

Cell Section Newsletter

Winter 2006 / Spring 2007

Michael F. Romero, Editor / Vice Chair

Message from the Chair

I have finished my second year as Chair of the Cell and Molecular Physiology Steering Committee, I want to thank all the members of the section steering committee for making it such a successful and enriching year. The CaMP banquet at EB06 was very well attended with over 100 participants and a very relaxed venue in San Francisco's Chinatown. I want to extend Peter Cala my thanks for the selection and initial arrangements for the banquet site. I would also like to again congratulate the New Investigator award winner, the research recognition award winners and student and Post-doc award winners. Cell and Molecular Physiology Section New Investigator Award was given to Cara J. Gottardi, Northwestern University. Cell and Molecular Physiology Section Research Recognition Awards were awarded to Consuelo Plata-Ramos, Case Western Reserve University and Oleh Pochynyuk, University of Texas Health Science Center at San Antonio. The Cell and Molecular Physiology Section Student Award was given to Amanda King Mason, from University of Maryland, Baltimore

Mike Jennings will continue in his role as Sage (2007), **Michael Romero** is the new vice chair (2009), Jay Gargus (2009), and Bruce Schultz (2009) are the new councilors and Scott O'Grady (2007) continues as a councilor. Chris Lytle (2009) is the senior programming officer and Carol Liedtke is the newly elected junior programming officer with a term that ends January 2011. Chahrzad Montrose (2007) is our Liaison with Industry representative, Perry Chang is the Post-doctoral representative and Dennis Brown as *ex officio* AJP editor.

This years EB06 will be in Washington D.C. , from April 28 to May 2 with the theme of "**Novel Technologies in Physiology and Medicine**".

A theme in keeping with the new NIH roadmap and offers all of us a chance to meet and interact with our colleagues. I encourage all members of the Cell and Molecular Physiology section to attend EB07. The range of symposia, and featured topics of EB06 is truly impressive. Many of the symposia will be described later in this newsletter. I want to remind everyone about the Hugh Davson Distinguished Lecture which will be presented by David Clapham on Monday April 30. Our Cell and Molecular Physiology dinner will be held that evening as will be the CaMP business meeting and the awards ceremony.

I hope to see all of you at the meeting this year.

Simon A. Lewis
Simon A. Lewis
Chair, APS Cell and Molecular Physiology Section

Call for Nominations: Hugh Davson Lectureship

Send in your nominations for the 2008 **Hugh Davson Lectureship** to Chris Lytle
(Christian.lytle@ucr.edu)

EB 2007 PREVIEW:

CELL & MOLECULAR PHYSIOLOGY SECTION SPONSORED EVENTS

Chris Lytle, senior programming officer



Hugh Davson Distinguished Lectureship of the APS Cell and Molecular Physiology Section

Monday, April 30, 2007
10:30-11:30 AM, Ballroom B

David E. Clapham, MD, PhD
Harvard Medical School

<http://clapham.tch.harvard.edu/>

Saturday April 28, 2007 (1-3 pm)

- Public Policy “Making the case for federally-funded research: Communicating with Congress.” (Sponsored by the APS Communications Committee)

Sunday, April 29, 2007

8:00-10:00AM, Room 147A

Symposium

Novel Aspects of the Regulation and Physiology of NHE1

Chairs: Diane Barber and Stine Falsig Pedersen

- **Stephen Reshkin.** *The role of NHE1 in driving metastasis and invasion: recent advances in understanding the dynamics of tumor cell-ECM interactions.*
- **Marcel Meima.** *A Broader View of Ion Transport Proteins: H⁺ Efflux, Actin Anchoring, and Scaffolding by NHE1.*
- **Shigeo Wakabayashi.** *Structural and functional aspects of the Na⁺/H⁺ exchanger 1 and its obligatory binding partner CHP.*
- **Jeffrey Schelling.** *Regulation of Cell Survival by the NHE1 Na⁺/H⁺ Exchanger.*
- **Christian Stock.** *NHE1 creates an extracellular pH nanoenvironment involved in cell migration.*

Featured Topic

Poster-driven FT: 4 posters selected for 10 min oral presentations

Monday, April 30, 2007

10:30-11:30 AM, Ballroom B

Lecture:

Hugh Davson Distinguished Lectureship of the APS Cell and Molecular Physiology Section

Speaker: David E. Clapham, MD, PhD

3:15-5:15 PM, Room 146C

Symposium: *Transport-Metabolism Coupling through AMPK*

Chairs: Kenneth Hallows, Alicia McDonough

- **Kenneth Hallows,** Regulation of CFTR and ENaC by AMPK
- **David Power,** AMPK in the Kidney and the Regulation of NKCC
- **Karen Madsen,** Role of AMPK in the Regulation of GI Transport
- **Geoff Holman,** AMPK Regulation of GLUT4 Trafficking in Insulin-Sensitive Tissues

Monday, April 30, 2007 (cont.)

