

Frontiers in Cardiovascular Research 2026 Program

January 1-5, 2026

OUTRIGGER Waikiki Beachcomber Hotel
2300 Kalākaua Ave, Honolulu, HI 96815

DAY 1: THURSDAY, JANUARY 1, 2026

1:00-5:00 PM Registration

DAY 2: FRIDAY, JANUARY 2, 2026

Session 1: Cardiac Development & Vascular Cell Biology

Moderator: *Hong Chen and Ziqing Liu*

8:30-8:50 AM | Guang Li - University of Pittsburgh

Study of heart development at single cell level

8:50-9:10 AM | Hongchao Guo - University of Utah

Elucidating the molecular mechanisms of cardiomyocyte maturation

9:10-9:30 AM | Mingtao Zhao - Nationwide Children's Hospital

Leveraging patient-specific iPSCs for precision medicine in congenital heart disease

9:30-9:50 AM | Break 1

9:50-10:10 AM | Joe Miano - Augusta University

Evading Visceral Myopathy to Gain Vascular Vicissitude

10:10-10:30 AM | Huabo Su - Augusta University

A posttranslational mechanism regulating cardiac maturation

10:30-10:50 AM | Yabing Chen - Oregon Health and Science University

VSMV resilience and aging

10:50-11:10 AM | Break 2

11:10-11:30 AM | Xiaochun Long - Augusta University
VSMC phenotypic adaptation and resilience

11:30-11:50 AM | Jiliang Zhou - Louisiana State University
Master regulators in controlling smooth muscle phenotype

11:50 AM-12:10 PM | Bo Liu - University of Wisconsin-Madison
Histone modification programs during smooth muscle cell phenotypic switch in aortic aneurysm

12:10-2:00 PM | Lunch Break

Session 2: Cardiac Disease Mechanisms & Pathophysiology

Moderator: Long Sheng Song and Mingtao Zhao

2:00-2:20 PM | Lin Chang - University of Michigan
Functions of PRDM16 in cardiovascular system

2:20-2:40 PM | Hong Chen - Harvard Medical School
Molecular Mechanisms Regulating Coronary Heart Disease by Epsins

2:40-3:00 PM | Zhao Wang - City of Hope
Stress response in heart failure

3:00-3:20 PM | Break 1

3:20-3:40 PM | Mark Ranek - Johns Hopkins University
Proteomic profiling of cardiac amyloidosis

3:40-4:00 PM | Jifeng Zhang - University of Michigan Medical Center
TREM2 dynamic functions in the development of AAA

4:00-4:20 PM | Break 2

4:20-4:40 PM | Rongxue Wu - University of Chicago
Intersecting Pathways: Hypoxia and Inflammation in Sepsis-Driven Heart Failure

4:40-5:10 PM | Jingyan Han - Boston University
Microtopography-guided cell orientation in 3D-printed vessel for enhanced vascular functionality

5:10-5:30 PM | Ann Chiao - Oklahoma Medical Research Foundation
The role of mitochondrial NAD transporter SLC25A51 in cardiac maturation

5:30-5:50 PM | Kai Wang - Peking University, School of Basic Medical Sciences

Injectable arterial organoids alleviate ischemic disease

DAY 3: SATURDAY, JANUARY 3, 2026

Session 3: Protein Regulation & Vascular Disease

Moderator: *Eugene Chen and Yanqing Gong*

8:30-8:50 AM | Jie Li - Augusta University

Ufm1 modification in ER homeostasis

8:50-9:10 AM | Xuejun Wang - University of South Dakota

Priming the Protrasome For Proteostasis

9:10-9:30 AM | Shiyu Chen - University of Missouri

Arterial wall remodeling in vascular diseases

9:30-9:50 AM | Break 1

9:50-10:10 AM | Yanhong Guo - University of Michigan

Hypertriglyceridemia as a Key Contributor to Abdominal Aortic Aneurysm Development and Rupture: Insights from Genetic and Experimental Models

10:10-10:30 AM | Huaizhu Wu - Baylor College of Medicine

Inflammatory role in atherosclerosis with hypertriglyceridemia

10:30-10:50 AM | Ziqing Liu - Medical College of Wisconsin

RNA-binding proteins in vascular biology

10:50-11:10 AM | Break 2

11:10-11:30 AM | Yanbo Fan - The Ohio State University

Coiled coil domain containing protein 92 and vascular diseases

11:30-11:50 AM | Li Lai - Houston Methodist

Metabolic control of cell fate transition during vascular recovery

11:50-12:10 PM | Pengchun Yu - Oklahoma Medical Research Foundation

Metabolic mechanisms regulating lymphatic vessel formation

12:10-2:00 PM | Lunch Break

Session 4: RNA Biology & Regenerative Medicine

Moderator: *Hua Linda Cai and Lei Yang*

2:00-2:20 PM | Guoping Li - Harvard Medical School/MGH
Therapeutic tRNA-derived small RNA: From Kidney to Heart

2:20-2:40 PM | Hanrui Zhang - Columbia University
Macrophage biology and functional genomics in cardiometabolic disease

