Progress in Motion







Annual Fall Conference

October 21-22, 2021 Rhode Island Convention Center Providence, Rhode Island

Welcome



Welcome

Recent months have presented the world with unrelentless challenges and devastation, and the importance of scientific advancement has never been more apparent. We will return to in-person programming for the 2021 NEACSM Fall Conference that will highlight impressive advancements in our respective fields to leave us informed, intrigued and inspired. Accordingly, the Executive Committee, Program Planning Committee and I present this overview of the conference, titled "**Progress in Motion**."

Our two keynote lectures will bring particular attention to the complex issues and advancements in exercise, sport and health

science. The **Knuttgen Keynote lecture** will feature Dr. Erica Perrier, Medical Innovation Lead at Perifit in France, who will dive into the challenging and fascinating facets of linking behaviors to health outcomes. The **Clarkson Keynote lecture** will be delivered by Dr. Monica Hubal, associate professor at Indiana University-Purdue University Indianapolis and former student of the late Dr. Priscilla Clarkson. Dr. Hubal will illustrate how non-reductionist (systems) biology defines the effects of exercise, providing us with a holistic view of exercise and health connections.

Dr. Dain LaRoche, professor and chair at the University of New Hampshire, will deliver the **Past President's lecture** on robots as caregivers. With expertise in developing technology for tracking physical activity and movement quality, exercise program delivery and independent living assistance, Dr. LaRoche will turn our attention to new options pertinent to exercise and health science.

Our **invited and featured** lecturers are also bound to capture your attention. You can view the impressive lineup of speakers and corresponding presentation titles in the following pages. Our **Physician track** will be filled with critical and novel topics in athletic care and clinical medicine, and we will offer presentations geared toward student and professional member development.

We are also thrilled to reinstate the annual **Ronai Academic College Bowl**, where students represent their respective institutions in a quiz-based competition that tests their knowledge of exercise science and sports medicine. This event will occur on Thursday evening following the **President's Reception** and announcement of **student scholarships** and **research awards**.

Please note that chapter leadership will consistently monitor local and national pandemic guidelines. Updated safety protocols will be available for review on our website closer to the conference date.

Whether you are a student or professional member, we hope the fall meeting provides an engaging program that will contribute to your continued learning, professional development and scientific intrigue. We look forward to seeing you in Providence this October!

Colleen Muñoz, Ph.D. President-Elect and Program Chair Associate Professor of Health Sciences University of Hartford #NFACSM21

Target Audiences

- Exercise Science Professionals and Students: research, clinical and academic
- Applied Professionals and Students: strength and conditioning coaches, health fitness professionals, personal trainers and nutrition specialists
- Sports Medicine Professionals and Students: physicians, physical therapists, athletic trainers, and allied health professionals

Learning Objectives

At the conclusion of the meeting, participants should be able to:

- Appreciate and connect the use of systems biology (i.e., metabolomics, epigenetics, etc.) and novel strategies in, and prominent barriers to, our understanding of exercise, diet and health.
- Discover, compare and contrast the use of state-of-the-art technology in intervention delivery and the study of exercise, sport and health science.
- Recognize the barriers and strategies in creating a more diverse exercise and sports medicine workforce and leadership.
- Describe and incorporate the tools and practices relevant to health promotion and clinical management in a diverse population.

Accreditation

Continuing Education Credits

NEACSM is an approved provider for the American College of Sports Medicine. 13.5 hours of CEUs/CECs will be awarded.

Student Development

- Free Communications Presentations (Thursday only)
- Oral Posters (Friday only)
- Posters (Thursday and Friday)

Professional Development

Special Interest Groups (Thursday, 4:35 p.m. – 5:05 p.m.)

- •Biomechanics (Room 551)
- Psychobiology and Behavior (Room 552)
- Strength and Conditioning (Room 553)
- Physiological/Biological Mechanisms (Rotunda)

Student Event: Ronai Academic College Bowl

Students test their exercise science and sports medicine knowledge in the annual Ronai Academic College Bowl on Thursday, October 21, following the President's Reception. Team registration and fee required.

