

**Research where Osmotic Pumps were Used**  
**American Physiology Summit, Long Beach, CA**  
**Thursday April 4<sup>th</sup> – Friday April 5<sup>th</sup>**

**Thursday April 4<sup>th</sup> 11:45am – 1:15pm, 104BC**

***Canadian Physiological Society Scientific Symposium 2024***

**Impact of Renin Angiotensin System Inhibition on Renal Function in Fructose-induced Salt Sensitive Blood Pressure**

<sup>†</sup>Presenter: Rebekah Pitpitan, Wayne State University School of Medicine

**Thursday April 4<sup>th</sup> 2:15 – 2:30pm, Rm. 103**

***Data NCARnation***

**Role of Angiotensin II on Cardiovascular/Autonomic Function and Cognition in a Novel Mouse Model of Alzheimer's Disease**

<sup>†</sup>Presenter: Nusaira Beenta Shahab, University of Iowa

**Friday April 5<sup>th</sup> 12:45 – 12:55pm, Hyatt Beacon Ballroom**

***Trainee Symposium: Breaking the Mold: Embracing the Unexpected in Physiological Findings***

**Angiotensin II-induced cardiac dysfunction and fibrosis is prevented by cardiomyocyte-specific overexpression of Larp6**

<sup>†</sup>Presenter: Jacob Russell, University of Missouri

**Friday April 5<sup>th</sup> 5:15 – 6:05pm**

***Autonomic Balance: Sympathetic and Parasympathetic***

**Role of Angiotensin II on Cardiovascular/Autonomic Function and Cognition in a Novel Mouse Model of Alzheimer's Disease**

<sup>†</sup>Poster #P0273, Presenter: Nusaira Beenta Shahab, University of Iowa

***Cardiovascular Physiology: Other***

**Prohibitin 1 deletion from activated cardiac fibroblasts in vivo attenuates cardiac fibrosis**

Poster #P0563, Presenter: Julie Davis, East Carolina University Brody School of Medicine

***Center Control of Autonomic Physiology***

**Upregulation of miR-361-3p is Associated With Impaired AT2 Receptor Expression in Cardiometabolic Diseases**

Poster #P0311, Presenter: Kevin Miao, Louisiana State University Health Sciences Center, USA

***Inflammation, Immune System and Autonomic Regulation***

**Sex differences in a novel transgenic mouse model of Alzheimer's Disease**

Poster #P0319, Presenter: Cassandra N. Smith, University of Iowa

***Hypertension***

**Role of Endothelial Nrf2 in the Regulation of Vasomotor Capacity and Arterial Blood Pressure**

Poster #P0477, Presenter: Neha Dhyani, University of Nebraska Medical Center

**Friday April 5<sup>th</sup> 5:15 – 6:05pm**

### ***Hypertension***

#### **Eplerenone Reduces Blood Pressure and Improves Vascular Function in a Mouse Model of Leptin-induced Preeclampsia**

Poster #P0487, Presenter: Elisabeth Mellott, Augusta University, USA

### ***Neuroinflammation/Neuroprotection/Ischemia***

#### **A pilot study of a novel brain penetrant Mn(III) porphyrin-based SOD mimic on middle cerebral artery occlusion in mice**

Poster #P0369, Presenter: Hiroki Uchikawa, Barrow Neurological Institute

### ***Renal Pathophysiology Associated with Hypertension/Pre-eclampsia and Inflammation***

#### **Impact of Renin Angiotensin System Inhibition on Renal Function in Fructose-induced Salt Sensitive Blood Pressure**

†Poster #P0623, Presenter: Rebekah Pitpitan, Wayne State University School of Medicine

#### **Inhibiting renal Traf2 and NCK interacting kinase (TNIK) decreases NKCC2 phosphorylation and blunts salt-sensitive hypertension**

\*Poster #P0631, Presenter: Jessica Granados, Henry Ford Health

### ***Sex Differences in Renal Physiology and Pathophysiology***

#### **Sex Differences in T Cell Migration from the Spleen to the Kidney in Mice at Baseline and in Response to Angiotensin II Infusion.**

\*Poster #P0643, Presenter: Lance Benson, University of Alabama at Birmingham

**Friday April 5<sup>th</sup> 6:10 – 7:00 pm**

### ***Inflammation, Immune System and Autonomic Regulation***

#### **Microglia Mediate Hypertension and Autonomic Dysfunction through Kinin B1 Receptor Activation**

Poster #P0320, Presenter: Drew Theobald, East Carolina University

### ***Heart Failure***

#### **Left Ventricular Dilation Resulting from the Absence of either Rgs2 or Rgs5 is Associated with Increased Immune Cell Infiltration in the Myocardium**

Poster #P0466, Presenter: Shelby Dahlen, Case Western Reserve University, USA

### ***Hypertension***

#### **Sex-Specific Regulation of Local Gonadal Hormone Signaling During Pathological Cardiac Remodeling in Spontaneously Hypertensive Rats**

Poster #P0486, Presenter: Dana Floyd, University of Arizona College of Medicine – Phoenix

#### **Genetic Deletion of Carboxypeptidase N Attenuates Angiotensin II-Induced Hypertension and Target Organ Damage**

Poster #P0492, Presenter: Srinivas Sriramula, East Carolina University

#### **Beclin-1-Dependent Autophagy Preserves Perivascular Adipose Tissue Function and Suppresses Hypertension Development in Hyperaldosteronism**

