

EPITHELIAL TRANSPORT GROUP NEWSLETTER

Spring, 2005

MESSAGE FROM THE CHAIR

I am writing this letter just prior to the IUPS/EB meeting in San Diego; I hope the newsletter will reach you prior to the meeting!! The opening ceremony for the IUPS meeting will be on Thursday, 31st. March at 7 p.m. and will take place on the Center Terrace of the Convention Center. On Friday, 1st. April, there is an IUPS Beach Party (ticket only) that will be held at 7 p.m. at the Embarcadero on the Bay. The IUPS Closing ceremony (ticket only) will be held on Tuesday, 5th April at Copley Symphony Hall and will feature dinner, followed by the premiere of "Body Notes", an orchestral suite commissioned especially for the IUPS and performed by the San Diego Chamber Orchestra. Tickets for "ticket only" events are available prior to the meeting and on site. Details of the many scientific sessions of interest for ETG members are given later in this newsletter.

I would also like to draw your attention to the ETG Trainee Awards, which we have made annually at the EB meeting for the last two years. These awards are made for the best abstract submitted by a doctoral trainee and post-doctoral fellow to any ETG sponsored session, as selected by the ETG Steering Committee. One award is made in each category. I am pleased to announce that the winners this year are Mr. S.-H. Kwon (Johns Hopkins, Baltimore, MD) and Dr. Deanne Hryciw (University of Queensland, Australia). I know you will join with me in giving these individuals our hearty congratulations! The awards will be presented during the meeting; details are given later in this newsletter.

I would also like to remind you that we are also beginning to solicit nominations for individuals to serve on the ETG steering committee; if you want to be a part of the process for programming future EB meetings, this is your chance!! We are also gathering suggestions for symposia and featured topic sessions for EB06 in San Francisco. Please feel free to contact me or any other member of the Steering Committee with your input on either of these issues (contact information is given at the end of the newsletter).

I look forward to seeing you in San Diego,
Yours,
Cathy

INTERNATIONAL UNION OF PHYSIOLOGICAL SCIENCES 2005 AND EXPERIMENTAL BIOLOGY 2005

For complete details about the program please visit the IUPS/EB 2005 WEB site at:
<http://www.iups2005.org/>

Sessions of Interest to ETG Members at IUPS/EB05

Below is a list of symposia, featured topics and lectures of broad interest to scientists working in the fields of membrane transport and/or epithelial biology. As there are numerous aspects of physiology that encompass these topics, the below list includes sessions that are of potential interest to ETG members from both the Epithelial Track and also other various sections:

Epithelial Track:

Symposia:

Novel Mechanisms of Transporter Regulation. Chairs: Rene Bindels, University Medical Center, Nijmegen, and Irene Schulz, University of Saarland. Friday, April 1, 2005, 8:00 AM—10:00 AM, 31 B/C.

Epithelial Polarity: Development to Disease. Chairs: Catherine Fuller, University of Alabama at Birmingham and Michael J. Caplan, Yale University. Friday, April 1, 2005, 10:30 AM—12:30 PM, 31 B/C.

Epithelial Cells and their Neighbors. Chairs: Hannah V. Carey, University of Wisconsin – Madison, and Helen E. Raybould, University of Alabama at Birmingham. Saturday, April 2, 2005, 8:00 AM—10:00 AM, 31 B/C.

PDZ Domain Scaffolding Proteins and their Functions in Polarized Cells. Chairs: Mark Donowitz, John Hopkins University, and Yoshihisa Kurachi, Osaka University. Monday, April 4, 2005, 8:00 AM—10:00 AM, 31 B/C.

Featured Topics:

The Molecular Basis of Epithelial Disease. Chair: David N. Sheppard, University of Bristol. Sunday, April 3, 2005, 10:30 AM—12:30 PM, 29C

Epithelial Genomics, Proteomics and Genetic Models. Chairs: Mark A. Knepper, NIH/NHLBI, and James E. Melvin, University of Rochester. Tuesday, April 5, 2005, 3:15 PM—5:15 PM, 29C.

Renal Control of Blood Pressure Track:

Symposia:

Cell Biology of Sodium Transport in Kidney. Chairs: Francois Verrey, University of Zürich, and Rebecca Hughey, University of Pittsburgh School of Medicine. Friday, April 1, 2005, 3:15 PM—5:15 PM, 31 B/C.

