

2022 MARC-ACSM ANNUAL MEETING PROGRAM



**AMERICAN COLLEGE
of SPORTS MEDICINE**
Mid-Atlantic Chapter



NOVEMBER 4-5, 2022

Sheraton Harrisburg-Hershey Hotel
4650 Lindle Rd, Harrisburg, PA 17111

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WELCOME FROM MARC-ACSM PRESIDENT

It is with great honor, pleasure, and privilege for me to welcome you to the 45th Annual Mid-Atlantic Regional Chapter of the American College of Sports Medicine (MARC-ACSM) Meeting. In our farewell conference before moving to the Lancaster County Convention Center, I would like to recognize and thank the Sheraton Hershey-Harrisburg Hotel for hosting the MARC-ACSM Annual Meeting for the past several years and understanding our need to move to a larger venue for the future.



As we prepare to return for our second face-to-face meeting after an unprecedented coronavirus pandemic, I would like to acknowledge Dr. Devon Dobrosielski, Immediate Past President, for leading and coordinating our Chapter's return to new normalcy. In addition to Dr. Dobrosielski, I would like to acknowledge Dr. Emily Sauers, President-Elect, who will assume the roles and responsibilities of the presidency at the close of this conference. Thank you both for providing me with guidance, perspective, and support to lead the Chapter for the past year. I would be remiss if I did not acknowledge our dedicated, hard-working, and relentless executive board, each of whom have served critical roles in making this conference possible. Special thanks go to Drs. Peter Hosick (Vice President), Rian Landers-Ramos (Member-at-Large, Research), Sushant Ranadive (Member-at-Large, Research), Deborah King (Member-at-Large, Expo), Jessica Butts (Physician-at-Large), Brittany Overstreet (Secretary), Sara Campbell (Regional Representative), Stephen LoRusso (Executive Director), Joohee Sanders (Associate Executive Director), and Mr. Kyle Pietro (Student Representative). Thank you all so very much for supporting me, and for working to ensure that this conference can be successful.

As we hope you will see from our conference schedule, the Program Planning Committee has made significant efforts to Embrace Our Disciplines and deliver a conference program that meets and delivers on your expectations. We are fortunate to have Dr. George Brooks deliver our Keynote address on Lactate in Contemporary Exercise Science: A Phoenix Risen. Dr. Brooks is a Professor of Integrative Biology at the University of California-Berkeley and an ACSM Distinguished Leader who has made significant contributions to the fields of exercise science and sports medicine. His two central hypotheses on the lactate shuttle and crossover concept are widely recognized and considered seminal concepts learned by students in exercise physiology coursework, applied in practice by ACSM certified professionals, and further investigated and explored by exercise science and sports medicine researchers.

We are also delighted to have Dr. Nina Stachenfeld close the conference with our final speaker session on Considerations When Performing Studies of Vascular Control that Include Women. Dr. Stachenfeld is a Senior Research Scientist at the Yale School of Medicine whose research program addresses reproductive hormone effects on cardiovascular and autonomic function, exercise responses, temperature and body fluid regulation, polycystic ovarian syndrome, endometriosis, and the impact of hormones on cardiovascular health in transgender people. Her work is highly innovative and inclusive to women's health, has been featured in key publications such as the Journal of Applied Physiology Point-Counter Point Series, and has received recognition and distinction by the American College of Sports Medicine as a recipient of the Carl V. Gisolfi Award.

In addition to Drs. Brooks and Stachenfeld, Dr. Sara Campbell will be delivering our Past President's Lecture on Bidirectional Link Between Gut Microbiota and Exercise Tolerance. Dr. Campbell will also be honored with the H. Scott Kieffer Service Award on Saturday November 5th to honor her service and dedication to the Chapter. Above and beyond these featured sessions, the conference will welcome more than 50 speakers within and beyond the region with national and international expertise, in academic, clinical pedagogical, biobehavioral, applied and industrial exercise science and sports medicine disciplines. Some of these featured sessions will include but are not limited to symposia on sports performance, cancer, extracellular vesicles and endothelial microparticles, pitching biomechanics, advocacy, and healthy cognitive aging. Other featured sessions will include content on exercise genomics, biobehavioral health, diversity, equity and inclusion, heat shock proteins, wearable and virtual technologies, research measurement and evaluation, biostatistical approaches in health and exercise science, and professional development.

Our physician track will feature clinical sessions on injury prediction, exercise counseling in cancer, evaluation and treatment of dance athletes, and treatment of athletes with special needs or considerations. The physician track will also feature more than 10 clinical case presentations for additional discussion and engagement at the conference. The conference will also feature more than 110 free communications and poster sessions, providing opportunities for undergraduate, graduate, early-career, and professional members of the Chapter to showcase their work and research. For those with special interests, the Chapter is pleased to begin a new tradition and provide dedicated times for ACSM Special Interest Groups (SIGS) to meet and reconnect at the conference. SIGS offered at the conference will include groups interested in cancer, clinical exercise physiology, nutrition, biomechanics, and education. At the same time, student registrants will have opportunities to connect with some of our invited speakers at the Meet the Experts session, a MARC-ACSM tradition.

Interlaced between sessions and SIGS, we encourage you to find time to connect with colleagues at the MARC-ACSM Social (Friday evening), visit our sponsors and exhibitors who help make the conference possible (Friday and Saturday), cheer on your favorite College Bowl (Friday evening) and Fitness Challenge (Saturday morning) teams, and purchase tickets for our Student Raffle with more than \$1,000 in new items donated and purchased for the Chapter's Student Fund. Prior to departing Harrisburg for the final time, we hope you will join us for the MARC-ACSM Annual Banquet and Awards Ceremony, where recognition will be given to those receiving MARC-ACSM professional, student and service awards, raffle winners will be announced, and the torch will be passed to Dr. Sauers for our next Chapter year.

On behalf of the entire MARC-ACSM executive board and program planning committee, I thank you for joining us as we Embrace our Disciplines and prepare for an exciting and engaging conference.

Best,

A handwritten signature in black ink, appearing to be 'S. Campbell', written in a cursive style.

2022 MARC-ACSM LEADERSHIP



EXECUTIVE DIRECTOR

Stephen LoRusso, Ph.D.
Mid-Atlantic ACSM



ASSOCIATE EXECUTIVE DIRECTOR

Joohee Sanders, Ph.D.
Shippensburg University



PAST PRESIDENT

Devon Dobrosielski, Ph.D., FACSM
Towson University



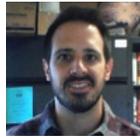
PRESIDENT

Michael Bruneau Jr., Ph.D.
Drexel University



PRESIDENT ELECT

Emily Sauers, Ph.D., FACSM
Our Lady of the Lake University



VICE PRESIDENT

Peter Hosick, Ph.D., FACSM
Montclair State University



SECRETARY

Brittany Overstreet, Ph.D., FACSM
University of Delaware



MEMBER AT LARGE

Rian Landers-Ramos, Ph.D.
Towson University



MEMBER AT LARGE

Deborah King, Ph.D.
Ithaca College



MEMBER AT LARGE

Sushant Ranadive, Ph.D.
University of Maryland



REGIONAL REPRESENTATIVE

Sara Campbell, Ph.D., FACSM
Rutgers University



PHYSICIAN AT LARGE

Jessica Butts, M.D.
Penn State Hershey Medical Center



STUDENT REPRESENTATIVE

Kyle Pietro
University of Maryland

2022 MARC-ACSM STATE REPRESENTATIVES



DE STATE REPRESENTATIVE

Melissa Witman, Ph.D.
University of Delaware



NJ STATE REPRESENTATIVE

Jay Garrels, Ph.D.
St. Peter's University



NJ STATE REPRESENTATIVE

John Guers, Ph.D.
Rider University



NY STATE REPRESENTATIVE

Justin Faller, Ph.D.
SUNY Brockport



NY STATE REPRESENTATIVE

Stephen Ives, Ph.D.
Skidmore College



PA STATE REPRESENTATIVE

Brian Larouere, Ph.D.
Seton Hill University



PA STATE REPRESENTATIVE

Jim Roberts, Ph.D.
Edinboro University



WV STATE REPRESENTATIVE

Jason Metz, Ph.D.
West Liberty University

If interested in serving as a state representative, please email Dr. Sara Campbell at saracamp@kines.rutgers.edu

