CA Society of Physiologists
APS California Chapter
Annual Conference

Friday November 4th, 2022

Medical Research Laboratory Building, The Lundquist Institute for Biomedical Innovation at Harbor-UCLA Medical Center, Torrance, CA, 90502

8:00	**8:45**	**Registration and Check-In**
8:45	**9:00**	**Welcoming Remarks** Chapter President, Martha E. O'Donnell, UC Davis Harry B. Rossiter PhD and Denise Al Alam PhD, The Lundquist Institute
9:00	**10:00**	**Free Communications 1: Cardiopulmonary Development, Aging and Disease** **Chairs: Soula Danopoulos and Rudy Ortiz**
9:00	9:10	**Nick Tiller.** *The Lundquist Institute at Harbor-UCLA.* Dynamic Airway Function During Exercise In COPD Assessed Via Impulse Oscillometry
9:10	9:20	**Yujuan Su.** *UC San Diego.* Brainstem Dbh+ Neurons Control Chronic Allergen-Induced Airway Hyperreactivity
9:20	9:30	**Randa Belgacemi.** *The Lundquist Institute at Harbor-UCLA.* Stage-Dependent FGF Signaling Trigger Mesenchymal Cell Differentiation During Human Lung Development
9:30	9:40	**Wanju Gu.** *UC San Diego.* Distinct Genetic Markers Associated with COVID-19 Severity in Latinx Populations from the Americas
9:40	9:50	**Dora Mendez.** *UC Merced.* Exogenous Thyroxine Increases GLUT4 Translocation and Improves Cardiac Metabolism in Insulin Resistant OLETF Rats
9:50	10:00	**Maartje Westhoff.** *UC Davis.* Deficits in Endosomal Recycling Contribute to β-Adrenergic Hypo-Responsivity in the Aging Heart
10:00	**10:30**	**Coffee Break**
MGC DIAGNOSTICS		Headquartered in Saint Paul, Minnesota, USA, MGC Diagnostics Corporation is a global medical technology company dedicated to cardiorespiratory health solutions
10:30	**11:30**	**Keynote Address – *Sponsored by MGC Diagnostics***  **Luis Fernando Santana, PhD, FAHA** *UC Davis* Embracing Diversity: How Biological Noise Tunes the Cardiovascular System
11:30	**12:30**	**Lunch**

12:30	**1:00**	**Business Meeting** Including words from our sponsors
1:00	**1:30**	**Free Communications 2: Injury, Inflammation and Immune Response** **Chairs: Mark Frey and Nicholas Jendzjowsky**
1:00	1:10	**Ethan Garcia.** *UC San Francisco.* Tissue-Specific Mitochondrial HIGD1C Promotes Oxygen Sensitivity of Carotid Body Chemoreceptors
1:10	1:20	**Pritha Chatterjee.** *UC Riverside.* Role of Autoimmune Susceptibility, Ptpn2, in Mediating Host-Microbiome Interaction
1:20	1:30	**Vini Canale.** *UC Riverside.* PTPN2 is a Critical Regulator of Ileal Paneth Cell Viability and Function in Mice
1:30	**2:00**	**Free Communications 3: Behavioral and Metabolic Disorders** **Chairs: Erica Heinrich and Carrie Ferguson**
1:30	1:40	**Elena Kozlova.** *UC Riverside.* Behavior and Reduced Hypothalamic Oxytocin Content Produced By Perinatal Exposure To DE-71
1:40	1:50	**Jessica Wilson.** *UC Merced.* Cannabidiol Attenuates Multiple Cluster Factor Conditions of Metabolic Syndrome
1:50	2:00	**Bailey Sanchez.** *UC Merced.* Amino Acid, Monosaccharide, and Nucleotide Metabolism in Human Kidney Cells are Disrupted Following Human Adenovirus Serotype 5 Infection
2:00	**2:30**	**Coffee Break**
2:30	**3:30**	**Trainee Career & Mentoring Session**
3:30	**4:30**	**Lightning Talks – Student and Trainee Poster Competition** **Chairs: Harry Rossiter and Denise Al Alam**
4:30	**5:45**	**Poster Presentations**
5:45	**6:00**	**Presentation of Awards**
6:00		**Close**

