Welcome
This is the second issue of the MPS Physio ExaMiner – a quarterly publication by the Michigan Physiological Society. The Physio ExaMiner acts as a platform for featured news within the society, recent awards received, upcoming opportunities, annual meeting information and current publications.

Please contact vanrynva@ps1.msu.edu for any news you wish to include. We look forward to sharing your updates!

-Valerie VanRyn, Secretary-Treasurer, MPS

Community Engagement and Outreach
2016 Physiology Understanding (PhUn) Week Activities

Central Michigan University
"Friday (November 11), 4 exercise science undergraduate students and myself visited the 4th grade classes at Mary McGuire Elementary in Mount Pleasant and St. Joseph the Worker School in Beal City to demonstrate basic concepts in exercise physiology as part of Physiology Understanding (PhUn) Week. We spoke to about 100 students at these schools, allowing them to get hands-on experience with tools that University students get to use (reflex mats, timing gates, dynamometers, stethoscopes). At one school we had 4 different stations (cardiovascular system, nervous system, integumentary system, musculoskeletal system) running simultaneously due to the large number of students, while at the other school we ran each station in sequence. Our program was well-received by the students and teachers, and we are already booked at these schools for next year, with potential expansion at other schools in the area. I'd personally like to thank the MPS (particularly Erica Wehrwein and James Poteracki) for the inspiration to pull an event like this off. It was very rewarding!" -Naveen Sharma, Ph.D., CMU School of Health Sciences

Michigan Technological University
"The Kinesiology and Integrative Physiology (KIP) Department at Michigan Tech coordinated its first ever Physiology Understanding (PhUn) Week 2016 under the nationwide umbrella of the American Physiological Society. Senior researcher, Dr. Jason Carter, and over 20 graduate and undergraduate students reached out to local K-12 teachers and were invited into 6 different classrooms to lead interactive, hands-on physiology activities. Approximately 150 students, from elementary to high school age, participated in engaging lessons aimed at increasing their understanding of physiology. The response was overwhelming positive, and the KIP Department at Michigan Tech plans to continue coordinating PhUn Week activities in local schools annually." -Kathryn R. Carter, MS, ACSM CPT, MTU Dept. of Kinesiology and Integrative Physiology

Michigan State University
"On Saturday November 5th, MSU’s Dept. of Physiology hosted its 5th annual PhUn Day event at Impression 5 (I5) Science Center in Lansing, MI. The event was co-coordinated by Dr. Erica Wehrwein and Valerie VanRyn. This year we had 133 undergraduate, graduate, staff and faculty volunteers at 16 different stations. During the 6 hours the event took place, we welcomed 912 attendees. We partnered with MSU’s Center for Service-Learning
and Civic Engagement office for the first time to provide bus tokens to the volunteers for free transportation to and from the venue. We are so appreciative of the willingness of our students and academic departments to serve the community and the enthusiasm, patience, knowledgeability and kindness they exhibit that continues to make this event a success every year.” -Valerie VanRyn, B.S., MSU Dept. of Physiology

Figures 1-4 (from left to right): Dr. Jason Carter of Michigan Technological University; Undergraduate students Drew Bechtel, Conner Steffke, Hannah Lark and Hannah Repasy of Central Michigan University; Dr. Erica Wehrwein and Valerie VanRyn of Michigan State University.
AWARDS

Award Recipients

Dr. Susan Barman, PhD, Dept. of Pharmacology and Toxicology, MSU - Distinguished Service Award from the Association of Chairs of Departments of Physiology. To be received at their annual retreat December 8th-11th, 2016 at RIU Palace Cabo San Lucas in Los Cabos, Mexico.

Brandon Coughlin, Dept. of Physiology, MSU - Joseph Meites Doctoral Degree Research Award from Michigan State University Department of Physiology. Was received Spring 2016 in East Lansing, Michigan.

Dr. Patrick Mueller, PhD, Department of Physiology, WSU School of Medicine - SOM College Teaching Award from Wayne State University Department of Physiology. Received 2016 in Detroit, MI.

Dr. Noreen Rossi, MD; Dr. Kamran S. Moghissi, MD: Department of Physiology, WSU School of Medicine - Endowed Faculty Award for Excellence in Basic Science Teaching from Wayne State University Department of Physiology. Received 2016 in Detroit, MI.

