Environmental & Exercise Section Newsletter
Spring 2015
American Physiological Society

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1. Welcome Newly Elected EEP Councilors

EEP is pleased to announce the election of two new councilors to join the EEP steering committee in 2015.

Exercise Physiology Councilor (2015-2018)
Harry Rossiter, Ph.D.
Associate Professor of Medicine
University of California, Los Angeles

Environmental Physiology Councilor (2015-2018)
Thomas Clanton, Ph.D.
Professor of Applied Physiology & Kinesiology
University of Florida
2. **Edward Adolph Distinguished Lecture: M. Harold Laughlin, Ph.D.**

Adolph Lecture title: “Physical Activity-induced Remodeling of Vasculature in Striated Muscle in Treatment of Type 2 Diabetes”.

The 2015 Adolph Lecturer is M. Harold Laughlin, Ph.D. Dr. Laughlin is the Curator’s Professor and Chair of the Department of Biomedical Sciences in the College of Veterinary Medicine at the University of Missouri-Columbia. He is also a Professor of Physiology in the School of Medicine and a Research Investigator at the Dalton Cardiovascular Research Center. Dr. Laughlin has published over 320 peer-reviewed publications in the most prestigious journals found in the fields of cardiovascular and exercise physiology. He is internationally known for his pioneering research associated with the control of skeletal muscle and coronary blood flow in health and disease. The Adolph Lecture is given by an eminent research scholar making landmark contributions within the areas of either environmental, exercise, and/or thermal physiology.

3. **EEP Honor Award: Jerome A. Dempsey, Ph.D.**

The 2015 Honor Award is presented to Jerome A. Dempsey, Ph.D. Dr. Dempsey is a Professor Emeritus and Director of the John Rankin Laboratory of Pulmonary Medicine at the University of Wisconsin-Madison. Dr. Dempsey has published over 350 peer-reviewed papers in the most prestigious journals found in the fields of exercise, pulmonary, and sleep physiology. He is internationally known for his research associated with the control of respiratory and cardiorespiratory interactions in humans and chronically instrumented animals during wakefulness and sleep, in hypoxic environments and in health and COPD, CHF and OSA. The Honor Award recognizes an EEP member, 60 years of age or older, who has made significant life-long contributions to the scientific advancement of environmental, exercise, or thermal physiology while enhancing the objectives of the section.

4. **EB14 Program of Symposia /Featured Sessions/Events**

David Poole, Ph.D., D.Sc. – EEP Program Representative
Lisa Leon, Ph.D. – EEP Program Representative

The 2015 APS/Experimental Biology Meeting will be held in Boston, MA during March 28th – April 1st, 2015. EEP Program Committee Representatives Lisa Leon and David Poole and the EEP steering committee have worked extremely hard to develop an outstanding EB 2015 program. The EEP programming for EB 2015 follows.
Sunday – March 29th, 2015

8:00 A.M. – Featured Topic – Room 206B Boston Convention Center

*New Insights into the Physiology and Pathophysiology of Diving and Hyperbaric Environments*
Chair: Dr. Florian

12:00 Noon – **EEP Section Trainee Luncheon** – Invitation Only – Westin Hotel - Commonwealth Ballroom A

Monday – March 30th, 2015

8:00 A.M. – Symposium (Partially sponsored by the Exercise Medicine and Sports Medicine Initiative at the University of California, Irvine) – Room 206A Boston Convention Center

*Limitations to and Potential of Exercise for the Spinal Cord Injured*
Chair: Dr. Taylor

2:00 P.M. – **Adolph Distinguished Lectureship** – Room 210A Boston Convention Center

“Physical activity-induced remodeling of vasculature in striated muscle in treatment of Type 2 Diabetes”
Lecturer: M. Harold Laughlin, Ph.D.

