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

36th Annual Scientific Meeting - 2013

FINAL PROGRAM

(Complete abstracts are available at www.marcacsm.org)

Friday, November 1, 2013
and
Saturday, November 2, 2013

Sheraton Harrisburg-Hershey Hotel
Harrisburg, PA

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MARC-ACSM Schedule-at-a-Glance: Friday Morning (Nov 1, 2013)

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<tr><th>Time</th><th>Ballroom A</th><th>Ballroom B</th><th>Ballroom C, D, E</th><th>Pennsylvania</th><th>Chestnut/ Dogwood</th><th>Ash/Birch</th></tr>
<tr><td>8:30 AM</td><td></td><td></td><td rowspan="2"></td><td>Medical Track
8:30 AM-12:00 PM</td><td rowspan="4"></td><td rowspan="2"></td></tr>
<tr><td>9:00 AM</td><td rowspan="3">Applied Science
Maximizing Athletic Performance During Intense Exercise in the Heat
Doug Casa, Ph.D.
Physiological Changes of Dehydration-Why Athletes do not Drink Enough
Stavros Kavouras, Ph.D.
9:00-11:00 AM</td><td rowspan="3">Basic Science
Plastic Fantastic: Muscle injury, Repair and Adaptation
Monica Hubal, Ph.D.
&
Matthew Kostek, Ph.D.
9:00-11:00 AM</td><td rowspan="3">|8:30 AM|
Introduction
|8:35AM|
Surgical Management of FAI and Labral Tears: When to Operate
Rob Palumbo, MD
|9:10 AM|
MRI of the Hip: Symptomatic Impingement or Incidental Finding?
Tim Mosher, MD
|9:40AM|
Ultrasound of the Hip: Diagnostic and Interventional Aid
Rob Monaco, MD, MPH
|10:45 AM|
Performance Enhancement Drugs in Cycling: The Drugs and their History
Michael Ross, MD
|11:15 AM|
Dietary Supplements and the Sports Medicine Professional
Eric Rawson, Ph.D.
|11:45 PM|
Questions</td><td rowspan="3">College Bowl Preliminary- Closed Session
10:30 AM-12 PM</td></tr>
<tr><td>9:30 AM</td></tr>
<tr><td>10:00 AM</td><td rowspan="2">Education
Training the Next Generation of Exercise Scientists: Strategies to Improve Student Learning
Adam Persky, Ph.D.
10:00-11:00 AM</td></tr>
<tr><td>10:30 AM</td><td rowspan="3">Applied Science
Exercise, Obesity and Cancer Prevention
Connie Rogers, Ph.D.
11:00 AM-12:00 PM</td><td rowspan="3">Applied Science
No Guts, No Glory- GI Function during Exercise
Bob Murray, Ph.D.
11:00 AM-12:00 PM</td><td rowspan="3">Basic Science
Beginners Guide to the Omics Universe
Matthew Barberio, Ph.D.
11:00 AM-12:00 PM</td><td rowspan="3">(Corp Sponsor)
Tekscan Inc.
Biomechanics Equipment Demonstration
11 AM
Pressure Mapping and Force Measurement</td></tr>
<tr><td>11:00 AM</td></tr>
<tr><td>11:30 AM</td></tr>
<tr><td>12:00 PM</td><td colspan="6">Lunch 12 PM-1 PM</td></tr>
</table>

MARC-ACSM Schedule-at-a-Glance: Friday Afternoon

<table>
<tr><th>Time</th><th>Ballroom A</th><th>Ballroom B</th><th>Ballroom C, D, E</th><th>Pennsylvania</th><th>Ash/Birch</th><th>Chestnut/ Dogwood</th><th>Elm/Fir</th></tr>
<tr><td>1:00 PM</td><td rowspan="3">|1:00 PM|
Resistance Training for Healthy Adults: ACSM Recommendations
Nick Ratamess, Ph.D.</td><td>Nutrition
Weighing in on Dietary Fats: Advising Clients on Best Types and How Much
Kristine Clark, Ph.D., RD
1:00-2:00 PM</td><td rowspan="3">Poster Session IA
1-3 PM</td><td rowspan="3">Clinical Case Studies Oral Presentations
1:00-3:00 PM

Clinical Case Poster Presentations
Lobby outside PA room
3:00-4:00 PM</td><td rowspan="2">Free Communications I
MS Award Nominees
1:00-2:15 PM</td><td rowspan="3">Free Communications II
Professional
1:00-2:30 PM</td><td rowspan="2">Free Communications III
UG
1:00-2:15 PM</td></tr>
<tr><td>1:30 PM</td></tr>
<tr><td>2:00 PM</td><td>|1:35 PM|
Resistance Training for Older Adults
Jill Bush-Wallace, Ph.D.

|2:10 PM|
Youth Resistance Training: Beyond sets and reps
Avery Faigenbaum, Ed.D.
1:00-3:00 PM</td><td>Clinical Science
Advances in the Understanding and Treatment of Obesity
Christopher Still, DO
2:00-3:00 PM</td><td></td><td></td><td></td></tr>
<tr><td>2:30 PM</td><td></td><td></td><td></td><td></td><td rowspan="2">Free Communications IV
PhD Award Nominees
2:30-3:45 PM</td><td colspan="2" rowspan="2"></td></tr>
<tr><td>3:00 PM</td><td colspan="2"></td><td colspan="2">Break 3-3:15 PM</td></tr>
</table>

Time	Ballroom A	Ballroom B	Ballroom C, D, E	Pennsylvania	Ash/Birch	Chestnut/ Dogwood	Elm/Fir
3:00 PM	Dietary Salt and Vascular Function. Does BP Matter? **William B. Farquhar, Ph.D.** 3:00-4:00 PM	Energy Drinks: Benefits, Behaviors and Bull **Melissa Roti, Ph.D.** 3:00-4:00 PM	Poster Session IB 3:15-4:45 PM	**Strength and Conditioning Workshop** Hands on Demonstration: Training for Optimal Performance **Eric Childs, MEd & Doug Lentz, MS, CSCS*D** 3:15-5:00 PM	Free Communications IV PhD Award Nominees (Continued) 2:30-3:45 PM		Free Communications V UG 3:15-5:00 PM
3:30 PM							
4:00 PM					Student Session Meet the Experts 4:00-5:00 PM	(Corporate Sponsor) **BIOPAC's** Bionomadix Wireless Physiology Workshop 4:00-5:00 PM	
4:15 PM							
5:00 PM							

MARC-ACSM Schedule-at-a-Glance: Friday Evening

Time			
5:00–7:15 PM	**Dinner 5:00-7:15 PM**		
7:15 PM	**Ballroom**		
	Keynote Address: Avery Faigenbaum, Ed.D. Exercise Deficit Disorder in Youth: Play Now or Pay Later **7:15 to 8:15 PM**		
8:15–11:00 PM	**Ballroom**	**Pennsylvania Room**	
	Expo, College Bowl, Fitness Challenge	Faculty & Professional Member Social	

MARC-ACSM Schedule-at-a-Glance: Saturday Morning (Nov 2, 2013)

<table>
<tr><th>Time</th><th>Ballroom A</th><th>Ballroom B</th><th>Ballroom C, D, E</th><th>Pennsylvania</th><th>Ash/Birch</th><th>Chestnut/ Dogwood</th><th>Elm/Fir</th></tr>
<tr><td>8:00 AM</td><td rowspan="2"></td><td rowspan="2"></td><td rowspan="3">Poster Session II
8:00-11:00 AM</td><td>Does Changing Footfall Patterns during Running Prevent Injuries?
Joseph Hamill, Ph.D.
8:00-9:00 PM</td><td rowspan="2">Free Communications VI
UG Award Nominees
8:00-9:15 AM</td><td rowspan="2">Free Communications VII
MS/PhD
8:00-9:15 AM</td><td rowspan="2">Free Communications VIII
MS/PhD
8:00-9:45 AM</td></tr>
<tr><td rowspan="2">9:00 AM</td><td rowspan="2">Free Communications: Biomechanics & Neural Control of Movement
9:00-11:00 AM</td></tr>
<tr><td rowspan="2">10:00 AM</td><td rowspan="3">|9:00 AM|
Physical Training Strategies for Performance Optimization in Women
Bradley Nindl, Ph.D.
|9:25 AM|
Physical Training, Fitness, and Injuries in Military and Active Populations
Bruce Jones, MD, MPH
|9:50 AM|
Physical and Extreme Training Effects on Overload, Fatigue and Risk of Injury: Too Much of a Good thing
Timothy Sell, Ph.D., PT
|10:15 AM|
Functional Movement Assessments: Predicting Injuries in Military and Active Populations
Peter Lisman, Ph.D., ATC
9:00-11:00 AM</td><td rowspan="3">|9:00 AM|
Brain Processes Underlying Superior Sport Performance
Bradley Hatfield, Ph.D.
|9:20 AM|
The Effects of Team Environment on the Brain and Psychomotor Performance
Matthew Miller, Ph.D.
|9:40 AM|
Controlling Attention in the Face of Threat: Implications for Athletic Performance
Bartlett Anne Healy Russell, Ph.D.
|10:00 AM|
Insight to the Athlete's Brain during Competition: Measures of Functional Connectivity for EEG Analysis
Hyuk Oh, Ph.D.
9:00- 11:00 AM</td><td rowspan="3"></td><td rowspan="3"></td><td rowspan="3"></td><td>Break 9:45-10:00 AM</td></tr>
<tr><td rowspan="2">Free Communications VIII
MS/PhD
10:00 AM-11:45 PM</td></tr>
<tr><td>11:00 AM</td><td></td><td></td><td>Biomechanics Interest Group Meeting – All are Welcome to Attend
Jean McCrory, Ph.D.
11 AM-12:00 PM</td></tr>
<tr><td>12:00 PM</td><td colspan="7">MARC Business Meeting, Luncheon, Award Ceremony 12:00 PM</td></tr>
</table>

President's Welcome

Welcome!

The American College of Sports Medicine membership is unlike that of other professional organizations in that we are united by a collective theme; the importance of physical activity. The expertise of our members: educators, researchers, clinicians, practitioners, and students, crosses an enormous range of disciplines. It is the interdisciplinary nature of the ACSM that allows us to successfully bridge so many professions and serve the needs of so many.

The 2013 MARC-ACSM program offers something for everyone. We are thrilled to have Dr. Avery Faigenbaum as our keynote speaker. Dr. Faigenbaum is a Professor of Exercise Science at the College of New Jersey, founder of www.strongkid.com, and an internationally renowned pediatric exercise physiologist. Please be sure to attend his keynote address entitled "Exercise deficit disorder in youth: Play now or pay later" on Friday at 7:15 PM. We have also invited many other nationally and internationally known speakers. Attend their sessions, ask questions, and even introduce yourself before or after their sessions. One of the benefits of a regional meeting is the friendly and casual atmosphere; it's ideal for establishing collaborations and expanding your professional network.

Please take several moments to browse the program. It has greatly expanded due to the growth of the MARC-ACSM meeting. There are many professional sessions by invited speakers, numerous free communications, and a record number of thematic poster presentations. In between sessions, visit our corporate sponsors, and check the program to see which sponsors offer workshops or equipment demonstrations. We also have a number of universities and colleges participating in our Expo. Please take a moment to visit their tables and learn about their programs. In all, nearly 100 professionals and students submitted abstracts for inclusion for this year's program. During the conference, follow us on Twitter @MARCACSM for meeting updates and highlights.

Back by popular demand are the College Bowl and the Fitness Challenge, which take place in the ballroom following the Keynote Address and Expo on Friday night. For the Faculty and professional members, a social will be held in the Pennsylvania Room beginning at 8:45 PM. This is a time for professionals to renew acquaintances and network with new professionals in the region. Join us!

I would like to thank two groups that have worked tirelessly over the past year orchestrating this meeting. The Executive Board (see page 10) is a volunteer board that works tirelessly for you during the year in planning all aspects of the meeting. The program committee helps develop sessions and locates the best speakers. A special thanks goes to the following program committee members:

Dr. John Abt
Dr. Katelyn Allison
Dr. Bradley Hatfield
Dr. Monica Hubal
Dr. Jean McCrory
Dr. Todd Miller
Dr. Brad Nindl
Dr. David Ross
Dr. Jake Veigal

I want to encourage everyone to personally thank our Executive Director Dr. Scott Kieffer. Dr. Kieffer works incredibly hard behind the scenes to keep our chapter moving forward.

Enjoy the program!
Eric S. Rawson, Ph.D., FACSM

2013 MARC-ACSM Program Dedication

The 2013 MARC-ACSM annual conference is dedicated to Dr. Priscilla Clarkson. Priscilla was a long time member of the ACSM, a Fellow, a past-president of the New England ACSM Regional Chapter, and served as the National ACSM's third female president (2000-2001). Priscilla died August 26th at age 66 following a long battle with cancer. She served the University of Massachusetts, Amherst, as dean of Commonwealth Honors College and Distinguished University Professor in Kinesiology. Although she was a member of New England ACSM throughout her career, she was a tremendous influence on many of the MARC-ACSM members. She mentored many MARC-ACSM professional members (subsequently influencing their future students) and was an invited speaker at the MARC-ACSM annual meeting.

Dr. Clarkson and her students (Recognize a few 2013 MARC-ACSM speakers…?)

Priscilla was the model of a great mentor. In addition to her prowess as a researcher and her excellence as a teacher, she was dedicated to service in her community, at her university, and in her profession. Her passion was helping people to achieve their best. If you had the opportunity to know Priscilla, you were one of the lucky ones. Her influence on our profession was so great, that even if you never met Priscilla, it is likely that you indirectly benefited from her mentoring!

Please take the time to read the many biographies or celebrations of Priscilla's life on line (links below). Several of the 2013 MARC-ACSM featured speakers are members of the Clarkson Lab or were her colleagues. Each has Priscilla's spirit and dedication to excellence. ESR 11/1/2013.

