



Neural Mechanisms in Cardiovascular Regulation: Novel Research and Disease Treatment Strategies

July 17-22, 2016
Saxtons River, VT

Organizers:

Glenn Toney, Ph.D.
University of Texas Health Science Center
San Antonio, TX

Ann Schreihof, Ph.D.
University of North Texas Health Science Center
Fort Worth, TX

Preliminary Program

Day 1: Sunday, July, 17, 2016 Reservations available for 2:30 pm shuttle bus from BOS airport to Saxtons River

Time	Event	Speaker, affiliation
4:00 – 9:00 p.m.	Conference Registration Open	
6:00 – 7:00 p.m.	Welcome Reception	
7:00 – 8:00 p.m.	DINNER	
8:00 – 9:00 p.m.	Keynote Address <i>Renal denervation in human hypertension: Mechanisms, current findings, and future prospects</i>	Murray Esler, M.D., Baker IDI Heart & Diabetes Institute, AUS

Day 2: Monday, July, 18, 2016

Time	Event	Speaker, affiliation
7:30 a.m. – noon	Conference Registration Open	
7:30 – 9:00 a.m.	BREAKFAST	
9:00 a.m. – noon	Session 1: Emerging Surgical and Instrumentation-based Therapies for Cardiovascular Disease	
9:00 – 9:05 a.m.	<i>Introduction</i>	Moderator: Murray Esler, M.D.
9:05 – 9:30 a.m.	<i>Rising to the challenge of treating high blood pressure</i>	Julian F.R. Paton, Ph.D., University of Bristol, UK
9:30 – 9:55 a.m.	<i>Baroreflex activation therapy in hypertension</i>	John D. Bisognano, M.D., Ph.D., Univ. of Rochester Medical Center, NY
9:55 – 10:10 a.m.	<i>Short Talk: Selected Abstract</i>	TBD
10:10 – 10:25 a.m.	<i>Short Talk: Selected Abstract</i>	TBD
10:25 – 10:40 a.m.	Coffee Break	
10:40 – 11:05 a.m.	<i>Exploring contributions of renal nerves in cardiovascular disease with catheter-based renal denervation</i>	Clive May, Ph.D., University of Melbourne, AUS
11:05 – 11:30 a.m.	<i>Targeting renal afferent and efferent nerves as a novel therapy for treatment of cardiovascular disease</i>	John Osborn, Ph.D., University of Minnesota, Minneapolis, MN
11:30 a.m. – noon	<i>Extended discussion with speakers</i>	Moderator: Murray Esler, M.D.

Day 2: Monday, July, 18, 2016 - Continued

Time	Event	Speaker, affiliation
Noon– 1:00 p.m.	LUNCH and Meet the Speakers	
1:00 – 4:30 p.m.	Session 2: Mechanisms Linking Mood Disorders and Cardiovascular Disease	
1:00 – 1:05 p.m.	<i>Introduction</i>	Moderator: Paul Marvar, Ph.D., George Washington University, Washington, D.C.
1:05 – 1:30 p.m.	<i>Anxiety-related morbidity after myocardial infarction</i>	Karie Scrogin , Ph.D., Loyola University, Chicago, IL
1:30 – 1:55 p.m.	<i>Sympathetic regulation in post-traumatic stress disorder</i>	Jeanie Park, M.D., Emory University, Atlanta, GA
1:55 – 2:10 p.m.	<i>Short Talk: Selected Abstract</i>	TBD
2:10 – 2:25 p.m.	<i>Short Talk: Selected Abstract</i>	TBD
2:25 – 2:45 p.m.	Coffee Break	
2:45 – 3:10 p.m.	<i>Role of inflammation and stress in the development of hypertension: Use of animal models & clinical applications</i>	Paul Marvar, Ph.D., George Washington University
3:10 – 3:35 p.m.	<i>Social inequalities in health: Modeling the co-morbidity of coronary artery disease and depression in primates</i>	Carol A. Shively, Ph.D., Wake Forest University, Winston-Salem, NC
3:35 – 4:00 p.m.	<i>Defining the neural basis of panic disorder, social anxiety, and stress-induced emotional disorders</i>	Anantha Shekhar, M.D., Ph.D., Indiana University School of Medicine, Indianapolis, IN
4:00 – 4:30 p.m.	<i>Extended Discussion with speakers</i>	Moderator: Paul Marvar, Ph.D.
4:30 – 6:00 p.m.	Free Time	
6:00 – 7:00 p.m.	DINNER	
7:00 – 10:00 p.m.	POSTER SESSION	Desserts and Beverages

