June 15th and 16th 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 Punihaoe, 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 Punihaoe, PhD, Assistant Professor of Chemistry
*Towards Directly Imaging the Chemical Dynamics of Amyloid Fibrils and Polymer Gene Delivery Vehicles in Cells*
Yangguang 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  Welcome  Mary Cushman, MD, MSc and Mark Nelson, PhD

9:10-10:30  Pipeline Investigator Flash Talks  Moderators: Denise Peters, DPT, PhD & Masayo Koide, PhD
Nicholas Klug, PhD, Postdoctoral Fellow, Dept of Pharmacology
Dura Mater Capillaries: An Unexplored Hotbed for Pain
Timothy Plante, MD, MHS, Assistant Professor of Medicine, Hematology / Oncology
The Inflammatory Basis of Hypertension
Maria Noterman-Soulinthavong, PhD, Postdoctoral Fellow, Dept of Pharmacology
Endothelial Cell Metabolism Regulates On-demand Brain Blood Flow
Debora Kamin-Mukaz, PhD, Postdoctoral Associate, Dept of Medicine
Residential Segregation and Risk of Hypertension in a Biracial Cohort
Matthew Caporizzo, PhD, Assistant Professor of Molecular Physiology and Biophysics
Molecular Underpinnings of Diastolic Dysfunction
Jessica Badlam, MD, Assistant Professor of Medicine, Pulmonary Disease
Pregnancy and Reproductive Risk Factors for Pulmonary Arterial Hypertension in Women
Amreen Mughal, PhD, Assistant Professor, Dept of Pharmacology
Electro Calcium Signaling in the Brain Endothelium
Nicole Habel, MD, PhD, Clinical Cardiac Fellow, Larner College of Medicine
The Grinch Heart – Novel Treatment Strategies for HFpEF
Margaret Philips, PhD, Postdoctoral Associate, Dept of Pharmacology
Mechanistic Insights into the CECR2-bromodomain Activity in Endothelial Inflammation
Emmett Whitaker, MD, Associate Professor, Dept of Anesthesiology
Anesthesia, Vascular Immaturity, and Disease: Implications for Brain Perfusion

10:30-11:30  Coffee Break / Poster Session #2  Moderator: Owen Nadeau, PhD

11:30-12:30  Science / Diversity and Inclusion Keynote Address  Moderator: Mark Nelson, PhD
Andra S. Stevenson, PhD, MPH, Senior Director – Global Medical Affairs, Global Medical & Scientific Affairs Department, General Medicine: CVD – Heart Failure and Thrombosis, Merck & Co., Inc, Chatham, New Jersey
Translating Science to Drug Development: Diversity in Clinical Trials & SDoH

12:30-1:30  Lunch Break

1:30-2:30  Poster Session #3  Moderator: Owen Nadeau, PhD

2:30-2:40  Closing Remarks  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