MONDAY, MAY 4, 2020

7:00 AM REGISTRATION AND CONTINENTAL BREAKFAST

8:00 AM INTRODUCTORY REMARKS

Luke Brewster, MD, Chair, Research and Education Committee
Ali AbuRahma, MD, SVS Vice-President
Peter Lawrence, MD, SVS Foundation
Alan Dardik, MD, PhD, Editor, JVS-Vascular Science

ABSTRACT SESSION I: ARTERIAL REMODELING AND DISCOVERY SCIENCE FOR VENOUS DISEASE

Moderator: Ulka Sachdev, MD
Moderator: Sanjay Misra, MD

8:15 AM Derek Afflu, MD: Elastic Fibers Of The Internal Elastic Lamina Are Unraveled But Not Created With Expanding Arterial Diameter In Arteriogenesis

8:25 AM Andrea Obi, MD: Loss of Myeloid Specific Protein Phosphatase 2a Accelerates Experimental Venous Thrombus Resolution

8:35 AM Evan Werlin, MD: A Synthetic Resolvin Analogue (Benzo-Rvd1) Attenuates Vascular Smooth Muscle Cell (VSMC) Migration And Neointimal Hyperplasia

8:45 AM Emily Newton, MD: Evaluation Of A Targeted Drug Eluting Intravascular Nanotherapy To Prevent Neointimal Hyperplasia In A Novel Atherosclerotic Rat Model

8:55 AM Yutaka Matsubara, MD, PhD: Programmed Death Ligand-1 Regulates T-cells And M2 Macrophages To Control Wall Thickening During Arteriovenous Fistula Maturation

9:05 AM Phillip Rideout, MD: Liposomal Delivery System Functionalized For Actively Targeting An Ex Vivo Model Of Vascular Disease

9:15 AM Andrew Smith, MD: TRPC6 Depletion Results In Loss Of Myocardin And Phenotypic Modulation In Vascular Smooth Muscle Cells

9:25-9:30 Chenglei Zhao, MD: Periadventitial Delivery Of Simvastatin From Microparticles Attenuates Arteriovenous Fistula Outflow Vein Neointimal Hyperplasia

ABSTRACT SESSION II: VASCULAR REGENERATION, STEM CELLS AND WOUND HEALING

Moderator: Jayer Chung, MD
Moderator: Ngan Huang, PhD

9:30 AM Katherine Hekman, MD: Autophagy Remodels Mitochondria During Differentiation And Enhances Longevity Through Ulk1 Kinase Signaling Of Induced Pluripotent Stem Cell-derived Endothelial Cells
9:40 AM  Hallie Quiroz, MD: Downregulation Of Inflammation And A Cascade Of Pro-angiogenic Signals Mediate The Beneficial Effects Of Gene-modified Stem Cell Therapy In Hindlimb Ischemia

9:50 AM  Shuai Li, MD, PhD: Prediction Of Walking Performance After Revascularization Of Arteries Supplying The Lower Extremities Of Claudicating Patients With Peripheral Artery Disease

10:00 AM  Ricardo Ferrari, PhD: Differential Expression Of Canonical Mitosis And DNA-damage Repair Pathways Characterize Muscle Satellite Cells Affected By Pad

10:10 AM  Furqan Muqri, MD: Fluvastatin And Vegf Containing Resins Promote Angiogenesis And Arteriogenesis

10:20 AM  Yu Wang, PhD: Adult And Pediatric Fibromuscular Dysplasia Are Genetically Distinct Dysplasia-associated Arterial Diseases

10:30 AM  Kath Gonzalez, MD: Impact Of Dietary Tungsten And Topical Nitrite In Diabetic Wound Healing And The Composition Of The Wound Microbiome

10:40-10:45  Henry Cheng, PhD: MicroRNA-181b Regulates Critical Limb Ischemia In Diabetic Mice

10:45-10:50  Ahmed Ismaeel, MS: Nitric Oxide Bioavailability Is Reduced In Peripheral Artery Disease In Association With Increased Oxidative Stress And An Altered Biopterin System

10:50 AM  BREAK

11:15 AM  Introduction: ALEXANDER W. CLOWES DISTINGUISHED LECTURE
Moderator: Scott M. Damrauer, MD

11:20 AM  SPECIAL SESSION I: ALEXANDER W. CLOWES DISTINGUISHED LECTURE

Molecular Mechanisms of AAA Disease
Philip S. Tsao, PhD
Associate Chief of Staff for Precision Medicine
VA Palo Alto Health Care System
Director, VA Palo Alto Epidemiology Research and Information Center (ERIC) for Genomics
Professor, Medicine (Cardiovascular Medicine)
Stanford University School of Medicine

