IMPORTANT

The Pre-EB Epithelial Transport Meeting for Young Researchers
Saturday, April 21, 2018 between 8:30 AM and 5 PM
San Diego Convention Center - Room 25A

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

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Message from the ETG Chair Paul Welling

Dear Epithelial Transport Group Members:

Thanks to the hard work of the ETG steering committee, we planned an outstanding EB 2018 meeting. The program kicks off with our Annual EB Pre-Meeting, highlighting ~30 talks by trainees and junior investigators (SAT. 8.30 AM – 5 PM, Room 25A). Dr. Ina Schiessl, the chair of the Pre-Meeting Committee, deserves special recognition for all her hard work, thoughtfulness and enthusiasm to organize and reinvigorate this historic event. It should be a great venue for trainees to present their work and network with established investigators. Our symposia, “Building Epithelial Organs in vitro to study Physiology and Pathogenesis of Disease” (SUN 8:30 AM – Room 25A) will highlight state-of-the-art research by leaders in the field, including Dr. Donald E. Ingber, Dr. Mark Donowitz, and Dr. Owen M. Woodward. Featured Topics serve as venues for two award lectures, and highlight trainee talks, selected from the best scoring abstracts. The Ussing Lecturer is Dr. Ursula Seidler, Hannover Medical School, Germany (MON 1:30 PM – Room 25A). Alicia McDonough, University of Southern California, is the Hebert Lecturer (TUES 3:30 PM – Room 25A).

To support the attendance of trainees, ETG has been very fortunate with an aggressive grant application campaign. This year Steering Committee Member Dr. Jennifer Bomberger received a perfect score on her R13 application for ETG from the National Institutes of Health to give out travel awards. Thank you Jen for your hard work and dedication!!

In response to a question from the APS task force on “Society Interest Groups,” the Steering Committee is considering if our mission would be better served if we become a section. If you have an opinion, please provide feedback to members of the committee.

As you know, the structure of the EB Meeting is changing. With the loss of Wednesday on the program, each section and group lost one symposium. As a consequence, ETG will not have a symposium of its own. We will, however, be working with other groups and sections to apply for “Cross-section” symposium slots. Please contact us if you have ideas for a symposium.

On a more uplifting note, I worked with Dr. Robert Fenton, Dr. Denis Brown (APS President), and Dr. Mark Okusa (President, American Society of Nephrology [ASN]), in a collaborative effort to amplify basic science at the ASN. As a result, ASN will be sponsoring a Pre-Meeting for renal epithelial transport and basic nephrology science at Renal Week. It will take place on Wednesday, October 24, 2018 in San Diego.

I’d like to personally thank Dr. Janet Klein for all her efforts over many years with ETG, as she steps down from the steering committee. Janet served on the Steering Committee, was Co-Chair of the ETG, and is now the Sage. Janet worked diligently, often behind the scenes, to make sure that all of ETG efforts ran smoothly. Quite frankly, without Janet, ETG wouldn’t have been possible. Thanks to Janet’s efforts, ETG is regarded as the “model” group by APS leadership. I would also like to extend my thanks to Dr. Rikke Nørregaard, who is doing an outstanding job with our newsletter.

I’d like to end this note by personally thank you for letting me serve you as Chair of this interest group. I’m proud of our many accomplishments during my tenure, especially establishing a system of governance that best serves our core missions and increasing the recognition of trainees. Please join me in welcoming Dr. Timo Rieg (University of South Florida) as your new Chair, and Arohan “Ro” Subramanya (University of Pittsburgh) as your Co-Chair. I will be filling the role of “Sage.”

Looking for ways to participate? Please contact us if you have ideas for a symposium or help with the pre-meeting. I look forward to seeing you at EB 2018. ETG Rocks!

Your outgoing ETG Chair, Paul A. Welling
Pre-EB Meeting

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 (MD/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 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!

For further information please contact
Ina Schiessl: schiessl@usc.edu
to be added to the mailing list or to update your contact information.
**EB 2018 – ETG-Sponsored Lectures**

**Congratulations to all our Top Scoring Trainees who got picked for presenting in these Sessions!**

**Steve Hebert Lecturer/Session**

Sunday, April 24, 2018
at 3:30 PM, Room 25A

3:30: Potassium diet and blood pressure. **Alicia McDonough. USC.**

4:00: The β-Adrenergic Stimulation of the Renal NaCl Cotransporter Is Mediated via a cAMP-Dependent Activation of Protein Phosphatase 1 Inhibitor 1. **D. Penton Ribas,** et al. University of Zurich, Switzerland and Aarhus University, Denmark.

4:15: Collecting-Duct-Principal-Cell-Select Knockout (KO) of the Mechanistic-Target-of-Rapamycin (mTOR) Alters Sodium and Acid/base Homeostasis. **M.B. Fluitt,** et al. Georgetown University and Sanjay Gandhi Post-Graduate Institute of Medical Sciences, India.


**Hans Ussing Lecturer/Session**

Monday, April 23, 2018
at 1:30 PM, Room 25A

1:30: Epithelial acid-base balance, claudins, and gastric barrier properties. **Ursula Seidler.** Hannover Med. Sch., Germany.