3:15 P.M. – Symposium (Sponsored by the Teaching Section) – Room 211 Boston Convention Center

**What’s Your Major? The Rise of the Undergraduate Physiology Degree**
Co-Chairs: Drs. Halliwill & Wehrwein

7:00 P.M. – **EEP Section Awards and Business Meeting** – Westin Hotel – Marina Ballroom I

8:15 P.M. – **EEP Section Mixer Reception** – Open to all EEP members – Westin Hotel – Marina Ballroom Foyer – Free Food

Tuesday – March 31st, 2015

8:00 A.M. – Symposium – Room 212 Boston Convention Center

*Exercise at the Molecular Level: Myokines and Other Novel Therapeutic Opportunities*
Chair: Dr. White

10:30 A.M. – Featured Topic – Room 207 Boston Convention Center

*Sex Hormone Effects on Autonomic and Endothelial Function*
Chair: Dr. Stachenfeld

3:15 P.M. – Symposium – Room 207 Boston Convention Center

*Muscle Atrophy, Hypertrophy and MicroRNA*
Co-Chairs: Drs. Carson & Wang

Wednesday – April 1st, 2015

8:00 A.M. – Symposium – Room 207 Boston Convention Center

*Who can Tolerate Blood Loss? New Insights into Mechanisms of Compensation to Hemorrhage*
Co-Chairs: Drs. Convertino & Hinojosa-Laborde

10:30 A.M. – Xsectional Symposium (Partially sponsored by the Exercise Medicine and Sports Medicine Initiative at the University of California, Irvine) – Rooms 210BC Boston Convention Center

*Contributors to the Slowed Aging Phenotype: Exercise and other Common Mediators*
Chair: Dr. Hamilton

10:30 A.M. – Featured Topic – Room 207 Boston Convention Center

*Sympathetic Control of the Vasculature in Clinical Populations*
Co-Chairs: Drs. Alexander & Greaney

2:30 P.M. – Featured Topic – Room 207 Convention Center

*Autophagy in Muscle*
Chair: Dr. Hood
5. **EEP Section Award Recipients**

Each year, the EEP section of APS presents research awards to pre-doctoral, post-doctoral, and junior investigators. These awards are presented to these outstanding researchers during the EEP business meeting held on Monday evening (7PM) during Experimental Biology. Congratulations to this year’s award winners:

**EEP New Investigator Award** – Jaume Padilla, University of Missouri

**EEP Beginning Investigator Award** – Walter Holbein, Mayo Clinic

**EEP Predoctoral Recognition Award** – Clark Holdsworth, Kansas State University

**Gatorade Sport Science Institute Beginning Investigator Award** – Steven Romero, Institute for Exercise and Environmental Medicine

**Gatorade Sport Science Institute Predoctoral Investigator Award** – Amanda Ross, Pennsylvania State University College of Medicine

**Military Physiology Beginning Investigator Award** – Mikhail Kellawen, University of Wisconsin-Madison

**Military Physiology Predoctoral Award** – Dylan Sieck, University of Oregon

**National Space Biomedical Research Institute’s Gravitational Physiology Beginning Investigator Award** – Jamila Siamwala, University of California-San Diego

**National Space Biomedical Research Institute's Gravitational Physiology Predoctoral Award** – Alex Snyder, University of California-San Diego

**CAN-TROL Environmental Systems New Investigator Award** – Jody Greaney, Pennsylvania State University

**CAN-TROL Environmental Systems Beginning Investigator Award** – Gerald Audet, United States Research Institute of Environmental Medicine

**CAN-TROL Environmental Systems Predoctoral Investigator Award** – Jennifer Wright, Kansas State University

**Nike, Inc. Loren G. Myhre Environmental and Exercise Physiology Postdoctoral Investigator Award** – Manda Keller-Ross, Mayo Clinic

**Nike, Inc. Loren G. Myhre Environmental and Exercise Physiology Predoctoral Investigator Award** – Scott Ferguson, Kansas State University

**Partnership for Clean Competition New Investigator Award** – Stephen Carter, University of Alabama-Birmingham

**Partnership for Clean Competition Beginning Investigator Award** – Angela Glean, Kansas State University
6. **EEP Trainee Opportunities – The Trainee Corner (Laura Gilliam, Ph.D.)**

The time for Experimental Biology (EB) 2015 in Boston, MA is quickly approaching (March 28th-April 1st). Below are details highlighting a few of the exciting events happening this year at EB. As the meeting approaches make sure to visit the [APS EB Meeting site](http://www.apsebmeeting.org/) for more information and keep an eye out for the APS Trainee Newsletter I will send out in early March, detailing a complete list of trainee-oriented events.

**EB Newcomers**

Is this your first EB meeting? Make sure to like the [American Physiological Society Trainees Facebook page](https://www.facebook.com/APSTrainees) for helpful articles and tips about meeting etiquette, building an itinerary, and what not to wear!

