

Research where Osmotic Pumps were Used
American Physiology Summit, Long Beach, CA
Thursday April 20th – Friday April 21st

Thursday April 20th 1:00 – 3:00pm, Rm. 101

Water and Electrolyte Homeostasis 1:30pm

***IL-33 supplementation improves vascular function and maternal hypertension in response to placental ischemia**

Poster #80, Presenter: Xi Wang, University of Mississippi Medical Center

Thursday April 20th 2:00 – 4:00pm, Rm. 201B

Data NCARnation 2:08pm

***Kininase I inhibition reduces B1R mediated signaling and attenuates angiotensin II-induced hypertension**

Poster #389, Presenter: Acacia White, East Carolina University

Friday April 21st 5:00 – 6:30pm, PhysioHub

Blood Pressure Regulation

Scleraxis Alters Arterial Smooth Muscle Phenotypic Switching and Exacerbates Arterial Stiffness

Poster #400, Presenter: Danah Sufian Alhattab, University of Manitoba, Canada

Blood Pressure and Fluid Volume Regulation

Regulation of renal function by the peroxisome proliferator-activated receptor-alpha: A novel target for treating hypertension

Poster #395, Presenter: Dexter Lee, Howard University, USA

Cardioprotection

Potential protective role of apelin-13 in the doxorubicin-induced cardiotoxicity in the rat

Poster #434, Presenter: Agnieszka Cudnoch-Jedrzejewska, Medical University of Warsaw, Poland

Potential role of brown adipose tissue-derived extracellular vesicles in mediating the cardioprotective effect of CNS leptin infusion after ischemic reperfusion injury

Poster #430, Presenter: Ana Carolina Miekko Omoto, University of Mississippi Medical Center

CNS, Neuroscience and Neurophysiology

Kinin B1 receptor antagonism prevents the transactivation of brain TLR4 in angiotensin II-induced hypertension Poster

#328, Presenter: Drew Theobald, East Carolina University

Epithelial Transport

***Chronic aldosterone administration alters aquaporin expression and localization in the murine kidney**

Poster #640, Presenter: Stephanie Mutchler, University of Pittsburgh

Difference in functional constituents of myocardial passive compliance renders BalbC/J mice sensitive to pulmonary edema compared to C57BL6/J mice

Poster #446, Presenter: Henrik Isackson, Uppsala University, Sweden

Investigating the connection between cardiac glycogen accumulation and hypertrophy

Poster #460, Presenter: Rachel Weiss, Saint Louis University School of Medicine

Role of scleraxis in angiotensin II-induced cardiac fibrosis

Poster #453, Presenter: Sikta Chattopadhyaya, Institute of Cardiovascular Sciences, St. Boniface Hospital Albrechtsen Research Centre, Canada

Friday April 21st 5:00 – 6:30pm, PhysioHub (continued)

Late-breaking Endocrinology and Metabolic Physiology

Differences and the Impact of G Protein-Couple Estrogen Receptor deletion in the Vascular and Renal Response to Aldosterone

Poster #878, Presenter: Ana Paula Leite, Tulane University

Thermogenic stimulation improves systemic metabolism and healthspan outcomes in aged mice

Poster #886, Presenter: Priya Balasubramanian, Louisiana State University Health Sciences Center New Orleans

Myocardial Ischemia

Collagen peptide reduces post-MI inflammatory response

Poster #489, Presenter: Ayodeji Olabiyi, East Carolina University

Physiology, Pathology and Metabolism of Skeletal Muscle in Health and Disease

Characterization of skeletal muscle pericytes in health, insulin resistance and type 2 diabetes

Poster #188, Presenter: Emily Attrill, University of Tasmania, Australia

Sex Differences in Blood Pressure and Fluid Volume Homeostasis

17 Beta-estradiol is associated with increased cardiovascular risk in the castrated male rat

Poster #: 548, Presenter: Jordan H. Mallette, University of Mississippi Medical Center

Water and sodium intake induced by water deprivation in high fat diet ovariectomized rats with 17-beta-estradiol replacement

Poster #549, Presenter: Debora Colobari, Sao Paulo State University, Brazil

Sex Differences in Renal Physiology and Pathophysiology

Renal mitochondrial metabolism is differentially regulated in male and female kidneys in Ang II -- induced hypertension