Invited **Speakers**



Knuttgen Keynote Lecture
Thursday, October 21
Unseen, Unspoken, Unheard: Linking
Invisible Behaviors and Health Outcomes
Erica Perrier, Ph.D.
Perift



Clarkson Keynote Lecture
Friday, October 22
Defining Exercise Effects via Systems
Biology
Monica Hubal, Ph.D., FACSM
Indiana University-Purdue University
Indianapolis



Invited Lecture
Thursday, October 22
Breaking Barriers, Melting Silos and
Discovering Pathways
NiCole Keith, Ph.D., FACSM
Indiana University-Purdue University
Indianapolis



Invited Lecture
Thursday, October 21
Microbiota and Inflammation: A Story of Sex,
Exercise and Diet
Sara Campbell, Ph.D., FACSM
Rutgers University



Invited Lecture
Thursday, October 21
Artificial Intelligence Meets Sport & Exercise
Science: A Complex Systems Approach
Michael Bergeron, Ph.D., FACSM
Women's Tennis Association



Invited Lecture
Thursday, October 21
Exploration of the Exercise Metabolome in
Health and Disease
Gregory Lewis, M.D.
Massachusetts General Hospital



Invited Lecture
Friday, October 22
Move People with Stories: Exploring the Health Potential of Narratives
Amy Lu, Ph.D.
Northeastern University



Past-President's Lecture
Friday, October 22
Robots as Caregivers: Machine Learning
Meets Therapeutic Service Delivery
Dain LaRoche, Ph.D., FACSM
University of New Hampshire



Featured Lecture
Thursday, October 21
10 Action Items to Combat Racial Bias in Medicine
Paul G. Mathew, M.D.
Brigham and Women's Hospital



Featured Lecture
Friday, October 22
Is a Career in the Fitness Industry Right for You?
Francis Neric, M.S., MBA
American College of Sports Medicine



Featured Lecture
Friday, October 22
Aches, Age and Influenza: A Pathway to
Muscle Loss and Disability
Jenna Bartley, Ph.D., and Andreia Cadar, B.S.
University of Connecticut Health