Boston Globe obituary: http://www.bostonglobe.com/metro/2013/08/27/priscilla-clarkson-dean-umass-amherst-commonwealth-honors-college-had-run-lab-studying-muscle-biology/9RTremgt84FXRo42XTu2YP/story.html

UMass Amherst Announcement: http://www.umass.edu/newsoffice/article/priscilla-m-clarkson-umass-amherst

2013 MARC-ACSM Executive Board

President	**Eric S. Rawson**, **Ph.D., FACSM, CSCS** Bloomsburg University E-mail: erawson@bloomu.edu
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2nd Year Member-at-Large	**Kimberly A. Smith, Ph.D., CSCS** Slippery Rock University E-mail: kimberly.smith@sru.edu
1st Year Member-at-Large	**Todd Miller, Ph.D., CSCS, FNSCA** George Washington University E-mail: tamiller@gwu.edu
1st Year Member-at-Large	**John Abt, Ph.D., ATC** University of Pittsburgh E-mail: jabt@pitt.edu
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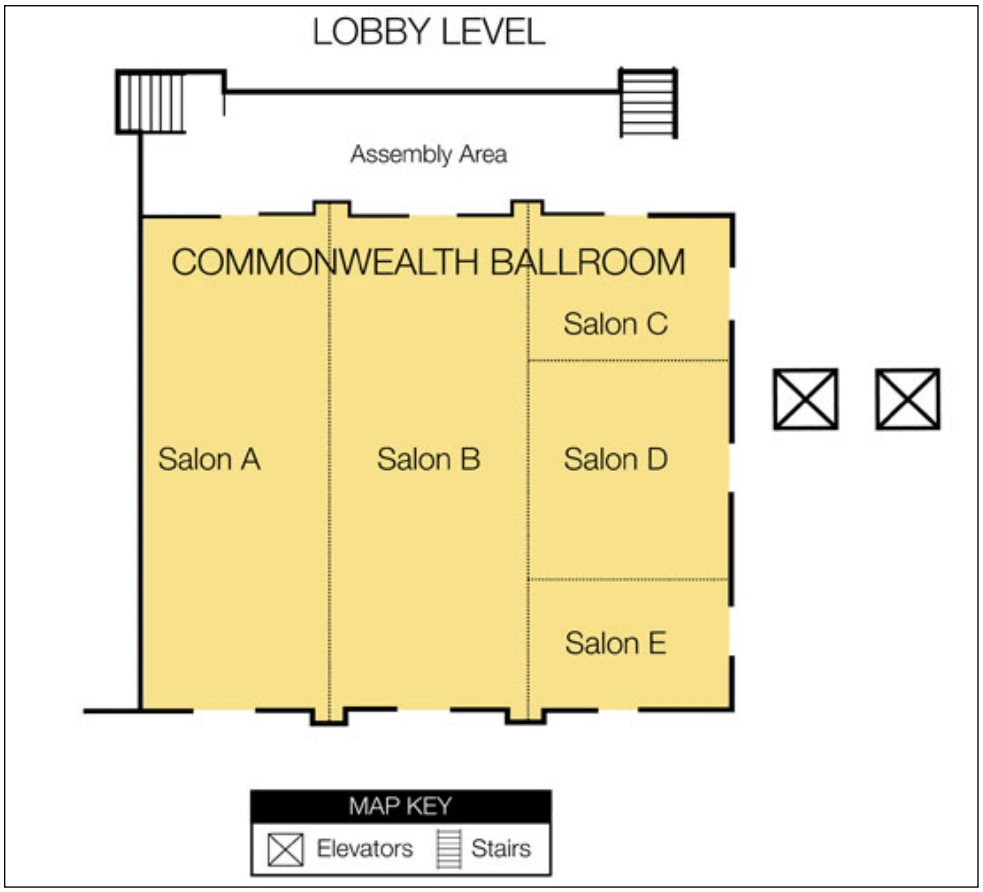
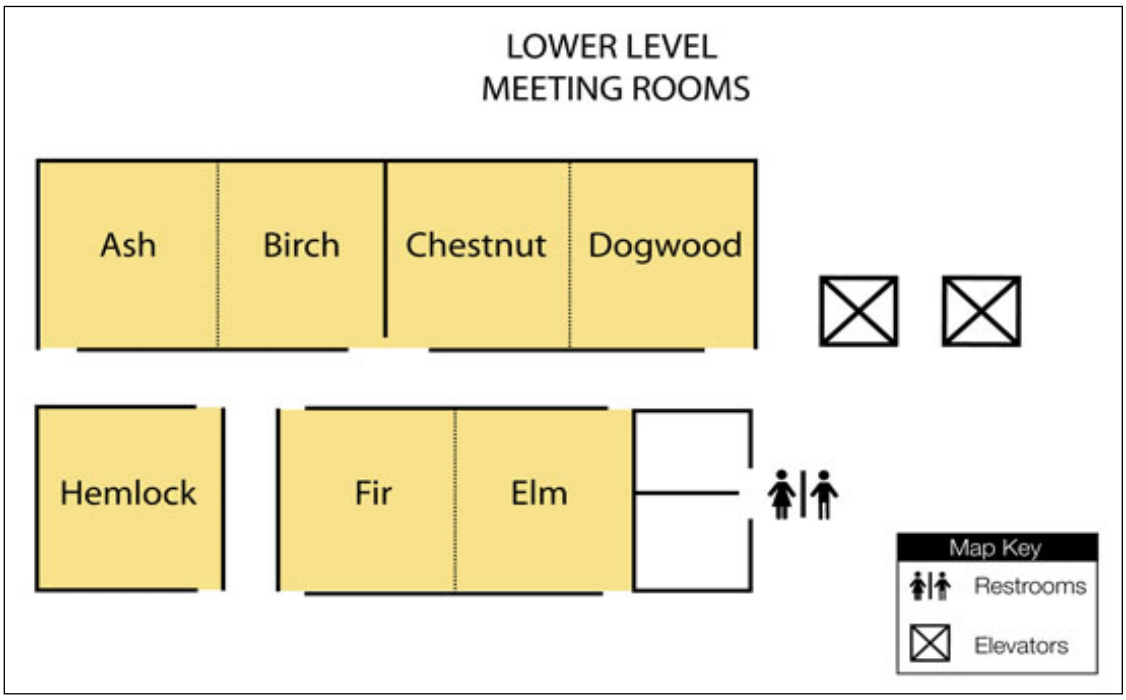
Student Representative	**Andrew Venezia, MS** University of Maryland E-mail: avenezia@umd.edu
MARC Regional Chapter Representative	**Kristie Abt, Ph.D.** University of Pittsburgh E-mail: klabt@pitt.edu
Executive Director	**H. Scott Kieffer, Ed.D.** Messiah College E-mail: kieffer@messiah.edu

Sheraton Harrisburg-Hershey Hotel Meeting Rooms

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





REGISTRATION INFORMATION

The Registration Table is located outside Ballroom Salons A, B, C and D (Lobby Level). Registration hours are the following:

Thursday	7:00pm – 9:00pm
Friday	8:00am - 5:00pm
Saturday	8:00am - 10:00am

CONTINUING EDUCATION CREDITS

MARC-ACSM is an approved CEC provider for ACSM. Please be sure to pick up your CEC Certificate at the Registration Area.

The American College of Sports Medicine's Professional Education Committee certifies that this Continuing Education offering meets the criteria for 14 credit hours of ACSM Continuing Education Credit (CEC).

MARC-ACSM is approved to offer 3 CMEs. Please stop by the Registration Desk for details.

NSCA members should request a certificate of attendance from the Registration Area for submission related to their certifications. Individuals with other certifications (NATA, AFAA, ACE, etc.) should also consider picking up a certificate of attendance that may be used to petition CEC's from their certification organization. However, MARC-ACSM is not responsible for determining if such organizations will or will not approve CEC's 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.

Determination of Finalists and Award Recipients for the Student Investigator Awards
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.

Announcement of Award Winners
The 2013 award winners (and honorable mentions) will be announced at the Business Meeting and Award Ceremony Luncheon on Saturday at 12:00 pm.

The Research Committee is chaired by:
Erica Jackson, Ph.D., MEd, FACSM Delaware State University

MARC-ACSM would also like to extend a thank you to those who served on the 2013 Research Committee. Thank you for all of your hard work and support!

STUDENT FUND RAFFLE

Each year the MARC-ACSM Student Representative is responsible for the student fund raffle in which a variety of prizes (e.g., textbooks, etc.) are raffled off throughout the meeting. Raffle tickets can be purchased in the Registration Area. All proceeds from the student raffle are used to support the student representative's trip to the National Annual meeting.

EVALUATION FORMS

Evaluation forms will be provided at the registration desk throughout the conference, as well as during the Saturday afternoon Business Meeting/Award Ceremony Luncheon. Your feedback is extremely important, as this information will be used in the planning of future meetings and conferences. **Please be sure to complete your evaluation form and submit to us at the Registration Desk or during the Luncheon.**

SPEAKER READY ROOM

The Speaker Ready Room will be in the Day Room (Lobby Level).

- **Friday Presentations:**
  Please bring your disk or jump drive to the speaker ready room (next to the on-site registration table) **before 10 AM on Friday Nov 1, 2013** to have it loaded on the proper computer for your afternoon presentation.

- **Saturday Presentations:**
  Please bring your disk or jump drive to the speaker ready room (next to the on-site registration table) **before 3 PM on Friday Nov 1, 2013** to have it loaded on the proper computer for your presentation.

2013 MARC-ACSM Honor Award Recipient
Bradley Hatfield Ph.D., FACSM, FNAK
Award presented Saturday

Dr. Bradley Hatfield is Professor and Chair of the Department of Kinesiology and Associate Dean in the School of Public Health at the University of Maryland, College Park with adjunct appointments in the Neuroscience and Cognitive Sciences (NACS) program as well as the Center on Aging. He received his PhD in 1982 from the Pennsylvania State University and was supported by the Research Council of Canada as a doctoral fellow. His research is focused on: (1) exercise and the aging brain as well as (2) brain dynamics underlying cognitive-motor performance. A cognitive neuroscience approach is used to address these topics using brain imaging techniques such as electroencepahalography (EEG), event-related potentials (ERPs), magnetoencephalography (MEG), and functional magnetic resonance imaging (fMRI) as the primary technical tools. He has published in a number of scholarly journals such as Neuroimage, Cerebral Cortex, Psychophysiology, Biological Psychology, Medicine and Science in Sports and Exercise, Neurobiology of Aging, Experimental Brain Research, Exercise and Sport Sciences Reviews, Journal of Gerontology, Journal of Sport and Exercise Psychology, Journal of Clinical Neurophysiology, and others and currently holds membership on the editorial boards of the Journal of Sport and Exercise Psychology, Psychology of Sport and Exercise, Sport Exercise and Performance Psychology, and the Journal of Contemporary Athletics, while also serving as a grant reviewer for the National Institutes of Health (NIH), the National Science Foundation (NSF) and numerous scholarly journals. Dr. Hatfield's research efforts have been supported by the Department of Defense – Army Research Office (ARO), and the National Institutes of Health (NIH) as well as the U.S. Army Research Institute for the Behavioral and Social Sciences, the American Heart Association, the Erickson Foundation, and the Johns Hopkins University Center for Health and Information Technology. His current research is focused on 1) the effects of psychological stress on cerebral cortical dynamics during motor performance (funded by Lockheed-Martin Corporation) and 2) the interactive role of physical activity and genotype in the delay of onset of dementia such as Alzheimer's disease. Dr. Hatfield served as president of the North American Society for the Psychology of Sport and Physical Activity and the Mid-Atlantic chapter of the American College of Sports Medicine. He is a fellow of the American College of Sports Medicine, the Research Consortium of AAHPERD, the National Academy of Kinesiology, and a charter fellow of the American Association for the Advancement of Applied Sport Psychology.

Award presentation at the MARC-ACSM Luncheon & Award Ceremony, Saturday 12:00 PM

2013 MARC-ACSM Keynote Speaker
Avery Faigenbaum, Ed.D., FACSM, FNSCA

Dr. Avery Faigenbaum is a Full Professor in the Department of Health and Exercise Science at The College of New Jersey. His specific area of research is in the field of pediatric exercise science, and over the past 25 years he has examined the effects of strength and conditioning on various health, fitness and performance measures in children and adolescents. His prospective research involves exercise interventions in public schools and recreation centers to understand changes in muscular fitness, body composition and athleticism. As an active researcher and practitioner, he has co-authored 175 peer-reviewed publications, 34 books chapters and nine books including Youth Strength Training, Strength and Power for Young Athletes, and Progressive Plyometrics for Kids. Further sharing his research and findings, Dr. Faigenbaum has been an invited speaker at more than 300 regional, national and international conferences. Dr Faigenbaum is a Fellow of the American College of Sports Medicine and of the National Strength and Conditioning Association. He was elected Vice President of the National Strength and Conditioning Association in 2005 and served on the Massachusetts Governor's Council on Fitness and Sports from 1998 to 2004. He was honored by the NSCA with the Junior Investigator of the Year Award in 1999 and the State Director of the Year Award in 2000. He was also awarded the Adult Volunteer of the Year Award by the South Shore YMCA. Dr Faigenbaum continues to develop innovative youth fitness programs and lecture at professional conferences worldwide. He enjoys teaching a full coarse-load at The College of New Jersey and mentoring his undergraduate students who participate in pediatric research activities.

Dr. Avery Faigenbaum will present his Keynote Lecture
"Exercise Deficit Disorder in Youth: Play Now or Pay Later"
Friday evening from 7:15 to 8:15

MARC-ACSM 2013 Annual Meeting Speakers

(Speakers are listed in alphabetical order)

Matthew Barberio, Ph.D.

"Why do some individuals respond to exercise more than others?" This is a simple question that drives my interest in the genetic and molecular mechanisms of skeletal muscle adaptation. The dynamic capacity of skeletal muscle tissue makes it a fascinating tissue to explore using multi-scale approaches. How does training lead to someone being able to run a marathon in 2:03 or long jumping almost 30 feet? At the other end of the spectrum, how does inactivity and bad lifestyle choices lead to skeletal muscle dysfunction, like the insulin resistance that leads to cardio metabolic diseases such as Type II diabetes? My research interest is exploring the effect of genetic variations on adaptation of skeletal muscle gene expression and clinical phenotype (i.e. insulin sensitivity) following exercise training. My interest in studying skeletal muscle's response to exercise stems from the practicality of exercise as an intervention for the prevention and reversal of chronic metabolic diseases. In the laboratory of Dr. Monica Hubal, where I currently work as I postdoctoral fellow, we are integrating genetic, molecular, and physiological data to understand the "individuality" of the exercise adaptation response. Why do some people benefit greatly from a little exercise while others work extremely hard but show little improvement? We believe this information will be important in the development of a more individualized approach to exercise prescription and rehabilitation medicine. Current position: Postdoctoral Fellow, Sheikh Zayed Institute for Pediatric Surgical Innovation, Department of Integrative Systems Biology, George Washington School of Medicine and Children's National Medical Center.

Jill A. Bush, Ph.D., CSCS*D, FACSM

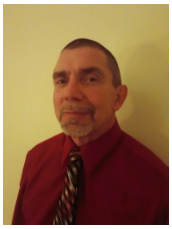
As a native of New Jersey, I received my B.S. in Exercise Science and Sport Studies at Rutgers University and my Ph.D. at Penn State University studying under Dr. William Kraemer. I joined The College of New Jersey in August 2012 as an Associate Professor in the Department of Health and Exercise Science. Previously, I was post-doctoral faculty at The Children's Nutrition Research Center at Baylor College of Medicine in Houston, TX where I studied the effects of growth hormone and protein synthesis/degradation rates in a pig model. As faculty at The University of Houston, I examined the effects of exercise training on genetic changes, hormonal changes, and community-based programs in multiple ethnic populations of obese children and adults and muscular and hormonal changes with the effects of vibration in strength training programs. Additionally, I examined physical fitness and nutrition assessment as risk factor for cardiovascular and obesity-related conditions among marching band members. As faculty at Towson University, I examined exercise programming for young adults with autism and exercise and nutrition programming in underserved populations and school districts. To support my research, collaborations, and student mentoring, I have been funded by the National Institutes of Health, Robert Wood Johnson Foundation, Office of Minority Health, US Department of Agriculture, National Strength and Conditioning Association, NASA Johnson Space Center, and Center for Disease Control and Prevention. I have published in numerous peer-reviewed journals, presented at regional and international conferences, given symposiums abroad, and written several chapters in books. Currently, my research focuses on examining hormonal and muscle changes due to various types of strength and conditioning programs, and risk factor reduction related to chronic diseases through exercise. I am a Certified Strength and Conditioning Specialist with Distinction, Fellow of the American College of Sports Medicine, Associate Editor for Journal of Strength and Conditioning Research, and on the Editorial Board for Medicine and Science in Sports and Exercise. I have been married for 10 years with one daughter and three dogs.

Doug Casa, Ph.D., ATC, FACSM, FNATA

For Douglas Casa, the opportunity to prevent sudden death in sport is the culmination of a life-long path; his passion for the study of exertional heat stroke started in 1985 when he suffered an exertional heat stroke while running a 10K race. This experience motivated what has become his life's cause: the study of exertional heat stroke, heat illnesses, hydration, and preventing sudden death in sport his ultimate goal is to find ways to prevent needless tragedy during sport and physical activity. "I was fortunate to receive amazing care on-site from the athletic trainer; the EMT's in the ambulance; and at the hospital from the emergency room physicians and nurses. I only survived because of the exceptional care I received. I was just 16 years old at the time, but I have been driven by this experience since that day," Dr. Casa explains when asked about what motivates him. In April 2010 Kelci Stringer (Korey's widow) and James Gould (Korey's agent) asked Dr. Casa to develop and run the Korey Stringer Institute (KSI) at the University of Connecticut. Korey was an All-Pro offensive tackle for the Minnesota Vikings of the NFL. He died from exertional heat stroke in August 2001. The KSI (ksi.uconn.edu) serves the public to work toward preventing sudden death in sport by mean of education, advocacy, public policy, research, media outreach, and publications. Additionally, he is the editor of a new book titled: *Preventing Sudden Death in Sport and Physical Activity*, published by Jones & Bartlett in cooperation with the American College of Sports Medicine.