2:00: Novel Mouse Model of a Human Mutation in NKCC1 Confirms Its Mistargeting in Epithelia. **R. Koumangoye,** et al. Vanderbilt University School of Medicine.


2:30: Intestinal Epithelial-Specific NHE3 Knockout Causes Metabolic Acidosis. **A. Valdez,** et al. University of South Florida and Aarhus University, Denmark.
Reasons to Attend ETG Sessions at EB 2018 in San Diego

Pre-EB Meeting

ETG Young Investigator Symposium
- Saturday April 21 | 8:30 AM – 5:00 PM | Room 25A

Symposium

Building Epithelial Organs in vitro to study Physiology and Pathogenesis of Disease
- Dr. Donald Ingber – Engineering human organs on a chip
- Dr. Mark Donowitz – Making mini-human intestine in a dish from intestinal biopsies
- Dr. Owen Woodward – Polycystic kidney organoids
Chairs: Rikke Nørregaard and Eryn Dixon
- Sunday April 22 | 8:30 – 10 AM | Room 25A

Featured Topics

Hans Ussing Lecture
Speaker: Ursula Seidler
- Monday April 23 | 1:30 – 3:00 PM | Room 25A

Steve Hebert Lecture
Speaker: Alicia McDonough
- Tuesday April 24 | 3:30 – 5:00 PM | Room 25A

NEW ETG Poster Awards!

Top scoring abstracts were selected for presentation at the ETG Poster Award session!

Please congratulate the following Top 10 Finalists and stop by to discuss their work on Monday 9:00 AM in Exhibit Halls A-D (A480-A489, Epithelial Transport Group II)

A. Kini, Hannover Medical School, Germany; J. Xue, University of South Florida; E.T.B. Olesen, Copenhagen University; B.E. McFarlin, University of Southern California; J.N. Curry, University of Kansas Medical Center; Y. Bhattarai, Mayo Clinic; S. Bazúa-Valenti, Instituto de Investigaciones Biomédicas-UNAM, Mexico; L.J. Nkashama, University of Pittsburgh; P-Y. Ho, University of Southern California; E. Goh, University of Utah.
EB2018 is almost here and there are several AJP-Cell Physiology activities at the conference that may be of interest to ETG members. AJP-Cell Physiology will co-sponsor with the Cell and Molecular Physiology Section a Symposium, on the topic of “Organoids: Modelling Cell Physiology and Disease in 3D”, chaired by Dr. Neil Bradbury and Dr. Nadia Ameen. This Symposium will be held at 1:30pm on Saturday 22nd April in Convention Center, Room 28A. This research area is associated with our current Call for Papers “Advanced Cell Culture: Organoids in Cell Physiology”. In addition, the AJP-Cell Physiology Paper of the Year award for 2017 will be announced at the start of this Symposium – this award celebrates the research contributions of early stage student or post-doctoral researchers. There will also be a general APS Editors’ Event at the APS Main Exhibit Booth (booth #1630) – time and date to be announced, please look out for further announcements.

Recent Papers of Interest. AJP-Cell Physiology has begun an occasional series of Landmark Reviews written by pioneers to provide perspectives on the development of their respective fields. The Editors were very pleased to publish in January a Review by Dr. Mordecai P. Blaustein, “The pump, the exchanger, and the holy spirit: origins and 40-year evolution of ideas about the ouabain-Na+ pump endocrine system” (Am J Physiol Cell Physiol. 314(1):C3-C26). Recent research papers relevant to epithelial cells include “Dynamic functional contribution of the water channel AQP5 to the water permeability of peripheral lens fiber cells” (Rosica et al. https://doi.org/10.1152/ajpcell.00214.2017) and “RAB27B requirement for stretch-induced exocytosis in bladder umbrella cells” (Gallo et al., https://doi.org/10.1152/ajpcell.00218.2017)

There are several Calls for Papers at AJP Cell Physiology. These include:

- Advanced Cell Culture: Organoids in Cell Physiology
- Correlating Muscle Function with Muscle Health Markers
- Endoplasmic Reticulum Functions in Cell Physiology and Disease
- Mitophagy, Autophagy and Cell Death

Submissions are of course welcome in all areas of Cell Physiology. Some of the advantages of publishing in AJP-Cell Physiology include rapid and fair peer-review (in 2017, 71% of submissions received peer-review with a mean time to first decision of 16 days), expert in-house editing and production of accepted manuscripts at APS, and, upon publication, excellent visibility of your paper within APS and the worldwide research community. In 2017, three papers were featured in APS press releases and ten papers were featured in APSselect. By publishing in AJP-Cell Physiology, you will also support the activities of APS as a not-for-profit publisher: proceeds from the Journals are returned to the community in the form of travel bursaries, educational awards, and support of conferences, amongst other activities.

Social Media. Receive immediate news of newly-published papers by following https://twitter.com/AJPCellPhys or facebook (https://www.facebook.com/pages/American-Journal-of-Physiology-CellPhysiology/178277545642714). Our twitter hashtag #PublishedInAJPCell also promotes online discovery of recent papers. Please send any correspondence to ajpcell-office@bristol.ac.uk.

