

10th Annual Meeting of the North American Section of the  
International Academy of Cardiovascular Sciences

**TAMPA, FLORIDA | SEPTEMBER 7-9, 2023**

**AGING, HEART FAILURE, REGENERATION AND CARDIOVASCULAR MEDICINE.**



Picture courtesy: Visit Tampa Bay

## Contact Information:

### Conference Chair Dr. Srinivas Tipparaju, PhD

Saunders Endowed Chair in Geriatric  
Pharmacotherapy  
Professor and Chair  
Department of Pharmaceutical Sciences  
USF Health Taneja College of Pharmacy  
University of South Florida,  
Tampa, FL 33612  
Ph: 813-974-7195  
Email: stippara@usf.edu

Conference Website:  
[www.iacs-nas.com](http://www.iacs-nas.com)

### Conference Co-Chair Dr. Guilherme Oliveira, MD, MBA

Ed C. Wright Endowed Chair of  
Cardiovascular Research  
Professor of Medicine,  
USF Morsani College of Medicine  
Heart and Vascular Institute  
Tampa General Hospital  
Email: oliveirag@usf.edu

 **USF Health**  
Morsani College of Medicine

 **USF Health**  
Taneja College of Pharmacy



## Scientific Symposium:

- Heart Failure
- Cardiovascular Aging
- Cardiovascular Regeneration
- Cardiovascular Medicine

## Named Awards For:

- Established Investigators
- Young Investigators
- Graduate Students
- Poster presentations

# Scientific Program

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# IACS Leadership and Committee

## Conference Chair

Srinivas Tipparaju, PhD, FIACS, FCVS, Professor and Chair, Department of Pharmaceutical Sciences, USF Health Taneja College of Pharmacy, Tampa, FL, USA

## Conference Co-Chair

Guilherme Oliveira, MD, MBA, Ed C. Wright Endowed Chair of Cardiovascular Research, Professor of Medicine, USF Health, Morsani College of Medicine, Heart & Vascular Institute, Tampa General Hospital, Tampa, FL, USA

## IACS World

Grant Pierce, PhD (President) – Winnipeg, MB, Canada  
Andras Varro, MD, PhD (President Elect) – Szeged, Hungary

## IACS Honorary Lifetime President

Naranjan S. Dhalla, PhD, DSc – Winnipeg, MB, Canada

## IACS NAS Council

Michael Czubryt, PhD (President) – Winnipeg, MB, Canada  
Buddha Dawn, MD (President Elect) – Las Vegas, NV, USA  
Devendra K. Agrawal, PhD, MBA (Secretary General & Treasurer) – Pomona, CA, USA  
Rushita Bagchi, PhD – Little Rock, AR, USA  
Ren-Ke Li, PhD – Toronto, ON, Canada  
Gary Lopaschuk, PhD (Past President) – Edmonton, AB, Canada  
Ali J. Marian, MD – Houston, TX, USA  
Tami Martino, PhD – Guelph, ON, Canada  
Ravichandran Ramasamy, PhD – New York, NY, USA  
Finosh G. Thankam, PhD – Pomona, CA, USA  
Suresh C. Tyagi, PhD – Louisville, KY, USA

## Scientific Committee

Hiram Bezerra, MD, Professor – Tampa, FL, USA  
Ganesh Halade, PhD, Associate Professor – Tampa, FL, USA  
Kevin Sneed, Pharm D, Professor & Dean – Tampa, FL, USA  
Vijay Sutariya, PhD, RPh, Associate Professor & Director – Tampa, FL, USA  
Wanling Xuan, MD, PhD, Assistant Professor – Tampa, FL, USA  
DaZhi Wang, MD, PhD, Professor & Director – Tampa, FL, USA

# Message from Dr. Charles J. Lockwood Executive Vice President, USF Health

USF Health

We are delighted to convene the 10<sup>th</sup> annual meeting of the International Academy of Cardiovascular Sciences – North American Section on the campus of the University of South Florida under the leadership of Dr. Srinivas Tipparaju and Dr. Guilherme Oliveira. On behalf of USF Health, it is my pleasure to invite you all to attend this scientific conference and visit our campus and our lovely city of Tampa.

