# LAKE CUMBERLAND BIOLOGICAL TRANSPORT GROUP 2011

SUNDAY JUNE 19 - TUESDAY JUNE 21

CHAIR: Charity Nofziger VICE CHAIR: Eleanor Lederer CHAIR EMERITUS: Stephen Kempson

SUPPORTED BY:















Ihr Partner weltweit für Medizin und Wissenschaft



# **INSTITUTE OF PHARMAKOLOGIE & TOXIKOLOGIE**





Greetings and Registration Sunday June 19<sup>th</sup> Pumpkin Creek Lodge

5:00 - 6:30 PM (Central Daylight Time)

Bring your family/colleagues and something to share (fruit, vegetables, cheese, dessert)

An entrée (ham/turkey sandwiches or the like, beverages & table service will be provided)

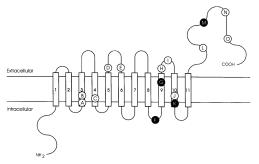


## LAKE CUMBERLAND BIOLOGICAL TRANSPORT GROUP 2011

# SESSION LOCATION: PUMPKIN CREEK LODGE

### SUNDAY, JUNE 19

- 6:30 6:40 PM Welcoming Remarks. Charity Nofziger
- Session Chair: Markus Paulmichl and Melinda Engevik
- 6:40 7:10 PM **Functional effects of carbon nanotubes on airway epithelial cells.** Amiraj Banga<sup>1</sup>, Frank A.Witzmann<sup>2</sup> and Bonnie L. Blazer-Yost<sup>1,2</sup>. <sup>1</sup>IUPUI, Indianapolis, IN, USA; <sup>2</sup>IUSM, Indianapolis IN, USA
- 7:10 7:45 PM On the osmotic and volume regulatory phases in jelly fish nematocytes. Marino A, La Spada G, Morabito R, Lauf PK, Adragna NC. University of Messina, Italy and Wright State University, Dayton OH, USA.
- 7:45 8:20 PM On the determination of K influx pathways in rat aortic vascular smooth cells. Sharma N, Lauf PK, Adragna NC. Wright State University, Dayton OH, USA
- 8:20 8:35 PM Break
- Session Chair: Ken Gagnon and Roger Worrell
- 8:35 9:10 PM **Peroxisome Proliferator Receptor γ Agonists Alter Electrolyte Transport Across Porcine Vas Deferens Epithelia.** Jacob Hull, Qian Wang, Florence Wang, Vladimir Akoyev & Bruce D. Schultz. Kansas State University, Manhattan KS, USA
- 9:10 9:45 PM Characterization of Ion Transport in the T84 Colonic Cell Line for Nanotoxic Analysis. Shanta Lewis, Amiraj Banga and Bonnie L. Blazer-Yost. IUPUI, Indianapolis IN, USA
- 9:45 10:20 PM **Divergent signaling for adrenergic activated K and Cl secretion.** Dan Halm. Wright State University, Dayton OH, USA.



# MONDAY, JUNE 20 (MORNING)

- Session Chair: Eleanor Lederer
- 7:45 8:30 Breakfast (Pumpkin Creek Lodge)
- 8:30 9:05 AM **The betaine transporter in kidney and liver and the different roles for betaine in these tissues.** Steve Kempson & Niels C. Danbolt. IUSM, Indianapolis IN, USA
- 9:05 9:40 AM Mapping the regions of OSR1 kinase involved in its activation. Kenneth Gagnon and Eric Delpire. Vanderbilt University, Nashville TN, USA
- 9:40 10:15 AM Modeling dark- and light-adapted rod photoresponses using non-classical transduction models. Jim Clack. IUPUC, Columbus IN, USA
- 10:15- 10:30 AM Break
- Session Chair: Bonnie Blazer-Yost and Steve Kempson
- 10:30 11:05 AM Intestinal Ammonium transport: Rhesus Glycoprotein compenstates for lack of NKCC1 in Mouse. Roger Worrell. University of Cincinnati College of Medicine, Cincinnati OH, USA
- 11:05 11:40 AM **Identification of a new apical chloride transporter in epithelial tissues.** Manoocher Soleimani. University of Cincinnati College of Medicine, Cincinnati OH, USA KY, USA
- 11:40 AM GROUP PHOTO: PUMPKIN CREEK LODGE
- 5:00 6:15 PM FAMILY DINNER: "THE LODGE" dining room

### MONDAY, JUNE 20 (EVENING)

- Session Chair: Manoocher Soleimani and Silvia Dossena
- 6:30 7:05 PM Activation of chloride channels in the mpkCCD<sub>cl4</sub> renal cell line in response to lysophosphatic acid (LPA). Stephanie M. Flaig and Bonnie L. Blazer-Yost. IUPUI, Indianapolis IN, USA
- 7:05 7:40 PM Cholesterol Trafficking in HK Renal Proximal Tubule Cells by STARD5. Barbara J. Clark, Renate K Meier, Syed J Khundmiri, Eleanor D. Lederer. University of Louisville School of Medicine, Louisville KY, USA