**Trainee Advisory Committee Symposium**

The Trainee Advisory Committee is excited to announce our symposium entitled “*Scientist as Supervisors: Hiring, Firing, and Beyond.*” The symposium will be held Wednesday, April 1st from 10:30 AM-12:30 PM, Rm 206A and include presentations on dealing with conflicts as a supervisor, working with Human Resources, and bullying in the workplace.

Are you receiving listserv emails? Check your [APS profile](http://the-aps.org/) to manage your membership information, and select the APS listserv tab and select EEPSEC. This will ensure you receive pertinent information about our section and is a great way to stay up-to-date with EEP.

Feel free to contact me with any questions or suggestions about trainee-related matters for our section (laura.gilliam7@gmail.com).

7. **Physiologists in Industry News – John Mattson, Ph.D.**

The APS Physiologists in Industry Committee (PIC) is sponsoring a Symposium at EB2015 entitled “Targeting Gut Microbiome in Human Diseases and as Novel Therapeutics” on Sunday, March 29. 10:30-12:30pm at Boston Convention Center Room 205B. This symposium covers the spectrum of intestinal microbiome research, from basic concepts in mammalian gut microbiome to disease associations and therapeutic implications. Advances in DNA sequencing and bioinformatics have revolutionized our understanding of the microorganisms that inhabit the gut. This new knowledge helps us understand how host–bacterial interactions contribute to normal physiology and provides the foundation to formulate novel therapeutic strategies. In this symposium, speakers will describe specific and potential therapeutic applications of the targeting gut microbiome. This section will be chaired by Carol Moreno Quinn, Ph.D. and co-chaired by Suttira Intrapad, Ph.D. who was our 2014 PIC Novel Disease Model Award recipient.

The PIC Novel Disease Model Award is sponsored by Novo Nordisk Research Centre China, a world leader in developing innovative treatments for Diabetes. Two awards are granted each year to a graduate student ($500) and a postdoctoral fellow ($800) who submit the best abstracts at EB meeting that describe a novel disease model. Our 2015 PIC Novel Disease Model Award recipients are: Pre-doctoral awardee, Ms. Casey Y. Carmichael, Boston University School of Medicine, Dept. of Pharmacology & Experimental
Therapeutics, and her abstract entitled “The renal afferent nerves: A role in countering salt-sensitive hypertension”. Post-doctoral awardee: Dr. Denise C. Cornelius, Ph.D., University of Mississippi Medical Center, Dept. of Pharmacology, and her abstract entitled “Placental Ischemia-Induced TH17 Cells Mediate the Pathophysiology Associated with Preeclampsia”. Both awards will be presented at the APS Business Meeting on Tuesday, March 31 at 5:45 PM in Room 210BC of the Boston Convention Center.

You’re invited! Come meet, eat and socialize with your fellow Physiologists who are working in the industrial, academic, or government sectors. The Annual Physiologists in Industry Committee Mixer will feature free hors d’oeuvres along with information on the roles of Physiologists in Industry. The mixer will be held on Sunday, March 29, at 6:45 PM in the Revere Room of the Westin Boston Waterfront. This is a great opportunity to network with our industry and academic APS members alike – we hope to see you there!

8. Journal of Applied Physiology - Update

Peter Wagner – Editor-In-Chief, Journal of Applied Physiology

Journal of Applied Physiology February 2015

Overall, the journal is doing well. In 2014 we had 1073 submissions, the largest in the APS portfolio, an acceptance rate of 32% and a 23 day mean time to first decision throughout the past year. Impact factor: 2 year is about 3.5; 5 year IF is just over 4. We have referred 17% of papers to Physiological Reports (PR) since PR began almost 2 years ago. This fits well with the target of sending PR everything we do not accept within the top 50% of submissions (32% acceptance in JAPPL + 17% referral to PR = 49% of submissions accepted or referred). Most of those referred are accepted, usually within a few days, as our reviews usually travel with the referred paper to the PR editors to help in their decisions.

We have a full calendar of Highlighted Topics through early fall 2016. (heart failure with preserved ejection fraction; epigenetics in chronic diseases; hypoxia; molecular basis of exercise adaptation in heat; analogs of microgravity; mathematical modeling in physiology; metabolic imaging (planned)).