The work you do is critically important, as heart disease is the leading cause of morbidity and mortality, not only in the United States, but throughout the world. Cardiovascular diseases, including heart disease and stroke, account for one-third of all U.S. deaths and contribute to about \$320 billion per year in health care costs and lost productivity. One person dies every 33 seconds in the U.S. from cardiovascular disease. We urgently need to learn more about predicting, preventing, and treating cardiovascular disease caused by etiologies ranging from genetic factors to lifestyle factors and influenced by race, ethnicity, socioeconomic status, and geography.

The theme of this conference *“Aging, Heart Failure, Regenerative and Cardiovascular Medicine”* – gives us an opportunity to focus on emerging and existing knowledge in the prevention of the disease, development of better diagnostic test and novel therapies for hypertension, heart failure, coronary artery disease, cardiomyopathy, peripheral artery disease, and carotid artery disease. The conference also features a session to discuss the potential benefits and possible challenges of artificial intelligence and machine learning technologies in all aspects of health and health care.

Distinguished cardiovascular scientists from all over the world will join us, deliver lectures, and share their knowledge with the conference attendees. The conference promises to be a rich environment for young researchers as they work to become the next generation of productive and effective scientists. It is my hope that the three-day conference will present valuable opportunities to learn about cutting-edge research and allow you to build new professional relationships with others. **Ultimately, the knowledge and skills you gain here will help you improve health and save lives.**

**Charles J. Lockwood, MD, MHCM**

Executive Vice President, USF Health

Dean, USF Health Morsani College of Medicine

**Message from Dr. Kevin B. Sneed**

**Senior Associate Vice President, USF Health**

**Dean and Professor, USF Health Taneja College of Pharmacy**

**USF Health**

Welcome to Tampa, Florida, for the 10<sup>th</sup> Annual meeting of the IACS – North American Section spearheaded by Dr. Srinivas Tipparaju and Dr. Guilherme Oliveira. The Conference hotel is located on the USF Campus in the beautiful scenic backdrop of USF Tampa North campus, surrounded by Florida Signature palm and oak trees. It is with great pleasure that I invite you to attend the prestigious world class scientific meeting titled *“Aging, Heart Failure, Regeneration, and Cardiovascular Medicine.”*

The conference covers thematic areas, including acute and chronic diseases affecting Florida, other parts of the United States, and the world. I am particularly impressed with the size of the meeting and the innovative interactive format that allow for plenty of interactions and to develop scientific collaborations. Several plenary sessions and the fire-side chat with the distinguished scientists are cornerstones of the Conference. Clinicians, academicians, and researchers can directly interact with the leaders in the field and get insight from their vision and success.

I sincerely thank the leadership of and support from USF Health and Tampa General Hospital (TGH) to bolster the impact of the conference in Tampa Bay. Program agenda developed by the scientific committee offers oral presentations, including keynote, plenary talks, fireside chats, and scientific posters, which will serve as a platform for presentations and cutting-edge research from top notch researchers in the field. Also, while the topics are focused on the Cardiovascular theme, there is plenty of interdisciplinary collaboration and crosstalk between the disciplines, which include topics such as biomaterials, nanotechnology, drug discovery, stem cells, and aging.

Overall, this will be a superb high impact scientific meeting in Tampa, Florida, with participation from clinicians, academicians, student trainees, early career stage researchers, and other health care professionals, allowing for growth and advancements in Cardiovascular and related fields. The increase and dissemination of scientific knowledge at this meeting will further enhance our academic and clinical missions at USF and the Tampa Bay community.

**Kevin B. Sneed, PharmD, FNAP, FNPFA**

Senior Associate Vice President, USF Health

Dean and Professor, USF Health Taneja College of Pharmacy



# Program Agenda

## Thursday, September 7, 2023

1:00 PM – 7:00 PM                      Registration (Embassy Suites Lobby – near entrance to Ballroom)

### Inauguration Ceremony

**Location:** Grand Ballroom (Salon D, E)

4:00 PM – 4:05 PM                      Opening remarks: Dr. Srinivas Tipparaju, Professor and Chair, Department of Pharmaceutical Sciences, USF Health Taneja College of Pharmacy

4:05 PM – 4:15 PM                      Welcome remarks: Dr. Charles Lockwood, Executive Vice President and Dean, USF Health Morsani College of Medicine

