EB 2011

EB 2011 will be held in Washington D.C. April 9-13. The section is sponsoring several sessions that promise to be at the forefront of endocrinology and metabolism. We look forward to seeing you there.

Section Programming and Special Events

The E&M Section will sponsor the Berson Lecturer, three symposia and two featured topics at EB. Also, don’t forget to join us for the Section Business Meeting and Awards Reception. Programming to date can be found below.

Sunday, April 10, 2011

**Special Event:** Section Steering Committee Meeting

Time: 12:00 pm  
Location: Washington DC Convention Center, Room 303

**Symposium:** How Much do We Actually Know About the Function of Intracellular Signals in the Regulation of In Vivo Protein Metabolism and Muscle Plasticity?

Time: 3:15 PM-5:15 PM  
Location: Washington DC Convention Center, 145A

Chair: Philip Atherton, Univ. of Nottingham  
       Michael Rennie, Univ. of Nottingham

3:15 PM  
Cross-talk between protein and fat in the nutritional control of muscle mass: what are the signals involved?  
Bettina Mittendorfer, Univ. of Washington Sch. of Med.

3:45 PM  
The role of nutrition in stimulating muscle protein accretion at the molecular level.  
Scott Kimball, Penn State Hershey Med. Ctr.

4:15 PM  
Impact of immobilization, remobilization and chronic exercise training on the purported molecular determinants of muscle mass in humans.  
Paul Greenhaff, Univ. of Nottingham

4:45 PM  
Regulation of myosin synthesis, cytosolic protein degradation, and muscular dystrophies by the kinome, phosphatome, and muscle genes in C. elegans.  
Nathaniel Szewczyk, Univ. of Nottingham
Monday, April 11, 2011

Featured Topic: Brain - Gut Interactions

Time: 8:00 AM-10:00 AM  
Location: Washington DC Convention Center, 154A

Chair: Willis K. Samson, Saint Louis Univ. Sch. of Med.

8:00 AM  
Nesfatin-1, a new player in brain-gut interactions.  
Yvette Tache, UCLA and VA Greater Los Angeles Healthcare System

8:30 AM  
Hypothalamic nutrient sensing and energy balance.  
Timothy H. Moran, Johns Hopkins Univ. Sch. of Med.

Lecture:  
Solomon A. Berson Distinguished Lectureship of the APS Endocrinology & Metabolism

Time: 10:30 AM-12:30 PM  
Location: Washington DC Convention Center, 146A

Speaker: Christos Mantzoros, Harvard Med. Sch. and VA Boston Healthcare System  
Title: Leptin deficiency as a new hormone deficiency syndrome in humans: from fiction to fa(c)ts using translational research.

Dr. Mantzoros is an internationally recognized expert on obesity and diabetes. His current research involves the discovery and study adipokines, important in the pathogenesis of diabetes, obesity, and associated disease states, including cardiovascular disease and malignancies. The Mantzoros group was the first to conclusively demonstrate the role of leptin in regulating the neuroendocrine response to energy deprivation in humans and that administration of leptin corrects neuroendocrine and reproductive abnormalities associated with acute and chronic energy deprivation in humans.

Tuesday, April 12, 2011

Featured Topic: Brain - Adipocyte Interactions

Time: 8:00 AM-10:00 AM  
Location: Washington DC Convention Center, 154A

Chair: Gina Yosten, Saint Louis Univ. Sch. of Med.

8:00 AM  
Sympathetic control of lipolysis.  
Timothy Bartness, Georgia State Univ.

8:30 AM  
Adipocyte signaling to brain.  
Alastair V. Ferguson, Queen’s Univ.

Additional presentations will be included from submitted abstracts.
**Tuesday, April 12, 2011 (Continued)**

**Symposium: Oxidants, Immunity, Beta Cells and Diabetes**

**Time:** 10:30 AM-12:30 PM  
**Location:** Washington DC Convention Center, 146B

**Chair:** John A. Corbett, Med. Col. of Wisconsin  
Clayton Matthews, Univ. of Florida


11:00 AM Mitochondria, oxidants, beta cells and diabetes. Clayton Matthews, Univ. of Florida

11:30 AM ROS, T-cell plasticity and type 1 diabetes. Hubert Tse, Univ. of Alabama at Birmingham

12:00 PM RNS, foxO1 and beta cells and diabetes. John A. Corbett, Med. Col. of Wisconsin

**Symposium: Sex Difference Contributions to the Developmental Origins of Health and Disease**

**Time:** 3:15 PM-5:15 PM  
**Location:** Washington DC Convention Center, 145B

**Chair:** Mark J. Nijland, Univ. of Texas Hlth. Sci. Ctr. at San Antonio  
Jeffrey S. Gilbert, Univ. of Minnesota Duluth

3:15 PM Sex Specific Programming: Critical Role of the Renal Renin-Angiotensin System  
Kate Denton, Monash University

3:45 PM Programmed Metabolic Syndrome in Offspring Exposed to Maternal Obesity and Maternal Under-Nutrition  

4:15 PM Fatty Acids and The Placenta – Sex Matters  
Perrie O’Tierney, Oregon Health Sci. Univ.

4:45 PM DNA Methylation at the PEPCK1 Gene Promoter in Offspring of Nutrient Restricted Pregnanies  
Tuesday, April 12, 2011 (Continued)

Special Event: APS Business Meeting
Time: 5:45-7:00 pm
Location: Washington DC Convention Center, Ballroom B.

Special Event: Section Business Meeting and Awards Reception
Time: 7:00 pm
Location: Cabin John, Grand Hyatt Washington

The Annual Business Meeting and Awards Reception is a great opportunity to get up to date on Section activities and to share research and refreshments with friends and colleagues. We will also announce award winners for the New Investigator Award, the Virendra B. Mahesh Award of Excellence in Endocrinology, the Mead Johnson Research Award in Endocrinology and Metabolism, and Endocrinology & Metabolism Section Research Recognition Award. Award winners will have their posters displayed for review and discussion. Please make time to attend and bring a colleague to learn more about our Section.

