



2025 Vascular Research Initiatives Conference (VRIC)

Deploying Multi-omics to Reveal New Therapeutic Targets in Vascular Biology

Tuesday, April 22, 2025

*Marriott Baltimore Waterfront
700 Aliceanna St,
Baltimore, MD 21202*

***SVS Foundation Vascular Research Initiatives Conference Trainee Awardee**

*Full presentations – 8 minutes, 5-minute presentations with 3 minutes of discussion
Quick shot presentations – 6 minutes, 3-minute presentations with 3 minutes of discussion*

TUESDAY, APRIL 22, 2025

ROOM

6:00 AM	POWERPOINT PRESENTATION DROP-OFF – No CME	WATerview BALLROOM
7:00 AM	REGISTRATION AND CONTINENTAL BREAKFAST / POSTER PICK-UP – No CME	WATerview BALLROOM
8:00 AM	INTRODUCTORY REMARKS – No CME	WATerview BALLROOM

Kathryn L. Howe, MD, PhD, Chair, SVS Basic and Translational Research Committee

8:08 AM ABSTRACT SESSION I - ANEURYSMS AND AORTIC DISEASE

Moderator: Jean Marie Ruddy, MD
Moderator: Alan Daugherty, PhD, DSc

- 8:10 AM Full** **Genome-Wide Association Study of Lower Extremity Aneurysms Reveals Shared Genetic Architecture With Abdominal Aortic Aneurysms**
John Cabot* (Presenting), Sabina Sorondo, Shaunak Adkar, Stanford University, Palo Alto, CA; Derek Klarin, Bitterroot Bio, Palo Alto, CA; Michael Levin, University of Pennsylvania, Philadelphia, PA; Philip S. Tsao, Stanford University- VAPAHCS, Los Altos, CA; Scott M Damrauer, University of Pennsylvania, Philadelphia, PA
- 8:20 AM Quick shot** **Newly Differentiated Smooth Muscle Cells from Sca1 Progenitors Generate De Novo Elastic Fibers in the False Lumen Wall Following Aortic Dissection**
Sohei Ito (Presenting), Hong S. Lu, Alan Daugherty, Hisashi Sawada, University of Kentucky, Lexington, KY
- 8:28 AM Quick shot** **Myeloid Cell TRIM59 Deficiency Promotes Experimental Abdominal Aortic Aneurysms**
Baohui Xu (Presenting), Xochilt Labissiere, Stanford School of Medicine, Stanford, CA; Dongmei Yan, Jilin University School of Medicine, Changchun, China; Toru Ikezoe, Kyorin University, Mitaka-Shi, Japan; Makoto Samura, Stanford University, Palo Alto, CA; Jiayu Ye, VA Palo Alto Health Care Systems, Palo Alto, CA; Zheng Jin, Wenjia Ai, Junjie Ju, Jilin University School of Medicine, Changchun, China; Weirong Fang, China Pharmaceutical University, Nanjing, China; Philip S. Tsao, Stanford University-VAPAHCS, Los Altos, CA; Ronald L. Dalman, Stanford University, Palo Alto, CA
- 8:36 AM Full** **Mixed-Lineage Leukemia 1 (MLL1) Regulates T Cell Phenotype Signaling During Abdominal Aortic Aneurysm Development**
Nicholas Juriga (Presenting), Brennan Callow, Xiaobing He, Kevin D. Mangum, Tyler Bauer, Amrita Joshi, Andrea T. Obi, Katherine A. Gallagher, Frank Davis, University of Michigan, Ann Arbor, MI
- 8:46 AM Quick shot** **Smooth Muscle Cell PCSK6 Deficiency Aggravates Mouse Abdominal Aortic Aneurysm Progression via Increased Inflammation and Dysfunctional Coagulation Control**
Hong Jin (Presenting), Karolinska Institutet, Stockholm, Sweden; Zhaolong Li, Klinikum rechts der Isar der TUM, Muenchen, Germany; Moritz Lindquist Liljeqvist, Mariette Lengqvist, Malin Kronqvist, Stefan Stoisavljevic, Karolinska Institutet, Stockholm, Sweden; Hanna Winter, Klinikum rechts der Isar der TUM, Muenchen, Germany; Bianca E. Suur, Rebecka Hultgren, Ulf Hedin, Karolinska Institutet, Stockholm, Sweden; Joy Roy, Karolinska Institutet, Stockholm, Sweden; Lars Maegdefessel, Klinikum rechts der Isar der TUM, Muenchen, Germany; Ljubica Matic, Karolinska Institutet, Stockholm, Sweden
- 8:54 AM Quick shot** **Trends in Left Ventricular Myocardial Remodeling After Thoracic Endovascular Aortic Repair**
Kelly Twohig (Presenting), David Jiang, Joseph Pugar, Jeremy Slivnick, Luis Landeras, Luka Pocivavsek, University of Chicago, Chicago, IL
- 9:02 AM Quick shot** **Time-Restricted Feeding Attenuates Experimental Abdominal Aortic Aneurysms**
Makoto Samura (Presenting), Stanford University, Palo Alto, CA; Jiayu Ye, Stanford University-VAPAHCS, Los Altos, CA; Baohui Xu, Stanford University, Palo Alto, CA; Philip S. Tsao, Stanford University-VAPAHCS, Los Altos, CA; Ronald L. Dalman, Stanford University, Palo Alto, CA