4:15 PM – 4:25 PM                      Welcome remarks: Dr. Kevin Sneed, Senior Associate Vice President, Dean and Professor, USF Health Taneja College of Pharmacy

4:25 PM – 4:35 PM                      Welcome remarks: Dr. Michael Czubryt, President IACS-NAS

4:35 PM – 4:45 PM                      Brief overview of the conference: Dr. Srinivas Tipparaju, and Dr. Guilherme Oliveira, Tampa General Hospital, Tampa FL

4:45 PM – 4:55 PM                      Dr. John Couris, President and CEO, Tampa General Hospital, Tampa, FL

### Keynote Lectures

5:00 PM – 5:30 PM                      Lecture Title: **“Aging: New insights and opportunities for translational impact”** Eminent Clinician-Scientist in Cardiovascular Diseases Dr. Mukesh K. Jain, MD, Senior Vice President for Health Affairs, Dean of Medicine and Biological Sciences, Warren Alpert Medical School, Brown University, Providence, RI  
Introduced by Dr. Guilherme Oliveira

5:30 PM – 6:00 PM                      Lecture Title: **“Inflammatory Tales in Cardiovascular Medicine”**  
Eminent Clinician-Scientist in Cardiovascular Diseases Dr. Joseph Hill, MD, PhD, James T. Willerson, M.D., Distinguished Chair in Cardiovascular Diseases; Frank M. Ryburn Jr. Chair in Heart Research, University of Texas Southwestern Medical Center, Dallas, TX  
Introduced by Dr. Grant Pierce, President IACS

6:15 PM – 7:00 PM                      Hors d’oeuvre

7:00 PM – 9:00 PM                      Reception Dinner

# Program Agenda

## Friday, September 8, 2023

8:30 AM – 9:00 AM

**Location:**

**Plenary Lecture 1**

Grand Ballroom (Salon D, E)

**"A Humanized Monoclonal Antibody to Prevent Post-infarct Heart Failure"**

Arjun Deb, MD, Professor of Medicine, UCLA

Introduced by Dr. Guilherme Oliveira

9:15 AM – 10:45 AM

**Oral Presentation Session 1**

(Three concurrent symposia – Each Presentation will be for 15 minutes and 5 minutes for Q&A)

**Symposium 1: Advances in Cardiovascular Sciences Symposium**

**Location:** Grand Ballroom (Salon D, E)

**Symposium Chairs:** Dr. Gary Lopaschuk and Dr. Mike Czubryt

9:15 AM – 9:35 AM

Dr. Lorrie Kirshenbaum: *"Cytoprotective Role of TRAF2 in TNF-  $\alpha$  Mediated Doxorubicin-Cardiomyopathy"*

9:35 AM – 9:55 AM

Dr. Ren-Ke Li: *"Potential New Therapy for Atrial Fibrillation using Bio-Conductive Membrane"*

9:55 AM – 10:15 AM

Dr. Buddha Dawn: *"Therapeutic Potential of Mesenchymal Stem Cells"*

10:15 AM – 10:35 AM

Dr. Vladimir Jakovljevic: *"Usnic Acid as a New Protector against Doxorubicin-induced Cardiotoxicity in Rats"*

**Symposium 2: Saunders Endowed Symposium for Geriatric Pharmacotherapy and Aging**

**Location:** Salon A, B, C

**Symposium Chairs:** Dr. Ali J. Marian and Dr. Srinivas Tipparaju

9:15 AM – 9:45 AM

Dr. David Sinclair: *"Reversing Aging to Prevent and Treat Rare and Common Diseases"*

9:45 AM – 10:05 AM

Dr. Ali J. Marian: *"DNA Damage is at the Core of Cardiovascular Aging"*

10:05 AM – 10:25 AM

Dr. Marco Brotto: *"Of Cells, Mice, and Humans: Targeted Lipidomics and Metabolomics Unveil New Mechanisms on Osteosarcopenia"*

10:25 AM – 10:35 AM

Dr. Feng Cheng: *"Alzheimer's Drug and Heart Disease"*

# Program Agenda

**Friday, September 8, 2023**

## **Symposium 3: Bioinformatics, New Technologies and Artificial Intelligence in Cardiovascular Disease and Clinical Practice**