WITH THANKS TO OUR SPONSORS

Lightning Talks – Student and Trainee Poster Competition		
Diane Aguilar	*The Lundquist Institute at Harbor-UCLA*	Investigating Nociceptor Pathogen Sensing Capabilities
Maximillian Denys	*UC Riverside*	Maternal Probiotic Therapy Protects Against DE-71-Induced Neurodevelopmental Delays in a Sex-Dependent Manner
Tyler Hilman	*Loma Linda University*	Caspase-9 Expression in the Cortex of a Novel Rodent Model for Preterm Hypoxic-Ischemic Encephalopathy
Caroline Cherry	*The Lundquist Institute at Harbor-UCLA*	Altered Differentiation in Upper Airway Epithelium in Trisomy 21
Eira Jardines	*UC Merced*	Angiotensin Receptor Blocker Attenuates Elevated Arterial Pressure and Reduces Body Mass in OLETF Rats Fed a High Cholesterol Diet
Hillmin Lei	*UC Riverside*	Loss of PTPN2 Activity Alters Iron Handling Gene Expression in IBD Patients and Causes Iron Deficiency in Mice
Andrew Frauenpreis	*The Lundquist Institute at Harbor-UCLA*	Endothelial Differentiation and Function in Trisomy 21
Mitchell Kong	*UC San Diego*	Identification of a Putatively Adaptive Promoter Variant in PRKAA1 in Andean Highlanders
Nicholas Iwakoshi	*Loma Linda University*	Heart Rate Variability (HRV) Analysis to Detect Physiological Changes of Mice Exposed to Hypergravity
Crystal Luna	*UC Riverside*	Effects of Probiotic L.reuteri Therapy on Social Behavior in An Environmental Autism Model
Jeff Moore	*The Lundquist Institute at Harbor-UCLA*	Distinguishing Increased Adiposity and/or Aerobic Deconditioning as Moderators of Low VO_2peak in Obese Men
Taylor Voelker	*UC Davis*	PI(4,5)P2 Regulation of CaV1.2 L-Type Ca2+ Channel via AngII signaling in the Heart
Meli'sa Crawford	*UC Riverside*	Intranasal Exposure to Hog Dust Extract Promotes Endotoxemia and Increases Gene Expression of TNF-α and Secretory Epithelial Cell Markers in Mouse Intestine
Imad El Alam	*The Lundquist Institute at Harbor-UCLA*	Effect of Cannabinoids and Nicotine on Prenatal Human Lung
Silvia Garcia del Villar	*UC Davis*	Tight Regulation of BIN1 is Essential for β-adrenergic Responsivity in the Myocardium
Clara Berdasco	*UC Riverside*	Inflammation in a Mouse Model of Gulf War Illness

Posters		
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Carolyn Oudiz	*CSU Dominguez Hills*	Physical Activity and Body Mass Index During the COVID-19 Pandemic
Andy Chang	*UC San Francisco*	Therapeutic Potential of Modulating Carotid Body Activity Through an Ectopic Olfactory Receptor
Suzzy Emily Campero	*UC Merced*	HPRT 1 Expression Reduction Trend of 1.37% in Exenatide Treated OLETF Rats
Erica Heinrich	*UC Riverside*	Inflammation and Immune Function During High Altitude Exposure
Esteban Moya	*UC San Diego*	Reduced Hypoxic Ventilatory and Heart Rate Responses to Hypoxia in Post- versus Premenopausal Tibetan Women in Mustang, Nepal
Elena Kozlova	*UC Riverside*	Behavior and Reduced Hypothalamic Oxytocin Content Produced By Perinatal Exposure To DE-71
Yujuan Su	*UC San Diego*	Brainstem Dbh+ Neurons Control Chronic Allergen-Induced Airway Hyperreactivity