

**Mid-Atlantic Regional Chapter  
of the  
American College of Sports Medicine  
(MARC-ACSM)**

**42<sup>nd</sup> Annual Scientific Meeting - 2019**

**FINAL PROGRAM**

**Friday, November 1<sup>st</sup>, 2019  
and  
Saturday, November 2<sup>nd</sup>, 2019**

**Sheraton Harrisburg-Hershey Hotel  
Harrisburg, PA**

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# MARC-ACSM Schedule-at-a-Glance: Fri. Nov. 1st

Please refer to the Program Booklet for specific times.

Time	Balroom A	Balroom B	Balroom C,D,E	Pennsylvania	Chestnut/Dogwood	Ash/Birch	Elm/Fir
8:30 AM				<b>MEDICAL/PHYSICIAN TRACK</b>			
				COMPARE AND CONTRAST E-SPORTS PARTICIPATION WITH TRADITIONAL ATHLETIC			
9:00 AM	<b>EXERCISE, CVD AND WOMEN'S HEALTH</b>	<b>CAFFEINE AND EXERCISE</b>	<b>BLOOD FLOW AND EXERCISE</b>	Dr. Seth Jenny	<b>EXERCISE AND THE PELVIC FLOOR</b>		
	PREGNANCY: A STRESS TEST AND A WINDOW OF OPPORTUNITY FOR IMPROVING CARDIOVASCULAR HEALTH IN WOMEN <i>Dr. Stella Goulapoulou</i>	OPENING REMARKS <i>Dr. Eric Rawson</i>	BLOOD FLOW RESTRICTION TRAINING: A COMING OF AGE <i>Dr. Jeremy Loenneke</i>	VIDEO GAIT ANALYSIS <i>Dr. Matt Sylvis</i>	HOW DOES EXERCISE IMPACT THE PELVIC FLOOR? <i>Dr. Tamara Rial-Rbullido &amp; Dr. Cathy Ingram</i>		Pre-Paid Registration Pick-up
9:30 AM	CARDIOVASCULAR FUNCTION IN FEMALE MARATHON RUNNERS <i>Dr. Jacqueline Augustine</i>	CAFFEINE, GENETICS AND ATHLETIC PERFORMANCE <i>Dr. Nanci Guest</i>	BLOOD FLOW RESTRICTED RESISTANCE TRAINING PROTOCOLS FOR OLDER ADULTS <i>Dr. Summer Cook</i>	COLLABORATION IN SPORTS MEDICINE: WHAT IS THE ROLE OF SPORTS MEDICINE IN THE EVOLVING HEALTH SYSTEM? <i>Dr. Gene Hong</i>			
10:00 AM	SEX DIFFERENCES OF BIOMARKERS FOR CVD AND RESPONSES TO EXERCISE <i>Dr. Rian Landers-Ramos</i>	CAFFEINE'S EFFECT ON NEUROMUSCULAR FUNCTION <i>Dr. Nate Jenkins</i>	THE APPLICATION OF BLOOD FLOW RESTRICTION IN CLINICAL POPULATIONS. <i>Dr. Scott Dankel</i>	DANCE VOCABULARY AND CORRELATION TO INJURY <i>Dr. Marc Harwood</i>	<b>PROFESSIONAL TUTORIAL</b>		
10:30 AM	MENOPAUSE AND AEROBIC FITNESS: IS IT REALLY AS SIMPLE AS WE THINK? <i>Dr. Cory Serviente</i>	CAFFEINE AND AEROBIC EXERCISE <i>Dr. Chris Womack</i>	Questions / Responses		ACULTY/PROFESSIONAL DEVELOPMENT <i>Dr. Nancy Williams</i> <i>National Kinesiology Association</i>		
11:00 AM	<b>PAST PRESIDENT LECTURE</b>	<b>ENDOTHELIAL FUNCTION</b>	<b>MUSCLE METABOLISM</b>	PEDIATRIC SPECIALIZATION IN SPORTS MEDICINE <i>Dr. John DiFlori</i>	<b>CHILDHOOD OBESITY</b>		
	I AM WOMAN! PERSPECTIVES ON WOMAN'S FITNESS, HEALTH AND SPORTS PARTICIPATION ACROSS THE LIFESPAN <i>Dr. Carol Ewing Garber</i>	ASSESS ENDOTHELIAL FUNCTION: YOU CONDUIT. NO MOVEMENT NECESSARY <i>Dr. Ninette Shenouda</i>	SUSTAINING POWER: BUILDING ENERGY NETWORKS IN STRIATED MUSCLE CELLS <i>Dr. Brian Glancy</i>		LIFESTYLE INTERVENTION ON BIOMARKERS OF TYPE 2 DIABETES IN YOUTH <i>Dr. Hoon Young Kim</i>		
11:30 AM		WAVE YOUR LEGS IN THE AIR.....P ASSIVE LEG MOVEMENT TO ASSESS VASCULAR FUNCTION <i>Dr. Melissa Witman</i>	DECONSTRUCTING MITOCHONDRIAL ENERGETICS IN HEALTHY & FAILING HEARTS <i>Sara Kuzmiak-Glancy</i>				
<b>LUNCH 12-1 pm</b>							
1:00 PM	<b>STATINS AND EXERCISE</b>	<b>NIH LECTURE</b>	<b>SALON C   SALON D/E</b>	<b>CLINICAL CASE STUDIES</b>	<b>RESEARCH</b>	<b>RESEARCH</b>	<b>RESEARCH</b>
	STATIN THERAPY: CARDIOVASCULAR CURE OR MUSCLE MALADY? <i>Dr. Beth Taylor</i>	MOVING MORE AND SITTING LESS: WHAT YOU NEED TO KNOW ABOUT THE NEW PHYSICAL ACTIVITY GUIDELINES FOR AMERICANS <i>Dr. Katrina Piercy</i>	<b>POSTER SESSION</b> Note: This room is split for the Afternoon	<b>FREE COMMUNICATIONS</b>	<b>FREE COMMUNICATIONS</b>	<b>FREE COMMUNICATIONS</b>	<b>FREE COMMUNICATIONS</b>
1:30 PM			<b>POSTER SESSION</b> Posters presentations will occur every 10 minutes. Please check your program or specific titles.	<b>CLINICAL CASES</b> Case Presentations will occur every 15 minutes. Please check your program or specific topics.		<b>MASTER'S RESEARCH AWARD NOMINEES</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.	
2:00 PM	<b>NUTRITION - KETO DIET</b>	<b>PHYSICAL ACTIVITY</b>			<b>PODIUM PRESENTATIONS</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.		
	THE PALEOKETOVEGANMACROFASTING DIET: STOP THE MADNESS <i>Dr. Shawn Arent</i>	PRESCHOOL CENTER-BASED PHYSICAL ACTIVITY INTERVENTIONS <i>Dr. Sofiya Hassan</i>				<b>RESEARCH FREE COMMUNICATIONS</b>	<b>PRESENTATIONS</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.
2:30 PM		NOVEL AND EFFECTIVE APPROACHES TO PROMOTING PHYSICAL ACTIVITY IN LATINO CHILDREN/FAMILIES <i>Dr. Sharon Ross</i>				<b>DOCTORAL RESEARCH AWARD NOMINEES</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.	
3:00 PM	SPORT NUTRITION AND THE COLLEGE ATHLETE: HOW TO BLOCK OUT THE NOISE <i>Michelle Arent, MPH</i>	MEASUREMENT OF ACTIVITY BEHAVIORS <i>Dr. Tiago Barreira</i>				<b>MEET THE EXPERTS STUDENT SESSION:</b> A session that students can meet and greet our invited speaker  4 - 5 speakers from the conference	
3:30 PM	<b>CONCUSSION UPDATE</b>	<b>INTERVENTIONS TO SIT LESS</b> <i>Dr. Bethany Barone Gibbs</i>	<b>POSTER SESSION II</b> Posters presentations will occur every 10 minutes. Please check your program or specific titles.	<b>Case Presentations will occur every 15 minutes.</b> Please check your program or specific topics.			
4:00 PM	SPIT SIGNALS: CONCUSSION INSIGHTS FROM SALIVA MOLECULES <i>Dr. Steve Hicks</i>	<b>AGING</b>					
4:30 PM	MOVEMENT AND COGNITIVE TESTING IN CONCUSSION INJURY <i>Dr. Christopher Neville</i>	AGING ASSOCIATED DECLINES IN CAPILLARIZATION: EFFECTS ON METABOLISM, FITNESS AND FUNCTION <i>Dr. Steve Prior</i>					
<b>DINNER 5:00 - 7:15 PM</b>							
7:15 PM	<b>KEYNOTE ADDRESS</b>						
	<b>THE 2-HOUR MARATHON</b> <i>Dr. Michael Joyner</i>						

# MARC-ACSM Schedule-at-a-Glance: Saturday, Nov. 2nd

Please refer to the Program Booklet for specific times.

Time	Ballroom A	Ballroom B	Ballroom C,D,E	Pennsylvania	Chestnut/Dogwood	Ash/Birch	Elm/Fir
8:00 AM	<b>POSTER SESSION</b>	<b>BIOMECHANICS</b>	<b>FIREFIGHTER HEALTH AND SAFETY</b>	<b>POSTER SESSION</b>	<b>POSTER SESSION</b>	<b>RESEARCH FREE COMMUNICATIONS</b>	<b>RESEARCH FREE COMMUNICATIONS</b>
8:30 AM	<b>POSTER SESSION</b> Posters presentations will occur every 10 minutes. Please check Your program or specific titles.	<b>MY BODY WANTS TO STOP RUNNING - SHOULD I LISTEN? THE BIOMECHANICS OF FATIGUED RUNNING</b> Dr. Ajit Chaudhari	<b>THE BIG 8 OF FIREFIGHTER FUNCTIONAL FITNESS</b> Dr. Dan Kerrigan	<b>POSTER SESSION</b> Posters presentations will occur every 10 minutes. Please check Your program or specific titles.	<b>POSTER SESSION</b> Posters presentations will occur every 10 minutes. Please check Your program or specific titles.	<b>PODIUM PRESENTATIONS</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.	<b>PODIUM PRESENTATIONS</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.
9:00 AM		<b>BIOMECHANIC FREE COMMUNICATION</b>	<b>CARDIOVASCULAR &amp; CHEMICAL EXPOSURE RISKS ON TODAY'S FIREGROUND</b> Dr. Gavin Horn			<b>RESEARCH FREE COMMUNICATIONS</b>	
9:30 AM		<b>PODIUM PRESENTATIONS</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.	<b>THE COMBINED INFLUENCE OF VIRTUAL TRAINING AND SLOW-PACED VENTILATION ON DECISIONMAKING IN PROFESSIONAL FIREFIGHTERS</b> Calvin Lu, PhD Candidate	<b>POSTER SESSION</b> Posters presentations will occur every 10 minutes. Please check Your program or specific titles.	<b>POSTER SESSION</b> Posters presentations will occur every 10 minutes. Please check Your program or specific titles.	Break	<b>PODIUM PRESENTATIONS</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.
10:00 AM		<b>UNERGRADUATE RESEARCH AWARD NOMINEES</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.					
10:30 AM			<b>FIRE FIGHTER COMBAT CHALLENGE</b> Paul Davis			<b>RESEARCH FREE COMMUNICATIONS</b>	
11:00 AM						<b>PODIUM PRESENTATIONS</b> Research presentations will occur every 15 minutes. Please check your program or specific titles.	
11:30 AM							
12:00 PM							
<b>Lunch/Banquet Awards and Raffle Drawing 12:30 - 2:00p</b>							

## Schedule by Topics - Friday

<b>Blood Flow</b>	
9:30-9:35a	21 years of Blood Flow Restriction Training.....29
9:35-10:10a	Optimizing Blood Flow Restricted Resistance Training Protocols for Older Adults.....29
10:10-10:45a	The Application of Blood Flow Restriction in Clinical Populations.....29
11:00-11:30a	Brachial Flow Mediated Dilation to Assess Endothelial Function .....28
11:30-12:00a	Passive Leg Movement to Assess Peripheral Vascular Function .....28
<b>Clinical Exercise Physiology</b>	
11:00-11:50a	Lifestyle Intervention on Biomarkers of Type 2 Diabetes in Youth .....31
1:00 – 1:50p	Statin Therapy: Cardiovascular Cure or Muscle Malady? .....32
4:00-5:00p	Aging Declines in Capillarization: Metabolism, Fitness and Function.....33
<b>Concussion Update</b>	
3:30-4:00p	The CARE Consortium: Findings from a Multi-site Concussion Study.....32
4:00-4:30p	Spit Signals: Concussion Insights from Saliva Molecules.....32
4:30-5:00p	Advanced Movement and Cognitive Testing in Concussion Injury .....32
<b>Faculty Development</b>	
10:00-10:50a	National Kinesiology Association.....31
<b>Medical Talks</b>	
8:30-9:10a	eSports Sports Medicine: Competitive Video Gaming.....30
9:10-9:50a	Running Gait Analysis for the Practicing Clinician .....30
9:50-10:30a	Collaboration in Sports Medicine - What is the Role of Sports Medicine.....30
10:30-11:10a	Dance Vocabulary and Correlation to Injury.....30
11:10-12:00p	Pediatric Specialization in Sports Medicine.....30
<b>Muscle Metabolism</b>	
11:00-11:15p	Deconstructing Mitochondrial Energetics in the Healthy and Failing Hearts.....29
11:15-11:30p	Evaluating Mitochondrial with Subcellular Resolution .....29
11:30-12:00p	Sustaining Power: Building Energy Networks in Striated Muscle Cells.....29
<b>Nutrition and Supplementation</b>	
9:00-9:50a	Caffeine, Genetics and Athletic Performance.....28
10:50-10:15a	Caffeine's Effect on Neuromuscular Function: Brain to Skeletal Muscle.....28
10:15-10:50a	Caffeine and Aerobic Exercise.....28
2:00-2:40p	The PaleoKetoVeganMacroFasting Diet: Stop the Madness.....32
2:40-3:25p	Sport Nutrition and the College Athlete: How to Block Out the Noise.....32
<b>Physical Activity</b>	
1:00-1:50p	Moving More and Sitting Less: New Physical Activity Guidelines.....33
2:00-2:30p	Preschool Center-based Physical Activity Interventions: Teachers Matter.....33
2:30-3:00p	Interventions to Promote Physical Activity in Latino Preschool Children .....33
3:00-3:30p	Measurement Behaviors: Sleep, Sedentary Time and Physical Activity .....33
3:30-4:00p	Interventions to Sit Less.....33
<b>Women's Health</b>	
9:00-9:40a	Pregnancy: An Opportunity for Improving Cardiovascular Health in Women .....27
9:00-9:50a	How Does Exercise Impact the Pelvic Floor.....31
9:40-10:00a	Cardiovascular Function in Female Marathon Runners .....27
10:00-10:25a	Sex Differences in Biomarkers for CVD and Responses to Exercise.....27
10:25-10:50a	Menopause and Aerobic Fitness.....27
11:00-12:00p	Perspectives on Woman's Fitness and Health Across the Lifespan..... 27

## Schedule by Topics - Saturday

<b>Biomechanics</b>	
9:00-9:40a	My Body Wants to Stop Running - Should I Listen?.....48
<b>Firefighter Health and Safety</b>	
8:00-8:55	The Big 8 of Firefighter Functional Fitness.....49
9:00-9:55	Cardiovascular & Chemical Exposure Risks on Today's Fireground .....49
10:00-10:55	Virtual Training and Slow-paced Ventilation on Decision-making .....49
11:00-11:55	Fire Fighter Combat Challenge.....49

**President's Welcome**  
**Kevin Heffernan, Ph.D.**

## Syracuse University



Take some of the top researchers, educators and clinicians in PA, NY, NJ, MD, DE...add some of the most renowned scientists and practitioners from around the country...include a national ACSM past president, an author of the physical activity guidelines, 2 past student award winners now considered top scholars in their respective fields...top it off with one of the most prolific and impactful integrative physiologists/exercise physiologists in the world delivering the keynote...marinate all of this with some of the most engaged undergraduate and graduate students in exercise science/kinesiology and trainees and fellows in sports medicine in the nation... and we get the 42<sup>nd</sup> annual Mid-Atlantic Regional Chapter (MARC) of the American College of Sports Medicine (ACSM) conference.

The MARC ACSM executive board has planned an exciting meeting that's sure to have something for everyone. Some of the leading experts in the field will be joining us to cover a wide array of topics from women's heart health, to concussions, eSports, keto diets, blood flow restriction exercise, a behind the scenes look at the genesis of the Physical Activity Guidelines, emerging strategies to measure and promote physical activity in children and adults, and of course a session dedicated to everyone's favorite supplement CAFFEINE. We also have an exciting session planned on Firefighter Health and Fitness that's sure to be memorable. This session will include demonstrations of functional exercises for firefighters as well as an opportunity for all to test their chops in a firefighter "combat challenge."

We are particularly excited to have Michael Joyner M.D. with us as our keynote speaker. Dr. Joyner is a faculty member at the Mayo Clinic in Rochester, Minnesota. His research interests are broad and include elucidating physiological mechanisms governing blood pressure and blood flow regulation. He is also interested in understanding the physiology of elite athletes. This past October 12<sup>th</sup> in Vienna, Eliud Kipchoge ran the first ever sub-2-hour marathon. Dr. Joyner's keynote address on the science underlying such a feat is as timely as ever and will be sure to be both informative and provocative. Dr. Joyner is highly regarded as one of the most prominent integrative physiologists/exercise physiologists in the world. He has published over 350 peer-reviewed papers and has mentored dozens of emerging and influential scholars in our field, including several now in the MARC region. He remains a research role model to many, including myself.

On the theme of "breaking records", we were excited to see a record-breaking number of abstract submissions from students, professionals and clinicians. In 2012, the MARC research committee received close to 80 submitted abstracts. Four years later in 2016 we eclipsed the formidable 100 abstract mark. And 3 years after this in 2019, we're knocking on the door of 200. This trajectory has been most impressive and highlights the growth in our region. Is breaking 2(00) in our future?

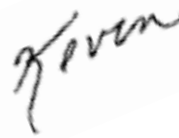
In between talks, be sure to roam around the expo and greet our vendors. Learn more about graduate school opportunities from colleges and universities in the region. Also learn more about new methods and equipment being used to probe the depths of physiology and human performance. Take time to network with peers from other institutions and chat with our invited speakers and distinguished faculty. Friday evening, cheer on your friends as colleges and universities from around the region go head-to-head in our always popular College Bowl and Fitness Challenge. For faculty and professionals that need to unwind after weeks of prepping talks

and mentoring student posters and presentations, join me for a beverage at the Faculty and Professional Social.

For those of you that are true-blue MARC ACSM members, thank you (from the bottom of my heart and connecting stiff arteries) for your continued support. MARC remains one of the strongest and fastest growing ACSM regions in the country because of dedicated members like you. For those of you joining us for the first time, we hope to see you again. MARC is a great region with great people. We'd love for you to join our family. A special welcome to friends and colleagues joining us from the community as well as those on the other side of the Mississippi (greetings Mizzou).

I'd like to thank the members of the Executive Board for all of their efforts in ensuring the success of the region and our annual meeting. It's always a pleasure to be surrounded by so many incredible and passionate scholars, clinicians and educators. I'd like to especially acknowledge the hard work and dedication of our Executive Director, Dr. Scott Kieffer, and our Associate Executive Director, Dr. Joohee Sanders. They are truly the glue that holds MARC together.

Enjoy the meeting. If you see me running around, be sure to say hi!

A handwritten signature in cursive script that reads "Kevin".