9:10 AM Quick shot	Clickable Extracellular Vesicles for Localized Abdominal Aortic Aneurysm Repair Justin Weinbaum (Presenting) , Ande Marini, University of Pittsburgh, Pittsburgh, PA; Ellen Otto, Carnegie Mellon University, Pittsburgh, PA; Bo Li, Vanderbilt University Medical Center, Nashville, TN; Xi Ren, Phil Campbell, Carnegie Mellon University, Pittsburgh, PA; John Curci, Vanderbilt University Medical Center, Nashville, TN; David A. Vorp, University of Pittsburgh, Pittsburgh, PA
9:18 AM Full	Phosphodiesterase 3 or 5 Inhibitors Have No Effect on BAPN-induced Aortic Dissection and Aneurysm Sam Tyagi (Presenting) , Jacob Hubbuch, Michael Franklin, Deborah A. Howatt, Hisashi Sawada, Hong S. Lu, Alan Daugherty, University of Kentucky, Lexington, KY
9:26 AM	BREAK – No CME
9:42 AM	ABSTRACT SESSION II - MOLECULAR AND CELLULAR MECHANISMS IN VASCULAR DISEASE Moderator: Frank M. Davis, MD Moderator: Nicolas J. Leeper, MD
9:44 AM Full	The MLL1/JARID1C Axis Regulates Fibrotic Gene Expression in Diabetic Wound Healing Tyler Bauer* (Presenting) , Kevin D. Mangum, James Shadiow, Amrita Joshi, Bethany Moore, Frank Davis, Katherine A. Gallagher, University of Michigan, Ann Arbor, MI
9:54 AM Quick shot	Carotid Plaque Microplastics are Associated with Clinical Symptoms and Mesenchymal Stem Cell-Macrophage Immunomodulatory Effects Ross Clark (Presenting) , Pierce Massie, Marcus Garcia, Aerlin Decker, Rui Liu, Milad Mazloumi Bakhshayesh, Deepali Kulkarni, Ali Rana, Carolyn Pace, Matthew J. Campen, University of New Mexico, Albuquerque, NM
10:02 AM Quick shot	Ligands of the Receptor for Advanced Glycation End Products (RAGE) Induce Trained Immunity in Mouse Bone Marrow-Derived Macrophages (BMDMs) Vikas Kumar (Presenting) , Ramesh Nimma, Gautham Yepuri, Veronica Uribe Echevarria Zubizarreta, NYU Langone Health, New York City, NY; Ravichandran Ramasamy, NYU School of Medicine, New York, NY; Ann Marie Schmidt, NYU Langone Health, New York City, NY
10:10 AM Quick shot	Targeted Nanotherapy for PAD: Hyaluronic Acid-based Platforms and PIEZO1 Modulation to Improve Vascular Health Fujie Zhao (Presenting) , Lei Zhu, Gloriani Sanchez, Emory University, Atlanta, GA; Maiko Sasaki, Atlanta VA Medical Center, Decatur, GA; Lily Yang, Luke P. Brewster, Emory University, Atlanta, GA
10:18 AM Full	Integrative Proteomics Identifies Extracellular Matrix Signatures Predicting Plaque Vulnerability Status Lars Maegdefessel (Presenting) , Institute of Molecular Vascular Medicine, Klinikum rechts der Isar, TUM, Munich, Germany; Ankit Sinha, Max Planck Institute of Biochemistry, Munich, Germany; Nadja Sachs, Institute of Molecular Vascular Medicine, Klinikum rechts der Isar, TUM, Munich, Germany; Elena Kratz, Max Planck Institute of Biochemistry, Munich, Germany; Jessica Pauli, Institute of Molecular Vascular Medicine, Klinikum rechts der Isar, TUM, Munich, Germany; Sophia Steigerwald, Vincent Albrecht, Thierry Nordmann, Patricia Skowronek,