**Location:** Salon F, G

**Symposium Chairs:** Dr. Rahul Mhaskar and Dr. Meifeng Xu

9:15 AM – 9:35 AM	Dr. Rahul Mhaskar: <i>"Role of Lifestyle Factors and Inflammation in Heart Failure"</i>
9:35 AM – 9:55 AM	Dr. Mingxiang Teng: <i>"Understanding Gene Regulatory Elements through Comparative Analysis of Large Genomic Datasets"</i>
9:55 AM – 10:15 AM	Dr. Yi-Gang Wang: <i>"Activation of Endogenous Cardiomyocyte Proliferation for Repair of Myocardial Infarction"</i>
10:15 AM – 10:35 AM	Dr. Meifeng Xu: <i>"Bioengineered Exosomes: A New Therapeutic Strategy for Myocardial Ischemia"</i>
<b>10:45 AM – 11:00 AM</b>	<b>Coffee Break</b>
<b>11:00 AM – 12:30 PM</b>	<b>Oral Presentation Session 2</b> (Three concurrent symposia – Each Presentation will be for 15 minutes and 5 minutes for Q&A)

## **Symposium 4: Gary Lopaschuk Graduate Student Award Competition**

**Location:** Grand Ballroom (Salon D, E)

**Symposium Chairs:** Dr. Rakesh Kukreja, Dr. Ravichandran Ramasamy, and Dr. Henrique Furtado

11:00 AM – 11:20 AM	Keshav Narayan Alagarsamy: <i>"MXene Nanomaterials for Maturation of Induced Pluripotent Stem Cells-derived Cardiomyocytes"</i>
11:20 AM – 11:40 AM	Xiaowei Han: <i>"Age-dependent Sex Differences in Paracardial Adipose Tissue"</i>
11:40 AM – 12:00 PM	Zachary Dawson: <i>"Non-physiologic Interaction of MG53 with Insulin Receptor and Lack of Evidence for MG53's Role in Controlling Insulin-stimulated Akt phosphorylation in muscle, heart and liver tissues"</i>
12:00 PM – 12:20 PM	Mary Catia Sleet: <i>"Comparative Analysis of Physician and ChatGPT Responses to Clinical Vignettes on Bariatric Surgery Recommendations"</i>



# Program Agenda

**Friday, September 8, 2023**

**Symposium 5: Cardiovascular Repair and Regenerative Medicine**

**Location:** Salon A, B, C

**Symposium Chairs:** Dr. DaZhi Wang and Dr. Wanling Xuan

11:00 AM – 11:20 AM	Dr. Roberto Bolli: <i>"Cell therapy for Heart Failure: Current Status and Future Perspectives"</i>
11:20 AM – 11:40 AM	Dr. Sanjiv Dhingra: <i>"Immunomodulatory Biomaterials for Cardiac Stem Cell Therapy"</i>
11:40 AM – 12:00 PM	Dr. Jan Kyselovic: <i>"Autologous Bone Marrow Mononuclear Cell Transplantation in Patients with Chronic Ischemic Heart Disease undergoing Coronary Artery Bypass Grafting (CABG)"</i>
12:00 PM – 12:20 PM	Dr. DaZhi Wang: <i>"Non-coding RNAs and RNA Binding Proteins (RBPs) in Heart Development and Cardiac Regeneration"</i>
12:20 PM – 12:30 PM	Dr. Kunhua Song: <i>"Heterogeneous Cell Populations in Heart Disease"</i>

**Symposium 6: Cardiovascular Disease Mechanisms: Epigenetics, Genomics and Biological Rhythms**

**Location:** Salon F, G

**Symposium Chairs:** Dr. Suresh Tyagi and Dr. Inna Rabinovich-Nikitin

11:00 AM – 11:20 AM	Dr. Vaibhav Patel: <i>"Extracellular Vesicles in Cardiac Repair after Myocardial Infarction"</i>
11:20 AM – 11:40 AM	Dr. Suresh Tyagi: <i>"The Role of the Circadian Clock System in the Transition of the HFpEF to the HFrEF"</i>
11:40 AM – 12:00 PM	Dr. Vidhya Selvaraj: <i>"Depression, Biological Rhythm, and Chronic Cardiovascular Diseases"</i>
12:00 PM – 12:20 PM	Dr. Dinender K. Singla: <i>"BMP-7 Modulates Hypercholesterolemia-induced Inflammation Induced Pyroptosis Mediated Sarcopenia and Muscle Myopathy in Diabetes"</i>
<b>12:30 PM – 1:30 PM</b>	<b>Lunch</b> <b>Location:</b> Grand Ballroom (Salon D, E) For IACS-NAS council members (Council Meeting) at Cyprus Room (2nd Floor)