Featured Topic

Poster-driven FT: 4 posters selected for 10 min oral presentations

Public Policy (Monday April 30, 12:45-1:45)

- “NIH at the Crossroads: How Diminished Funds Will Impact Biomedical Research and What Scientists Can Do About It”
(*EB symposium that features **NIH Director Elias Zerhouni** and former Congressman John Porter.*)

Tuesday, May 1, 2007

8:00-10:00 AM, Room 154B

Featured Topic: *Molecular Physiology of Cation-Coupled Bicarbonate Transporters*

Chairs: Mark Bevensee, Irina Grichtchenko

- **Walter F. Boron**, Na-coupled HCO₃⁻ transporters: 10 years of cloning and characterizing function
- **Ira Kurtz**, SLC4 transporters: Lessons learned from knockout models, genetic diseases, and structural studies

OTHER SYMPOSIA OF INTEREST

Tuesday, May 1, 2007

10:30 AM-12:30 PM, Room 145B

Symposium: *Epithelial Development, Disease, and Regeneration*

Chair: Caroline R. Sussman

- **Iain A. Drummond**, Zebrafish as a model of kidney development and disease
- **Todd Evans**, From stem cells to organs with Gata transcription factors
- **Michael Levin**, Bioelectrical control of embryonic development and regeneration
- **Marc R. Hammerman**, Organogenesis of kidney and endocrine pancreas: growing new organs in situ

<http://www.the-aps.org/meetings/eb07/abs/etg-sussman.htm>

PUBLIC AFFAIRS EVENTS AT EB 2007 (WASH., DC)

While there will be plenty of events to keep you busy at the meeting, please consider setting aside a few hours during the meeting or just before you go home to visit Capitol Hill. The biggest topic of concern for most of us will be federal research funding. A quick start guide plus a tip sheet for successful Congressional meetings have been posted on the EB web site at <http://www.the-aps.org/pa/ebweb/index.htm>.) For more information on making visits, please contact APS Science Policy Analyst Rebecca Osthus at rosthus@the-aps.org.

In addition, two EB sessions can help you prepare:

- “Making the case for federally-funded research: Communicating with Congress.” (Saturday, April 28 1-3 pm. Sponsored by the APS Communications Committee)
- “NIH at the Crossroads: How Diminished Funds Will Impact Biomedical Research and What Scientists Can Do About It” is an EB symposium that features NIH Director Elias Zerhouni and former Congressman John Porter. (Monday April 30, 12:45-1:45)

Another area of concern for many APS members is legislation to add new regulations or other restrictions on the use of animals in research. Members of Congress are deluged with email and letters from constituents who oppose animal research. For talking points on animal research issues, contact APS Director of Government Relations Alice Ra'anan at araan@the-aps.org.

Simon A. Lewis

CALL FOR SYMPOSIUM AND FEATURED TOPIC PROPOSALS, EB 2008

We invite you to submit proposals for symposia and featured topic sessions at EB 2008 (San Diego). Forms should be downloaded from the APS web site (<http://www.the-aps.org/meetings/eb.htm>) and sent to our Programming Chair, Chris Lytle (Christian.lytle@ucr.edu) before March 26, 2007.

The CAMP section can organize up to two symposia each year. The symposium organizer will receive up to \$4,000 to allocate for travel reimbursement along with complimentary registration for the organizer, co-organizer, and up to 4 invited speakers.

Our section can also organize up to 3 Featured Topics each year. A Featured Topic is a "Mini-symposium" in which a thematically cohesive series of outstanding posters are selected for oral presentation alongside one or two invited speakers. The organizer will receive up to \$1000 to allocate for travel reimbursement along with complimentary advance registration for up to 2 presenters.

