12th Annual Meeting North American Section

of Cold Oxogonous Sciences

International Academy of Cardiovascular Sciences



September 18-20, 2025

LAS VEGAS, NEVADA

Conference Chair

Buddhadeb Dawn, MD

Professor and Chairman
Department of Internal Medicine
Chief, Division of Cardiovascular Medicine
Kirk Kerkorian School of Medicine
University of Nevada, Las Vegas
Email: buddha.dawn@unlv.edu

International Academy of Cardiovascular Sciences



University of Nevada, Las Vegas

KIRK KERKORIAN SCHOOL OF MEDICINE UNIV

Conference Website:

Visit https://iacs-nas-meeting.org/ Scan the QR code



University of Nevada, Reno



University Medical Center of Southern Nevada



CONFERENCE INFORMATION

Conference Chair

Buddhadeb Dawn, MD (Las Vegas, NV)

Scientific Advisory Committee

Chowdhury Ahsan, MD (Las Vegas, NV)

Josh Baker, PhD (Reno, NV)

Rushita Bagchi, PhD (Little Rock, AR)

Bradley Ferguson, PhD (Reno, NV)

AJ Marian, MD, PhD (Houston, TX)

Graham McGinnis, PhD (Las Vegas, NV)

Ravichandran Ramasamy, PhD (New York, NY)

Sakthivel Sadayappan, PhD (Tucson, AZ)

Organizing Committee

Devendra K. Agrawal, PhD (Pomona, CA)

Jacqueline Clark (Las Vegas, NV)

Michael V. DiCaro, MD, MSc (Las Vegas, NV)

Mridul Gautam, PhD (Reno, NV)

Russell Hancock (Las Vegas, NV)

Natalie Hernandez (Pomona, CA)

Julia Siu (Las Vegas, NV)

Venue & Accommodation

Mandalay Bay Convention Center

3950 S Las Vegas Blvd Las Vegas, NV 89119

Registration Desk Hours

• September 18: 1:00 PM – 6:00 PM

• September 19: 7:00 AM – 5:00 PM

• September 20: 7:00 AM – 5:00 PM

Poster Session DetailsSeptember 19

Setup: Begins at 8:00 AM

• Judging: 5:15 PM - 6:30 PM

Social Media

Follow and Share #IACSNAS2025

AGENDA - Day 1: Thursday, September 18, 2025

1:00 - 6:00 pm Registration 4:00 - 4:30 pm **Welcome Remarks (Islander DEI)** Buddhadeb Dawn, MD, Conference Chair Marcia Turner, PhD, Associate Vice Chancellor for Health Sciences, NSHE David W. Hatchett, PhD, Vice President for Research, UNLV Josh Baker, PhD, Associate Vice President for Research, University of Nevada, Reno John O'Reilly, JD, MBA, Chairman, UMC Governing Board **President's Address** Michael Czubryt, PhD, University of Manitoba, Canada **IACS Medal of Merit Lecture** 4:30 - 5:00 pm Introduced by Naranjan Dhalla, PhD, Honorary Life President, IACS **Changing Perspectives: Transport Regulation at the Nuclear Membrane** Grant Pierce, PhD, University of Manitoba, Canada 5:00 - 5:30 pm **Martin Morad Distinguished Lecture** Targeting Calcium Leak to Treat Disorders of Heart, Muscle and Brain Andrew Marks, MD, Columbia University State-of-the-Art Lecture 5:30 - 6:00 pm **Cell Therapy for Heart Failure** Roberto Bolli, MD, University of Louisville 6:00 - 6:30 pm **Plenary Lecture** Cardiovascular Disease and Cancer: A Dangerous Liaison Kathryn Moore, PhD, New York University

SATELLITE SESSION: ISLANDER DEI Moderator: Marcia Turner, PhD

6:45 – 7:30 pm Research and Innovation in Nevada: An Exciting Present and a Bright Future Panelists

Josh Baker, PhD, Associate Vice President for Research, University of Nevada, Reno Zachary Miles, Esq., Interim Vice President for Economic Development, UNLV Martin Schiller, PhD, Exec. Director, Nevada Institute of Personalized Medicine, UNLV Vick Gill, MD, Business Development Officer, UMC

6:45 pm Welcome Dinner: Islander DEI

AGENDA - Day 2: Friday, September 19, 2025

| 7:00 - 8:00 am | Registration & Breakfast |
|-----------------|---|
| IACS PRE | Session 1: Tradewinds DEF ESIDENTIAL SYMPOSIUM: ADVANCES IN CARDIOVASCULAR SCIENCES Moderators: Grant Pierce, PhD; Michael Czubryt, PhD |
| 8:00 - 8:20 am | The Cellular Cardiac Electrophysiological Effect of Long Term Amiodarone Treatment in Heart Failure Patients Andras Varro, MD, PhD, University of Szeged, Hungary |
| 8:20 - 8:40 am | Scleraxis: A Stress-Responsive Regulator of Wound Healing and Fibrosis Michael Czubryt, PhD, University of Manitoba, Canada |
| 8:40 – 9:00 am | Myeloid-Specific Regulation of RhoA in Response to Cardiac Injury and Cardiac Fibrosis Maria Kontaridis, PhD, Harvard Medical School |
| 9:00 - 9:20 am | modRNA Therapeutics vs. hiPSC-derived Cell and Cell-products for Myocardial Repair in Large Mammals: Remuscularization of Injured Ventricle Jianyi (Jay) Zhang, MD, PhD, University of Alabama |
| 9:20 - 9:40 am | Regulation of Cellular Quality Control Mechanisms in the Heart Lorrie Kirshenbaum, PhD, University of Manitoba, Canada |
| 9:40 - 10:00 am | Coffee Break: Tradewinds ABC |
| | Session 2: Mariners AB VASCULAR BIOLOGY Moderators: Puja Mehta, MD; Daisy Sahoo, PhD |
| 8:00 - 8:20 am | Role of Resident Macrophages in Fibrosis and Angiogenesis Jop van Berlo, MD, PhD, University of Minnesota |
| 8:20 - 8:40 am | Small Vessels with Big Problems: Understanding Coronary Microvascular Dysfunction Puja Mehta, MD, Emory University |
| 8:40 - 9:00 am | Direct Reprogramming for Vascular Regeneration <i>Young-sup Yoon, MD, PhD, Emory University</i> |
| 9:00 - 9:20 am | Receptor-Based Approaches to Reducing Cardiovascular Risk Daisy Sahoo, PhD, Medical College of Wisconsin |
| 9:20 - 9:40 am | Macrophage Immunometabolic Regulation in Atherosclerosis Carlos Fernández-Hernando, PhD, Yale University |

AGENDA - Day 2: Friday, September 19, 2025

9:40 – 10:00 am Coffee Break: Tradewinds ABC

Session 3: Tradewinds DEF

CELL AND GENE THERAPY FOR CARDIOVASCULAR REPAIR AND REGENERATION

Moderators: Ewa Zuba-Surma, PhD; Sunjay Kaushal, MD, PhD

| 10:00 - 10:20 am | Interaction Between MSC Therapeutics and Genetics in Dilated Cardiomyopathy Joshua Hare, MD, University of Miami |
|--------------------|--|
| 10:20 - 10:40 am | Stem Cell-Derived Extracellular Vesicles as a Next Generation Tool for Tissue Repair Ewa Zuba-Surma, PhD, Jagiellonian University, Poland |
| 10:40 - 11:00 am | Phase I Randomized Study of Cardiac Stem Cells in Patients with Hypoplastic Left Heart Syndrome: CHILD Trial Sunjay Kaushal, MD, PhD, University of Nevada, Las Vegas |
| 11:00 - 11:20 am | Developmental Pathways for Human Heart Repair <i>Hina Chaudhry, MD, Icahn School of Medicine at Mount Sinai</i> |
| 11:20 - 11:40 am | NAN-CS101: A First-in-Human Phase 1 Open-Label Dose-Escalation Study of AB-1002 Gene Therapy for the Treatment of NYHA Class III HF Timothy Henry, MD, The Christ Hospital, Cincinnati |
| N | Session 4: Mariners AB GENETICS, EPIGENETICS, AND OMICS Moderators: Bradley Ferguson, PhD; AJ Marian, MD, PhD |
| 10:00 - 10:20 am | Chromatin as Mechanosensor in Cardiac Fibrosis Thomas Vondriska, PhD, University of California, Los Angeles |
| 10:20 - 10:40 am | Targeting Cellular Plasticity in Cardiometabolic Disease via an Atypical HDAC Rushita Bagchi, PhD, University of Arkansas |
| 10:40 - 11:00 am | Understanding Actin Acetylation in Muscle Function Bradley Ferguson, PhD, University of Nevada, Reno |
| 11:00 - 11:20 am | Role of KDM5 in Epigenetic Regulation of Heart Failure Priyatansh Gurha, PhD, McGovern Medical School at UT Health |
| 11:20 - 11:40 am | Human -Omics Data to Advance Novel Discovery in Heart Failure Jacob Joseph, MD, Brown University |
| 11:40 am - 1:00 pm | Lunch: Islander DEI |