Program Thursday October 21

Time	Room 550 (110 seats)	Room 551 (192 seats)	Room 552 (198 seats)	Room 553 (160 seats)	Ballroom D (414 seats)	Rotunda (212 seats)	
8:00-8:30 AM	NEACSM Registration Booth Opens						
8:30-9:30 AM	Tutorial Lectures: Are We Still Overdrinking during Exercise? Suzanne Young, Ph.D.; Cannabidiol (CBD), Worth the Hype? David Ferrer, Ph.D.	Mini-Symposia: Gait as a Biomarker of Brain Health: Assessing Motor Impairments in MCI & Dementia Christie Ward-Ritacco, Ph.D., ACSM-EP, FACSM; Susan D'Andrea, Ph.D.; and Tabatha Hartshom, M.S.	Physician's Track: Tendinopathy in Runners: Cutting Edge Treatments and Evidence-Driven Rehab Adam Tenforde, MD David Nolan, DPT	Tutorial Lecture: Special Considerations in Youth Sports: A Medical Perspective Peter Morano, Ph.D., ATC	Tutorial Lecture: Overweight and Obesity: Addressing the Epidemic of Misconceptions and Misapplications Wayne Westcott, Ph.D.	Invited Lecture: Breaking Barriers, Melting Silos and Discovering Pathways NiCole Keith, Ph.D., FACSM	
9:40-10:40 AM	Free Comm Pres	Masters Pres	Physician's Track: Interesting Fellowship Case Presentations	Bachelor Pres	Free Comm Pres	Doctoral Pres	
10:50-12:00 PM	Ballroom A. Knuttgen Keynote Lecture - Unseen, Unspoken, Unheard: Linking Invisible Behaviors and Health Outcomes Erica Perrier, Ph.D.						
12:00-1:05 PM		Lunch	h/Exhibitors/Free Commu	nication Posters (1:00-4:00	PM)		
1:10-2:10 PM	Colloquia: Critical Updates for the Exercise Professional: Updates to Academic Accreditation, Eligibility Requirements and Legislation Christie Ward-Ritacco, Ph.D., ACSM-EP, FACSM, and Francis Neric, M.S., MBA	Clinical Workshop: WorkFit Ergonomics: How to Be Fit If You Must Sit Peter Ronai, M.S., ACSM-CEP, CSCS-D, FACSM	Physician's Track: Orthobiologics in Athletes Joanne Borg-Stein, MD Pierre d'Hemecourt, MD	Featured Lecture: 10 Action Items to Combat Racial Bias in Medicine Paul G. Mathew, M.D.	Mini-Symposia: Impact of Low Energy Availability on Regulation of Skeletal Muscle Mass Lee Margolis, Ph.D.; Jessica Gwin, Ph.D.; and Emily Howard, Ph.D.	Invited Lecture: Microbiota and Inflammation: A Story of Sex, Exercise, and Diet Sara Campbell, PhD, FACSM	
2:20-3:20 PM	Tutorial Lecture: Role of the Exercise Physiologist in Bariatric Surgery Matthew Stults- Kolehmainen, Ph.D., ACSM-EP, FACSM, and Garrett Ash, Ph.D.	Biomechanics Interest Group Symposium: 1) Wearable Sensors in Biomechanics Matt Moran, Ph.D. 2) Exoskeletons for Improving Human Performance Pei-Chun Kao, Ph.D. 3) Design and Use of	Physician's Track Invited: Navigating the Pandemic in the NBA: The Bubble and Beyond The NBA and Youth Sport: Combining Research and Outreach John DiFiori, MD	Colloquia: Volunteerism with ACSM: SHI-Women Program, Committee Work and Fellowship Marisa Hastie, Ed.D., ACSM-EP, FACSM, and Paul Gallo, Ed.D., ACSM-CEP, ACSM-EP, FACSM	Mini-Symposia: Spaceflight and Musculoskeletal Health: Progressing Beyond Low Earth Orbit to the Moon, Mars and Beyond Megan Rosa-Caldwell, Ph.D.; Marie Mortreux, Ph.D.; and Ann-Sofie Schreurs, Ph.D.	Invited Lecture: Artificial Intelligence Meets Sport & Exercise Science: A Complex Systems Approach Michael Bergeron, Ph.D., FACSM	
3:30-4:30 PM	Tutorial Lecture: HIIT Training Recommendations for Clients with Neurodegenerative Disease: What to Know and Do! Paul Gallo, Ed.D., ACSM-CEP, ACSM-EP, FACSM	an Eccentric Cycle Ergometer for Training and Research Chee-Hoi Leong, Ph.D. 4) Kinetics and Energetics of Running and Skipping Sarah Roelker, Ph.D.	Physician's Track: Interesting Fellowship Case Presentations	Tutorial Lecture: Fragile and Feminine? Exploring Sexism and Physical Activity in Women Melanna Cox, M.S.	Colloquia: What the Heck Do I Do with a Degree in Exercise Science? Generating the Skills that Pay the Bills Elizabeth O'Neill, DPE, ACSM-EP, CSCS, and Jason Melnyk, Ph.D., CSCS	Invited Lecture: Exploration of the Exercise Metabolome in Health and Disease <i>Gregory Lewis, M.D.</i>	
4:35-5:05 PM (Special Interest Group Meetings)		Special Interest Group: Biomechanics	Special Interest Group: Psychobiology and Behavior	Special Interest Group: Strength and Conditioning		Special Interest Group: Physiological/ Biological Mechanisms	