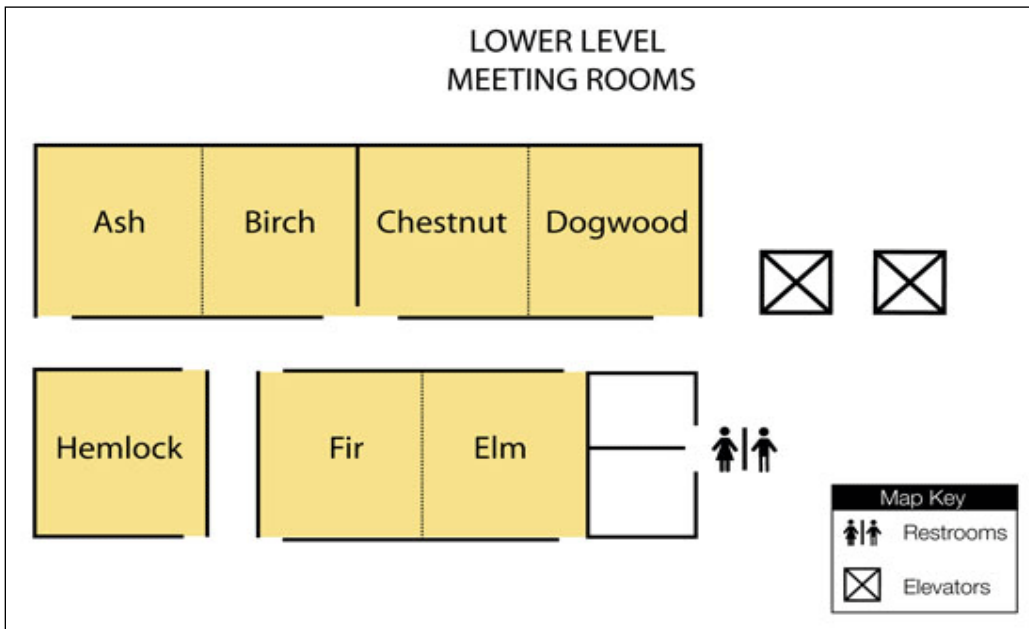
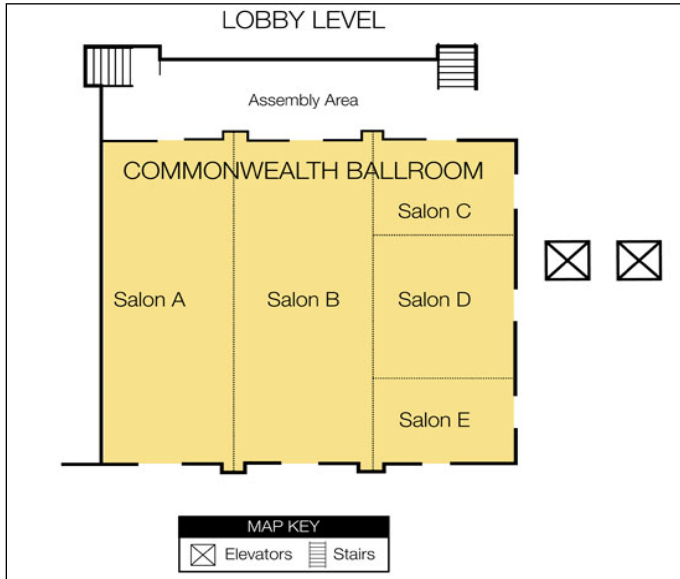
## 2019 MARC-ACSM Executive Board

President	<b>Kevin Heffernan, Ph.D.</b> Syracuse University ksheffer@syr.edu
Past President	<b>Dave Edwards, Ph.D.</b> University of Delaware dge@udel.edu
President-elect	<b>Melissa Reed, Ph.D., ACSM C-EP</b> West Chester University mreed@marcacsm.org
Vice President	<b>Jill Bush, Ph.D. FACSM</b> The College of New Jersey jillbushphd@yahoo.com
Secretary	<b>Melissa Whidden, Ph.D., FACSM</b> West Chester University mwhidden@wcupa.edu
2 <sup>nd</sup> Year Member-at-Large – Expo	<b>Michael Bruneau Jr., Ph.D., ACSM C-EP</b> Drexel University mlb425@drexel.edu
2 <sup>nd</sup> Year Member-at-Large – Research	<b>Devon Dobrosielski, Ph.D., FACSM</b> Towson University ddobrosielski@towson.edu
1 <sup>st</sup> Year Member-at-Large - Expo	<b>Jerry Jerome, Ph.D., FAHA, FACSM</b> Towson University gjerome@towson.edu
1 <sup>st</sup> Year Member- at-Large - Research	<b>Kathleen Sturgeon, Ph.D., MTR</b> Penn State Hershey Medical Center Kms99@psu.edu
2 <sup>nd</sup> Year Physician-at-Large	<b>Jennifer Payne, M.D., CAQSM</b> Lancaster General Health Sports Medicine ironeight@gmail.com
1 <sup>st</sup> Year Physician-at-Large	<b>Cayce Onks, D.O., MS, ATC</b> Penn State Hershey Medical Center conks@pennstatehealth.psu.edu
Student Representative	<b>Ted DeConne</b> University of Delaware deconnet@udel.edu
ACSM Regional Chapter Representative	<b>Sara Campbell, Ph.D., FACSM</b> Rutgers University saracamp@rci.rutgers.edu
Associate Executive Director	<b>Joohee Sanders, Ph.D.</b> Shippensburg University JISanders@ship.edu
Executive Director	<b>H. Scott Kieffer, Ed.D., FACSM</b> Messiah College executive@marcacsm.org



# Sheraton Harrisburg-Hershey Hotel Meeting Rooms

*Note: The Pennsylvania Room is opposite the registration desk on the lobby level.*



## REGISTRATION INFORMATION:

**Hours:**

Thursday	7:00pm – 9:00pm
Friday	7:30am - 5:00pm
Saturday	7:30am - 10:00am

On Friday Morning from 7:30a–10:00a:

- Pre-Registered floor (lower Level) in Elm/Fir.**
- Onsite registration: Adjacent to Ballroom (Salon) C, D, E.

**CONTINUING MEDICAL EDUCATION CREDITS (CMEs):**

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Penn State College of Medicine and MARC ACSM. Penn State College of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

Penn State College of Medicine designates this live activity for a maximum of 6 *AMA PRA Category 1 Credit(s)*<sup>TM</sup>. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**CONTINUING EDUCATION CREDITS: (CEC/CEUs)**

MARC-ACSM is an approved CEC provider for ACSM. Please be sure to pick up your CEC Certificate at the tables outside of Ballroom (Salon) C, D, E. 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).

NSCA professionals should request a certificate of attendance from the registration table for submission related to their certifications. Individuals with other certifications (NATA, AFAA, ACE, etc.) should also pick up a certificate of attendance that may be used to petition CECs from their certifying organization. MARC-ACSM is not responsible for determining if such organizations will or will not approve CECs from attending the MARC-ACSM meeting.

**STUDENT AWARDS:**

MARC-ACSM is pleased to present the following awards:

- **MARC-ACSM Matthew Kerner Undergraduate Student Investigator Award**  
Eligible individuals are a current or recently graduated UG student who is not enrolled in a Master's level program. 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-ACSM Annual 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.
- **MARC-ACSM Master's Student Investigator Award**  
Eligible individuals are any student who is currently enrolled in a Master's level program, even if the work was completed as an UG student. The purpose of this award is to recognize and support Master's level student investigative research. The winner receives a plaque and \$400. All undergraduate students who submit an abstract for a Free Communications/Slide presentation at the MARC-ACSM Annual 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.
- **MARC-ACSM Doctoral Student Investigator Award**  
Eligible individuals are any student who is currently enrolled in a doctoral or medical program, even if the work was completed as a Master's student. 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 graduate students who submit an abstract for a Free Communications/Slide presentation at the MARC-ACSM Annual 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.

*The MARC-ACSM Research Committee screens all student abstracts that are submitted for an oral presentation using a rubric. The top five ranked abstracts for each academic category identified above present their research during an oral session with the other class finalists (i.e. there is an UG Award Nominee Session, MS Award Nominee Session, and a Ph.D. Award Nominee Session) during the MARC-ACSM Annual Meeting. These finalists are ranked by a sub-committee of the MARC-ACSM Research Committee to determine the award recipients.*

The 2019 award winners (and honorable mentions) will be announced at the Business Meeting and Award Ceremony Luncheon on Saturday at 12:30 pm.

The Research Committee is chaired by **Devon Dobrosielski, Ph.D., FACSM** from Towson University.

The MARC-ACSM Executive Board would like to extend our thanks to those who served on the 2019 Research Committee. We appreciate your hard work and support!

### **STUDENT FUND RAFFLE:**

Each year the MARC-ACSM Student Representative conducts a raffle where a variety of prizes (e.g., textbooks, etc.) are awarded throughout the meeting. Tickets can be purchased outside of Ballroom (Salon) C, D, E. All proceeds from the student raffle are used to support our student representative's trip to the National ACSM Annual Scientific meeting.

### **EVALUATION FORMS:**

Evaluation forms will be sent via an electronic survey approximately 1 week following the conference. Your feedback is extremely important, as this information will be used in the planning of future meetings and conferences.

### **SPEAKER READY ROOM:**

The Speaker Ready Room will be in the Hemlock Room (last room on the first floor).

**Friday Presentations:** Please bring a USB storage device with your oral presentation to the speaker ready room (Hemlock Room) before 10 AM on Friday November 1<sup>st</sup>, 2019 to have it loaded on the proper computer for your afternoon presentation.

**Saturday Presentations:** Please bring a USB storage device with your oral presentation to the speaker ready room (Hemlock Room) before 3 PM on Friday, November 1<sup>st</sup>, 2019 to have it loaded on the proper computer for your presentation.

## **2019 MARC-ACSM Keynote Speaker**

**Michael Joyner, MD**



## **Mayo Clinic**

### **Professor of Anesthesiology**

- *Department of Anesthesiology and Perioperative Medicine*
- *Department of Physiology & Biomedical Engineering*

### **Vice Chair for Research,**

- *Department of Anesthesiology and Perioperative Medicine*

Michael J. Joyner, M.D., is the Caywood Professor of Anesthesiology at Mayo Clinic where he was named Distinguished Investigator in 2010. His research focuses on exercise physiology, human performance, blood pressure regulation, metabolism, and transfusion practices. He is also interested in the limits of scientific reductionism and the de-hyping of biomedical communications. The latter interest has led to a number of thought provoking and critical essays on the so-called Precision Medicine narrative in the popular press and key scientific journals. Professor Joyner attended the University of Arizona where he graduated with a B.S. in 1981 and an M.D. in 1987. After leaving Arizona he completed his residency training in anesthesiology at the Mayo Clinic in 1993 and then developed an independent research laboratory that has been funded by NIH since that time. His former fellows have established research programs at leading institutions throughout the world and he has held leadership positions at Mayo, in the extramural research community, and with leading journals.

**Dr. Joyner will present “The 2-Hour Marathon”  
At 7:15pm on Friday evening**

**MARC-ACSM 2019 Annual Meeting Speakers**  
*(Listed in alphabetical order)*

**Alhassan, Sofiya, Ph.D.**

Sofiya Alhassan, Ph.D. is an Associate Professor in the Kinesiology Department at the University of Massachusetts. Her research focuses on implementing physical activity for the prevention of pediatric obesity and the improvement of cognitive outcomes. In particular, the utilization of community family-based physical activity interventions to improve obesity-related health behaviors and cognitive health in children of color. Her research agenda also includes examining 1) physical activity policy-based intervention in preschool-age children; 2) environmental influences on various health behaviors in children of color, and 3) after-school family-based intervention to improve physiological and psychosocial, and academic performance of pre-adolescent children of color. Dr. Alhassan's research in preschool-age

children has been primarily funded by Robert Wood Johnson Foundation, and her research in pre-adolescent children have been funded by NIH. Her work has been published in top tier peer-review journals and has been presented at both national and international conferences.

**Arent, Michelle, MPH**

Michelle Arent received both her Bachelor's degree and Master of Public Health degree from the University of South Carolina. Michelle is a Certified Strength and Conditioning Specialist (NSCA CSCS), Certified Sports Nutritionist (CISSN), Certified Sports Performance Coach (USA Weightlifting) as well as a kettlebell instructor. She is the former Director of Training and Conditioning at Rutgers Center for Health and Human Performance and served as head strength and conditioning coach and head Sport Nutritionist for Rutgers Women's Soccer. She is currently employed by the University of South Carolina's Department of Health Promotion, Education, and Behavior as the training coordinator for their statewide

Health Literacy Initiative.

**Arent, Shawn, Ph.D.**

Shawn M. Arent, PhD, CSCS\*D, FISSN, FACSM is Professor and Chair of the Department of Exercise Science at the University of South Carolina and is the Director of the U of SC Sport Science Lab. His research focuses on the relationship between physical activity and stress and the implications for health, performance, and recovery. He was named the 2017 William J. Kraemer Outstanding Sports Scientist of the Year by NSCA. He is a fellow in ACSM and

ISSN and is the current President of ISSN. Additionally, he has worked with teams in the NHL, MLB, the US Soccer Federation, and a number of teams at the youth, high school, and collegiate levels.

**Augustine, Jacqueline, Ph.D.**

Dr. Augustine graduated with a Bachelor of Arts from The College of the Holy Cross where she studied biology-psychology. She then attended Syracuse University where she completed both a Masters in Exercise Science and a Doctorate in Science Education/Exercise Science. Dr. Augustine's research focuses on sex differences in the cardiovascular response to exercise and the impact of excessive exercise on cardiovascular function. In particular, Dr. Augustine has studied the effects of the menstrual cycle, and endurance exercise on arterial stiffness and examined sex differences in cardiac and arterial physiology in avid marathon runners. Dr. Augustine is currently a tenure-track Assistant Professor in the Kinesiology Department at SUNY Cortland in Cortland, NY.

**Barone Gibbs, Bethany, Ph. D.**

Dr. Bethany Barone Gibbs is an Associate Professor in the Department of Health and Physical Activity, and Clinical and Translational Science at the University of Pittsburgh. She trained in cardiovascular epidemiology and studies the prevention and treatment of obesity and cardiometabolic disease through healthy lifestyle behaviors. Her interests include population and intervention studies of physical activity, sedentary behavior, and eating habits as they related to hypertension, subclinical cardiovascular disease, diabetes, and obesity. Most recently, her research has focused on sedentary behavior as a risk factor, independent from moderate-to-vigorous intensity physical activity. These sedentary behavior studies have evaluated measurement and methods, longitudinal associations in cohort studies, and intervention methods to decrease sedentary behavior.

**Barreira, Tiago, Ph. D.**

Tiago Barreira is an expert in objective measurement of human physical behaviors (sleep, sedentary behavior, and physical activity), more specifically in the use of accelerometers and pedometers. His research has focused on four main objectives related to the measurement of human physical behavior: (1) establishing validity and reliability evidence of human physical behavior measurement tools (i.e., questionnaires, pedometers, accelerometers), (2) determining how to use those measurement tools to obtain reliable and accurate information on behavior patterns, (3) investigating the relationship between behaviors and cardiovascular disease risk factors, and (4) the use of measurement tools as a motivation to promote improvements in physical behaviors.

**Broglio, Steven, Ph.D.**

Steven Broglio is a Professor of Kinesiology, Neurology, and Physical Medicine and Rehabilitation at the University of Michigan in Ann Arbor. Dr Broglio completed his training at the University of Georgia, followed by his first faculty position at the University of Illinois at Urbana-Champaign. He been at the University of Michigan since 2011. At Michigan, Dr. Broglio is the Director of the Michigan Concussion Center and the NeuroTrauma Research Laboratory where he oversees clinical care, educational outreach, and multi-disciplinary research aimed at fundamental questions on concussion prevention, identification, diagnosis, management, and outcomes. His research has been supported by numerous foundations and federal funding agencies, resulting in over 125 peer reviewed works. Dr Broglio is a co-PI on the CARE Consortium, the largest prospective investigation of concussion ever conducted.

**Chaudhari, Ajit, Ph. D.**

Dr. Chaudhari's research focuses on the basic question: Can we better understand how movement-related injuries and diseases happen by studying the human body as a mechanical system? He is interested in the role of core stability in the prevention and treatment of injuries across the entire body, the mechanisms behind overuse running and throwing injuries, and the effects of chemotherapy, osteoarthritis, total knee arthroplasty and aging on gait and balance. He's been a professor at Ohio State since 2006.

**Cook, Summer, Ph.D.**



Dr. Summer Cook is an associate professor in the Department of Kinesiology at the University of New Hampshire. She earned her BS in Exercise Science from East Stroudsburg University and her MS and PhD from Syracuse University. Her research focuses on neuromuscular function, resistance training and aging. She has been a researcher in the area of blood flow restricted exercise for almost 20 years and has been awarded grant funding from the National Institutes of Health, National Aeronautics and Space Administration, and the American College of Sports Medicine (ACSM). She has an established publication record that includes several manuscripts regarding neuromuscular function during and after blood flow restricted exercise and

as well as studies reporting the adaptations to blood flow restricted training in various populations. Dr. Cook was awarded the New Investigator Award from ACSM in 2015. Dr. Cook maintains a productive research agenda with the help of her undergraduate and graduate students. She has mentored over 50 students with many of them winning prestigious university or professional awards. Dr. Cook also serves as the Vice Chair of the University of New Hampshire Institutional Review Board and facilitates the Responsible Conduct of Research Training at the University of New Hampshire. Dr. Cook has been an active member within the ACSM since 2000 as she was the MARC student representative, chair of the Student Affairs Committee, Student Representative on the Board of Trustees, the New Hampshire State Representative for the New England Chapter of ACSM, and a member at large of the New England Chapter of ACSM. She is currently a member of the ACSM Strategic Health Initiative on Aging.

#### **Dankel, Scott, Ph.D.**



Scott is originally from Howell, New Jersey and began his career with a B.A. in Health and Physical Education. He began teaching Health and Physical Education classes to Elementary, Middle and High School students in South Jersey, before working at a sports performance facility for student athletes. He has spent the last five years studying at The University of Mississippi under Dr. Jeremy Loenneke where he earned his M.S. in Exercise Science and Ph.D. in Health and Kinesiology. He has recently moved back to New Jersey and is beginning his first year as an assistant professor within the Health & Exercise Science department at Rowan University where he primarily teaches courses related to Exercise Physiology. In addition to teaching, Scott has several research

interests, most of which examine adaptations that occur in response to various resistance exercise interventions. He has published numerous studies examining blood flow restricted exercise, with a focus on how manipulating different variables alters the applied stimulus and subsequent adaptations. Additionally, Scott recently completed his dissertation examining whether individuals respond differently to the exact same resistance exercise after accounting for the degree of random error present. In his free time, Scott enjoys fishing, watching sports, and brewing beer.

#### **Davis, Paul, Ph.D.**



Paul earned his doctoral degree from the University of Maryland, School of Public Health, Department of Kinesiology where he placed major emphasis on the study of occupational fitness requirements and the quantification of work physiology. His dissertation on the energy costs and oxygen/lactate kinetics of structural firefighting was the first published study of its kind. He has consulted a number of law enforcement organizations including the NYPD, DEA, US Secret Service Agency, Pennsylvania State Police, US Marshalls Service, IAC, and the FBI. Projects of note have included the development of job-related physical performance and medical standards for a number of law enforcement agencies.

#### **DiFiori, John, MD**



Dr. John DiFiori is Chief of the Primary Sports Medicine Service and Attending Physician at Hospital for Special Surgery. Prior to HSS, Dr. DiFiori was Chief of the UCLA Division of Sports Medicine and Non-Operative Orthopaedics. He was Head Team Physician for the UCLA Department of Intercollegiate Athletics, overseeing the care of more than 650 athletes in 24 NCAA sports. He spent more than 15 years on the sidelines with the Bruins football and basketball teams. Dr. DiFiori's expertise in treating sports injuries in competitive athletes is internationally recognized. He serves as the Director of Sports Medicine for the NBA, where he is involved with the League's research initiatives, and the development and implementation of all policies related to player health and safety. He has also been appointed to the FIBA (international basketball federation) Medical Commission where he serves to work with basketball federations across the world in setting standards for player health. Dr. DiFiori has served as a medical consultant for the NHL Players Association. He has also served for the USOC as a US team physician for several international competitions, including for US Soccer, USA Basketball, and the XIII Pan American Games.

**Garber, Carol Ewing, Ph.D.**



Carol Ewing Garber is Professor of Movement Sciences and Education and Chair of the Department of Biobehavioral Sciences at Teachers College, Columbia University, where she also serves as the Director of the Graduate Program in Applied (Exercise) Physiology and Director of the EXerT Clinic for Exercise Prescription. She is a clinical exercise physiologist who studies the benefits of exercise in the prevention and treatment of chronic diseases across the lifespan—from toddlers to older adults—and her work targets people living in low-resourced communities. Professor Garber is a past President of the American College of Sports Medicine and the New England Chapter of the American College of Sports Medicine. She is a recipient of the 2019 ACSM Citation Award. She received her BS, MA, and PhD from the University of Connecticut. She is the author of over 130 published articles and book chapters. In her spare time, Dr. Garber sings with the Cecilia Chorus of NYC where she can be seen on stage at Carnegie Hall, and she is an avid Pilates practitioner, urban bicyclist and wilderness backpacker.