Day 3: Tuesday, July, 19, 2016

Time	Event	Speaker, affiliation
7:30 a.m. – noon	Conference Registration Open	
7:30 – 9:00 a.m.	BREAKFAST	
9:00 a.m. – Noon	Session 3: New Discoveries Linking Immune Function and Cardiovascular Disease	
9:00 – 9:05 a.m.	<i>Introduction</i>	Moderator: Jasenka Zubcevic, Ph.D., University of Florida, Gainesville
9:05 – 9:30 a.m.	<i>Preventing autoimmunity protects from hypertension</i>	Keisa Mathis, Ph.D., Univ. North of Texas Health Sci. Center, Fort Worth
9:30 – 9:55 a.m.	<i>Interplay between immune & autonomic systems: Implications for drug-resistant hypertension</i>	Jasenka Zubcevic, Ph.D., University of Florida, Gainesville
9:55 – 10:10 a.m.	<i>Short Talk: Selected Abstract</i>	TBD
10:10 – 10:25 a.m.	<i>Short Talk: Selected Abstract</i>	TBD
10:25 – 10:40 a.m.	Coffee Break	
10:40 – 11:05 a.m.	<i>Critical role of CNS aldosterone: MR-AT1R signaling in salt-sensitive hypertension</i>	Frans Leenen, Ph.D., University of Ottawa Heart Inst., Ontario, CA
11:05 – 11:30 a.m.	<i>Salt: An ingested risk factor for development of autoimmunity & cardiovascular disease?</i>	Jens Titze, M.D., Vanderbilt University, Nashville, TN
11:30 a.m. – noon	<i>Extended discussion with speakers</i>	Moderator: Jasenka Zubcevic, Ph.D.
noon	Group Photo of Meeting Attendees	
12:30 – 1:30 p.m.	LUNCH and Meet the Speakers	

Day 3: Tuesday, July, 19, 2016 – Continued

Time	Event	
1:30 – 4:00 p.m.	Panel Discussion - Pathways to Independence for Today's Trainees	
Moderator	Ann Schreihofner, Ph.D., University of North Texas HSC, Fort Worth, TX	
<i>Academia</i>	Matthew Zimmerman, Ph.D., Univ. of Nebraska Med Center, Omaha, NE	
<i>US Government</i>	Nisha Charkoudian, Ph.D., US Army Research Inst. Of Environmental Medicine, Natick, MA	
<i>Non-Profit</i>	Prashant Nedungadi, Ph.D. American Heart Association, Dallas, TX	
<i>Organizations</i>	James Austgen, Ph.D., U.S. Pharmacopeia, Washington, D.C.	
<i>Industry</i>	Matthew Zahner, Ph.D., Pfizer Drug Safety Research & Development, CT	
	<i>All attendees are welcome to join in the discussion.</i>	
4:00 – 6:00 p.m.	Free Time	
6:00 – 7:00 p.m.	DINNER	
7:00 – 10:00 p.m.	Session 4: Eavesdropping - Intimate Conversations of Neurons, Glia, & Cerebral Blood Vessels	
7:00 – 7:05 p.m.	<i>Introduction</i>	Moderator: Javier Stern, M.D., Ph.D., Augusta University, GA
7:05 – 7:30 p.m.	<i>Role of astrocytes and purinergic signaling in the chemical drive to breathe</i>	Daniel Mulkey, Ph.D., University of Connecticut, Storrs, CT
7:30 – 7:55 p.m.	<i>Astrocytes are beyond supporting players on enhanced sympathetic outflow in heart failure</i>	Yoshitaka Hirooka, M.D., Ph.D., Kyushu University Graduate School of Medical Sciences, Fukuoka, Japan
7:55 – 8:10 p.m.	<i>Short Talk: Selected Abstract</i>	TBD
8:10 – 8:25 p.m.	<i>Short Talk: Selected Abstract</i>	TBD
8:25 – 8:40 p.m.	Coffee Break	
8:40 – 9:05 p.m.	<i>Neuro-glial communication in the NTS is altered by hypoxia</i>	Daniela Accorsi-Mendonça, Ph.D., Univ. São Paulo, Ribeirão Preto, BR
9:05 – 9:30 p.m.	<i>Mechanisms underlying the contribution of PVN astrocytes to sympathoexcitation by Angiotensin II</i>	Javier Stern, M.D., Ph.D., Augusta University, GA
9:30 – 10:00 p.m.	<i>Extended discussion with speakers</i>	Moderator: Javier Stern, M.D., Ph.D.