Renal NaCl Reabsorption: Molecular Insights into Human. Chair: Paul A. Welling, University of Maryland School of Medicine. Saturday, April 2, 2005, 8:00 AM—10:00 AM, 30 B/C.

Free Standing (Non-Track) Sessions:

Symposium:

TRP Channels: Physiological Genomics and Proteomics. Chairs: Stewart O. Sage, University of Cambridge and Bernd Nilius, KU Leuven. Tuesday, April 5, 2005, 3:15 PM—5:15 PM, 30 B/C.

Featured Topics:

Acid-Base Transporters. Chair: Michael Romero, Case Western Reserve University. Friday, April 1, 2005, 3:15 PM—5:15 PM, 31A.

Transport: PKD, Cilium. Chair: Stefan Somlo, Yale University School of Medicine. Saturday, April 2, 2005, 10:30 AM—12:30 PM, 31A.

Urea Transporters in the Post Genomic Era. Chairs: Craig P. Smith, University of Manchester, and Jeff M. Sands, Emory University School of Medicine. Saturday, April 2, 2005, 3:15 PM—5:15 PM, 31A.

Amino Acid Transporters. Chair: Yoshikatsu Kanai, Kyorin University School of Medicine. Sunday, April 3, 2005, 8:00 AM—10:00 AM, 31A.

IUPS Distinguished Lectureships Approved to Date:

The Wallace O. Fenn Lecture: Peter Agre, Johns Hopkins University School of Medicine. Thursday, March 31, 2005—6:00PM.

Soloman A. Berson Distinguished Lectureship of the APS Endocrinology & Metabolism Section: Amira Klip, Hospital for Sick Children, Toronto. *“Regulation of glucose transporters in muscle cells: epurr si muove.”* Friday, April 1, 2005—10:30AM.

Ernest H. Starling Distinguished Lectureship of the APS Water & Electrolyte Homeostasis Section: Giuseppe Bianchi, University of Milano, Italy. *“The Genetic*

Control of Renal Na Handling in Primary Hypertension.” Saturday, April 2, 2005—
10:30AM.

ETG STUDENT AND YOUNG INVESTIGATOR AWARDS

The Epithelial Transport Group Student and Young Investigator Awards (\$250) are given to one pre-doctoral and one post-doctoral fellow each year for outstanding research in a topic related to epithelial physiology. This year's winners are Sang-Ho Kwon, (pre-doctoral; Johns Hopkins University, Baltimore MD) and Dr. Deanne Hryciw, (post-doctoral; University of Queensland, Australia). These awards will be presented at the start of the Featured Topic session on "Molecular Basis of Epithelial Disease" on Sunday, April 3rd. from 10:30 - 12 PM in Room 29C of the San Diego Convention Center. Congratulations!

EXPERIMENTAL BIOLOGY 2006

Although EB05 has not yet arrived, EB06 will soon be here! The Experimental Biology 2006 meeting will be held in San Francisco, CA. The ETG is still soliciting proposals for symposia and featured topics. Members who have suggestions for symposia or featured topic categories that they would like to see at EB06, please send your suggestions via email to Cathy Fuller at: (fuller@physiology.uab.edu) no later than June 1, 2005.

OTHER EVENTS AND ANNOUNCEMENTS OF INTEREST TO THE EPITHELIAL TRANSPORT GROUP:

Mechanisms of Membrane Transport

In the ETG Fall 2004 newsletter we highlighted this meeting to be held at the Tilton School in Tilton, NH from June 5-10, 2005. Robert Stroud from the University of California, San Francisco is chairing the conference and Peter C. Mahoney of Johns Hopkins Medical Institute is serving as vice-chair. Topics will include "Principles of Membrane Protein Construction," "The Amt/MEP/Rh family and Gas Transport," "Translocation of Proteins," "Channels that are Transporters and Vice Versa," "ABC Transporters," "Major Facilitators," "Regulation of Transporters," "Synaptic Transporters," "P-Type ATPases," and "Mechanisms of Water Transport." The conference WEB site can be found at:
<http://www.grc.uri.edu/programs/2005/mechmemb.htm>.