PAST MARC-ACSM PRESIDENTS AND EXECUTIVE DIRECTORS

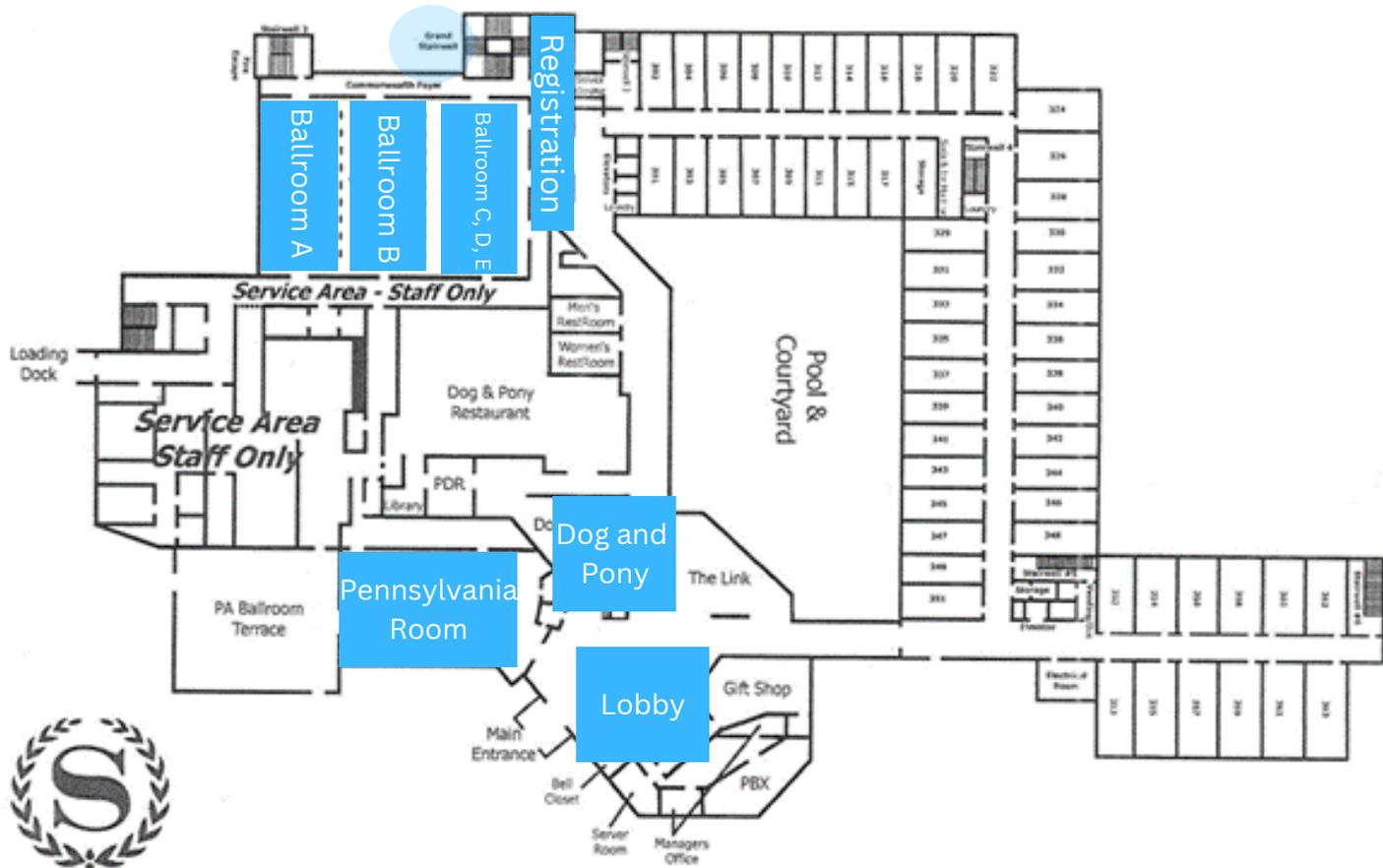
Past Presidents

2022- Michael Bruneau, Jr.
2021- Devon Dobrosielski
2020- Melissa Reed
2019- Kevin Heffernan
2018- David Edwards
2017- Sara Campbell
2016- Michael Holmstrup
2015- Scott Mazzetti
2014- Gene Hong
2013- Eric Rawson
2012- Bill Farquhar
2011- H. Scott Kieffer
2010- Kristie Abt
2009- Jim Roberts
2008- Steven Siconolfi
2007- Mark Sloniger
2006- Matthew Kerner
2005- Jill Kanaley
2004- Shala Davis
2003- Dan Drury
2002- Brad Hatfield
2001- Carlos Crespo
2000- Ross Anderson
1999- Betsy Keller
1998- Sam Case
1997- Michael Cox
1996- Karen Mittleman
1995- Thomas Doubt
1994- W. Craig Stevens
1993- M. Paternostro-Bayles
1992- M. Paternostro-Bayles
1991- Gary Sforzo
1990- Tim McConnell
1989- H. Robert Perez
1988- Elsworth Buskirk
1987- Robert Otto

Past Executive Directors

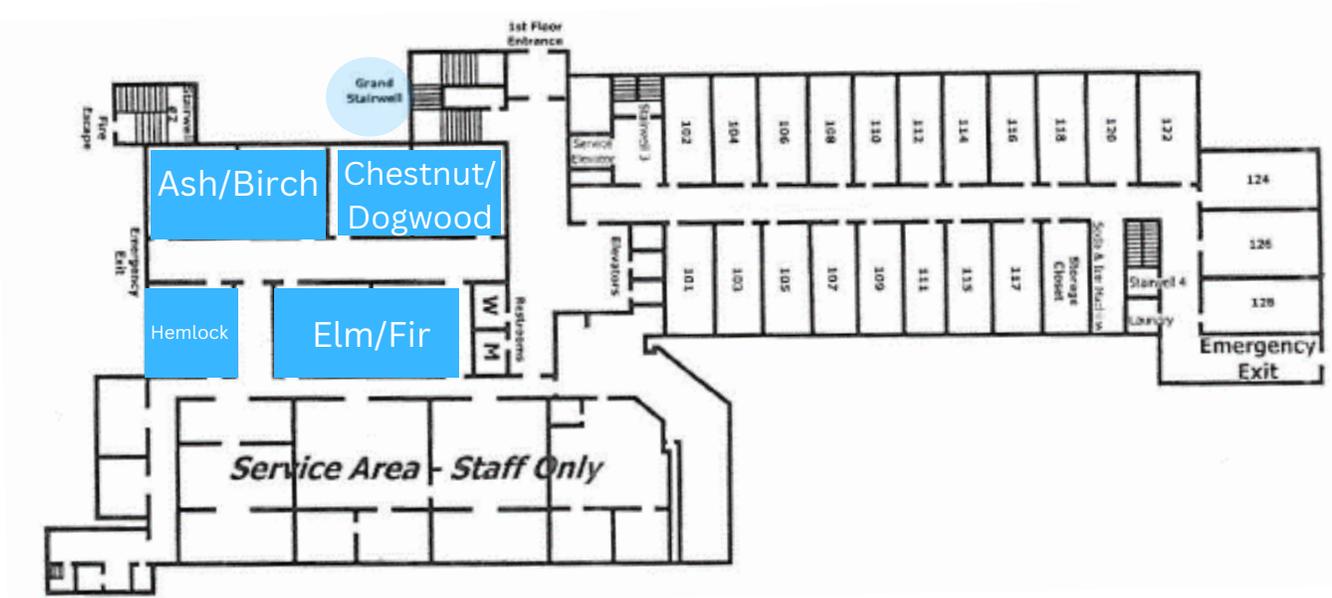
2020- Present- Stephen LoRusso
2012-2020- H. Scott Kieffer
2009-2012- Dan Drury
2001-2009- W. Craig Stevens
1985-2001- Ed Zambraski

SHERATON HARRISBURG-HERSHEY FLOORPLANS: LOBBY LEVEL



Sheraton
Harrisburg-Hershey
HOTEL

SHERATON HARRISBURG-HERSHEY FLOORPLANS: BOTTOM LEVEL



REGISTRATION INFORMATION

PRE-REGISTRATION PICK-UP TIMES

THURSDAY 7-9PM

LOBBY FLOOR (BY ELEVATORS)

FRIDAY 7-9AM

GROUND FLOOR (ELM/FIR)

FRIDAY 9AM-5PM

LOBBY FLOOR (BY ELEVATORS)

SATURDAY 7-9AM

LOBBY FLOOR (BY ELEVATORS)

ON-SITE REGISTRATION TIMES

FRIDAY 7AM-5PM

LOBBY FLOOR (BY ELEVATORS)

SATURDAY 7-9AM

LOBBY FLOOR (BY ELEVATORS)

ATTENDEE INFORMATION

CONTINUING EDUCATION CREDITS

MARC-ACSM is an approved CEC provider for ACSM. Your CEC Certificate will be available for download from the MARC-ACSM website after the meeting has concluded. The ACSM's Professional Education Committee certifies that this Continuing Education offering meets the criteria for 14 credit hours of ACSM Continuing Education Credit (CEC).

STUDENT RAFFLE

Participate in the MARC-ACSM raffle! Hosted by MARC-ACSM Student Representative, this year's raffle offers a variety of prizes (e.g., Apple Air Pods, Fitbit, gift cards, etc.) which are awarded throughout the meeting. Tickets can be purchased outside of Ballroom (Salon) C, D, E. All proceeds from the student raffle contribute the chapter endowment which is used to fund student travel and MARC research awards as well as allow us to offer student scholarships in the future.

SPEAKER READY ROOM

The Speaker Ready Room will be in the Hemlock Room (last room on the left of the first floor. Note: the first floor has a direct entrance from the back of the hotel and is one floor below the main hotel lobby).

Speakers are encouraged to bring their PowerPoint presentations on a jump drive to the speaker ready room at their earliest convenience, but no later than 2 hours prior to the start of their session, e.g. before 11 am for a session that begins at 1 pm, regardless of when the speaker speaks during that session.

For the convenience of our speakers, the speaker ready room will be open during the following hours:

Thursday, November 3rd	7- 8 pm
Friday, November 4th	7:30 am - 11 am; 12:15 -3:45 pm
Saturday, November 5th	8 am - 10 am

AWARDS BANQUET LUNCH: SATURDAY 1PM

Please join us for a buffet luncheon on Saturday afternoon following the last talk where we will award trophies, certificates and checks to all our winners: The Mathew Kerner Undergraduate Research Award, the Master's and Doctoral Graduate Student Research Awards, the Presidents Cup winner and the College Bowl and Fitness Challenge winners. The Early Career Investigator award will also be presented. Additionally, all prizes from the raffle will be selected and awarded! You must be present to win one of the many prizes we are offering this year. One of our top prizes this year is a Portable Touch screen Monitor and Protein Blender Bottle package!

ATTESTATION OF COVID-19 VACCINATION/NEGATIVE COVID 19 TEST

Please be advised, as part of our efforts to provide a safe environment for our meeting attendees, the Mid-Atlantic ACSM Regional Chapter is requiring all in-person conference participants to be fully vaccinated and/or have a negative COVID-19 test result*. Failure to comply with this mandate and by signing a form attesting to this at the time of checking in for the Conference will result in being denied access to the meeting.

MARC-ACSM RESEARCH AWARDS

Matthew Kerner Undergraduate Student Investigator Award

Eligible individuals are any current or recently graduated UG student. Recently graduated students regardless of current employment status (i.e. professionally employed or enrolled in a Master's level program) are eligible provided the work was completed as an undergraduate student and they are not more than one semester removed from UG graduation.

The purpose of this award is to recognize and support undergraduate student investigative research. The winner receives a plaque and \$250. All undergraduate students who submit an abstract for a Free Communications/Slide presentation at the MARC Regional Chapter Meeting will be eligible for this award. The award is based on the quality of the submitted abstract and the presentation at the meeting. All abstracts will be evaluated, but only the top abstracts will have their presentations evaluated.