Matthias Mann, Max Planck Institute of Biochemistry, Munich, Germany

10:28 AM
Quick shot

Endothelial Cell Activation Impairs Macrophage Efferocytosis and Promotes Inflammation
Majed Abdul-Samad (Presenting), Sneha Raju, Kamalben Prajapati, Mandy Kunze Guo, Leandro Breda, Corey A. Scipione, Jason Fish, Kathryn L. Howe, University Health Network - TGHRI, Toronto, Ontario, Canada

10:36 AM
Quick shot

Smooth Muscle Embryonic Origin Drives Differential Response to Injury in Atherosclerosis
Kevin Dale Mangum (Presenting), Qinmengge Li, Tyler Bauer, Amrita Joshi, James Shadiow, Jadie Moon, Gabriela Saldana de Jimenez, Lam Tsoi, Andrea T. Obi, Frank Davis, Johann Gudjonsson, Katherine A. Gallagher, University of Michigan, Ann Arbor, MI

10:44 AM
Quick shot

Myeloid-Specific Deletion of DIAPH1 Exhibits Sex-Dependent Effects on Lipid Metabolism and Necrotic Core Formation in LDLR^{-/-} Mice
Jillian Poles (Presenting), Kaamashri Mangar, Tamanna Shabnam, Ann Marie Schmidt, NYU Langone Health, New York, NY

10:50 AM

BREAK – No CME

11:11 AM

ALEXANDER W. CLOWES DISTINGUISHED LECTURE

Moderator: Kathryn L Howe, MD, PhD, Chair, SVS Basic and Translational Research Committee

11:13 AM

From the Rat Carotid to Carotid Plaque Instability: Translational Vascular Surgery Research in the Footsteps of Dr. Clowes

Ulf Hedin, MD

Surgeon-Scientist and Professor, Department of Vascular Surgery
Karolinska University Hospital and Karolinska Institute

11:45 AM

LUNCH & POSTER PREVIEW
NO CME

ESSEX

12:45 PM

SVS FOUNDATION UPDATE AND AWARDS CEREMONY
NO CME

WATerview BALLROOM

Moderator: Peter K. Henke, MD, Chair, SVS Research Council

VRIC Trainee Awardees

John Cabot

Tyler Bauer

Mandy Kunze Guo

Bryan Ho

12:55 PM

SVS FOUNDATION MENTORED CLINICAL SCIENTIST RESEARCH CAREER DEVELOPMENT AWARD

Moderator: Kathryn L Howe, MD, PhD, Chair, SVS Basic and Translational Research Committee

12:57 PM

Multi-omics Strategies for Identifying Inflammatory Pathways in Vascular Aging

Tammy Nguyen, MD

University of Massachusetts Chan Medical School

1:07 PM ABSTRACT SESSION III - ENDOTHELIAL FUNCTION AND REPAIR PROCESSES

Moderator: Katherine Hekman, MD, PhD
Moderator: Lars Maegdefessel, MD, PhD

1:09 PM Full **Leveraging a Transgenic Mouse Model to Study Endothelial Cell-Derived Extracellular Vesicles in Atherosclerosis**

Mandy Kunze Guo* (Presenting), Corey A. Scipione, Leandro Breda, Kamalben Prajapati, Sneha Raju, Steven R. Botts, Majed Abdul-Samad, Sarvatit Patel, Garry Yu, University Health Network, Toronto, Ontario, Canada; Andrew Dudley, University of Virginia, Charlottesville, VA; Jason Fish, Kathryn L. Howe, University Health Network, Toronto, Ontario, Canada

