852

To Park: Complementary parking is available at the hotel on the 1st and 2nd garage floors. Attendees should pull into the hotel driveway and enter the garage from the 1st floor. Limited parking is also available in front of the hotel. Additional paid parking is available on the ground level from the Warren St entrance.

### Accreditation

#### Continuing Education Credits

NEACSM is an approved provider for the American College of Sports Medicine. 5 hours of CEUs/CECs will be awarded.

# Speakers



**Abbie E. Smith-Ryan, PhD, CSCS\*D, FACSM, FNCSA, FISSN**

Dr. Smith-Ryan is an Associate Professor in the Department of Exercise and Sport Science at the University of North Carolina Chapel Hill. Her research is focused on exercise and nutrition interventions to modify various aspects of body composition, exercise performance, cardiovascular health, and metabolic function in both healthy and clinical populations. She is actively involved in the National Strength and Conditioning Association (NSCA), American College of Sports Medicine, and the International Society of Sports Nutrition. She was recognized by the NSCA as the Nutrition Researcher of the Year (2013) and the Young Investigator of the Year (2015). Dr. Smith-Ryan has a passion for improving the health and quality of life of others through evidenced-based research and she currently serves as a University liaison for the 'Working on Women in Science (WOWS)' initiative.



**Sarah Witkowski, PhD, FACSM**

Dr. Witkowski is an Associate Professor of Exercise & Sport Studies at Smith College in Northampton, MA whose research is on understanding the effect of habitual physical activity and acute exercise on the cells and signals that promote blood vessel health, repair and regeneration. Her current research is focused on female-specific conditions that are related to cardiovascular disease (CVD) risk. CVD risk increases to a greater degree during the transition to menopause than at other times in a woman's life. Therefore, her lab is evaluating the role of habitual physical activity and cardiorespiratory fitness on blood vessel health in women around the time of menopause. Dr. Witkowski's goal is to improve understanding of the role exercise may play to reduce CVD risk in midlife women.



**Joanna Harper, M.S.**

Joanna Harper holds a M.S. in Radiological Physics and is currently a doctoral student in the Department of Sport, Exercise and Health Sciences at Loughborough University, UK where she studies transgender athletic performance. In 2015 she published the first peer-reviewed article containing quantitative analysis of the athletic performance of transgender athletes with differing hormonal values. She is the author of the book "Sporting Gender: The History, Science and Stories of Transgender and Intersex Athletes" and published an article in Current Sports Medicine Reports "The Fluidity of Gender and Implications for the Biology of Inclusion for Transgender and Intersex Athletes." Harper has served as an advisor to the International Olympic Committee on matters of gender diversity and sport since 2015 and was a witness for the International Association of Athletic Federations for the Dutee Chand and Caster Semenya cases before the Court of Arbitration for Sport.



**Adam Tenforde, M.D.**

Dr. Tenforde is an Assistant Professor in the Department of Physical Medicine and Rehabilitation at Harvard Medical School and a sports medicine physician at the Spaulding National Running Center – one of the only centers in the United States exclusively dedicated to the diagnosis and treatment of running-related injuries. Dr. Tenforde has the unique perspective of being both a doctor and a former professional runner who was an All-American at Stanford University where he contributed to three NCAA National Team Championships and later qualified for the Olympic trials. Dr. Tenforde's research has focused on the evaluation of biological and biomechanical risk factors for stress fractures, tendinopathy and other

running injuries. He also studies effective use of telehealth to optimize patient care and procedures including shockwave treatment for management of overuse injuries in athletes.



**Irene Davis, PhD, PT, FACSM, FAPTA, FASB**

Dr. Irene Davis is the founding Director of the Spaulding National Running Center, Department of Physical Medicine and Rehabilitation, Harvard Medical School. Her research is focused on the relationship between lower extremity structure, mechanics and injury and the development of interventions to alter faulty mechanics through gait retraining. Dr. Davis has received funding from the Department of Defense and National Institutes of Health to support her research. She has given over 350 lectures both nationally and internationally and authored 140 publications on the topic of lower extremity mechanics during walking and running gait. She was recently named one of the 50 Most Influential People in Running. She is a Fellow and Past President of the American Society of Biomechanics, and the 2019 Borelli award winner. She is also a Fellow, Vice President and current Presidential nominee of the American College of Sports Medicine and a Catherine Worthingham Fellow of the American Physical Therapy Association.

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## Conference Partners



**PHYSICAL THERAPY  
AND KINESIOLOGY  
DEPARTMENT**



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COLLEGE**

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## Speaker Sponsors and Exhibitors



**University of  
New Hampshire**

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and Human Services



**NEW YORK**  
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# Conference Registration

**To register online:**

Use the NEACSM website:

<https://www.neacsm.org/spring-conference>

**To register by mail:**

Complete and mail the registration form, along with full payment to:

American College of Sports Medicine

Department 6022

Carol Stream, IL 60122-6022

Pre-registrations sent via mail will be accepted through March 13. Online pre-registrations will be accepted through March 19.

**No registrations by phone.**

**Group registrations:** To register a group, contact Heather Turner at (317) 637-9200, ext. 138 or [hturner@acsm.org](mailto:hturner@acsm.org)

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Last Name

First Name

MI

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Professional Affiliation

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Street Address

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City

State

ZIP

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Phone

Email

(Please use one registration form per person. Be sure to circle the appropriate registration fee. Make additional copies of the form as needed).

**Registration Fees - Member Rates: Non-members selecting not to pay member dues below must add \$35 to registration fee.**

	Before 2/28/20	Before 3/13/20	After 3/19/20 and onsite	Total
Professional	\$100	\$110	\$125	
Student Member (Two days)	\$35	\$45	\$60	
			<b>Total Amount</b>	

**Full payment must accompany the registration.** Registration refund policy: all conference registration cancellations must be requested in writing. A 50% refund may be obtained up to 10 business days prior to the event. No refunds will be granted after March 13. Substitutions are allowed. For additional information, please contact Heather Turner at [hturner@acsm.org](mailto:hturner@acsm.org).

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University of Massachusetts -  
Lowell Inn & Conference Center

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Wallingford, CT 06492

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