Master's Student Investigator Award

Eligible individuals are any current or recently graduated Master's level student. Recently graduated students regardless of current employment status (i.e. professionally employed or enrolled in a PhD level program) are eligible provided the work was completed as a Master's student and they are not more than one semester removed from graduation with their Master's degree. The purpose of this award is to recognize and support Master's level student investigative research. The winner receives a plaque and \$400. All Master's level students who submit an abstract for a Free Communications/Slide presentation at the MARC Regional Chapter Meeting will be eligible for this award. The award is based on the quality of the submitted abstract and the presentation at the meeting. All abstracts will be evaluated, but only the top abstracts will have their presentations evaluated.

Doctoral Student Investigator Award

Eligible individuals are any current or recently graduated student in a doctoral or medical program. Students that recently completed their doctoral or medical program are eligible provided they are currently employed as a post-doctoral fellow or equivalent (those employed in faculty positions are NOT eligible) and they are not more than one semester removed from their doctoral or medical program completion. The purpose of this award is to recognize and support graduate student investigative research. The winner receives a plaque and \$500 to be used to defray either travel costs to the National ACSM meeting or her/his research expenses. All doctoral or medical students who submit an abstract for a Free Communications/Slide presentation at the MARC Regional Chapter Meeting will be eligible for this award. The award is based on the quality of the submitted abstract and the presentation at the meeting. All abstracts will be evaluated, but only the top abstracts will have their presentations evaluated.

2022 RESEARCH COMMITTEE

The MARC-ACSM Executive Board would like to thank the 2022 Research Committee for their hard work in reviewing abstract submissions and evaluating research award nominees.

Rian Landers-Ramos, Committee Chair

Sushant Ranadive, Committee Co-Chair

Amy Alnutt

Wally Bixby

Justin DeBlauw

Shawn Eagle

Kevin Heffernan

Ricky Howard

Steve Ives

Joon Young Kim

Kristen Koltun

Sara Kovacs

Karla Kubitz

Ashley Lesniak

Erik Lind

Masoud Maghaddam

Evan Matthews

Julia Matzenbacher dos Santos

Kenneth Harrington McKeever

Jason Metz

J. David Mosinski

Shawn Munford

Julia Olsen

Jason C. Parks

Joseph Pierce

Steven Prior

Megan Ramick

Selen Razon

Edward Ryan

Emily Ryan

Drue Stapleton

Joe Stock

Andrew Venezia

Steven Vitti

Melissa Whidden

S. Tony Wolf

Towson University

University of Maryland

Marymount University

Ann Arundel Community College

Skidmore College

University of Pittsburgh Medical Center

Syracuse University

West Chester University

Skidmore College

Syracuse University

University of Pittsburgh

Temple University

Towson University

Lock Haven University

SUNY Cortland

Salisbury University

Montclair State University

Fairmont State University

Rutgers University

West Liberty University

Gannon University

East Stroudsburg University

Delaware State University

SUNY Cortland

United States Army Public Health Center

University of Maryland

West Chester University

West Chester University

Chatham University

West Virginia University

Rider University

University of Delaware

University of Scranton

Drexel University

West Chester University

The Pennsylvania State University

H. SCOTT KIEFFER SERVICE AWARD

The MARC-ACSM Executive Board honors and recognizes Dr. Sara Campbell as the 2022 recipient of the H. Scott Kieffer Service Award.



Sara C. Campbell, PhD, FACSM has been a member of MARC-ACSM since 1999, while pursuing her master's degree at Bloomsburg University of Pennsylvania.

She was also a member of Southeast ACSM, while attending Florida State University to earn her doctorate. She returned to the Mid-Atlantic region in 2010 after accepting an academic appointment at Rutgers University. Dr. Campbell has been an active member of the ACSM National Student Bowl Committee since 2011. Due to her work on this committee, she was charged with helping to ensure that MARC's student bowl format was consistent with that of the national ACSM competition.

In 2013, she was elected to the MARC Executive Board as Member-at-Large/EXPO. The following year, she was nominated to serve as President and assumed that role in 2015. As President, Dr. Campbell planned the 2017 MARC Annual Meeting. In 2018, she was appointed Regional Representative to national ACSM and has subsequently been awarded approximately \$9K in grant funding to support the diversity, equity, and inclusivity (DEI) initiatives that the MARC chapter has championed. This includes recruiting and retaining faculty and students from underrepresented and underserved colleges and universities. Dr. Campbell mentors faculty and oversees student state representatives, who are tasked with promoting DEI initiatives, hosting state meetings, and organizing the MARC student bowl.

Over the years, Dr. Campbell has planned and organized scientific symposia for the MARC annual meetings and served as a moderator and chair of multiple scientific sessions while also mentoring her students who regularly present abstracts at the meetings. In addition, Dr. Campbell has written materials for ACSM journals, and has served as an ad hoc reviewer for MSSE and book chapters. She was honored as an ACSM Fellow in 2016.

Please join us in congratulating and thanking Dr. Campbell for her service to the MARC-ACSM.

SOCIAL MEDIA: FOLLOW MARC-ACSM



@MARCACSM



@marc.acsm



@MidAtlantic Region of the ACSM



@Mid-Atlantic Marcacsm



YouTube

@MARC-ACSM

**TAG US THROUGHOUT THE MEETING
USING #MARC22**

PROGRAM AT A GLANCE: FRIDAY AM

Time	Ballroom A	Ballroom B	Ballroom C, D, E	Pennsylvania Room	Chestnut/Dogwood	Ash/Birch	Elm/Fir	Hemlock
7:00-8:00 AM	MARC-ACSM On-Site Registration Lobby area outside of ballrooms **Note: Pre-Registration Check-In is in Elm/Fir until 9:00am**						Pre-Registration Check In	
8:00-9:00 AM						Physician Track Welcoming Remarks 8:00 AM Jessica Butts, MD <i>Penn State Health</i>		
9:00-10:00 AM	The Carbohydrate Conundrum: Is More Better than Enough? Patrick DeVitt, PhD, CSCS <i>St. Joseph's University</i>	Exercise Omics: Past, Present and Future Through the Lense of the HERITAGE Family Study Mark Sarzynski, PhD <i>University of South Carolina</i>	Ageism, Racism, Sexism and other Unfortunate "Isims" that Create Barriers to Physical Activity- Let's Face the Discomfort and Discover Solutions NiCole Keith, PhD, FACSM <i>Indiana-University Purdue-University of Indianapolis</i>	Injury Prediction and Use of Microdopplar Radar 8:10AM Cayce Onks, MD <i>Penn State Health</i> Counseling for Exercise in Cancer 8:50 AM Allison Betof-Warner, MD, PhD Memorial Sloan Kettering Cancer Center Evaluating and Treating the Performance/Dance Athlete 9:30AM Elizabeth Barchi, MD ChristianaCare Special Olympics: Lessons Learned and Care for the Special Needs Athlete 10:10AM Shawn Phillips, MD, PhD <i>Penn State Health</i>	Diabetes Care for the Clinical Exercise Physiologist Brian Foster, DHSc, ACSM CEP, MSE, CCRP <i>University of Pennsylvania</i>	Extracellular Vesicles and Endothelial Microparticles in Cardiometabolic Health after Exercise: Small in Size but Big in Function? Rian Landers-Ramos, PhD <i>Towson University</i> Steven Prior, PhD <i>University of Maryland</i>	Speaker Ready Room	
10:00-11:00 AM	Stress and Adaptation: Historical and Future Perspectives Courtney Jensen, PhD <i>University of the Pacific</i>	Power in the Transverse Plane: How to Become a Rotational Powerhouse Jonathan Mike, PhD <i>Dr. J Mike Scientific Strength</i>	Hot Tub or Treadmill? The Exercise-Like Benefits of Heat Therapy on Cardiometabolic Health Paige Geiger, PhD <i>University of Kansas</i>	Tracking Physical Activity Using Wearable Technology in Individuals with Disabilities Shiv Hiremath, PhD <i>Temple University</i>	Matthew Barberio, PhD <i>George Washington University</i> Steven Malin, PhD <i>Rutgers University</i>	Free Communications I		
11:00-12:00 PM	Keynote Address Lactate in Contemporary Exercise Science: A Phoenix Risen George Brooks, PhD <i>University of California at Berkeley</i>							
12:00-1:00 PM	Lunch Break/Exhibitors/ Poster Setup							

PROGRAM AT A GLANCE: FRIDAY PM

Time	Balroom A	Balroom B	Balroom C, D, E	Pennsylvania Room	Chestnut/Dogwood	Ash/Birch	Elm/Fir	Hemlock
1:00-2:00 PM	<p>Past President: Bidirectional Link Between Gut Microbiota and Exercise Tolerance</p> <p>Sara Campbell, PhD, FACSM <i>Rutgers University</i></p>	<p>A Personal Biography of a Physiological Misnomer: The Anaerobic Threshold</p> <p>James Hagberg, PhD <i>University of Maryland</i></p>	Poster Session I		<p>Advocacy: Chapter Involvement in Federal, State and Local Physical Activity Initiatives</p> <p>Craig Stevens, PhD, FACSM <i>West Chester University</i></p> <p>Monte Ward, President <i>Advanced Capitol Consulting</i></p> <p>Stephen LoRusso, PhD <i>Mid-Atlantic Regional Chapter of the American College of Sports Medicine</i></p>	<p>Free Communications II</p>	<p>Undergraduate Research Awards</p> <p>Gregory Chartier <i>Towson University</i></p> <p>Grace Dietz <i>Towson University</i></p> <p>Morgan Figue <i>Towson University</i></p> <p>George Mysh <i>Rutgers University</i></p> <p>Justin Updegraff <i>Towson University</i></p>	Speaker Ready Room
2:00-3:00 PM	<p>Cancer Symposium</p> <p>Allison Betof-Warner, MD, PhD <i>Memorial Sloan Kettering Cancer Center</i></p> <p>Christina Dieli-Conwright, PhD, MPH, FACSM, CSCS <i>Dana Farber Cancer Institute</i></p> <p>Laura Rodgers, MD, MPH, FACP, FACSM <i>University of Alabama at Birmingham</i></p>	<p>Sports Performance Symposium</p> <p>Nyree Dardarian, EDD, RDN, CSSD, FAND, LDN <i>Drexel University, Philadelphia Union, Philadelphia Flyers</i></p> <p>Patrick McDowell, BA <i>Philadelphia Eagles</i></p>			Clinical Case Presentation		<p>Translating Genomic Discoveries to Behavioral Interventions: Deep Phenotyping of Physical Activity</p> <p>Harold Lee, PhD <i>Penn State University</i></p>	
3:00-4:00 PM	<p>Maple Tree University: Building a Work Force in Exercise Oncology?</p> <p>Karen Wonders, PhD, FACSM <i>Maple Tree Cancer Alliance</i></p>	<p>Garrison Draper, PhD <i>Philadelphia Union</i></p>	Poster Session II			<p>Making Success Out of Failure...Exercise in HFpEF, HFpEF and VADs...Oh My!</p> <p>Steven Keteyian, PhD, <i>Henry Ford Hospital</i></p>	<p>Pitthng Biomechanics Symposium</p> <p>Kristen Faith Nicholson, PhD <i>Wake Forest University</i></p> <p>Garrett Bullock, PT, DPT, DPHIL <i>Wake Forest University</i></p>	
4:00-5:00 PM	<p>Special Interest Group Meeting: Cancer</p>	<p>Special Interest Group Meeting: Nutrition</p>		Meet the Experts	<p>Special Interest Group Meeting: Clinical Exercise Physiology</p>	<p>Special Interest Group Meeting: Biomechanics</p>	<p>Doctoral Research Award</p> <p>Michele D'Agata <i>University of Delaware</i></p> <p>Evan Feigel <i>University of Pittsburgh</i></p> <p>Candace Longoria <i>Rutgers University</i></p> <p>Catherine Sapp <i>University of Maryland</i></p> <p>Nicole Sekel <i>University of Pittsburgh</i></p>	
5:00-6:00 PM	College Bowl							
6:00-7:00 PM								
7:00-8:00 PM	Dinner							
8:00-10:00 PM				Professional's Social				