AGENDA - Day 2: Friday, September 19, 2025

SATELLITE SESSION
LOCATION: ISLANDER DEI
Moderator: Peter Kaufmann, PhD

| 12 noon – 1:00 pm | Funding Opportunities at the NIH: Mechanisms, Applications, FAQs Renee Wong, PhD, National Institutes of Health |
|-------------------|---|
| | Session 5: Tradewinds DEF REGULATION OF CARDIAC SARCOMERES IN HEART FAILURE Moderators: Michelle Parvatiyar, PhD; Josh Baker, PhD |
| 1:00 - 1:20 pm | Defining Myosin S2 Variants in Hypertrophic Cardiomyopathy <i>Sakthivel Sadayappan, PhD, University of Arizona</i> |
| 1:20 - 1:40 pm | Is Pre-Phenotype Treatment of HCM a Reasonable Goal? J. Carter Ralphe, MD, University of Wisconsin |
| 1:40 - 2:00 pm | Contractility and Relaxation in Pediatric Dilated Cardiomyopathy Carmen Sucharov, PhD, University of Colorado |
| 2:00 - 2:20 pm | Determinants of Cardiac Recovery in Inherited Dilated Cardiomyopathy Jennifer Davis, PhD, University of Washington |
| 2:20 - 2:40 pm | The Sarcomere in Atrial Fibrillation Jonathan Kirk, PhD, Loyola University |
| 2:40 - 3:00 pm | Coffee Break: Tradewinds ABC |
| | Session 6: Mariners AB CIRCADIAN RHYTHM, EXERCISE, DIET, AND AGING Moderators: Tami Martino, PhD; Graham McGinnis, PhD |
| 1:00 - 1:20 pm | Timing Is Therapy: Eating, Exercise, and Aging in Circadian Cardiovascular Medicine Tami Martino, PhD, University of Guelph, Canada |
| 1:20 - 1:40 pm | Aerobic Training and Cardiac Protection in Experimental Hyperhomocysteinemia: Analysis of Cardiometabolic Biomarkers, Oxidative Stress and Histological Changes Dragan Djuric, MD, PhD, University of Belgrade, Serbia |
| 1:40 - 2:00 pm | Systemic Aging Fuels Cardiometabolic Remodeling: Increased Risk of Insulin Resistance and Mitochondrial Dysfunction in the Aging Heart Belma Turan, PhD, Lokman Hekim University, Turkey |
| 2:00-2:20 pm | Temporal Regulation of Exercise and Training Induced Responses in |

AGENDA - Day 2: Friday, September 19, 2025

| th | e | Н | ea | rt |
|----|---|---|----|----|
| | | | | |

Graham McGinnis, PhD, University of Nevada, Las Vegas

2:20-2:40 pm Epigenetics of Ablation of Sleep Time Dipping in Blood Pressure and

Heart Failure

Suresh Tyagi, PhD, University of Louisville

2:40 – 3:00 pm Coffee Break: Tradewinds ABC

Session 7: Tradewinds DEF

ROBERTO BOLLI YOUNG INVESTIGATOR AWARD

Judges: Michael Czubryt, PhD; Harlokesh Yadav, PhD; Srinivas Tipparaju, PhD; Sakthivel Sadayappan, PhD

| 3:00 - 3:15 pm | DIAPH1 Regulates Stress-Induced Senescence in Human |
|----------------|---|
| 3.00 3.13 pm | DIAI III NEEdiales su ess-muuleu senestente in munian |

Cardiomyocytes

Gautham Yepuri, PhD, New York University

3:15 – 3:30 pm Cardiac Myocyte Cytosolic Self-DNA Contributes to the Pathogenesis of

Desmoplakin-Cardiomyopathy

Weiyue Wang, MD, UTHealth Houston

3:30 – 3:45 pm Stress Granule-Driven Regenerative Signaling in Myocardial Infarction

and Metabolic Comorbidities

Resmi Rajalekshmi, PhD, Western University of Health Sciences

3:45 - 4:00 pm FABP5 Induces Cardiomyocyte Cell Cycle to Regenerate the Adult

Heart, a Lesson from the Neonatal Heart

Abou Bakr Salama, MBBCh, Baylor College of Medicine

4:00 – 4:15 pm Development of iPSC-Based Clinical Trial Selection Platform for

Patients with Inherited Metabolic and Cardiovascular Disorders

Abhay Srivastava, PhD, University of Manitoba, Canada

Session 8: Mariners AB

INTERORGAN AND INTERORGANELLE TALKS IN CARDIOVASCULAR DISEASES

Moderators: Yajing Wang, MD, PhD; Ravichandran Ramasamy, PhD

| 3:00 - 3:20 pm | Stem Cell Reservoir Able to Support Cardiac Repair via Crosstalk |
|----------------|--|
|----------------|--|

Between Heart and Bone Marrow

Ren-Ke Li, MD, PhD, University of Toronto, Canada

3:20 – 3:40 pm Inter-Organ Communication Management (IOCoM): A New Mechanistic

Insight for Effective Anti-Aging Intervention

Shin-ichiro Imai, MD, PhD, Washington University

3:40 – 4:00 pm Diabetes-Driven Impairment of Heart-Adipose Crosstalk

Yajing Wang, MD, PhD, University of Alabama

AGENDA - Day 2: Friday, September 19, 2025

4:00 – 4:20 pm Interorganelle Communications in Cardiac Diseases Ravichandran Ramasamy, PhD, New York University

Session 9: Tradewinds DEF

BUDDHADEB DAWN YOUNG INVESTIGATOR AWARD

Judges: Grant Pierce, PhD; Roberto Bolli, MD; Ren-Ke Li, MD, PhD

| 4:20 – 4:35 pm | Engineering Lipid Nanoparticles for Selective and Enhanced Delivery of mRNA to Cardiomyocytes Chandra Bhattacharya, PhD, University of Nevada, Las Vegas |
|----------------|---|
| 4:35 – 4:50 pm | Natriuretic Peptide Signaling Prevents Cardiac Remodeling in HFpEF via Interruption of Wnt5a-Mediated Adipocyte-Cardiomyocyte Crosstalk Vineet Agrawal, MD, PhD, Vanderbilt University |
| 4:50 – 5:05 pm | CDX2 cells in Cardiovascular Regeneration and Pregnancy Disorders: From Mouse Models to Human Insights Sangeetha Vadakke-Madathil, PhD, Icahn School of Medicine at Mount Sinai |
| 5:05 - 5:20 pm | FLNC Deficiency Disrupts Nuclear and Intercalated Disc Integrity to Activate STING-IRF3 Signaling in Cardiomyopathy Suet Chen, PhD, University of Colorado-Denver Anschutz Medical Campus |

Session 10: Mariners AB

GARY LOPASCHUK GRADUATE STUDENT AWARD

Judges: Mario Delmar, MD, PhD; Elizabeth Akin, PhD; Sai Sudha Koka, PhD; Marc Kahn, MD, MBA

| 4:25 – 4:40 pm | Investigating Altered Neuro-Cardiac Crosstalk Using the Spontaneously Hypertensive Rat Model Marika DeFerrari |
|----------------|--|
| 4:40 - 4:55 pm | Galectin-3, Transforming Growth Factor Beta 1, and Brain Natriuretic Peptide in Cardiac Remodeling Under Hyperlipidemic and Hyperglycemic Stress Hina Patel |
| 4:55 - 5:10 pm | Bleeding Risk with Next-Generation BTK Inhibitors: A Meta-Analysis of Randomized Controlled Trials Rishi Nanda |
| 5:10 - 5:25 pm | Divergent Male and Female Offspring Cardiometabolic Responses to Parental PM2.5 Exposure Eleanor Mohler |

AGENDA - Day 2: Friday, September 19, 2025

POSTER SESSION: TROPICS AB

Judges: Graham McGinnis, PhD; Dinender Singla, PhD; Ewa Zuba-Surma, PhD; Harpal Buttar, PhD; Leila Rouhi, MD, PhD; Ravichandran Ramasamy, PhD; Rushita Bagchi, PhD; Chandra Bhattacharya, PhD; Marc Kahn, MD, MBA