For the past 12 years, Dr. Casa has worked toward his goal of preventing sudden death in sport at the Department of Kinesiology, Neag School of Education, University of Connecticut. During this time he has published more than 140 peer-reviewed publications and presented more than 300 times on subjects related to exertional heat stroke, heat-related illnesses, preventing sudden death in sport, and hydration. Dr. Casa has successfully treated more than 155 cases of exertional heat stroke (with 0 fatalities). In October 2010 the Department of Kinesiology doctoral program at the University of Connecticut was ranked number 1 in the country by the National Academy of Kinesiology. Additionally, in September 2010 the National Research Council ranked the faculty in the Department of Kinesiology number one for research productivity. Dr. Casa was named full professor at the University of Connecticut in August 2010. In 2008 he was the recipient of the medal for distinguished athletic training research from the National Athletic Trainers' Association. He was named a fellow of the National Athletic Trainers' Association in 2008. He received the Sayers "Bud" Miller Distinguished Educator Award from the National Athletic Trainers' Association in 2007 and has been a fellow of the American College of Sports Medicine since 2001. He has been a lead or co-author on numerous sports medicine (ACSM, NATA) position statements related to heat illness and hydration. He is an associate editor of the *Journal of Athletic Training*, and on the editorial board of *Current Sports Medicine Reports*, *Journal of Sport Rehabilitation*, and the *Journal of Strength and Conditioning Research*. Dr. Casa has worked with numerous media outlets across the country in discussing his research including the NBC Today Show, Good Morning America, ESPN, CNN, PBS, Sports Illustrated, USA Today, Wall Street Journal and the New York Times. Dr. Casa earned his bachelor's degree in biology from Allegheny College, in 1990; his master's degree in athletic training from the University of Flordia in 1993; and his doctorate in exercise physiology from the University of Connecticut in 1997. He has been happily married to his wife Tutita Casa, PhD for 17 years and they have 3 kids; Montana (9), Navia (8), and Alessio (7).

Eric Childs, MEd, CSCS, CPT



Eric Childs, MEd, CSCS, CPT, is a kinesiology instructor and supervisor of student teachers in Health/Physical Education at Penn State. A former wrestling All-American, Childs spent 10 years as an assistant coach and strength training coach with the Penn State Wrestling Team. Prior to his years at Penn State, he served one season as the strength & conditioning coach for the Texas Rangers Baseball Team. Childs is also a former high school health & physical education/weight training instructor and coached wrestling in South Florida.

Kristine Clark, Ph.D., RD, FACSM

Kristine Clark is the Director of Sports Nutrition for Penn State University's Athletic Dept. where she counsels over 800 varsity athletes from 29 teams. In addition, she advises head coaches, team physicians, athletic trainers, strength and conditioning coaches, and athletic administrators on policies regarding eating disorders, weight management, and supplement use among athletes. While most of Dr. Clark's time is devoted to athletics, she also holds a faculty position as an assistant professor in the Dept. of Nutritional Sciences. Dr. Clark holds a Ph.D. in Nutrition Science from Penn State University, a Masters degree in Health Education from the University of Wisconsin, and a B.S. degree in Nutrition and Dietetics from Viterbo College, LaCrosse, WI. Her research interests include food choices for exercise and athletic performance, timing of eating, and weight management. Clark, a registered dietitian, is a past chair of the American Dietetic's Association Dietetic Practice Group that specializes in sports nutrition, is a member of the Weight Management Dietetic Practice Group of the American Dietetic Association, is a Fellow in and past Trustee Member of the American College of Sports Medicine, and is a member of the U.S. Olympic Sports Medicine Advisory Board. As an Assistant Professor of Nutritional Sciences at Penn State University Dr. Clark teaches sports nutrition courses and coordinates one of the few sports nutrition training centers for nutrition students desiring to further their education in specialty practice of sports nutrition.

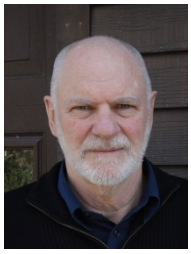
Avery Faigenbaum, Ed.D. , FACSM (Keynote Speaker)

Dr. Avery Faigenbaum is a Full Professor in the Department of Health and Exercise Science at The College of New Jersey. His specific area of research is in the field of pediatric exercise science, and over the past 25 years he has examined the effects of strength and conditioning on various health, fitness and performance measures in children and adolescents. His prospective research involves exercise interventions in public schools and recreation centers to understand changes in muscular fitness, body composition and athleticism. As an active researcher and practitioner, he has co-authored 175 peer-reviewed publications, 34 books chapters and nine books including *Youth Strength Training*, *Strength and Power for Young Athletes*, and *Progressive Plyometrics for Kids.* Further sharing his research and findings, Dr. Faigenbaum has been an invited speaker at more than 300 regional, national and international conferences. Dr Faigenbaum is a Fellow of the American College of Sports Medicine and of the National Strength and Conditioning Association. He was elected Vice President of the National Strength and Conditioning Association in 2005 and served on the Massachusetts Governor's Council on Fitness and Sports from 1998 to 2004. He was honored by the NSCA with the Junior Investigator of the Year Award in 1999 and the State Director of the Year Award in 2000. He was also awarded the Adult Volunteer of the Year Award by the South Shore YMCA. Dr Faigenbaum continues to develop innovative youth fitness programs and lecture at professional conferences worldwide. He enjoys teaching a full coarse-load at The College of New Jersey and mentoring his undergraduate students who participate in pediatric research activities.

William B. Farquhar, Ph.D., FACSM

Dr. William Farquhar is an Associate Professor in the Department Kinesiology and Applied Physiology at the University of Delaware. He has joint academic appointments in Biological Sciences and Nursing. He completed a BS degree and MS degree from East Stroudsburg University and a PhD from Penn State University. His post-doctoral training was at Beth Israel Deaconess Medical Center and the Hebrew Rehab Center for Aged in Boston. The focus of his research is blood pressure regulation and autonomic nervous system function in humans. Dr. Farquhar teaches undergraduate and graduate exercise physiology classes. He is a Fellow of the American College of Sports Medicine, and currently serves on the Editorial Boards of the *Journal of Applied Physiology* and *Autonomic Neuroscience: Basic and Clinical*.

Joseph Hamill, Ph.D., FACSM



Joseph Hamill completed his undergraduate degrees at York University in Toronto (B.A., Political Science) and Concordia University in Montreal (B.S., Science). He completed his graduate work in Biomechanics at the University of Oregon (M.S., Ph.D.). He is currently a Professor in the Department of Kinesiology at the University of Massachusetts Amherst, an Honorary Professor at the University of Edinburgh in Scotland, an Adjunct Professor at the University of Limerick in Ireland, a Distinguished Research Professor at the Republic Polytechnic in Singapore and a Staff Scientist at the Shriner's Hospital in Springfield, MA. He has authored or co-authored over 300 research papers and research proceedings, several book chapters and three books. He has also presented numerous papers at both national and international conferences. He has been an invited speaker at universities in the United States and in countries such as Brazil, Canada, Germany, Portugal, Spain, Hong Kong, China, Korea, Austria, Singapore, Czech Republic, Ireland and New Zealand. He is a Fellow of the Research Consortium of AAHPERD, the American College of Sports Medicine, the International Society of Biomechanics in Sports, the Canadian Society of Biomechanics and the American Academy of Kinesiology and Physical Education. During his academic career, he has mentored more than 50 graduate students. Dr. Hamill's research interests are focused on lower extremity biomechanics during normal and pathological locomotion. His current projects include studies on coordination variability in the determination of cumulative micro-trauma injuries and the interaction of biomechanical and biochemical factors in overuse injuries. Professionally, he has served on the Executive Boards of the New England Chapter of the American College of Sports Medicine, the Footwear Biomechanics Group, the International Society of Biomechanics, the Canadian Society of Biomechanics and the International Society of Biomechanics in Sports.

Bradley Hatfield Ph.D., FACSM, FNAK (2013 MARC-ACSM Honor Award Recipient)

Dr. Bradley Hatfield is Professor and Chair of the Department of Kinesiology and Associate Dean in the School of Public Health at the University of Maryland, College Park with adjunct appointments in the Neuroscience and Cognitive Sciences (NACS) program as well as the Center on Aging. His research is focused on: (1) exercise and the aging brain as well as (2) brain dynamics underlying cognitive-motor performance. A cognitive neuroscience approach is used to address these topics using brain imaging techniques such as electroencepahalography (EEG), event-related potentials (ERPs), magnetoencephalography (MEG), and functional magnetic resonance imaging (fMRI) as the primary technical tools. He has published in a number of scholarly journals, is a member of several prestigious editorial boards, and has served as a grant reviewer for the National Institutes of Health (NIH), the National Science Foundation (NSF), and numerous scholarly journals. Dr. Hatfield's research efforts have been supported by the Department of Defense – Army Research Office (ARO), and the National Institutes of Health (NIH) as well as the U.S.

Army Research Institute for the Behavioral and Social Sciences, the American Heart Association, the Erickson Foundation, and the Johns Hopkins University Center for Health and Information Technology. Dr. Hatfield is a past-president of the Mid-Atlantic chapter of the American College of Sports Medicine. He is a fellow of the American College of Sports Medicine, the Research Consortium of AAHPERD, the National Academy of Kinesiology, and a charter fellow of the American Association for the Advancement of Applied Sport Psychology.

Monica Hubal, Ph.D., FACSM

Growing up as a multi-sport athlete, I have always been fascinated by how the body responds to stimuli like exercise training or injury. Anyone that has wondered how someone like Usain Bolt can run 100 m in 9.58 seconds or someone can bend a soccer ball like David Beckham can hear the answer - "good genetics". Of course, elite performance is the product of both genetics AND environment (training, diet, etc). While I'm interested in what makes athletes perform better, my main research interests lie at the other end of the performance spectrum - why some people are prone to obesity, Type II diabetes, and cardiometabolic disease - especially earlier in life. With dual backgrounds in exercise physiology and genetic medicine, much of my research involves integrating genetic and molecular data with physiological data in both exercise and obesity studies. Long term goals of my laboratory are to identify genetic and molecular factors controlling metabolic dysfunction and to model how interventions like diet and exercise can best treat or prevent obesity and related diseases in both children and adults.

Bruce Jones, MD, MPH

Dr. Bruce Jones grew up in Kansas. After graduating from High School in Kansas, he went to Harvard University in Cambridge, Massachusetts, where he received a Bachelor of Arts in History of Science. Following college, he worked as a research assistant at the Harvard Concord Field Station studying comparative animal energetics. He completed a Master's Degree in Biology at the University of Kansas in Lawrence, then studied medicine at the Kansas University Medical Center in Kansas City, where he was awarded his M.D. degree. He received a Masters Degree in Public Health (MPH) from the Harvard School of Public Health and completed his residency in preventive medicine at the Walter Reed Army Institute of Research. He attained Board Certification in Preventive Medicine in 1990. Dr. Jones began his career in the U.S. Army as a general medical officer at Fort Jackson, South Carolina. In 1980 he joined the staff of the U.S. Army Research Institute of Environmental Medicine (USARIEM) in Natick, Massachusetts, as a research medical officer. He left the Institute in 1984 to attain his MPH and residency training. In 1986 he returned to the USARIEM with a mission from the Surgeon General of the Army to establish an injury epidemiology program. In 1990 he was made Chief of the Occupational Medicine Division that was created to support the injury program he created. In 1991 he was appointed to represent the Department of Defense on the U.S. Department of Health and Human Services, CDC Injury Prevention and Control Advisory Committee. A DOD Injury Surveillance and Prevention Work Group that he chaired from 1992 to 1998 accomplished his vision of documenting for the first time the full impact of injuries on U.S. Armed Forces. The report and recommendations from the work group he led continue to influence injury prevention in the Armed Forces. In 1996, then Colonel Jones was selected as the Director of Epidemiology and Disease Surveillance at the U.S. Army Center for Health Promotion and Preventive Medicine (now the U.S. Army Public Health Command). Under his leadership the Army/USACHPPM became the Executive Agent for the Defense Medical Surveillance System, which his directorate built. He also directed field epidemiology investigations for the Army. Just as earlier in his career, he succeeded in documenting the effects of injuries on soldiers and military readiness, later he showed the value of integrated

injury and disease surveillance and control programs for the prevention of injuries. Dr. Jones retired from active duty in the U.S. Army as a colonel in July 1998. In August 1998, Dr. Jones became the manager of the Motor Vehicle Injury Prevention Program at the National Center for Injury Prevention and Control in Atlanta, Georgia. He also managed the Rehabilitation and Disability program at the NCIPC. After four years at the NCIPC, Dr. Jones returned to the USACHPPM in April 2002 to manage the newly created Injury Prevention Program. His work continues as the manager of the Injury prevention Program at what became the Army Public Health Command in 2009. Over his career, he has written or contributed to more than 125 peer reviewed journal articles and book chapters.

Stavros Kavouras Ph.D., FACSM, FECSS

Dr. Stavros Kavouras is an Assistant Professor at the University of Arkansas. He is an expert in the area of hydration and its effects on both health and exercise performance. Dr. Kavouras' training includes: Post-doctorate in Human Physiology from Yale University, School of Medicine; Ph.D. in Human Exercise Physiology from the University of Connecticut, Human Performance Laboratory, and Master of Science in Exercise Physiology and Nutrition from University of Colorado at Colorado Springs. Dr. Kavouras is the author of more than 75 peer review articles and book chapters and he has given lectures in more than 20 countries around the world. He is a Fellow of the American College of Sports Medicine & the European College of Sports Science and elected member of the American Physiological Society.

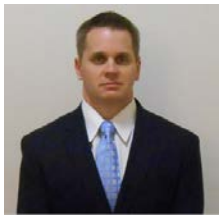
Matthew Kostek, Ph.D., FACSM

I was at the University of South Carolina in the department of Exercise Science and Physical Therapy Program for 4 years as an Assistant Professor. Last year I moved back home to Pittsburgh and am now an Assistant Professor in the Physical Therapy Department at Duquesne University. I am the director of the Laboratory of Muscle and Translational Therapeutics at Duquesne and have running projects with the departments of Pharmacy and Biology at Duquesne and Stem Cell Therapeutics at the University Of Pittsburgh School Of Medicine. My lab studies muscle injuries and muscle diseases, for the purpose of optimizing human therapies to improve muscle function, and ultimately quality of life. My lab is currently funded through several private foundations and industry partners. I have been heavily involved with ACSM since being a master's student. I served as the student rep for the Mid-Atlantic chapter of ACSM for three years on the Student Affairs Committee and then chaired that committee for three years. I am the current chair of the ACSM membership committee and have served on several task forces for ACSM.

Doug Lentz, MS, CSCS*D

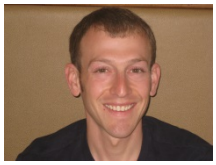
Douglas Lentz, MS, CSCS*D is the Director of Fitness and Wellness for Summithealth in Chambersburg, Pa. Since his graduation from Penn State University in 1981, Doug has trained professional, Olympic, collegiate, high school and adolescent athletes. Doug is also the NSCA Conferences and Special Programs Coordinator, a role that he has had since 2001. In this role, Mr. Lentz has had the fortune of working with many of the top speed and movement experts from all over the world. In 2008 and 2009, Doug traveled to China to lecture and instruct athletes, coaches, and coaching directors at the Shanghai Technical Sports Institute. Also in 2009, Doug was chosen to present at the NSCA European Conference which was held at the Netherlands Olympic Training Center in Arnham. Recently he finished the Speed Chapter in the 3rd edition of Human Kinetics, "Speed, Agility, and Quickness" book.