**Glancy, Brian, Ph.D.**



Brian graduated with a B.A. in Sport Science from the University of the Pacific prior to receiving a Master's degree in Kinesiology and a Ph.D. in Exercise Science from Arizona State University working with Wayne Willis. He was a postdoctoral fellow with Robert Balaban at the National Heart, Lung, and Blood Institute from 2009 to 2016. Dr. Glancy became an Earl Stadtman Investigator at the NIH with a dual appointment between NHLBI and NIAMS in 2016. He is a member of the American College of Sports Medicine and the American Physiological Society.



### **Goulopoulou, Stella, Ph.D.**



Dr. Stella Goulopoulou is an Assistant Professor in the Department of Physiology and Anatomy at the University of North Texas Health Science Center. Dr. Goulopoulou's research training and career has always been concentrated on cardiovascular physiology. She received her MS in Exercise Science and PhD in Exercise Physiology and Science Education from Syracuse University. At the end of her graduate studies, she transitioned from the field of applied human physiology to basic science research and trained in Vascular Physiology and Biology as a postdoctoral fellow in Augusta University. In 2014, she moved to Fort Worth, Texas to join the faculty at the University of North Texas Health Science Center, where she has established a vascular physiology laboratory with a focus on women's cardiovascular health and particular emphasis on maternal vascular physiology

during pregnancy and postpartum. The goals of her research program are: 1) To determine the mechanisms linking placental dysfunction with maternal vascular dysfunction in pregnancies with preeclampsia, 2) To determine the role of pregnancy complications in maternal risk for future cardiovascular disease, 3) To develop therapeutic interventions that can be safely administered during pregnancy in order to prevent maternal cardiovascular complications during pregnancy and postpartum. Dr. Goulopoulou has published over fifty peer-reviewed manuscripts, book chapters, and invited reviews and her laboratory is funded by the American Heart Association and intramural grants.

### **Guest, Nanci, Ph.D., RD**



Dr. Guest is a registered dietitian (sport specialty), certified personal trainer and a certified strength and conditioning specialist, and she has been working in private practice in this field for two decades. Her doctoral research focused on caffeine, genetics and athletic performance, at the University of Toronto, where she also received the 2019 Dr. Michael C. Archer Award for Research Excellence. She continues to do research in this area in her post-doctoral fellowship also at the University of Toronto. She completed her BSc/MSc degrees in agriculture and dietetics, and nutritional sciences with a sport focus at the University of British Columbia. Dr. Guest has published her research in top journals and given dozens of invited talks around the world. She is a global consultant to professional & amateur

athletes and teams and teaches college-level sport nutrition courses. She was the Head Dietitian at the Vancouver 2010 Olympics and the Toronto 2015 Pan Am games and helped to prepare several athletes for the London, Sochi, Rio and PyeongChang Olympics. She has been offering genetic testing for personalized sport nutrition in her Toronto-based private practice for 7 years.

### **Hicks, Steve, Ph. D.**



Dr. Hicks is a physician scientist at the Penn State College of Medicine. As a general pediatrician he cares for children with concussion in an acute outpatient setting. As a clinical researcher he studies the body's molecular response to traumatic brain injury. His research program aims to harness epigenetic findings to transform the way clinicians recognize and treat concussions. A major focus of his research is saliva microRNA. His research on saliva RNA profiles in adolescents with prolonged concussion symptoms was among the most-read articles in JAMA Pediatrics for 2018. The results of that study were featured on National Public Radio and CBS news. Dr. Hicks was the recipient of the "2018 Distinguished Young Investigator Award", and the

"Investigator to Watch Award" from the Penn State College of Medicine.

**Harwood, Marc, MD**

Dr. Harwood is a board certified non-operative sports medicine physician and serves as the Service Chief of the Non-Operative Sports Medicine Department at Rothman Orthopedic Institute. He is currently a team physician for the Philadelphia Phillies - a position he has held since 2005. He currently serves as the Vice President of the Major League Baseball Team Physicians Association. He also serves as a team physician for the St. Joseph's University NCAA Division 1 athletic program. He is a sports medicine consultant for several local high schools, in addition to caring for elite level dancers at the Rock School of Dance Education, University of the Arts, BalletX, and the Pennsylvania Ballet.

He is a consultant to Athletes and the Arts and has been an active member on the International Association of Dance Medicine and Science's research committee.

**Hong, Gene, MD**

Dr. Eugene Hong is a primary care sports medicine physician, is board certified in both sports medicine and family medicine and currently serves as the Chief Physician Executive at the Medical University of South Carolina. He enjoys working with active people of all ages/abilities at all levels as well as operating as the team physician/consultant for many high-level programs. He has served as the team physician for Saint Joseph's University Head team physician, Drexel University Head team physician, Philadelphia University Team physician, U.S. U19 Women's National Lacrosse Team physician, US U19 Men's National Lacrosse Team Philadelphia Marathon. His research and experience include work in the areas of: musculoskeletal ultrasound, both diagnostic and therapeutic; ultrasound-guided interventional

procedures; platelet rich plasma; percutaneous tenotomy; viscosupplementation and hyaluronic acid injections; joint injections; tendon injections; and computerized neurocognitive testing for sports related concussions. Finally, he served as the Medical Liaison to the MARC-ACSM Board for 10 years, he is a former Past-President of MARC-ACSM and he was instrumental in revising the MARC Board to include a Physician-at-Large position. Under his guidance and vision, the Medical Session (usually in the Pennsylvania room) has grown from a small interest group to a major part of the MARC-ACSM Annual Meeting. Welcome home Gene!

**Horn, Gavin, Ph.D.**

Gavin Horn is a Research Engineer with the UL Fire Safety Research Institute (FSRI). Gavin's research interests range from firefighter health and safety and first responder technology development to material testing and nondestructive evaluation. Prior to joining the UL FSRI team, he served as the Director of IFSI Research Programs at the University of Illinois Fire Service Institute (IFSI) for 15 years and as a firefighter/engineer with the Savoy (IL) Fire Department. Gavin holds a PhD in Mechanical Engineering from the University of Illinois at Urbana-Champaign as well as a ME in Fire Protection Engineering from the University of Maryland. He has

published over 70 peer-reviewed journal manuscripts and given presentations at meetings, conferences and symposia around the world.

**Ingram, Catherine, MSPT**



Cathy completed her undergraduate degree in Biology at Bucknell University. She received her Master's degree in Physical Therapy from Boston University in 1988. Cathy started her working career in Los Angeles, CA where she worked in a variety of orthopedic settings. She started to specialize in spine rehab and worked privately with professional golfer Seve Ballesteros as his personal physical therapist. She was an adjunct professor in the PTA program at Mount Saint Mary's College for 4 years. Cathy began working for Lancaster General Hospital in 2002. The first 15 years at the Suburban Outpatient Pavilion as a Level III Senior Therapist and the past 3 years at the Women's and Babies Hospital Specialty PT clinic as a pelvic and women's health therapist. Cathy has been an integral team member contributing to the

development of a Lumbar Spine Program, Cervical Spine Program and Fibromyalgia Program. She is co-chair of a Chronic Pain clinical excellence team and a member of the lumbar spine, cervical/headache and pelvic health clinical teams. In the last 10 years, Cathy has focused her continuing education on neuromuscular re-education training and manual therapy techniques through the Postural Restoration Institute (PRI) and Herman and Wallace Institute. Cathy enjoys playing competitive tennis and golf and has an interest in personal fitness and sports athletic performance training.

#### **Jenkins, Nate, Ph.D.**



Dr. Jenkins received his undergraduate at Messiah College in Mechanicsburg, PA and received his Masters and PhD at The University of Nebraska Lincoln. He has been an active member of MARC-ACSM, National ACSM and the National Strength and Conditioning Association. In 2018, he received the Housh Outstanding Young Investigator Award from the NSCA. Dr. Jenkins studies and publishes in the areas of the non-invasive assessment of neuromuscular function and motor unit behavior; acute and chronic neuromuscular responses to resistance training; the effects of age on neuromuscular function; and the effects of nutrition and dietary supplementation on health and human performance across the age-span.

#### **Jenny, Seth, Ph.D.**



Seth E. Jenny, Ph.D., ACSM-EP, teaches within the Department of Public Health at Slippery Rock University of Pennsylvania. Formerly, he taught within the Department of Physical Education, Sport and Human Performance at Winthrop University and the Department of Health, Exercise and Sports Sciences at the University of New Mexico. Prior to working within higher education, Dr. Jenny was a U.S. Air Force exercise physiologist and K-12 health and physical education teacher. As a scholar and researcher, Dr. Jenny has provided nearly 100 professional presentations and published over 40 peer-reviewed academic journal articles within his prime areas of research – eSports, motion-based video gaming, and elementary-age distance running. He has consulted for *ELEAGUE* (TBS's professional televised eSports league), co-created the first undergraduate major in eSports sport science

(Shenandoah University), and currently is the "Sports Performance Advisor" for *The Meta* – an eSports start-up company based in San Francisco. Moreover, Dr. Jenny was an invited speaker at the first academic eSports conference (University of California, Irvine), has written a chapter titled "eSports

Science and Player Performance” in the first academic eSports textbook (to be released soon), and recently was an invited keynote speaker at the 2019 *American Medical Society for Sports Medicine (AMSSM)* Annual Conference discussing “eSports and the Sports Medicine Physician.” As lead author, he is currently co-writing a textbook titled “*Technology for Physical Educators, Health Educators, and Coaches: Enhancing Instruction, Assessment, Management, Professional Development and Advocacy*” with the book publisher *Human Kinetics* (to be released April 2020).

### **Joyner, Michael J., M.D.**



Michael J. Joyner, M.D., is the Caywood Professor of Anesthesiology at Mayo Clinic where he was named Distinguished Investigator in 2010. His research focuses on exercise physiology, human performance, blood pressure regulation, metabolism, and transfusion practices. He is also interested in the limits of scientific reductionism and the de-hyping of biomedical communications. The latter interest has led to a number of thought provoking and critical essays on the so-called Precision Medicine narrative in the popular press and key scientific journals. Professor Joyner attended the University of Arizona where he graduated with a B.S. in 1981 and an M.D. in 1987. After leaving Arizona he completed his residency training in anesthesiology at the Mayo Clinic in 1993 and then developed an independent research laboratory that has been funded by NIH since that time. His former fellows have established research programs at leading institutions throughout the world and he has held leadership positions at Mayo, in the extramural research community, and with leading journals.

### **Kerrigan, Dan, MS**



Dan Kerrigan, MS, EFO, CFO is Chief of Fire and Emergency Services for Upper Providence Township, Montgomery County, PA and co-author of the best-selling book *Firefighter Functional Fitness*. A 33-year veteran of the fire service, Dan is a certified peer fitness trainer, ACE Group Fitness Instructor, and he serves as an at-large director on the International Association of Fire Chiefs Safety, Health and Survival section board of directors. He is a staunch firefighter health and wellness advocate and international speaker on the topic. Contact him at [dankerrigan911@gmail.com](mailto:dankerrigan911@gmail.com). Follow him on Twitter @[@dankerrigan911](https://twitter.com/dankerrigan911) & @[firefighterFFit](https://twitter.com/firefighterFFit)

### **Kim, Joon Young, Ph.D.**



Joon Young Kim, Ph.D., is an assistant professor in the Department of Exercise Science at Syracuse University. He is a patient-oriented researcher with specific focus on childhood obesity, metabolism and type 2 diabetes. He earned a doctorate degree in the Kinesiology/Exercise Physiology program at Arizona State University. He had pursued his patient-oriented research during his post-doctoral training in the Center for Pediatric Research for Obesity and Metabolism at UPMC Children’s Hospital of Pittsburgh, and he was funded by NIH/NIDDK T32 postdoctoral training grant for 2017-2019 in the Division of Endocrinology and Metabolism at University of Pittsburgh School of Medicine. His research has focused on 1) identification of novel phenotypic biomarkers and genetic targets of obesity and type 2 diabetes, 2) pathophysiology of prediabetes and type 2 diabetes in obese youth vs. adults, 3) genetic contributions (i.e., SNPs) to the emerging biomarkers of type 2 diabetes, and 4) interaction effects of genetic component and physical activity on cardiometabolic traits. He has had multiple peer-reviewed publications in high impact journals including *Diabetes Care*, *Diabetes*, and the *Journal of Clinical Endocrinology & Metabolism*. His recent highlighted publications are “Adipose Tissue Insulin Resistance in Youth on the Spectrum From

Normal Weight to Obese and From Normal Glucose Tolerance to Impaired Glucose Tolerance to Type 2 Diabetes (Diabetes Care, 2019;42:265)”, “The Shape of the Glucose Response Curve during an Oral Glucose Tolerance Test: Forerunner of Heightened Glycemic Failure Rates and Accelerated Decline in  $\beta$ -cell Function in TODAY (Diabetes Care, 2019;42:164)”, and “Impaired Lipolysis, Diminished Fat Oxidation and Metabolic Inflexibility in Obese Girls with Polycystic Ovary Syndrome (J Clin Endocrinol Metab. 2018;103:546)”.

**Kuzmiak-Glancy, Sara, Ph.D.**



Sarah Kuzmiak-Glancy is an Assistant Professor in the Department of Kinesiology at the University of Maryland. Dr. Glancy received her B.S. from Rutgers University and her Ph.D. from Arizona State University, and she completed postdoctoral training at the George Washington University and the National Heart, Lung, and Blood Institute at NIH. Dr. Glancy’s research focuses on determining how cardiac mitochondrial energy production is exquisitely matched to energy demand and how this coordination is altered in disease. Specifically, she is interested in disentangling when mitochondrial dysfunction is a product of an altered environment and when it is a function of intrinsic changes within the mitochondria. Dr. Glancy is a member of the American

Physiological Society and the American College of Sports Medicine. Additionally, Dr. Glancy is President of the Greater Washington DC Chapter of the American Physiological Society.

**Landers-Ramos, Rian, Ph.D.**



Rian Landers-Ramos, Ph.D. is an Assistant Professor of Exercise Science in the Department of Kinesiology at Towson University (TU). Her research focuses on the effects of acute and chronic exercise on novel cardiovascular risk factors across the lifespan and how these are related to vascular function. Prior to joining the faculty at TU, she completed her postdoctoral training at the University of Maryland School of Medicine and the Veterans Affairs Medical Center. She received her Ph.D. in Kinesiology from the University of Maryland in College Park. Her doctoral and postdoctoral work involved the effects of cardiovascular diseases and physical inactivity on circulating angiogenic cells (CACs), endothelial microparticles (EMPs) and inflammatory cytokines.

**Loenneke, Jeremy, Ph.D.**



Dr. Jeremy Loenneke is an Assistant Professor of Exercise Science at The University of Mississippi within the School of Applied Sciences. He received his MS in Nutrition and Exercise Science from Southeast Missouri State University and his PhD in Exercise Physiology from the University of Oklahoma. He is the director of the Kevser Ermin Applied Physiology Laboratory and his research group’s primary focus is on skeletal muscle adaptations to exercise with and without the application of blood flow restriction. His recent work has answered several important methodological and safety questions with respect to applying blood flow restriction. Dr. Loenneke is a Fellow of the American College of Sports Medicine and a member of the American Physiological Society.

He has authored over 250 peer-reviewed articles and currently serves on the editorial board for Sports Medicine, PLOS One, and the Journal of Trainology

**Neville, Christopher, Ph.D., PT**



Dr Christopher Neville is an Associate Professor in the Department of Physical Therapy Education at Upstate Medical University. He is director of the Motion Analysis Laboratory where he completes research with the Department of Orthopedic Surgery, Department of Physiology, and the Upstate Concussion Center. Dr. Neville teaches in the area of biomechanics, kinesiology, and research methods for the physical therapy program as well as supervising graduate and medical students from across the campus. Ongoing research projects are focused on understanding movement, cognitive, and educational deficits following concussion injury.

### **Piercy, Katrina, Ph.D., RD**



Katrina Piercy is a Physical Activity and Nutrition Advisor in the Office of Disease Prevention and Health Promotion (ODPHP) in the United States Department of Health and Human Services (HHS) and serves as a dietitian officer in the United States Public Health Service Commissioned Corps. Dr. Piercy advises agency and departmental officials on current physical activity and nutrition science to inform policies and programs related to health promotion and disease prevention. She leads the physical activity portfolio within ODPHP, which includes managing dissemination of the recently released *National Youth Sports Strategy* and the expansion of the *Move Your Way* communications campaign to support and encourage more Americans to get the physical activity they need to stay healthy. She most recently served as the federal lead for the second edition of the *Physical Activity Guidelines for Americans* and coordinated efforts across ODPHP, CDC, NIH, and the President's Council on Sports, Fitness & Nutrition. Her work involved overseeing the 17-member Advisory Committee as they executed an extensive systematic literature review on physical activity and health and compiled their findings into a Scientific Report. She was the lead policy writer to translate the Committee's work into the Guidelines. She previously served as a policy writer and staffed the advisory committee for the *2015-2020 Dietary Guidelines for Americans* and was the federal lead managing the *Physical Activity Guidelines Midcourse Report: Strategies to Increase Physical Activity Among Youth*.

### **Prior, Steve, Ph.D.**



Aging and a sedentary lifestyle lead to changes in skeletal muscle and the vasculature that result in insulin resistance and an increased risk for developing type 2 diabetes. This places older adults at substantially greater risk for diabetes-associated cardiovascular disease, microvascular complications, and impaired angiogenesis. My research is focused on conducting exercise intervention studies to determine mechanisms by which the risk for aging-associated vascular impairments and cardiometabolic diseases may be reduced in older adults. My laboratory uses state of the art techniques to assess angiogenesis and skeletal muscle capillarization, as well as in vivo vascular function and glucose metabolism. We have also developed basic science and cell culture techniques to study the number and function of circulating angiogenic cells that may contribute to improvements in angiogenesis and vascular function in older adults. I am currently funded by the National Institutes of Health and Department of Veterans Affairs for my research examining mechanisms underlying abnormal angiogenesis and vascular dysfunction in aging and age-associated cardiometabolic diseases such as diabetes and peripheral arterial disease, as well as how exercise training may restore normal angiogenesis, metabolism and physical function in these individuals.

**Rial, Tamara, Ph.D.**

Dr. Tamara Rial is an author, lecturer & researcher with a special interest in pelvic floor fitness for women's health. She earned dual bachelor degrees in exercise science and physical education, a masters degree in exercise science and a doctorate with international distinction from the University of Vigo (Spain). Her dissertation focused on the effects of hypopressive exercise on women's health. Dr. Rial is on the faculty of Herman & Wallace Pelvic Rehabilitation Institute. She is the author of several scientific publications and books about women's health and fitness. She has also published numerous articles and videos about pelvic floor fitness, hypopressive exercise and core training. She is an internationally recognized speaker and has presented at conferences throughout

Argentina, Canada, Mexico, Portugal and Spain. As an established researcher and practitioner, she continues to collaborate with colleagues at universities and health care settings to explore the effects of hypopressive exercise on health and wellbeing. After creating the certification program called Low Pressure Fitness, Dr. Rial founded Exercise & Women's Health with the mission of educating and empowering women in evidence-based exercise programs.

**Ross, Sharon, Ph.D.**

Sharon E. Taverno Ross, Ph.D., is an Assistant Professor of Health and Physical Activity in the School of Education with a secondary appointment in the Department of Behavioral and Community Health Sciences in the Graduate School of Public Health at the University of Pittsburgh. Dr. Ross received her Ph.D. in Biobehavioral Health from the Pennsylvania State University where her training under Dr. Lori Francis focused on the biobehavioral mechanisms surrounding the etiology and development of childhood

obesity in low-income, minority populations. Following this, she completed a post-doctoral fellowship under the mentorship of Dr. Russ Pate in the Children's Physical Research Group in the Department of Exercise Science in the Arnold School of Public Health at the University of South Carolina. There, she received training in measurement of physical activity in children and intervention design, implementation, and evaluation. Dr. Ross' research focuses on physical activity promotion and child obesity prevention in children and youth, particularly those of Latino origin. She has served as the PI on federally-funded studies examining the effectiveness of culturally-tailored, home- and community-based intervention programs promoting a healthy lifestyle in Latino children of immigrants and their families.

**Serviente, Corinna, Ph.D.**

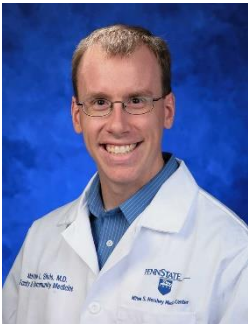
Corinna Serviente is currently a postdoctoral fellow through the Center for Healthy Aging at Pennsylvania State University. She received her bachelor's degree in Clinical Exercise Science from Ithaca College and her Master's degree and PhD in kinesiology from the University of Massachusetts Amherst. Her work has broadly focused on understanding how cardiovascular health changes with menopause and how exercise may or may not mitigate that change in risk.