5:15 – 6:30 pm Poster Session

Morris Karmazyn Poster Awards (4)

Margaret Moffat Poster Awards (4)

6:30 pm Dinner on your own

SATELLITE SESSION (STUDENTS, TRAINEES, EARLY-CAREER SCIENTISTS)

LOCATION: TRADEWINDS DEF Moderator: AJ Marian, MD, PhD

6:30 – 7:30 pm Mentoring Session: Choosing a Career in Research

Roberto Bolli, MD, University of Louisville

AGENDA - Day 3: Saturday, September 20, 2025

| 7:00 - 8:00 am | Registration & Breakfast |
|-----------------|--|
| | Session 11: Tradewinds DEF ADVANCES IN CARDIOVASCULAR MEDICINE Moderators: Roberto Bolli, MD; Jagat Narula, MD, PhD |
| 8:00 - 8:25 am | Is PCSK9 Inhibition a Stand-Alone Therapy for Reducing Atherosclerotic Burden and Stabilizing Plaque? Devendra Agrawal, PhD, Western University of Health Sciences |
| 8:25 - 8:50 am | Precision Management of Coronary Heart Disease: Role of Biomarkers <i>Arshed Quyyumi, MD, Emory University</i> |
| 8:50 - 9:15 am | The Unbearable Lightness of Primary Endpoints in Clinical Trials Ali J. Marian, MD, PhD, McGovern Medical School |
| 9:15 - 9:40 am | Eliminating CAD in Our Lifetime: Presumptive, Precision, Personalized to Population Medicine Jagat Narula, MD, PhD, UT Health Houston |
| 9:40 - 10:00 am | Coffee Break: Tradewinds ABC |
| I | Session 12: Mariners AB EVERYTHING ARTIFICIAL: INTELLIGENCE, MATERIALS, CELLS Moderators: Jonathan Silva, PhD; Finosh Thankam, PhD |
| 8:00 - 8:20 am | Augmented Reality Displays as a Conduit to Bring Artificial Intelligence to the Cardiac Catheterization Laboratory Jonathan Silva, PhD, Washington University |
| 8:20 - 8:40 am | MXene Nanomaterials for Allogeneic Stem Cell Therapy for Cardiac Repair and Regeneration Sanjiv Dhingra, PhD, University of Manitoba, Canada |
| 8:40 - 9:00 am | Injectable Hydrogels for the Intra-Pericardial Delivery of Stem Cells Finosh Thankam, PhD, Western University of Health Sciences |
| 9:00 - 9:20 am | Calcium Signaling Consequences of Arrhythmogenic CPVT1 Mutations in hIPSC.CMs Martin Morad, PhD, Medical University of South Carolina |
| 9:20 - 9:40 am | Clinically Interpretable Deep Learning for Non-Invasive, High-Fidelity Fetal ECG Extraction and Early Congenital Heart Disease Screening Shengjie (Patrick) Zhai, PhD, University of Nevada, Las Vegas |
| 9:40 - 10:00 am | Coffee Break: Tradewinds ABC |

AGENDA - Day 3: Saturday, September 20, 2025

Session 13: Tradewinds DEF HEART RHYTHM: BENCH AND BEDSIDE Moderators: DJ Lakkireddy, MD; Jennifer Silva, MD

| 10:00 - 10:20 am | Updates in Pacing, Defibrillation, Resynchronization, and Heart Failure Therapies Dhanunjaya DJ Lakkireddy, MD, University of Missouri-Columbia |
|------------------|--|
| 10:20 - 10:40 am | The Era of Continuous Data is Now: Wearables and AI Jennifer Silva, MD, Washington University SOM |
| 10:40 - 11:00 am | Arrhythmogenic Right Ventricular Cardiomyopathy: Molecular Mechanisms and the Promise of Gene Therapy Mario Delmar, MD, PhD, New York University |
| 11:00 - 11:20 am | State of the Art in Pulse Field Ablation - Present and Future Andrea Natale, MD, Texas Cardiac Arrhythmia Institute |
| 11:20 - 11:40 am | Insights From Atrial Fibrillation Genetics and Genomics: From Bedside to Bench and Back Again Mina Chung, MD, Cleveland Clinic Lerner College of Medicine |

Session 14: Mariners AB

DIABETES, INFLAMMATION, AND HEART DISEASE

Moderators: Chiara Giannarelli, MD, PhD; Ranko Skrbic, MD, PhD

| 10:00 - 10:20 am | Inflammation and Atherogenesis in the Context of Diabetes Chiara Giannarelli, MD, PhD, New York University |
|--------------------|---|
| 10:20 - 10:40 am | PCSK9-Induced Inflammation in Diabetes Dinender Singla, PhD, University of Central Florida |
| 10:40 - 11:00 am | GLP-1 Agonists and Their Role in Oxidative Stress and Inflammation: Results from Clinical and Experimental Studies Ranko Skrbic, MD, PhD, University of Banja Luka, The Republic of Srpska, Bosnia & Herzegovina |
| 11:00 - 11:20 am | Cardiac Inflammation and Cell Death in Diabetic Cardiomyopathy: Metallomic Impact Lu Cai, MD, PhD, University of Louisville |
| 11:20 - 11:40 am | Diabetic Myocardial Infarction and Strategies to Protect the Heart Srinivas Tipparaju, PhD, University of South Florida |
| 11:40 am - 1:00 pm | Lunch: Islander DEI |

AGENDA - Day 3: Saturday, September 20, 2025

Session 15: Tradewinds DEF

ADVANCES IN INTERVENTIONAL AND STRUCTURAL CARDIOVASCULAR MEDICINE AND SURGERY Moderators: Petr Ostadal, MD, PhD; Chowdhury Ahsan, MD, PhD

| 1:00 - 1:20 pm | Surgical Management of Functional Mitral Regurgitation <i>Paul C. Tang, MD, PhD, Mayo Clinic</i> |
|----------------|--|
| 1:20 - 1:40 pm | Updates and Advances in Coronary and Valve Interventions <i>Chowdhury Ahsan, MD, PhD, University of Nevada, Las Vegas</i> |
| 1:40 – 2:00 pm | Treatment of Left Main Coronary Artery Lesions: Current Status and How I Select the Patient Henrique B. Furtado, MD, Tocantins Federal University, Brazil |
| 2:00 - 2:20 pm | ECMO in Cardiogenic Shock Petr Ostadal, MD, PhD, Charles University, Czech Republic |
| 2:20 – 2:40 pm | Advances in Transcatheter Mitral and Tricuspid Valve Therapies Saibal Kar, MD, University of California, Los Angeles |
| 2:40 – 3:00 pm | Coffee Break: Tradewinds ABC |
| | Session 16: Mariners AB Women's Heart Health And Cardio-Obstetrics Moderators: Andera Russo, MD; Lorrie Kirshenbaum, PhD |
| 1:00 - 1:25 pm | Arrhythmias in Pregnancy Andera Russo, MD, Cooper Medical School of Rowan University |
| 1:25 - 1:50 pm | The Cardiac Pathophysiological Outcomes of Shift Work During Pregnancy Inna Rabinovich-Nikitin, PhD, University of Manitoba, Canada |
| 1:50 - 2:15 pm | Mitochondrial Stress Signals in Pregnancy: Drivers of Hypertension and Vascular Dysfunction Stella Goulopoulou, PhD, Loma Linda University |
| 2:15 - 2:40 pm | Gender-Specific Differences in Heart Failure and Coronary Artery Disease Jasmine K. Dugal, DO, MPH, University of Nevada, Las Vegas Vasiliki (Vicky) Tasouli Drakou, DO, University of Nevada, Las Vegas |
| 2:40 - 3:00 pm | Coffee Break: Tradewinds ABC |