PROGRAM AT A GLANCE: SATURDAY

Time	Ballroom A	Ballroom B	Ballroom C, D, E	Pennsylvania	Chestnut/Dogwood	Ash/Birch	Elm/Fir	Hemlock
7:00- 8:00 AM	Fitness Challenge							Speaker Ready Room
8:00- 9:00 AM	Registration Lobby area outside of ballrooms							
9:00- 10:00 AM	Lifestyle Strategies for Healthy Cognitive Aging Loretta Di Pietro, PhD, MPH FACSM <i>George Washington University</i> Christopher Martens, PhD <i>University of Delaware</i>	The Role of Exercise Scientists in Industry Professions Brittany Masteller Leboeuf, PhD <i>Orange Theory</i>	ACSM Certifications: Bridging the Gap Between Science and Practice Madeline Paternostro Bayles, PhD <i>American College of Sports Medicine</i>	The Future of Exercise Science: Leveraging Wearable, Online and Virtual Exercise Technologies for Research and Performance Christopher Harnish, PhD, ACSM EP, CSCS, CFMS <i>Marybaldwin University</i> Garrett Bullock, PT, DPT, DPHIL <i>Wake Forest University</i>	Free Communications III	Free Communications IV	Free Communications V	
10:00-11:00 AM	Networking Online and Offline to Build Your Client Base or Business Niki Campbell, MS <i>The Flourish Group</i>	Overwhelmed: Maintaining Your Well-Being in an Academic Career Courtenay Dunn Lewis, PhD <i>University of Pittsburgh</i>	Weighted Judgement: The Importance of a Paradigm Shift in Treating Obesity Amy Allnutt, PhD, ACSM EP <i>Marymount University</i>	Reliability and Validity in Kinesiology Research Tiago Barreira, PhD <i>Syracuse University</i>	Free Communications VI	Free Communications VII	Free Communications VIII	
11:00- 12:00 PM				Improving Functional Movement: Fundamental Movement Versus Task-Oriented Approaches Adam Eckart, DHSc <i>Kean University</i>	Free Communications IX	Free Communications X	Free Communications XI	
12:00-1:00 PM	Final Speaker Address Considerations When Performing Studies of Vascular Control that include Women Nina Stachenfeld <i>Yale University</i>							
1:00- 2:00 PM	MARC-ACSM Banquet and Awards Ceremony							

KEYNOTE SPEAKER: DR. GEORGE BROOKS

It is with great pleasure for the Mid-Atlantic Regional Chapter of the American College of Sports Medicine to welcome Dr. George A. Brooks as our keynote speaker for the 45th Annual MARC ACSM Meeting in Harrisburg, PA. Dr. Brooks is a Professor of Integrative Biology at the University of California, Berkeley in San Francisco, CA, who has been recognized as a Fellow, President and Past-President, Distinguished Leader, and Honor Award Recipient of the American College of Sports Medicine.

Prior to joining the faculty at UC, Berkeley in 1971, Dr. Brooks studied under Dr. John Faulkner at the University of Michigan upon recommendation of his advisor, Dr. William McArdle at the City University of NY. As Director of the Exercise Physiology Laboratory at the University of California, Berkeley, Dr. Brooks has authored more than 290 peer reviewed publications, including his seminal textbook *Exercise Physiology: Human Bioenergetics and its Applications*, now in its 5th edition.



Dr. Brooks' research contributions to the fields of the exercise science and sports medicine are significant and rooted in his two central hypotheses on: 1) The Lactate Shuttle and 2) Crossover Concept. His research efforts with the Lactate Shuttle aim to elucidate the energy metabolism and control pathways of lactic acid formation and removal before, during and after exercise. His work with the Crossover Concept aims to reveal mechanisms for how organisms select combinations of fatty acids, carbohydrates, and amino acids for use during sustained exercise and other physiological conditions. Other aspects of Dr. Brooks' research involve exploration of the effects of exercise training, gender, age, and high altitude on substrate utilization and how these effects translate into the prevention and management of metabolic inflexibility. His work with these concepts and effects have therefore been considered seminal concepts learned by students in undergraduate and graduate coursework, applied in practice by ACSM certified professionals, and further investigated and explored by exercise science and sports medicine researchers.

Join us for Dr. Brooks' keynote address on Lactate in Contemporary Exercise Science: A Phoenix Risen in Ballrooms A, B, C, D, E.

FINAL SPEAKER: DR. NINA STACHENFELD

It is with great pleasure for the Mid-Atlantic Regional Chapter of the American College of Sports Medicine to welcome Dr. Nina Stachenfeld as our final speaker for the 45th Annual MARC ACSM Meeting in Harrisburg, PA. Dr. Stachenfeld is a Senior Research Scientist in Obstetrics, Gynecology and Reproductive Sciences at the Yale School of Medicine at Yale University in New Haven, CT, who has been recognized as the Carl V. Gisolfi Speaker at the 1st Annual World Congress of Exercise is Medicine at the 57th Annual American College of Sports Medicine Meeting in Baltimore, MD.

Prior to joining the faculty at Yale University, Dr. Stachenfeld completed her PhD at Columbia University. Thereafter, Dr. Stachenfeld leveraged her knowledge, skills, and abilities and became a postdoctoral associate within the laboratory of Dr. Ethan Nadal at the John B. Pierce Laboratory in New Haven, CT in 1993. Since joining the Yale School of Medicine as a Senior Research Scientist, Dr. Stachenfeld has become the Director of the Laboratory for Metabolic Testing and Performance at the John B. Pierce Laboratory and has published more than 90 peer-reviewed publications, some of which have been featured in the Journal of Applied Physiology's Point Counterpoint series.



Dr. Stachenfeld's research contributions to the fields of exercise science and sports medicine are significant and have explored the effects of exercise and aging on fluid and sodium regulation and cardiovascular systems. Her research has focused on the reproductive hormone effects on physiological responses to exercise, thermal and orthostatic challenges, with particular emphasis on skin microcirculation, autonomic function, and sympathetic outflow in women with low orthostatic tolerance, in endothelial function among women with polycystic ovarian syndrome, and in the impact of hormones in transgender people. Other aspects of Dr. Stachenfeld's research have investigated the metabolic effects of environmental exposure on insulin resistance in women.

In addition to Dr. Stachenfeld's contributions to the fields of exercise science and sports medicine, her service to women's health has been remarkable. She currently serves as the Co Chair on the Status of Women in Medicine and is a member of Yale's Women's Health Research at Yale, an interdisciplinary research center missioned to improve the health and well being of everyone.

Join us for Dr. Stachenfeld's final speaker address on Considerations When Performing Studies of Vascular Control that Include Women in Ballrooms B, C, D, E before the MARC-ACSM Banquet Ceremony.

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KEYNOTE

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SYMPOSIA & INVITED SPEAKERS

ATCOR

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Maple Tree Cancer Alliance

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Messiah University, Master of Occupational Therapy