# Program Agenda

**Friday, September 8, 2023**

1:30 PM – 2:00 PM

**Location:**

**Plenary Lecture 2**

Grand Ballroom (Salon D, E)

**“WE-CARE...Take the Opportunity to Live!”**

Kevin B. Sneed, PharmD, FNAP, FNPFA

Senior Associate Vice President,

Dean and Professor, USF Health Taneja College of Pharmacy

Introduced by Dr. Srinivas Tipparaju

2:10 PM – 3:40 PM

**Oral Presentation Session 3**

(Three concurrent symposia - Each Presentation will be for 15 minutes and 5 minutes for Q&A)

**Symposium 7: Roberto Bolli Young Investigator Award Competition**

**Location:** Grand Ballroom (Salon D, E)

**Symposium Chairs:** Dr. Buddha Dawn, Dr. Yi-Gang Wang, and Dr. Istvan Baczko

2:10 PM – 2:30 PM

Dr. Wanling Xuan: *“Therapeutic Application of Extracellular Vesicles in Cardiovascular Diseases and Muscle Regeneration”*

2:30 PM – 2:50 PM

Dr. Petra Kienesberger: *“Lysophosphatidic Acid Metabolism and Signaling in Cardiometabolic Disease”*

2:50 PM – 3:10 PM

Dr. Finosh G. Thankam: *“Secretome-driven Intercellular Communication between Myocardial and Epicardial Stromal Cells in Cardiac Regeneration”*

3:10 PM – 3:30 PM

Dr. Sai Sudha Koka: *“The Emerging Role of Gut Microbiota-Derived Metabolites in Cardiovascular Diseases”*

**Symposium 8: Cardio-Oncology**

**Location:** Salon A, B, C

**Symposium Chairs:** Dr. Edward Yeh and Dr. Guilherme Oliveira

2:10 PM – 2:30 PM

Dr. Edward Yeh: *“Primary Prevention of Doxorubicin-induced Cardiotoxicity”*

2:30 PM – 2:50 PM

Dr. Vahagn Ohanyan: *“Doxorubicin-induced Cardiac Dysfunction: Old Story and New Treatment”*

2:50 PM – 3:10 PM

Dr. Rakesh Kukreja: *“PDE5 Inhibition Improves Cancer Chemotherapy and Attenuates Cardiotoxicity”*

3:10 PM – 3:30 PM

Dr. Mohammed Alomar: *“Cardiovascular Complications Emerging Cancer Therapeutics”*

# Program Agenda

**Friday, September 8, 2023**

**Symposium 9: Buddha Dawn Early Career Award Symposium**

**Location:** Salon F, G

**Symposium Chairs:** Dr. Devendra K. Agrawal and Dr. Srinivas Tipparaju

2:10 PM – 2:30 PM	Dr. Inna Rabinovich-Nikitin: <i>"Retinoic Acid-Related Orphan Receptors Regulate Autophagy and Cell Survival in Cardiac Myocytes during Hypoxic Stress"</i>
2:30 PM – 2:50 PM	Dr. Rushita Bagchi: <i>"Targeting Lysine Fatty Acylation in the Diabetic Heart"</i>
2:50 PM – 3:10 PM	Dr. Qutuba G. Karwi: <i>"Untangling the Effects of Branched-Chain Amino Acids and Branched-Chain Keto Acids in the Failing Heart"</i>
3:10 PM – 3:30 PM	Dr. Leila Rouhi: <i>"Role of the Fibroblasts LMNA in the Pathogenesis of Dilated Cardiomyopathy"</i>