**Shenouda, Ninette, Ph.D.**



Ninette Shenouda is a Postdoctoral Researcher in the Department of Kinesiology and Applied Physiology at the University of Delaware. Dr. Shenouda completed all of her undergraduate and graduate training at McMaster University (Ontario, Canada), earning her B.S. in Biology and Mathematics, her M.S. in Pediatric Exercise Physiology, and her Ph.D. in Cardiovascular Exercise Physiology. Under the mentorship of Dr. Maureen MacDonald, her dissertation investigated factors regulating endothelial function in healthy young adults, namely the effects of exercise and sex hormones. Dr. Shenouda has since moved to the U.S. where she is now completing her postdoctoral training with Dr. David Edwards at the University of Delaware. Her interests in the regulation of vascular function have expanded to include the central and cerebral vasculature. Currently, Dr. Shenouda's research examines the relations between aortic hemodynamics, cerebrovascular reactivity, and cognitive function in patients with chronic kidney disease.

### **Silvis, Matthew, MD**



Matthew Silvis, MD graduated from Pennsylvania State University College of Medicine in 2002. He then completed a Family Medicine Residency at Wake Forest University in Winston-Salem, NC. After residency, Dr. Silvis practiced wilderness medicine in rural Wyoming before returning to Wake Forest where he completed a fellowship in primary care sports medicine. Dr. Silvis is currently a Professor in the Departments of Family and Community Medicine & Orthopedics and Rehabilitation at Penn State College of Medicine and Division Chief of Primary Care Sports Medicine. Dr. Silvis also serves as the Vice Chair of Clinical Operations for the Department of Family and Community Medicine and Director of Adult Ambulatory Care for Penn State Health. He serves as team physician for the Hershey Bears Hockey Club, Lebanon Valley College, and Hershey High School. He has special interests in the care of endurance athletes, exercise, and concussion. An avid outdoorsman, Dr. Silvis enjoys hiking, mountain biking, running, gardening, and photography. He lives in Hershey with his wife, Christine, and their children, Nicholas, Benjamin, and Emory.

### **Taylor, Beth, Ph.D.**



Dr. Taylor is an Associate Professor of Kinesiology at University of Connecticut as well as the Director of Exercise Physiology Research at Hartford Hospital. Her research interests focus on interactions between exercise, aging, cardiovascular disease, and commonly used cardiovascular medications. She has been a principal or co-investigator on several NIH-funded projects involving the pleiotropic effects of statin therapy (cholesterol-lowering drugs) in humans. These projects include investigation of the direct effects of statins on skeletal muscle strength and aerobic performance, the effects of Coenzyme Q10 supplementation on skeletal muscle side effects, and cognitive side effects of statins assessed with functional magnetic resonance imaging. With funding from the American Heart Association, she is now investigating novel mechanisms to detect statin-associated muscle symptoms so as to improve tolerance and effectiveness of statin drugs. She has also recently been studying the effect of aerobic exercise training on brain volumes and memory function in individuals at risk of Alzheimers Disease. An avid runner herself, Taylor has conducted studies at the



Boston and Hartford Marathons to determine the effects of sustained endurance exercise on blood clot risk, markers of cardiovascular injury and stress, and the effects of cholesterol-lowering drugs on these biomarkers.

**Witman, Melissa, Ph.D.**



Dr. Witman joined the University of Delaware in 2015 as an Assistant Professor in the Department of Kinesiology and Applied Physiology. She pursued her Master's degree at the University of New Hampshire under the mentorship of Dr. David Edwards and specialized in the cardiovascular responses to exercise. She received her doctoral degree from the University of Utah. Under the mentorship of Dr. Russell Richardson in the Utah Vascular Research Laboratory, she studied the relationships between vascular function, exercise-induced hyperemia, and the role of oxidative stress in patients with heart failure and heart transplant recipients. Dr. Witman stayed in Utah for her Postdoctoral Research Fellowship at the Salt Lake City VA Medical Center where she continued to study those with severe heart failure, including those that have received a left-ventricular assist, in addition to healthy aging and other chronic diseases. Currently, Dr. Witman's work continues to focus on the vasculature and how this changes throughout the lifespan and with various chronic diseases in hopes of improving overall health and quality of life. When not in the laboratory, she enjoys spending time with her family, running, skiing, hiking, and almost any other outdoor activity.

**Womack, Christopher, Ph.D.**



Chris Womack is a Professor in the Department of Kinesiology at James Madison University, where he has served as a faculty member for 13 years. Prior to that he was an Associate Professor at Michigan State University in East Lansing, MI. He received his Bachelor's degree in Physical Education from James Madison and his Doctorate in Exercise Physiology from the University of Virginia. He also completed a post-doctoral research fellowship at the University of Maryland Medical Center in the Division of Gerontology. He has been a member of ACSM for 30 years and a Fellow since 2001. His main research interests are hematological exercise responses and the role of genetic polymorphisms on exercise performance. The latter interest has sparked a decade-long series of inquiries into the role of a polymorphism in the CYP1A2 gene on the ergogenic response to caffeine. Chris live happily in Harrisonburg VA with his wife of 20 years, Dawn, and their dog Bam-Bam. He also enjoys spending time with his stepson Landon and daughter-in-law Melanie.

**Sessions:**

*Invited Speakers*

*Oral Communications*

*Poster Sessions*

<b>Friday Morning</b>		<b>Salon A</b>
<b>Exercise, CVD and Women's Health</b>		<b>Moderator</b>
<b>9:00-9:40a</b>	<b>Pregnancy: A Stress Test and a Window of Opportunity for Improving Cardiovascular Health in Women</b> <i>Stella Goulopoulou, PhD</i>	
<b>9:40-10:00a</b>	<b>Cardiovascular Function in Female Marathon Runners</b> <i>Jacqueline Augustine, PhD</i>	Rian Landers-Ramos, PhD
<b>10:00-10:25a</b>	<b>Sex Differences in Novel Circulating Biomarkers for Cardiovascular Disease and Responses to Exercise</b> <i>Rian Landers-Ramos, PhD</i>	

<b>10:25-10:50a</b>	<b>Menopause and Aerobic Fitness: Is it Really as Simple as We Think?</b> <i>Cory Serviente, PhD</i>	
<b>10:50-10:55a</b>	<i>Questions / Responses</i>	

**Past President's Lecture (National ACSM)**

<b>11:00a-12:00p</b>	<b>I am Woman! Perspectives on Woman's Fitness, Health and Sports Participation Across the Lifespan</b> <i>Carol Ewing Garber, PhD, FACSM</i>	<b>Kevin Heffernan, PhD</b>
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*Stella Gouloupoulou, PhD*



*Jacqueline Augustine, PhD*

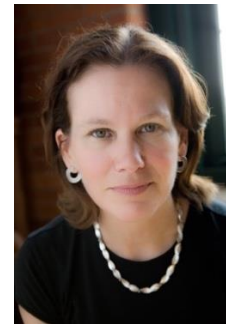


*Rian Landers-Ramos, PhD*

**President's Lecture Sponsor**



*Cory Serviente, PhD*



*Carol Ewing Garber, PhD, FACSM*

**Friday Morning** **Salon B**

**Caffeine and Exercise** **Moderator**

<b>9:00-9:05a</b>	<b>Opening Remarks</b> <i>Eric Rawson, PhD, FACSM</i>	
<b>9:05-9:40a</b>	<b>Caffeine, Genetics and Athletic Performance</b> <i>Nanci Guest, PhD, RD, CSCS</i>	
<b>9:40-10:15a</b>	<b>Caffeine's Effect on Neuromuscular Function: From the Brain to Skeletal Muscle</b> <i>Nate Jenkins, PhD, CSCS, *D, NSCA-CPT, *D</i>	<b>Eric Rawson, PhD, FACSM</b>
<b>10:15-10:50a</b>	<b>Caffeine and Aerobic Exercise</b> <i>Chris Womack, PhD</i>	

**Endothelial Function**

<b>11:00-11:30a</b>	<b>Brachial Flow Mediated Dilation to Assess Endothelial Function: You Con-du-it. NO Movement Necessary</b> <i>Ninette Shenouda, PhD</i>	Stephen Ives, PhD
<b>11:30-12:00p</b>	<b>Waive Your Legs in the Air Like You Just Don't Care: Passive Leg Movement to Assess Peripheral Vascular Function</b> <i>Melissa Witman, PhD</i>	



*Nanci Guest, PhD, RD, CSCS*



*Nate Jenkins, PhD, CSCS, \*D, NSCA-CPT, \*D*

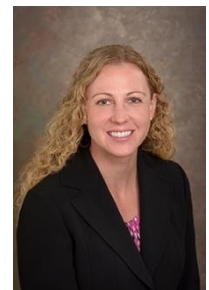


*Chris Womack, PhD, FACSM*



*Ninette Shenouda, PhD*

**Session Sponsor  
Endothelial Function**



*Melissa Witman, PhD*

**Friday Morning** **Salon C,D,E**

**Blood Flow and Exercise** **Moderator**

<b>9:00-9:35a</b>	<b>21 years of Blood Flow Restriction Training: A Coming of Age</b> <i>Jeremy Loenneke, PhD, FACSM</i>	
<b>9:35-10:10a</b>	<b>Optimizing Blood Flow Restricted Resistance Training Protocols for Older Adults</b> <i>Summer Cook, PhD, FACSM</i>	Jordan Patik, PhD
<b>10:10-10:45a</b>	<b>The Application of Blood Flow Restriction in Clinical Populations</b> <i>Scott Dankel, PhD, FACSM</i>	
<b>10:45-10:50a</b>	<b>Question and Responses</b>	

**Muscle Metabolism**

<b>11:00-11:30a</b>	<b>Deconstructing Mitochondrial Energetics in the Healthy and Failing Hearts</b> <i>Sarah Kuzmiak-Glancy, PhD</i>	
	<b>mitoRACE: Evaluating Mitochondrial Function in vivo and in Single Cells with Subcellular Resolution</b> <i>T. Bradley Willingham, PhD</i>	John Guers, PhD
<b>11:30-12:00p</b>	<b>Sustaining Power: Building Energy Networks in Striated Muscle Cells</b> <i>Brian Glancy, PhD</i>	



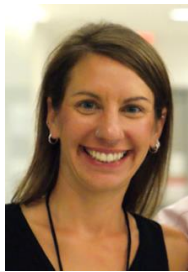
*Jeremy Loenneke, PhD, FACSM*



*Summer Cook, PhD*



*Scott Dankel, PhD*



*Sarah Kuzmiak-Glancy, PhD*



*T. Bradley Willingham, PhD*



*Brian Glancy, PhD*

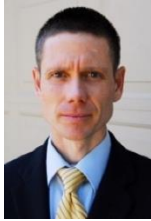
<b>Friday Morning</b>		<b>Pennsylvania</b>
<b>Clinical Track: Invited Speakers</b>		<b>Moderator</b>
<b>8:25-8:30a</b>	<b>Welcome and Introductions to the Session</b> <i>Jennifer Payne, MD</i> <i>Cayce Onks, MD</i>	
<b>8:30-9:10a</b>	<b>eSports Sports Medicine: Why You Should Care about Competitive Video Gaming</b> <i>Seth Jenny, PhD</i>	Jennifer Payne, MD & Cayce Onks, MD
<b>9:10-9:50a</b>	<b>Running Gait Analysis for the Practicing Clinician</b> <i>Matt Silvis, MD</i>	
<b>9:50-10:30a</b>	<b>Collaboration in Sports Medicine - What is the Role of Sports Medicine in the Evolving Health System?</b> <i>Gene Hong, MD, CAQSM, FAAFP</i>	

**10:30-11:10a**

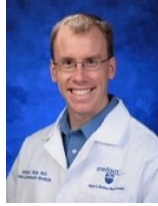
**Dance Vocabulary and Correlation to Injury**  
*Marc Harwood, MD*

**11:10-12:00p**

**Pediatric Specialization in Sports Medicine**  
*John P. DiFiori, MD, FACSM, FAMSSM*



*Seth Jenny, PhD*



*Matt Silvis, MD*



*Gene Hong, MD, CAQSM,  
FAAFP*



*Marc Harwood, MD*

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DOCTOR OF  
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*John P. DiFiori, MD, FACSM,  
FAMSSM*

<b>Friday Morning</b>		<b>Chestnut/ Dogwood</b>
<b>Women's Health</b>		<b>Moderator</b>
<b>9:00-9:50a</b>	<b>How Does Exercise Impact the Pelvic Floor?</b> <i>Tamara Rial-Rbullido, PhD</i> & <i>Cathy Ingram, MSPT</i>	Tamara Rial-Rbullido, PhD
<b>Professional Tutorial</b>		
<b>10:00-10:50a</b>	<b>National Kinesiology Association</b> <i>Nancy Williams, ScD</i>	Nancy Williams, PhD
<b>Childhood Obesity</b>		
<b>11:00-11:50a</b>	<b>Lifestyle Intervention on Biomarkers of Type 2 Diabetes in Youth</b> <i>Joon Young Kim, PhD</i>	Joohee Im Sanders, PhD



*Tamara Rial-Rbullido, PhD*



*Cathy Ingram, MSPT*



*Nancy Williams, ScD*



*Joon Young Kim, PhD*

<b>Friday Afternoon</b>		<b>Ballroom A</b>
<b>Statins and Exercise</b>		<b>Moderator</b>
<b>1:00-1:55p</b>	<b>Statin Therapy: Cardiovascular Cure or Muscle Malady?</b> <i>Beth Taylor, PhD</i>	Lacy Alexander, PhD
<b>Nutrition: Keto Diet</b>		
<b>2:00-2:40p</b>	<b>The PaleoKetoVeganMacroFasting Diet: Stop the Madness</b> <i>Shawn Arent, PhD, FACSM, FISSN, CSCS*D</i>	Sara Campbell, PhD, FACSM
<b>2:40-3:25p</b>	<b>Sport Nutrition and the College Athlete: How to Block Out the Noise</b> <i>Michelle Arent, MPH</i>	
<b>Concussion Update</b>		
<b>3:30-4:00p</b>	<b>The CARE Consortium: Findings from a Multi-site Concussion Study</b> <i>Steve Broglio, PhD, FACSM</i>	
<b>4:00-4:30p</b>	<b>Spit Signals: Concussion Insights from Saliva Molecules</b> <i>Steve Hicks, PhD</i>	Thomas Buckley, PhD
<b>4:30-5:00p</b>	<b>Advanced Movement and Cognitive Testing in Concussion Injury: Can New Tests Add Insight?</b> <i>Christopher Neville, PhD</i>	



*Beth Taylor, PhD, FACSM*



*Shawn Arent, PhD, FACSM, FISSN, CSCS\*D*



*Michelle Arent, MPH*



*Steve Broglio, PhD, FACSM*



*Steve Hicks, PhD*



*Christopher Neville, PhD*



<b>Friday Afternoon</b>		<b>Ballroom B</b>
<b>NIH Physical Activity Lecture</b>		<b>Moderator</b>
<b>1:00-1:50p</b>	<b>Moving More and Sitting Less: What You Need to Know About the New Physical Activity Guidelines for Americans</b> <i>Katrina Piercy, PhD, RD</i>	Katrina Piercy, PhD, RD
<b>Physical Activity</b>		
<b>2:00-2:30p</b>	<b>Learning from Our Successes and Failures in Preschool Center-based Physical Activity Interventions: Teachers Matter!</b> <i>Sofiya Alhassan, PhD, FACSM</i>	
<b>2:30-3:00p</b>	<b>Interventions to Promote Physical Activity in Latino Preschool Children</b> <i>Sharon Ross, PhD</i>	Katrina Piercy, PhD, RD
<b>3:00-3:30p</b>	<b>Measurement of Activity Behaviors: Sleep, Sedentary Time and Physical Activity</b> <i>Tiago Barreira, PhD</i>	
<b>3:30-4:00p</b>	<b>Interventions to Sit Less</b> <i>Bethany Barone Gibbs, PhD</i>	
<b>Aging</b>		
<b>4:00-5:00p</b>	<b>Aging Associated Declines in Capillarization: Effects on Metabolism, Fitness and Function</b> <i>Steve Prior, PhD</i>	<i>Steve Prior, PhD</i>



*Katrina Piercy, PhD, RD*

*Session Sponsor:*

**Syracuse University**  
 School of Education  
 Exercise Science



*Sofiya Alhassan, PhD, FACSM*



*Sharon Ross, PhD*



*Tiago Barreira, PhD*



*Bethany Barone Gibbs, PhD*



*Steve Prior, PhD*

<b>Friday Afternoon</b>		<b>Salon C</b>
<b>Poster Session: Undergraduate</b>		
<b>Cardiovascular, Renal &amp; Respiratory Physiology</b>		
<b>1:00-1:10p P-1</b>	<b>Sex Differences in Endothelial Progenitor Cells and Circulating Endothelial Cells in Response to Acute Exercise</b> <i>Ian Imery<sup>1,2</sup>, Dakota Siok<sup>1</sup>, Urvi Patel<sup>1</sup>, Sarah Syme<sup>1</sup>, Kailyn Gates<sup>1</sup>, Elizabeth Boyle<sup>1</sup>, Elizabeth Dalton<sup>1</sup>, Kathleen Dondero<sup>1</sup>, Rian Q. Landers-Ramos<sup>1</sup>. <sup>1</sup>Towson University, Towson, MD, <sup>2</sup>Johns Hopkins University, Baltimore, MD</i>	Sushant Ranadive, PhD 1:00-1:50
<b>1:10-1:20p P-2</b>	<b>Aortic Blood Pressure is Lowered During Active Pill Phase of Oral Contraceptives in Young Females</b> <i>Sarika S. Walia, Lauren E. Eagan, Catalina A. Chesney, Maes A. Zietowski, Sushant M. Ranadive. University of Maryland, College Park, MD</i>	
<b>1:20-1:30p P-3</b>	<b>Effects of Anxiety Symptomology on Subclinical Cardiovascular Disease Risk in Young Women</b> <i>Isabel N. Reedy, Jacob P. DeBlois, Kevin S. Heffernan. Syracuse University, Syracuse, NY.</i>	
<b>1:30-1:40p P-4</b>	<b>The Effects of Beetroot Juice Consumption on Cerebrovascular Function during an Orthostatic Stressor</b> <i>Dziana Vertsiakhouskaya<sup>1</sup>, Hannah Zazulak<sup>1</sup>, Morgan L. Worley<sup>1</sup>, Christopher L. Chapman<sup>1</sup>, Emma L. Reed<sup>1</sup>, Zachary J. Schlader<sup>1,2</sup>, Blair D. Johnson<sup>1</sup>. <sup>1</sup>University at Buffalo, Buffalo NY, USA, <sup>2</sup>Indiana University, Bloomington, IN</i>	
<b>1:40-1:50p P-5</b>	<b>Heart Rate Variability in Response to a 3-day Kumbhaka Pranayama Practice</b> <i>Tara N. Riley<sup>1</sup>, Daniel B. Houston<sup>2</sup>, Sarah Y. Gingrich<sup>3</sup>, Cristina Houston<sup>2</sup>, Edward J. Ryan<sup>1</sup>, Andres E. Carrillo<sup>1,4</sup>. <sup>1</sup>Chatham University, Pittsburgh, PA, <sup>2</sup>Mind Tribes, Houston, TX, <sup>3</sup>Create Karma, Lancaster, PA, <sup>4</sup>Move-COR, Pittsburgh, PA</i>	
<b>Clinical Exercise Physiology</b>		
<b>1:50-2:00p P-6</b>	<b>Correlation Between Q-Angle, Arch Index, and Weight Distribution Dependent on Supination and Pronation While Walking</b> <i>Serena A. Sabbagh<sup>1</sup>, Madeline J. Meloche<sup>1</sup>, Brandon M. DiChiacchio<sup>1</sup>, Aislinn M. Roth<sup>1</sup>, Dr. Rebecca Kudrna<sup>2</sup>. <sup>1</sup>DeSales University, Center Valley, PA, <sup>2</sup>Park University, Kansas City, MO</i>	Tim Werner, PhD 1:50-2:30
<b>2:10-2:20p P-7</b>	<b>The Acute Effects of a Weighted Load on Glucose Metabolism</b> <i>Haley Shaffer, Zachary Rollar, Samuel Tomlin, Joohee Sanders, William Braun, FACSM. Shippensburg University, Shippensburg PA</i>	
<b>2:10-2:20p P-8</b>	<b>The Effects of a 12-Week Resistance Training Program on Arterial Stiffness in Females: A Pilot Study</b> <i>Joshua E. Nicolas, Thomas K. Pellingner, Colin J. Gimblet, Ateeb Mirza, Austin T. Ortlip, Jessica M. Walter, Timothy J. Werner. Salisbury University, Salisbury, MD</i>	
<b>2:20-2:30p P-9</b>	<b>The Effects of Acute Creatine Supplementation on Arterial Stiffness</b> <i>Colin J. Gimblet, Morgan M. Vance, Meghan Shepherd, Austin T. Ortlip, Timothy Staudmyer, Nabil E. Boutagy, John J. LaManca, Thomas K. Pellingner, Timothy J. Werner. Salisbury University, Salisbury, MD</i>	
<b>2:30-2:40p P-10</b>	<b>Effects of Acute Nitrate Intake on Exhaled Nitric Oxide and Vascular Endothelial Function in Hypoxia</b> <i>Kailee A. Coonan, Wesley K. Lefferts, Kevin S. Heffernan, Syracuse University, Syracuse NY</i>	Steve LoRusso, PhD 2:30-3:30
<b>2:40-2:50p P-11</b>	<b>Qualitative Analysis of Patient Comments Regarding Adherence to an Exercise Oncology Rehabilitation Program</b> <i>Shaelyn L. Parry<sup>1</sup>, Travis Yahner<sup>1</sup>, Karen Wonders<sup>2,3</sup>, FACSM, Stephen M. LoRusso<sup>1</sup>. <sup>1</sup>Saint Francis University, Loretto, PA, <sup>2</sup>Maple Tree Cancer Alliance, Dayton, OH</i>	
<b>2:50-3:00p P-12</b>	<b>Comparison of Lipoprotein Based Insulin Resistance Score and Traditional Risk Factors in Adolescents with Obesity</b> <i>Natalie A. Gadaleta<sup>1</sup>, Matthew D. Barberio<sup>1</sup>, Martin B. Playford<sup>2</sup>, Evan P. Nadler<sup>3</sup>, Nehal N. Mehta<sup>2</sup>, and Robert J. Freishtat<sup>3</sup>. <sup>1</sup>George Washington University, Washington, D.C., <sup>2</sup>National Institutes of Health, Bethesda, MD, <sup>3</sup>Children's Research Institute, Washington DC</i>	