11:50 AM  LUNCH WITH QUICK KSHOT POSTER PREVIEWS

12:50 PM  In Memoriam: Dr. Thomas Monahan
Jason MacTaggart, MD

1:00 PM  SVS FOUNDATION UPDATE AND AWARDS CEREMONY

Peter Lawrence, MD, SVS Foundation

VRIC Trainee Awards
Frank Davis, MD, University of Michigan
Derek Afflu, MD, University of Pittsburgh Medical Center
1:10 PM **SPECIAL SESSION II: SVS Foundation Mentored Clinical Scientist Research Career Development Award**
Moderator: Luke Brewster, MD
Moderator: Katherine Gallagher, MD

Presented by Recipient of the 2018 SVS Foundation Mentored Clinical Scientist Research Career Development Award

Bao-Ngoc H. Nguyen, MD
George Washington University School of Medicine & Health Sciences
K08 Project: The Role of Poly-ADP-ribose Polymerase in Angiogenesis of Ischemic-diabetic Wound Healing

1:25 PM **TBA ESVS talk here (10 min (7/3)**

**ABSTRACT SESSION III: AORTOPATHIES AND NOVEL VASCULAR DEVICES**
Moderator: Jason MacTaggart, MD
Moderator: Bhama Ramkhelawon, PhD

1:35 PM Frank Davis, MD: Epigenetic Modifications Influence Macrophage-mediated Inflammation Inabdominal Aortic Aneurysms

1:45 PM Bryan Tillman, MD, PhD: The Perfuse Dual Chamber Stent Improves Donor Organ Recovery In A Porcine Model

1:55 PM Alexey Kamenskiy, PhD: Endovascular Repair Of Blunt Thoracic Aortic Trauma Is Associated With Increased Left Ventricular Mass, Hypertension, And Off-target Aortic Remodeling

2:05 PM Craig Elder, MD: Maresin 1 Attenuates Murine Abdominal Aortic Aneurysms Via Vascular Smooth Muscle Cell Dependent TGF-β Signaling

2:15 PM Sergio Sastriques-Dunlop, MD: A Theranostic Role For Ccr2 In Rodent Abdominal Aortic Anerysm Development And Rupture

2:25 PM Derek Klarin, MD: Polygenic Risk Score Identifies Patients At Increased Risk For Abdominal Aortic Aneurysm And May Benefit From Ultrasound Screening

2:35 PM Baohui Xu, MD: Pharmacological Inhibition Of Bruton's Tyrosine Kinase Attenuates Experimental Abdominal Aortic Aneurysms

2:45-2:50 Dan Simonescu, PhD: Chemical Stabilization Of The Extracellular Matrix Attenuates Growth Of Experimentally Induced Abdominal Aorta Aneurysms In A Large Animal Model


3:00 PM **BREAK**
### TRANSLATIONAL PANEL: Immunology and Vascular Disease

**Moderator:** Katherine Gallagher, MD

**Myocardial Infarction and Cross Disease Communication**
Kathryn J. Moore, PhD  
Professor of Cell Biology  
Director, NYU Cardiovascular Research Center  
New York University Langone Health

**The Balance of Life and Death in Atherosclerosis**
Katey Rayner, PhD  
Associate Professor  
Member, College of the Royal Society of Canada  
Department of Biochemistry, Microbiology & Immunology  
Faculty of Medicine, University of Ottawa Heart Institute

### ABSTRACT SESSION IV: ATHEROSCLEROSIS AND ROLE OF THE IMMUNE SYSTEM

**Moderator:** Ryan McEnaney, MD  
**Moderator:** Mireille Ouimet, PhD

**4:15 PM**  
Roberto Mota Alvidrez, MD, MS: Absence Of Cpla2 In Lrp1 Smooth Muscle Cell Deficient Mice Promotes Severe Aortic Atherosclerotic Disease

**4:25 PM**  
Pavlos Tsantilas, MD: Chitinase-3-like Protein 1: From A Biomarker In Cardiovascular Disease To Its Functional Role In Atherosclerosis.

**4:35 PM**  
Elizabeth Chou, MD: Vascular Smooth Muscle Cells Release Protease Nexin-1 In Cell Models Of Atherosclerosis And Human Carotid Plaque

**4:45 PM**  
Shirli Tay, BA: Circulating Fatty Acid Synthase And Diabetes Are Independently Associated With Chronic Limb Threatening Ischemia

**4:55-5:00**  
Dawn Fernandez, PhD: ZEB2 Regulates Activation And Exhaustion Programming Of CD8 T Cells In Atherosclerosis

**5:00-5:05**  
Nikolaos-Taxiarchis Skenteris, MSc: The Role Of Mast Cells In Atherosclerotic Plaque Calcification

### POSTER SESSION QUICKSHOTS, COMPETITION, and VRIC RECEPTION

**5:15 PM**

**7:00 PM**  
**ADJOURN**