2:40-3:00 PM | Jianxiong Chen - Mississippi Medical Center
Endothelial PHD2 Deficiency Impairs Nitric Oxide Signaling and Cardiomyocyte Mitochondrial Ca^{2+} Uptake, Leading to Diastolic Dysfunction

3:00-3:20 PM | Break 1

3:20-3:40 PM | Yao Wei Lu - University of Southern California
Post-transcriptional Regulation in Cardiovascular Development

3:40-4:00 PM | Ting Ting Hong - The University of Utah
T-tubule Microdomain in Heart Failure

4:00-4:20 PM | Break 2

4:20-4:40 PM | Wendong Huang - City of Hope
Targeting bile acid signaling and microbiome to treat metabolic disorders

4:40-5:00 PM | Wuqiang Zhu - Mayo Clinic Arizona
Cardiac cell therapy for ischemia heart disease

5:00-5:20 PM | Yiqiang Zhang - University of Hawaii at Manoa
Epigenetics of Cardiomyocyte Cell Cycle Control

DAY 4: SUNDAY, JANUARY 4, 2026

Session 5: Cardiac Remodeling & Repair

Moderator: *Yabing Chen and Shijie Liu*

8:30-8:50 AM | Liya Yin - The University of Arizona
The regulation of Coronary Vasculature Architecture in ischemic Heart Disease

8:50-9:10 AM | Ling Yang - University of Iowa
The lysosomal function in HFpEF

9:10-9:30 AM | Lei Yang - Indiana University
LncRNA-mediated lipid droplet transport system in human heart

9:30-9:50 AM | Break 1

9:50-10:10 AM | Shijie Liu - Cincinnati Children's Hospital

The Microtubule network is required for YAP-induced sarcomere breakdown

10:10-10:30 AM | Na Li - Baylor College of Medicine

Targeting Inflammatory Signaling Pathways in Arrhythmias

10:30-10:50 AM | Haobo Li - Massachusetts General Hospital

Post-transcriptional regulation of cardiac response to exercise

10:50-11:10 AM | Long-Sheng Song - University of Iowa

Multifaceted Functions of Juncophilin-2 in the Heart

11:10-11:30 AM | Break 2

11:30-11:50 AM | Hua Linda Cai - UCLA

Novel NO modulating pathways in cardiovascular injury and protection

11:50 -12:10 PM | Chi Keung Lam - University of Delaware

Is Hsp90 a friend or a foe in cardioprotection?

12:10-12:30 PM | Chun Liu - Medical College of Wisconsin

Decoding Cardiotoxicity with Human iPSCs and CRISPR Screens

12:30-2:00 PM | Lunch Break

Session 6: Metabolism, Aging & Future Technologies

Moderator: Zhao Wang and Bo Liu

2:00-2:20 PM | Yanqiao Zhang - The University of Arizona

The Role of ATF3 in Atherosclerosis

2:20-2:40 PM | Guizhen Zhao - University of Houston

SWI/SNF Chromatin Remodeling Complex in Cardiovascular Diseases

2:40-3:00 PM | Yingjie Chen - University of Mississippi Medical Center

Impact of cellular PD1 bioavailability on CD8 T cells' multiple functional capacities and cardiac inflammation

3:00-3:20 AM | Break

3:20-3:40 PM | Yanqing Anna Gong - University of Pennsylvania

Unveiling Tbc1d2b as a Novel Driver of Vascular Tube Formation

3:40-4:00 PM | Xiaolei Liu - Temple University

Chemokine signaling as a guiding cue regulating lymphatic development

4:00-4:20 PM | Yingfeng Deng - City of Hope

Uridine in metabolism and beyond

4:20-4:40 PM | Xinghui Sun - University of Nebraska-Lincoln

From long noncoding RNA to protein modification in cardiometabolic disease

4:40-5:00 PM | Jinxi Wang - University of Iowa

Junctophilin-2 in Cardiac Fibroblasts is Key for Fibrotic Repair

5:00-5:20 PM | Chi Fung Lee - Oklahoma Medical Research Foundation

Mitochondrial and NAD metabolism in cardiometabolic disease

5:20-5:40 PM | Xi Wang - Peking University, School of Basic Medical Sciences

Engineered stem cell-derived islets therapy for Type 1 diabetes

DAY 5: MONDAY, JANUARY 5, 2026

Session 7: Panel Discussion and Workshop for Career Development

9:00-10:00 AM | Panel Discussion: *Future of Cardiovascular Research*

Panelists: **Xuejun Wang, Ziqing Liu**

10:00-10:30 AM | Break 1

10:30-11:30 AM | Workshop: *Grant Opportunities & Collaboration Planning*

Panelists: **Eugene Chen, Yanbo Fan**

11:30-2:00 PM | Lunch Break & Collaborative Planning

2:00-3:00 PM | Workshop: *How to Publish in High-Impact Journals*

Panelists: **Li Lai, Long Sheng Song**

3:00-3:30 PM | Break 2

3:30-4:30 PM | Workshop: *Managing Your Lab and Resources*

Panelists: **Yabing Chen, Lei Yang**

4:30-5:00 PM | Closing Remarks & Farewell