<b>Friday Afternoon</b>		<b>Salon C</b>
<b>Poster Session: Undergraduate</b>		
<b>Fitness Assessment &amp; Training</b>		
<b>3:00-3:10p P-13</b>	<b>Can Non-Exercise Science Majors Direct an Exercise Program for Children with HFASD?</b> <i>Lillian C. Wozniak, Samantha R. Crane, Adam J. Booth, Jonathan D. Rogers, Christopher Lopata, Marcus Thomeer, Karl F. Kozłowski, Canisius College, Buffalo, NY</i>	
<b>3:10-3:20p P-14</b>	<b>The Effects of Varying Doses of Caffeine on Sports Skill Related Performance and Reaction Time</b> <i>Michael Lingard, Thomas Smith, Canar Morrison, Evan Hooper, Joohee Sanders. Shippensburg University, Shippensburg, PA</i>	
<b>3:20-3:30p P-15</b>	<b>The Effect of a Placebo on the ROTC APFT Test and Performance Perception</b> <i>Cassandra Saunders, Kimberly Williams, Christa Sebeck, Elizabeth McGee, Kelsy Fitzgerald Samuel Forlenza, Joohee Sanders. Shippensburg University, Shippensburg, PA</i>	
<b>Athlete Care &amp; Clinical Medicine</b>		
<b>3:30-3:40p P-16</b>	<b>Neuromuscular Function in Individuals One Year after Medical Clearance Following Anterior Cruciate Ligament Reconstruction</b> <i>Alexa N. Cardella, Stephen R. Chimeenti, Paul T. Cutrufello The University of Scranton, Scranton, PA</i>	
<b>3:40-3:50p P-17</b>	<b>More Than One Personal Risk Factor is Associated with Worse Clinical Outcomes Among Adolescents Following Concussion</b> <i>Abigail Kirschler, Elizabeth Nagle, Aaron Sinnott, Cynthia Holland, Hannah Bitzer, Michael Collins, Anthony Kontos, University of Pittsburgh, Pittsburgh, PA</i>	Brock Jensen, PhD 3:30-4:10
<b>3:50-4:00p P-18</b>	<b>Field Based Assessment of Running Metrics</b> <i>Thomas C. Long, Peri Pavicic, Drue T. Stapleton. Rider University, Lawrenceville, NJ</i>	
<b>4:00-4:10p P-19</b>	<b>Individual Factors Influencing Performance on The Tandem Gait Test in Healthy, Physically Active Adults</b> <i>Samantha C. Winters, Orah Gholian, Ashley L. Santo. Towson University, Towson, MD</i>	
<b>4:10-4:20p P-20</b>	<b>Inter-leg Difference in Blood Pressure is Related to the Ankle-brachial Index in Healthy Individuals</b> <i>Karly L. Balon, Rosalyn J. Henzel, Benjamin D.H. Gordon, Michael E. Holmstrup, Brock T. Jensen. Slippery Rock University, Slippery Rock, PA</i>	
<b>4:20-4:30p P-21</b>	<b>Sleep and Dietary Habits in Undergraduate College Students</b> <i>Cindy C. Rullo, Elissa K. Katulka, Felicia R. Berube, Michele N. D'Agata, Melissa A.H. Witman. University of Delaware, Newark, DE</i>	
<b>4:30-4:40p P-22</b>	<b>The Effect of Dietary Sodium Intake on Blood Pressure in Healthy Young Adults</b> <i>Yunshu Yang<sup>1</sup>, Kamila U Migdal<sup>1</sup>, Ronald K McMillan<sup>1</sup>, Joseph C Watson<sup>1,3</sup>, Matthew C Babcock<sup>1,5</sup>, Austin T Robinson<sup>1,2</sup>, Megan M Wenner<sup>1</sup>, Sean D Stocker<sup>4</sup>, William B Farquhar.<sup>1</sup>  <sup>1</sup>University of Delaware, Newark, DE; <sup>2</sup>Auburn University, Auburn, A; <sup>3</sup>University of Texas Southwestern Medical Center, Dallas, TX; <sup>4</sup>University of Pittsburgh, Pittsburgh, PA, <sup>5</sup>University of Colorado Anschutz Medical Campus, Aurora, CO</i>	Racine Emmons, PhD 4:10-5:00
<b>Metabolism &amp; Nutrition</b>		
<b>4:40-4:50p P-23</b>	<b>Effects of a Low Carbohydrate Diet Versus a High Carbohydrate Diet on 5-km Running Performance</b> <i>Adam D. Atwell<sup>1</sup>, Philip J. Prins<sup>1</sup>, Timothy D. Noakes<sup>2</sup>, Gary L. Welton<sup>1</sup>, Sarah J. Haley<sup>1</sup>, Noah J. Esbenschade<sup>1</sup>, Katie E. Scott<sup>1</sup>, Jacqueline Abraham<sup>1</sup>, Amy S. Raabe<sup>3</sup>, Jeffrey D. Buxton<sup>1</sup>, Dana L. Ault<sup>1</sup>. <sup>1</sup>Grove City College, Grove City, Pennsylvania, <sup>2</sup>The Noakes Foundation, Cape Town, South Africa, <sup>3</sup>Youngstown State University, Youngstown, OH</i>	
<b>4:50-5:00p P-24</b>	<b>Effects of Acute Aerobic vs. Resistance Exercise on Glycemic Control</b> <i>Nathaniel J. Helwig and William A. Braun, FACSM. Shippensburg University, Shippensburg PA</i>	

<b>Poster Session: Graduate</b>		
<b>Biomechanics</b>		
<b>1:00-1:10p P-25</b>	<b>Functional Analysis of the Peroneus Longus and Tibialis Posterior Using Over-Stimulation</b> <i>Nathaniel E. Kozyra, Christopher G. Neville, SUNY Upstate Medical University, Syracuse, NY</i>	
<b>Cardiovascular, Renal &amp; Respiratory Physiology</b>		
<b>1:10-1:20p P-26</b>	<b>The Influence of Sleep on Blood Pressure in Healthy Children</b> <i>Felicia R. Berube, Elissa K. Katulka, Michele N. D'Agata, Melissa A.H. Witman. University of Delaware, Newark, D</i>	
<b>1:20-1:30p P-27</b>	<b>The Effect of Urea and Laminar Shear Stress on Endothelial L-arginine Transport</b> <i>Sophie B. Green<sup>1,2</sup>, Nicholas V. Chouramanis<sup>1</sup>, David G. Edwards<sup>1</sup>. <sup>1</sup>University of Delaware, Newark, DE 19713. <sup>2</sup>Rider University, Lawrenceville, NJ</i>	
<b>1:30-1:40p P-28</b>	<b>Moderate and High Intensity Exercise Differently Affect Arterial Stiffness and Related Circulating MicroRNAs in Men</b> <i>Ryan M. Sapp, Catalina A. Chesney, Lauren E. Eagan, William S. Evans, Evelyn M. Zietowski, Steven J. Prior, James M. Hagberg, FACSM, Sushant M. Ranadive. University of Maryland, College Park, MD</i>	Jessica Adams, PhD 1:00-2:00
<b>1:40-1:50p P-29</b>	<b>Endothelial Function is Preserved in Ultra-Marathon Runners Following a 50 km Race</b> <i>Lauren E. Eagan<sup>1</sup>, Catalina A. Chesney<sup>1</sup>, Ryan M. Sapp<sup>1</sup>, Rian Q. Landers-Ramos<sup>2</sup>, Odessa Addison<sup>3</sup>, Steven J. Prior<sup>1,4</sup>, Sushant M. Ranadive<sup>1</sup>. <sup>1</sup>University of Maryland, College Park, MD, <sup>2</sup>Towson University, Baltimore, MD, <sup>3</sup>University of Maryland, School of Medicine, Baltimore, MD, &amp; <sup>4</sup>Baltimore Veterans Affairs Geriatric Research, Education and Clinical Center, Baltimore, MD</i>	
<b>1:50-2:00p P-30</b>	<b>Renal and Segmental Artery Hemodynamic Response to Mild Hypercapnia</b> <i>Christopher L Chapman<sup>1</sup>, Paul J Kueck<sup>1</sup>, Wenjie Ji<sup>1</sup>, Emma L Reed<sup>1</sup>, Morgan C Worley<sup>1</sup>, Hannah Zazulak<sup>1</sup>, Zachary J Schlader<sup>1,2</sup>, Blair D Johnson<sup>1</sup>. <sup>1</sup>University at Buffalo, Buffalo, NY, <sup>2</sup>Indiana University, Bloomington, IN</i>	
<b>2:00-2:10p P-31</b>	<b>Oral Contraceptives Do Not Affect Exercise Pressor Reflex During Active Pill Phase</b> <i>Sara E. Mascone, Lauren E. Eagan, Catalina A. Chesney, Maes A. Zietowski, Sushant M. Ranadive. University of Maryland, College Park, MD</i>	
<b>2:20-2:30p P-32</b>	<b>Cardiac Responses to <math>\beta</math>-adrenergic Stimulation and Induced Vasodilation are Similar in Young Male and Female Rats</b> <i>Yuan Liu, Sarah Kuzmiak-Glancy, University of Maryland, College Park, MD</i>	
<b>2:30-2:40p P-33</b>	<b>Circulating extracellular vesicles from dystrophic mice do not alter mitochondrial dysfunction in cardiomyocytes</b> <i>Andrew D. Mitchell, Brittany E. Wilson, Eric R. Muñoz, Kyle T. Shuler, Matthew B. Hudson. University of Delaware, Newark DE</i>	
<b>2:40-2:50p P-34</b>	<b>Changes in Circulating Angiogenic Cell Number and Function During and After an Ultramarathon</b> <i>Katherine I. Kim<sup>1</sup>, William S. Evans<sup>1</sup>, Ryan M. Sapp<sup>1</sup>, James M. Hagberg<sup>1</sup>, Odessa Addison<sup>2,3</sup>, Rian Q. Landers-Ramos<sup>4</sup>, Steven J. Prior<sup>1,2,3</sup>. <sup>1</sup>University of Maryland, College Park, MD, <sup>2</sup>University of Maryland School of Medicine, Baltimore, MD, <sup>3</sup>Baltimore Veterans Affairs Geriatric Research, Education and Clinical Center, Baltimore, MD, <sup>4</sup>Towson University, Towson, MD</i>	Melissa Whidden, PhD 2:00-3:00
<b>2:50-3:00p P-35</b>	<b>The Impact of Dietary Sodium on Blood Pressure During the Cold Pressor Test</b> <i>Ronald K. McMillan<sup>1</sup>, Yungshu Yang<sup>1</sup>, Kamila U. Migdal<sup>1</sup>, Matthew C. Babcock<sup>1,5</sup>, Austin T. Robinson<sup>1,2</sup>, Joseph C. Watson<sup>1,3</sup>, Sean D. Stocker<sup>4</sup>, Megan M. Wenner<sup>1</sup>, William B. Farquhar<sup>1</sup>. <sup>1</sup>University of Delaware, Newark, DE <sup>2</sup> Auburn University, Auburn, AL, <sup>3</sup>University of Texas Southwestern Medical Center, Dallas, TX, <sup>4</sup>University of Pittsburgh, Pittsburgh, PA, <sup>5</sup>University of Colorado Anschutz Medical Campus, Aurora, CO</i>	
<b>3:00-3:10p P-36</b>	<b>The Effects of the Natural and Contraceptive Menstrual Cycle on Autonomic Function in Trained Females</b> <i>Lauren E. White<sup>1</sup>, Jesse D. Krensel<sup>1</sup>, Melissa A. Whidden<sup>1</sup>, Melissa A. Reed<sup>1</sup>, Evan L. Matthews<sup>2</sup>, Meghan G. Ramick<sup>1</sup>. <sup>1</sup>West Chester University, West Chester, PA, <sup>2</sup>Montclair State University, Montclair, NJ</i>	Brian Larouere, PhD 3:00-4:00

<b>3:10-3:20p</b> <b>P-37</b>	<b>Calcium Activation of Mitochondrial Respiration is Maintained in Heart Failure Despite Altered Mitochondrial Membrane Potential</b> <i>Harry Z. Li, Jackson W. Durbin, Abdil M. Chowdry, &amp; Sarah Kuzmiak-Glancy, University of Maryland, College Park, MD</i>	
<b>3:20-3:30p</b> <b>P-38</b>	<b>The Effects of Cocoa Flavanol Supplementation on Endothelial Function and Exercise Performance</b> <i>James M. Heilman<sup>1,2</sup>, Yunsuk Koh<sup>1</sup>. <sup>1</sup>Baylor University, Waco, TX, <sup>2</sup>University of Maryland, College Park, MD</i>	
<b>3:30-3:40p</b> <b>P-39</b>	<b>Investigating the Effects of Dietary Nitrate Supplementation on Coronary and Leg Outcomes in Peripheral Artery Disease: Rationale, Methods, and Feasibility</b> <i>Kate Levenberg<sup>1</sup>, J. Carter Luck<sup>1</sup>, Amanda Miller<sup>1</sup>, Danielle Kim<sup>1</sup>, Andrew Gardner<sup>1</sup>, Urs Leuenberger<sup>1</sup>, Matthew Muller<sup>2</sup> and David Proctor<sup>1,3</sup>. <sup>1</sup>Hershey Medical Center, Hershey, PA, <sup>2</sup>Case Western Reserve University School of Medicine, <sup>3</sup>Penn State University, University Park, PA</i>	
<b>3:40-3:50p</b> <b>P-40</b>	<b>The Influence of Social Evaluation on Heart Rate Variability and Motor Performance: A Study of “Real-Life” Competition</b> <i>Kyle F. Pietro, Michelle E. Costanzo, Ronald N. Goodman, Li-Chuan Lo, Hyuk Oh, Jeremy C. Rietschel, Mark Saffer, Trent Bradberry, Jose Contreras-Vidal, Amy Haufler, Bradley D. Hatfield. University of Maryland, College Park, College Park, MD</i>	
<b>Environmental &amp; Occupational Physiology</b>		
<b>3:50-4:00p</b> <b>P-41</b>	<b>Respiratory muscle training for aerobic endurance performance at 3,658m altitude.</b> <i>Courtney E. Wheelock, Hayden W. Hess, Dave Hostler. University at Buffalo, Buffalo, NY</i>	
<b>4:00-4:10p</b> <b>P-42</b>	<b>Effects of Precooling on Recreationally Active Individuals During Loaded Carriage Foot Marches in Heated Conditions</b> <i>Christopher A. Esposito, Chad A. Witmer, Gavin L. Moir, Matthew M. Miltenberger. East Stroudsburg University of Pennsylvania, East Stroudsburg, PA</i>	
<b>4:10-4:20p</b> <b>P-43</b>	<b>Simulated Military Operational Stress Negatively Impacts Psychomotor Vigilance and Neurocognitive Biomarkers in Men and Women</b> <i>Meaghan E. Beckner<sup>1</sup>, Brian J. Martin<sup>1</sup>, William R. Conkright<sup>1</sup>, Shawn R. Eagle<sup>1</sup>, Aaron M. Sinnott<sup>1</sup>, Alice D. LaGoy<sup>1</sup>, Felix Prossel<sup>1</sup>, Shawn D. Flanagan<sup>1</sup>, Anne Germain<sup>1</sup>, Peter G. Roma<sup>2</sup>, Michael N. Dretsch<sup>3</sup>, Christopher Connaboy<sup>1</sup>, Bradley C. Nindl, FACSM<sup>1</sup>. <sup>1</sup>University of Pittsburgh, Pittsburgh, PA, <sup>2</sup>KBR/NASA Johnson Space Center, Houston, TX, <sup>3</sup>Walter Reed Army Institute for Research, Joint Base Lewis-McCord, WA</i>	
<b>Environmental &amp; Occupational Physiology</b>		
<b>4:20-4:30p</b> <b>P-44</b>	<b>Influence of Physical Activity and Sedentary Behavior During Pregnancy on Labor and Delivery Type</b> <i>Melissa A. Jones<sup>1</sup>, Janet Catov<sup>1</sup>, Kara Whitaker<sup>2</sup>, Bethany Barone Gibbs<sup>1</sup>. <sup>1</sup>University of Pittsburgh, Pittsburgh, PA, <sup>2</sup>University of Iowa, Iowa City, IA</i>	Sophie Green, PhD 4:00-5:00
<b>4:30-4:40p</b> <b>P-45</b>	<b>Cardiovascular Disease Associated with Occupational and Leisure-Time Activity: The Physical Activity Health Paradox in the United States</b> <i>Tyler D. Quinn<sup>1</sup>, Peter Smith<sup>2</sup>, Yongsuk Seo<sup>3</sup>, Bethany Barone Gibbs<sup>1</sup>. <sup>1</sup>University of Pittsburgh, Pittsburgh, PA, <sup>2</sup>Institute for Work and Health, Toronto, Ontario, <sup>3</sup>Kent State University, Kent, OH</i>	
<b>4:40-4:50p</b> <b>P-46</b>	<b>Associations of Sedentary Behavior and Moderate-Vigorous Intensity Physical Activity with Depressive Symptoms throughout Pregnancy</b> <i>Joshua L. Paley, Bethany Barone Gibbs, University of Pittsburgh, PA</i>	
<b>Fitness Assessment &amp; Training</b>		
<b>4:50-5:00p</b> <b>P-47</b>	<b>Evaluation of VO2max Criteria in High-Active Trail Runners</b> <i>Tatum M. Mack<sup>1</sup>, Luke Haile<sup>1</sup>, Heather J. Porter<sup>2</sup>, Kyle S. Beyer<sup>1</sup>, Joseph L. Andreacci<sup>1</sup>, Curt B. Dixon<sup>3</sup>. <sup>1</sup>Bloomsburg University, Bloomsburg, PA, <sup>2</sup>Penn State University, State College, PA, <sup>3</sup>Lock Haven University, Lock Haven, PA</i>	