AGENDA - Day 3: Saturday, September 20, 2025

Session 17: Tradewinds DEF

CARDIOMYOPATHIES AND HEART FAILURE: NOVEL CONCEPTS, TREATMENTS, DEVICES
Moderators: Carmen Sucharov, PhD; Javier Banchs, MD

| 3:00 - 3:20 pm | Metabolic Inflammation in HFpEF: Moving Targets Matthew Feinstein, MD, Northwestern University |
|----------------|---|
| 3:20 – 3:40 pm | Remodeled Metabolic Trafficking of Fatty Acids in the Cardiomyocyte in Heart Failure Douglas Lewandowski, PhD, Ohio State University |
| 3:40 – 4:00 pm | Implantable Devices and Wearables in Heart Failure and Arrhythmia Monitoring Javier Banchs, MD, Baylor Scott & White Health |
| 4:00 – 4:20 pm | Hypertrophic Cardiomyopathy – Navigating Through Novel Treatments Srikanth Seethala, MD, Saint Alphonsus Heart Institute |
| 4:20 – 4:40 pm | Is Iron Therapy Indicated for Heart Failure with Reduced Ejection Fraction Patients? Marc Kahn, MD, MBA, University of Nevada, Las Vegas |
| | Session 18: Mariners AB OBESITY, METABOLIC SYNDROME, NEW RISK FACTORS, AND NEW TREATMENTS Moderators: Loren Wold, PhD; Vineet Agrawal, MD, PhD |
| 3:00 – 3:20 pm | Heart Failure and Psychosocial Stress: Implications of the Microbiome Loren Wold, PhD, Ohio State University |
| 3:20 – 3:40 pm | A Translational Journey: Targeting PDE5 and mTOR to Enhance Cancer Killing While Preventing Cardiotoxicity Rakesh Kukreja, PhD, Virginia Commonwealth University |
| 3:40 – 4:00 pm | Understanding Cardiovascular Risk Factors: Enhanced Vesicular Trafficking of Neuropeptide Y (NPY) in Sympathoexcitation Elizabeth Akin, PhD, University of Nevada, Reno |
| 4:00 – 4:20 pm | Effect of GLP-1 Receptor Agonist on Ischemia Reperfusion Injury in Rats and Metabolic Syndrome Vladimir Jakovljevic, MD, PhD, University of Kragujevac, Serbia |
| 4:20 – 4:40 pm | Lipoprotein(a): Emerging Knowledge and Novel Therapeutic Options <i>Michael V. DiCaro, MD, University of Nevada, Las Vegas</i> |

AGENDA - Day 3: Saturday, September 20, 2025

Awards Ceremony and Gala Dinner Location: Islander DEI

6:00 - 7:00 pm

Announcements, Recognitions, and Awards

Recognition by IACS-NAS Organizing Committee

Chairs: Dr. Buddhadeb Dawn, Dr. Ali J. Marian

Research Catalyst Award: Dr. Renee Wong

Translational Catalyst Award: Dr. Santosh Sanganalmath

Distinguished Service Award: Dr. Marcia Turner

Research Leadership Excellence Award: Dr. Josh Baker **Healthcare Trailblazer Award:** Mason Van Houweling

Healthcare Excellence Award: Ms. Joann Strobbe

IACS Awards

Chair: Dr. Naranjan Dhalla

IACS Medal of Merit: Dr. Grant Pierce

IACS Distinguished Service Award: Dr. Devendra K. Agrawal IACS Distinguished Leadership Award: Dr. Michael Czubryt IACS Lifetime Achievement Award: Dr. Buddhadeb Dawn

Established Investigator Awards

Chairs: Dr. Naranjan Dhalla, Dr. Andras Varro

Naranjan S. Dhalla Award for Innovative Investigators in Cardiovascular Sciences: Dr. E. Douglas Lewandowski

Paul Ganguly Distinguished Lecture Award in Cardiovascular

Sciences: Dr. Ravichandran Ramasamy

Amarjit Arneja Distinguished Lecture Award in Prevention of Heart

Disease: Dr. Jianyi "Jay" Zhang

Grant Pierce Award for Excellence in Cardiovascular Sciences:

Dr. Vladimir Jakovljevic

James Willerson Award for Excellence in Cardiovascular Sciences:

Dr. Jagat Narula

AGENDA - Day 3: Saturday, September 20, 2025

Jawahar (Jay) Mehta Award for Clinical Scientist: Dr. Petr Ostadal

Howard Morgan Award for Distinguished Achievements in Cardiovascular Research: Dr. Ali J. Marian

Suresh Tyagi Award for Excellence in Cardiovascular Sciences:

Dr. Maria I. Kontaridis

Young Investigator, Graduate Students, and Poster Awards Chairs: Dr. Buddhadeb Dawn, Dr. Devendra Agrawal

Roberto Bolli Young Investigator Award Buddhadeb Dawn Young Investigator Award Gary Lopaschuk Graduate Student Award

Margaret Moffat Poster Awards (4)

Morris Karmazyn Poster Awards (4)

6:00 pm Gala Dinner

Devendra K. Agrawal, MSc (Chem), PhD (Biochem), PhD (Med Sciences), MBA, MS (ITM) FAAAAI, FAHA, FAPS, FIACS

Professor and Director, Department of Translational Research

College of Osteopathic Medicine of the Pacific Western University of Health Sciences Pomona, CA, USA

Chowdhury H. Ahsan, MD, PhD, FSCAI, MRCP

Professor of Medicine

Director, Cardiovascular Fellowship Program Chief of Medicine and Director of Cath Lab – University Medical Center

Director, UMCSN Cardiovascular Research Immediate Past Governor, ACC Nevada Chapter Kirk Kerkorian School of Medicine at UNLV Las Vegas, Nevada, USA

Elizabeth J. Akin, PhD

Assistant Professor Department of Pharmacology School of Medicine University of Nevada, Reno Reno, Nevada, USA

Rushita Bagchi, PhD

Assistant Professor Department of Physiology and Cell biology College of Medicine University of Arkansas for Medical Sciences (UAMS) Little Rock, Arkansas, USA

Josh Baker, PhD

Professor Department of Pharmacology Principal Investigator, NIH NV INBRE Associate Vice President for Research Research & Innovation University of Nevada, Reno Reno, Nevada, USA

Javier E. Banchs, MD, FACC, FHRS

Director, Clinical Cardiac Electrophysiology and Pacing Baylor Scott & White Health Temple, Texas, USA

Roberto Bolli, MD, DSc (Hon), FAHA, FACC

Professor of Medicine, Physiology and Biophysics Jewish Hospital Heart and Lung Institute Distinguished Chair in Cardiology Director, Institute of Molecular Cardiology Distinguished University Scholar University of Louisville School of Medicine Louisville, KY, USA

Lu Cai, MD, PhD

Professor of Pediatrics, Radiation Oncology, and Pharmacology and Toxicology Director, Pediatric Research Institute University of Louisville School of Medicine Louisville, Kentucky, USA

Hina W. Chaudhry, MD

Professor of Medicine and Cardiology Director, Cardiovascular Regenerative Medicine Icahn School of Medicine at Mount Sinai New York, NY, USA

Mina Chung, MD, FACC, FHRS

President, Heart Rhythm Society
Professor of Medicine
Robert and Suzanne Tomsich Department of
Cardiovascular Medicine
Cleveland Clinic Lerner College of Medicine
Cleveland Clinic Heart and Vascular Institute
Cleveland, Ohio, USA

Michael P. Czubryt, PhD, FCVS, FAHA, FIACS

President, International Academy of Cardiovascular Sciences - North American Section Everett Chair in Fibrosis Research Professor of Physiology and Pathophysiology, University of Manitoba St. Boniface Hospital Albrechtsen Research Centre Winnipeg, Manitoba, Canada

Jennifer Davis, PhD

Associate Professor | Eva & Arra Woods Professorship Departments of Laboratory Medicine and Pathology & Bioengineering Director, Center for Cardiovascular Biology Interim Director, The Institute for Stem Cell & Regenerative Medicine University of Washington School of Medicine Seattle, Washington, USA

Mario Delmar, MD, PhD

Patricia M. and Robert H. Martinson Professor of Cardiology Department of Medicine NYU Langone Health Professor, Department of Cell Biology New York University Grossman School of Medicine New York, New York, USA

Naranjan S. Dhalla, PhD, MD (Hon), DSc (Hon)

Executive Director, IACS

Distinguished Professor, University of Manitoba St. Boniface Hospital Albrechtsen Research Centre Winnipeg, Manitoba, Canada

Sanjiv Dhingra, PhD, FAHA, FIACS, FAPS

Professor

Director, Canada Italy Tissue Engineering Program Associate Head Research - Department of Physiology and Pathophysiology

Institute of Cardiovascular Sciences, St. Boniface Hospital Research

Regenerative Medicine Program Biomedical Engineering Program Max Rady College of Medicine, Rady Faculty of Health Sciences

University of Manitoba Winnipeg, Manitoba, Canada

Michael V. DiCaro, MD, MSc

Clinical Fellow, Cardiovascular Medicine Department of Internal Medicine Kirk Kerkorian School of Medicine University of Nevada, Las Vegas Las Vegas, Nevada, USA

Dragan M. Djuric, MD, MS, PhD, FIACS, FIUPS

Professor of Physiology and Clinical Physiologist Institute of Medical Physiology "Richard Burian" Faculty of Medicine, University of Belgrade Belgrade, Serbia