Peter J. Lisman, Ph.D., ATC



Peter J. Lisman, Ph.D., ATC, is an Assistant Professor in the Department of Kinesiology within the College of Health Professions at Towson University. Dr. Lisman previously served as a postdoctoral research associate for the Human Performance Laboratory at Uniformed Services University (USU) where he was involved with numerous research projects focused on optimizing the health and human performance of today's Warfighters. His present research interests are on the use of functional movement assessments in predicting risk of injury and developing injury prevention programs for musculoskeletal injury in both military and athletic populations. At Towson, Dr. Lisman teaches coursework in Biomechanics and Functional Anatomy. Dr. Lisman is a certified Athletic Trainer with clinical experience working in the high school, collegiate, and industrial settings. He received a B.S. in Athletic Training from King's College in Wilkes-Barre, PA, in 2001, a M.S. in Athletic Training from California University of Pennsylvania in 2002, and Ph.D. in Exercise Physiology from the University of Miami, FL, in 2009. His primary professional affiliations are with the American College of Sports Medicine and the National Athletic Trainers' Association.

Matthew Miller, Ph.D.

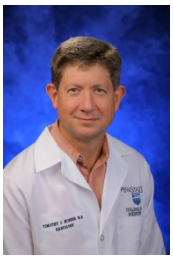


Matt Miller is an assistant professor and the Director of the Performance and Exercise Psychophysiology Laboratory in the School of Kinesiology at Auburn University. He also holds a joint appointment in Auburn's Department of Psychology. He earned his Ph.D. in the Program in Neuroscience and Cognitive Science at the University of Maryland, College Park while conducting research in Maryland's Department of Kinesiology, where he was mentored by Dr. Brad Hatfield. Matt's current research foci include: measuring cognitive workload, the effects of team environments on the brain, the neural correlates of 'choking under pressure,' the relationship between the psychological construct 'mindfulness' and motor performance, nonconscious and conscious priming of health behavior, and the effects of physical activity on neurocognitive function.

Robert Monaco, MD, MPH

Robert Monaco, is the director of Sports Medicine at Rutgers University Athletics Department. He is a Clinical Assistant Professor of Family Medicine and Fellowship Director of the Primary Care Sports Medicine Fellowship at Rutgers-Robert Wood Johnson Medical School Department of Family Medicine. He received his MD from the University of Medicine and Dentistry of New Jersey (UMDNJ)/NJ Medical School; completed his Residency in Family Medicine at the Robert Wood Johnson University Hospital and St. Peters Medical Center, completed a Masters in Public Health (M.P.H.) at the University of Medicine and Dentistry of New Jersey and Rutgers University, and completed a Fellowship in Primary Care Sports Medicine at the Hospital for Special Surgery and Robert Wood Johnson Medical School Department of Family Medicine. He is a member of the American Medical Society for Sports Medicine (AMSSM), American Institute of Ultrasound Medicine (AIUM), the Dept. of Alcohol Science at Rutgers University, the American College of Sports Medicine (ACSM), American Team Physicians, and the American Academy of Family Physicians, (AAFP). Dr. Monaco has published and presented Sports Medicine related research and was recently awarded a grant to study concussion in sports.

Timothy J. Mosher, MD



Timothy Mosher is a Distinguished Professor of Radiology and Orthopedics, Vice Chair of Radiology Research, and Chief of Musculoskeletal Radiology and MRI in the Department of Radiology at the Penn State University College of Medicine at the Milton S. Hershey Medical Center. Dr. Mosher received his MD from the Penn State University College of Medicine, completed a Post-Doctoral Research Fellowship at the Center for NMR Research in the Department of Radiology at the Pennsylvania State University College of Medicine, completed a Residency in Diagnostic Radiology at the Pennsylvania State University College of Medicine, and a Fellowship in Clinical Magnetic Resonance Imaging at the Johns Hopkins University. Dr. Mosher is a member of the Radiological Society of North America (RSNA), the International Society for Magnetic Resonance in Medicine (ISMRM), the American Roentgen Ray Society (ARRS), the Osteoarthritis Research Society International (OARSI), the Society of Skeletal Radiology (SSR), and the American College of Radiology (ACR). Dr. Mosher's research has been funded by NIH and various foundations; he has published and presented extensively in the Sports Medicine field.

Bob Murray, Ph.D., FACSM

Bob Murray, PhD, FACSM is managing principal of Sports Science Insights, LLC, a consulting group that assists companies and organizations in need of targeted expertise in exercise science and sports nutrition. SSI's clients range from start-up enterprises to Fortune100 companies. Prior to starting SSI, Dr. Murray was the co-founder and director of the Gatorade Sports Science Institute from 1985 to 2008. Dr. Murray is an exercise scientist and has served on the faculties of Boise State University (1980-1985; Associate Professor), Ohio State University (1979-1980; Lecturer), and Oswego State University (1974-1977; Assistant Professor and Men's Swimming &Diving Coach). Bob received his PhD in exercise physiology from Ohio State University and is a Fellow of the American College of Sports Medicine and an honorary member of the Academy of Nutrition and Dietetics. Dr. Murray has given hundreds of invited lecturers on exercise science and sports nutrition at professional meetings around the world and has authored numerous scientific articles in peer-reviewed journals. Bob is co-author of the text, *Sports Drinks: Basic Science & Practical Aspects*, and has written many textbook chapters, two recent examples being "Fluid, Electrolytes, and Exercise" in *Sports Nutrition: A Practice Manual for Professionals* (Academy of Nutrition and Dietetics, 2012) and "Exercise Physiology" in the *IOC Encyclopedia of Sports Medicine – Sports Nutrition* (to be published in 2013 by Blackwell Press). Dr. Murray's research on the hydration needs of athletes and the physiological and performance responses to fluid, carbohydrate, and electrolyte ingestion has contributed to the broader understanding of the importance of being well hydrated during exercise and of the role that carbohydrates play in helping athletes and non-athletes alike get the most out of their bodies during physical activity.

Bradley Nindl, Ph.D., FACSM

Dr. Bradley Nindl is currently the Scientific Advisor at the Army Institute of Public Health for the Army Public Health Command. Dr. Nindl previously served as a research physiologist with responsibility as the Performance Physiology Team Leader in the Military Performance Division at The United States Army Research Institute of Environmental Medicine (USARIEM) in Natick, MA and as Task Area Manager for Physiological Mechanisms of Musculoskeletal Injuries for The United States Army Medical Research and Material Command (MRMC) in Fort Detrick, MD. Dr. Nindl graduated from Phillips Exeter Academy in Exeter, New Hampshire in 1985, received a B.S. in biology from Clarkson University in Potsdam, NY in 1989, a M.S. in physiology of exercise from Springfield College in Springfield, MA in 1993, a Ph.D. in integrative physiology with a focus in endocrine physiology from The Pennsylvania State University in State College, PA in 1999, and is a resident graduate of the Army War College in 2012. Dr. Nindl is a Fellow in the American College of Sports Medicine and holds adjunct professor positions at Springfield College, The University of Connecticut and the University of North Carolina-Greensboro and was an invited visiting professor at the Department of Biology of Physical Activity Neuromuscular Research Center at the University of Jyvaskyla, Finland where he participated in physiological studies in muscle damage and recovery with the Finnish Defense Forces in 2009. Dr. Nindl's primary professional affiliations are with the American Physiological Society, the American College of Sports Medicine and the National Strength and Conditioning Association. Dr. Nindl is an associate editor for *Medicine and Science in Sports and Exercise*, *Exercise and Sport Sciences Reviews* and the *Journal of Strength and Conditioning Research*. His line of research focused on the growth hormone/insulin-like growth factor-I (GH/IGF-I) system with a particular regard to exercise, military operational stress and soldier physical performance physiology. He has authored or co-authored more than 132 total peer-reviewed publications, book chapters, government technical reports, proceedings, and short communications resulting in over 2204 citations and an h-index of 26. Among Dr. Nindl's prominent honors and awards are 1997 Mid-Atlantic ACSM President's outstanding doctoral student award, 2002 ACSM Young Investigator Award, 2002 Biological Remodeling and Plasticity NIH Young Investigator travel Award, 2006 ACSM exchange lecture for the American Orthopedic Society for Sports Medicine, invited keynote speaker at the 2008 Singapore Army Fitness Symposium, 2008 invited keynote speaker at the Nordic Symposium of Military Sciences, invited speaker at the 2009 Gordon Research Conference on IGF-I in Physiology and Disease, and an invited keynote speaker at USARIEM's Commemorative Anniversary Symposium in 2011. Dr. Nindl is also a LTC in the USAR and currently serves as the 3rd BDE, 104th DIV S-3. His previous military assignments include DIMA Deputy Commander and executive officer at USARIEM, battalion training and operations officer (S-3), 1/304th Regiment, 98th Division in Londonderry, NH, military transition team (MiTT) executive officer (XO) in Mosul, Iraq, company commander, 1/304th, 98th Division, research biochemist in the USARIEM Military Performance Division, medical platoon leader in the Pennsylvania National Guard and as a biological sciences NCOIC. His military awards and badges include the Bronze Star Medal, the Army Meritorious Service Medal, the Army Commendation Medal, the Army Achievement Medal, the Combat Action Badge, and the Air Assault Badge.

Hyuk Oh, Ph.D.

Hyuk Oh is a Ph.D. candidate (ABD) in the Neuroscience and Cognitive Science Program at the University of Maryland (UMD), College Park, MD, USA. He received a M.S. in the Computer Science from the University of Southern California (USC), Los Angeles, CA, USA in 2006, and a B.S. in the Computer Science from the Seoul National University, Seoul, ROK in 1999. His research interests include computational models of human sensorimotor system with emphasis on adaptive learning mechanisms, and neural dynamics in psychophysiological processes using various non-invasive brain biomarkers and physiological sensors. He served an active duty as a senior consultant and senior engineer in a defense industry contractor from 1999 to 2004. He was a research assistant in the USC Brain Project (2006), in the Dynamic and Advanced Systems Division at the USC/ISI East (2008), Voice, Speech, and Language Branch at the National Institute on Deafness and Other Communication Disorders (2008-2010), in the Laboratory of Cognition and Emotion at the UMD (2011-2012), in the Neural Engineering and Smart Prosthetics Research Laboratory at the UMD (2006-2011), and in the Cognitive Motor Neuroscience Laboratory at the UMD (2006-current). He has often served as a reviewer for Computers in Biology and Medicine, IEEE Engineering in Medicine and Biology Society, International Graphonomics Society, etc.

Rob Palumbo, MD

Dr. Palumbo is an accomplished, nationally recognized Sports Medicine physician and surgeon, specializing in sports-related injuries of the knee, shoulder, ankle, elbow, and hip. Dr. Palumbo is a second-opinion physician for the NFL Players' Association, as well as the Head Team Physician for the Lehigh Valley IronPigs baseball team, a Triple-A affiliate of the Philadelphia Phillies. In his capacity as Head Team Physician, he attends Spring Training in Florida, where he treats major-league and minor-league baseball players. Dr. Palumbo is also one of the original participating physicians of the Gridiron Greats Assistance Fund (GGAF), which is a non-profit, 501(c) (3) corporation established to provide financial assistance and coordinate social services to dire-need retired NFL players. He is currently one of the key principals involved with the GGAF, and has helped the organization form a partnership with OAA. Additionally, Dr. Palumbo is President and Founder of OAA's Sports Medicine Institute, a non-profit organization which is dedicated to providing medical education to sports medicine professionals. Before joining OAA, Dr. Palumbo practiced for eight years in Orlando, Florida, where he had the unique experience of treating all levels of athletes and performing artists. There he served as orthopaedic consultant for the world famous Cirque de Soleil, The Orlando Ballet, Sea World entertainers, and Disney World acrobats and dancers, as well as team physician for the U.S. Women's National Soccer team, which he continues today. Dr. Palumbo is a firm believer in the value of lifelong education. In March 2008, he received his board certification and was awarded the 2007 Sub-Specialty Certification in Sports Medicine. He has served on the Sports Medicine Evaluation Committee of the American Academy of Orthopaedic Surgeons, and is a reviewer for the American Journal of Sports Medicine. As part of Dr. Palumbo's ongoing desire to teach, he participates in training residents in orthopaedic medicine and family practice. Finally, Dr. Palumbo is a frequently sought-after speaker at national meetings, and has published numerous articles in professional journals. In his spare time, Dr. Palumbo hosts radio and TV shows, including "The Sports Doc", which airs Saturday mornings from 9:00 am - 10:00 pm on the local ESPN affiliate, 1230 - 1320 AM.

Adam Persky, Ph.D., FACSM

Adam Persky received his BS in biology from Purdue University and a MS in exercise science from the University of Massachusetts Amherst. He completed his PhD in pharmaceutical sciences at the University of Florida and did an industry-sponsored postdoctoral fellowship in pharmacokinetics/pharmacodynamics at the University of North Carolina at Chapel Hill and GlaxoSmithKline. In 2004 Persky joined the faculty at the UNC Eshelman School of Pharmacy where he is currently a clinical associate professor in the Division of Pharmacotherapy and Experimental Therapeutics. Within the pharmacy school, Persky teaches physiology and pharmacokinetics and has received several of the School's teaching awards, including Best Overall Instructor. Persky was named an Atlantic Coast Conference Teaching Scholar during the program's inaugural year (2009–2010). He has published articles on teaching and learning and is on the editorial board for the American Journal of Pharmaceutical Education and College Teaching. He has given nearly forty workshops across the country, including presentations at eight universities and four national professional organizations.

Nick Ratamess, Ph.D., CSCS*D, FNSCA

Dr. Ratamess earned a Ph.D. in Kinesiology from the University of Connecticut and is currently an Associate Professor in the Department of Health and Exercise Science at The College of New Jersey. His major research interest is examining physiological responses and adaptations to resistance training and sports supplementation. Dr. Ratamess has authored and co-authored more than 140 scientific investigations, educational articles, review papers, chapters, and books and most recently authored *The ACSM's Foundations for Strength Training and Conditioning*. He also co-authored three position stands from the ACSM and National Strength and Conditioning Association (NSCA) regarding Progression Models in Resistance Training and Anabolic Androgenic Steroids and Growth Hormone Use in Athletes. Dr. Ratamess is a Certified Strength and Conditioning Specialist with Distinction and a fellow of the NSCA.

Eric Rawson, Ph.D., FACSM, CSCS

Eric S. Rawson is a Professor in the Department of Exercise Science at Bloomsburg University of Pennsylvania. Dr. Rawson received his Ph.D. from the University of Massachusetts, Amherst where he studied under the direction of Dr. Priscilla Clarkson. Over the past decade and a half, Dr. Rawson's research has focused on the interactions between nutrition and skeletal muscle. In particular, Dr. Rawson has extensively studied the effects of the dietary supplement creatine on muscle function. Dr. Rawson has been an active member in the American College of Sports Medicine since 1996, and has served on the ACSM Annual Meeting Program Committee, as Chair of the ACSM National Chapter Nutrition Special Interest Group, on various task forces, and has frequently moderated sessions at ACSM regional and National conferences. Dr. Rawson is currently an Associate Editor for *Applied Physiology, Nutrition, and Metabolism*, *Amino Acids*, the *Journal of Strength and Conditioning Research*, and is on the Editorial board for the *ACSM's Health & Fitness Journal*. Dr. Rawson has delivered more than 100 professional presentations, is co-author of the 10th Edition of the text Nutrition for Health Fitness and Sport, has authored/co-authored numerous articles and book chapters, and his research has been funded by the National Institutes of Health National Center for Complementary and Alternative Medicine, Bloomsburg University, and various foundations. Dr. Rawson is a Fellow of the American College of Sports Medicine (FACSM) and is the current President of the Mid-Atlantic ACSM regional chapter.