- 7:40 8:15 PM **Ouabain regulates Na-K ATPase through an AT1R mediated mechanism**. Syed Khundmiri and Michael Merchant. University of Louisville, Louisville
- 8:15 8:50 PM Break
- Session Chair: Barbara Clark and Amy Banga
- 8:50 9:25 PM **Community Dynamics in the Mouse Gut Microbiota: Role of NHE3**. Melinda Engevik and Roger Worrell. University of Cincinnati College of Medicine, Cincinnati OH, USA
- 9:25 10:00 PM Helicobactria and pH sensing. Amy Engevick and Roger Worrell. University of Cincinnati College of Medicine, Cincinnati OH, USA
- 10:00 10:35PM **TBA.** Najma Javed. Ball State University, Muncie IN, USA.

### TUESDAY, JUNE 21 (MORNING)

- Session Chair: Charity Nofziger
- 7:45 8:25 Breakfast (Pumpkin Creek Lodge)
- 8:25 9:00AM **Role of AMPK in Npt2a function**. Eleanor Lederer. University of Louisville School of Medicine, Louisville KY, USA
- 9:00 9:35 AM **Development of novel KCC3 mouse models to study ACCPN, a degenerative peripheral neuropathy disorder.** Jinlong Ding, Jose Ponce-Coria, and Eric Delpire. Vanderbilt University, Nashville TN, USA
- 9:35 10:10 AM **Evidence for K-Cl cotransporter heterodimerization.** Jose Ponce-Coria, Jinlong Ding, and Eric Delpire. Vanderbilt University, Nashville TN, USA
- 10:10 10:25 AM Break
- Session Chair: Eric Delpire and Jim Clack
- 10:25 11:00 AM **PENDRIN DIMERIZATION: FUNCTIONAL IMPLICATIONS.** Silvia Dossena, Simona Rodighiero, Emanuele Bernardinelli, Charity Nofziger, Maria Elena Silva, and Markus Paulmichl. Paracelsus Medical University, Salzburg Austria
- 11:00 11:35 AM IL4 and Pendrin. Simone Vanoni<sup>1</sup>, Adam Lee<sup>2</sup>, Charity Nofziger<sup>1</sup>, Valeria Vezzoli<sup>1,3</sup>, Silvia Dossena<sup>1</sup>, Elena Silvia<sup>1</sup>, Bob Diasio<sup>2</sup> and Markus Paulmichl<sup>1</sup>.
  <sup>1</sup>Paracelsus Medical University, Salzburg Austria, <sup>2</sup>Mayo Clinic, Rochester MN, USA, <sup>3</sup>IRCCS Milan Italy

# TUESDAY, JUNE 21 (EVENING)

- Session Chair: Peter Lauf and Norma Adragna
- 7:00 7:35 PM Stripping Spider Venom: Fractions of Tarantula Cubensis Venom and Their Effect on Vasopressin-Stimulated Ion Transport. Susanne Lukas<sup>1</sup>, Volker Neu<sup>3</sup>, Charity Nofziger<sup>1</sup>, Bernd Follrich<sup>2</sup>, Georgia Wagner<sup>2</sup>, Florian Fritsch<sup>2</sup>, Christian Huber<sup>3</sup> and Markus Paulmichl<sup>1</sup>. <sup>1</sup>Paracelsus Medical University, Salzburg Austria, <sup>2</sup>Richter Pharma AG, Wels Austria, <sup>3</sup>University of Salzburg, Salzburg Austria
- 8:10 8:45 PM **Effect of curcumin on the swelling-activated chloride current.** Sonja Kössler, Silvia Dossena, Charity Nofziger, Elena Silva, Martin Jakab, and Markus Paulmichl. Paracelsus Medical University, Salzburg Austria
- 8:45 9:20 PM The effect of polyamideamine polymers on the swelling activated chloride current Elisabeth Grabmayer<sup>1</sup>, Silvia Dossena<sup>1</sup>, Charity Nofziger<sup>1</sup>, Maria Elena Silva<sup>1</sup>, Simone Vanoni<sup>1,2</sup>, Elisabetta Ranucci<sup>2</sup>, Paolo Ferruti<sup>2</sup>, and Markus Paulmichl<sup>1</sup>. <sup>1</sup>Paracelsus Medical University, Salzburg Austria, <sup>2</sup>University of Milan, Milan Italy
- 9:20 9:35 PM Break
- 9:35 10:30 PM BUSINESS MEETING TREASURER'S REPORT: Roger Worrell ELECTIONS: Charity Nofziger CLOSING REMARKS: Eleanor Lederer

#### FUTURE MEETINGS:

2012:	Sunday June 17 – Tuesday June 20	Chair: Eleanor Lederer; Vice Chair:
2013:	Sunday June 16 - Tuesday June 19	Chair:; Vice Chair: TBA
2014:	Sunday June 22 – Tuesday June 24	Chair: TBA; Vice Chair: TBA