Day 4: Wednesday, July, 20, 2016

Time	Event	Speaker, affiliation
7:30 a.m. – noon	Conference Registration Open	
7:30 – 9:00 a.m.	BREAKFAST	
9:00 a.m. – noon	Session 5: Metabolic Factors Contributing to Neurogenic Hypertension	
9:00 – 9:05 a.m.	<i>Introduction</i>	Moderator: Sean Stocker, Ph.D., Penn State University, Hershey, PA
9:05 – 9:30 a.m.	<i>Dysregulated vagal afferents: cause or effect of obesity?</i>	Kirsteen Browning, Ph.D., Penn State University, Hershey, PA
9:30 – 9:55 a.m.	<i>Dissection of the neural pathways controlling autonomic function: One neural population at a time</i>	Kamal Rahmouni, Ph.D., University of Iowa, Iowa City, IA
9:55 – 10:10 a.m.	<i>Short Talk: Selected Abstract</i>	TBD
10:10 – 10:25 a.m.	<i>Short Talk: Selected Abstract</i>	TBD
10:25 – 10:40 a.m.	Coffee Break	
10:40 – 11:05 a.m.	<i>Cellular integration of adiposity signals by arcuate neurons</i>	Martin Kelly, Ph.D., Oregon Health & Science University, Portland, OR
11:05 – 11:30 a.m.	<i>Circumventricular organs: critical autonomic control centers at the blood-brain interface</i>	Alastair Ferguson, Ph.D., Queen's University, Kingston, ON, CA
11:30 a.m. – noon	<i>Extended discussion with speakers</i>	Moderator: Sean Stocker, Ph.D.
noon – 1:30 p.m.	LUNCH and ANNOUNCEMENT of Trainee Travel Awards with Awardee Group Photo	

Day 4: Wednesday, July, 20, 2016 - Continued

1:30 – 6:00 p.m.	Free Time: Escape to Saxtons River: Canoe, Swim, Hike!	
6:00 – 7:00 p.m.	DINNER	
7:00 – 10:00 p.m.	Session 6: Novel Angiotensin Signaling Mechanisms in Cardiovascular Disease	
7:00 – 7:05 p.m.	<i>Introduction</i>	Moderator: Andrew Allen, Ph.D., University of Melbourne, AUS
7:05 – 7:30 p.m.	<i>Unique mechanism of brain RAS control of blood pressure, fluid intake and metabolic rate</i>	Justin Grobe, Ph.D., University of Iowa, Iowa City, IA
7:30 – 7:55 p.m.	<i>Selective activation of brainstem AT1a receptors promotes angiotensin-dependent hypertension</i>	Andrew Allen, Ph.D., University of Melbourne, AUS
7:55 – 8:10 p.m.	<i>Short Talk: Selected Abstract</i>	TBD
8:10 – 8:25 p.m.	<i>Short Talk: Selected Abstract</i>	TBD
8:25 – 8:40 p.m.	Coffee Break	
8:40 – 9:05 p.m.	<i>Protection from reno-vascular hypertension by activation of brainstem AT2 receptors</i>	Debora Colombari, Ph.D., São Paulo State University, Araraquara, BR
9:05 – 9:30 p.m.	<i>High fat diet-induced sensitization of angiotensin II-elicited hypertension: The roles of leptin, renin-angiotensin system, and proinflammatory cytokines</i>	Baojian Xue, Ph.D., University of Iowa, Iowa City, IA
9:30 – 10:00 p.m.	<i>Extended discussion with speakers</i>	Moderator: Andrew Allen, Ph.D.