<b>Friday Afternoon</b>		<b>Pennsylvania</b>
<b>Clinical Track: Clinical Case Studies</b>		<b>Moderator</b>
<b>Session 1</b>		
<b>1:15-1:25p</b>	<b>Musculoskeletal Injury – Football</b> <i>Joseph M. Andrie</i> (Sponsor: Matt Silvis, MD)	
<b>1:25-1:35p</b>	<b>Left Hip Injury – Mountain Biking</b> <i>Salih Grice</i> (Sponsor: Thomas Trojian, MD)	
<b>1:35-2:45p</b>	<b>Knee Injury – Roller Derby</b> <i>Steven Cetel</i> (Sponsor: Sheila Taylor, DO)	David Ross, MD
<b>1:45-1:55p</b>	<b>Knee Injury — Age Specific</b> <i>Shannon C. Clemons</i> (Sponsor: Andy Getzin, MD)	& Jessica Butts, MD
<b>1:55-2:05p</b>	<b>Neck/Shoulder Injury - Ice Hockey/Mountain Biking</b> <i>William A. Rieck</i> (Sponsor: Natasha Romanoski, MD)	
<b>2:05-2:15p</b>	<b>Lower Leg Injury in the Ocean</b> <i>Rebecca M. King, Giselle A Aerni</i> (Sponsor: Mark E. Lavallee, MD)	
<b>Poster Session</b>		
<b>2:15-2:35p</b>		
<b>Right Distal Leg Injury – Handball</b> <i>Kameron Bazmi, MD (Sponsor: Christine Persaud, MD)</i>	<b>Neck Injury – Motor Vehicle Accident</b> <i>Briana N. Fedorko and Brent F. Fedorko</i>	
<b>Lower Extremity Injury – Women’s Soccer</b> <i>Jordan J. Cohen, Bradley Sandella, DO, ATC, Sheila Taylor, DO (Sponsor: Andrew Reisman, MD)</i>	<b>Knee Injury - MOI Unknown</b> <i>Neil Singhani (Sponsor: Mohammed Emam, MD)</i>	
<b>Two Heads to Tango- Tango Dancing</b> <i>Kanad Mukherjee (Sponsor: Thomas Trojian, MD, FACSM)</i>	<b>Not Your Average Tennis Elbow</b> <i>Lynn K. Weaver, Jennifer L. Grana (Sponsor: Jessica F. Butts, MD)</i>	
<b>Chronic Prepatellar Swelling in Elderly Gentleman</b> <i>Devesh A. Patel (Sponsor: Justin G. Tunis, MD)</i>	<b>Complete Wrist Drop – Military Explosion</b> <i>Samantha Willer (Sponsor: Aiesha Ahmed, MD)</i>	

<b>Friday Afternoon</b>		<b>Pennsylvania</b>
<b>Clinical Track: Clinical Case Studies</b>		<b>Moderator</b>
<b>Session 2</b>		
<b>2:35-2:45p</b>	<b>Blunt Testicular Trauma - Wrestling</b> <i>Megan B. Sanborn (Sponsor: Eldra W. Daniels, MD)</i>	
<b>2:45-2:55p</b>	<b>Knee Injury- A Tragic Tackle in a Weekend Warrior</b> <i>Laura A. Shaffer, John R. Deitch</i> <i>(Sponsor: Mark E. Lavallee, MD)</i>	
<b>2:55-3:05p</b>	<b>Non-Traumatic Back Pain in Teenage Volleyball Player</b> <i>Dominique Stevens, Stephanie MacDonald</i> <i>(Sponsor: Mark Mirabelli, MD)</i>	David Ross, MD
<b>3:05-3:15p</b>	<b>Altered Mental Status – Lacrosse</b> Ryan S. Stolakis <i>(Sponsor: Mark Lavallee, MD)</i>	&  Jessica Butts, MD
<b>3:15-3:25p</b>	<b>Whole Body Muscle Cramping – Football</b> <i>Jeffrey Wisinski</i> <i>(Sponsor Peter Seidenberg, MD)</i>	
<b>3:25-3:35p</b>	<b>Clinical Considerations in a Patient Presenting with Constitutional Symptoms After Mountain Biking</b> <i>Joseph Wong</i> <i>(Sponsor: David Ross, MD)</i>	

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<b>Friday Afternoon</b>		<b>Chestnut/ Dogwood</b>	
Oral Presentations: <i>Undergraduate</i>		Moderator	
<b>Cardiovascular, Renal &amp; Respiratory Physiology</b>			
<b>1:00-1:15p</b>	<b>The Effect of Postprandial Lipemia Serum With or Without a Prior Bout of Acute Exercise on Endothelial Cell Function</b> <i>Abel B. Banko<sup>1</sup>, Nathan T. Jenkins<sup>1,2</sup>, Daniel D. Shill<sup>1</sup>, James M. Hagberg<sup>1</sup>.</i> <sup>1</sup> University of Maryland, College Park, MD, <sup>2</sup> University of Georgia, Athens, GA	Jodi Dowthwaite, PhD 1:00-2:30	
<b>1:15-1:30p</b>	<b>Finger Plethysmography and Heart Rate Monitors Provide Accurate Resting Heart Rate Variability Assessments vs Electrocardiography</b> <i>Fiona M. Horvat, Alexander L. Enrique, David A. Phillips, Peter A. Hosick, Evan L. Matthews. Montclair State University, Montclair, NJ</i>		
<b>1:30-1:45p</b>	<b>Beetroot Juice and Cerebrovascular Hemodynamics in Young Adults with a History of Concussion: Preliminary Findings</b> <i>Brandon J. Fascia, Jacob P. DeBlois, Kevin S. Heffernan. Syracuse University, Syracuse, NY.</i>		
<b>Epidemiology, Biostatistics &amp; Health Promotion</b>			
<b>1:45-2:00p</b>	<b>Peak Height Velocity Maturity Offset Estimated from Cross-sectional vs. Longitudinal Growth Data</b> <i>Matthew J. Pelowski<sup>1</sup>, Jennifer E. Minassian<sup>1</sup>, Tamara A. Scerpella<sup>2</sup>, Jodi N. Dowthwaite<sup>1,3</sup>.</i> <sup>1</sup> Binghamton University, Binghamton, NY, <sup>2</sup> University of Wisconsin-Madison, Madison, WI, <sup>3</sup> SUNY Upstate Medical University, Syracuse, NY		
<b>Fitness Assessment &amp; Training</b>			
<b>2:00-2:15p</b>	<b>A New Paradigm for Bodyweight Classification from the 2001-2006 National Health and Nutrition Examination Survey</b> <i>Parina Depani, Michael Bruneau Jr., Drexel University, Philadelphia, PA</i>		
<b>2:15-2:30p</b>	<b>High-Speed Treadmill Running Reduces Systemic Inflammation But Fails as Secondary Intervention For Peripheral Musculoskeletal Discomfort</b> <i>Ryan W Paul<sup>1</sup>, Tianqi TG Smith<sup>2</sup>, Ann E Barr-Gillespie<sup>3</sup>, Michelle Y Harris<sup>1</sup>, Mamta Amin<sup>1</sup>, Sean Gallagher<sup>2</sup>, Mary F Barbe<sup>1</sup>.</i> <sup>1</sup> Temple University, Philadelphia, PA, <sup>2</sup> Auburn University, Auburn, AL, <sup>3</sup> Pacific University, Hillsboro, OR		
<b>Break 2:30-2:45p</b>			
<b>2:45-3:00p</b>	<b>Effects of an Eight Week Periodized Resistance Program in Adolescents</b> <i>Alec L. Shriner, Shaelyn L. Parry, Kristofer S. Wisniewski. Saint Francis University Loretto PA</i>	Emily Sauers, PhD 2:45-3:30	
<b>3:00-3:15p</b>	<b>Relationship Between Sleep Quality and Quantity with Sports-Related Injury Rates</b> <i>Francesco J. Palagruto, Michael A. Angelucci, Emily J. Sauers. East Stroudsburg University, East Stroudsburg PA</i>		
<b>3:15-3:30p</b>	<b>Determining the Accuracy of Basal Metabolic Rate Prediction Equations for Athletes</b> <i>Kianna H. Ly, Joseph R Stanzone, Stella L. Volpe, FACSM</i> <i>Drexel University, Philadelphia, PA</i>		
<b>Break 3:30-3:45p</b>			

## Friday Afternoon Chestnut/Dogwood (cont.)

Oral Presentations: *Undergraduate*

Moderator



<b>Metabolism &amp; Nutrition</b>		
<b>3:45-4:00p</b>	<b>Energy Balance during Postpartum Period is Associated with Metabolic Adaptation</b> <i>Iqrah I. Choudhry, Jaime R. DeLuca, Nicolas D. Knuth. Towson University, Towson, MD</i>	John Guers, PhD 3:45-4:45
<b>4:00-4:15p</b>	<b>The Addition of Naltrexone Alters Cerebral Glucose Uptake Following Acute Exercise</b> <i>Corey Doyle<sup>1</sup>, Qudratullah Qadiri<sup>2</sup>, Harlee York<sup>1</sup>, Bryce J. Muth<sup>2</sup>, Candace Longoria<sup>3</sup>, Sara C. Campbell<sup>3</sup>, John J. Guers<sup>1</sup>. <sup>1</sup>Rider University, Lawrenceville, NJ, <sup>2</sup>Stockton University, Galloway, NJ, <sup>3</sup>Rutgers University, New Brunswick, NJ</i>	
<b>4:15-4:30p</b>	<b>Is Hormonal Contraceptive Use during Adolescence a Factor in Baseline Adult Muscle Mass and Function?</b> <i>Berkley M. Sawester, Agnes V. Sydenstricker, Jacqueline E. Pina, Dana Al Kuisi, Mahmoud A. Almady, Jodi N. Dowthwaite. Binghamton University, Binghamton, NY</i>	
<b>4:30-4:45p</b>	<b>Cardiovascular Responses to the Cold Pressor Test Are Not Modified in Healthy Adults with a History of Concussion</b> <i>Paul J. Kueck, Emma L. Reed, Christopher L. Chapman, Blair D. Johnson. University at Buffalo, Buffalo, NY</i>	

<b>Friday Afternoon</b>		<b>Ash/Birch</b>
<b>Oral Presentations- Masters Award Nominees</b>		<b>Moderator</b>
<b>1:00-1:15p</b>	<p><b>Lower Extremity Power and its Relationship to Qualitative and Quantitative Measures of Landing Performance</b>  <i>Bailey Capra, Bridgette Buckalew, Jacklyn Alencewicz, Bridget Keough, David Phillips. Montclair State University, Montclair, NJ</i></p>	Peter Hosick, PhD 1:00-2:15
<b>1:15-1:30p</b>	<p><b>Arterial Wave Reflection Increases 60 Minutes Post Ultramarathon but Returns to Baseline at 24 Hours</b>  <i>Catalina A. Chesney<sup>1</sup>, Lauren E. Eagan<sup>1</sup>, Ryan M. Sapp<sup>1</sup>, Rian Q. Landers-Ramos<sup>2</sup>, Odessa Addison<sup>3</sup>, Steven J. Prior<sup>1,4</sup>, Sushant M. Ranadive<sup>1</sup>. <sup>1</sup>University of Maryland, College Park, MD. <sup>2</sup>Towson University, Towson, MD. <sup>3</sup>University of Maryland, School of Medicine, Baltimore, MD, <sup>4</sup>Baltimore Veterans Affairs Geriatric Research, Education and Clinical Center, Baltimore, MD</i></p>	
<b>1:30-1:45p</b>	<p><b>Potential Racial Disparity in Vascular Function Across the Menstrual Cycle</b>  <i>Michele N. D'Agata, Alexandra E. Hirt, Elissa K. Katulka, Felicia R. Berube, Megan M. Wenner, Melissa A.H. Witman. University of Delaware, Newark, DE</i></p>	
<b>1:45-2:00p</b>	<p><b>The Effects of Acute Thermoneutral and Hot Water Immersion on Cerebrovascular Reactivity</b>  <i>Nathan J. Klaes<sup>1</sup>, Morgan L. Worley<sup>1</sup>, Emma L. Reed<sup>1</sup>, Jacqueline C. Dirr<sup>2</sup>, Dziana Vertsiakhouskaya<sup>1</sup>, Manjoyt Sandhur<sup>1</sup>, Zachary J. Schlader<sup>1,3</sup>, Blair D. Johnson<sup>1</sup>. <sup>1</sup>University at Buffalo, Buffalo, NY, <sup>2</sup>Loyala University Chicago, Chicago, IL <sup>3</sup>Indiana University, Bloomington, IN</i></p>	
<b>2:00-2:15p</b>	<p><b>Exercise's Effect on Reaction Time and Answer Accuracy During Memory Recall</b>  <i>Lucas Van Horn<sup>2</sup>, Stefan Szilagyi<sup>1</sup>, William A. Braun<sup>1</sup>, FACSM <sup>1</sup>Shippensburg University of Pennsylvania, Shippensburg, PA, <sup>2</sup>West Chester University of Pennsylvania, West Chester, PA</i></p>	
<b>Break 2:15-2:30p</b>		
<b>Oral Presentations- Doctoral Award Nominees</b>		
<b>2:30-2:45p</b>	<p><b>Sleep Variability is Associated with Measures of Peripheral Vascular Function in Healthy Undergraduate College Students</b>  <i>Elissa K. Katulka, Felicia R. Berube, Michele N. D'Agata, Freda Patterson, Melissa A.H. Witman. University of Delaware, Newark, DE</i></p>	Emily Besecker, PhD 2:30-4:00
<b>2:45-3:00p</b>	<p><b>Impact of Operational Stress on Motor Evoked Potentials in Military Personnel</b>  <i>Maria C. Canino, Felix Proessl, Adam J. Sterczala, Courtenay Dunn-Lewis, William R. Conkright, Aaron M. Sinnott, Alice LaGoy, Meaghan E. Beckner, Shawn R. Eagle, Fabio Ferrarelli, Anne Germain, Christopher Connaboy, Bradley C. Nindl, FACSM, Shawn D. Flanagan. University of Pittsburgh, Pittsburgh, PA</i></p>	
<b>3:00-3:15p</b>	<p><b>The Role of Reactive Oxygen Species in Neurovascular Coupling in Healthy Young and Older Adults</b>  <i>Theodore M. DeConne, Faria Sanjana, Wendy Nichols, Joshua C. Hobson, and Christopher R. Martens. University of Delaware, Newark DE</i></p>	
<b>3:15-3:30p</b>	<p><b>Vascular and Autonomic Correlates of Cerebral Pulsatility in Young</b>  <i>Alaina C. Glasgow, Jacob P. DeBlois, Allison Keller, Kevin S. Heffernan. Syracuse University, Syracuse, NY</i></p>	
<b>3:30-3:45p</b>	<p><b>Diagnosed Concussion History is Associated with Increased Risk for Lower-Extremity Injury in R.O.T.C. Cadets</b>  <i>Katherine J. Hunzinger, Katelyn M. Costantini, C. Buz Swanik, Thomas A. Buckley. University of Delaware, Newark, DE</i></p>	
<b>4:00-5:00p</b>		
<b>MEET THE EXPERTS: Student Session</b>		

<b>Friday Afternoon</b>		<b>Elm/Fir</b>
Oral Presentations: <i>Graduate</i>		Moderator
<b>Cardiovascular, Renal &amp; Respiratory Physiology</b>		
<b>1:00-1:15p</b>	<b>Brain Natriuretic Peptide and Inflammation in Non-Dialysis Chronic Kidney Disease</b> <i>Nicholas V. Chouramanis<sup>1</sup>, Joseph M. Stock<sup>1</sup>, Bryce J. Muth<sup>1</sup>, Danielle L. Kirkman<sup>2</sup>, David G. Edwards<sup>1</sup>. <sup>1</sup>University of Delaware, Newark, DE, <sup>2</sup>Virginia Commonwealth University, Richmond, VA</i>	Jordan Patik, PhD 1:00-2:30
<b>1:15-1:30p</b>	<b>The Association between Ambulatory Blood Pressure Monitoring, Cerebrovascular Pulsatility, and Cognitive Performance in Young Adults</b> <i>Jacob P. DeBlois, Allison P. Keller, Kevin S. Heffernan. Syracuse University, Syracuse, NY</i>	
<b>1:30-1:45p</b>	<b>Blood Pressure Responses During Isometric Full Body Exercise vs Isometric Handgrip: A Pilot Study</b> <i>Angelica R. Del Vecchio, David A. Phillips, Evan L. Matthews. Montclair State University, Montclair, NJ</i>	
<b>1:45-2:00p</b>	<b>Microvascular Endothelial Dysfunction is Not Evident in Adults with 2017 AHA/ACC-Defined Stage 1 Hypertension</b> <i>Gabrielle A. Dillon<sup>1</sup>, Jody L. Greaney<sup>1,2</sup>, Lacy M. Alexander<sup>1</sup>. <sup>1</sup>The Pennsylvania State University, University Park, PA, <sup>2</sup>University of Texas Arlington, Arlington, TX</i>	
<b>2:00-2:15p</b>	<b>Effects of Oral Saline Consumption on Heart Rate Variability Measurements During Postural Change</b> <i>Alexander L. Enrique<sup>1</sup>, John J. Del Vecchio<sup>2</sup>, Peter A. Hosick<sup>2</sup>, Evan L. Matthews<sup>2</sup>. <sup>1</sup>University of Delaware, Newark, DE, <sup>2</sup>Montclair State University, Montclair, NJ</i>	
<b>2:15-2:30p</b>	<b>Cellular Endothelin-1 Expression in Pre- and Post-menopausal Women</b> <i>Andrew V. Kuczmariski, Joshua C. Hobson, David G. Edwards, Megan M. Wenner. University of Delaware, Newark, DE</i>	
<b>BREAK 2:30-2:45p</b>		
<b>Cardiovascular, Renal &amp; Respiratory Physiology</b>		
<b>2:45-3:00p</b>	<b>Peripheral Revascularization Reverses the Decline in Active Muscle Oxygen Saturation in Peripheral Artery Disease</b> <i>J. Carter Luck<sup>1,2</sup>, Danielle Jin-Kwang Kim<sup>1</sup>, Cheryl A. Blaha<sup>1</sup>, Samuel Pai<sup>1</sup>, Faisal Aziz<sup>1</sup>, John F. Radtka<sup>1</sup>, Kimberly S. Fasczewski<sup>2</sup>, Abigail S. L. Stickford<sup>2</sup>, Lawrence I. Sinoway<sup>1</sup>. <sup>1</sup>Penn State University College of Medicine, Hershey, PA, <sup>2</sup>Appalachian State University, Boone, NC</i>	Shannon Lennon, PhD 2:45-4:15
<b>3:00-3:15p</b>	<b>ET-1 Receptor Responses in Young Women with a Family History of Hypertension</b> <i>Shane J. McGinty, Laura M. Welti, Andrew V. Kuczmariski, Sangeetha Nathaniel, and Megan M. Wenner. University of Delaware, Newark, DE</i>	
<b>Epidemiology Biostatistics &amp; Health Promotion</b>		
<b>3:15-3:30p</b>	<b>Vascular function in Female Vegetarians and Omnivores</b> <i>Macarena Ramos Gonzalez, Alexis Mbakwe, Katarina Smiljanec, Michelle Zuelch, Shannon Lennon. University of Delaware, Newark, DE.</i>	
<b>3:30-3:45p</b>	<b>Association Between Large Elastic Artery Stiffness and Brain Integrity with Advancing Age</b> <i>Faria Sanjana, Peyton L. Delgorio, Ryan T. Pohlig, Lucy V. Hiscox, Theodore M. DeConne, Joshua C. Hobson, Curtis L. Johnson, Christopher R. Martens. University of Delaware, Newark, DE</i>	
<b>Friday Afternoon Elm/Fir (cont.)</b>		
Oral Presentations: <i>Graduate</i>		Moderator

<b>3:45-4:00p</b>	<b>Ultra-processed Food Consumption and Vascular Health</b> <i>Katarina Smiljanec, Macarena Ramos-Gonzalez, Alexis U. Mbakwe, Christina Mesbah, Shannon L. Lennon. University of Delaware, Newark, DE</i>	
<b>4:00-4:15p</b>	<b>Pressure Wave Reflection Magnitude is Reduced Following Peak Exercise in Young and Older Adults</b> <i>Joseph M. Stock<sup>1</sup>, Nicholas V. Chouramanis<sup>1</sup>, Ninette Shenouda<sup>1</sup>, Jordan C. Patik<sup>1</sup>, Julio A. Chirinos<sup>2</sup>, David G. Edwards<sup>1</sup>. <sup>1</sup>University of Delaware, Newark, DE, <sup>2</sup>University of Pennsylvania, Philadelphia, PA</i>	
<b>BREAK 4:15-4:30p</b>		
<b>Cardiovascular, Renal &amp; Respiratory Physiology</b>		
<b>4:30-4:45p</b>	<b>Impact of Exercise Frequency on ET-1 Responses in Postmenopausal Women</b> <i>Laura M. Welti, Shane J. McGinty, Andrew V. Kuczmariski, Sangeetha Nathaniel, and Megan M. Wenner. University of Delaware, Newark, DE</i>	
<b>4:45-5:00p</b>	<b>Cerebral Blood Velocity Increases during Face Cooling in Symptomatic Concussed Athletes</b> <i>Wenjie Ji<sup>1</sup>, Morgan L. Worley<sup>1</sup>, Morgan C. O'Leary<sup>1</sup>, James R. Sackett<sup>1,2</sup>, Zachary J. Schlader<sup>1,3</sup>, John J. Leddy<sup>1</sup>, Blair D. Johnson<sup>1</sup>. <sup>1</sup>University at Buffalo, Buffalo, NY, <sup>2</sup>Cornerstone University, Grand Rapids, MI, <sup>3</sup>Indiana University, Bloomington IN</i>	Meghan Ramick, PhD 4:30-5:00