1:19 PM Quick shot **Hypoxia Mediates JMJD3-Dependent Angiogenesis in Wound Microvascular Endothelial Functions**

James Shadiow (Presenting), Amrita Joshi, Sonya Wolf, Tyler Bauer¹, Kevin D. Mangum, Jadie Moon¹, Gabriela Saldana de Jimenez, Sabrina Rocco, Samuel Buckley, Matthew White Jr., Lindsey Hughes, Maggie Ovalle, Katherine A. Gallagher, University of Michigan, Ann Arbor, MI

1:27 PM Quick shot **Critical Role of NRP1 in Regulating iPSC-EC Function**

Sean Carr (Presenting), Katherine Owsiany, Michael Tu, Katherine Hekman, Emory University, Decatur, GA

1:35 PM Quick shot **In a Murine Model of PAD, Genetic Loss of the Absent in Melanoma 2 (AIM2) Inflammasome Promotes Regional Transcriptional Activity Favoring Regeneration, Cellular Communication, and Management of Oxidative Stress**

Ulka Sachdev (Presenting), Paul Cantalupo, Bowen Xie, Edwyn Assaf, Rohan Kulkarni, Ryan M. McEnaney, Uma R Chandran, UPMC, Pittsburgh, PA

1:43 PM Full **CCR4 Deficiency Decreases Arteriovenous Fistula Patency and Increases Venous Wall Thickness**

Bryan Ho* (Presenting), Carly Thaxton, Luis Gonzalez, Hualong Bai, Alan Dardik, Yale University, New Haven, CT

1:53 PM Quick shot **JAK/STAT Inhibition Modulates Endothelial Mixed Lineage Leukemia 1 (Kmt2a/MLL1) Induction and Immunothrombosis During SARS-CoV-2 Infection**

Nathaniel Parchment (Presenting), Oscar Y. Moreno, Kiran Kumar, Sriganesh Sharma, Sabrina Rocco, University of Michigan, Ann Arbor, MI Catherine Luke, Hartland High School, Howell, MI; Katherine A. Gallagher, Peter Henke, Andrea T. Obi, University of Michigan, Ann Arbor, MI

2:01 PM Quick shot **Integrin-Specific Signaling Drives ER Stress-Dependent Atherogenic Endothelial Activation**

Cyrine Ben Dhaou (Presenting), LSU Health Shreveport, Shreveport, LA; Zaki Al-Yafeai, University of Illinois Chicago, Chicago, IL; Elizabeth D. Cockerham, Brenna Pearson-Gallion, Gerardo A. Cruz Marquez, Wayne Orr, LSU Health Shreveport, Shreveport, LA

2:09 PM Quick shot **Matrix Metalloproteinases-3 Promotes Arteriovenous Fistula Failure by Regulating FAK-AKT Signaling**

Yangzhouyun Xie (Presenting), Weichang Zhang, Carly Thaxton, Ying Jin, Bogdan Yatsula, Sean D. Davis, Tobias Exsted, Alan Dardik, Raul J. Guzman, Yujun Cai, Yale, New Haven, CT

