IMPORTANT

Abstract Deadline: Thursday November 17, 2016

SEND TO THE ETG, ABSTRACT CATEGORY:
1170-1185 APS Epithelial physiology and transport

TRAVEL GRANTS AVAILABLE TO EARLY CAREER SCIENTISTS TO HELP THEM ATTEND THE EB MEETING

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Abstract Deadline for EB in Chicago 2017: November 17, 2016

SEND TO ONE OF THE EPITHELIAL PHYSIOLOGY AND TRANSPORT ABSTRACT CATEGORIES:

1170-APS Steve Hebert Lecture Featured Topic
1171-APS Hans Ussing Lecture Featured Topic
1175-APS Epithelial physiology and transport: CFTR
1176-APS Epithelial physiology and transport: Channels
1177-APS Epithelial physiology and transport: ENaC
1178-APS Epithelial physiology and transport: Exosomes
1179-APS Epithelial physiology and transport: Ion and electrolyte transport
1180-APS Epithelial physiology and transport: Microbiome
1181-APS Epithelial physiology and transport: Miscellaneous transporters
1182-APS Epithelial physiology and transport: Paracellular transport
1183-APS Epithelial physiology and transport: Solute transport
1184-APS Epithelial physiology and transport: Tight junctions
1185-APS Epithelial physiology and transport: Water transport

TRAVEL GRANTS AVAILABLE TO EARLY CAREER SCIENTISTS TO HELP THEM ATTEND THE EB MEETING
Message from the ETG Chair

Message from the ETG Chair Paul Welling

Thanks to the hard work of the steering committee, ETG has programmed an outstanding EB Meeting for 2017 in Chicago, IL. ETG has activities throughout the conference from Saturday to Wednesday. Following tradition, the Pre-Meeting on Epithelial Transport Regulation, organized by Robert Fenton, will kickoff our activities (Saturday, April 22). The ETG symposium (Sunday April 23, 3:15-5:15pm), MicroRNAs in Kidney and Epithelial Transport Physiology, Development and Disease was organized by Mike Butterworth, and will be chaired by Johannes Loffing, and Hui Cai.

Mark Knepper will deliver the Hebert Lecture in the first ETG Featured Topic session (Monday, April 24, 10:30-12:30). Inspired by a Handel Concerto Grosso, his lecture is entitled Vasopressin Signaling in the Kidney: New Insights from Genome Editing, Deep DNA Sequencing and Protein Mass Spectrometry.

Moshe Levi will deliver The Ussing Lecture, Imaging Renal and Intestinal Phosphate transporter in our second ETG Featured Topic session (Tuesday, April 25, 3:15-5:15).

Finally, ETG was selected to have a special Featured Topic Session on Wednesday, April 26, 2:30-4:30, New Insights in Renal Transport: Application of Genetic Models, chaired by Timo Rieg and Robert Fenton.

ETG has a lot to offer for trainees and junior investigators. I am happy to highlight the ways: ETG Pre-meeting: provides many great opportunities for trainees to present their work, network with principal investigators, and learn about new developments and directions in the field. Oral Communications: Featured Topic slots for oral presentations are preferentially given to graduate Students, post-doctoral fellows, and junior faculty. Chance to Co-Chair a FT Session: The two top scoring abstracts submitted to ETG by a trainee are selected to co-chair a session. Travel Awards. In the past few years, ETG was able to support travel awards for ETG trainees through NIDDK R13 grants. Thanks to the heroic efforts of Arohan R. Subramanya, the NIH R13 application that was submitted for EB 2017 scored very well. While we can’t guarantee awards at this time, it looks very promising, indeed. Please submit your abstracts to an ETG category (see below) to be considered.

The Steering Committee welcomes two new members for a three-year term, Nadia Ameen from Yale University School Medicine, and Mike Althaus from Justus-Liebig University Giessen, Giessen, Germany.

Please welcome me in congratulating Timo Rieg for accepting the ETG co-Chair position. This puts Timo in line for Chair at the end of EB 2018.

Please submit your abstracts to an ETG category. I look forward to seeing you at EB ‘2017. ETG Rocks!
Contributed by Robert Fenton

Twice a year, on the days preceding the FASEB Experimental Biology meeting and the American Society of Nephrology annual meeting, a research symposium is held that focuses on all aspects of epithelial cell transporters, channels and receptors, their function and their regulation. The symposia are usually attended by between 80 and 120 researchers and have been held, in some form or another, since 1991.