Jasmine K. Dugal, DO, MPH

Internal Medicine Resident, PGY3 Department of Internal Medicine Kirk Kerkorian School of Medicine University of Nevada, Las Vegas Las Vegas, Nevada, USA

Matthew J. Feinstein, MD

Associate Professor of Medicine, Preventive Medicine, and Pathology

Director of Northwestern's Clinical and Translational Immunocardiology Program Director of Medical Student Research Northwestern University Feinberg School of Medicine Chicago, Illinois, USA

Bradley Ferguson, PhD

Associate Professor Graduate Program Director Department of Nutrition College of Agriculture, Biotechnology & Natural Resources University of Nevada, Reno Reno, Nevada, USA

Carlos Fernández-Hernando, PhD

Anthony N. Brady Professor

Director, Vascular Biology & Therapeutics Program (VBT)
Departments of Comparative Medicine and Pathology
Yale Center for Molecular and System Metabolism
(YMSM)

Yale University School of Medicine New Haven, Connecticut, USA

Henrique B. Furtado, MD

Efetive Professor of the Medical College of the Tocantins Federal University Vice President of the Latin América Section Praia da Graciosa Palmas, TO, Brazil

Chiara Giannarelli, MD, PhD

Associate Professor of Medicine and Pathology NYU Grossman School of Medicine New York, New York, USA

Stella Goulopoulou, PhD, FAHA

Associate Professor Lawrence D. Longo, MD Center for Perinatal Biology Department of Basic Sciences, Division of Physiology Department of Gynecology & Obstetrics Loma Linda University School of Medicine Loma Linda, California, USA

Priyatansh Gurha, PhD

Assistant Professor Center for Cardiovascular Genetics Institute of Molecular Medicine McGovern Medical School The University of Texas Health Science Center at Houston

Joshua Hare, MD, FACC, FAHA

Director, Donald Soffer Endowed Program in Regenerative Medicine Chief Science Officer Senior Associate Dean for Experimental & Cellular Therapeutics Louis Lemberg Professor of Medicine (Cardiology) Professor of Molecular and Cellular Pharmacology Professor of Biomedical Engineering Director, Interdisciplinary Stem Cell Institute (ISCI) University of Miami Miller School of Medicine Miami, Florida, USA

Timothy D. Henry, MD, MSCAI

The Lindner Family Distinguished Chair in Clinical Research

Medical Director, The Carl and Edyth Lindner Canter for Research and Education

The Christ Hospital

Cincinnati, Ohio, USA

Shin-ichiro Imai, MD, PhD

Theodore and Bertha Bryan Distinguished Professor of Environmental Medicine
Department of Developmental Biology
Department of Medicine (Joint)
Washington University School of Medicine
St. Louis, Missouri, USA

Vladimir Jakovljevic, MD, PhD, FIACS

President, IACS- Europe Professor, Department of Medical Physiology Faculty of Medicine, University of Kragujevac Kragujevac, Serbia

Jacob Joseph, MD

Professor of Medicine Chief of Cardiology VA Providence Healthcare System Brown University School of Medicine West Roxbury, Massachusetts, USA

Marc Kahn, MD, MBA, MACP, FRCP

Professor of Medicine Chief, Division of Hematology/Medical Oncology Kirk Kerkorian School of Medicine University of Nevada, Las Vegas Las Vegas, Nevada, USA

Saibal Kar, MD, FACC, FSCAI

Director of Structural Heart Disease Interventions and Clinical Research Los Robles Health System Clinical Professor of Medicine David Geffen School of Medicine at UCLA Thousand Oaks, California, USA

Sunjay Kaushal, MD, PhD

Professor Department of Surgery Kirk Kerkorian School of Medicine University of Nevada, Las Vegas Las Vegas, Nevada, USA

Jonathan Kirk, PhD

Professor and Vice Chair Department of Cell & Molecular Physiology Loyola University Stritch School of Medicine Chicago, Illinois, USA

Lorrie Kirshenbaum, OM, PhD, FAHA, FIACS, FISHR, FFGTB, FCAHS

Naranjan Dhalla Chair in Cardiovascular Sciences
Director, Institute of Cardiovascular Sciences
St. Boniface Hospital Albrechtsen Research Centre
Canada Research Chair in Molecular Cardiology
Head, Division of Cardiovascular Science and Disease
Professor, Departments of Physiology and
Pathophysiology, and
Pharmacology and Therapeutics, Max Rady College of
Medicine
Rady Faculty of Health Sciences, University of Manitoba
Winnipeg, Manitoba, Canada

Maria I. Kontaridis, PhD

Executive Director
Director of Research
Gordon K. Moe Professor and Chair
Biomedical Research and Translational Medicine
Masonic Medical Research Institute
Associate Professor of Medicine, Part-time
Beth Israel Deaconess Medical Center
Harvard Medical School
Utica, NY, USA

Peter G. Kaufmann, PhD

Associate Dean for Research Professor, Department of Brain Health School of Integrated Health Sciences University of Nevada, Las Vegas Las Vegas, Nevada, USA

Rakesh C. Kukreja, PhD

Professor of Internal Medicine, Biochemistry & Molecular Biology and Physiology & Biophysics Eric Lipman Professor of Cardiology Virginia Commonwealth University School of Medicine Richmond, Virginia, USA

Dhanunjaya DJ Lakkireddy, MD, FACC, FHRS

Executive Medical Director, Kansas City Heart Rhythm Institute HCA Midwest Health Professor, University of Missouri-Columbia Vice President, Heart Rhythm Society

Kansas City, Kansas, USA

E. Douglas Lewandowski, Ph.D., FAHA, FISHR, FAAAS

Director, Translational Research Dorothy M. Davis Heart & Lung Research Institute Professor, Department of Internal Medicine Professor, Department of Biological Chemistry and

Pharmacology The Ohio State University College of Medicine Columbus, OH, USA

Ren-Ke Li, MD, PhD, FCAHS, FRSC

Canadian Research Chair of Cardiac Regeneration Professor of Cardiovascular Surgery, University of Toronto

Senior Scientist, Toronto General Hospital Research Institute

University Health Network Toronto, Ontario, Canada

Ali J. Marian, MD, PhD

Professor of Molecular Medicine and Internal Medicine

Director, IMM-Center for Cardiovascular Genetics, Institute of Molecular Medicine

James T. Willerson Distinguished Chair in Cardiovascular Research

McGovern Medical School Houston, TX, USA

Andrew R. Marks, MD

Clyde and Helen Wu Professor of Molecular Cardiology Chairman, Department of Physiology and Cellular

Founding Director, Wu Center for Molecular Cardiology Professor of Physiology & Cellular Biophysics Member, National Academy of Sciences Columbia University Vagelos College of Physicians and Surgeons

New York, NY, USA

Tami A. Martino, PhD

Distinguished Chair in Molecular Cardiovascular Research

Director, Centre for Cardiovascular Investigations Career Investigator Heart & Stroke Foundation: Circadian Medicine & Heart Health

President, Canadian Society for Chronobiology Professor, Biomedical Sciences

University of Guelph

Guelph, Ontario, Canada

Graham McGinnis, PhD

Assistant Professor Department of Kinesiology and Nutrition Sciences School of Integrated Health Sciences University of Nevada, Las Vegas Las Vegas, Nevada, USA

Puja K. Mehta, MD, FACC, FAHA

Associate Professor of Medicine (Cardiology) Director, Women's Translational Cardiovascular Research

Emory Women's Heart Center Associate Program Director, Clinical Investigator Cardiology Fellowship Program Emory Clinical Cardiovascular Research Institute **Emory Heart Disease Center for Prevention Emory University School of Medicine** Atlanta, Georgia, USA

Kathryn J Moore, PhD

Jean and David Blechman Professor of Cardiology Professor, Departments of Medicine and Cell Biology Director, NYU Cardiovascular Research Center New York University Langone Health New York, New York, USA

Martin Morad, PhD, FISHR, FIACS

Director of Cardiac Signaling Center Smart State Chair in Regenerative Medicine BlueCross BlueShield of South Carolina Endowed Chair in Cardiovascular Health Professor, Regenerative Medicine and Cell Biology Medical University of South Carolina Charleston, South Carolina, USA

Jagat Narula, MD, PhD

Executive Vice President and Chief Academic Officer University of Texas Health Houston Houston, TX, USA

Andrea Natale, MD, FACC, FHRS, FESC

Executive Medical Director, Texas Cardiac Arrhythmia Institute St. David's Medical Center Austin, Texas, USA

Petr Ostadal, MD, PhD

President, Czech Society of Cardiology **Professor of Cardiology** Second Faculty of Medicine, Charles University Prague, Czech Republic

