

Day 3 – Tuesday, October 21

7:00-8:00am	Group Breakfast		Career Development Forum Breakfast	
8:00-10:00am	Advanced Molecular Mechanisms in Vascular Matrix Remodeling <i>Systems approach to cardiovascular calcification</i> Elena Aikawa, Brigham and Women's Hospital		Neuroinflammation <i>Mechanisms of cerebral microvascular dysfunction in AD/ADRD: role of cellular inflammatory mediators</i> Paulo Pires, University of Arizona	
	Short talk: <i>Functional profiling of SCAD-associated genes reveals disruption of ECM and cell morphology in human vascular cells</i> Emily Bramel, Broad Institute of MIT		Short talk: <i>Pde4b activity and vascular association correlate with immune-like oligodendrocytes in chronic stress</i> Miguel M Madeira, Stony Brook University	
	Short talk: <i>Role of endothelial Nck1 in atherosclerosis</i> Cyrine Ben Dhaou, LSUHS		Short talk: <i>Myeloid β2-adrenergic receptors mediate neuroimmune signaling to prime aortic stiffness</i> Tzung Hsiai, UCLA	
	Short talk: <i>BMP1 coronary disease causality and mechanisms of disease risk</i> Joao Monteiro, Stanford University		Short talk: <i>Microglia and neutrophils reciprocally mediate unique post-stroke spatial patterning independent of infarct topology</i> Laurel Schappell, Stony Brook	
	Short talk: <i>CRK/CRKL regulate embryonic angiogenesis by maintaining formation of tip cells and modulating MAP4K4 signaling in mammals</i> Lijie Shi, Albert Einstein College of Medicine		Short talk: <i>A high-throughput human Blood-brain barrier (BBB)-on-a-chip model for drug discovery of anti-inflammatory and barrier restoring agents for neurological disorders</i> Nick Saites, Mimetas B.V.	
	<i>Mineralization in the matrix</i> Cynthia St. Hilaire, University of Pittsburgh		<i>Vascular contributions to neuroinflammation: novel roles for endothelial tissue-nonspecific alkaline phosphatase</i> Candice Brown, Indiana University School of Medicine	
10:30am-12:00pm	Blood Vascular Development <i>Higd1b is a unique and conserved gene marker for pericytes</i> Ke Yuan, Boston Children's Hospital		Vascular Extracellular Matrix Bioengineering <i>Engineering human blood vessels for modeling and therapeutics</i> Sharon Gerecht, Duke University	
	Short talk: <i>The metabolism-regulated transcription factor FOXO1 links nutrient deprivation to the establishment of artery identity</i> Qingqing Yin, Stanford University		Short talk: <i>Biological sex influences long term remodeling outcomes of compliance matched vascular grafts</i> Katarina Martinet, University of Pittsburg	
	Short talk: <i>Pioneer factor ETV2 safeguards endothelial cell specification by recruiting the repressor REST to restrict alternative lineage commitment</i> Danyang Chen, Boston Childrens		Short talk: <i>From human genetics to therapeutics: RNA nanomedicine for cardiovascular and metabolic disease</i> Yun Fang, University of Chicago	
	Short talk: <i>Artery formation is mediated by Esm1+ endothelial cells</i> Ralf Adams, MPI for Molecular Bioscience		<i>Matrix-mediated regeneration of vasa vasorum as a treatment for aortic aneurysm</i> Julie Phillippi, University of Pittsburgh	
	Short talk: <i>Endothelial Ovol1 regulates angiogenesis via Slug</i> Kapil Thapa, Tulane University			
12:00-1:30pm	Group Lunch			
1:30-3:00pm	MCS President's Symposium: Bone Marrow Niche <i>Clonal hematopoiesis: the emergent risk factor</i> Kenneth Walsh, University of Virginia			
	<i>The role of the nitric oxide / soluble guanytyl cyclase pathway in erythropoiesis</i> Miriam Cortese-Krott, Heinrich Heine University			
	<i>Endothelial cell responses to hyperlipidemia distinguish the bone marrow and splenic hematopoietic niches</i> Adil Rasheed, Augusta University			
3:00-3:45pm	MCS Landis Award Lecture <i>The Architecture of Resistance: Three Decades in Microcirculatory Research</i> Donald Welsh, Roberts Research Institute, University of Western Ontario			
4:00-5:30pm	Emerging Topics in Microcirculation Short talk: <i>Paracrine regulation of angiogenesis and coronary microvascular function by cardiac-specific isoform Friend of GATA 2 (FOG2S)</i> Marie Guerraty, University of Pennsylvania		Vascular Remodeling in the Uterus and Placenta <i>The impact of the regulation of uteroplacental perfusion on fetal growth: novel animal models and human studies</i> Ramon Lorca, University of Colorado	
	Short talk: <i>Investigating stimuli that elicit pericyte-capillary dissociation in skeletal muscle</i> Mark A Danesh, York University		<i>Mechanisms of placental vascular growth</i> Mark Kahn, University of Pennsylvania	
	Short talk: <i>Calcium influx via Cx43 hemichannels directs eNOS internalization and endothelial hyperpermeability</i> Pia Burboa, Rutgers University			
	Short talk: <i>Rapid activation of TRPV4 channels by aldosterone in mouse and human vascular smooth muscle cells</i> Fênix Araujo, University of Virginia			
	Short talk: <i>Understanding the process and signaling of coronary collateral growth in adult heart by single-cell RNA sequencing</i> Jian Shi, NE Ohio			
	Short talk: <i>Poor lysosome acidification blunts BKCa channel activity in the cerebral vasculature of male 5x-FAD mice</i> Paige E. Martin, University of Arizona			
5:30-7:00pm	Dinner on your own			
7:00-10:00pm	Poster Sessions			