Award Applications

It's not too late to apply for the following awards through APS:

Bowditch Award Lectureship

Physiology in Perspective: The Walter B. Cannon Award Lecture


Call for Awards

We will gladly include any recent awards received by MPS members. Please include: recipient(s) and donors, as well as any additional information you would like to be mentioned.
**Ida Fonkoue, PhD Candidate**

Graduating December 2016 with a PhD in Biological Sciences (emphasis in Integrative Physiology) at Michigan Technological University. Ida works under the advisory of Dr. Jason Carter and successfully defended her dissertation titled, "Sympathetic Neural Reactivity to Mental Stress in Humans: Reliability, Heredity and Race" on November 14, 2016. She published two first author papers, one in the American Journal of Physiology (AJP)-Regulatory, Integrative and Comparative Physiology and the second in AJP-Heart and Circulatory Physiology, and has one additional first author paper in the process of being submitted to a journal. She will be starting her postdoctoral position in June 2017 at Emory University School of Medicine in the department of Medicine, Renal Division with Dr. Jeanie Park.

**Nusrat Matin, Postdoctoral Research Fellow**

Graduated with a PhD in Pharmacology and Toxicology from Michigan State University on August 25th, 2016. She published two first author papers, one in the American Journal of Physiology and one in Microcirculation, two reviews, and has two additional first author papers in the pipeline. She is currently a Postdoctoral Research Fellow at the University of British Colombia, Dept. of Cellular & Physiological Sciences studying palmitoylation in a model of cocaine addiction.

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**Call for Defenses**

We will gladly include any recent defenses completed by MPS members. Please include: department, school, publications, post-doctoral school and study (if applicable), as well as any additional information you would like to be mentioned.
Events

Be a part of the first Michigan Physiology Quiz (MiPQ)!

How it works:

In collaboration with IMSPQ Malaysia, MPS is excited to announce the first MiPQ! The idea was created by Quiz Master Dr. Hwee-Ming Cheng, Professor of Physiology of the Faculty of Medicine at University of Malaya. Initially, 7 schools in Malaysia competed in this science Olympiad in which both written and oral testing demonstrated the team with the best proficiency in Physiology.

Each year since 2013, IMSPQ surpassed more than 80 schools in over 20 different countries.

The competition consists of a series of elimination rounds where students from each team taking the stage to demonstrate their Physiology knowledge through a rapid-pace oral quiz.

Although there is only one quiz winner, all participants feel that they gained an immense working knowledge in Physiology, a number of new friends, and a novel experience to discuss with others in interviews all through this unique and exceptional opportunity.

For more information, read how MPS member Dr. Sue Barman was able to experience this event in 2016.

How to get involved:

Each college/university in MI can form one team of students to send. Each competing team can have a minimum of 3 and a maximum of 5 undergraduate students and should have faculty mentors to support and train them.

A body of students and faculty are highly encouraged to act as a cheering...
section/support team to root for their school and enhance the event

The quiz itself will consist of an oral competition before a live audience
There will be prizes!
The event will happen in conjunction with the annual meeting June 8th and 9th. Location TBD and registration and more information to follow.
If you are at all interested, please contact MPS!

Workshops/Committees

Serve on a MPS Committee

MPS is seeking trainees to serve on the Trainee Committee as well as one individual to serve as Chair of the Trainee Committee. The terms begin immediately after selection. The committee functions as a catalyst by interacting with the MPS Executive Committee. The committee is interested in persons with demonstrated interest and experience in physiology to serve a 3-year term (maximum, with consideration for those approaching graduation) from January 2017 through December 2019. For this term, MPS will seek one member with graduate expertise in physiology to serve as chair and 4 additional members to serve on the committee. In addition, all candidates should be interested in obtaining leadership experience in academia, practice, research, and/or regional and national organizations. For more information, visit MPS. Application deadline: December 12, 2016.

Serve on an APS Committee

It’s an exciting time at APS and now is your chance to get involved. They are accepting applications for APS committee service! Committee members are appointed by the APS Council at the recommendation of the Committee on Committees. Members serve a 3-year term commencing on January 1. For more information, visit the APS website. Application deadline: January 16, 2017.