Connie J. Rogers, Ph.D., MPH

Dr. Connie Rogers is currently an Assistant Professor in the Department of Nutritional Sciences at Penn State University, and is the recipient of the Broadhurst Career Development Professorship in the College of Health and Human Development. Her Ph.D. training is in Cell Biology & Physiology from the University of Pittsburgh where she was trained as a tumor immunologist. She did a postdoctoral fellowship in the Department of Molecular Virology, Immunology & Medical Genetics, at Ohio State University, College of Medicine & Public Health. She did an additional fellowship in the Cancer Prevention Fellowship Program at the National Cancer Institute, during which time she obtained a Master of Public Health Degree, focusing in Epidemiology, from the University of Pittsburgh. Following her fellowship in the Cancer Prevention Program, she worked as a Senior Research Fellow in the Laboratory of Tumor Immunology & Biology at NCI during which time she had the opportunity to participate in both bench and population-based research examining the role of changes in energy balance in cancer prevention and therapy. Her laboratory at Penn State examines the role of physical activity and obesity on metabolic, inflammatory, and immune mediators, and the downstream consequences of physical activity in gastrointestinal and breast cancer prevention.

Michael J. Ross, MD

Dr. Ross is a board certified, non-surgical sports medicine physician. He sees patients at Rothman Institute's Media, King of Prussia, and Northeast Philadelphia offices and at Pioneer Urgent Care Center in West Chester, PA. Dr. Ross is also the Director of Rothman's Performance Lab at Velocity Sports Performance in Cherry Hill, NJ.

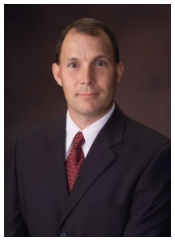
Melissa W. Roti, Ph.D., FACSM, ACSM-HFS, ACSM-GEI

Dr. Melissa Roti is currently an Associate Professor of Exercise Science in the department of Movement Science at Westfield State University. Dr. Roti received her BS and PhD in Kinesiology at the University of Connecticut and her MS in Exercise Science at University of Massachusetts, Amherst. She was named a fellow of the American College of Sports Medicine in 2013. Her research focus is on caffeine and hydration effects on physical and cognitive performance in both athletes and older adults. Dr. Roti has also served in multiple capacities on the executive committee of the New England chapter of ACSM.

Bartlett Anne Healy Russell, Ph.D.

Bart Russell is a member of the Kinesiology department and a Ph.D. candidate in the Neuroscience and Cognitive Science Program (NACS) at the University of Maryland, College Park. Working in both laboratory and field environments, her research interests include mechanisms of elite human performance, individual differences in human performance, methods for bolstering and sustaining performance, and identifying ecologically valid metrics that are predictive of stress resilience. In addition to her doctoral work she has a Masters degree in Peace and Security Studies from Georgetown University and almost ten years of contract experience conducting analytic studies on biotechnology and security for various offices within the U.S. Department of Defense.

Timothy C. Sell, Ph.D., PT



Timothy C. Sell, Ph.D., P.T., is an Associate Professor in the Department of Sports Medicine and Nutrition within the School of Health and Rehabilitation Services. He is the Director of Graduate Studies in Sports Medicine and the Associate Director of the University of Pittsburgh's Neuromuscular Research Laboratory (NMRL). Dr. Sell research interests and current ongoing projects include several injury prevention and performance optimization research studies with the Department of Defense, several studies aimed at female anterior cruciate ligament injury prevention, knee biomechanics during athletic tasks, pathomechanics, integration of accelerometers into injury prevention research, and rotator cuff injury prevention. He is in charge of instruction for the NMRL's graduate course in Laboratory Techniques in Sports Medicine and Nutrition (I and II) and Research Seminar in Sports Medicine. In addition, Dr. Sell serves as an academic and research advisor to graduate students in the department. He earned a bachelor's degree in physical therapy in 1993 and a master's degree in human movement science in 2001, both at the University of North Carolina at Chapel Hill.

Christopher Doubet Still, DO, FACN, FACP

Dr. Still has been studying developments in nutrition, metabolic syndrome, and obesity for over two decades. His work has included research into genetic markers for obesity, NASH and diabetes; the metabolic differences among obese, formerly obese, and normal-weight men; surgical options for severely obese persons, and leptin-level determination among elderly obese women. He serves as principal investigator on a rural elderly nutrition and aging study of some 22,000 individuals. He is the author of the book chapter on obesity in Conn's Current Therapy, 1999, 2007 and 2008 editions and the co-author of several other textbook chapters. He has also published in several journals, including Obesity, PNAS, Annals of Surgery, Current Gastroenterology Reports, Journal of Clinical Gastroenterology, Surgery for Obesity and Related Disorders, among others. He has lectured on such subjects as vitamin and mineral metabolism; diet, nutrition, and exercise; obesity through the life cycle; and peri-operative medical and nutritional management of the bariatric surgery patient. Dr. Still is certified by the American Board of Internal Medicine, American Board of Obesity Medicine, the American Board of Physician Nutrition Specialists, and the American College of Nutrition. He belongs to several professional societies, including The Obesity Society, American Society of Metabolic and Bariatric Surgery and the American Society of Parenteral and Enteral Nutrition. He is a fellow of the American College of Physicians and the American College of Nutrition. He serves on the board of directors for The Obesity Action Coalition and the current President of the American Board of Physician Nutrition Specialists as well as others editorial boards. He and his program have been featured on CNN, National Public Radio, ABC News, The Discovery Health Channel and several local affiliates. He most recently was awarded the 2011 ASMBS' Integrated Health Circle of Excellence Award. Dr. Still received Masters of Science degree from Columbia University Institute of Human Nutrition and his osteopathic medical degree from The Philadelphia College of Osteopathic Medicine. He completed his internship at the University of Buffalo at Sisters of Charity Hospital, followed by a residency in internal medicine and a subsequent fellowship in clinical nutrition and obesity treatment at Geisinger Medical Center in Danville, PA.

Program Schedule

Program schedule is presented by room and day (Friday/Saturday).

Friday

Ballroom A	Friday, November 1, 2013	
		Chair/Moderator
9:00-10:00 AM	Maximizing Athletic Performance during Intense Exercise in the Heat **Speaker: Doug Casa, Ph.D., ATC, FACSM, FNATA**	**Wendy Cheesman, MS,PT, ATC**
10:00- 11:00 AM	Physiological Changes of Dehydration-Why Athletes do not Drink Enough **Speaker: Stavros Kavouras, Ph.D., FACSM, FECSS**	
11:00-12:00 PM	Exercise, Obesity and Cancer Prevention **Speaker: Connie Rogers, Ph.D., MPH**	**Brock Jensen, Ph.D.**
Lunch Break 12:00 to 1:00 PM		
1:00 PM--4:00 PM	**Resistance Training Across the Lifespan**	**Nick Ratamess, Ph.D.**
1:00-1:35 PM	Resistance Training for Healthy Adults: ACSM Recommendations **Speaker: Nick Ratamess, Ph.D., CSCS*D, FNSCA**	
1:35-2:10 PM	Resistance Training for Older Adults **Speaker: Jill Bush-Wallace, Ph.D., CSCS*D, FACSM**	
2:10-2:45 PM	Youth Resistance Training: Beyond Sets and Reps **Speaker: Avery Faigenbaum, Ed.D., FACSM**	
2:45-3:00 PM	Questions/Discussion	
3:00-4:00 PM	Dietary Salt and Vascular Function. Does BP Matter? **Speaker: William B. Farquhar, Ph.D., FACSM**	**Evan Matthews, MS**
Dinner 5:00 to 7:15 PM		
7:15-8:15 PM	**Keynote: Avery Faigenbaum, Ed.D., FACSM** Exercise Deficit Disorder in Youth: Play Now or Pay Later	**Eric S. Rawson, Ph.D.**
8:15-11:00 PM	**(College bowl sponsored by New York Chiropractic College)** EXPO, College Bowl Finals, and the Fitness Challenge will begin immediately following the Keynote Address with the College Bowl starting around 8:30 PM and the Fitness Challenge at approximately 9:15. A Faculty and Professional Member Social will be held in the Pennsylvania room.	

Friday

Ballroom B	Friday, November 1, 2013	
		Chair/Moderator
9:00-11:00 AM	Plastic Fantastic: Muscle Injury, Repair and Adaptation **Speaker: Monica Hubal, Ph.D., FACSM** **Speaker: Matt Kostek, Ph.D., FACSM**	**Monica Hubal, Ph.D.**
11:00-12:00 PM	No Guts, No Glory-GI Function during Exercise **Speaker: Bob Murray, Ph.D., FACSM**	**Larry Kenney, Ph.D.**
Lunch Break 12:00 to 1:00 PM		
1:00-2:00 PM	Weighing in on Dietary Fats: Advising Clients on Best Types and How Much **Speaker: Kristine Clark, Ph.D., RD, FACSM**	**Eric S. Rawson, Ph.D.**
2:00-3:00 PM	Advances in the Understanding and Treatment of Obesity **Speaker: Christopher Still, D.O., FACN, FACP**	**Carena Winters, Ph.D.**
3:00-4:00 PM	Energy Drinks: Benefits, Behaviors and Bull **Speaker: Melissa Roti, Ph.D., FACSM, ACSM-HFS, ACSM-GEI**	**Adam Persky, Ph.D.**
Dinner 5:00 to 7:15 PM		
7:15-8:15 PM	**Keynote: Avery Faigenbaum, Ed.D., FACSM** Exercise Deficit Disorder in Youth: Play Now or Pay Later	**Eric S. Rawson, Ph.D.**
8:15-11:00 PM	**(College bowl sponsored by New York Chiropractic College)** EXPO, College Bowl Finals, and the Fitness Challenge will begin immediately following the Keynote Address with the College Bowl starting around 8:30 PM and the Fitness Challenge at approximately 9:15. A Professional Social will be held in the Pennsylvania room.	

Friday

Ballroom C,D,E	Friday, November 1, 2013	
		Chair/Moderator
10:00-11:00 AM	Training the next Generation of Exercise Scientists: Strategies to Improve Student Learning **Speaker: Adam Persky, Ph.D., FACSM**	**Melissa Roti, Ph.D.**
11:00-12:00 PM	Beginners Guide to the Omics Universe **Speaker: Matthew Barberio, Ph.D.**	**Monica Hubal, Ph.D.**
Lunch Break 12:00 to 1:00 PM		
1:00 to 3:00 PM	**Poster Session IA**	**Chair/Moderator**
	Fitness Assessment and Training	**Katelyn Allison, Ph.D.**
P-1 1:00-1:10	**Metabolic Demand and Nutrient Resource in Rowing Ergometer and Treadmill Exercise** Burns, E., Burns, D. DeSales University, Center Valley, PA	
P-2 1:10-1:20	**Normative Data for Overhead Back and Between-the-Legs Front Throws** [1]Todora, J., [1]Meyer, B. [1]Shippensburg University, Shippensburg, PA	
P-3 1:20-1:30	**Cardiovascular and Metabolic Responses to Combined Upper and Lower Body Exercise.** Venters, E., Mason, S., Peterson, M., Timmons, K., Hoover, K., Crehan, L., McCole, S.D., and McKenzie, J.A. Department of Exercise Science & Physical Education, McDaniel College, Westminster, MD	
P-4 1:30-1:40	**Cardiovascular and Metabolic Responses to Treadmill and Elliptical Maximal Exercise.** Timmons, K., Mason, S., Peterson, M., Venters, E., Hoover, K., Crehan, L., McCole, S.D., and McKenzie, J.A. Department of Exercise Science & Physical Education, McDaniel College, Westminster, MD	
P-5 1:40-1:50	**The Influence of Sport Goggles on Visual Target Detection in Elite Athletes** [1]Kauffman, D., [2]Clark, J., [1]Smith, J.C. [1]University of Maryland, College Park, MD, [2]University of Cincinnati, Cincinnati, OH	

P-6 **1:50-2:00**	**The Acute Effects of Myofascial Release and Static Stretching on Flexibility** Kaminski, Z., Kudrna, R. DeSales University, Center Valley, PA	
P-7 **2:00-2:10**	**Poloxamer 188 does not Alter Performance Improvements Associated with Equivalent Exercise Regimens in Mice**. [1]Krajek, A., [2]Weisleder, N., [1]Orange, M. [1]Gettysburg College, Gettysburg PA, [2]The Ohio State University, Columbus, Ohio	
P-8 **2:10–2:20**	**Predictability of Muscle Fiber Characteristics using the Biodex System 3** Nannapaneni, N., Schmidt, G. (FACSM), Cox, M., Boutote, R., William Paterson University, Wayne, NJ.	
P-9 **2:20–2:30**	**Effects of Kickboxing Exercise on Muscular Fitness, Balance and Quality of Life in Older Individuals** [1]Tokarz, M., [1]Fisher, M. [1]Montclair State University, Montclair, NJ	
P-10 **2:30–2:40**	**Applicability of Body Composition Assessments for Children** Mastrangelo, M., Dean, R., Desmond, B., Pitcher, S., Rencher, A., Yau, A. The Richard Stockton College of New Jersey, Galloway, NJ	
P-11 **2:40–2:50**	**Quality PE Classes versus After-School Physical Activity: Which Contributes to Adolescents' Aerobic Capacity More?** Liu, W., Zillifro, T., Nichols, R. Slippery Rock University, Slippery Rock, PA	
P-12 **2:50–3:00**	**The Correlation of Repeat Sprint Measures to Predicted VO2 in Recreationally Active College Age Males** [1] Miltenberger, M., [2] Zipp, G., [2] Lombardi, V., [2] Parasher, R., [1] Davis, S. [1] East Stroudsburg University, East Stroudsburg, PA. [2] Seton Hall University, South Orange, NJ.	

3:15 to 4:45 PM	Poster Session IB	Chair/Moderator
	Fitness Assessment and Training, cont.	**Sara Campbell, Ph.D.**
P-13 **3:15-3:25**	**Effect of Front-Panel Support during Inclined Treadmill Walking** Hoover, K., Peterson, M., Timmons, K., Mason, S., Venters, E., Crehan, L., McKenzie, J.A., and McCole, S.D. Department of Exercise Science & Physical Education, McDaniel College, Westminster, MD.	
P-14 **3:25-3:35**	**Vigorous and High Intensity Training with an Anti-Gravity Treadmill** [1]Muñoz, E., [1]Figueroa, M., [1]Manning, J., [1]William Paterson University, Wayne, NJ.	
P-15 **3:35-3:45**	**Ventilatory Threshold Responses at Different Percentages of Body Weight on the Alter-G® Anti-Gravity Treadmill: A Pilot Study** [1]Santillo, N., [1]Figueroa, M., [1]Lasala, T., [1]Manning, J. [1]William Paterson University, Wayne NJ	
P-16 **3:45-3:55**	**Correlations between Functional Balance and Postural Sway in a Geriatric Population: A Pilot Study** [1]Jordan, R., [1]Hertz, J., [1]Kieffer, H.S., [2]Sollenberger, B. [1]Messiah College, Grantham, PA and [2]CPRS Physical Therapy, Elizabethtown, PA.	
P-17 **3:55-4:05**	**Perceived Credibility of Weight Management Apps/Websites Among Female College Students** [1]Clark, A., [1]Kretsch, J., [1]Haros, P., [1]Gelfen, G., [2]Albright, C., [1]Jerome, G.J. [1]Towson University, Towson, MD, [2]Immaculata University, Immaculata, PA	
P-18 **4:05-4:15**	**KINECTing Generations to Physical Activity** Duszak, E., Sullivan, J., Orsega-Smith, E. University of Delaware, Newark, DE	
P-19 **4:15-4:25**	**Challenging Balance in Older Adults Using the Wii Fit Balance Program** Farrell, A., Orsega-Smith, E., Ferguson, J., Plante, K. University of Delaware, Newark, DE	
P-20	***Biomechanics*** **Landing Differences in Ground Reaction Force and Kinematics between Collegiate Female**	

4:25-4:35	**Basketball Players and Dancers** Bravo-Pontrelli, E., Rubin, K., Stearne, D. West Chester University, West Chester, PA	
P-21 **4:35-4:45**	**Is Postural Stability Compromised in Women with Urinary Incontinence?** Rondini, S., McCrory, J. West Virginia University, Morgantown, WVRondini, S., McCrory, J. West Virginia University, Morgantown, WV	
Dinner 5:00 to 7:15 PM		
7:15 to 8:15 PM	**Keynote: Avery Faigenbaum, Ed.D., FACSM** Exercise Deficit Disorder in Youth: Play Now or Pay Later	**Eric S. Rawson, Ph.D.**
8:15-11:00 PM	**(College bowl sponsored by New York Chiropractic College)** EXPO, College Bowl Finals, and the Fitness Challenge will begin immediately following the Keynote Address with the College Bowl starting around 8:30 PM and the Fitness Challenge at approximately 9:15. A Faculty & Professional Member Social will be held in the Pennsylvania room.	