2:15 PM BREAK – No CME

2:31 PM	TRANSLATIONAL PANEL
	Moderator: Kathryn L Howe, MD, PhD, Vice-Chair, SVS Basic and Translational Research Committee
2:33 PM	A Systems Approach to Target Discovery for Inflammatory Vascular Diseases: A Focus on Macrophages in Atherosclerosis and Maladaptive Venous Grafts
	Masanori Aikawa, MD, PhD Professor of Medicine (Harvard Medical School); Yoshihiro Miwa Endowed Chair and Founding Director, Center for Interdisciplinary Cardiovascular Sciences (Brigham and Women's Hospital)
3:35 PM	BREAK – No CME
3:51 PM	ABSTRACT SESSION IV - DIABETES AND PAD
	Moderator: Scott M. Damrauer, MD Moderator: Ann Marie Schmidt, MD
3:53 PM Full	Transcriptomic Profiling Links Senescent Fibro-Adipogenic Progenitors to Amputation and Mortality in Human Chronic Limb Threatening Ischemia Patients Hana Shafique (Presenting) , Yueyuan Xu, Changxin Wan, Shaghayegh Sadeghmousavi, Wenzhe Luo, Camryn Johnson, Derek Peters, Qunsheng Dai, James Otto, Christopher D. Kontos, Zhicheng Ji, Yarui Diao, Kevin Southerland, Duke University, Durham, NC
4:03 PM Quick shot	CEPT1 Promotes the Release of Angiogenic Factors in Diabetic Patients Tariq Khan (Presenting) , Rodrigo Meade, Larisa Belaygorod, Santiago Elizondo Benedetto, Batool Arif, Shahab Hafezi, Omar Saffaf, Sangeeta Adak, Clay F. Semenkovich, Mohamed A. Zayed, Washington School of Medicine, St. Louis, MO
4:11 PM Quick shot	Single-cell Transcriptome Profiling of the Aorto-Iliac Region in Diabetic Peripheral Arterial Disease Dong Jun Jun Park (Presenting) , Sakeef Sayeed, Katie Pool, Casey Ho, Brian Eliceiri, Ann C. Gaffey, University of California- San Diego, San Diego, CA
4:19 PM Quick shot	Integration of Genome-Wide Association Studies with Single Cell Chromatin Accessibility Data Identifies a Fibro-Adipogenic Progenitor (FAP) Enhancer and Mmp1 and Mmp3 as Novel Targets for PAD Hana Shafique (Presenting) , Yueyuan Xu, Wenzhe Luo, Shaghayegh Sadeghmousavi, Derek Peters, Camryn Johnson, Qunsheng Dai, James Otto, Christopher D. Kontos, Kevin Southerland, Yarui Diao, Duke University, Durham, NC
4:27 PM Quick shot	Genetic Evidence for Glucose-dependent Insulinotropic Polypeptide as a Therapeutic Target for Peripheral Artery Disease Sabina Sorondo (Presenting) , John Cabot, Derek Klarin, Nicholas Leeper, Shaunak Adkar, Stanford, Palo Alto , CA
4:35 PM Quick shot	Multi-omics Approach of Peripheral Artery Disease Patient Gastrocnemius Describes Disease Progression Dimitrios Miserlis (Presenting) , Emma Fletcher, University of West Florida, Pensacola, FL; Evlampia Papoutsis, University of West Florida, Pensacola, FL; Iraklis I. Pipinos, University Nebraska Medical Center, Omaha, NE; Panagiotis Koutakis, University of West Florida,

Pensacola, FL

4:43 PM
Quick shot

Senescent Cells Accumulate in the Ischemic Limb

Shaghayegh Sadeghmousavi (Presenting), Hana Shafique, Qunsheng Dai, James Otto, Camryn Johnson, Wenzhe Luo, Yueyuan Xu, Derek Peters, Christopher D. Kontos, Yarui Diao, Kevin Southerland, Duke University, Durham, NC

5:00 PM

POSTER COMPETITION AND RECEPTION
NO CME

ESSEX

Announcements / Instructions

Moderator: Karen J. Ho, MD

Moderator: Gale L. Tang, MD

Moderator: Jean Marie Ruddy, MD

Poster ID

Poster Category

Presenter

5:05 PM

1

Aortic Disease and Treatment

Baohui Xu

Particulate Matter Exposure Promotes Experimental Abdominal Aortic Aneurysm Progression

Baohui Xu (Presenting), Stanford University School of Medicine, Stanford, CA; Jiayu Ye, VA Palo Alto Health Care Systems, Palo Alto, CA; Shuling Han, Wenjia Ai, Makoto Samura, Junjie Ju, Olivia M. Martinez, Ronald L. Dalman, Stanford University School of Medicine, Stanford, CA; Philip S. Tsao, Stanford University-VAPAHCS, Los Altos, CA

Poster ID

Poster Category

Presenter

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2

Aortic Disease and Treatment

Bwaar Omer

Sex Differences in Mouse Aortic Contractility and Protein Expressions in Response to Lipopolysaccharide Exposure

Bwaar Omer (Presenting), Jingshu Chi, Feng Chen, Hong Hao, Zhenguo Liu, University of Missouri School of Medicine, Columbia, MO

Poster ID

Poster Category

Presenter

5:13 PM

3

Aortic Disease and Treatment

Shayan Mohammadmoradi

VAMP8 Deficiency Attenuates AngII-Induced Abdominal Aortic Aneurysm Formation via Platelet Reprogramming and Enhanced ECM Stability