Messiah University, Doctor of Physical Therapy

Montclair State University, Exercise Science and Physical Education

West Virginia University, School of Medicine, Exercise Physiology

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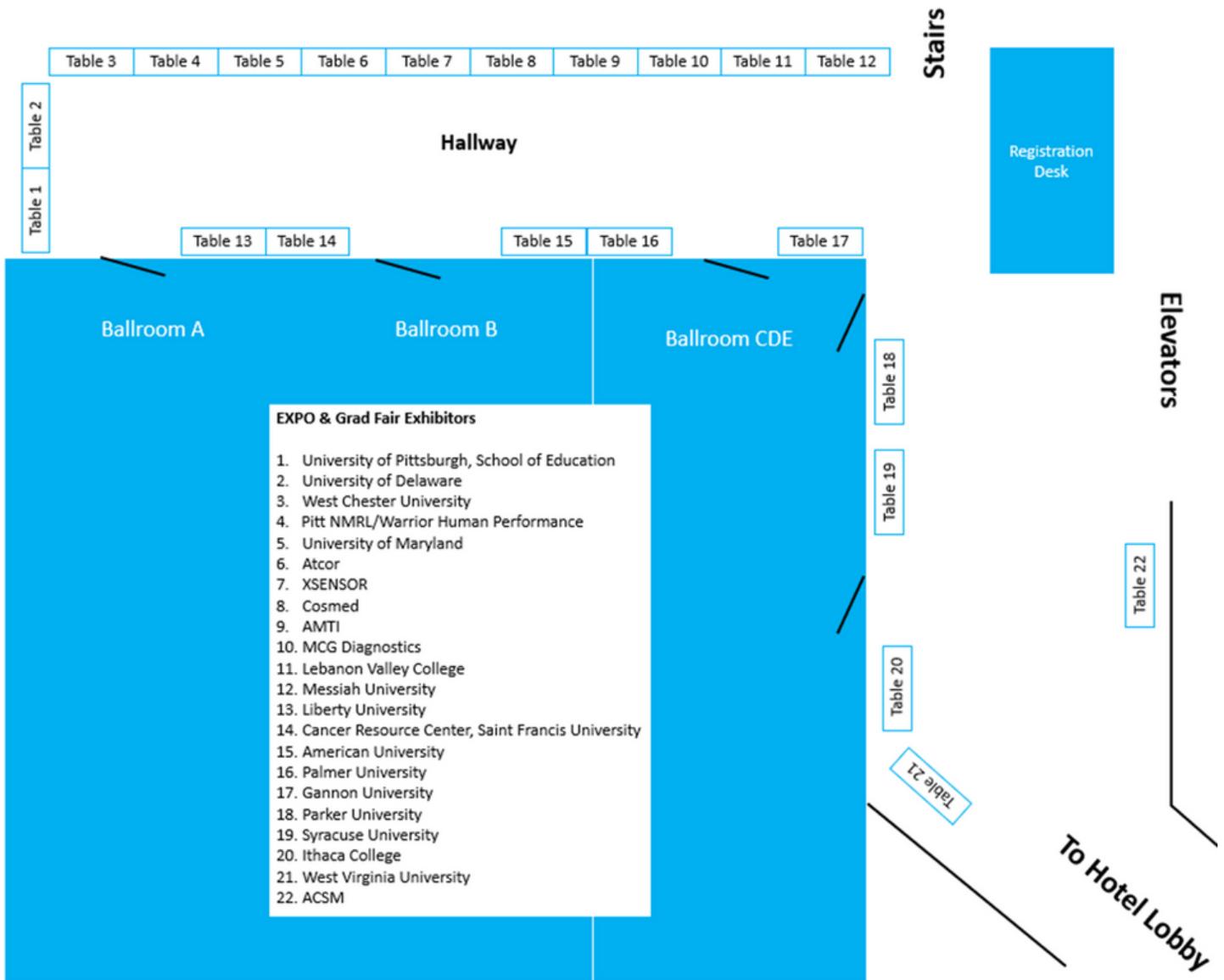
University of Maryland, School of Public Health

University of Pittsburgh, School of Education

West Chester University

West Virginia University, School of Medicine, Exercise Physiology

MAP OF EXHIBITOR BOOTHS



INVITED SPEAKER SESSIONS

DAY 1

8:00AM Friday November 4, 2022



MUSCULOSKELETAL INJURY PREVENTION: THE IMPORTANCE OF NEW INNOVATION

Sponsored by:
Messiah University, Doctor of Physical Therapy

Cayce Onks, DO, ATC

Penn State Milton S. Hershey Medical Center
Pennsylvania Room

DAY 1

9:00AM Friday November 4, 2022



THE CARBOHYDRATE CONUNDRUM: IS MORE BETTER THAN ENOUGH?

Patrick DaVit, Ph.D., CSCS

St. Joseph's University
Ballroom A



EXERCISE OMICS: PAST, PRESENT AND FUTURE THROUGH THE LENSE OF THE HERITAGE FAMILY STUDY

Mark Sarzynski, Ph.D.

University of South Carolina
Ballroom B



AGEISM, RACISM, SEXISM AND OTHER UNFORTUNATE "ISIMS" THAT CREATE BARRIERS TO PHYSICAL ACTIVITY- LET'S FACE THE DISCOMFORT AND DISCOVER SOLUTIONS

NiCole Keith, Ph.D., FACSM

Indiana University Purdue-University of Indianapolis
Ballroom C, D, E

INVITED SPEAKER SESSIONS

DAY 1

9:00AM Friday November 4, 2022

EXTRACELLULAR VESICLES AND ENDOTHELIAL MICROPARTICLES IN CARDIOMETABOLIC HEALTH AFTER EXERCISE: SMALL IN SIZE BUT BIG IN FUNCTION?

Sponsored by: ATCOR

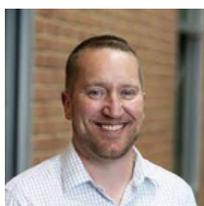


The Role of Endothelial Microparticles in the Pathophysiology of Cardiometabolic Diseases

Rian Landers-Ramos, Ph.D.

Towson University

Ash/Birch



Effects of Acute Exercise on Endothelial Microparticles in Healthy Populations

Steven Prior, Ph.D.

University of Maryland

Ash/Birch



The Biology of Extracellular Vesicles: Form, Function, and the Effect of Acute Exercise

Matthew Barberio, Ph.D.

George Washington University

Ash/Birch



Extracellular Vesicles as Bio-Mediators of Metabolic and Vascular Insulin Sensitivity in Obesity

Steven Malin, Ph.D.

Rutgers University

Ash/Birch

INVITED SPEAKER SESSIONS

DAY 1

9:00AM Friday November 4, 2022



DIABETES CARE FOR THE CLINICAL EXERCISE PHYSIOLOGIST

Sponsored by:
West Virginia University, Exercise Physiology

Brian Foster, DHS, ACSM CEP, MSE, CCRP

University of Pennsylvania
Chestnut/Dogwood



EXERCISE AS CANCER MEDICINE: AN ONCOLOGIST'S PERSPECTIVE

Allison Betof-Werner, M.D., Ph.D.

Memorial Sloan Kettering Cancer Center
Pennsylvania Room (8:50)



CAN'T STOP! WON'T STOP! COMMON DANCE INJURIES AND MODIFICATIONS DURING TREATMENT

Elizabeth Barchi, MD

Christiana Care
Pennsylvania Room (9:30)

DAY 1

10:00AM Friday November 4, 2022



STRESS AND ADAPTATION: HISTORICAL AND FUTURE PERSPECTIVES

Courtney Jensen, Ph.D.

University of the Pacific
Ballrooms A

INVITED SPEAKER SESSIONS

DAY 1

10:00AM Friday November 4, 2022



POWER IN THE TRANSVERSE PLANE: HOW TO BECOME A ROTATIONAL POWERHOUSE

Jonathan Mike, Ph.D.

Dr. J Mike Scientific Strength
Ballroom B



HOT TUB OR TREADMILL? THE EXERCISE-LIKE BENEFITS OF HEAT THERAPY ON CARDIOMETABOLIC HEALTH

Sponsored by:
Gannon University, Applied Exercise Physiology

Paige Geiger
University of Kansas
Ballrooms C, D, E



CARE OF ATHLETES WITH INTELLECTUAL DISABILITIES

Shawn Phillips, MD
Penn State Milton S. Hershey Medical Center
Pennsylvania Room (10:10)



TRACKING PHYSICAL ACTIVITY USING WEARABLE TECHNOLOGY IN INDIVIDUALS WITH DISABILITIES

Shiv Hiremath, Ph.D.
Temple University
Chestnut/Dogwood

INVITED SPEAKER SESSIONS

DAY 1

11:00AM Friday November 4, 2022

KEYNOTE ADDRESS

Sponsored by:
Lebanon Valley College



LACTATE IN CONTEMPORARY EXERCISE SCIENCE: A PHOENIX RISEN

George Brooks, Ph.D.

University of California at Berkley
Ballrooms A, B, C, D, E

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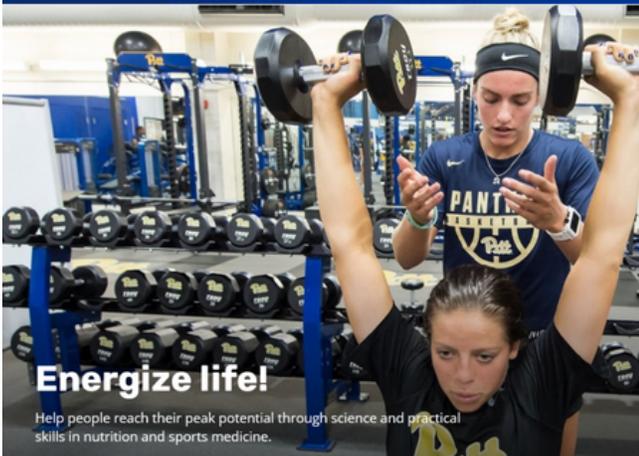
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INVITED SPEAKER SESSIONS

DAY 1

1:00PM Friday November 4, 2022



PAST-PRESIDENT'S LECTURE BIDIRECTIONAL LINK BETWEEN GUT MICROBIOTA AND EXERCISE TOLERANCE

Sara Campbell, Ph.D., FACSM

Rutgers University

Ballroom A



A PERSONAL BIOGRAPHY OF A PHYSIOLOGICAL MISNOMER: THE ANAEROBIC THRESHOLD

James Hagberg, Ph.D.

University of Maryland

Ballroom B



ADVOCACY: CHAPTER INVOLVEMENT IN STATE AND LOCAL PHYSICAL ACTIVITY INITIATIVES

Monte Ward, Ph.D.

Advanced Capital Consulting

Ash/Birch



Craig Stevens, Ph.D., FACSM

West Chester University

Ash/Birch



Stephen LoRusso, Ph.D.

Executive Director of MARC-ACSM

Ash/Birch

INVITED SPEAKER SESSIONS

DAY 1

2:00PM Friday November 4, 2022

CANCER SYMPOSIUM

Sponsored by:
Maple Tree Cancer Alliance



Exercise as a Cancer Therapy? Preclinical Evidence for Manipulation of the Tumor Microenvironment

Allison Betof-Warner, MD, Ph.D.

Memorial Sloan Kettering Cancer Center
Ballroom A



HIIT as Medicine Among Cancer Survivors: The Translation of Sports Science to Improve Health and Elicit Anti-Tumorigenic Effects

Christina Dieli-Conwright, Ph.D., MPH, FACSM, CSCS

Dana Farber Cancer Institute
Ballroom A



AMPLIFI: Cancer Survivor Health through Web-Based Translation of Evidence-Based Diet and Exercise Interventions

Laura Rodgers, MD, MPH, FACP, FACSM

University of Alabama at Birmingham
Ballroom A



STATISTICAL ANALYSIS AND STUDY DESIGN: MAXIMIZING THE POTENTIAL OF YOUR DATA

Heather Gordish-Dressman, Ph.D.

