# VASCULAR HEALTH INNOVATION SUMMIT

Precision Medicine and Patient-Centric Vascular Health: Present and Future State

Friday, September 22, 2023

#### **MEETING LOCATION**

Mission Bay Conference Center, UCSF Robertson 1 Auditorium 1675 Owens Street San Francisco, CA 94143-3008

**Registration**: Robertson Auditorium

Foyer, Opens at 7:30am

PROGRAM MANAGEMENT Isabel Bjork, JD MS Chief Executive Officer Lisa Huntzinger Program Manager

Twitter: @VascularCures

#vascsummit23

SUMMIT CO-CHAIRS
Michael S. Conte, MD
Chief, Division of Vascular
and Endovascular Surgery
UC San Francisco
Chief Medical Officer,
Foundation to Advance Vascular Cures

Manesh R. Patel, MD

Chief, Division of Cardiology and the Division of Clinical Pharmacology Duke University Health System Advisory Board & Research Committee Member, Foundation to Advance Vascular Cures



#### **Summit Objectives**

The Summit will investigate ways that precision medicine approaches can improve the patient experience in the intersectional space between risk identification, treatment, and outcomes. We examine the role of data-derived phenotyping, artificial intelligence, and omics across vascular disease areas, including peripheral artery disease, venous thrombosis, aortic aneurysms and dissections, and carotid artery disease. The Summit will conclude by mapping out collaborative high-impact projects to address the identified issues and prioritize the patient experience, incorporating patient and caregiver perspectives of how vascular health problems can be directly addressed by the research topic in light of health disparities and quality of life priorities. Following the Innovation Summit, a report will be published and RFPs will be issued.

#### **Meeting Agenda**

| Welcome                          |  |  |
|----------------------------------|--|--|
| 8:00-8:15                        | Welcome and Summit Overview Isabel Bjork, JD MS CEO, Foundation to Advance Vascular Cures Mike Conte, MD Chief of Vascular Surgery, UCSF; CMO, Foundation to Advance Vascular Cures  |  |
| Presentations                    |  |  |
| 8:15-8:50<br>8:50-9:05<br>Q&A    | Bringing Precision Medicine to Vascular Disease Investigations: Challenges and Opportunities Introduction by Mike Conte, MD Scott Damrauer, MD Associate Professor of Surgery, Associate Professor of Genetics, University of Pennsylvania   |  |
| 9:05-10:00<br>10:00-10:15<br>Q&A | Precision Medicine as a Path to Improved Prevention and Care  Panel Introduction by Katie Wright, VEDS Patient Advocate; Podcaster, Staying Connected, Translucent One LLC; VEDS Research Project Coordinator, Division of Vascular and Endovascular Surgery, Oregon Health and Sciences University Genetic Predisposition to Disease: Using Genetic Data to Identify Aortic Dissection Risk Dianna Milewicz, MD PhD Chair of Cardiovascular Medicine, Director of the Division of Medical Genetics, Vice-Chair Department of Internal Medicine, UTHealth McGovern Medical School Serum Biomarkers for Atherosclerosis: How Do We Scale for Primary Prevention? Mohamed Zayed, MD PhD MBA Associate Professor of Surgery, Radiology, Molecular Cell Biology, & Biomedical Engineering, Washington University Genotype-Surgical Phenotype: Using Genetic Information to Drive Surgical Decision-Making Sherene Shalhub, MD MPH Associate Professor and Head of Vascular Surgery, Oregon Health and Sciences University; Advisory Board Member, Foundation to Advance Vascular Cures |  |
| 10:15-10:30                      | Coffee Break   |  |

| Panel                             |   |
|-----------------------------------|---|
| 10:30-11:25<br>11:25-11:40<br>Q&A | Using Genetic and Electronic Data to Personalize Treatment Approaches Introduction and Panel Facilitation by Manesh Patel, MD Chief of Cardiology, Duke University; Advisory Board Member and Research Committee Member, Foundation to Advance Vascular Cures Phenotypic Expressions and Their Relation to Gene Discovery Approaches: The Potential of Al and Biobanks/Consortia-Based Discovery Santhi Ganesh, MD Professor of Cardiology, Professor of Internal Medicine and Human Genetics, University of Michigan Machine Learning-Based Risk Stratification Scheme for CLTI Kate McGinigle, MD MPH Associate Professor of Surgery, University of North Carolina Molecular Genetic Evaluation of Pediatric Renovascular Hypertension to Enable a Personalized Treatment Approach: The Value of a Consortia Model Dawn Coleman, MD Chief, Division of Vascular and Endovascular Surgery, Duke University |

| Presentation                      |   |
|-----------------------------------|---|
| 11:40-12:10<br>12:10-12:20<br>Q&A | Clinical Practicalities Using Pharmacogenomics in Thrombosis Introduction by Manesh Patel, MD Marc Bonaca, MD MPH Executive Director, CPC Clinical Research, University of Colorado |

#### Lunch/Networking

12:20-1:15 Group Photo and Lunch Logistics - Isabel Bjork

### Panel Discussion

| 1:15-2:25<br>2:25-2:45<br>Q&A | Opportunities and Challenges of Al and Imaging for Precision Medicine<br>Panel Facilitation by Oliver Aalami, MD Clinical Professor, Surgery - Vascular Surgery, Stanford University     |
|-------------------------------|--|
|                               | Carotid Plaque Analysis / AAA Registry Development for Risk Prevention and Identification Bobby Chang, MD Assistant Chair of Vascular Surgery, Northern CA, The Permanente Medical Group |
|                               | Multi-Modal AAA Progression Model Development Sharon Kiang, MD   |
|                               | Chief, Vascular Surgery, Associate Professor of Surgery, Loma Linda VA<br>Healthcare System  |
|                               | Video Understanding for Risk and Resilience Screening: Integration of Computer Vision, Phenotype, and Clinical Data Matthew Corriere, MD   |
|                               | Frankel Professor of Cardiovascular Surgery, Associate Professor, Vascular Surgery, University of Michigan   |
|                               | The Future of Generative AI & Multi-Modal AI in Health Care Akshay Chaudhari, PhD  |
|                               | Assistant Professor, Integrative Biomedical Imaging Informatics, Stanford University   |
|                               | The Power of a "Human-in-The-Loop" - Cognitive Behavioral Therapy to Personalize SET Programs  |
|                               | Oliver Aalami, MD, Clinical Professor, Surgery - Vascular Surgery<br>Stanford University   |

| Concurrent Breakout Sessions |  |  |
|------------------------------|--|--|
| 2:45-3:00                    | Break-out Sessions and Focus  Vascular Patient Perspective by Jim Tietjens, Former Professional Soccer Player  Overview and Logistics by Isabel Bjork, JD MSc  |  |
| 3:00-4:30                    | #1 Innovative Approaches in Atherosclerosis  Moderator. Mike Conte, MD - Robertson 1 room  #2 Using AI and Imaging to Advance Vascular Disease Investigation  Moderator. Manesh Patel, MD - Robertson 2 room  #3 Genetics and Omic Approaches for Prevention and Care  Moderator. Sherene Shalhub, MD MPH - Robertson 3 room |  |
| Wrap-up                      |  |  |
| 4:30-5:15                    | Project identification: RFP discussion  Breakout Session Report-outs: Mike Conte, MD, Manesh Patel, MD, Sherene Shalhub, MD MPH  Next Steps Isabel Bjork, JD MS  |  |
| Reception                    |  |  |
| 5:15-6:00                    | Robertson Foyer  |  |

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