Day 5: Thursday, July, 21, 2016

Time	Event	Speaker, affiliation
7:30 a.m. – noon	Conference Registration Open	
7:30 – 9:00 a.m.	BREAKFAST	
9:00 a.m. – noon	Session 7: Novel Strategies to Investigate Neural Mechanisms in Cardiovascular Regulation	
9:00 – 9:05 a.m.	<i>Introduction</i>	Moderator: David Mendelowitz, Ph.D., George Washington Univ., Washington, D.C.
9:05 – 9:30 a.m.	<i>Novel chemogenetic tools</i>	Bryan Roth, Ph.D., University of North Carolina, Chapel Hill, NC
9:30 – 9:55 a.m.	<i>Optogenetics in psychiatric animal models</i>	Christian Wentz, Ph.D., Massachusetts Inst. of Technology, Cambridge, MA
9:55 – 10:10 a.m.	<i>Short Talk: Selected Abstract</i>	TBD
10:10 – 10:25 a.m.	<i>Short Talk: Selected Abstract</i>	TBD
10:25 – 10:40 a.m.	Coffee Break	
10:40 – 11:05 a.m.	<i>Transneuronal circuit tracing with alphaherpesviruses</i>	Esteban Engel, Ph.D., Princeton University, Princeton, NJ
11:05 – 11:30 a.m.	<i>Can oxytocin be beneficial in treating cardiovascular disease?</i>	David Mendelowitz, Ph.D., Georgetown University, Washington D.C.
11:30 a.m. – noon	<i>Extended discussion with speakers</i>	Moderator: David Mendelowitz, Ph.D.
noon – 12:30 p.m.	Business Meeting	
12:30 – 1:30 p.m.	LUNCH and Meet the Speakers	

Day 5: Thursday, July, 21, 2016 - Continued

1:30 – 4:30 p.m.	Session 8: Neuroadaptations to Hypoxia: The Good, the Bad, and the Unexpected	
1:30 – 1:35 p.m.	<i>Introduction</i>	Moderator: Glenn Toney, Ph.D., Univ. of Texas HSC, San Antonio, TX
1:35 – 2:00 p.m.	<i>Synaptic adaptations to intermittent hypoxia protect NTS from ischemia, but at what price?</i>	Steve Mifflin, Ph.D., University of North Texas HSC, Fort Worth, TX
2:00 – 2:25 p.m.	<i>Neurotransmitter transport, hypoxia and nTS activity.</i>	David Kline, Ph.D., University of Missouri, Columbia, MO
2:25 – 2:40 p.m.	<i>Short Talk: Selected Abstract</i>	TBD
2:40 – 2:55 p.m.	<i>Short Talk: Selected Abstract</i>	TBD
2:55 – 3:10 p.m.	Coffee Break	
3:10 - 3:35 p.m.	<i>Respiratory-modulated sympathetic activity: Effects of chronic hypobaric hypoxia</i>	Thomas Dick, Ph.D., Case Western Reserve University, Cleveland, OH
3:35 – 4:00 p.m.	<i>Unexpected benefits of intermittent hypoxia – Increased respiratory motor outflow!</i>	Gordon S. Mitchell., Ph.D., University of Florida, Gainesville, FL
4:00 – 4:30 p.m.	<i>Extended discussion with speakers</i>	Moderator: Glenn Toney, Ph.D.
4:30 – 6:00 p.m.	Free Time	
6:00 – 7:30 p.m.	DINNER – LOBSTERS!	

Day 6: Friday, July, 22, 2016

Time	Event
9:00 a.m. – 11:30 a.m.	Breakfast Discussion
	<i>The Future of Autonomic Regulation of Cardiovascular Function: At the Bench and in the Classroom</i>
11:30 a.m.	LUNCH to Go and DEPARTURE

END OF CONFERENCE

Registration is open. Abstracts must be submitted at time of registration.

Visit our meeting microsite for more information.

<http://www.faseb.org/SRC-Microsite/CardioReg/Home.aspx>

For additional information contact:
FASEB Science Research Conferences
9650 Rockville Pike
Bethesda, MD 20814

www.faseb.org/src