Children's National Hospital
Ash/Birch



TRANSLATING GENOMIC DISCOVERIES TO BEHAVIORAL INTERVENTIONS: DEEP PHENOTYPING OF PHYSICAL ACTIVITY

Harold Lee, Ph.D.

Penn State University
Chestnut/Dogwood

INVITED SPEAKER SESSIONS

DAY 1

2:00PM Friday November 4, 2022



SPORTS PERFORMANCE SYMPOSIUM

Sponsored by: XSENSOR Technology Corporation

Nutrition for Performance in E-Sports Players

Nyree Dardarian, EDD, RDN, CSSD, FAND, LDN

Drexel University, Philadelphia Union, Philadelphia Flyers

Ballroom B



The Importance of Collaboration to Optimize Player Performance

Daniel Vega, MS, CSCS

Milwaukee Brewers

Ballroom B



Evaluating and Managing Environmental Performance Challenges Within Elite North American Soccer

Garrison Draper, Ph.D.

Philadelphia Union

Ballroom B

INVITED SPEAKER SESSIONS

DAY 1

3:00PM Friday November 4, 2022



MAPLE TREE UNIVERSITY: BUILDING A WORK FORCE IN EXERCISE ONCOLOGY

Karen Wonders, Ph.D., FACSM
Maple Tree Cancer Alliance
Ballroom A (3:30)



MAKING SUCCESS OUT OF FAILURE...EXERCISE IN HFREF, HFPEF AND VADS...OH MY!

Steven Keteyian, Ph.D.
Henry Ford Hospital
Chestnut/Dogwood

PITCHING BIOMECHANICS SYMPOISUM



Kristen Faith Nicholson, Ph.D.
Wake Forest University
Ash/Birch



Garrett Bullock, PT, DPT, DPHIL
Wake Forest University
Ash/Birch

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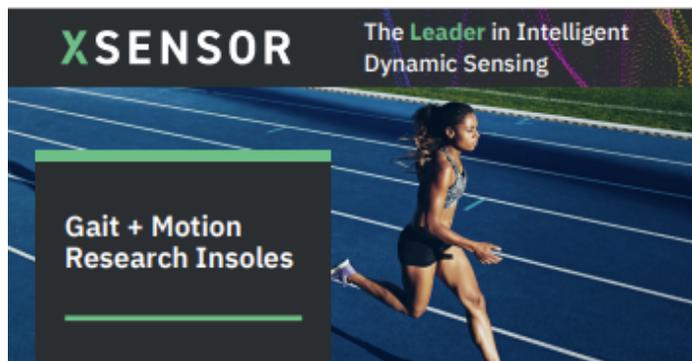


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April 14, 2023

INVITED SPEAKER SESSIONS

DAY 2

9:00 AM Saturday November 5, 2022

LIFESTYLE STRATEGIES FOR HEALTHY COGNITIVE AGING



Modifiable Risk Factors in the Prevention of Dementia

Loretta Di Pietro, Ph.D., MPH, FACSM

George Washington University

Ballroom A

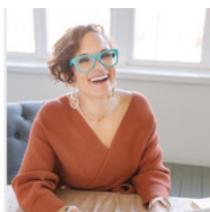


Getting to the Heart of Alzheimer's Disease: Vascular Determinants of Age-Related Memory Loss

Christopher Martens, Ph.D.

University of Delaware

Ballroom A

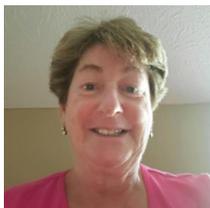


THE ROLE OF EXERCISE SCIENTISTS IN INDUSTRY PROFESSIONS

Brittany Masteller Leboeuf, Ph.D.

Orange Theory

Ballroom B



ACSM CERTIFICATIONS: BRIDGING THE GAP BETWEEN SCIENCE AND PRACTICE

Madeline Paternostro Bayles, Ph.D.

American College of Sports Medicine

Ballrooms C, D, E

INVITED SPEAKER SESSIONS

DAY 2

9:00 AM Saturday November 5, 2022

THE FUTURE OF EXERCISE SCIENCE: LEVERAGING WEARABLE, ONLINE, AND VIRTUAL EXERCISE TECHNOLOGIES FOR RESEARCH AND PERFORMANCE

Sponsored by: Montclair State University
Exercise Science and Physical Education



The Past, Present, and Future of Technology in Exercise Science
Christopher Harnish, Ph.D., ACSM EP-C, CSCS, CFMS
Marybaldwin University
Pennsylvania Room



Current Applications of Wearable Technology During the COVID-19
Pandemic
Garrett Bullock, PT, DPT, DPHIL
Wake Forest University
Pennsylvania Room

DAY 2

10:00 AM Saturday November 5, 2022



NETWORKING ONLINE AND OFFLINE TO BUILD YOUR CLIENT BASE OR BUSINESS

Niki Campbell, MS
The Flourish Group
Ballroom A



OVERWHELMED: MAINTAINING YOUR WELL-BEING IN AN ACADEMIC CAREER

Courtney Dunn Lewis, Ph.D.
University of Pittsburgh
Ballroom B

INVITED SPEAKER SESSIONS

DAY 2

10:00 AM Saturday November 5, 2022



WEIGHTED JUDGEMENT: THE IMPORTANCE OF A PARADIGM SHIFT IN TREATING OBESITY

Amy Allnutt, Ph.D., ACSM-EP

Marymount University
Ballroom C, D, E



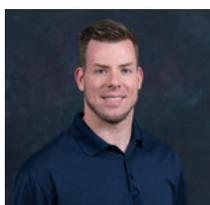
RELIABILITY AND VALIDITY IN KINESIOLOGY RESEARCH: WHAT YOU NEED TO KNOW

Tiago Barreira, Ph.D.

Syracuse University
Pennsylvania Room

DAY 2

11:00 AM Saturday November 5, 2022



IMPROVING FUNCTIONAL MOVEMENT: FUNDAMENTAL MOVEMENT VS. TASK-ORIENTED APPROACHES

Sponsored by: Messiah University
Master of Science in Athletic Training

Adam Eckart, DHSc

Kean University
Pennsylvania Room

INVITED SPEAKER SESSIONS

DAY 2

12:00 PM Saturday November 5, 2022

FINAL SPEAKER ADDRESS



CONSIDERATIONS WHEN PERFORMING STUDIES OF VASCULAR CONTROL THAT INCLUDE WOMEN

Nina Stachenfeld, Ph.D.

Yale University

Ballrooms B, C, D, E

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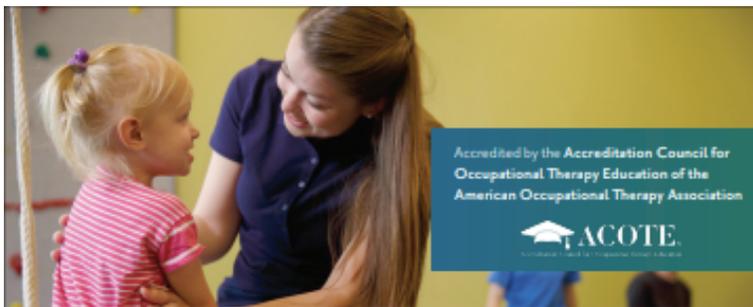


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MARC-ACSM ANNUAL MEETING SPECIAL EVENTS

DAY 1

Friday November 4, 2022

AWARDS SESSIONS: ELM/FIR

Undergraduate

1:00-2:30PM

Masters

2:30-4:00PM

Doctoral

4:00-5:30PM

SPECIAL INTEREST GROUPS: 4-5PM

Cancer

Ballroom A

Nutrition

Ballroom B

Clinical Exercise Physiology

Chestnut/Dogwood

Biomechanics

Ash/Birch

Education

Hemlock

MEET THE EXPERTS: PENNSYLVANIA ROOM

4:00-5:00PM

COLLEGE BOWL: BALLROOMS A, B, C, D, E

Sponsored by ParvoMedics

5:30-7:00PM

PROFESSIONAL'S SOCIAL: PENNSYLVANIA ROOM

8:00-10:00PM

MARC-ACSM ANNUAL MEETING SPECIAL EVENTS

DAY 2

Saturday November 5, 2022

FITNESS CHALLENGE: BALLROOMS A, B, C, D, E

Sponsored by Gannon University

7:00-8:00AM

MARC-ACSM BUSINESS MEETING CHESTNUT/DOGWOOD

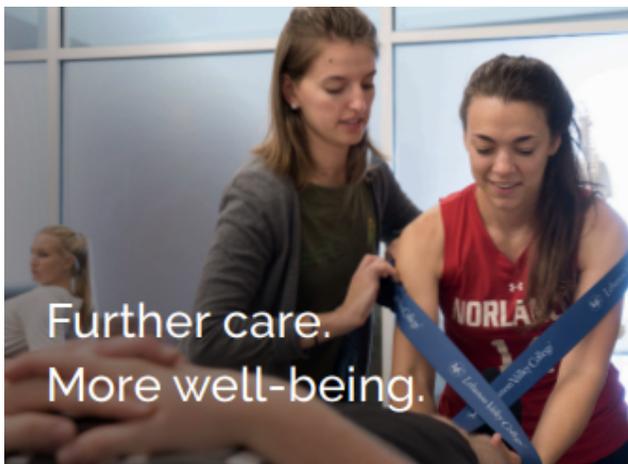
9:00-10:00AM

MARC-ACSM BANQUET AND AWARDS CEREMONY BALLROOMS B, C, D, E

12:30-2:00PM



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RESEARCH AWARDS SESSIONS

UNDERGRADUATE

Friday 1:00-2:15PM

Elm/Fir

1:00

Comparison of Near-Infrared Spectroscopy Measured Muscle Metabolism with Predicted Whole-Body Metabolism

[Gregory Chartier, Towson University](#)

1:15

Establishing the Reproducibility of Mitochondrial Capacity using Near-Infrared Spectroscopy

[Grace Dietz, Towson University](#)

