

Biological Transport Group

35th Annual Meeting

June 22-25, 1997

Lake Cumberland State Resort Park, Jamestown, Kentucky

Sponsored in part by the American Physiological Society

Informal Reception. Sunday June 18, 1995. 5:00 PM

Meet old friends and make new ones. Please bring something to share (fruit, veggies, cheese, dessert or other dish). Beverages will be provided.

Session I. Sunday Evening.

Moderator: Melinda Hauser. Department of Microbiology, University of TN, Knoxville

7:30 - 7:40 **Opening Remarks:** Melinda Hauser

7:40 - 8:10 **A Memorial to Bill Armstrong:** John Cuppoletti

8:10 - 8:40 **Gregory J. Anderson¹, Fred Naider² and Jeffrey M. Becker.¹** *Characterization of regulatory components of the di- and tri-peptide transport system in the yeast *Saccharomyces cerevisiae*.* ¹Department of Microbiology, University of Tennessee, Knoxville, TN 37996 and ²Department of Chemistry, City University of New York, Staten Island, NY 10314.

8:40 - 8:50 : Discussion

8:50 - 9:20 **Jeff Wiles and Jeffrey M. Becker.** *Structure/function studies of the dipeptide transporter (*Ptr2p*) in *Saccharomyces cerevisiae*.* Department of Microbiology, University of Tennessee, Knoxville, TN 37996

9:20 - 9:30 Discussion

Session II. Monday Morning.

Moderator: Thomas Cox, Dept. of Physiology, Southern Illinois University, Carbondale

9:00 - 9:30 **Ira Josephson.** *Gating currents in cardiac muscle.* Department of Molecular and Cellular Physiology, University of Cincinnati College of Medicine, Cincinnati, OH 45267.

9:30 - 9:40 Discussion

9:40 - 10:10 **Atsuko Yatani and Hidenori Sako.** *Phospholamban deficiency is associated with altered inactivation kinetics of L-type Ca^{2+} channels in mouse ventricular myocytes.* Department of Pharmacology & Cell Biophysics, University of Cincinnati, Cincinnati, OH 45267.

10:10 - 10:20 Discussion

10:20 - 10:50 **Coffee Break**

10:50 - 11:20 **Hidenori Sako¹, Stuart A. Green², Evangelia G. Kranias¹ and Atsuko Yatani¹.** *Modulation of cardiac L-type Ca^{2+} channel currents by isoproterenol studied in transgenic mouse myocytes with altered sarcoplasmic reticulum Ca^{2+} content.* ¹Department of Pharmacology and Cell Biophysics and ²Medicine, University of Cincinnati, Cincinnati, OH 45267.

11:20 - 11:30 Discussion

11:30 - 12:00 **Manoocher Soleimani.** *Molecular regulation of colonic H-K-ATPase in the kidney and colon.* Department of Internal Medicine, Division of Nephrology and Hypertension, University of Cincinnati Medical Center, Cincinnati, OH, 45267.

12:00 - 12:10 Discussion

Session III. Monday Evening.

Moderator: John Cuppoletti, Dept. Molecular and Cellular Physiology, Univ. Cincinnati

7:30 - 8:00 **Ann Sherry, John Cuppoletti and Danuta H. Malinowska.** *Cloning and expression of human $\text{ClC-2}\alpha$ chloride channels.* Department of Molecular and Cellular Physiology, University of Cincinnati College of Medicine, Cincinnati, OH, 45267.

8:00 - 8:10 Discussion

8:10 - 8:40 **K. Stroffekova, Danuta H. Malinowska and John Cuppoletti.** *Identification of the pH sensor of $\text{ClC-2}\alpha$ chloride channels.* Department of Molecular and Cellular Physiology, University of Cincinnati College of Medicine, Cincinnati, OH, 45267.

8:40 - 8:50 Discussion

8:50 - 9:20 **Aaron Gerlach.** *The role of K_{Ca}^{+} channels in Cl^{-} secretion.* Department of Cell Biology and Physiology, University of Pittsburgh, Pittsburgh, PA, 15261.

9:20 - 9:30 Discussion

9:30 - 10:00 **Bob Bridges.** *Counting Cl^{-} channels: transepithelial noise estimates.* Department of Cell Biology and Physiology, University of Pittsburgh, Pittsburgh, PA, 15261.

10:00 - 10:10 Discussion

Session IV. Tuesday Morning.

Moderator: Danuta Malinowska, Dept. Molecular and Cellular Physiol, Univ. Cincinnati

8:45 - 9:15 **Darryl Peterson.** *Role of oxyproline in the regulation of neutral amino acid transport across the blood brain barrier.* Department of Physiology and Biophysics, Chicago Medical School, North Chicago, Il, 60064.

9:15 - 9:25 Discussion

9:25 - 9:55 **Kevin Corbit and Michael Shanahan.** *Subcellular localization and phosphorylation state of platelet pleckstrin.* Department of Physiology, Southern Illinois University School of Medicine, Carbondale, Il, 62901.

9:55 - 10:05 Discussion

10:05 - 10:20 **Coffee Break**

10:20 - 10:50 **Thomas Cox.** *Purinergic regulation at the apical membrane of cation transport across larval amphibian skin epithelium.* Department of Physiology, Southern Illinois University School of Medicine, Carbondale, Il, 62901.

10:50 - 11:00 Discussion

11:00 - 11:30 **Jim Clack.** *Preliminary evidence for existence of a homologue of Xenopus apical protein (APX) in vertebrate retina.* Department of Biology, Indiana University Purdue University, CORB 101, Columbus, IN 47203.

11:30 - 11:40 Discussion

11:40 - 12:10 **Gaspar Carrasquer, Ming Li, M. Schwartz and M.A. Dinno.** *Recent microelectrode experiments on bullfrog cornea epithelium.* University of Louisville, Departments of Medicine (Nephrology) and Physics, Louisville, KY, 40292 and East Carolina University, Department of Physics, Greenville, NC, 27858.

12:10 - 12:20 Discussion

5:30 - 7:00 **Picnic Style Buffet Dinner**

7:00 - 7:30 **Business Meeting. All meeting participants are encouraged to attend**

Session IV. Tuesday Evening

Moderator: Bonnie Blazer-Yost, Dept. Biology, IUPUI

7:30 - 8:00 **Darryl Peterson.** *Glutamine and glutamate transport by the blood brain barrier: a possible mechanism for nitrogen removal.* Department of Physiology and Biophysics, Chicago Medical School, North Chicago, Il, 60064.

8:00 - 8:10 Discussion

8:10 - 8:40 **Cynthia Hughes and Bonnie Blazer-Yost.** *The role of prenylation in aldosterone induced Na^+ transport.* Department of Biology, Indiana University-Purdue University, Indianapolis, IN 46202.

8:40 - 8:50 Discussion

8:50 - 9:20 **Tom Lahr, Cynthia Hughes and Bonnie Blazer-Yost.** *Interactions between CFTR and ENaC: the view from the non-transfected MDCK cell.* Department of Biology, Indiana University-Purdue University, Indianapolis, IN 46202.

9:20 - 9:30 Discussion

9:30 - 10:00 **Kim Lee and Bonnie Blazer-Yost.** *Effect of Cytochalasin B on hormone-stimulated sodium transport in the A6 cell line.* Department of Biology, Indiana University-Purdue University, Indianapolis, IN 46202.

10:00 - 10:10 Discussion