Shayan Mohammadmoradi (Presenting), Elizabeth Driehaus, Hammodah R. Alfar, University of Kentucky, Lexington, KY; Smita Joshi, Morehead State University, Morehead, KY; Sidney W. Whiteheart, University of Kentucky, Lexington, KY

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Presenter

5:17 PM 4 Aortic Disease and Treatment Pushkar Shivam

Plasma Protein Predictors of Abdominal Aortic Aneurysm Growth

Pushkar Shivam (Presenting), Pius N. Nde, Meharry Medical College, Nashville, TN; Emily Chen, ThermoFisher Scientific, San Jose, CA; Santosh Renuse, Bernard T. Baxter, Nebraska Medicine, Omaha, NE; Michael Terrin, University of Maryland School of Medicine, Baltimore, MD; Jon Matsumura, University of Colorado School of Medicine, Aurora, CO; Merry L. Lindsey, Meharry Medical College, Nashville, TN; John Curci, Vanderbilt University Medical Center, Nashville, TN

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5:21 PM 5 Aortic Disease and Treatment Jason Cook

Inflammatory Cell Infiltration in the Aorta in Marfan Syndrome Is Independent of Angiotensin Type 1 Receptor Activation

Jason Cook (Presenting), Wanfen Xiong, Trevor Meisinger, University of Nebraska Medical Cent, Omaha, NE

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5:05 PM 6 Atherosclerosis Adriana Araceli Rodriguez Alvarez

Comparative Effects of Apixaban and Rivaroxaban on Thrombin Generation Assessed by Viscoelastic Testing and Calibrated Thrombography

Adriana Araceli Rodriguez Alvarez (Presenting), Isabella Ferlini Cieri, Shiv Patel, Mounika Boya, Anahita Dua, Massachusetts General Hospital, Boston, MA

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5:09 PM 7 Atherosclerosis Meghana Iyer

Uncovering Sex-Specific Mechanisms in Vascular Disease through a Multi-Omics Approach

Meghana Iyer (Presenting), Cleveland Clinic, Eden Prairie, MN; Daniel Li, Wenduo Gu, William Jackson, Quanyi Zhao, Isabella Damiani, Trieu Nguyen, Alexa Berezowitz, Juyong B. Kim, Paul Cheng; Stanford University, Stanford, CA

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5:13 PM 8 Atherosclerosis Pierce Massie

Carotid Atherosclerotic Plaque Heavy Metals are Associated with Clinical Symptoms

Pierce Massie (Presenting), Marcus Garcia, Aerlin Decker, Rui Liu, Milad Mazloui, Bakhshayesh, Deepali Kulkarni, Ali Rana, Carolyn Pace, Matthew J. Campen, Ross Clark, University of New Mexico, Albuquerque, NM

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5:17 PM 9 Atherosclerosis Drew J Braet

Refining Internal Carotid Artery Stenosis Classification: The Role of Hemodynamics in Enhancing Diagnostic Accuracy

Drew J Braet (Presenting), Vivek Dandu, Ismael Assi, Nicholas S. Burris, Nicholas H. Osborne, C A. Figueroa, University of Michigan, Ann Arbor, MI

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5:21 PM	10	Atherosclerosis	Ian Brann
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24-Dehydrocholesterol Reductase Plays a Significant Role in Inflammation During Peripheral Arterial Disease

Ian Brann (Presenting), Falero-Diaz, Christopher Montoya, Catarina Barboza, University of Miami, Miami, FL

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5:05 PM	11	Biomarkers and Risk Factors	Sang Sun Yoon
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Intestinal Degradation of Trimethylamine by a Novel Gut Bacterium Reduces Blood Level of Trimethylamine N-Oxide, a Risk Factor for Cardiovascular Disease

Sang Sun Yoon (Presenting), Jinsun You, June Beom Kim, Mi Young Yoon, Yonsei University, BioMe Inc., Seoul, Japan

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5:09 PM	12	Biomarkers and Risk Factors	Vikki Rueda
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Analysis of Transcriptomes and Patient Factors in Non-healing Diabetic Foot Ulcers

Vikki Rueda (Presenting), Drexel College of Medicine, Trenton, NJ

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5:13 PM	13	Biomarkers and Risk Factors	Yuling Zhu
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Spatial Transcriptomic Analysis of Human Tibial Vessels Reveals Bilayered Media