1:30

Four Months of Kettlebell Training Improves Muscle Strength and Functional Outcomes in Older Adults

[Morgan Figue, Towson University](#)

1:45

Insulin-Induced Relative Hypoglycemia on Hemodynamics and Metabolic Insulin Sensitivity in Adults with Obesity

[George Mysh, Rutgers University](#)

2:00

Aerobic Capacity Independently Predicts Central Augmentation Index Among Apparently Healthy Adults

[Justin Updegraff, Towson University](#)

RESEARCH AWARDS SESSIONS

MASTERS

Friday 2:30-3:45PM
Elm/Fir

2:30

Effect of Menstrual Cycle Phase and Sex on Carotid Artery Pulsatility in Healthy Young Adults

Zoe Lincoln, University of Delaware

2:45

Structural Differences in the Tibial Metaphysis Between Female NCAA Division I Cross-Country Runners and Gymnasts

Kelly Mroz, University of Pittsburgh

3:00

Changes in Circulating Angiogenic Cells After Exercise or Flexibility Intervention in Older Men and Women

Madison Shoemaker, University of Maryland

3:15

Load Differences in Male and Female Marine Officer Candidates Quantified by Inertial Measurement Units

Elizabeth Steele, University of Pittsburgh

3:30

Relationship Between Left Ventricular Mass and Exercising Systolic Blood Pressure in Women

Skylar Paletta, Montclair State University

RESEARCH AWARDS SESSIONS

DOCTORAL

Friday 4:00-5:15PM
Elm/Fir

4:00

Consistency is Key for Activity: Sleep Duration Regularity is Associated with Increased Activity in Children

[Michele D'Agata, University of Delaware](#)

4:15

Analysis of Inter-Limb Asymmetry of Landing Forces and Ankle Injury in Warfighters: A Prospective Study

[Evan Fiegel, University of Pittsburgh](#)

4:30

The Effect of 12-weeks of Concurrent Exercise Training on Body Composition and Bone Microarchitecture

[Nicole Sekel, University of Pittsburgh](#)

4:45

Markers of Mitochondrial Mitophagy and Fusion-to-Fission Ratio are Greater in Older vs. Young Rats

[Catherine Sapp, University of Maryland](#)

5:00

Resident Gut Microbiota Mediates Exercise Capacity and Tissue Metabolomes in Mice

[Candace Longoria, Rutgers University](#)

CLINICAL CASE PRESENTATIONS

Sponsored by:
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DAY 1

*Friday 1:00-2:20PM
Pennsylvania Room*

1:00

Introduction

Jessica Butts, MD Penn State Hershey Medical Center

1:05

Recurrent Fibular Stress Fractures in an Athlete

Kelsey Chmielewski, MD, Christiana Care

1:20

When Groin Pain is More Than Just a Strain

Caitlyn Haines, MD, Penn State Hershey Medical Center

1:35

Post-Surgical Lower Leg Pain out of Proportion to Expectation in an Active Male

Andrew Hamm, DO, University of Rochester

1:50

Unusual Presentation of Autoimmune Disease in the NCAA Division I Female Athlete

Ashley Sturts, DO, Penn State Health - State College

2:05

Persistent Hip Pain in a Young Female

Laryssa Loncar, DO Geisinger

CLINICAL CASE PRESENTATIONS

Sponsored by:
Messiah University, Master of Occupational Therapy

DAY 1

Friday 2:35-4:00PM
Pennsylvania Room

2:35

Throwing a Curve Ball: Persistent Volar Wrist Pain in a Professional Baseball Pitcher

Royce Sumayo, DO, Penn State Hershey Medical Center

2:50

Delayed Diagnosis of a Knee Dislocation in a Severely Obese Fourteen year old Soccer Player

Dominick DeFelice, MD, University of Rochester Medical Center

3:05

Non-Traumatic Monoarticular Arthropathy in a 34-year-old

Elyse Jensen, MD, Geisinger

3:20

Polymyalgia Rheumatica in the Setting of Known DJD

John Turner, DO, Christiana Care

3:35

Adolescent with an Uncommon Cause of Shoulder Pain

Jeremy Palmer, DO, Wellspan York

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FREE COMMUNICATION SESSIONS

FREE COMM SESSION I

Friday 10:00–11:00AM
Elm/Fir

10:00

Bone Mineral Density and Tibial Microarchitecture Changes in Division I Male and Female Cross-Country Runners
[Kristen Koltun, University of Pittsburgh](#)

10:15

Biomechanical Comparison of Open versus Percutaneous Techniques for Primary Mid-Substance Achilles Tendon Repair: A Meta-Analysis
[Heath Gould, Georgetown University of Medicine](#)

10:30

Acute Changes in Levels of Inflammatory Proteins After a Single Bout of HIIT
[Davi Mazalá, Towson University](#)

10:45

Acute Response of Different High-intensity Interval Training Protocols on Cardiac Auto-regulation
[Myong-Won Seo, Syracuse University](#)

FREE COMM SESSION II

Friday 1:00–2:00PM
Ash/Birch

1:00

Changes in Glenohumeral Kinematics after a Competitive Season in Collegiate Baseball Pitchers
[Benjamin Lerch, Pennsylvania State University Harrisburg](#)

1:15

The Effect of Lifting Straps on Deadlift Performance in Females
[Kevin Trahey, DeSales University](#)

1:30

The Quantification of Muscle Activation during the Loaded Carry Movement Pattern
[Thomas Holcomb, Slippery Rock University](#)

1:45

Relationship of Body Composition Variables and Performance Outcomes in Male Professional Soccer Players
[Shay Fisher, Drexel University](#)

FREE COMMUNICATION SESSIONS

FREE COMM SESSION III

Saturday 9:00-10:00AM
Chestnut/Dogwood

9:00

High Antioxidant Load Impairs Cutaneous Microvascular Function In Healthy Young Women

[Virginia Content, The Pennsylvania State University](#)

9:15

Men and Women Have Similar Responses in Arterial Stiffness and Wave Reflection Post-High-Fat Meal

[Cynthia Weiner, University of Maryland](#)

9:30

Role of Chronotype on Vascular Insulin Sensitivity in Adults with Obesity

[Mary-Margaret Remchak, Rutgers University](#)

9:45

Sodium Density Associates with Nighttime Systolic Blood Pressure in Young Healthy Adults

[Michael Axler, University of Delaware](#)

FREE COMM SESSION IV

Saturday 9:00-10:00AM
Ash/Birch

9:00

Real-Time Hemodynamic Evidence Supporting the Safety of Acute Isometric Exercise

[Benjamin Gordon, University of Pittsburgh](#)

9:15

Effects of Short-term 3-Day Caloric Restriction on Cardiometabolic Health in Overweight and Obese Individuals

[Stephen Ives, Skidmore College](#)

9:30

PGC-1 α Overexpression Improves Angiogenic Signaling Potential of Skeletal Muscle-derived Extracellular Vesicles

[Christopher Kargl, Purdue University and University of Pittsburgh](#)

9:45

Validity of Remote Testing to In-Person Testing of 2-Minute Walk Test and Stepping in Place Test

[Lori Portzer, Lebanon Valley College](#)

FREE COMMUNICATION SESSIONS

FREE COMM SESSION V

Saturday 9:00–10:00AM

Elm/Fir

9:00

Impact of Caloric Restriction and Exercise on Trimethylamine N-oxide Metabolites in Women with Obesity

[Daniel Battillo, Rutgers University](#)

9:15

Relationship of Family Nutrition and Physical Activity (FNPA) Screening Scores and BMIz in Rural Children

[Benjamin Potts, Bloomsburg University](#)

9:30

Acute effect of ketogenic diet on metabolic flexibility during exercise in adults

[Wonhee Cho, Syracuse University](#)

9:45

Physical Activity and 1-hr Glycemic Status on Pancreatic β -cell Function (β CF) in Youth

[Jared Rosenberg, Syracuse University](#)

FREE COMM SESSION VI

Saturday 10:00–11:00AM

Chestnut/Dogwood

10:00

Trends in Moderate-to-Vigorous Physical Activity among Veterans: Findings from the National Health Interview Survey 2011–2020

[Jacob DeBlois, Syracuse University](#)

10:15

Sleep Regularity is Associated with Physical Activity and Sedentary Behavior in 13–17-Year-Old Adolescents

[Bray Fedele, University of Delaware](#)

10:30

Examination of 24-hour movement behaviors in home vs. office work locations

[Anthony Holmes, University of Pittsburgh](#)

10:45

Exercise Variety Associates with Low Adiposity and Better Emotional Wellbeing in Adults with Metabolic Syndrome

[Aquib Fahmy, Rutgers University](#)

FREE COMMUNICATION SESSIONS

FREE COMM SESSION VII

Saturday 10:00-11:00AM

Ash/Birch

10:00

Relationship Between Lung Function and Skeletal Muscle Morphology in Predicting Risk of Cachexia

[Briauna Malone, West Virginia University](#)

10:15

Association between Pre-diagnosis Physical Activity and Risk of Breast Cancer Recurrence -the California Teachers Study

[Dan Lin, Penn State College of Medicine](#)

10:30

Evaluation of Cytokine Pattern in Perivascular and Intramuscular Fat During Heart Failure

[Maria Clara Canellas de Silva, University of Maryland](#)

10:45

Role of Oncostatin M in Exercise-Induced Breast Cancer Prevention

[Kara Negrini, Penn State College of Medicine](#)

FREE COMM SESSION VIII

Saturday 10:00-11:00AM

Elm/Fir

10:00

Chronic Ultraviolet Radiation Exposure Does Not Effect Nitric Oxide-Mediated Vasodilation in the Cutaneous Microvasculature

[Kat Fisher, The Pennsylvania State University](#)

10:15

Relationships Between Vascular Function and Social Determinants of Health in Young Black and White Adults

[Lauren Eagan, University of Maryland](#)

10:30

Depressive Symptomology Predicts Nighttime Central Systolic Blood Pressure Dipping in Adults

[Andrew Heckel, Syracuse University](#)

10:45

Acute Intermittent Hypoxia Does Not Impact Vascular Function in Young, Healthy Individuals

[Sara Mascone, University of Maryland](#)