Purpose:
As the name implies, although everyone is welcome to attend the ‘Young Investigators Symposium’ special emphasis is given to younger researchers (PhD/graduate students, post-doctoral fellows etc.) who get the opportunity to present their work in a friendly and less formal atmosphere. The meeting will consist of short communications (10-15 min duration) and ample time is allocated for extensive discussion.

Registration:
A small registration fee (usually $20) gives you a full day of research talks tailored specifically to your areas of interest and we include coffee!

HAVE YOU EVER ATTENDED THE BI-ANNUAL ETG YOUNG RESEARCHERS SYMPOSIUM?

IF NOT, WHY NOT?!

At the last symposium, held in San Diego in April, over 80 researchers from 16 different countries attended. The symposium was a great success.

If you are interesting in attending/ presenting, then please send your name and potential presentation title/ authors and abstract to the email address below. Approx 3 weeks before the meeting you will be notified if you have been selected for an oral presentation.

The next meeting will be held on Saturday before the EB meeting in Chicago, 2017.
April 22 I 9am-5pm I Rm W196C
McCormic Place Convention Center

Travel scholarships:
We are able to offer limited travel scholarships to those presenting to help defray the extra costs associated with this meeting. Therefore, please submit an abstract to be considered for these awards.

For further information please contact
ROBERT FENTON (ETG2012@ana.au.dk).

Pre-EB meeting in Chicago
Steve Hebert Lecturer  Monday, April 24, 2017 at 10:30 AM

Mark Knepper, M.D., Ph.D.
Senior Investigator
Head of Epithelial Systems Biology Laboratory
National Heart Lung and Blood Institute
National Institutes of Health

Title:
Vasopressin Signaling in the Kidney: New Insights from Genome Editing, Deep DNA Sequencing and Protein Mass Spectrometry

Hans Ussing Lecturer  Tuesday April 25, 2017 at 3:15 PM

Moshe Levi, M.D.
Professor
Medicine-Renal Med Diseases/Hypertension
University of Colorado

Title:
Imaging Renal and Intestinal Phosphate transporter
Reasons to Attend ETG Sessions at EB 2017 in Chicago

Pre-EB Meeting

ETG Young Investigator Symposium
- Saturday April 22 | 10:30 AM – 12:30 PM | Rm W192A

Symposium

MicroRNAs in Kidney and Epithelial Transport Physiology, Development and Disease
  - Mingyu Liang – MicroRNAs in Hypertension and Endothelial Dysfunction
  - Jacqueline Ho – Small RNAs and Small Kidneys
  - Rama Natarajan – MicroRNAs in Diabetic Nephropathy
  - Michael Butterworth – microRNAs and the Regulation of Epithelial Ion Transport
    Chairs: Johannes Loffing and Hui Cai
- Sunday April 23 | 3:15 PM – 5:15 PM | Rm W193

Featured Topics

Steve Hebert Lecture
Speaker: Mark Knepper
Chairs: Hanne B Moeller
- Monday April 24 | 10:30 AM – 12:30 PM | Rm W192A

Hans Ussing Lecture
Speaker: Moshe Levi
Chairs: Janet Klein
- Tuesday April 25 | 3:15 PM – 5:15 PM | Rm W192A

Sponsored Session

New Insights into Renal Transport: Application of Genetic Models
(Featured Topic)
Chairs: Timo Rieg and Robert Fenton
- Wednesday April 26 | 2:30 PM – 4:30 PM | Rm W192A
EB 2016 Highlights in San Diego

Trainees who presented at these 2016 ETG sessions received Research Recognition Awards in part supported by an NIH R13 grant to ETG.

The 2016 ETG Steve Hebert Session:
Douglas C. Eaton who received the Steve Hebert Award together with the moderators M. Helms and K. Hamilton.

The 2016 ETG Hans Ussing Session:
Bruce Stanton who received the Hans Ussing Award together with the moderators N. Bradbury and J. Bomberger.

The 2016 ETG Steve Hebert Session:
D. Eaton (left) and A. Eaton (right), with the moderators M. Helms and K. Hamilton and the speakers (left to right) P. Trac, A. Mukherjee, J. Czogalla and CA. Klemens.

