



June 15<sup>th</sup> and 16<sup>th</sup> 2023

June 15, 9:00 am- 4:10 PM EDT

- 9:00 -9:10 **Welcoming Ceremonies** Co-Directors: Mary Cushman, MD MSc and Mark Nelson, PhD  
Opening Remarks from Drs Cushman and Nelson
- 9:10-10:30 **VCCBH Project Director Presentations** Moderator: David Punihaole, PhD  
**Denise Peters, DPT, PhD**, Assistant Professor of Rehabilitation and Movement Science  
*Let's Move! Walking Predictions and Actualizations Post-stroke*  
**Osama Harraz, PhD**, Assistant Professor of Pharmacology  
*May the Force Be with You: Piezo1 and Cerebral Blood Flow Regulation*  
**Katharine Cheung, MD, PhD**, Assistant Professor of Medicine  
*Mechanisms and Outcomes of Cognitive Impairment in Kidney Disease*  
**Masayo Koide, PhD**, Assistant Professor of Pharmacology  
*Crippled Cerebral Blood Flow Regulation in Hypertension and Beyond*
- 10:30-10:45 **Coffee Break**
- 10:45-12:05 **Pilot Grant Awardee Presentations** Moderator: Masayo Koide, PhD  
**David Punihaole, PhD**, Assistant Professor of Chemistry  
*Towards Directly Imaging the Chemical Dynamics of Amyloid Fibrils and Polymer Gene Delivery Vehicles in Cells*  
**Yanguang Ou, PhD**, Assistant Professor of Chemistry  
*Measuring Reactive Oxygen Species from Cells Incubated with Amyloid-beta Fibrils*  
**Mansour Gergi, MD**, Assistant Professor of Medicine  
*Cardiovascular Care Delivery and Bleeding in Individuals with Cancer*  
**Matthew Caporizzo, PhD**, Assistant Professor of Molecular Physiology and Biophysics  
*The Molecular Underpinnings of Diastolic Dysfunction*
- 12:05-2:00 **Lunch Break / Poster Session #1** Moderator: Owen Nadeau, PhD
- 2:00-3:00 **Science Keynote Address** Moderator: Mark Nelson, PhD  
**David E Clapham, MD, PhD**, Group Leader, Howard Hughes Medical Institute (HHMI); Janelia Research Campus, Aldo R. Castañeda Professor of Cardiovascular Research and Professor Emeritus of Neurobiology, Harvard Medical School; HHMI Vice President and Chief Scientific Officer, 2016-22; Member of the National Academy of Sciences and National Academy of Medicine.  
*Never Work on Smooth Muscle*
- 3:00-4:00 **VCCBH Science Core Presentations** Moderator: Denise Peters, DPT, PhD  
**Neil Zakai, MD, MSc**, Professor of Medicine and **Peter Durda, PhD**, Faculty Scientist, Pathology & Laboratory Medicine; Co-directors of the **Study Design and Epidemiology Core**  
*What Do Statistics and Biomarkers Have in Common*  
**Todd Clason, MS**, Neurological Sciences and Pharmacology; Director of the **Customized Physiology and Imaging Core**  
*Moving, Maintaining and Mouse Fuzz – New Iconeus Functional Ultrasound System*
- 4:00-5:30 **Concluding Remarks / Announcements and Break** Mary Cushman, MD
- 5:30-7:30 **Reception**  
Echo, Leahy Center for Lake Champlain, 1 College Street, Burlington, VT 05401

June 16, 9:00am-2:40 PM EDT

9:00-9:10	<b>Welcome</b>	Mary Cushman, MD, MSc and Mark Nelson, PhD
9:10-10:30	<b>Pipeline Investigator Flash Talks</b>	Moderators: Denise Peters, DPT, PhD & Masayo Koide, PhD
	<b>Nicholas Klug, PhD</b> , Postdoctoral Fellow, Dept of Pharmacology <i>Dura Mater Capillaries: An Unexplored Hotbed for Pain</i>	
	<b>Timothy Plante, MD, MHS</b> , Assistant Professor of Medicine, Hematology / Oncology The Inflammatory Basis of Hypertension	
	<b>Maria Noterman-Soulinthavong, PhD</b> , Postdoctoral Fellow, Dept of Pharmacology <i>Endothelial Cell Metabolism Regulates On-demand Brain Blood Flow</i>	
	<b>Debora Kamin-Mukaz, PhD</b> , Postdoctoral Associate, Dept of Medicine <i>Residential Segregation and Risk of Hypertension in a Biracial Cohort</i>	
	<b>Matthew Caporizzo, PhD</b> , Assistant Professor of Molecular Physiology and Biophysics <i>Molecular Underpinnings of Diastolic Dysfunction</i>	
	<b>Jessica Badlam, MD</b> , Assistant Professor of Medicine, Pulmonary Disease <i>Pregnancy and Reproductive Risk Factors for Pulmonary Arterial Hypertension in Women</i>	
	<b>Amreen Mughal, PhD</b> , Assistant Professor, Dept of Pharmacology <i>Electro Calcium Signaling in the Brain Endothelium</i>	
	<b>Nicole Habel, MD, PhD</b> , Clinical Cardiac Fellow, Larner College of Medicine <i>The Grinch Heart – Novel Treatment Strategies for HFpEF</i>	
	<b>Margaret Philips, PhD</b> , Postdoctoral Associate, Dept of Pharmacology <i>Mechanistic Insights into the CECR2-bromodomain Activity in Endothelial Inflammation</i>	
	<b>Emmett Whitaker, MD</b> , Associate Professor, Dept of Anesthesiology <i>Anesthesia, Vascular Immaturity, and Disease: Implications for Brain Perfusion</i>	
10:30-11:30	<b>Coffee Break / Poster Session #2</b>	Moderator: Owen Nadeau, PhD
11:30-12:30	<b>Science / Diversity and Inclusion Keynote Address</b>	Moderator: Mark Nelson, PhD
	<b>Andra S. Stevenson, PhD, MPH</b> , Senior Director – Global Medical Affairs, Global Medical & Scientific Affairs Department, General Medicine: CVD – Heart Failure and Thrombosis, Merck & Co., Inc, Chatham, New Jersey <i>Translating Science to Drug Development: Diversity in Clinical Trials &amp; SDoH</i>	
12:30-1:30	<b>Lunch Break</b>	
1:30-2:30	<b>Poster Session #3</b>	Moderator: Owen Nadeau, PhD
2:30-2:40	<b>Closing Remarks</b>	Mary Cushman, MD, MSc and Mark Nelson, PhD

**Thank you to the VCCBH External Advisory Board!**

**Manuel F. Navedo, PhD**, Professor of Pharmacology, University of California, Davis

**Suzanne Judd, PhD MPH**, Professor of Biostatistics, Director: Lister Hill Center for Health Policy, University of Alabama, Birmingham

**Scott Earley, PhD**, Professor of Pharmacology, University of Nevada, Reno

**Sharon Rounds, MD**, Professor of Medicine, Professor of Pathology and Laboratory Medicine, Brown University

**Thank you to the Organizing Committee!**

**Catherine Cate; Masayo Koide, PhD; Denise Peters, DPT, PhD; Owen Nadeau, PhD; Mark Nelson, PhD**