Volunteer to Host an Undergraduate Student or Middle/High School Teacher This Summer

Share your love of science this summer by hosting an APS-supported undergraduate student or middle/high school teacher in your lab.

New to hosting? Add your contact information and research area(s) by completing the APS Summer Research Host Contact List form.

Already on the list? Visit the Selecting Your Research Host webpage and make sure your information is up-to-date by reviewing the Research Host Contact List (XLS) in the Resources section. If you need to make changes, please complete the Research Host Contact List form.

For more information, visit the APS Undergraduate Summer Research Fellowships or Frontiers in Physiology Webpages or contact the APS Education Office.
Job Listings

Assistant Professor of Integrative Physiology and Health Science

The Department of Integrative Physiology and Health Science (IPHS) at Alma College (Michigan) invites applications for the position of Assistant Professor. This is a full-time, tenure-track faculty position beginning August, 2017.

The successful candidate will: 1) demonstrate commitment to quality undergraduate education through excellent teaching within the classroom and quality advising/mentoring of students; 2) pursue an externally recognized research agenda engaging undergraduate students in the research process; 3) demonstrate commitment to institutional service activities.

Teaching responsibilities will include contribution to the department’s core courses such as Human Physiology and Human Anatomy, as well as coursework in the candidate’s area of expertise. Full-time teaching load is six units per year; salaries, benefits, and support for professional development are competitive.

An earned Doctorate in Physiology/Exercise Science or related discipline prior to appointment date is required. Review of applicants will begin on December 1, 2016 and continue until the position is filled. To apply, electronically submit a cover letter, curriculum vitae, transcripts (unofficial copies are acceptable initially) as well as statements of teaching and research interests and expertise.

Additionally, three letters of reference should be e-mailed directly to:
Dr. Karen Ball
Chair, Department of Integrative Physiology and Health Science
ball@alma.edu

A Phi Beta Kappa institution, Alma is a selective, baccalaureate liberal arts college committed to academic excellence and an equal opportunity employer committed to recruiting and retaining a diverse faculty, staff and student body. For more details regarding the position, visit the departmental web page at http://www.alma.edu/academics/integrative-physiology-health-science/.

Conferences

The Experimental Biology (EB) meeting will be held April 22–26, 2017, in Chicago. Visit the EB 2017 website to stay up to date on the latest deadlines and announcements. You can view the APS scientific program, apply for awards, register for the meeting, make your hotel reservations and submit your abstract all online. We look forward to seeing you in Chicago.

Abstract submission deadline: November 17, 2016
Hotel Reservation deadline: March 31, 2017
Early Registration deadline: February 23, 2017

IUPS 2017, the 38th International Union of Physiological Sciences Congress, will be held August 1–5, 2017, in Rio de Janeiro. The meeting theme—Rhythms of Life—is inspired by fundamental physiological processes from cells to whole systems functions based on rhythms and cycles. Visit the IUPS 2017 website for complete meeting details and to take advantage of early registration discounts.

Early registration deadline: November 1, 2016.

MEETINGS

The 2017 Annual MPS Conference will be held at Alma College on the 8th and 9th of June 2017.

The MPS welcomes 2017 Keynote Speaker Dr. J. Kevin Shoemaker of the University of Ontario, School of Kinesiology.

His lecture will be on, "Forebrain Neurocircuitry Associated with Autonomic Function in Humans".

His workshop talk will be on, "The Effect of Exercise Training on Brain Health".

Abstract submission will begin in January. Abstracts will be due in March, along with early registration for the conference.

*Photos from the previous meetings are posted on our Facebook. Click here to view them and be sure to like our page!
Featured Editorials
Steury MD, Poteracki JM, Kelly KL, Rennhack J, Wehrwein EA.
Hypothesis-driven laboratories: an innovative way to foster learning in physiology laboratory courses.

Subramanian M, Mueller PJ

Wehrwein EA, Orer HS, Barman SM.
Overview of the Anatomy, Physiology, and Pharmacology of the Autonomic Nervous System.

Wehrwein EA, Carter JR.
The Mind Matters: Psychology as an Overlooked Variable Within Physiology Studies.

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Call for MPS Member Publications

We will gladly include any recent publications by MPS members in mid year newsletters. Please include: authors, title, journal, publication date, and link.