Transport ATPases: Genomics, Mechanisms and Relevance to Diseases

This FASEB 2005 Summer Research Conference will be held from July 16-21, 2005 at the Vermont Academy, Saxtons River, Vermont. The chair of this conference is Alan Senior from the Department of Biochemistry and Biophysics at the University of Rochester Medical Center. Topics will include "Genomics of Transport ATPases and

Relevance to Diseases,” “V-type ATPases - Mechanism and Relevance to Diseases,” “P-type ATPases - Structure and Mechanism,” “F-type ATPase/ATP synthase - Structure, Mechanism and Relevance to Disease,” “ABC Transporters - Structure and Mechanism,” “Physiological Relevance of Isoforms of Transport ATPases,” “ABC Transporters - Diverse Roles in Disease,” “Transport ATPases as Nanomotors - Measurement and Simulation of Rotational and Conformational Motions,” and “Small Protein Regulators of P-type Cation Pumps.” For more detailed information on the scientific program, please see: http://src.faseb.org/2005_programs/Ver05_05.pdf. General information on FASEB summer research conferences, including application and abstract submission guidelines can be found at: http://src.faseb.org/gen_info.htm.

Perspectives in Transport Biology

This FASEB 2005 Summer Research Conference will be held from July 23-28, 2005 also at the Vermont Academy. The conference is chaired by Hannelore Daniel of the Technical University of Munich in Germany and Michael B. Robinson of The Children’s Hospital of Pennsylvania/University of Pennsylvania. The topics will be “Model organisms to study transporter function,” “Transporters in disease: From genetics to function,” “Coupling signaling to transporter activation and trafficking,” “Optical/biophysical approaches to study transporter biology,” “Structural approaches to understanding transporter function,” “Pharmacogenomics of transporters,” “Relating transporter function to physiology,” “Transporters as drug targets,” and “Protein:protein interactions and transporter regulation.” A detailed scientific program is available online at: http://src.faseb.org/2005_programs/ver05_06.pdf. General information on FASEB summer research conferences can be found at: http://src.faseb.org/gen_info.htm.

Glucose Transporter Biology

As previously mentioned in the Fall 2004 ETG Newsletter, this meeting will be taking place from August 6-11, in Snowmass, CO. The meeting is co-chaired by Timothy McGraw of Cornell University Medical College and Barbara Khan of Harvard Medical School. Topics consist of “Signal regulation of vesicle trafficking,” “Glucose sensing and nutrient utilization,” “New insights into signaling and glucose metabolism,” “Pathophysiology and glucose transport regulation: role of AMPK and novel pathways,” “GLUT4 trafficking: regulation at multiple levels,” “Transcriptional regulation of Gluts and other modulators of metabolism,” “Signaling and novel approaches to study Glut function,” and “Regulation of fuel metabolism.” The scientific program is now available online at: http://src.faseb.org/2005_programs/snow05_09.pdf. As with the other FASEB summer research conferences, general information can be found at: http://src.faseb.org/gen_info.htm.

BioMedical Transporters 2005 – Membrane Transporters: Bridging Basic and Applied Sciences

In the Fall 2004 we highlighted the topics of this conference chaired by Matthias Hediger of Harvard Medical School, Robert Burrier of Invitrogen, Ken-ichi Inui of Kyoto

University and Peter Meier-Abt of the University of Zürich held in St. Gallen, Switzerland from August 14-18, 2005. Registration for this meeting will begin soon and discounted registration fees will be offered for those who register prior to May 1, 2005. Please see the conference WEB site at: <http://www.bioparadigms.org/conference/05.htm> for more information or, contact Laura Alice, Conference Coordinator at: lalice@rics.bwh.harvard.edu.

POSITIONS AVAILABLE

The **Department of Molecular and Cellular Physiology** at the **University of Cincinnati** is recruiting multiple faculty at the level of **ASSISTANT** or **ASSOCIATE PROFESSOR**.



We seek colleagues that can contribute to a broadly interpreted theme of membrane physiology, building upon departmental and institutional strengths in membrane transport, epithelial biology, cell and tissue development, contractility, and hormonal regulation. A strong modern infrastructure (including bioinformatics, mutant mouse models, and imaging) will support research approaches studying molecular events in biologic systems that span the scale from single cells to whole organisms.

Faculty members are expected to sustain an externally funded research program, have a strong commitment to graduate and medical education, and contribute to our vigorous collaborative environment. Candidates should have a doctoral degree, and will be considered for a faculty rank and track commensurate with experience. Review of applications will commence upon receipt, and will continue until all positions are filled. Please send a curriculum vitae, statement of research interests, and the names of four potential references to:

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University of Cincinnati is an affirmative action/equal opportunity employer. Women, minorities, disabled persons, and Vietnam Era and disabled veterans are encouraged to apply.

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