THE TENNESSEE PHYSIOLOGICAL SOCIETY MEETING AND
UTHSC DEPARTMENT OF PHYSIOLOGY RETREAT
NOVEMBER 9, 2018
THE UNIVERSITY OF TENNESSEE HEALTH SCIENCE CENTER

8:00-8:35 am  Continental Breakfast – Registration/Check-in
Le Bonheur Lower Lobby (50 North Dunlap)
and Poster Setup (Le Bonheur Main Lobby)

8:35-8:45: am  Opening Remarks
Julio F. Cordero-Morales, TPS President
Zhongjie Sun, Chair, Department of Physiology, UTHSC

8:45 -9:10 am  “A novel pH-dependent membrane peptide that binds to the EphA2 receptor and inhibits cell migration”
Francisco Barrera, Ph.D.
Institute of Biomedical Engineering
University of Tennessee-Knoxville

9:10-9:35 am  “Neutrophil-mediated DHA oxidation promotes β2 integrin-dependent macrophage migration”
Valentin Yakubenko, Ph.D.
Department of Biomedical Sciences
Quillen College of Medicine

9:35-9:50 am  Short Talk: “Inflammation and histone modifications in alcohol-mediated colon cancer promotion”
Pradeep K. Shukla, Ph.D.
Department of Physiology. Dr. Radhakrishna Rao’s laboratory
University of Tennessee Health Science Center-Memphis

9:50-10:05 am  Short Talk: “G-protein coupled receptor signaling and atherosclerosis.”
Nikhlesh K Singh, DVM, Ph.D.
Department of Physiology. Dr. Gadiparthi N. Rao’s laboratory
University of Tennessee Health Science Center-Memphis

10:05-10:20 am  Short Talk: “Of water and nerves: loss and gain of function mutations in KCC3”
Bianca Flores, Ph.D. candidate.
Department of Molecular Physiology & Biophysics and Department of Anesthesiology.
Dr. Eric Delpire’s laboratory. Vanderbilt University

10:20-10:35 am  Break

10:35-11:00 am  “Structural characterization of inositol triphosphate receptors”
Erkan Karakas, Ph.D.
Department of Molecular Physiology & Biophysics.
Vanderbilt University

11:00-11:15 am  Short Talk: “Structural and functional analyses of TRPC channels”
Caleigh Azumaya, Ph.D. candidate.
Department of Molecular Physiology & Biophysics. Dr. Terunaga Nakagawa’s laboratory (Vanderbilt University) in collaboration with Dr. Julio F. Cordero-Morales’ laboratory
11:15-11:40 am *Cholesterol control of BK channel alcohol sensitivity in cerebral artery myocytes*.
Anna Bukiya, Ph.D.
Department of Pharmacology
University of Tennessee Health Science Center-Memphis

11:40-11:55 pm Short Talk: *Arterial smooth muscle cell PKD2 (TRPP1) channels regulate systemic blood pressure*
Carlos Fernandez Peña, Ph.D.
Department of Physiology. Dr. Jonathan Jaggar’s laboratory
University of Tennessee Health Science Center-Memphis

12:00-1:00 pm Lunch

1:00-2:00 pm Poster Session

2:00-2:25 pm **TBA**
Adebowale Adebiyi, Ph.D.
Department of Physiology
University of Tennessee Health Science Center-Memphis

2:25-2:50 pm New molecular targets against heart failure
Salvatore Mancarella, Ph.D.
Department of Physiology
University of Tennessee Health Science Center-Memphis

2:50-3:05 pm Short Talk: *Cytochrome P450 1B1 generated 17B-estradiol metabolite 2-methoxyestradiol in the brain inhibits the angiotensin II-induced hypertension in the female mice*
Purnima Singh, Ph.D.
Department of Pharmacology. Dr. KU Malik’s laboratory
University of Tennessee Health Science Center-Memphis

3:05-3:30 pm Fine-tuning mechanosensitive ion channels gating with dietary fatty acids
Valeria Vásquez, Ph.D.
Department of Physiology
University of Tennessee Health Science Center-Memphis

3:30-3:45 pm Short Talk: *Discovery of pranlukast in a high-throughput screen for novel inhibitors of LRRC8 volume regulation anion channels*
Eric E. Figueroa, Ph.D. candidate.
Department of Anesthesiology. Dr. Jerod Denton’s laboratory
Vanderbilt University

3:45-4:00 pm Break

4:00-5:00 pm KEYNOTE LECTURE:

“*Ion Channels in Health and Disease: Sumo Emerges From the Nucleus*”
Steve A. N. Goldstein MA, MD, Ph.D, FAAP
Dean Stritch School of Medicine
Loyola University, Chicago

5:00-5:05 pm Closing Remarks