Yuling Zhu (Presenting), Benjamin Humphreys, Katherine M. Holzem, Washington University, Saint Louis, MO

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5:17 PM 14 Biomarkers and Risk Factors Sean Rahman

Multivariate Analysis of Demographic and Clinical Predictors of Recanalization and Thrombotic Sequelae Following Endovenous Ablation in Chronic Venous Insufficiency

Sean Rahman (Presenting), Vikki Rueda-Juarez, Saahil Adusumilli, Zainab Haider, DUCOM, Philadelphia, PA; Olga Bakayev, Total Vascular Care, Brooklyn, NY; Pavel Kibrik, NYU Langone, Brooklyn, NY

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5:05 PM	15	Novel Models or Vascular Devices	Daniel Gage

Proinflammatory Changes in a Porcine Elastin Injury Model of Aneurysm

Daniel Gage (Presenting), Jordan Stafford, Dahlia Kenawy, Foued Amari, Bryan Tillman, The Ohio State University, Columbus, OH

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5:09 PM	16	Novel Models or Vascular Devices	Santiago Elizondo Benedetto

Novel Elastase-Papain Model for Induction of Infraarenal Abdominal Aortic Aneurysm Rupture in Mice

Santiago Elizondo Benedetto (Presenting), Mohamed Zaghloul, Batool Arif, Mohamed A. Zayed, Washington University, St Louis, MO

	<u>Poster ID</u>	<u>Poster Category</u>	<u>Presenter</u>
5:13 PM	17	Novel Models or Vascular Devices	Barbara Batista de Oliveira

Peripheral Artery Calcification Disrupts Lower Extremity Biomechanics in a Swine Model

Barbara Batista de Oliveira (Presenting), Jason N. MacTaggart, Alexey Kamenskiy, University of Nebraska Omaha, Omaha, NE

	<u>Poster ID</u>	<u>Poster Category</u>	<u>Presenter</u>
5:17 PM	18	Novel Models or Vascular Devices	Wei Zhang

Photo-Induced Universal Modifying Vessels or Cardiovascular Devices with a Hemocompatible Peptide to Improve Blood Compatibility

Wei Zhang (Presenting), Yale Cardiovascular Research Center, New Haven, CT; Fukazawa Kyoko, Atsushi Mahara, Tetsuji Yamaoka, National Cerebral and Cardiovascular Research Center, Osaka, Japan

	<u>Poster ID</u>	<u>Poster Category</u>	<u>Presenter</u>
5:21 PM	19	Novel Models or Vascular Devices	Gengfu Dong

Inhibition of Nicotinamide N-Methyltransferase Enhances Limb Function in Experimental Peripheral Artery Disease

Gengfu Dong (Presenting), Jaewon Choi, Yangyi Luo, Zhuoxin Li, Diana Muller, Yufen Li, Jennifer Russel, Feng Yue, Terence E. Ryan, University of Florida, Gainesville, FL

	<u>Poster ID</u>	<u>Poster Category</u>	<u>Presenter</u>
5:05 PM	20	PAD	Melinda Schaller

CD14+ Mononuclear Phagocyte Gene Expression is Altered in Peripheral Arterial Disease

Melinda Schaller (Presenting), Amitoj Singh J. Sawhney, Jimmy Cai, Douglas G. Brownfield, Mayo Clinic, Rochester, MN

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5:09 PM	21	PAD	Caroline Pass

Single Nuclei Multi-omics Reveal Changes in Transcriptional and Epigenetic Regulation in Skeletal Muscle Following Open Revascularization in CLTI: A Pilot Study

Caroline Pass (Presenting), Brian Fazzone, Kyoungrae Kim, Qingping Yang, Yong He, Guoshuai Cai, Kerri O'Malley, Salvatore T. Scali, Scott A. Berceli, Terence E. Ryan, University of Florida, Gainesville, FL

	<u>Poster ID</u>	<u>Poster Category</u>	<u>Presenter</u>
5:13 PM	22	PAD	Yuqian Tian

Muscle Oxygen Levels in Patients with Claudication: Measurements During Rest, Walking, and Temporary Occlusion of Blood Flow