Poster #P0494, Presenter: Rafael Costa, University of Pittsburgh

**Research where Osmotic Pumps were Used**  
**American Physiology Summit, Long Beach, CA**  
**Friday April 5<sup>th</sup> - Saturday April 6<sup>th</sup>**

**Friday April 5<sup>th</sup> 6:10 – 7:00 pm**

***Kidney Function in Diabetes, Obesity, Metabolic Syndrome and Aging***

**Juxtaglomerular (JG) cell-specific deletion of the NADPH oxidase accessory protein, NOXA1, decreases pro-renin and proteinuria in vivo in a mouse model of diabetes.**

Poster #P0604, Presenter: Mariela Mendez, Henry Ford Hospital/Wayne State University

***Renal Pathophysiology Associated with Hypertension/Pre-eclampsia and Inflammation***

**2-Methoxyestradiol protects from angiotensin II-induced renal CD3<sup>+</sup>/FOXP3<sup>+</sup> T cell-dysregulation via 12/15 lipoxygenase inhibition**

Poster #P0624, Presenter: Purnima Singh, University of Tennessee Health Science Center

***Water and Electrolyte Balance: Cell, Organ and Whole Organism Physiology***

**Immune Activation Promotes Cardiac Remodeling in a Mouse Model of Takotsubo Cardiomyopathy**

Poster #P0380, Presenter: Daniel J. Fehrenbach, IUSM

**Saturday April 6<sup>th</sup> 5:15 – 6:05 pm**

***Blood Pressure and Hypertension***

**Male Offspring Exposed to Maternal Hyperandrogenemia Have Exaggerated Pressor Response to Angiotensin II That is Partially Attenuated by Etanercept**

Poster #P0245, Presenter: John Agbo, University of Mississippi Medical Center

***The Role of Renal Medullary Bilirubin and Biliverdin Reductase in Ang II Induced Hypertension***

Poster #P0247, Presenter: Gertrude Arthur, University of Mississippi Medical Center

***Blood Pressure Regulation***

**Mitochondrial AKAP1 is Necessary for Obesity- and Angiotensin II-induced Hypertension**

Poster #P0083, Presenter: Yuying Zhao, University of Iowa

***Sex and tissue-specific downregulation of miR410-3p in a mouse model of cardiometabolic diseases***

Poster #P0093, Presenter: Mohammed Alnoud, Louisiana State University Health Sciences Center, USA

***Cardiac Function and Dynamics***

**Angiotensin II-induced cardiac dysfunction and fibrosis is prevented by cardiomyocyte-specific overexpression of Larp6**

Poster #P0101, Presenter: Jacob Russell, University of Missouri

***Setmelanotide Administration Improves Cardiac Systolic Function in Sirtuin-3 Deficient Mice***

Poster #P0107, Presenter: Benjamin Nelson, University of Mississippi Medical Center

***Cardiac: Vascular and Renal Mechanisms***

**Leptin Induces Evidence of Placental Mitochondrial Dysfunction in a Mouse Model of Preeclampsia**

Poster #P0261, Presenter: Elisabeth Mellott, Augusta University

**Saturday April 6th 5:15 – 6:05 pm**

***Cardioprotection***

**The protective effects of alamandine on angiotensin II-induced cardiac dysfunction and remodeling in rats**  
Poster #P0131, Presenter: Nafis Md Irfan, University of Iowa

***Late-breaking Cardiovascular Physiology***

**Divergent Effects of IL-18- and IL-18R-deficiency on Angiotensin II-induced Abdominal Aortic Aneurysm Formation**

Poster #P0903, Presenter: Antony Vinh, La Trobe University

**Effects of Donepezil on Nonlinear Arterial Pressure and Pulse Interval Dynamics in Spontaneously Hypertensive Rats (SHR)**

Poster #P0907, Presenter: Helio Salgado, Ribeirão Preto Medical School

***Myocardial Ischemia***

**Myocardial CD34+ Stromal Cells/Telocytes Demonstrate a Dynamic Pattern of Interactions with CD68+ Macrophages During Post-Myocardial Infarction Healing**

Poster #P0229, Presenter: Daniel Schneider, Cooper Medical School of Rowan University

***Sympathetic Physiology and Pathophysiology***

**Angiotensin II-Induced Heart Failure Disrupts Cardiac Sympathetic Innervation**

Poster #P0357, Presenter: Arianna Scalco, Oregon Health & Science University

**Saturday April 6th 6:10 – 7:00pm**

***Acute Kidney Injury: Mechanisms, Treatment and Associated Pathology***

**Chronic central leptin administration attenuates kidney dysfunction and injury in a model of ischemia/reperfusion-induced acute kidney injury**

Poster #P0826, Presenter: Emilio Luna-Suarez, University of Mississippi Medical Center

***Blood Pressure and Hypertension***

**GPER1 Activation Upregulates Renal Purinergic P2Y2 Receptor Expression and Lowers Blood Pressure in Ovariectomized Rats Fed High Salt Diet**

Poster #P0236, Presenter: Supaporn Kulthinee, Vanderbilt University Medical Center

**Galantamine Reduces Blood Pressure and Renal Injury in Female Angiotensin II-induced Hypertensive Mice**

Poster #P0246, Presenter: Sarika K. Chaudhari, University of Texas Southwestern Medical Center