We publish Physiology in Medicine articles, to expand readership and promote the discipline. Topics include: Altitude illnesses; travel to altitude by patients with heart/lung disease; sleep apnea; rehabilitation for heart/lung disease; airway smooth muscle function in asthma; peripheral arterial disease; diaphragm function in abdominal hernia. Additional topics planned include respiratory muscles in the ICU; heart failure with preserved ejection fraction; neuromuscular consequences of diabetes.

Several author-initiated topical reviews have appeared (“Synthesis” articles) including pulmonary capillary fragility; estrogen replacement and muscle function; lymphatic regulation; flow mediated vasodilatation; nitrate supplementation and arterial aging; EMG information content; metabolic homeostasis; intermittent hypoxia; evaluation of tendons by ultrasound.
**Viewpoint** articles published: Protein synthesis and muscle mass; physiological investigation in clinical disease; attaining the two hour marathon; breathing control

We are steadily producing **podcasts** (jappl.podbean.com), which have received on average 80 plays each. Podcasts feature selected articles: HIF responses in Tibetans; Sapropterin and skin perfusion; sleep apnea; proteomic response to altitude; comparative thermoregulatory study design; exercise, aging and arterial stiffness; hyperpolarized Xe to assess lung function; cerebral velocity versus actual blood flow; dietary nitrate and metabolic recovery from exercise.

The JAPPL **Facebook** page has a following of 3,212; The JAPPL **Twitter** feed (@japplphysiol) has a following of 2,794. Feeds are updated regularly with JAPPL content. In general, JAPPL has the largest following on social media, by far, of any of the APS journals.

The APS conducted an **author survey** in 2014. We learned that authors would like IF to exceed 5, time to first decision reduced, and peer review to be improved in two ways - they do not like nitpicking reviewer comments, and they do not like demands for additional studies. Finally, they would like better-stated reasons for rejection. We are working on these requests to the extent reasonable and feasible.

9. **2014-2015 EEP Steering Committee**

The following EEP members were elected to serve your interests. If you have any program or other ideas / concerns regarding APS and EEP issues please do not hesitate to contact the following:

Chair – Tim Musch musch@vet.ksu.edu
ex officio, Past Chair – Scott Powers spowers@hhp.ufl.edu
Advisor/Nominations Committee – Mike Sawka mike.n.sawka@gmail.com
Joint Program Committee Rep Co-Chair (out going, and newly elected APS Councilor) – Lisa Leon lisa.r.leon.civ@mil
Joint Program Committee Rep Co-Chair – David Poole poole@vet.ksu.edu
Exercise Physiology Councilor (outgoing 2015) – James Carson carsonj@mailbox.sc.edu
Exercise Physiology Councilor (incoming 2015) – Harry Rossiter hrossiter@ucla.edu
Exercise Physiology Councilor – Benjamin Miller Benjamin.F.Miller@ColoradoState.edu
Environmental Physiology Councilor (outgoing 2015) – John Halliwill halliwil@uoregon.edu
Environmental Physiology Councilor (incoming 2015) – Thomas Clanton tclanton@hhp.ufl.edu
Environmental Physiology Councilor – Sue Bodine scbodine@ucdavis.edu
Thermal Physiology Councilor – Glen Kenny gkenny@uottawa.ca
Thermal Physiology Councilor – Lacy Alexander lma191@psu.edu
Committee-on-Committees Rep – Lacy Alexander lma191@psu.edu
Secretary/Treasurer – Benjamin Miller Benjamin.F.Miller@ColoradoState.edu
Trainee Advisory Rep (outgoing 2015) – Laura Gilliam gilliaml@ecu.edu
Trainee Advisory Rep (incoming 2016) – Steven Copp scopp@hmc.psu.edu
International Committee Rep (outgoing 2015) – Anne McArdle Mdcro2@liverpool.ac.uk
International Committee Rep (incoming 2015) – David A Hood dhood@yorku.ca
Liaison with Industry – John Mattson jmattson@hickorytech.net
10. **Thanks to the following for their generous support of EEP awards and activities during 2014-2015**

- Exercise Medicine and Sport Sciences Initiative (EMSS) at the University of California, Irvine
- Gatorade Sports Science Institute
- National Space Biomedical Research Institute
- Nike, Inc.
- CAN-TROL Environmental System
- Partnership for Clean Competition
- US Army