Meeting Itinerary

Monday, July 18, 2022 – Day 1

7:30 AM       Continental Breakfast and Registration
8:30AM         Welcome
               Patty J Lee, M.D, Duke University
8:40 AM        Keynote: Victoria L Bautch, Ph.D, UNC – Blood Vessels and Disease: BMP Signaling
9:30 AM – 11:00 AM Session 1 – Genetic and Epigenetic Modifiers in Diverse Vascular Niches
               MODERATOR(S): Francis Miller, MD, Wake Forest
               9:30 AM          Purushothama Tata, Ph.D, Duke University - Distal lung stem cells and regeneration
               10:00 AM         Xuchen Zhang, MD, Ph.D, Yale - Non-cirrhotic portal hypertension: an underrecognized entity and new concept
               10:30 AM         Christopher Mack, Ph.D, UNC - Transcriptional regulation of SMC phenotype in vascular development and disease
               11:00 AM         BREAK
11:30 AM – 12:30 PM Session 2 – Vascular Remodeling and Hypertension
               MODERATOR(S): Daniel Greif, MD, Yale
               11:30 AM         Sudarshan Rajagopal, MD, Ph.D, Duke University - The Vasculature in Pulmonary Arterial Hypertension
               12:00 PM         Joan Taylor, Ph.D, UNC - RhoA signaling in the development of hypertension and vascular stiffness
               12:30 PM         Ke Yuan, PhD FAHA, Boston Children’s Hospital & Harvard Medical School - The vascular modeling in the lung
1:00 PM – 2:30 PM LUNCH (provided)         Presentation: Diversity, Equity and Inclusion – Trent Semans Great Hall - Matthew Moreira Bahnson, Ph.D and Edward Bahnson, Ph.D
2:30 PM – 3:00 PM Transfer to workshops
3:00 PM – 5:30 PM Workshop 1, 2, 3 or 4
               Workshop 1: Mass Spectrometry – Matt Foster, Ph.D, Duke University: TSCHE 4030 Conference Room 4A
               Workshop 2: Light Sheet Microscopy – Miltenyi Biotec: TSCHE 4067 Classroom 4
5:30 PM  Wrap-up Day 1 (approximate)

Tuesday, July 19, 2022 – Day 2
7:30 AM  Continental Breakfast and Registration
8:30 AM – 10:30 AM  Session 3 – Vascular Biology and Signaling
MODERATOR(S): Daniel Greif, MD, Yale
8:30 AM  Francis Miller, MD, Wake Forest - NADPH Oxidases and Vascular Disease
9:00 AM  Tim McMahon, MD, Ph.D, Duke University - Respiratory vasoregulation by RBC-derived mediators in health and disease
9:30 AM  Edward Bahnson, Ph.D, UNC - Nrf2 activators to combat arterial disease
10:00 AM  Matthew L Edin, Ph.D, NIEHS - Cytochrome P450-Derived Eicosanoids, a Double-Edged Sword in Vascular Biology
10:30 AM  BREAK
11:00 AM – 12:30 PM  Session 4 – Vascular Homeostasis and Angiogenesis
MODERATOR(S): Edward Bahnson, Ph.D, UNC
11:00 AM  Chris Kontos, MD, Duke University - Mechanisms Regulating Vascular Homeostasis
11:30 AM  Daniel Greif, MD, Yale - Smooth muscle cell pathobiology in cardiovascular disease
12:00 PM – 1:30 PM  LUNCH
1:30 PM – 2:00 PM  Transfer to workshops
2:00 PM – 4:30 PM  Workshops 1, 2, 3 or 4
Workshop 1: Mass Spectrometry – Matt Foster, Ph.D, Duke University: TSCHE 4030 Conference Room 4A
Workshop 2: Light Sheet Microscopy – Miltenyi Biotec: TSCHE 4067 Classroom 4
Workshop 3: Spatial Transcriptomics – Simon Gregory, PhD, Duke University: Trent Semans Great Hall
Workshop 4: Applying 3D-Engineered Vasculature-on-Chip Models in Drug Discovery Research – Nortis: TSCHE 3025 Classroom 3
4:30 PM  BREAK
5:00 PM – 6:30 PM  Poster Session A – Trent Semans Atrium
6:30 PM  Wrap up Day 2 (approximate)