FREE COMMUNICATION SESSIONS

FREE COMM SESSION IX

Saturday 11:00–12:00PM
Chestnut/Dogwood

11:00

Acute Effects of Prolonged Endurance Exercise on Circulating Microparticles

[James Heilman, University of Maryland](#)

11:15

Aerobic Exercise Training Affects Exercise Pressor Reflex in Older Adults

[Lindsay Lotter, University of Maryland](#)

11:30

A Pilot Weight Loss Program for Parents of Children with a Disability

[Julia Depuy, Towson University](#)

11:45

Maximal Fat Oxidation is Diminished in Individuals with Mild Cognitive Impairment

[Nicholas Rizzi, University of Delaware](#)

FREE COMM SESSION X

Saturday 11:15–12:00PM
Ash/Birch

11:15

Association between coffee, caffeine and gut biodiversity: A United States-Veteran Microbiome Project Sub-Study

[Ryan Sawyer, Syracuse University](#)

11:30

Complications Associated with Proximal Hamstring Tendon Repair: A Systematic Review

[Jonathan Lawson, Georgetown University](#)

10:45

Surveying Athletic Trainers on COVID-19 Incidence and Severity Among Athletes

[Daniel DeSio, Rutgers University](#)

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FREE COMMUNICATION SESSIONS

FREE COMM
SESSION XI

Saturday 11:00-12:00PM

Elm/Fir

11:00

The Effect of Low-Density Lipoprotein Cholesterol on T-Cell Mitochondrial Respiration

[Theodore DeConne, University of Delaware](#)

11:15

Acute Hypernatremia Increases Functional Connectivity Between the SFO and OVLT: Time Course of the Response

[Nathan Romberger, University of Delaware](#)

11:30

Core Temperature Responses to Compensable vs. Uncompensable Heat Stress in Young Adults (PSU Heat Project)

[Rachel Cottle, The Pennsylvania State University](#)

11:45

No Impact of Biological Sex on Cutaneous Vascular Response to 39°C Local Heating

[Auni Williams, The Pennsylvania State University](#)

POSTER SESSIONS

POSTER SESSION I

Friday 1:00–2:30PM
Ballrooms C, D, E

Board 1: Blood Flow Restricted Electrical Stimulations to Prevent Symptoms of Muscle Damage

Tyler Baer, Rowan University

Board 2: Sprinting Velocity Increases Through Postactivation Potentiation with a Hex-Bar Farmers Walk

Jeffrey Chimenti, William Patterson University

Board 3: The Relationship Between Daytime Sedentary Behavior and Sleep Health in Desk-based Workers

Caitlin Cheruka, University of Pittsburgh

Board 4: The Reliability and Validity of an Accelerometer to Measure the Pop-Up Phase of Surfing

Richard Boergers, Seton Hall University

Board 5: Effects of High Functional Resistance Training on Parameters of Arterial Stiffness—Pilot Study

Collin Barnett, Salisbury University

Board 6: No Racial or Gender Disparities in Cardiac Rehabilitation Attendance after CABG

Tara Honeycutt, West Chester University

Board 7: Psychological Resilience is Associated with Higher Physical Fitness Scores during Military Training

Jennifer Forse, University of Pittsburgh

Board 8: The Effects of COVID-19 Restrictions on College Students Physical Activity and Mental Health

Justin DuBlauw, Skidmore College

Board 9: The Acute Effects of a Caffeine-based Multi-ingredient Energy Drink Compared to Caffeine on Muscular Endurance

Morgan Blanchflower, Grove City College

Board 10: Fatigue Index is Affected by Repetitive Transcranial Magnetic Stimulation Target but not Protocol

Juliana Houghland, University of Pittsburgh

POSTER SESSIONS

POSTER SESSION I

Friday 1:00-2:30PM
Ballrooms C, D, E

Board 11: The Relationship of Functional Movement Patterns and Health-Related Quality of Life

Megan Heintzleman, University of Delaware

Board 12: A Comparison of Warm-up Effects on Maximal Aerobic Exercise Performance in Children

Avery Faigenbaum, The College of New Jersey

Board 13: Relationship Between Exercise Motivation, Exercise Enjoyment, and Daily Cognition of Collegiate Student-Athletes

Dinh Bui, Shippensburg University

Board 14: Relationship of Dynamic Balance with Kinematic Pitching Parameters in Collegiate Baseball Pitchers

Paulo Lobo, Hackensack Meridian School of Medicine

Board 15: Grip Strength Not Associated with Changes in Vascular Function Post-Aerobic Exercise Training in Older Adults

Shannon Khan, University of Maryland

Board 16: Arch Stiffness Does Not Determine Running Economy in Recreational Runners

Brian Leary, West Virginia University

Board 17: Carbohydrate Mouth Rinse vs. Ingestion and Swim Performance

Rebecca Entner, Shippensburg University

Board 18: *fat-1* overexpression mitigates the weight gain and intestinal inflammation in ovariectomized mice on high-fat diets

Natasha Malonza, Rutgers University

Board 19: Cardiac Response to β 2-Adrenergic Stimulation is Attenuated in Old Rats Despite Higher Protein Expression

Yuan Liu, University of Maryland

Board 20: The Impact of a Weighted Warm upon 1-Mile Run Performance

Ashley Lesniak, Lock Haven University

POSTER SESSIONS

POSTER SESSION I

Friday 1:00–2:30PM
Ballrooms C, D, E

Board 21: Association Between Measures of Body Composition and Functional Movement in Cancer Survivors
[Marie-Therese Cooper, Saint Francis University](#)

Board 22: Early and Late Chronotype Have Similar Glucose Effectiveness in adults with Metabolic Syndrome
[Aashik Jagani, Rutgers University](#)

Board 23: Low and High Carbohydrate Diets on Performance, Metabolism and Cardiometabolic Health in Middle-Aged Athletes
[Kelli Jancay, Grove City College](#)

Board 24: Characterization of Yoga-Associated Teaching Format, Barriers, And Injuries During COVID-19
[Indiana Jenkins, Rowan University](#)

Board 25: Bilateral Asymmetry in the Single Leg Step Down among Young Healthy Adults
[Katy Krueger, Ithaca College](#)

POSTER SESSION II

Friday 3:00–4:30PM
Ballrooms C, D, E

Board 1: Accuracy of Measuring Intensity Through Means of Repetition in Reserve in Trained College Females
[Kyle Kunzer, McDaniel College](#)

Board 2: Home-Based Hypertension and Physical Activity Screening by Community Health Workers in Under-Resourced South African Communities
[Lia McNulty, Temple University](#)

Board 3: Meeting Physical Activity Guidelines During Pregnancy and Its Relationship With Low Back/Pelvic Girdle Pain
[Traci McCarthy, Rutgers University](#)

Board 4: Validation of a New Assessment of Surfer's Performance
[Jerry-Thomas Monaco, Seton Hall University](#)

POSTER SESSIONS

POSTER SESSION II

Friday 3:00–4:30PM
Ballrooms C, D, E

Board 5: Acute Effects of Exercise Time on Mood and Stress
Brenden Livinghouse, Shippensburg University

Board 6: Bilateral Asymmetry in the Forward Lunge Exercise
Reese Michaels, Ithaca College

Board 7: The Impact of Leisure Constraints on Physical Activity Among Parent-Adolescent Dyads
Serena Schade, The Pennsylvania State University

Board 8: Plasma LEAP-2 after a Low-Calorie Diet with or without Exercise in Women with Obesity
Tristan Ragland, Rutgers University

Board 9: Effects of a Novel Ankle Strengthening Protocol on Lateral Ankle Strength and Flexibility
Jack Petit, Grove City College

Board 10: Neuroendocrine Responses to Cold Pressor Stimuli in Midshipmen Participating in the Naval Special Warfare Screener
Varun Patel, University of Pittsburgh

Board 11: Early Chronotype Favors Appetite and Reduced Later Day Caloric Intake Among Adults with Metabolic Syndrome
Unaima Sidra Afsheen, Rutgers University

Board 12: Relationship Between Body Satisfaction and Exercise Behavior: A Cross Cultural Comparison
Selen Razon, West Chester University

Board 13: Can Blood Flow Restriction Enhance the Effectiveness of Electrical Stimulations for Treating Muscle Damage?
Kevin Rice, Rowan University

Board 14: Exploring Attitudes about Weight and Weight Stigma Among Undergraduate Health Science Students
Tyler Countess, Moravian University

Board 15: Autonomic Nervous System Responses to a Bout of Vinyasa Yoga and Prolonged Seated Control
Alexis Thrower, West Virginia University

POSTER SESSIONS

POSTER SESSION II

Friday 3:00–4:30PM
Ballrooms C, D, E

Board 16: Effects of Yoga and High-intensity Exercise on Heart Rate Variability and Stress—A Pilot Study
[Robyn Redline, Sant Francis University](#)

Board 17: Effects of Stress on Lactate Levels and Other Physiological Variables During Exercise
[Rebecca Smith, Shippensburg University](#)

Board 18: β -aminoisobutyric Acid Relates to Favorable Glucose Metabolism and Adiponectin in Adults with Metabolic Syndrome
[Habiba Faiz, Rutgers University](#)

Board 19: Positional Differences in Areal Bone Mineral Density and Body Composition in NCAA Division-I Football Athletes
[Alex Vincent, University of Pittsburgh](#)

Board 20: A Comparison of the Energy Demands of Quadrupedal Movement Training to Walking
[Micah Sterrett, Grove City College](#)

Board 21: The Influence of E-Stim on Posture and Respiratory Function to Improve Aerobic Capacity: A Pilot
[Carol Weber, Slippery Rock University](#)

Board 22: Minimum Time Effect of Fish Oil on Arterial Stiffness—A Pilot Study
[Alonzo Strickland, Salisbury University](#)

Board 23: Comparison of Positive and Negative Verbal Cueing on Muscular Endurance in College-Aged Females
[Hannah Szmaciasz, Grove City College](#)

Board 24: Effects of Submaximal Intensity Rowing vs Cycling on Cognitive Performance
[Zaden Thomas, Grove City College](#)

Board 25: Effect of Light Brightness on Cycling Performance
[Kharizma Thomkins, Lock Haven University](#)

Board 26: Skin Tone Representation in Kinesiology Textbook: Objective and Subjective Analysis
[Amy Winger, Lebanon Valley College](#)

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