Friday

Pennsylvania	**Friday, November 1, 2013**	
8:30-12:00 PM	**Clinical/Medical Track**	**Chair/Moderator**
8:30-8:35 AM	Introduction	**David Ross, MD**
8:35-9:10 AM	Surgical Management of FAI and Labral Tears: When to Operate **Speaker: Rob Palumbo, M.D.**	
9:10-9:40 AM	MRI of the Hip: Symptomatic Impingement or Incidental Finding? **Speaker: Tim Mosher, M.D.**	
9:40-10:10 AM	Ultrasound of the Hip: Diagnostic and Interventional Aid **Speaker: Rob Monaco, M.D., MPH**	
10:45-11:15 AM	Performance Enhancement Drugs in Cycling: The Drugs and their History **Speaker: Michael Ross, M.D.**	
11:15-11:45 AM	Dietary Supplements and the Sports Medicine Professional **Speaker: Eric S. Rawson, Ph.D., FACSM, CSCS**	
11:45-12:00 PM	Questions	

Lunch Break 12:00 to 1:00 PM		
1:00 - 3:00 PM	**Clinical Case Studies**	**Chair/Moderator**
1:00 – 1:05 PM	Introduction	
1:05 – 1:15 PM	**Elbow Injury – High School Football** Chamberlain, C., Vanic, K, Rozea, G. East Stroudsburg University, PA (Sponsor: Kevin N. Waninger, MD, FACSM)	**Bradley Sandella, DO**
1:20 – 1:30 PM	**Shortness of Breath in a Runner** Adrian Western, Cayuga Medical Center, Ithaca NY; Andrew Getzin, Cayuga Medical Center, Ithaca, NY	
1:35 – 1:45 PM	**Foot Pain – College Football Player** Tew, B., Vanic, K., Rozea, G., Wheeler-Dietrich, W. East Stroudsburg University, PA (Sponsor: Kevin N. Waninger, MD, FACSM)	
1:50 – 2:00 PM	**Recreational Runner with Right Shoulder Pain and Cyanosis** Mary Tierney, MD; Parminder Nizran, MD; George Pujalte, MD; Penn State Milton S. Hershey Medical Center	
2:05 – 2:15 PM	**Eye Pain – College Rugby Player** Slaughter, M., Vanic, K., Rozea, G. East Stroudsburg University, PA (Sponsor: Kevin N. Waninger, MD, FACSM)	
2:20 – 2:30 PM	**Division 1 Freshman Basketball Player with Palpitations**. R. Davis and M. McElroy, Geisinger Medical Center, Danville, PA	
2:35 – 2:45 PM	**Knee Pain – Adolescent** Kauffman, A., Rozea, G., Vanic, K., Hauth, J. East Stroudsburg University, PA (Sponsor: Kevin N. Waninger, MD, FACSM)	
2:50 – 3:00 PM	**Knee Pain – High School Wrestler** Ferrarini, N., Rozea, G., Vanic, K., Hauth, J. East Stroudsburg University, PA (Sponsor: Kevin N. Waninger, MD, FACSM)	
Break 3:00 to 3:15 PM		

Sheraton Lobby	Clinical Case Poster Session	Chair/Moderator
3:00-4:00 PM	**Elbow Injury – Crossit (Olympic Lifting)** Christian Basque, MD, David Ross, MD, Geisinger Wyoming Valley – Sports Medicine Fellowship	Gene Hong, MD
	Sport: Field Hockey **Progressive Numbness of Distal Lower & Upper Extremities** Jason J. Brucker MD, Christiana Care Sports Medicine Center, Wilmington, DE	
	Acute Knee pain- College Lacrosse Player Authors: Christine S. Persaud MD, Mark Mirabelli MD, University of Rochester Medical Center, Rochester, NY	
	Unique Muscle Strain Masquerading as an Intraarticular Ligamentous Knee Injury in a Female, Collegiate Basketball Player Edward Rosero, Christiana Care Health System Department of Sports Medicine.	
	Hip Pain – High School Track Taylor, M., Rozea, G., Vanic, K. East Stroudsburg University, PA & Zaparzynski, L. Mansfield University, PA	
	Clinical Case Abstract Shoulder Injury — Rugby, Tennis Kenneth Vitale MD, Manhattan Wellness Medical Care (MWMC), New York, NY	
	Shoulder Injury – certified nursing assistant Romulo Vasquez, United Health Service Hospitals Sports Medicine, Binghamton, NY romulo_vasquez@uhs.org (Sponsors: Luis Rodriguez, MD; Andrew Getzin, MD)	
	Bilateral Triceps Atrophy in a Personal Trainer M. Nameer Sidiquee, M.D. Geisinger Orthopaedics and Sports Medicine, Wilkes-Barre, PA	
Pennsylvania	**3:15- 5:00**	
	(sponsored by the National Strength & Conditioning Association-NSCA)	**Chair/Moderator**
3:15- 5:00 PM	Strength and Conditioning Workshop- Hands on Demonstration: Training for Optimal Performance **Speaker: Eric Childs, ME.d., CSCS, CPT** **Speaker: Doug Lentz, MS, CSCS*D**	**Michael Holmstrup, Ph.D.**
Dinner 5:00 to 7:15 PM		

Friday

Ash/Birch	Friday, November 1, 2013	
		Chair/Moderator
10:30 to 12:00 PM	**CLOSED SESSION: College Bowl Prelims**	**Andrew Venezia, MS**
Lunch Break 12:00 to 1:00 PM		
1:00-2:15 PM	**Free Communications I: MS Award Nominees (FC-I)**	**Chair/Moderator**
1:00-1:15 PM FC-I-1	**Vascular Function in Exercise- Trained Women** Augustine, J., Lefferts, W., Martin, E., Spartano, N., Heffernan, K. Syracuse University, Syracuse, NY	**Lacy Alexander, Ph.D.**
1:15-1:30 PM FC-I-2	**Association between Inflammation, Cardiorespiratory Fitness, Body Size, and Dietary Behaviors in Young Adults.** [1]Fleming JJ, [1]Fradkin AF, [1]Andreacci JL, [2]Miles MP, [1]Rawson ES. Bloomsburg University of Pennsylvania, Bloomsburg PA Montana State University, Bozeman MT	
1:30-1:45 PM FC-I-3	**Effect of Bisphenol A (BPA) on Skeletal Muscle Oxidative Stress.** [1]Receno, C., [1]Benson, M., [1]Liang, C., [1]Keslacy, S., [1]DeRuisseau, K. [1]Syracuse University, Syracuse, NY	
1:45-2:00 PM FC-I-4	**Effect of beta-adrenergic Blockade on Coronary Blood Flow during Isometric Exercise in Older Adults.** Ross A., Gao Z., Heffernan M., Leuenberger U., Sinoway L., Muller M. Penn State Hershey Heart and Vascular Institute, Pennsylvania State University College of Medicine, Hershey, PA	
2:00-2:15 PM FC-I-5	**Effects of Training Status on Circulating Angiogenic Cell Paracrine Activity in Young Men and Women** [1]Sapp, R., [1]Landers-Ramos, R., [2]Jenkins, N., [1]Roth, A., [1]Cancre, L., [1]Spangenburg, E., [1]Hagberg, J. [1]University of Maryland, College Park, MD, [2]University of Missouri, Columbia MO	

2:30 to 3:45 PM	Free Communications IV: PhD Award Nominees (FC-IV)	Chair/Moderator
2:30-2:45 PM FC-IV-1	**Effects of Manganese (Mn) Supplementation on Muscle Force Generation during Hypoxia.** [1]Benson, M., [1]Receno, C.,[2]Mohamed, Z., [2]DeRuisseau, L., [1]DeRuisseau, K. [1]Syracuse University, Syracuse, NY, [2] Le Moyne College, Syracuse, NY	**Matthew Muller, Ph.D.**
2:45-3:00 PM FC-IV-2	**Dietary Sodium-induced Changes in Plasma Osmolality are Greater in Those with Salt Sensitive Blood Pressure.** [1]Brian M.S., [1]Matthews, E.L., [1]Ramick, M.G., [1]Lennon-Edwards S.L., [1]Edwards, D.G., [1]Wenner, M.M., [1]Farquhar, W.B., University of Delaware, Newark, Delaware	
3:00-3:15 PM FC-IV-3	**Intermittent Parathyroid Hormone Administration Attenuates Age-Related Endothelial Dysfunction.** Guers J.J., Prisby R. D., Edwards D.G. and Lennon-Edwards, S.L. University of Delaware, Newark, DE	
3:15-3:30 PM FC-IV-4	**Voluntary Wheel Running Improves Cardiac Function in the 5/6 Ablation-Infarction Model of Chronic Kidney Disease** Kuczmarski, JM., Martens, CR., Kim, JH., Lennon-Edwards SL., Edwards DG. University of Delaware, Newark, DE	
3:30-3:45 PM FC-IV-5	**Endothelium-Dependent Dilation is Lower in Salt Resistant Males than Females on a High Sodium Diet** [1]Ramick, MG., [1]Lennon-Edwards, SL., [1]Matthews, EL., [1]Brian, MS., [1]Farquhar, WB., [1]Edwards, DG. [1]University of Delaware, Newark, Delaware	
	Break 3:45 to 4:00 PM	**Chair/Moderator**
4:00-5:00 PM FC-IV-6	**<u>Student Session: Meet the Experts</u>** **Joseph Hamill Ph.D., FACSM** **Bradley Nindl Ph.D., FACSM** **Katelyn Allison PhD, ACSM-HFS** **Gene Hong MD, CAQSM, FAAFP** **Avery Faigenbaum Ed.D., FACSM, FNSCA**	**Andrew Venezia, MS**
Dinner 5:00 to 7:15 PM		

Friday

Chestnut/Dogwood	Friday, November 2, 2012	
11:00 AM	**(Corporate Sponsor) Tekscan Equipment Demonstration: Pressure Mapping and Force Measurement**	
1:00 - 2:30 PM	**Free Communications Session II – Professional (FC-II)**	**Chair/Moderator**
	Metabolism and Nutrition	
1:00-1:15 PM FC-II-1	**Glycemic Control Following Nordic Ski Training** Braun, W.A. (FACSM), Shippensburg University, Shippensburg PA	**Betsy Keller, Ph.D.**
	Skeletal Muscle, Bone and Connective Tissue	
1:15-1:30 PM FC-II-2	**Do Changes In Predicted Isotonic 1RM and Isometric Peak Torque Demonstrate Cross Education?** [1,2]LoRusso, S, [1]Brownyard N, [1]Hay S, [1]Hiester R, [1]Pion J, [1]Schlanger S. [1]Department of Physical Therapy and [2]Exercise Physiology, Saint Francis University, Loretto PA	
	Psychology, Behavior and Neurobiology	
1:30-1:45 PM FC-II-3	**Validation of OMNI-Walk/Run RPE in overweight and obese adults** [1]Wisniewski, K., [2]Goss, F. (FACSM). [2]Rubinstein, E., [2]Davis, K., [2]Nagle, E. (FACSM), [2]Storti, K., [2]Jakicic, J. (FACSM). [1]Saint Francis University, Loretto, Pa, [2]University of Pittsburgh, Pittsburgh, Pa	
	Fitness Assessment and Training	
1:45-2:00 PM FC-II-4	**A Comparison of Objective and Subjective Markers of Exertion using the Wii and Xbox Kinect** Mishler, A., Lo Bue-Estes, C., Patrick, E., Tobin S. Mercyhurst University, Erie, PA	
	Cardiovascular, Renal and Respiratory Physiology	
2:00-2:15 PM FC-II-5	**Carotid blood pressure reactivity is associated with carotid intima-media thickness independent of central adiposity** [1]Spartano, N., [1]Augustine, J., [1]Lefferts, W., [1]Hughes, W., [1]Morse, B., [1]Martin, E., [1]Bill, K., [1]Gump B., [1]Heffernan K. [1]Syracuse University, Syracuse, NY	

2:15-2:30 PM FC-II-6	**Ketorolac Attenuates the Blood Pressure Response to Plantar Flexion Exercise in Peripheral Arterial Disease Patients** Muller, M., Drew R., Heffernan, M., Blaha C., Sinoway, L. Penn State Hershey Heart and Vascular Institute, Penn State College of Medicine, Hershey, PA	
4:00 PM	**(Corporate Sponsor) BIOPAC's Bionomadix Wireless Physiology Workshop**	
Dinner 5:00 to 7:15 PM		

Friday

Elm/Fir	Friday, November 2, 2012	
1:00 - 2:15 PM	**Free Communications Session III – UG (FC-III)**	**Chair/Moderator**
	Fitness Assessment and Training	
1:00-1:15 PM FC-III-1	**The Effect of Music Tempo on Squat Performance** Burket, J., Eubank, T., Reed, C., Sanders, J. Shippensburg University, Shippensburg, PA	**Luke Haile, Ph.D.**
1:15-1:30 PM FC-III-2	**The Effects of Ankle Taping and Bracing on Agility, Vertical Jump, and Power** Leonard, T. M., Rotay, J. S., Paulson, S., Sanders J. Shippensburg University,Shippensburg, PA.	
1:30-1:45 PM FC-III-3	**Effectiveness of an Exercise Is Medicine (EIM)™ referral program to change exercise behaviors and efficacy.** Wilhelm, N., Kelly, J., Kovacs, S., Urda, J., Winters, C., Larouere, B., Smith, K., and Lynn, J. Slippery Rock University, Slippery Rock, PA.	
	Cardiovascular, Renal, and Respiratory Physiology	
1:45-2:00 PM FC-III-4	**The Heart Rate Response and Force Production Related to Deer Hunting-Associated Activities** Eberhart, K., Verba, S., Jensen, B., Lynn, J. Slippery Rock University, Slippery Rock, PA.	
2:00-2:15 PM FC-III-5	**Effects of Nasal Insufflation on Heart Rate Recovery from Exercise** Ivester, B., Miller, P., Bohlen, J., Phan, P. Dobrosielski, DA. Towson University, Towson, MD	

Break 2:15 to 3:15 PM		
3:15 to 5:00 PM	**Free Communications V - UG (FC-V)**	**Chair/Moderator**
	Cardiovascular, Renal, and Respiratory Physiology, cont.	**Dan Drury, Ph.D.**
3:15-3:30 PM FC-VI-6	**No Association between Body Fat and Arterial Stiffness in Non-obese Women** Martin, E., Augustine, J., Spartano, N., Lefferts, W., Heffernan, K. Syracuse University, Syracuse, NY	
	Epidemiology, Biostatistics and Health Promotion	
3:30-3:45 PM FC-VI-7	**Pedometer-assessed Workplace Walking Program Improves Cardio-Metabolic Profile Among the University's Workforce** [1]Weiss, H., [2]Veerabhadrappa, P. Shippensburg University, Shippensburg, PA	
	Metabolism and Nutrition	
3:45-4:00 PM FC-VI-8	**Effects of Simple Carbohydrate vs. Carbohydrate-Protein Intake on Glucose Homeostasis Following Intense Exercise** Kluka, J., Baskerville, J., Clifton, K., Fisher, K., Marks, D., Weidner, C., Veerabhadrappa, P. and Braun, W.A. (FACSM), Shippensburg University, Shippensburg, PA.	
4:00-4:15 PM FC-VI-9	**The Effects of Fish Oil Supplementation on Cardiovascular Health** Merk, L., Michael, C., Rackley, S., O'Brien K., Kramerenko, J., Sanders, J. Shippensburg University, Shippensburg, PA.	
	Psychology, Behavior and Neurobiology	
4:15-4:30 PM FC-VI-10	**Manual Asymmetries and Working Memory: Preliminary Results** Matos, J. A., Flink, T. S. Gannon University, Erie, PA	
	Biomechanics and Neural Control Movement	
4:30-4:45 PM FC-VI-11	**The Influence of Prophylactic Ankle Strategies on Vertical Jump Performance** Nelson, C., Paulson, S. Shippensburg University, Shippensburg, PA	
Dinner 5:00 to 7:15 PM		