Michelle S. Parvativar, PhD

Associate Professor College of Education, Health, and Human Sciences Florida State University Tallahassee, Florida, USA

Grant N. Pierce, CM, OM, PhD, FACC, FAHA, FISHR, FIACS, FCAHS, FRSC

World President, International Academy of Cardiovascular Sciences Assistant Executive Director, Manitoba Medical Service Foundation

Distinguished Emeritus Professor Department of Physiology and Pathophysiology Rady College of Medicine, Rady Faculty of Health Sciences University of Manitoba Winnipeg, Canada

Arshed Quyyumi, MD

Professor of Medicine
Director, Emory Clinical Cardiovascular Research
Institute
Division of Cardiology, Department of Medicine
Emory University School of Medicine
Atlanta, Georgia, USA

Inna Rabinovich-Nikitin, PhD

Assistant Professor
Evelyn Wyrzykowski Family Professorship in
Cardiovascular Sciences
Institute of Cardiovascular Sciences
St. Boniface Hospital Albrechtsen Research Centre
University of Manitoba
Department of Physiology and Pathophysiology
Winnipeg, Manitoba, Canada

J. Carter Ralphe, MD

Professor of Medicine Chief, Division of Cardiology Co-Director, Congenital Heart Program at UW Health Kids Department of Pediatrics University of Wisconsin School of Medicine Madison, Wisconsin, USA

Ravichandran Ramasamy, PhD

Professor, Department of Medicine Professor, Department of Biochemistry and Molecular Pharmacology NYU Grossman School of Medicine New York, New York, USA

Andrea M. Russo, MD, FACC, FHRS, FAHA

Professor of Medicine
Cooper Medical School of Rowan University
Academic Chief, Division of Cardiology
Director, Cardiac Electrophysiology and Arrhythmia
Services
Director, CCEP Fellowship
Cooper University Hospital
Director of Research, Cooper Heart Institute
Camden, NJ, USA

Sakthivel Sadayappan, PhD, MBA, FAHA

Professor and Head Department of Cellular & Molecular Medicine Czarina M. & Humberto S. Lopez Endowed Chair Associate Director, Sarver Heart Center University of Arizona College of Medicine-Tucson Tucson, Arizona, USA

Daisy Sahoo, PhD, FAHA

Dean, School of Graduate Studies Women in Science Endowed Professor Department of Medicine Medical College of Wisconsin Milwaukee, Wisconsin, USA

Srikanth Seethala, MD

Advanced Heart Failure and Transplant Cardiology Saint Alphonsus Heart Institute Boise, Idaho, USA

Jonathan Silva, PhD, FAHA, SMNAI

Professor of Biomedical Engineering and Computer Science and Engineering McKelvey School of Engineering Washington University St Louis, Missouri, USA

Jennifer N. Avari Silva, MD, FHRS

James G. Berges and Elizabeth Mannen Berges Professorship in Pediatric Cardiology Director, Pediatric Electrophysiology Professor, Pediatrics and Biomedical Engineering Faculty Fellow in Entrepreneurship Washington University SOM Saint Louis, Missouri, USA

Dinender K Singla, PhD, FAHA, FIACS

Professor and Head, Division of Metabolic and Cardiovascular Sciences Endowed Chair-Advent Health President, International Society for Adaptive Medicine Associate Editor, Canadian Journal of Physiology and Pharmacology Burnett School of Biomedical Sciences College of Medicine University of Central Florida Orlando, Florida, USA

Ranko Škrbić, MD, MSc, PhD, FIACS

Dean

Professor of Pharmacology and Clinical Pharmacology Department of Pharmacology, Toxicology and Clinical Pharmacology Center for Biomedical Research Faculty of Medicine University of Banja Luka The Republic of Srpska, Bosnia & Herzegovina

Carmen Sucharov, PhD, FAHA

Professor

Director, Pediatric Cardiovascular Research Laboratories Division of Cardiology, Department of Medicine University of Colorado Anschutz Medical Campus Denver, Colorado, USA

Paul C. Tang, MD, PhD

Associate Professor and Vice Chair Division of Thoracic and Cardiovascular Surgery **Department of Surgery** Mayo Clinic Rochester, Minnesota, USA

Finosh G Thankam, PhD

Assistant Professor

Tissue Engineering and Regenerative Medicine Department of Translational Research Western University of Health Sciences Council Member and Assistant Treasurer International Academy of Cardiovascular Sciences, North American Section Pomona, California, USA

Srinivas M. Tipparaju, PhD

Professor and Chair William Saunders Endowed Chair in Geriatric Pharmacotherapy Interim Associate Dean for Faculty Affairs Department of Pharmaceutical Sciences USF Health Taneja College of Pharmacy Tampa, Florida, USA

Vasiliki Tasouli Drakou, DO

Internal Medicine Resident, PGY2 Department of Internal Medicine Kirk Kerkorian School of Medicine University of Nevada, Las Vegas Las Vegas, Nevada, USA

Belma Turan, PhD

Professor Head of Department of Biophysics - Basic Medical Sciences Lokman Hekim University Ankara, Turkey

Suresh C. Tyagi, MPhil, PhD, DSc, FAHA, FAPS, FIACS

Endowed Chair Professor Department of Physiology University of Louisville Louisville, Kentucky, USA

Jop van Berlo, MD, PhD

Associate Professor of Medicine

Director of Graduate Studies Cardiovascular Division, Department of Medicine University of Minnesota School of Medicine Minneapolis, Minnesota, USA

Andras Varro, MD, PhD, DSc

Professor SZTE-HUN REN Department of Pharmacology Faculty of Medicine, University of Szeged Szeged, Hungary

Thomas Vondriska, PhD

Professor of Anesthesiology, Medicine, Physiology UCLA David Geffen School of Medicine Los Angeles, California, USA

Yajing Wang, MD, PhD

Professor Director of Basic and Translational Research Department of Biomedical Engineering University of Alabama at Birmingham, Heersink School of Medicine Birmingham, Alabama, USA

Loren E. Wold, PhD, FAHA, FAPS

Senior Associate Vice President for Research The Enterprise for Research, Innovation and Knowledge

The John G. and Jeanne Bonnet McCoy Chair in Cardiovascular Medicine Professor, Department of Surgery (Cardiac) Editor-in-Chief, The FASEB Journal and FASEB **BioAdvances**

The Ohio State University College of Medicine Columbus, Ohio, USA

Renee Wong, PhD

Chief, Heart Failure and Arrhythmias Branch National Heart, Lung, and Blood Institute National Institutes of Health Bethesda, Maryland, USA

Harlokesh Narayan Yadav, PhD, MAMS, FIACS, FPAS

Additional Professor, Pharmacology All India Institute of Medical Sciences President, Society of Pharmaceutical Education & Research (SPER) Delhi Chairman, Pharm. Federation (Scientific Wing) Vice President, International Academy of Cardiovascular Sciences (India) Member, National Academy of Sciences INDIA (NASI) Member, National Academy of Medical

Sciences INDIA (NAMS)

Ansari Nagar, New Delhi, India

Young-sup Yoon, MD, PhD

Director of Stem Cell Biology
Bruce R. Logue Professor
Professor of Medicine and Biomedical Engineering
Division of Cardiology
Department of Medicine
Emory University School of Medicine
Allanta, Georgia, USA

Jianyi (Jay) Zhang, MD, PhD

Chair, Department of Biomedical Engineering T. Michael and Gillian Goodrich Endowed Chair of Engineering Leadership Professor of Medicine, Professor of Engineering School of Medicine, School of Engineering The University of Alabama at Birmingham Birmingham, AB, USA

Shengjie (Patrick) Zhai, PhD

Assistant Professor Department of Biomedical and Computer Engineering University of Nevada, Las Vegas Las Vegas, Nevada, USA

Ewa Zuba-Surma, PhD, DSc

Professor in Medical Sciences Department of Cell Biology Faculty of Biochemistry, Biophysics and Biotechnology Jagiellonian University Krakow, Poland

Finalists for the Roberto Bolli Young Investigator Award:

Resmi Rajalekshmi, PhD

Postdoctoral Fellow Department of Translational Research Western University of Health Sciences

Abhay Srivastava, PhD

Postdoctoral Fellow Institute of Cardiovascular Sciences University of Manitoba, Canada

Gautham Yepuri, PhD

Research Scientist NYU Langone School of Medicine

Weiyue Wang, MD

Postdoctoral Fellow Department of Cardiovascular Genetics The University of Texas Health Science Center at Houston (UTHealth Houston)