Wednesday, July 20, 2022 – Day 3
7:30 AM  Continental Breakfast and Registration
8:30 AM – 10:00 AM  Session 5 – Data Science and Informatics
MODERATOR(S): A.Ian Wong, MD, Ph.D, Duke University/Patty Lee, MD, Duke University

8:30 AM  Matt Foster, Ph.D, Duke University - Secretomics to interrogate mechanisms of cellular signaling

9:00 AM  Bastiaan Driehuys, Ph.D, Duke University - Xenon MRI of lung vasculature

9:30 AM  Ed Manning, MD, Ph.D, Yale – Functional Genomics Approach to Investigating Proximal Pulmonary Arterial Remodeling

10:00 AM  BREAK

10:15 AM – 11:45 AM  Session 6 – Crosstalk Between Vessels, Immune Cells, & Tissues
MODERATOR(S): Edward Moreira Bahnson, Ph.D, UNC

10:15 AM  Patty J Lee, MD, Duke University - Intersections between Endothelial Innate Immunity & Senescence

10:45 AM  Suzanne N Martos, Ph.D, NIEHS - Epigenetic modifications and scRNA-seq of immune cells link smoking to atherosclerosis and immunosenescence

11:15 AM  Jacqueline Cole, Ph.D, NCSU - Interactions between Bone and Microvasculature Following Ischemic Stroke

11:45 AM – 1:15 PM  Workshop 5 – Grant Writing Workshop (All) – Michael Gunn, M.D, Duke University – Trent Seaman Great Hall

1:15 PM – 2:15 PM  LUNCH

2:15 PM – 3:15 PM  Session 7 – Emerging Microbes and Environmental Stressors
MODERATOR(S): Francis Miller, MD, Wake Forest

2:15 PM  Jennifer Ingram, Ph.D, Duke University - Chronic allergen exposure models of pulmonary hypertension and vascular remodeling

2:45 PM  Robert Tighe, MD, Duke University - Environmental-host inflammatory responses in immune and vascular cells

3:15 PM – 4:30 PM  Poster Session B - Trent Semans Atrium

4:30 PM – 6:30 PM  Explore Downtown Durham/Free Time

6:30 PM  Dinner – Tobacco Road Restaurant

Thursday, July 21, 2022 – Day 4

7:30 AM  Continental Breakfast and Registration

8:30 - 9:00  Keynote – Sonia A. Rapaport, M.D.  Mold, Mycotoxins, and Health

9:00 AM – 10:30 AM  Talks from selected abstracts

9:00 AM  Lindsay Bischoff, Cincinnati Children's - Hospital Medical Center Hyperactive GNAQ mutation in endothelial cells drive aberrant vascular morphology and signaling

9:15 AM  Katie Anne Fopiano, Medical College of Georgia at Augusta University - The role of CD44 variants in coronary vascular rarefaction and the development of left ventricular diastolic dysfunction in HFpEF
9:30 AM  Mascha Koenen, Rockefeller University - *The role of adipose tissue identity in blood pressure regulation*

9:45 AM  Boa Kim, University of Pennsylvania - *Endothelial lipid droplets link metabolic syndrome to blood pressure elevation*

10:00 AM  Meng Ling Wu, Oklahoma Medical Research Foundation - *The endothelial chromatin remodeling enzymes BRG1 and CHD4 transcriptionally regulate extracellular matrix production to promote lung development*

10:15 AM  Donghyun Jeong, University of Notre Dame - *Podoplanin regulates angiogenesis and lymphangiogenesis through physical recognition*

10:30 AM  BREAK

10:45 AM  **Concluding Remarks** – Patty J Lee, M.D, Duke University

11:00 AM  **End** – Have a safe trip home