Saturday

Ballroom A	Saturday, November 3, 2012	
9:00-11:00 AM	***Human Performance Optimization/Injury Prevention: Lessons from the Military***	**Chair/Moderator**
9:00-9:25 AM	Physical Training Strategies for Performance Optimization in Women **Speaker: Bradley Nindl, Ph.D., FACSM**	**Bradley Nindl, Ph.D.**
9:25-9:50 AM	Physical Training, Fitness, and Injuries in Military and Active Populations **Speaker: Bruce Jones, M.D., MPH**	
9:50-10:15 AM	Physical and Extreme Training Effects on Overload, Fatigue and Risk of Injury: Too Much of a Good Thing **Speaker: Timothy Sell, Ph.D., PT**	
10:15-10:45 AM	Functional Movement Assessments: Predicting Injuries in Military and Active Populations **Speaker: Peter Lisman, Ph.D., ATC**	
10:45-11:00 AM	**Questions/Discussion**	
Ballrooms: MARC-ACSM Business Meeting and Award Ceremony Luncheon – 12:00 to 2:00 PM		

Ballroom B	Saturday, November 3, 2011	
9:00-11:00 AM	***The Mind of the Superior Athlete- Insights from Exercise Science, Neuroscience, and Social Science***	**Chair/Moderator**
9:00-9:20 AM	**9:00 AM** Brain Processes Underlying Superior Sport Performance **Speaker: Bradley Hatfield, Ph.D., FACSM**	**Bradley Hatfield, Ph.D.**
9:20-9:40 AM	**9:20 AM** The Effects of Team Environment on the Brain and Psychomotor Performance **Speaker: Matthew Miller, Ph.D.**	
9:40-10:00 AM	**9:40 AM** Controlling Attention in the Face of Threat: Implications for Athletic Performance **Speaker: Bartlett Anne Healy Russell, Ph.D.**	
10:00-10-20 AM	Insight to the Athlete's Brain during Competition: Measures of Functional Connectivity for EEG Analysis **Speaker: Hyuk Oh, Ph.D.**	
10:20-10:45 AM	**Questions/Discussion**	
Ballrooms: MARC-ACSM Business Meeting and Award Ceremony Luncheon – 12:00 to 2:00 PM		

Ballroom C,D,E	Saturday, November 3, 2012	
8:00-11:30 AM	**Poster Session IIA**	**Chair/Moderator**
	Psychology, Behavior and Neurobiology	
P1 **8:00 – 8:10 AM**	**Impact of Hybrid Delivery on Learning Outcomes in Exercise Physiology** [1]Fisher, M., [1]Pfeifer, N. [1]Montclair State University, Montclair, NJ	**James Roberts, Ph.D.**
P2 **8:10 – 8:20 AM**	**Military Veterans' Attitude on the Value of Exercise as a Means of Coping with Stress** McVaugh, C.S.[1], Stevens, W.C.[1], Roar, J.D.[1], Bolt, M.C.[1] and Williams, J.G.[1,2] [1]West Chester University, West Chester, PA, [2]Kinestech Consulting.	
P3 **8:20 – 8:30 AM**	**The Relationship between Aerobic Fitness, BMI, and Measures of Perception while at Very High Altitudes.** Gray, S., Drozdowsky, D., Schoenenberger, M., Wisniewski, K., Fitzgerald, P. Saint Francis University, Loretto, PA.	
P4 **8:30 – 8:40 AM**	**The Effect of Anticipatory Anxiety on Performance in an Attention Task** [1]Stevens, C., [1, 2, 3]Russell, B.A.H., [1,2]Hatfield, B.D., [1]Department of Kinesiology, School of Public Health, University of Maryland, College Park, [2]Neuroscience and Cognitive Science Program (NACS), University of Maryland, College Park, [3]Center for Advanced Study of Language (CASL), University of Maryland, College Park	
P5 **8:40 – 8:50 AM**	**Examination of Exercise Behaviors, Exercise Barriers and Exercise Self-Efficacy of British Adults** Sadler, M., Brown, M., Dugan, K., Litchauer, J., Port, K., & Smith, K. Slippery Rock University, Slippery Rock, PA	
P6 **8:50 – 9:00 AM**	**Perceptions of Body Weight and Contributing Weight Gain Factors in British Adults** Fox, K., Stovall, B., Mariacher, K., Pautler, P., Hedgepeth, A., Fengl, C., & Smith, K. Slippery Rock University, Slippery Rock, PA	

	Metabolism and Nutrition	
P7 **9:00 – 9:10 AM**	**The Effect of L-citrulline and Watermelon Juice on Anaerobic and Aerobic Exercise Performance** [1]Gadomski, S., [1]Cutrufello, P., [2]Zavorsky G., & [1]Demkosky, C., [1]University of Scranton, Scranton, PA, [2]University of Louisville, Louisville, KY	
P8 **9:10 – 9:20 AM**	**Measuring the Effects of Pre-Workout Supplementation on Resting Metabolism over Time** Harper, R., Anton, J., Torre, A., Lafferty, M. Delaware Technical Community College, Wilmington, DE	
P9 **9:20 – 9:30 AM**	**Effects of Manganese Administration on Breathing.** [1]Mohamed, Z., [1]Gorczynski, D., [1]Glausen, T., [2]DeRuisseau K., [1]DeRuisseau, L. [1]Department of Biological Sciences, Le Moyne College, Syracuse, NY [2]Department of Exercise Science, Syracuse University, Syracuse, NY	
P10 **9:30 – 9:40 AM**	**Exercise and Calorie Restriction Protect Against Changes in Intestinal Morphology Induced by High-fat Diets.** Wisniewski, P.J.[1], Shikhel, S.[1], Lightfoot, S.A., MD[2], Campbell, S.C., PhD[1]. [1]Department of Exercise Science and Sports Studies, Rutgers, The State University of New Jersey, New Brunswick, NJ 08901,[2]VAMC – OKC, Oklahoma Health Sciences Center, Oklahoma City, OK 73104	
P11 **9:40 – 9:50 AM**	**Phosphate decrement in repeated sprint ability** [1]DiMartino, V., [1]Schmidt, G. (FACSM), [1]Carpenter, T., [1]Campo, G., [1]William Paterson University, Wayne, NJ.	
P13 **9:50 – 10:00 AM**	**Increased frequency of moderate intensity walking increases consumption of low energy density foods** Panek-Scarborough, L., Temple, J. University at Buffalo, Buffalo, NY	

P14 **10:00 – 10:10 AM**	**Exercise Promotes Enhanced Gut Microbial Diversity Compared to Sedentary Counterparts** Juliet D. Gotthardt[1], Michael Noji[2], Lee J. Kerkhof, PhD[3], Lora McGuiness[3], Max M. Häggblom, PhD[4], Sara C. Campbell, PhD[2] [1]Department of Nutritional Sciences, [2]Department of Exercise Science and Sports Studies; [3]Institute of Marine and Coastal Sciences; Department of Biochemistry and Microbiology Rutgers, The State University of New Jersey, New Brunswick, NJ 08901	
	Clinical Exercise Physiology	
P15 **10:10 – 10:20 AM**	**Group-Based Aerobic Exercise in HIV+ Patients: A Pilot Study** Lindsey, R., Shikuma, C., Chow D., Kocher, M., Kimura, I. University of Hawaii-Manoa, Honolulu, HI	
P16 **10:20 – 10:30 AM**	**Effects of a High Speed-Low-Resistance Bicycling Intervention in Parkinson's disease** Bellumori, M., Uygur, M., Knight, C.A. University of Delaware, Newark, DE	
	Cardiovascular, Renal, and Respiratory Physiology	
P17 **10:30 – 10:40 AM**	**The effect of Passive heat stress on arterial wave reflection, arterial stiffness, and cerebral blood flow** Ashton, K., Edwards, D., Rose, W., University of Delaware, Newark, DE	
	Genetics	
P18 **10:40 – 10:50 AM**	**IGF1R Pathway is Related to Enhanced Insulin Sensitivity Following Exercise Training** [1]Barberio, M., [2]Huffman, K. [1]Hoffman, E., [2]Kraus, W. FACSM, [1]Hubal, M. FACSM. [1]Children's National Medical Center, Washington, D.C., [2]Duke University Medical Center, Durham, North Carolina	
	Athletic Care and Clinical Medicine	
P19 **10:50 – 11:00 AM**	**The Effects of Various Recovery Techniques on Collegiate Pitching Performance** [1]Snyder, B., [1]Davis, S., [1]Moir, G., [1]Miltenberger, M., [1]East Stroudsburg University, East Stroudsburg, PA	
Ballrooms: MARC-ACSM Business Meeting and Award Ceremony Luncheon – 12:30 to 2:00 PM		

Saturday

Pennsylvania	Saturday, November 3, 2012	
		Chair/Moderator
8:00-9:00 AM	**(Sponsor West Virginia University School of Medicine Department of Exercise Physiology)** Does Changing Footfall Patterns during Running Prevent Injuries? **Speaker: Joseph Hamill, Ph.D., FACSM**	**Jean McCrory, Ph.D.**
9:00-10:30 AM	***Free Communications: Biomechanics & Neural Control of Movement***	**Chair/Moderator**
9:00-9:15 AM **BM-I-1**	**Effect of Submaximal Concentric and Eccentric Training on Torque Steadiness of the Ankle Plantar flexors** [1]Rozea G., [2]Tillman M., [2]Dodd S., [2]Chmielewski T., [1]Vanic, K. [1]East Stroudsburg University, East Stroudsburg, PA, [2]University of Florida, Gainesville, FL	**David Stearne, PhD, ATC**
9:15-9:30 AM **BM-I-2**	**Thoracopelvic Coordination of Pregnant Women during Gait** [1]McCrory JL, FASCM, [2]Seay JF, [3]Hamill J, FACSM [1]West Virginia University, Morgantown, WV, [2]U.S. Army Research Institute of Environmental Medicine, Natick , MA, [3]University of Massachusetts, Amherst, MA, USA	
9:30-9:45 AM **BM-I-3**	**Comparison of Young and Functional Fit Older Adults on Temporal Spatial Gait Parameters** [1]Paulson, S., [2]Gray, M. [1]Shippensburg University, Shippensburg, PA; [2]University of Arkansas, Fayetteville, AR	
9:45-10:00 AM **BM-I-4**	**The Influence of Arch Type on Injury in Minimally-Shod Runners** Galbreath KM, and Harrison KD, and McCrory JL, FACSM. West Virginia University, Morgantown, WV	
10:00-10:15 AM **BM-I-5**	**Primigravida Foot Anthropometric Effects on Foot, Posterior-Pelvic and Low Back Pain.** [1]Harrison, KD, [2]Thomas K, [1]McCrory, JL, FASCM. [1]Division of Exercise Physiology, [2]Division of Physical Therapy, West Virginia University, Morgantown, WV	
10:15-10:30 AM **BM-I-6**	**Manual Asymmetry and Performance across the Lifespan** Iorio, A., Flink, T. Gannon University, Erie, PA	

10:30-10:45 AM BM-I-7	**Manual Asymmetries and Working Memory: Preliminary Results** Matos, J. A., Flink, T. S. Gannon University, Erie, PA	
10:45-11:00 AM BM-I-8	**The Bilateral Deficit and the Acute Effects of Heavy Bilateral and Unilateral Squats on Sprinting.** Tholis, M. & Moir, G.L. East Stroudsburg University, East Stroudsburg, Pennsylvania.	
11:00-12:00 PM	Biomechanics Interest Group Meeting **Speaker: Jean McCrory, Ph.D.**	
Ballrooms: MARC-ACSM Business Meeting and Award Ceremony Luncheon – 12:00 to 2:00 PM		

Ash/Birch	**Saturday, November 3, 2012**	
		Chair/Moderator
8:00 to 9:30 AM	**Free Communications VII: UG Award Nominees (FC-VII)**	
8:00-8:15 AM FC-VII-1	**Effects of Applying Floss Bands on Regional Blood Flow** Bohlen, J., Arsenault, M., Deane, B., Miller, P., Guadagno, M., Dobrosielski, D.A. Towson University, Towson, MD	**Tim McConnell, Ph.D.**
8:15-8:30 AM FC-VII-2	**Validity of a Hand-held Tablet Compared to 3-Dimensional Motion Analysis to Assess Landing Mechanics.** Gabor, Z., Lewis, E., Jackson, J., Alderman, E., King, D., Belyea, B. Ithaca College, Ithaca, NY	
8:30-8:45 AM FC-VII-3	**Sympathetic Reactivity in Young Women with a Family History of Hypertension** [1]Kaiser, CR., [1]Fiorilli, DM., [1]Matthews, EL., [2]Greaney, JL., [1]Farquhar, WB., and [1]Wenner, MM.,[1]University of Delaware, Newark, DE, [2]Penn State University, State College, PA	
8:45-9:00 AM FC-VII-4	**Dynamic Stability in Gymnasts, Non-Balance Athletes, and Active Controls**. Sloanhoffer, HS, McCrory, JL, FASCM. Division of Exercise Physiology, West Virginia University, Morgantown, WV	
9:00-9:15 AM FC-VII-5	**Forward and Reflected Waveform Amplitudes during Static Handgrip Exercise** [1]Wiltshire, MH., [1]Farquhar, WB., [1]Edwards, DG., [1,2]Greaney, JL.,[1]University of Delaware, Newark, DE, [2]Pennsylvania State University, State College, PA	

	Break 9:30 to 10:30 PM	
9:15-12:00 AM	Open	
Ballrooms: MARC-ACSM Business Meeting and Award Ceremony Luncheon – 12:00 to 2:00 PM		

Chestnut/Dogwood	**Saturday, November 3, 2012**	
		Chair/Moderator
8:00 AM to 12:15 PM	**Free Communications VII: MS/PhD (FC-VII)**	
	Fitness Assessment and Testing	
8:00-8:15 AM FC-VII-1	**Music Playlist Tempo and Self-Paced Running, Mood, and Attentional Focus** Bly, K., Sforzo, G., King, D. Ithaca College, Ithaca, NY	**Bill Farquhar, Ph.D.**
8:15-8:30 AM FC-VII-2	**Estimating Caloric Expenditure using Physical Activity Index (PAI) in Children Performing a Maximal Exercise Test** [1]Gairola, A., [1]Robertson, R., [1]Bayles, C., [1]Goss, F., [1]Kane, I., [1]Nagle, E., [2]Arslanian, S. [1]University of Pittsburgh, Pittsburgh, PA, [2]Children's Hospital, University of Pittsburgh, Pittsburgh, PA.	
8:30-8:45 AM FC-VII-3	**A Comparison of CrossFit Training to Traditional Anaerobic Resistance Training in terms of Selected Fitness Domains Representative of Overall Athletic Performance** Gerhart, H.D., Bayles, M.P. Indiana University of Pennsylvania, PA.	
8:45-9:00 AM FC-VII-4	**Predictive validity of critical power and functional threshold power for mountain bike race performance.** Miller, M., Witmer, C., Moir, G., Davis, S. East Stroudsburg University, East Stroudsburg, PA	
9:00-9:15 AM FC-VII-5	**Effects Of Plyometric and Endurance Training On Aerobic and Anaerobic Power.** Snyder, T., Shaw, E., Mueller, A., Stoeckel, E., Strom, A., VanDerVeeken, T., & Swensen, T. Exercise and Sport Sciences, Ithaca College, Ithaca NY	
9:15-12:00 PM	Open	
Ballrooms: MARC-ACSM Business Meeting and Award Ceremony Luncheon – 12:30 to 2:00 PM		