Abou Bakr Salama, MBBCh

Postdoctoral Research Associate Baylor College of Medicine

Finalists for the Buddhadeb Dawn Young Investigator Award:

Vineet Agrawal, MD, PhD

Assistant Professor of Medicine Director of Invasive CPET Program Vanderbilt University Medical Center

Sangeetha Vadakke-Madathil, PhD

Assistant Professor Department of Medicine Icahn School of Medicine at Mount Sinai

Chandra Bhattacharya, PhD

Assistant Professor, Medicinal Chemistry Department of Chemistry and Biochemistry University of Nevada, Las Vegas Las Vegas, Nevada, USA

Suet Chen, PhD

Assistant Professor Division of Cardiology, School of Medicine University of Colorado-Denver Anschutz Medical Campus

For more information, please visit <u>www.iacs-nas-</u> meeting.org

Or Email: iacsVegas@medicine.unlv.edu

POSTERS

IACS-NAS-25-076: Abou Bakr M. Salama, Kamal Abou Farraj, Marc Dwenger, Ghazal Sadri, Yazan Almasry, Pretty Rose Mathew, Maryam Al Attas, Dania Ibrahim, Stuti Mehta, Morgan Toran, Michelle Huo, Hannah Zhou, Anoushka Krishnan, Ruchira G. Sivakumar, Abdul Rahman Alkhatib, Luqman Siddique, Stephanie Joseph, Tamer M. A. Mohamed, Riham R. E. Abouleisa. *Csrp3 Regulates mitotic Cardiomyocyte Cell Cycle entry through regulating YAP and p38 MAPK*

IACS-NAS-25-077: Andras Varro, Albert Szent- Györgyi. *The Cellular Cardiac Electrophysiological Effect of Long-Term Amiodarone Treatment in Heart Failure Patients*

<u>IACS-NAS-25-078</u>: Angelie Pathak, Hina Patel, Resmi Rajalekshmi, Devendra K. Agrawal. *Stress Granule Dysregulation Drives NLRP3 Activation in Carotid Artery Inflammation Under Metabolic Stress*

IACS-NAS-25-079: Asma Awan, Manoj Sharma. Effects of Structured Yoga Practices in Improving Cardiovascular Health Outcomes: A Scoping Review

IACS-NAS-25-080: Belma Turan. Systemic aging fuels cardiometabolic remodeling: Increased risk of insulin resistance and mitochondrial dysfunction in the aging heart

IACS-NAS-25-081: Blessing Imade, Asma Awan, Manoj Sharma. Mindfulness-Based Stress Reduction Compared to Standard Post-Operative Care in Improving Psychological and Physiological Outcomes for Cardiac Surgery Patients: A Narrative Review

IACS-NAS-25-082: Bo Wang, Mengdie Wang, Xinyue Cui, Jialu Sun, Di Shen, Yajing Wang, Jianli Zhao, Ruifang Zhang, Li Zhang, Zhiyu Liu, Xuejing Duan, Li Li, Yu Liu, Jinying Zhang, Junnan Tang. *Pathogenic Characterization of a Novel G47R Transthyretin Mutation in Early-Onset Amyloid Cardiomyopathy*

<u>IACS-NAS-25-083</u>: Eleanor J. Mohler, Brandon M. Gibson, Mariana Gallego-Perez, Noah. O Citek, Sierra J. Saldana, Colin Doss, Matthew W. Gorr, Michael J. Falvo, Loren E. Wold. *Divergent Male and Female Offspring Cardiometabolic Responses to Parental PM2.5 Exposure*

<u>IACS-NAS-25-084</u>: Noah. O Citek, Brandon M. Gibson, Mariana Gallego-Perez, Eleanor J. Mohler, Sierra J. Saldana, Matthew W. Gorr, Michael J. Falvo, Loren E. Wold. *Sex-Dependent Timing of Intergenerational Cardiovascular Risk from Preconception PM2.5 Exposure*

IACS-NAS-25-085: Chisom Ovuegbe, Finosh G Thankam. *Immune-like Stem Cell Sub-Phenotypes from Epicardial Adipose Tissue as Determinants of Adverse Cardiac Repair Response.*

<u>IACS-NAS-25-086</u>: Christine Lee, Andras Bratincsak. *PR Interval Differences in Congenital and Rheumatic Heart Disease: A Retrospective ECG Analysis*

IACS-NAS-25-087: Colin A. Doss, Brandon M. Gibson, Mariana Gallego-Perez, Noah O. Citek, Emerson D. Woodbury, Ayra Abid, Loren E. Wold. *Cardiac Dysfunction in Female APP Mice Following in utero PM2.5 Exposure: A Potential Link Between Neurodegeneration and Cardiovascular Disease.*

IACS-NAS-25-088: Daniel Thomas Jones, Rishi Kumar Nanda, Zin Thandar Win, Abbas Ali Hussain, Riccesha Hattin, Ramaditya Srinivasmurthy, Jason Ta, Timothy Chu, Tin Tun, Hazem Aboaid, Yin Mon Myat, Kevin Khuong Nguyen, Aziel Macias, Kyaw Zin Thein, Khaing Khaing Htwe, Thura Win Htut. Atrial Fibrillation Risk with Second-Generation Covalent and Non-Covalent Bruton's Tyrosine Kinase Inhibitors: A Meta-Analysis of Randomized Controlled Trials

<u>IACS-NAS-25-089</u>: Dhrubo Ahmad, Yuhui Yang, Huilan Tan, Taslima Akter Shila, Wang Bo, Jianli Zhao, Yajing Wang. Stimulation Protocol For A Wireless Battery-Free Continuous Cardiac EKG Monitoring And Stimulating Platform

<u>IACS-NAS-25-090</u>: Dina Ali, Guangming Cheng, Magdy Girgis, Yanjuan Yang, Jeryl Hauptman, Buddhadeb Dawn. Wnt11 Enhances Mesenchymal Stem Cell Survival Under Hypoxic and Oxidative Stress

IACS-NAS-25-091: Edgmin Rostomian, Alexander Postajian, Finosh G. Thankam. *Ischemia-Induced Metabolites Drive Repair-Associated Genes in Cardiac Stromal Cells*

<u>IACS-NAS-25-092</u>: Gautham Yepuri, Kaamashri Mangar, Navneeth Narula, Stuart Katz, Alexander Shekhtman, Ann Marie Schmidt, Ravichandran Ramasamy. *DIAPH1 regulates stress induced senescence in Human cardiomyocytes*

IACS-NAS-25-093: Grant N. Pierce. Nuclear protein import in cardiovascular cells: Lost in space?

POSTERS

IACS-NAS-25-094: Guangming Cheng, Magdy Girgis, Yanjuan Yang, Jeryl Hauptman, Buddhadeb Dawn. *Cardiacspecific Transgenic Abrogation of NF-κB Activation Attenuates Doxorubicin-induced Cardiomyopathy in Mice*

<u>IACS-NAS-25-095</u>: Guangming Cheng, Magdy Girgis, Yanjuan Yang, Jeryl Hauptman, Buddhadeb Dawn. *Ambient Temperature during Reperfusion Profoundly Impacts Myocardial Infarct Size in the C57BL/6j Mouse*

<u>IACS-NAS-25-096</u>: Hina Patel, Angelie Pathak, Resmi Rajalekshmi, Devendra K. Agrawal. *Galectin-3, Transforming Growth Factor Beta 1, and Brain Natriuretic Peptide in Cardiac Remodeling Under Hyperlipidemic and Hyperglycemic Stress*

<u>IACS-NAS-25-097</u>: Huong Nguyen, Erele Tzidon, Ruzzell Flores, Inna Rabinovich-Nikitin. *The cardiac pathophysiological outcomes of shift work during pregnancy*

<u>IACS-NAS-25-098</u>: Jasmine K. Dugal, Mohamad Mubder, Luay Alalawi, Matthew Chen, Heriberto Cantu, Hasnan Ijaz, Mustafa Almollah, Farah Al-Taweel, Thomas Alexander. *Leriche Without the Limps: Incidental Diagnosis in an Asymptomatic Patient*

IACS-NAS-25-099: Vasiliki Tasouli-Drakou, Jasmine Dugal, Arsalan Siddiqui, Divyansh Sharma, Ryan Shao, KaChon Lei, Chowdhury Ahsan. *Cardiac Curveball: Incidental Discovery of a Rare Massive Right Atrial Hemangioma*

<u>IACS-NAS-25-100</u>: Jasmine Dugal, Scott Turnbull, Arpinder Malhi, Randeep Gill, Shawn Wang, Hayden Leung, Ji Yoo, Mohamad Mubder. *Does the HEART Score Hold Up? Insights from a Southern Nevada ED*