# Friday Evening

## 7:15 PM Keynote Address:

The 2-Hour Marathon  
Grand Ballroom



## 8:30 – 10:00 PM Professional Social – Pennsylvania Room

### 8:30 PM – College Bowl – Registered Teams (more teams may be added)

University of Maryland	Drexel University	Messiah College
Indiana University of Pennsylvania	Saint Francis University	The University of Scranton
East Stroudsburg University	Temple University	Salisbury University
West Liberty University	Slippery Rock University	Towson University
Cabrini University	West Chester University	Gannon University
William Patterson University		

### College Bowl Sponsors:



Lebanon Valley College

### 9:30ish PM – Fitness Challenge (more teams may be added)

West Chester University	Drexel University	Cabrini University
Indiana University of Pennsylvania	Seton Hill University	Slippery Rock University
East Stroudsburg University	Temple University	Towson University
SUNY Cortland University		

### Fitness Challenge



<b>Saturday Morning</b>		<b>Salon A</b>
<b>Poster Session: Graduate</b>		<b>Moderator</b>
<b>Metabolism &amp; Nutrition</b>		
<b>8:00-8:10a P-48</b>	<b>Exercise Attenuates Weight Gain and Modulates Satiety Hormones in Female Mice</b> <i>Candace R. Longoria, Paul J. Wisniewski, Robert A. Dowden, Natasha Malonza, Sara C. Campbell, FACSM. Rutgers University, New Brunswick, NJ</i>	Selen Razon, PhD 8:00-8:40
<b>8:10-8:20a P-49</b>	<b>Effects of Cholecalciferol Supplementation on Vitamin D Status among Male and Female Collegiate Basketball Athletes</b> <i>Nicole M. Sekel, Sina Gallo, Margaret T. Jones, Tammy L. Wagner, Jennifer B. Fields. George Mason University, Fairfax, VA</i>	
<b>Psychology, Behavior, &amp; Neurobiology</b>		
<b>8:20-8:30a P-50</b>	<b>Diabetes Prevention Program: An Investigation of Lifestyle Coaches' Habits and Motivations</b> <i>Melanie K. Sookiasian<sup>1</sup>, Selen Razon<sup>1</sup>, Patricia G. Davidson<sup>1</sup>, Umit Tokac<sup>2</sup>, Melissa A. Reed<sup>1</sup>. <sup>1</sup>West Chester University, West Chester PA <sup>2</sup>University of Missouri, St Louis, MO</i>	Nick Knuth, PhD 8:40-9:30
<b>8:30-8:40a P-51</b>	<b>The Effects of Essential Oils on Perception of Exertion, Task Pleasantness and Time on Task</b> <i>Katelyn Koser<sup>1</sup>, Umit Tokac<sup>2</sup>, Melissa Reed<sup>1</sup>, Melissa Whidden<sup>1</sup>, Selen Razon<sup>1</sup>. <sup>1</sup>West Chester University, West Chester, PA <sup>2</sup>University of Missouri, St Louis, MO</i>	
<b>Skeletal Muscle, Bone &amp; Connective Tissue</b>		
<b>8:40-8:50a P-52</b>	<b>Wheel Running Partially Compensates for the Effects of Estrogen Receptor-<math>\alpha</math> Knockout on Cortical Bone</b> <i>Rebecca K. Dirkes, Nathan C. Winn, Thomas J. Jurrissen, Dennis B. Lubahn, Victoria J. Vieira-Poter, Jaume Padilla, Pamela. S Hinton. University of Missouri, Columbia, MO</i>	Nick Knuth, PhD 8:40-9:30
<b>8:50-9:00a P-53</b>	<b>Increased Adenosine Monophosphate Degradation Impairs Mitochondrial Function</b> <i>Catherine B. Springer, Michael D. Tarpey, Jeffrey J. Brault. East Carolina University, Greenville, NC</i>	
<b>9:00-9:10a P-54</b>	<b>Healthy Men and Women are Protected from Prolonged Sitting and Postprandial Hyperglycemia-Induced Endothelial Dysfunction</b> <i>Lauren K. Park, Robert M. Restaino, Nathan C. Winn, Jaume Padilla. University of Missouri, Columbia, MO</i>	
<b>9:10-9:20a P-55</b>	<b>Correlations of Body Composition and 1RM to Peak Velocity at different Exercise Intensities in Back Squat.</b> <i>Ethan S. Lindermuth, Robert J. Grow, Tatum M. Mack, Ishalé N. Toliver, Kris D. Bookamer, Joshua S. Gates, Kyle S. Beyer. Bloomsburg University, Bloomsburg, PA</i>	
<b>9:20-9:30a P-56</b>	<b>RFD-SF and Time to Peak Force for Grip Strength is not affected in College Aged Students with Multiple Concussions</b> <i>Shana McMeans, Mary Debolt<sup>1</sup>; Logan Large<sup>1</sup>; Micah Josephson<sup>2</sup> <sup>1</sup>Shenandoah University, Winchester, VA, <sup>2</sup>Alvernia University, Reading, PA</i>	
<b>Professional Posters</b>		
<b>9:30-9:40a P-57</b>	<b>The Cardiopulmonary Effects of Thoracic Load Carriage While Resting</b> <i>Ashley Y. Lesniak, Benjamin J. Ronemus, Curt B. Dixon, FACSM. Lock Haven University, Lock Haven, PA</i>	Self-moderated Session
<b>9:40-9:50a P-58</b>	<b>Differences in Performance Decline Between Sex Under Simulated Military Operational Stress</b> <i>Philip J. Agostinelli<sup>1</sup>, William R. Conkright<sup>1</sup>, Aaron M. Sinnott<sup>1</sup>, Meaghan E. Beckner<sup>1</sup>, Shawn R. Eagle<sup>1</sup>, Brian J. Martin<sup>1</sup>, Shawn D. Flanagan<sup>1</sup>, Christopher Connaboy<sup>1</sup>, Anne Germain<sup>2</sup>, Bradley C. Nindl<sup>1</sup>. <sup>1</sup>University of Pittsburgh, Pittsburgh, PA, <sup>2</sup>School of Medicine, University of Pittsburgh, Pittsburgh, PA</i>	

<b>Saturday Morning Salon A (cont.)</b>		
<b>Poster Session: Professional</b>		<b>Moderator</b>
<b>9:50-10:00a</b> <b>P-59</b>	<b>Association between Physical Activity and Social Media Usage in College Students</b> <i>Sara J Kovacs<sup>1</sup>, Amanda L Folk<sup>1,2</sup>. <sup>1</sup>Temple University, Philadelphia, PA, <sup>2</sup>Univeristy of Minnesota, Minneapolis, MN</i>	Self-moderated Session
<b>10:00-10:10a</b> <b>P-60</b>	<b>Evoking the Mechanoreflex Using Static and Dynamic Approaches: The Influence of Free Radicals and Sex</b> <i>Stephen J. Ives, Allison Keller, and Lucas Zornoza. Skidmore College, Saratoga Springs, NY</i>	
<b>10:10-10:20a</b> <b>P-61</b>	<b>The Impact of a Parkinson's Disease Workshop on Student's Attitudes and Competencies Towards Interprofessional Collaboration</b> <i>Brittany S. Overstreet, Christine V. Cook, Barrett Michalec, Julie Schneider. University of Delaware, Newark, DE</i>	

<b>Saturday Morning</b>		<b>Salon B</b>
<b>Biomechanics Session</b>		
<b>8:00-8:50a</b>	<b>My Body wants to Stop Running - Should I Listen? The Biomechanics of Fatigued Running</b> <i>Ajit Chaudhari, PhD, FACSM</i>	
<b>Biomechanics Communications</b>		<b>Moderator</b>
<b>Oral Presentations</b>		
<b>9:00-9:15a</b>	<b>The Effects of Accentuated Eccentric Loading on Velocity and Muscle Activation in the Bench Press</b> <i>Alexis H. Castro, Gavin L. Moir. East Stroudsburg University of Pennsylvania, East Stroudsburg, PA</i>	Micah Josephson, PhD
<b>9:15-9:30a</b>	<b>Load Magnitude and Locomotion Strategy Alters Knee Mechanics in Recruit-Aged Women</b> <i>Kellen T. Krajewski<sup>1</sup>, Camille C. Johnson<sup>1</sup>, Dennis E. Dever<sup>1</sup>, Nizam U. Ahamed<sup>1</sup>, Qi Mi<sup>1</sup>, William J. Anders<sup>2</sup>, Chris Connaboy<sup>1</sup>. <sup>1</sup>Neuromuscular Research Laboratory, University of Pittsburgh, Pittsburgh, PA, USA <sup>2</sup>Biodynamics Laboratory, University of Pittsburgh, Pittsburgh, PA</i>	
<b>9:30-9:45a</b>	<b>Normalization Removes Differences in Contractile Properties and Corticospinal Excitability Between Single- and Multi-Joint Exercises</b> <i>Felix Proessel, Maria C. Canino, Adam J. Sterczala, Courtenay Dunn-Lewis, William R. Conkright, Aaron M. Sinnott, Meaghan E. Beckner, Shawn R. Eagle, Fabio Ferrarelli, Anne Germain, Chris Connaboy, Bradley C. Nindl, FACSM, Shawn D. Flanagan. University of Pittsburgh, Pittsburgh, PA</i>	
<b>9:45-10:00a</b>	<b>Estimating Scapular Kinematics during Baseball Pitching using an Individualized Linear Model Approach</b> <i>R. Tyler Richardson, Pennsylvania State University Harrisburg, Middletown, PA</i>	
<b>Poster Presentations</b>		
<b>10:00-10:10a P-62</b>	<b>Information Processing is not Affected by Multiple Concussions in College Age Students</b> <i>Mary Debolt<sup>1</sup>, Shana Mcmeans<sup>1</sup>, Logan Large<sup>1</sup>, Micah Josephson<sup>2</sup>. <sup>1</sup>Shenandoah University, Winchester, VA, <sup>2</sup>Alvernia University, Reading, PA</i>	Micah Josephson, PhD
<b>10:10-10:20a P-63</b>	<b>Impact Forces of Unilateral and Bilateral Landings in Various Ballet Jumps</b> <i>Maren D. Pulou, Tyler Standifird. Utah Valley University, Orem UT</i>	
<b>10:20-10:30a P-64</b>	<b>Lower Body Kinematics Do Not Differ Between Flat Ground and Mound Baseball Throwing</b> <i>Joshua P. Perez<sup>1</sup>, Maryellen M. Crain<sup>1</sup>, Andrew C. Venezia<sup>1</sup>, Bryon C. Applequist<sup>2</sup>. <sup>1</sup>The University of Scranton, Scranton, PA, <sup>2</sup>The University of Hawaii at Hilo, Hilo, HI</i>	
<b>10:45-11:15a</b>	<b>Biomechanics Interest Group Meeting</b>	



<b>Firefighter Health and Safety</b>		<b>Moderator</b>
<b>8:00-8:55a</b>	<b>The Big 8 of Firefighter Functional Fitness</b> <i>Dan Kerrigan</i>	
<b>9:00-9:55a</b>	<b>Cardiovascular &amp; Chemical Exposure Risks on Today's Fireground</b> <i>Gavin Horn</i>	Jerry Jerome
<b>10:00-10:55a</b>	<b>The Combined Influence of Virtual Training and Slow-paced Ventilation on Decision-making in Professional Firefighters</b> <i>Calvin Lu, PhD Candidate</i>	
<b>11:00-11:55a</b>	<b>Fire Fighter Combat Challenge</b> <i>Paul Davis</i>	

<b>Saturday Morning</b>		<b>Chestnut/ Dogwood</b>	
<b>Poster Session: Undergraduate</b>		<b>Moderator</b>	
<b>Clinical Exercise Physiology</b>			
<b>8:00-8:10a P-65</b>	<b>Effect of Creatine Supplementation on Muscle Oxygen Saturation</b> <i>Morgan M. Vance, Meghan Shepherd, Colin J. Gimblet, Austin T. Ortlip, Timothy B. Staudmyer, Thomas K. Pellingier, Zachary M. Townsend, John J. LaManca, Timothy J. Werner. Salisbury University, Salisbury, MD</i>	Anjali Gairola, PhD 8:00-9:10	
<b>Fitness Assessment &amp; Training</b>			
<b>8:10-8:20a P-66</b>	<b>The Effects of Music on Perceived Intensity of Exercise During a Submaximal Treadmill Test</b> <i>Ruth Georges, Thariana Salazar, Rebecca Shumard, Anjali Gairola, Cabrini University, Radnor, PA</i>		
<b>8:20-8:30a P-67</b>	<b>The Physiological and Perceptual Responses of Thoracic Load Carriage During Walking</b> <i>Benjamin J. Ronemus, Ashley Y. Lesniak, Curt B. Dixon, FACSM. Lock Haven University, Lock Haven, PA</i>		
<b>Psychology, Behavior, &amp; Neurobiology</b>			
<b>8:30-8:40a P-68</b>	<b>Influence of Acute Resistance Training on Memory, Executive Function and Mood</b> <i>Patrick J. Barney, Cannon G. Hiranaka, Daniela M. Spagnoli, and Andrew C. Venezia. The University of Scranton, Scranton, PA</i>		
<b>8:40-8:50a P-69</b>	<b>The Psychoactive Effect of Exercise May Mediate Increases in Pain Tolerance Following Acute Exercise</b> <i>Lauren S. Kerner, Casey B. Wrabley, John J. Guers. Rider University, Lawrenceville, NJ</i>		
<b>8:50-9:00a P-70</b>	<b>Mental Health is not Affected by Multiple Concussions in Young Adults</b> <i>Logan Large<sup>1</sup>; Mary Debolt<sup>1</sup>; Shana Mcmeans<sup>1</sup>, Micah Josephson<sup>2</sup>.  <sup>1</sup>Shenandoah University, Winchester, VA, <sup>2</sup>Alvernia University, Reading, PA</i>		
<b>Skeletal Muscle, Bone &amp; Connective Tissue</b>			
<b>9:00-9:10a P-71</b>	<b>The Effects of 50k Ultramarathon Running on Quadriceps Torque and Circulating Inflammatory Calprotectin</b> <i>Kathleen Dondero<sup>1</sup>, Inez Hankerson<sup>1</sup>, Christa M. Nelson<sup>2</sup>, Steven J. Prior<sup>2,3,4</sup>, Odessa Addison<sup>2,4</sup>, Rian Q. Landers-Ramos<sup>1</sup>. <sup>1</sup>Towson University, Towson, MD, <sup>2</sup>University of Maryland School of Medicine, Baltimore, MD, <sup>3</sup>University of Maryland, College Park, MD, <sup>4</sup>Baltimore Veterans Affairs Geriatric Research, Education and Clinical Center, Baltimore, MD</i>		
<b>9:00-9:10a P-72</b>	<b>Effects of Pre-infusion and Home Exercise Program on Quality of Life and Fatigue During Chemotherapy Treatment: A Case Study</b> <i>Ashley L. Oostveen, Meghan G. Ramick, Selen Razon, Melissa A. Reed. West Chester University of Pennsylvania, West Chester, PA</i>		

<b>Saturday Morning</b>		<b>Pennsylvania</b>
<b>Fitness Assessment &amp; Training</b>		<b>Moderator</b>
<b>8:00-8:10a P-73</b>	<b>A Comparative Analysis of Soccer Skill Tests on Varying Experience Levels</b> <i>Madison J. Jones, Dominic Stroh, Erica Helm, Kyra Shank, Dylan Beaver, Samuel T. Forlenza. Shippensburg University, Shippensburg, PA</i>	Kory Stauffer, PhD 8:00-9:10
<b>8:10-8:20a P-74</b>	<b>Habitual Alcohol Consumption and its Relationship to Physical Fitness in College-age Students</b> <i>Gavin R. Atkins, Sarah Malay, Brock Asper, Nathan Gardner, Brayden Tiner, Samuel T. Forlenza. Shippensburg University, Shippensburg, PA</i>	
<b>8:20-8:30a P-75</b>	<b>The Effect of Video Distraction on High-Intensity Exercise Performance</b> <i>Shannon K. Brady, Kirsten Cofer, Meghan Steager, Remington Paul, Abby Monko, H. Scott Kieffer, FACSM, Douglas K. Miller. Messiah College, Mechanicsburg, PA</i>	
<b>8:30-8:40a P-76</b>	<b>The Effect of Static and Dynamic Stretching on Power Output in Dancers</b> <i>Sydney R. De Poto, Abigail K. Gibson, Elizabeth R. Vlieg, Grace M. Brewster, Emily A. Walter, H. Scott Kieffer, FACSM. Messiah College, Mechanicsburg, PA</i>	
<b>8:40-8:50a P-77</b>	<b>Changes in Health-Related Fitness of College Females During a One-Semester Activity Course</b> <i>Nick Forthman, Rachel Femiano, Miles Baker, Jennifer Moxley, Andrea T. Barton, Tara B. Blackshear. Towson University, Towson, MD</i>	
<b>8:50-9:00a P-78</b>	<b>The Effect of Music Tempo on Muscular Endurance During the Bench Press</b> <i>Garrett C. Ressler, Ashley Y. Lesniak, Curt B. Dixon, FACSM. Lock Haven University, Lock Haven, PA</i>	
<b>9:00-9:10a P-79</b>	<b>Effects of a Novel Ground-Based Movement Training Program on Functional Movement, Flexibility, Strength and Endurance</b> <i>Jeffrey D. Buxton<sup>1</sup>, Philip J. Prins<sup>1</sup>, Michael G. Miller<sup>2</sup>, Anthony Moreno<sup>3</sup>, Gary L. Welton<sup>1</sup>, Adam Atwell<sup>1</sup>, Gretchen Elsey<sup>1</sup>, Tirzah Talampas<sup>1</sup>. <sup>1</sup>Grove City College, Grove City, PA. <sup>2</sup>Western Michigan University, Kalamazoo, MI. <sup>3</sup>Eastern Michigan University, Ypsilanti, MI</i>	Brittany Overstreet, PhD 9:10-10:30
<b>9:10-9:20a P-80</b>	<b>The Cardiorespiratory Response of Caffeine Supplementation with Submaximal Exercise in College Students</b> <i>Garret Showalter, Anna Mayo, Abigail Beveridge, Josie Weaver, Saw Picky, Rachel Caldwell, H. Scott Kieffer, FACSM. Messiah College, Mechanicsburg, PA</i>	
<b>9:20-9:30a P-81</b>	<b>The Effect of Caffeine on Motor Task Performance</b> <i>Alyssa Cunningham, Jesse Torbic, Emily Davis, Carissa Weaver, Kara Leaman, H. Scott Kieffer, FACSM. Messiah College, Mechanicsburg, PA</i>	
<b>9:30-9:40a P-82</b>	<b>The Influence of Caffeine and the c.1083T&gt;C Polymorphism on Anaerobic Power and Anaerobic Capacity</b> <i>Joshua Beiler, Caleb Smith, Rachel Caldwell, Madison Wright, Anna Mayo, Micheal Shin, H. Scott Kieffer, FACSM. Messiah College, Mechanicsburg, PA</i>	
<b>9:40-9:50a P-83</b>	<b>The Effects of Foam Rolling on Hamstring Flexibility, Muscle Soreness and Power</b> <i>Kameron Holt<sup>1</sup>, Tessa Cordell<sup>1</sup>, Brooke Delancy<sup>1</sup>, Erica Koutch<sup>1</sup>, Nik Romage<sup>1</sup>, Kyle Wagman<sup>1</sup>, Sally Paulson<sup>2</sup>, Joohee I. Sanders<sup>1</sup>. <sup>1</sup>Shippensburg University, Shippensburg, PA, <sup>2</sup>Mount St. Joseph University, Cincinnati, OH</i>	
<b>9:50-10:00a P-84</b>	<b>Positional Differences in Training Load During Matches and Practices in Collegiate Female Soccer Players.</b> <i>Charles P. Nolte<sup>1</sup>, Alexis Q. Shafer<sup>2</sup>, Jordan M. Paisley<sup>2</sup>, Andrew T. Askow<sup>3</sup>, Joel A. Luedke<sup>2</sup>, Jacob L. Erickson<sup>1</sup>, Andrew R. Jagim<sup>1</sup>. <sup>1</sup>Mayo Clinic Health System, Onalaska, WI, <sup>2</sup>University of Wisconsin – La Crosse, La Crosse, WI, <sup>3</sup>University of Illinois at Urbana-Champaign, Champaign, IL</i>	