Yuqian Tian (Presenting), University of Nebraska Medical Center, Omaha, NE; Cody P. Anderson, Ali H. Hakim, Prateek Sharma, Varnica Bajaj, University of Nebraska Medical Center, Omaha, NE; Holly Despiegelaere, VA Medical Center, Omaha, NE; Sara A. Myers, Panagiotis Koutakis, University of West Florida, Pensacola, FL; Song-young Park, Iraklis I. Pipinos, University of Nebraska Medical Center, Omaha, NE

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5:17 PM	23	PAD	Zhen Chen

Linking Diabetes and Peripheral Artery Disease: Long Non-Coding RNA-Regulated Endotheliopathy

Zhen Chen (Presenting), Naseeb K. Malhi, Yingjun Luo, City of Hope, Duarte, CA; John P. Cooke, Houston Methodist Research INS, Houston, TX

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5:21 PM

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PAD

Mary Meltem Kavurma

Females Exhibit Greater Mitochondrial Endothelial Dysfunction, Impairing Vascular Healing in Diabetes-Associated Peripheral Artery Disease

Mary Meltem Kavurma (Presenting), Sian Cartland, Elaina Kelland, Natalie Le, Christopher Stanley, Rachael Menezes, Madeleine Murphy, Jacqueline Ku, Lauren Boccanfuso, Lauren Sandeman, Lorna Beattie, Lisa Turner, Sergey Tumanov, Polina Nedoboy, Malathi Dona, Joseph Powell, Shane Thomas, Christina A. Bursill, Alexander Pinto, Sarah Aitken, David Robinson, Heart Research Institute, Bonnyrigg, New South Wales

Poster ID

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Presenter

5:05 PM

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Vascular Injury and Remodeling

Shuilin Dong

Single Cell and Spatial multi-Omics Show the Regulation and Therapeutic Potential of Venous Smooth Muscle Cell Reprogramming During Arteriovenous Fistula Remodeling

Shuilin Dong (Presenting), Chunhui Wang, Austin Lowery, Lily Liu, William Bryant, Xiaoliang Wu, Vascular Biology Center, Augusta University, Augusta, GA; Carly Thaxton, Alan Dardik, Yale New Haven Hospital, Hamden, CT; Weix Zhang, Temple University, Philadelphia, PA; Laisel Martinez, University of Miami, Miami, FL; Kunzhe Dong, Yanfang P. Zhu, Wantien Chiang, Xiaochun Long, Augusta University; Harold A. Singer, Albany Medical College, Albany, NY; Roberto Vazquez-Padron, Miami University, Miami, FL

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Presenter

5:09 PM

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Vascular Injury and Remodeling

Laisel Martinez

The Microanatomy of the Human Hemodialysis Fistula Maturation and Failure

Laisel Martinez (Presenting), Filipe F. Stoyell, Marwan Tabbara, Miguel G. Rojas, Simone Pereira-Simon, Nieves Santos Falcon, Xiaofeng Yang, YAN-TING SHIU, Timmy Lee, Juan Duque, Loay Salman, Xiaochun Long, Roberto Vazquez-Padron, University of Miami, Miami, FL

Poster ID

Poster Category

Presenter

5:13 PM

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Vascular Injury and Remodeling

Filipe Stoyell

Transcriptomic Dynamics of Mouse Arteriovenous Fistulas via Single-Cell RNA Sequencing Analysis

Filipe Stoyell (Presenting), Miguel Rojas, Yuntao Wei, Nieves Santos Falcon, Laisel Martinez, Roberto I. Vazquez-Padron, University of Miami, Miami, FL



	<u>Poster ID</u>	<u>Poster Category</u>	<u>Presenter</u>
5:17 PM	28	Vascular Injury and Remodeling	Tyler Bauer
	The Histone Deacetylase HDAC11 Contributes to Diabetic Vascular Fibrosis Tyler Bauer (Presenting) , Kevin D. Mangum, James Shadiow, Amrita Joshi, Bethany Moore, Frank M. Davis, Katherine A. Gallagher, University of Michigan, Ann Arbor, MI		
5:30 PM	Winners Announced		
7:00 pm	Reception ends. <u>Presenters, please remove posters by 7PM, or they will be discarded.</u> If you have a poster that will be at the AHA's Vascular Discovery, you are responsible to move it.		