IACS-NAS-25-101: Jasmine Dugal, Mohamad Mubder, Alexis Lopez Cruz, Heriberto Cantu, Thomas Alexander. *Dual Supply, Singular Catastrophe: Anterolateral Papillary Muscle Rupture Post-AM*

<u>IACS-NAS-25-102</u>: Jie Zhao, Karen I. Hannigan, and Elizabeth J. Akin. *Sympathetic-associated macrophage populations are altered in the superior cervical ganglia of hypertensive rats*

IACS-NAS-25-103: Joshua Khorsandi, Liahm Blank, Demitri Franzoni, Noama Iftekhar, Joshua MacDavid. Deep Sternal Wound Infection After Cardiac Surgery: Omental Flap, Polymethylmethacrylate, and Neosternum Reconstruction

IACS-NAS-25-104: Joshua Khorsandi, Alexander Rowan, Liahm Blank, Abu-Bakr Ahmed, Noama Iftekhar. Rare Presentation of Cardiac Laceration and Delayed Postoperative Tamponade Cardiac Trauma

IACS-NAS-25-105: Joshua Khorsandi, Liahm Blank, Abu-Bakr Ahmed, Michael Harouni, Steven Burstein. *Unmasking Acute Pericarditis in an Athletic Older Adult with Low Atherosclerotic Burden*

<u>IACS-NAS-25-106</u>: Luis Godoy, Adrian Lopez, Travis Stewart, Aditi Madan, Neilanshu Khemka, Josh Baker, Anthony Cammarato, and Bradley Ferguson. *Act88F pseudo-acetylation of lysine 50 (K50) negatively regulates skeletal muscle function in Drosophila melanogaster*

<u>IACS-NAS-25-107</u>: Xiaohua Zhang and Martin Morad. *Calcium Signaling Consequences of RyR2 domain-specific or Ca²⁺ and caffeine binding sites CPVT1mutations expressed in human cardiomyocytes*

<u>IACS-NAS-25-108</u>: Mahsa Pashaeimeykola, Asma Awan, Manoj Sharma. *The Role of Sleep Hygiene in Cardiovascular Health: A Narrative Review*

IACS-NAS-25-109: Mariana Gallego-Perez, Sierra J. Saldana, Brandon M. Gibson, Noah O. Citek, Roy A. Miller, Matthew W. Gorr, Loren E. Wold. *Acute Environmental PM2.5 Exposure as a Driver of Cardiovascular Dysfunction*

IACS-NAS-25-110: Marija Stojanovic and Devendra K. Agrawal. *Expression of Oxysterols-Responsive Genes in the Carotid Arteries of Hyperglycemic and Hyperlipidemic Swine*

<u>IACS-NAS-25-111</u>: Marika S DeFerrari, Karen I Hannigan, Ahtziri Valle Diaz, and Elizabeth J Akin. *Investigating altered neuro-cardiac crosstalk using the spontaneously hypertensive rat model*

<u>IACS-NAS-25-112</u>: Niayesh Najafi, Andrew Abou Jaoude, Finosh G. Thankam. *Methacrylated biopolymer-based hydrogels as template for cardiac regeneration*

<u>IACS-NAS-25-113</u>: Noyan Ramazani, Sahar Mahani, Ryan Shao, Marriyam Moten. *Heart of Stone: Extensive Cardiac Heterotopic Ossification in a Pre-Transcatheter Aortic Valve Replacement Patient*

POSTERS

- <u>IACS-NAS-25-114</u>: Noyan Ramazani, Alice Lee, Paul O. Duru. *Poisonous Octopus: Sepsis Induced Takotsubo Cardiomyopathy Complicated by Autonomic Dysreflexia in a Quadriplegic Patient*
- **IACS-NAS-25-115**: Peter G. Kaufmann, Brenna N. Renn, and Buddhadeb Dawn. *When IRB Decisions Derail Randomized Trials: Lessons from LookAHEAD.*
- **IACS-NAS-25-116**: Resmi Rajalekshmi and Devendra K. Agrawal. *Stress Granule-Driven Regenerative Signaling in Myocardial Infarction and Metabolic Comorbidities*
- IACS-NAS-25-117: Rishi Kumar Nanda, Daniel Thomas Jones, Zin Thandar Win, Abbas Ali Hussain, Riccesha Hattin, Ramaditya Srinivasmurthy, Jason Ta, Timothy Chu, Tin Tun, Hazem Aboaid, Yin Mon Myat, Kevin Khuong Nguyen, Aziel Macias, Kyaw Zin Thein, Khaing Khaing Htwe, Thura Win Htut. Bleeding Risk with Next-Generation BTK Inhibitors: A Meta-Analysis of Randomized Controlled Trials
- <u>IACS-NAS-25-118</u>: Sei Kim, Nathan Grainger. *Vascular pericyte regulation of coronary blood flow in the cardiac pacemaker during sympathetic stimulation*
- <u>IACS-NAS-25-120</u>: Chang Wang, Ming Zhu, Shengjie (Patrick) Zhai, Buddhadeb Dawn. *Clinically Interpretable Deep Learning for Non-Invasive, High-Fidelity Fetal ECG Extraction and Early Congenital Heart Disease Screening*
- <u>IACS-NAS-25-121</u>: Somaya Ibrahim, Ryan Holdiness, Alyssa Whisler, Kristen Boyle, Rushita Bagchi. *Early Inter-Organ Communication in Acute Nutrient Overload: Sex-Specific Adipose Adaptations Influence Hepatic and Cardiac Outcomes*
- IACS-NAS-25-122: Spencer Thatcher, Arbab Khalid, Abu-Bakr Ahmed, Randeep Gill, Ali Kia. *PDE9A Promotes Calcium Handling Dysfunction in Right Heart Failure via cGMP–PKG Pathway Suppression: A Mechanistic and Therapeutic Review*
- <u>IACS-NAS-25-123</u>: Srushti Wagh, Ariana Khzarjyan, Joshua Corpuz, Elias Malek, Charli Aguilar, Michael Dial, Paula Martinez, Graham McGinnis. *Interleukin-6 as a Mediator of Circadian and Sex Differences in Exercise-Induced STAT3 and Autophagy Signaling*
- <u>IACS-NAS-25-124</u>: Tamara Nikolic Turnic, Katarina Djordjevic, Bozidar Pindovic, Zorka Stanic, Katarina Postolovic, Vladimir Zivkovic, Vladimir Jakovljevic. *Curcumin pretreatment and post-treatment both improve the antioxidative ability of Wistar rats immunized with complete Freund's adjuvant*
- **IACS-NAS-25-125:** Vedi Hatamian, Kevin Babakhan-Vartanian, Finosh G. Thankam. *LGALS1-positive Epicardial Adipose Tissue Stromal Cells in Cardiac Regeneration*
- IACS-NAS-25-126: Vikash Patel, Sidath Kapukotuwa, Manoj Sharma. *Tai Chi as a Mind-Body Approach to Cardiovascular Health: A Contemporary Evidence Synthesis*
- <u>IACS-NAS-25-127:</u> Yssel Mendoza-Mari, Brian David, and Devendra K. Agrawal. *Interleukin-13 Receptor A2 in the Left Ventricle of Hyperglycemic Pigs: Potential Role in Cardiomyopathies*
- IACS-NAS-25-128: Zin Thandar Win, Abbas Ali Hussain, Riccesha Hattin, Daniel Thomas Jones, Rishi Kumar Nanda, Ramaditya Srinivasmurthy, Jason Ta, Timothy Chu, Tin Tun, Hazem Aboaid, Yin Mon Myat, Kevin Khuong Nguyen, Aziel Macias, Kyaw Zin Thein, Khaing Khaing Htwe, Thura Win Htut. Meta-Analysis of Phase III Randomized Controlled Trials Evaluating the Risk of Cardiac Adverse Events in Patients with Hematologic Malignancies Treated with Acalabrutinib Compared to Control, including BTK Inhibitor (Ibrutinib)
- IACS-NAS-25-129: Zin Thandar Win, Abbas Ali Hussain, Daniel Thomas Jones, Riccesha Hattin, Rishi Kumar Nanda, Ramaditya Srinivasmurthy, Matthew J. Chu, Jason Ta, Tin Tun, Hazem Aboaid, Kevin Khuong Nguyen, Yin Mon Myat, Aziel Marcias, Kyaw Zin Thein, Khaing Khaing Htwe, Thura Win Htut. Meta-Analysis of Phase III Randomized Controlled Trials to Evaluate the Risk of Cardiac Adverse Events in Patients with Hematologic Malignancies Treated with Acalabrutinib