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

One distinguishing feature of our journal is the dedicated renal physiology community that it serves. My editorial team and I very much appreciate the highly impactful work that you have submitted to us, in exciting areas such as acute kidney injury, chronic kidney disease, diabetes, hypertension, the renin-angiotensin system, bladder physiology, etc. In return, AJP-Renal offers a number of benefits for authors: no submission fees; no page or figure limits; cited half-life of ~9 years; 18 days to first decision; articles online within days of acceptance; open access option available.

Thanks to your support, our submission rate has remained steady this year, and our impact factor has continued to increase, from 3.390 (in 2015) to 3.611 (in 2016).

Do you know that in addition to kidney physiology, our journal also publishes research articles on the bladder and urinary tract? To emphasize our inclusiveness, we recently adopted a new tagline: “A Journal for Kidney, Bladder, and Urogenital Research.” Also, two of our current Calls for Papers focus on “Inflammatory Mediators in Kidney/Bladder Diseases” and “Mechanisms of Inflammation and Hyperplasia in the Prostate.”

Another Call for Papers targets translational work: “Precision Medicine in Kidney Disease and Injury.” This call is part of our major efforts to expand our clinical readership. Those efforts began a couple of years ago with a series of Perspectives Articles, where clinicians introduce opportunities for translational research. The Perspectives Article series is flourishing, and we are happy to report that the submission rate of clinical research manuscripts has jumped.

Yet another Call for Papers highlights research in “Sex and Gender in Renal Health and Function.” This call is timely given the community’s increasing awareness of sex as a key biological variable. Indeed, this fall APS is hosting a meeting in “Cardiovascular, Renal and Metabolic Diseases: Sex-Specific Implications for Physiology.” We invite you to submit your research in these and other relevant areas to us.

We look forward to seeing you at the 2018 FASEB Meeting in San Diego. Please be sure to stop by the APS booth in the exhibit hall. On Sunday night, APS will be hosting the annual Editorial Board Member dinner. At that dinner we will honor our Star Reviewers, who averaged reviewing 16 submitted manuscript last year: Ravi Nistala (University of Missouri), Aihua Zhang (Children’s Hospital of Nanjing Medical University), and Ruisheng Liu (University of South Florida). As always, we appreciate all your effort that goes into reviewing for our journal.

Thank you for your continued support of AJP-Renal.

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

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

**EB Symposium: “Hallmarks of and ground rules for productive collaborations in science”**
Join us Sunday, Monday and Tuesday at 7:00am-8:00am in the San Diego Convention Center, Room 25B for a light breakfast and “nuts and bolts” series of discussions on collaborations. Specific questions panelists will discuss include: How do I establish and maintain a successful collaboration?; What does communication and data sharing look like in a productive collaboration?; What does a ‘typical’ collaboration look like and entail?; How are intellectual property rights and authorship managed across collaborations? Each day will feature different speakers and their perspectives on these topics. Visit [http://www.the-aps.org/collaborations-in-science](http://www.the-aps.org/collaborations-in-science) for more information.

**Experimental Biology Undergraduate Orientation and Poster Sessions**
Open to all undergraduate students attending EB, the Undergraduate Orientation session serves as a primer to help the students get the most out of their EB experience, and includes award presentations for various APS-sponsored undergraduate research programs. This will be held at the Marriot Marquis & Marina (room TBA) from 3:30-5:30pm on Saturday, April 21. There is also a special poster session for undergraduate students at EB, held from 4:00-5:30pm (undergrad presenters must arrive by 3:00pm to hang posters) on Sunday April 22 in the San Diego Convention Center, Sails Pavilion – please stop by and meet the next generation of physiologists!

**Positively Influence a Future Physiologist at EB 2018**
Volunteer APS member hosts (PIs, postdocs or graduate students) are needed to guide local high school students and teachers around the EB exhibits and posters on Monday, April 23, from 11 a.m. to 1:30 p.m. Each year, students say this is their favorite part of the teacher-student workshop day. Follow the link: [https://www.surveymonkey.com/r/HighSchoolStudentTeacherTourGuideEB2018](https://www.surveymonkey.com/r/HighSchoolStudentTeacherTourGuideEB2018)

**APS Video Contest – VOTE NOW!!**
Each year we encourage undergraduate and graduate students to creatively connect with physiology and bring it the broader public through a short video contest. This year we have 9 videos and it is time to vote for the viewer’s choice award – YOU be the judge! The video with the most views before April 21 wins a $250 prize! To view this year’s entries, go to: [http://bit.ly/1nmGEWf](http://bit.ly/1nmGEWf)

**The APS Local Undergraduate Research Award in Physiology (LURAP)**
LURAP allows APS Members to recognize excellence in physiology research by undergraduates at their home institutions. The award fosters interest in physiological research for undergraduates, encourages them to continue with physiological studies, and provides networking with APS members at their home institutions. The award package includes a certificate, an APS t-shirt, and a free one-year undergraduate membership. Visit [www.the-aps.org/lurap](http://www.the-aps.org/lurap) for more information.
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