**Saturday Morning Pennsylvania (cont).**

<p><b>10:00-10:10a</b> <b>P-85</b></p>	<p><b>The Acute Effect of a Five Repetition Maximum on Vertical Jump Performance at Different Time Intervals</b> <i>Troy Walter, Evan Courtney, Chris Zinn, Steven Yovic, Clayton Meyers, Joohee Sanders, Russell Robinson, Sally Paulson. Shippensburg University, Shippensburg, PA</i></p>	
<p><b>10:10-10:20a</b> <b>P-86</b></p>	<p><b>Upper Body Kinetics has No Difference for Mound and Flat Ground Throwing</b> <i>Maryellen M. Crain<sup>1</sup>, Joshua P. Perez<sup>1</sup>, Andrew C. Venezia<sup>1</sup>, Bryon C. Applequist<sup>2</sup>. <sup>1</sup>The University of Scranton, Scranton, PA, <sup>2</sup>The University of Hawaii, Hilo, HI</i></p>	
<p><b>10:20-10:30a</b> <b>P-87</b></p>	<p><b>Comparison of Velocity between an Accelerometer and a Linear Position Transducer during Barbell Back Squat</b> <i>Robert J. Grow, Ethan S. Lindermuth, Tatum M. Mack, Ishalé N. Toliver, Kris Bookamer, Joshua T. Gates, Kyle S. Beyer. Bloomsburg University of Pennsylvania, Bloomsburg, PA</i></p>	
<b>Metabolism &amp; Nutrition</b>		
<p><b>10:30-10:40a</b> <b>P-88</b></p>	<p><b>Effects of a 6-week Low-Carbohydrate High-Fat Diet on Lipid Profiles in Competitive Recreational Distance Runners</b> <i>Katie E. Scott<sup>1</sup>, Philip J. Prins<sup>1</sup>, Timothy D. Noakes<sup>2</sup>, Gary L. Welton<sup>1</sup>, Adam D. Atwell<sup>1</sup>, Sarah J. Haley<sup>1</sup>, Noah J. Esbenshade<sup>1</sup>, Jacqueline Abraham<sup>1</sup>, Amy S. Raabe<sup>3</sup>, Jeffrey D. Buxton<sup>1</sup>, Dana L. Ault<sup>1</sup>. <sup>1</sup>Grove City College, Grove City, Pennsylvania, <sup>2</sup>The Noakes Foundation</i></p>	
<b>Psychology, Behavior, &amp; Neurobiology</b>		
<p><b>10:40-10:50a</b> <b>P-89</b></p>	<p><b>Effect of Different Exercise Modalities on Executive Function in College-Aged Individuals</b> <i>Chloe E. Williams, Dana L. Ault, Nathanael J. Sprunk, Lauren E. Dietz, Laura E. Williams, Leah M. Bovard, Jennifer L. Kondracki, Tabitha N. White, Priya M. Graczyk, Allen M. Steimling, Philip J. Prins. Grove City College, Grove City, PA</i></p>	
<p><b>10:50-11:00a</b> <b>P-90</b></p>	<p><b>The Effects of Music Genre on Cardiovascular Performance and Enjoyment in Young Adults</b> <i>Sydney G. Morgan, Hannah Hamsher, Kenneth Joiner, Lyndsey Koehler, Samuel T. Forlenza. Shippensburg University, Shippensburg, PA.</i></p>	
<p><b>11:00-11:10a</b> <b>P-91</b></p>	<p><b>Blood Lactate Levels are Correlated with an Increase in Minimal Pain Threshold</b> <i>Casey B. Wrabley, Lauren S. Kerner, John J. Guers. Rider University, Lawrenceville, NJ</i></p>	<p>Wally Bixby, PhD 10:30-11:40</p>
<p><b>11:10-11:20a</b> <b>P-92</b></p>	<p><b>The Effect of Acute Exercise on Mood Following a Cognitive Test Battery</b> <i>Jasmin E. Russo, Emily L. Schramm, and Andrew C. Venezia. The University of Scranton, Scranton, PA</i></p>	
<b>Skeletal Muscle, Bone &amp; Connective Tissue</b>		
<p><b>11:20-11:30a</b> <b>P-93</b></p>	<p><b>The Effects of a 50k Ultramarathon on Plasma IL-6 and Rectus Femoris Muscle Thickness</b> <i>Dakota Siok<sup>1</sup>, Kathleen Dondero<sup>1</sup>, Christa M. Nelson<sup>2</sup>, Steven J. Prior<sup>2,3,4</sup>, Odessa Addison<sup>2,4</sup>, Rian Q. Landers-Ramos<sup>1</sup>. <sup>1</sup>Towson University, Towson, MD, <sup>2</sup>University of Maryland School of Medicine, Baltimore, MD, <sup>3</sup>University of Maryland, College Park, MD, <sup>4</sup>Baltimore Veterans Affairs Geriatric Research, Education and Clinical Center, Baltimore, MD</i></p>	
<p><b>11:30-11:40a</b> <b>P-94</b></p>	<p><b>The Effect of Seated Posture on Thoracolumbar Fascia, thus Influencing Balance</b> <i>Michelle C. Furman<sup>1</sup>, Kameron D. Matthews<sup>1</sup>, Andrew C. Venezia<sup>1</sup>, Bryon C. Applequist<sup>2</sup>. <sup>1</sup>The University of Scranton, Scranton, PA, <sup>2</sup>The University of Hawaii at Hilo, Hilo, HI</i></p>	

<b>Saturday Morning</b>		<b>Ash/Birch</b>
<b>Oral Presentations: Graduate</b>		
<b>Environmental &amp; Occupational Physiology</b>		<b>Moderator</b>
<b>8:00-8:15a</b>	<b>Does Weight Status Influence Cardiovascular Response to Sitting Versus Standing While Performing Computer Work?</b> <i>Indira J. Gonzalez, Evan L. Matthews, Peter A. Hosick. Montclair State University, Montclair, NJ</i>	Michael Bruneau, PhD 8:00-9:00
<b>8:15-8:30a</b>	<b>Self-paced aerobic exercise performance is attenuated following four hours cold water immersion.</b> <i>Hayden W. Hess<sup>1</sup>, Zachary J. Schlader<sup>1</sup>, Blair D. Johnson<sup>1</sup>, David Hostler<sup>1</sup>, FACSM. <sup>1</sup>University at Buffalo, Buffalo, NY</i>	
<b>8:30-8:45a</b>	<b>Hydration Status Response to Bolus Frequency and Volume Intake During Exercise in Heat</b> <i>Jonathan R. Larson, Zachary J. Schlader, Blair D. Johnson, David Hostler, Keiona M. Nance, Riana R. Pryor. University at Buffalo, Buffalo, NY</i>	
<b>8:45-9:00a</b>	<b>Hot Head-Out Water Immersion Acutely Impairs Cerebral Autoregulation in Healthy Participants</b> <i>Morgan L. Worley<sup>1</sup>, Emma L. Reed<sup>1</sup>, Jacqueline C. Dirr<sup>2</sup>, Dziana Vertsiakhouskaya<sup>1</sup>, Manjot Sandhur<sup>1</sup>, Zachary J. Schlader<sup>1,3</sup>, Blair D. Johnson<sup>1</sup>. <sup>1</sup>University at Buffalo, Buffalo, NY, <sup>2</sup>Loyola University Chicago, Chicago, IL, <sup>3</sup>Indiana University, Bloomington, IN</i>	
<b>Oral Presentations: Undergraduate Awards</b>		
<b>9:00-9:15a</b>	<b>The Inverse Association Between Muscular Strength and Carotid Intima-Media and Extra-Media Thickness in Young Women</b> <i>Julie A. Karabinus, Jacob P. DeBlois, Allison P. Keller, Kevin S. Heffernan. Syracuse University, Syracuse, NY</i>	Tiago Barreira, PhD 9:00-10:15
<b>9:15-9:30a</b>	<b>Racial Differences in the Effect of Influenza Vaccine on eNOS Expression and Regulatory MicroRNAs</b> <i>Matt R. Laskowski, Ryan M. Sapp, Catherine B. Springer, Daniel B. Singer, William S. Evans, Steven J. Prior, James M. Hagberg, FACSM, Sushant M. Ranadive. University of Maryland, College Park, MD</i>	
<b>9:30-9:45a</b>	<b>The Physiological Validation of Spectral Wavelet Analysis for Skin Flowmotion</b> <i>Zachary S. Lichter, Gabrielle A. Dillon, Lacy Alexander, FACSM. Noll Laboratory, The Pennsylvania State University, University Park, PA</i>	
<b>9:45-10:00a</b>	<b>Hormonal Contraceptive Use and Bone Accrual Rates in Adolescent Females</b> <i>Agnes V. Sydenstricker<sup>1</sup>, Mahmoud A. Almady<sup>1</sup>, Tamara A. Scerpella<sup>2</sup>, Jodi N. Dowthwaite<sup>1,3</sup>. <sup>1</sup>Binghamton University, Binghamton, NY, <sup>2</sup>University of Wisconsin-Madison, Madison, WI, <sup>3</sup>SUNY Upstate Medical University, Syracuse, NY</i>	
<b>10:00-10:15a</b>	<b>African American and Caucasian Endothelial Cells Exhibit Different Inflammatory Responses to the Influenza Vaccine</b> <i>Daniel B. Singer, Ryan M. Sapp, Matthew R. Laskowski, William S. Evans, Steven J. Prior, James M. Hagberg, FACSM, Sushant M. Ranadive. University of Maryland, College Park, MD</i>	

## Saturday Morning Ash/Birch (cont.)

PROFESSIONAL FREE COMMUNICATIONS

10:45-11:00a	<p><b>Peripheral Arterial Disease Patients with Exaggerated Pressor Response have Impaired Walking Ability</b>  <i>Danielle Jin-Kwang Kim, Polly S. Montgomery, Ming Wang, Biyi Shen, Marcos Kuroki, Andrew W. Gardner. Penn State University College of Medicine, Hershey, PA</i></p>	<p>Ninette Shenouda, PhD 10:45-12:00</p>
11:00-11:15a	<p><b>High-fat Diets and Exercise Modulate Colon Inflammation and Proliferative Status in Male and Female Mice</b>  <i>Paul J. Wisniewski, Candace Longoria, Robert A. Dowden, Sara C. Campbell, FACSM. Rutgers, The State University of New Jersey, New Brunswick, NJ</i></p>	
<b>UNDERGRADUATE FREE COMMUNICATIONS</b>		
11:15-11:30a	<p><b>Barriers That Influence Adoption of ACL Injury Prevention Programs Among High School Girls' Soccer Coaches</b>  <i>Gregory C. Kingston<sup>1,2</sup>, Pamela L. Kocher Brown<sup>1</sup>, Diane L. Gill<sup>1</sup>, Randy J. Schmitz<sup>1</sup>. <sup>1</sup>University of North Carolina at Greensboro, Greensboro, NC, <sup>2</sup>Thiel College, Greenville, PA</i></p>	
11:30-11:45a	<p><b>An Analysis of the Differences in Exercise, Wearable Exercise Technology Device Use and Increased Exercise Behaviors in University Women</b>  <i>Carrie A. McFadden. Towson University, Towson, MD</i></p>	
11:45-12:00p	<p><b>Changes in Vertical Jump and Sprint Momentum at the NFL Scouting Combine since 2000</b>  <i>Kyle S. Beyer<sup>1</sup>, Ishalé N. Toliver<sup>1</sup>, David D. Church<sup>2</sup>. <sup>1</sup>Bloomsburg University of Pennsylvania, Bloomsburg, PA, <sup>2</sup>University of Arkansas for Medical Sciences, Little Rock, AR</i></p>	

<b>Saturday Morning</b>		<b>Elm/Fir</b>	
<b>Oral Presentations: Graduate</b>		<b>Moderator</b>	
<b>Epidemiology, Biostatistics &amp; Health Promotion</b>			
<b>8:00-8:15a</b>	<b>60 Min Daily Vs Average of 60 Min/Day, Are There Differences in Health Status?</b> <i>Gianpietro J. Elías-Revollo &amp; Tiago V. Barreira. Syracuse University. Syracuse, NY</i>	Kristofer Wisniewski, PhD 8:00-9:15	
<b>Fitness Assessment &amp; Training</b>			
<b>8:15-8:30a</b>	<b>Predicting Gross Motor Skills in Children: Data from the 2012 NHANES National Youth Fitness Survey</b> <i>Lindsey E. White, Tiago V. Barreira. Syracuse University. Syracuse, NY</i>		
<b>8:30-8:45a</b>	<b>Validity and Reliability of the Two-Point Method for Estimating Squat and Bench Press One-Repetition Maximums</b> <i>Dylan S. Zangakis, Brandon W. Snyder, Gavin L. Moir, Shawn N. Munford. East Stroudsburg University of Pennsylvania, East Stroudsburg, PA</i>		
<b>8:45-9:00a</b>	<b>Relationship of Health-Related Quality of Life to Functional Fitness in Rural Cancer Survivors</b> <i>Jared R. Heitzenrater, Nicole M. Svendsen, Kristofer S. Wisniewski, Saint Francis University, Loretto, PA</i>		
<b>9:00-9:15a</b>	<b>Effect of a 12-week Supervised Exercise Program on Anxiety and Depression in Cancer Survivors</b> <i>Bethany M. Kanski, Alex J. Sipolino, Kelsey N. Colaric, Kristofer S. Wisniewski Saint Francis University, Loretto, PA</i>		
<b>BREAK 9:15-9:30a</b>			
<b>Psychology, Behavior, &amp; Neurobiology</b>			
<b>9:30-9:45a</b>	<b>Increased Deep Sleep May Relate to Compromised Perception-action Coupling Performance in Military Personnel</b> <i>Alice D. LaGoy<sup>1,2</sup>, Shawn R. Eagle<sup>1</sup>, Aaron M. Sinnott<sup>1</sup>, Meaghan E. Beckner<sup>1</sup>, William R. Conkright<sup>1</sup>, Bradley C. Nindl<sup>1</sup>, Anne Germain<sup>2</sup>, Fabio Ferrarelli<sup>2</sup>, Chris Connaboy<sup>1</sup>. <sup>1</sup>University of Pittsburgh, Pittsburgh PA, <sup>2</sup>University of Pittsburgh School of Medicine, Pittsburgh PA</i>	Jason Metz, PhD 9:30-10:30	
<b>Metabolism &amp; Nutrition</b>			
<b>9:45-10:00a</b>	<b>A Survey of Nutritional Knowledge in College-Aged Students</b> <i>Elizabeth A. Berdahl, Meaghan M. Dwyer, Emily J. Sauers. East Stroudsburg University. East Stroudsburg, PA.</i>		
<b>10:00-10:15a</b>	<b>Gut Microbiota Contribute to Exercise Capacity and Metabolic Profile in a Wildtype and Longevity Model Mouse</b> <i>Robert A. Dowden<sup>1</sup>, Paul J. Wisniewski<sup>1</sup>, John J. Guers<sup>2</sup>, Marko Oyandich<sup>1</sup>, Stephen F. Vatner<sup>1</sup>, Sara C. Campbell<sup>1</sup>, FACSM. <sup>1</sup>Rutgers, The State University of New Jersey, New Brunswick, NJ, OR, <sup>2</sup>Rider University, Lawrence Township, NJ</i>		
<b>10:15-10:30a</b>	<b>Effects of Beetroot and Hawthorn Supplementation on Blood Pressure and Prevalence of AMS in Hypoxia</b> <i>Nathan E. Bartman, University at Buffalo, Buffalo, NY</i>		
<b>BREAK 10:30-10:45a</b>			

<b>Fitness Assessment &amp; Training</b>		
<b>10:45-11:00a</b>	<p><b>Validation of a Wrist-Mounted Photoplethysmography Device During Graded Exercise Testing</b>  <i>Joshua S. Gates<sup>1</sup>, Luke Haile<sup>1</sup>, Alyssa A. Olenick<sup>2</sup>, Kyle S. Beyer<sup>1</sup>, Joseph L. Andreacci<sup>1</sup>, FACSM, Curt B. Dixon<sup>2</sup>, FACSM. <sup>1</sup>Bloomsburg University, Bloomsburg, PA, <sup>2</sup>Lock Haven University, Lock Haven, PA</i></p>	<p>J. David Mosinski, PhD 10:45-12:00</p>
<b>11:00-11:15a</b>	<p><b>Effects of 12 Weeks of an Individualized Exercise Program in Cancer Survivors</b>  <i>Alex J. Sipolino, Bethany M. Kanski, Julie A. Stillman, Kristofer S. Wisniewski, Saint Francis University, Loretto PA</i></p>	
<b>11:15-11:30a</b>	<p><b>Satellite Cell-Derived Extracellular Vesicles as a Therapeutic for Muscle Disease</b>  <i>Kyle T. Shuler<sup>1</sup>, Brittany E. Wilson<sup>1</sup>, Eric R. Muñoz<sup>1</sup>, Andrew D. Mitchell<sup>1</sup>, Joshua T. Selsby<sup>2</sup>, Matthew B. Hudson<sup>1</sup>. <sup>1</sup>University of Delaware, Newark, DE. <sup>2</sup>Iowa State University, Ames, IA</i></p>	
<b>11:30-11:45a</b>	<p><b>Development of a Time Efficient Protocol for Cross-Limb Comparisons of Muscle Mitochondrial Capacity Using NIRS</b>  <i>Rewais Hanna<sup>1</sup>, Jigar Gosalia<sup>1</sup>, Zachary Hobson<sup>1</sup>, Jocelyn Delgado<sup>1</sup>, Alaina Demalis<sup>1</sup>, Kevin McCully<sup>2</sup>, Brian Irving<sup>3</sup>, Swapan Mookerjee<sup>4</sup>, Giampietro Vairo<sup>1</sup> and David Proctor<sup>1</sup>. <sup>1</sup>Penn State University, University Park, PA, <sup>2</sup>University of Georgia, Athens, GA, <sup>3</sup>Louisiana State University, Baton Rouge, LA, <sup>4</sup>Bloomsburg University, Bloomsburg, PA</i></p>	
<b>11:45-12:00a</b>	<p><b>Differential Responses in the Growth Hormone-Insulin-Like Growth Factor-1 Axis Following Simulated Military Operational Stress</b>  <i>William R. Conkright<sup>1</sup>, Meaghan E. Beckner<sup>1</sup>, Aaron M. Sinnott<sup>1</sup>, Alice D. LaGoy<sup>1,2</sup>, Felix Proessl<sup>1</sup>, Shawn R. Eagle<sup>1</sup>, Brian J. Martin<sup>1</sup>, Shawn D. Flanagan<sup>1</sup>, Christopher Connaboy<sup>1</sup>, Anne Germain<sup>2</sup>, Bradley C. Nindl<sup>1</sup>. <sup>1</sup>University of Pittsburgh, Pittsburgh, PA, <sup>2</sup>School of Medicine, University of Pittsburgh, Pittsburgh, PA</i></p>	



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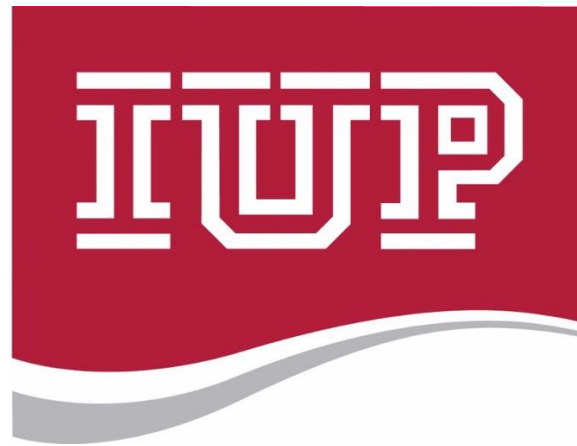
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