Elm/Fir	Saturday, November 3, 2012	
8:00 AM to 12:00 PM	**Free Communications VIII: MS/PhD (FC-VIII)**	**Chair/Moderator**
	Cardiovascular, Renal and Respiratory Physiology	
8:00-8:15 AM FC-VIII-1	**Ilex Increases Cutaneous Blood Flow by Augmenting Endothelium-derived Hyperpolarizing Factors** Craighead, D., Conlon, C., Alexander, L, FACSM. Penn State University, University Park, PA	**Kevin Heffernan, Ph.D.**
8:15-8:30 AM FC-VIII-2	**Sex differences in arterial stiffness and left ventricular pressure energetics.** Hughes, W.E., Spartano, NL., Lefferts, WK., Augustine, JA., Heffernan, KS. Syracuse University, Syracuse, NY.	
8:30-8:45 AM FC-VIII-3	**Resistance Exercise, Carotid Artery Stiffness, and Cerebral Blood Flow Pulsatility.** Lefferts, W., Augustine, J., Heffernan, K. Department of Exercise Science, Syracuse University, Syracuse, NY	
	Skeletal Muscle, Bone and Connective Tissue	
8:45-9:00 AM FC-VIII-4	**Skeletal Muscle Immobilized in a Stretched Position does not Display Characteristics of Disuse Atrophy**. Kelleher, A., Gordon, B., Kimball, S., Jefferson, L. The Pennsylvania State University College of Medicine, Hershey, PA.	
9:00-9:15 AM FC-VIII-5	**The Relationship between Aerobic Fitness and Bone Health in College-Aged Women** [1]Masteller, B., [2]Dixon, C.B., FACSM, [1]Rawson, E.S., FACSM, [1]Andreacci, J.L., FACSM. [1]Bloomsburg University, Bloomsburg, PA, [2]Lock Haven University, Lock Haven, PA	
	Skeletal Muscle, Bone and Connective Tissue, cont.	
9:15-9:30 AM FC-VIII-6	**Trial-to-trial Reliability of Biceps Brachii Mechanomyographic Responses During Isometric Contractions** Miles, P., McMahon, M., Mookerjee, S. Bloomsburg University of Pennsylvania, Bloomsburg, PA	

9:30-9:45 AM FC-VIII-7	**Effect of Vocalization on Static Handgrip Force Output.** Rodolico, C., Oberholzer, R., Smith, S. Drexel University, Health Science Department, Philadelphia, PA	
Break 9:45 to 10:00 AM		
	Metabolism and Nutrition	**Chair/Moderator**
10:00-10:15 AM FC-VIII-8	**High-Fat Diet Regulation of Cell Cycle** Dungan, C. M. and Williamson, D. L. University at Buffalo, Buffalo, NY	**Megan Wenner, Ph.D.**
10:15-10:30 AM FC-VIII-9	**Effects of beetroot juice supplementation on performance during a repeated-sprint test in active males.** Murphy, S., Witmer, C.A., Davis, S.E., Sauers, E.J. East Stroudsburg University, East Stroudsburg, PA	
10:30-10:45 AM FC-VIII-10	**Alcohol intake, cardiorespiratory fitness, body size, and dietary behaviors in young adults** Steele, CN, Fradkin, AF, FACSM, Andreacci, JL, FACSM, Rawson, ES, FACSM, Bloomsburg University, Bloomsburg PA	
	Metabolism and Nutrition	
10:45-11:00 AM FC-VIII-11	**The association of nutrition intake and physical activity on weight in female college-aged students.** Stinchcomb, M.; Bayles, M., Indiana University of Pennsyvlania. Indiana, PA	
	Clinical Exercise Physiology	
11:00-11:15 AM FC-VIII-12	**Effects of a High Speed-Low-Resistance Bicycling Intervention in Parkinson's disease** Bellumori, M., Uygur, M., Knight, C.A. University of Delaware, Newark, DE	
11:15-11:30 AM FC-VIII-13	**Energy Expenditure During Gait Using the ReWalk™ Exoskeletal Walking System for Persons with Paraplegia.** [1,2]Knezevic, S., [1]Emmons R., [2]Asselin, P., [2]Spungen, A., [2]Bauman, W. [1]William Paterson University, Wayne, NJ, [2]James J. Peters VA Medical Center, Bronx, NY	
	Environmental and Occupational Physiology	
11:30-11:45 PM FC-VIII-14	**Predicting Performance on a Firefighting Specific Ability Test in Volunteer Firefighters** [1]Kerns, Z., [1]Bennett, D., [1]Moir, G. [1]East Stroudsburg University, East Stroudsburg, PA	
Ballrooms: MARC-ACSM Business Meeting and Award Ceremony Luncheon - 12:00 to 2:00 PM		

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Special Event

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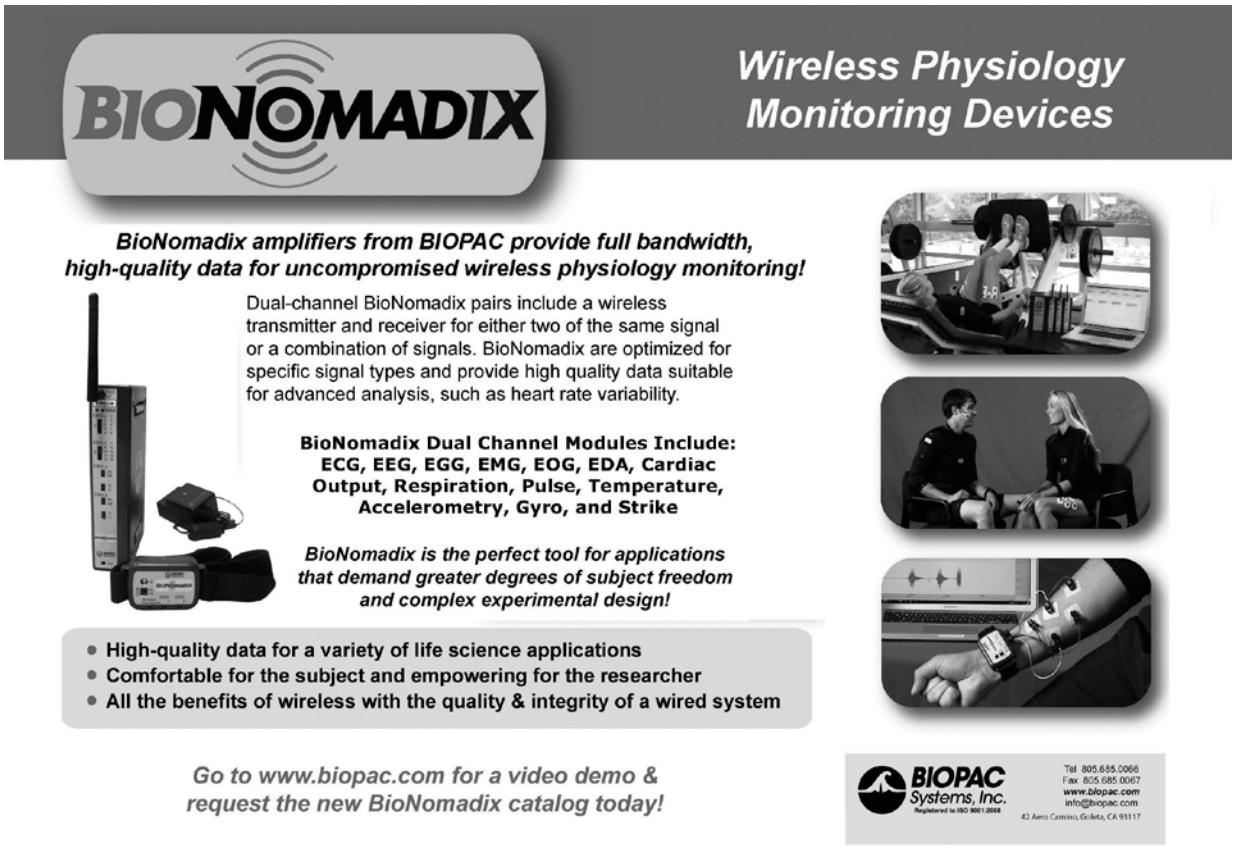
Chestnut/Dogwood Room
Friday 4:00 PM



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Special Event

Tekscan Equipment Demonstration
Pressure Mapping, Force Measurement, & Tactile Sensors
Chestnut/Dogwood Room
Friday 11:00 AM

Tekscan's manufactures pressure measurement systems to measure gait asymmetries, determine efficacy of offloading devices and assess balance and sway. Our new MobileMat BESS is the first and only computerized system that objectively implements the well-established Balance Error Scoring System (BESS) used to assess static postural stability of athletes pre- and post-concussion.

www.tekscan.com
Follow us on Twitter @PressureMapping

2013 Strength and Conditioning Workshop- Hands on Demonstration Session Sponsor: National Strength and Conditioning Association

www.nsca.com
Follow us on Twitter @NSCA

Pennsylvania Room
Friday 3:15 PM to 5:00 PM

Training for Optimal Performance
Eric Childs, MEd, CSCS & Doug Lentz, MS, CSCS*D

COSMED
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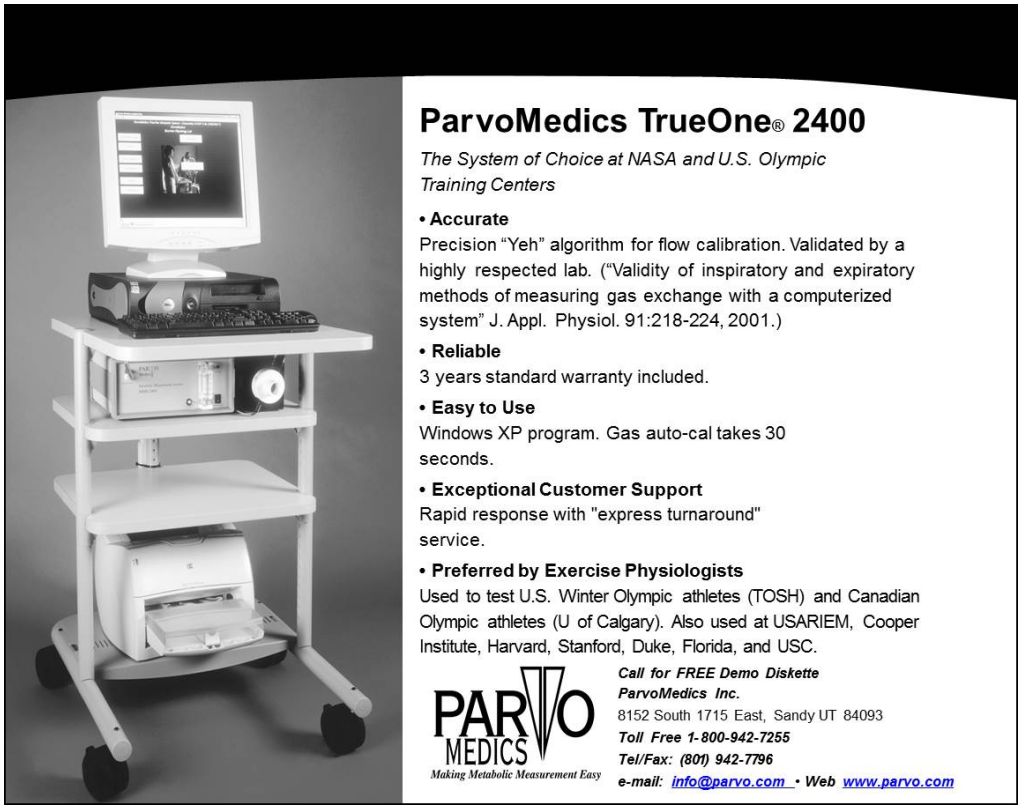

www.parvo.com

University Sponsors

2013 College Bowl Sponsor: New York Chiropractic College

NEW YORK CHIROPRACTIC COLLEGE

Finger Lakes School of Acupuncture & Oriental Medicine
School of Applied Clinical Nutrition

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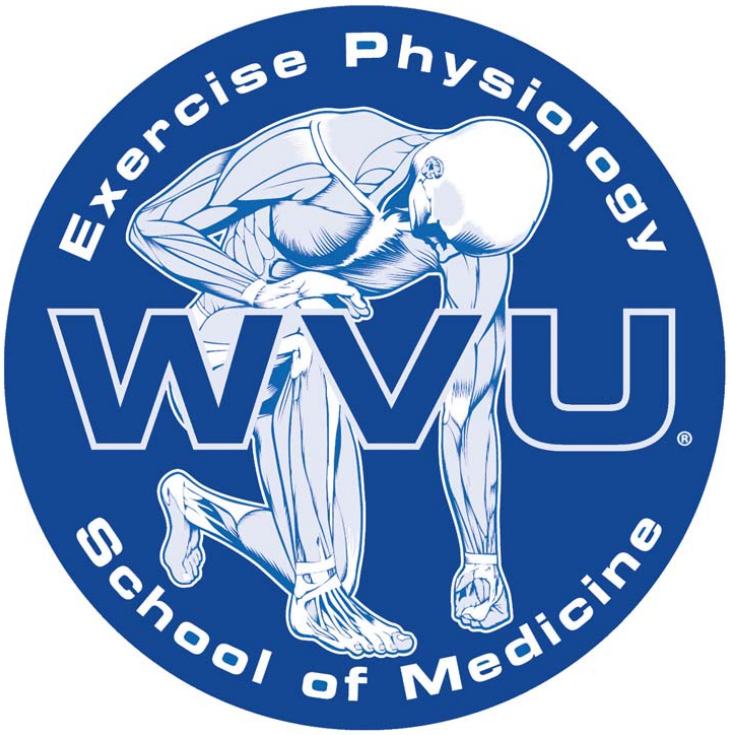
2013 Biomechanics Session Sponsor: West Virginia University School of Medicine, Department of Exercise Physiology



http://medicine.hsc.wvu.edu/ep/
Follow us on Twitter @WestVirginiaU

Pennsylvania Room
Saturday 8:00 AM to 9:00 AM

Does changing footfall patterns during running prevent injuries?
Joseph Hamill, Ph.D., FACSM

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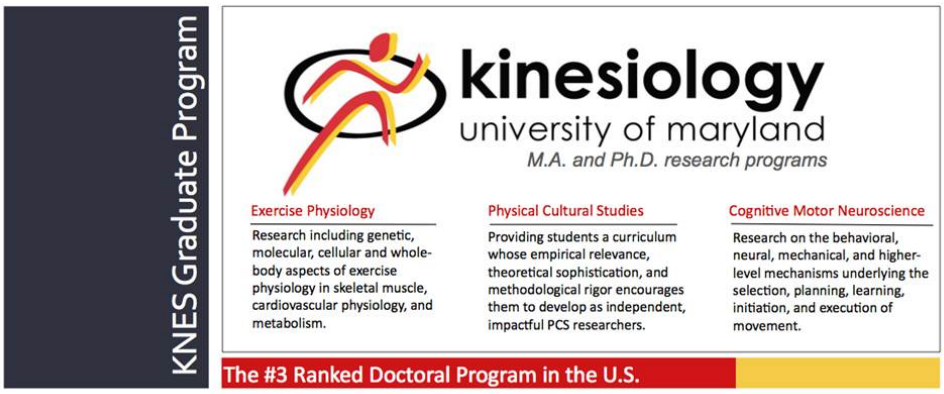

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