APS Liaison With Industry Committee (LWIC)

The LWIC is sponsoring a Symposium entitled "Stem Cells in Physiology and Drug Discovery" at EB2007 on Sunday, April 29th from 10:30 – 12:30. This symposium will describe latest research on stem cells expansion, use of stem cells in target identification and understanding of signaling pathways, as well as its use in Neurodegeneration diseases. LWIC is also organizing a Translational Symposium entitled "Drug Discovery Efforts for Pain Indications: Ion Channels and GPCRs" at EB2007 on Tuesday, May 1st from 8:00 – 10:00 AM. This symposium will describe novel ion channel and GPCR targets for treating chronic pain. The mechanistic rationale for the target as well as the drug testing strategies to identify novel therapeutics will be discussed.

Look for the full program in the Spring.

The Novel Disease Model Award will be granted to a graduate student and a postdoctoral fellow who submit the best abstracts at EB2007 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 and is sponsored by the LWIC. See the call for abstracts this Fall for application details and in the Spring newsletter.

You're invited! Come meet and eat with your fellow physiologists who are working in the corporate sector. The 7th Annual Liaison With Industry Committee Mixer is on at EB2007. Look for details in the Spring newsletter.

Message from

Chahrzad Montrose-Rafizadeh, CaMPS Industry Liason

CAMPS TRAINEE COMMITTEE UPDATE

The Trainee Advisory Committee (TAC) will hold another fall meeting in December 2006 to continue work on a number of projects requested and approved by the Council for the next year. Please email me (mxc130@case.edu) if you have specific issues that you would like me to bring up or addressed at the fall meeting.

The TAC sends out newsletters every other month that contain valuable information on Committee activities, resources, awards/grants, positions available. Please sign up at: <http://www.the-aps.org/committees/trainee/Traineenewsletter.htm> for the Listserv to make sure you don't miss out on any future news.

Short Courses on Basic Presentation Skills:

Dates: January 18-21, 2007 (Orlando, FL)
March 8-11, 2007 (Bethesda, MD)

Application Deadline (for either course) October 25

Do you want to...?

- Improve your skills at introducing yourself to colleagues, faculty members, chairs?
- Learn how to write a better meeting abstract?
- Know how to write a great poster?
- Learn what constitutes an effective poster design?
- Learn how to present your poster to different types of audiences?
- Discover how diversity issues may influence your presentation skills?
- Learn about resources that can further develop your presentation skills?

If so, then you'll want to apply for one of the APS's Short Course on Basic Presentation Skills.

Who can apply?

- Lower level graduate students (within first 1-3 years of graduate training)
- Applicants must be US citizens or permanent US residents
- Minority students active in APS, ASM, or SDB will be given priority.

What is the cost?

Thanks to support from NIGMS/NIH, accepted students will receive FREE:

- Registration and materials
- Travel support (roundtrip budget airfare or mileage)
- Subsistence (hotel-double occupancy, food per diem, and ground transportation)

For more information, FAQs about the course, and how to apply, please visit <http://www.the-aps.org/education/professionalSkills/index.htm> or contact Melinda Lowy, Higher Education Programs Coordinator, at mloy@the-aps.org.

At the end of EB07, the trainee representative (Min-Hwang Chang) will complete his term on the CaMP steering committee. If you are a graduate student, postdoctoral fellow, or new investigator and are interested in contributing in issues concerning trainee welfare please contact CaMP Chair (Simon Lewis) at slewis@utmb.edu and let him know you are interested in serving on the Committee.

Message from

Min-Hwang (Perry) Chang, CaMPS Trainee Rep

CaMP Section Dinner – EB 2007

Hi Everyone,

Big apologies for messing up the Newsletter schedule. I moved institutions over the summer and time got away from me. Here is the information of note (that most of you received 3-6 times from the APS list-servers).

The 2007 CaMP banquet is scheduled for Monday April 30, 2006

THE TIME: Cocktails start at 6:30 p.m. and dinner at 7:30 p.m.

THE PLACE: Marrakesh Restaurant (<http://www.marrakesh.us/>)

THE COST: Members/nonmembers \$30 each.

Students and Post-doc \$15 each. (For a 7 course meal!!!)

Door cost: \$40 (members) and \$20 (student / postdocs)

AND entertainment

a) belly dancer

b) “How I got here” – featuring Dennis Brown (MGH, Editor, AJP-Cell)

POST DINNER ACTIVITIES: Awards followed by a brief business meeting.

See you in Washington, DC !

Message from

Michael F. Romero, CaMPS Vice Chair