Other EB Topics of interest

From the APS Science Policy Committee

Workshop: How to Be an Advocate: A Workshop for Scientists
Date: Saturday April 9
Time: 1:00-3:00 pm
Location: Walter E. Washington Convention Center, 147A

Join the members of the APS Science Policy Committee to learn how to be an effective advocate for science. This workshop will address what scientists can do to encourage federal support for research and what you will need to understand about the budget process. You will also learn how to schedule a meeting with your Member of Congress while you are in Washington. Experiences science advocates will be available to guide small group discussions about advocacy and answer questions about meeting with Members of Congress.

For more information on planning ahead to visit Capitol Hill during EB, see the APS Science Policy website: http://www.the-aps.org/pa/advocate/AdvocateforScience.htm

From the APS Physiologists in Industry Committee (PIC)

Section representative: Joe Brozinick

Symposium: Stem Cells in Physiology and Drug Discovery
Date: Sunday, April 10
Time: 8:00-10:00 am
Location: Washington DC Convention Center, 145A

Chair: Magdalena Alonso-Galicia
       Cheryl Watson
Recent breakthroughs have allowed the generation of induced pluripotent stem cells (iPS cells) from somatic cells which maintain all the potential of embryonic stem cells without using embryos, eliminating ethical concerns. These findings have generated excitement and interest in the biomedical research community as well as the pharmaceutical industry. The first stem cell trial in the US has recently been approved by the FDA for severe spinal cord injury. Beyond therapeutics, the promise of using differentiated human stem cells in drug discovery as disease relevant and toxicology models is maturing. Stem cells and cell lines derived from iPS cells of patients can accelerate the development of existing targets for different diseases and provide opportunity to explore innovative treatments in regenerative medicine. This symposium will review the current use of pluripotent stem cells as enabling technology in drug discovery as well as provide examples of therapeutic approaches.

**Symposium: The Cardiac Sarcomere as a Therapeutic Target**

Date: Wednesday, April 13  
Time: 3:15-5:15 pm  
Location: Washington DC Convention Center, 145A

Chair: John Liles  
Kelly R. Pitts

This symposium is co-sponsored by the APS Translational Physiology Group and the PIC. The cardiac sarcomere is the core structure responsible for active mechanical heart function and dynamics. A better understanding of the interactions at the crossbridge level has led to the discovery of novel pathways and to the development of new clinical targets. In this symposium, key opinion leaders in the field will a) review the sarcomere components associated with regulating basic cardiac function; b) discuss the effect of calcium signaling on sarcomere proteins; c) address the clinical consequences of certain genetic mutations of the sarcomere; and d) review the successes and challenges that sarcomeric modulators are experiencing in the clinic. Attendees will gain an appreciation for the translational nature of studying and targeting the cardiac sarcomere.

**PIC Novel Disease Award**

Date: Tuesday, April 12  
Time: 5:45-7:00 pm  
Location: Washington DC Convention Center, Ballroom B

PIC Novel Disease Model Award is now sponsored by Plato BioPharma, Inc., a world leader in *in vivo* model development and execution. The PIC Novel Disease Model Award will be granted to each a graduate student and a postdoctoral fellow who submit the best abstracts at EB 2011 that describe a novel disease model. The model can be *in vitro* or *in vivo* but should clearly emphasize the potential utility of the system for future research related to a disease. The award is $500 for the graduate student and $800 for the postdoctoral fellow categories, respectively, is sponsored by the PIC and the APS, and will be presented at the APS Business Meeting.
**PIC reception**

Date: Sunday, April 10  
Time: 7:00-8:15 pm  
Location: TBD  

You're invited! Come meet, eat and socialize with your fellow Physiologists who are working in the corporate, industrial, or academic sector at The 11th Annual Physiologists in Industry Committee Mixer at EB 2011. Free Hors d’oeuvres will be available along with a cash bar and information on the roles of Physiologists in Industry. This is a great opportunity to network with industry and academic APS members alike – we hope to see you there!

**PIC Section Meeting**

Date: Monday, April 11  
Time: 2:30-4:00 pm  
Location: TBD  

The APS PIC meeting is the committee’s annual opportunity to have a face-to-face meeting to discuss committee business and new initiatives. Please feel free to contact your PIC section representative if there are issues to be brought to the attention of the PIC.

**From the Energy and Macronutrient Metabolism Research Interest Section (EMM-RIS) of the ASN**

**Hot Topic:** “The fate of fat: The use of knockout mice to examine lipid partitioning.”

Date: Saturday April 9  
Time: 5:00-6:00 pm  
Location: TBD  

The Energy and Macronutrient Metabolism Research Interest Section (EMM-RIS) of the ASN welcomes scientists interested in the function, metabolism, and utilization of carbohydrates, lipids, proteins, and amino acids to attend the Hot Topics Seminar, Business Meeting and Reception.

The EMM-RIS Hot Topics Seminar will be presented by Rosalind Coleman from the University of North Carolina at Chapel Hill. Business meeting and reception will follow. The reception will include presentation of student and postdoc abstract award winners.

**EB 2012**

We URGENTLY need suggestions for symposia and featured topics for EB 2012. The deadline for receiving suggestions about symposia and featured topics has been extended to **March 25, 2011**. Your suggestions for symposia topics and featured topics should be sent to our joint programming committee representative, Rick Samson at: samsonwk@SLU.EDU. We look forward to receiving your suggestions for these important opportunities for the Section to highlight research in Endocrinology and Metabolism.