Program Friday October 22

Time	Room 550 (110 seats)	Room 551 (192 seats)	Room 552 (198 seats)	Room 553 (160 seats)	Ballroom D (414 seats)	Rotunda (212 seats)	
8:00-8:30 AM	NEACSM Registration Booth Opens						
8:30-9:30 AM	Mini-Symposium: Physical Activity, Social Support and Anxiety in Undergraduate Students Shifting from On-Campus to Remote-Learning during the COVID-19 Pandemic Jessica Peacock, Ph.D.; Leah Polosky, Ph.D.; and April Bowling, Sc.D.	Clinical Workshop: Resistance Training for the Cardiac Rehabilitation Patient: Practical Tips for the Clinical Exercise Physiologist Peter Ronai, M.S., ACSM-CEP, CSCS-D, FACSM	Physician's Track: Advancing Women's Sports Medicine Part 1: Sex Differences and Core of Injury Prevention - Kelly C. McInnis, DO and Ashley Wiater, DPT	Tutorial Lecture: The Impact of Exercise on Vascular Responsiveness to Angiotensin II Infusion as a Novel Method to Measure Cardiovascular Function Stephen Maris, Ph.D.	Featured Lecture: Is a Career in the Fitness Industry Right for You? Francis Neric, M.S., MBA.	Invited Lecture: Move People with Stories: Exploring the Health Potential of Narratives Amy Lu, Ph.D.	
9:40-10:40 AM	Tutorial Lecture: Stress Echocardiography: Visualizing the Heart's Response to Exercise Steven Walling, B.S., RCS, RDCS	Tutorial Lecture: Using Accelerometry for Home-monitoring of Daily Activity and Sleep Patterns in Chronic Disease Populations Alessandra Adami, Ph.D., and Jungeun Lee, Ph.D., R.N.	Physician's Track: Interesting Fellowship Case Presentations	Tutorial Lecture: Autophagy and Cardiovascular Health Leena Bharath, Ph.D.	Oral Posters	Past-President's Lecture: Robots as Caregivers: Machine Learning Meets Therapeutic Service Delivery Dain LaRoche, Ph.D., FACSM	
10:50-12:00 PM	Ballroom A. Clarkson Keynote Lecture - Defining Exercise Effects via Systems Biology Monica Hubal, Ph.D., FACSM						
12:00-1:05 PM	Lunch/Exhibitors/Free Communication Posters (1:00-4:00 PM)						
1:20-2:20 PM	Tutorial Lecture: Standing up to COVID-19: Using a Telehealth Group Support Intervention to Promote Physical Activity and Reduce Sedentary Behavior during the Pandemic Allison Seifert, Ph.D., CSCS, and Jacquelyn Rickson, Ph.D.	Featured Lecture: Aches, Age and Influenza: A Pathway to Muscle Loss and Disability Jenna Bartley, Ph.D., and Andreia Cadar, B.S.	Physician's Track: Advancing Women's Sports Medicine Part 2: Managing Elite Dancers and Ice Skaters - Bridget Quinn, MD and Ellen Geminiani, MD	Tutorial Lecture: Racial Differences in Hemodynamic Responses Following Acute Bouts of Anaerobic Exercise Huimin Yan, Ph.D.	Tutorial Lecture: Monitoring Training Load for Athlete Performance and Health Jennifer Fields, Ph.D., CSCS, CISSN	Tutorial Lecture: Pregnant Athletes: Boundaries of Safe Exercise during Pregnancy Ryanne Carmichael, Ph.D., CSCS	
2:20-3:30 PM	Clinical Workshop: Exercise is Medicine® Ambassador Program Colleen Muñoz, Ph.D.	Oral Posters	Physician's Track: Interesting Fellowship Case Presentations	Tutorial Lecture: Sports Nutrition: Current Fads and Trends Nancy Clark, M.S., R.D., CSSD, FACSM	Diversity Committee - Community Conversation		

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Conference Registration

To register online:

Use the NEACSM website: www.neacsm.org

Pre-registration will be accepted through October 17, 2021. No registrations by phone or mail.

Group registrations: To register a group, contact Heather Turner at (317) 637-9200, ext. 138 or hturner@acsm.org. Group registration information and payments must be submitted no later than October 10, 2021.

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

	Registration before Sept. 19	Registration before Oct. 17	Registration Onsite
Professional Member (One day - Thursday)	\$120	\$130	\$140
Professional Member (One day - Friday)	\$120	\$130	\$140
Professional Member (Two days)	\$150	\$160	\$170
Professional-in-Training Member (One day - Thursday)	\$90	\$100	\$110
Professional-in-Training Member (One day - Friday)	\$90	\$100	\$110
Professional-in-Training Member (Two days)	\$110	\$120	\$130
Student Member (One day - Thursday)	\$45	\$50	\$60
Student Member (One day - Friday)	\$45	\$50	\$60
Student Member (Two days)	\$60	\$65	\$75

Hotel Accommodations

Blocks of guest rooms are available for conference attendees at a special rate at two Providence hotels. Be sure to identify your affiliation with NEACSM to receive the special conference rate. You must reserve your room by September 20, 2021, to receive the special rates listed below:

The Omni Providence One West Exchange Street Providence, RI 02903 (800) 843-6664

Click here to book your room

\$179.00/night

Providence Biltmore 11 Dorrance Street Providence, RI 02903

(800) 294-7709

Click here to book your room

\$159.00/night

Directions to the Conference

From the South:

Take 95 North to Exit 16 to Route 10 North. Continue North to the Dean Street Exit. Once on the exit, stay to the left, and at the light cross over Dean Street. Then take your first right onto West Exchange Street to the Rhode Island Convention Center Garage.

From the North:

Take 95 South to the Civic Center Interchange, Exit 22, Downtown Providence. Stay to the left on the ramp; at the end go right. At the light go right to the Rhode Island Convention Center Garage.

For more detailed directions log on to www.neacsm.org