The 2016 ETG Hans Ussing Session:
The moderators J. Bomberger (left) and N. Bradbury (right) with the speakers (left to right) A. Grill, KK. Kalsi, XT. Su, JM. Nizar and N. Zaldman.
Update on AJP Cell from the Editor: Jo Adams

**AJP-Cell Physiology** welcomes submissions from ETG members in any area of Cell Physiology.

Papers on epithelial transported and channels recently published by AJP-Cell include:

"Mouse Slc4a11 expressed in Xenopus oocytes is an ideally selective H+/OH−-conductance pathway that is stimulated by rises in intracellular and extracellular pH" (Myers et al 2016, DOI: 10.1152/ajpcell.00259.2016);

"N-glycosylation critically regulates function of oxalate transporter SLC26A6" (Thomson et al 2016 DOI: 10.1152/ajpcell.00171.2016);

"Ca2+-activated Cl− channel currents in mammary secretory cells from lactating mouse" (Kamikawa et al. 2016, DOI: 10.1152/ajpcell.00050.2016) and

"Functional Assessment of SLC4A11, an Integral Membrane Protein Mutated in Corneal Dystrophies" (Loganathan et al 2016, DOI: 10.1152/ajpcell.00078.2016).

**AJP-Cell’s current Calls for Paper run until Dec 31st, 2016 and cover the areas:**

- Cellular Mechanisms of Proteostasis
- Gasotransmitters
- Pathophysiology of Skeletal Muscle Loss
- Single Cell Physiology
- Stem Cell: Physiology and Microenviroment

Associate Editor Eric Delpire held a well-attended “Meet the Editor” session at the APS booth during Physiology 2016 in Dublin – photos of this event can be found on the AJP-Cell facebook page. Looking ahead to EB2017 in Chicago, don’t forget to mark your diaries for the next CamPS/AJP-Cell Physiology-sponsored Symposium. The “Paper of the Year 2016” winner will be announced at the start of this Symposium. This year’s Symposium topic is “Multi-omics to Study the Cellular Pathophysiology of Neurodegenerative Diseases” and will be co-chaired by AE Dr. Sanjay Pimplikar (Cleveland Clinic) and Dr. Li-Huei Tsai (MIT). The Symposium will consider how “Multi-omic”, system-level investigations of cells and molecular pathways are generating a better holoistic understanding of the pathogenesis of complex neurological disorders, with a focus on Alzheimer’s disease. Speakers are: Prof. Alison Goate (Mount Sinai), Dr. Li-Huei Tsai (MIT), Dr. Bin Zhang (Mount Sinai School of Medicine) and Prof. Madhav Thambisetty (National Institute on Ageing, NIH). This Symposium will be held from 3.15PM-5.15PM on Tuesday April 25, 2017.

If you are considering where to submit your next paper, you may like to know that average handling times by AJP-Cell Physiology in 2015 were 1 day for the decision to review and 16 days to first decision. Visit [http://ajpcell.physiology.org](http://ajpcell.physiology.org) or APS Select apsselect.physiology.org/ to see the latest papers and highlighted research articles from AJP-Cell Physiology. Also consider to sign up your laboratory for eTOCs, or for the Journal’s Social Media posts on Twitter ([https://twitter.com/AJPCellPhys](https://twitter.com/AJPCellPhys)) or facebook ([https://www.facebook.com/pages/American-Journal-of-Physicsiology-CellPhysiology/178277545642714)](https://www.facebook.com/pages/American-Journal-of-Physicsiology-CellPhysiology/178277545642714)).

ETG members are welcome to contact the editorial office (ajpcell-office@bristol.ac.uk) at any time with ideas, suggestions or comments regarding AJP-Cell, including ideas for Reviews, Perspectives, Methods in Cell Physiology, or future Calls for Papers.

**Jo Adams, EIC AJP-Cell Physiology**
Update on AJP Renal from the Editor: Darwin Bell

As I begin my second term as Editor in Chief of the American Journal of Physiology Renal Physiology, I look forward to working with a talented group of editors, in shaping the journal to ensure that it maintains its place as the leading publication addressing renal physiology. I am excited to announce that not only have we increased our submission rate by over 20% from last year, our impact factor has increased to 3.390. None of these achievements would have been possible without your continued support. I would also like to acknowledge the outstanding work of our Managing Editor, Amy McEver.

One of our major efforts is to expand our clinical readership. A year ago we began A series of Perspectives articles, where clinicians introduce opportunities for translational research. The Perspectives article series is flourishing, and the submission rate of clinical manuscripts has jumped. In July we welcomed a new Associate Editor, Adam Whaley-Connell, from the University of Missouri--Columbia. Dr. Whaley-Connell is primarily in charge of clinical research papers.