Poster #557, Presenter: Adam Jones, Augusta University

Renal Pathophysiology Associated with Hypertension and Pre-eclampsia

***AT1a receptor knockout selectively in renomedullary interstitial cells of the kidney lowers basal blood pressure, impairs urine concentration, and attenuates angiotensin II-induced hypertension in RMIC-Agtr1a-/- mice**

Poster #619, Presenter: Xiao Li, Tulane University School of Medicine

The Two Sides of the Placenta: Recent Advances in Maternal Health and Fetal Programming

AT1-AA Exposure During Pregnancy Impairs Maternal Cerebral Blood Flow Autoregulation Postpartum

Poster #383, Presenter: Nathan Campbell, University of Mississippi Medical Center

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Saturday April 22nd – Sunday April 23rd

Saturday April 22nd 1:30 – 3:00pm, Rm. 101

Advances in Renal Physiology I 2:45pm

Leptin-dependent gene expression and function in mouse kidney

Poster #7 Presenter: Young Chul Kim, University of California, San Diego

Saturday April 22nd 5:00 – 6:00pm, PhysioHub

Cellular Mechanisms of Stress, Inflammation, and Metabolism

***Astrocytic cellular senescence in the subfornical organ during Ang-II-induced hypertension**

Poster #559, Presenter: Samantha A. Dow, The George Washington University School of Medicine and Health Sciences

Diabetic and Chronic Kidney Disease and Fibrosis

Alpha-glucosidase inhibitor mitigates bone loss in type-1 diabetes

Poster # 787, Presenter, Subir Kumar Juin, University of Louisville

Hypertension

Autophagy induction protects the perivascular adipose tissue during hyperaldosteronism-induced hypertension

Poster #207, Presenter: Rafael Costa, University of Pittsburgh

***Endothelial Nrf2 modulates blood pressure and vasoconstrictor responses in conscious mice**

Poster #190, Presenter: Neha Dhyani, University of Nebraska Medical Center

Human amnion epithelial cells reduces hypertension induced vascular stiffening and cognitive impairment

Poster #188, Presenter: Quynh Nhu Dinh, La Trobe University, Australia

***Hyperaldosteronism induces vascular injury and hypertension via CCL5|CCR5 and Nox1-derived reactive oxygen species**

Poster #201, Presenter: Rafael Costa, University of Pittsburgh

Targeting LOXL2 in Angiotensin II-induced Hypertension

Poster #197, Presenter: Marta Martinez Yus, John Hopkins University

Interoceptive Mechanisms of Physiologic Homeostasis

UBR1 Mediates ACE2 Ubiquitination and Hypertension in Male Mice

Poster #367, Presenter: Mona Elgazzaz, Louisiana State University Health Sciences Center New Orleans

Late-breaking Cardiovascular Physiology

Cardiomyocyte-specific overexpression of Larp6 protects against angiotensin II-induced cardiac dysfunction

Poster #873, Presenter: Jacob J. Russell, University of Missouri

Neuraminidase-1 inhibition reduces arterial stiffness and improves endothelial function in diabetic mice

Poster #844, Presenter: Edgar Betancourt-Cortes, University of Missouri

Zanamivir infusion improves endothelial function and reduces arterial stiffness in diabetic mice

Poster #867, Presenter: Mariana Morales-Quinones, University of Missouri

Sympathetic Physiology and Pathophysiology

Overexpression of regulator of G protein signaling 2 (RGS2) in the paraventricular nucleus reduces blood pressure in angiotensin II-induced hypertensive rats

Poster #413, Presenter: Shane Boomer, University of South Dakota

Sunday April 23rd 9:00 – 10:30am, Grand Ballroom I

Women and Disease: Disparities and Novel Interventions 9:15am

Ovarian-derived sex hormones do not mediate the sex-specific mechanism of hypertension in obese mice

Poster #2, Presenter: Candee Barris, Medical College of Georgia, Augusta University

Advances in Renal Physiology II 9:30am

***The effects of chronic administration of a histamine-N-methyltransferase inhibitor on blood pressure and renal damage in the Dahl SS rats**

Poster #4, Presenter: Aleksandra Zamaro, Medical College of Georgia, Augusta University