We continue to encourage the submission of manuscripts under one of our special Calls for Papers:

- Renal hemodynamics
- Imaging techniques in renal (patho)physiology research
- Inflammation and inflammatory mediators in kidney disease
- Gender and hormones in lower urinary tract function
- Mechanism and treatment of renal fibrosis and treatment

Papers accepted under these calls will be published under a distinct heading and will receive special attention and handling. If you have recently submitted a paper in one of these areas and would like it included in the call, please contact Amy McEver (amcever@emory.edu).

Our Facebook page has become increasingly active and popular. Be sure to like our page (http://www.facebook.com/AJPRenal) and visit often for updates of recent publications, research opportunities, and news in renal research.

We look forward to seeing you at the Renal Week 2016 in Chicago. Our Editorial Board will once again have a reception; invitations will follow. However, all are welcome, and if you would like to attend please send a note to Amy McEver. As always we appreciate the effort that goes into reviewing for our journal.

We are seeking Review articles. If you would like to submit a Review, please contact us or send us suggestions of potential authors or topics.

Darwin Bell, Editor in Chief, AJP-Renal
Update from The Career Opportunities in Physiology Committee

Career Opportunities

FALL 2016

The Career Opportunities in Physiology Committee supports a number of APS programs to foster the career development of physiologists of all ages:

Physiology Understanding (PhUn) Week
APS’s annual November outreach program, Physiology Understanding (PhUn) Week is approaching. Help us spread the word and convince your colleagues to join in on the PhUn to reach out to more than 14,000 pre-college students this year. Are you ready to plan a classroom event or visit during PhUn Week (November 7-11, 2016)? Deadline for submitting your event planner: October 1. See www.phunweek.org for more details.

Excellence in Professional (MD/DO) Student Travel Awards for EB 2017
Did you host a great MD or DO student in your lab this summer? Are they submitting a first author abstract to Experimental Biology? If so, you’ll want them to apply this award! It provides medical student (not MD/PhD) first-authors with up to $1,800 in reimbursement for travel and advanced meeting registration for Experimental Biology. Up to 10 awards are made each year. This award is designed to foster the student’s interest in research by aiding in their participation in the Experimental Biology meeting, along with gaining valuable advice from MD/DO “meeting mentors”. Applications are due one week after the Experimental Biology abstract deadline in November. See http://www.the-aps.org/md-do for more details.

APS Video Contest – Help Spread the Word!
APS Presents... Phantastic Physiology Voyage: “Function Follows Form” video contest to encourage undergraduate and graduate students to creatively connect with physiology and engage them with the broader public through a short video contest. Videos should creatively demonstrate and/or explore a specific physiological function in five minutes or less (including credits). The target audience is the general public. The video can be staged as a short play, commercial, news broadcast, talk show, music video, documentary etc. No professional assistance can be provided to produce the video in any manner. The first place prize is $750 plus up to $1000 in travel support to Experimental Biology to collect the award. There is also a $250 viewer's-choice award. Follow the link for more information and to view previous winners: http://www.the-aps.org/video. Entries are due December 15.

Science Fair Prizes
Know of a science fair near you? The APS has FREE prizes to give away! Just fill out a simple online request form (http://www.the-aps.org/sciencefair) and APS members can present one award per science fair. Student winners receive an APS t-shirt and a certificate for the best physiology project. The teachers of the winning students will receive an APS teaching resource packet. Follow this link for further details: http://www.the-aps.org/sciencefair.

Undergraduate Summer Research Fellowships
It’s never too early to start thinking about next summer! Our committee sponsors awards to encourage undergraduate students to pursue a career in research, providing a $4000 stipend and $1300 in Experimental Biology travel support to the student, and a $300 grant to the APS member’s lab. Awards are available both for students with little or no prior research experience (Undergraduate Summer Research Fellowship or UGSRF – see http://www.the-aps.org/ugsrf; up to 24 awards annually) or significant exposure to research already (>9 months; Undergraduate Research Excellence Fellowships or UGREF – see http://www.the-aps.org/ugref; up to 6 awards annually). The APS sponsors 2 additional summer research programs targeting underrepresented undergraduate students. See http://www.the-aps.org/summerresearch for additional details and opportunities. Applications are due February 1.
# Epithelial Transport Group Steering Committee

## Councilors

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