**3:40 PM – 4:00 PM**

**Coffee Break**

**4:00 PM – 4:50 PM**

**Fireside Chat with Legends in Cardiovascular Science**

**Topics:** Inspiration, words of wisdom and guidance for path to success and entrepreneurship (Attendees: Please select one of the following fireside chat at the time of registration)

Fireside chat 1:

Dr. Mukesh Jain (Moderated by Dr. Srinivas Tipparaju)

**Location:** Salon F, G

Fireside chat 2:

Dr. Arjun Deb (Moderated by Dr. Guilherme Oliveira)

**Location:** Salon A, B, C

**5:00 PM – 6:30 PM**

**Poster Presentations**

Judges: Four judges will be appointed by the Conference Chair and Co-Chair.

**Morris Karmazyn poster award (4) Margaret Moffat poster award (4)**

(Posters from Medicine, Nursing, Pharmacy, Public Health, Physical Therapy, Research, and other disciplines)

5:00 PM – 6:30 PM

*Hors d'oeuvre*

**6:30 PM**

**Dinner (on your own)**

# Program Agenda

## Saturday, September 9, 2023

8:30 AM – 9:00 AM

**Location:**

### **Plenary Lecture 3**

Grand Ballroom (Salon D, E)

#### **“Leadership and Innovation in Healthcare”**

John Couris, President and CEO, Tampa General Hospital

Introduced by Dr. Guilherme Oliveira

9:15 AM – 10:45 AM

### **Oral Presentation Session 4**

(Three concurrent symposia – Each Presentation will be for 15 minutes and 5 minutes for Q&A)

### **Symposium 10: Advances in Cardiovascular Medicine**

**Location:** Grand Ballroom (Salon D, E)

**Symposium Chairs:** Dr. Grant Pierce and Dr. Roberto Bolli

9:15 AM – 9:35 AM

Dr. Rhian Touyz: *“The Vasculome in Hypertension – From Basic Biology to Clinical Implications”*

9:35 AM – 9:55 AM

Dr. Robert Reis: *“How the Heart Impacts the Brain: Clues to a Mechanistic Connection”*

9:55 AM – 10:15 AM

Dr. Istvan Baczko: *“Arrhythmogenic Cardiac Ventricular Remodeling in a Large Animal Model of Chronic Endurance Exercise”*

10:15 AM – 10:35 AM

Dr. Guilherme Oliveira: *“Evolution of Cardio-Oncology from Opinion based to Data-driven Patient Care”*

### **Symposium 11: Inflammation and Resolution in Cardiovascular Disease**

**Location:** Salon A, B, C

**Symposium Chairs:** Dr. Ganesh Halade and Dr. Laszlo Nagy

9:15 AM – 9:35 AM

Dr. Laszlo Nagy: *“How Macrophages Harm and Heal Skeletal Muscle: Lessons from Snake Bites Help Understand Duchenne Muscular Dystrophy”*

9:35 AM – 9:55 AM

Dr. Ganesh Halade: *“Four-Dimensional View of Inflammation-Resolution Signaling in Heart Failure”*

9:55 AM – 10:15 AM

Dr. Devendra K. Agrawal: *“Resolution of Inflammatory Response to Induce Plaque Stability and Reduce Plaque Burden in Atherosclerotic Carotid Artery”*

10:15 AM – 10:35 AM

Dr. Ashish Sharma: *“Endothelial Cell-mediated Efferocytosis in Inflammation-Resolution of Vascular Pathologies”*

10:35 AM – 10:45 AM

Dr. Vasundhara Kain: *“Discontinuation of Prolonged Obesogenic Stressor Reverses Proinflammatory Immune-Lipidome Memory in Aging”*

# Program Agenda

## Saturday, September 9, 2023

### Symposium 12: Cardiogenic Shock

**Location:** Salon F, G

**Symposium Chairs:** Dr. Hiram Bezerra and Dr. Debbie Rinde-Hoffman

9:15 AM – 9:35 AM	Dr. Hiram Bezerra: <i>"Shock and AMI"</i>
9:35 AM – 9:55 AM	Dr. Debbie Rinde-Hoffman: <i>"Shock and non-MI"</i>
9:55 AM – 10:15 AM	Dr. Jeet Mehta: <i>"Case Study on Shock and Acute MI"</i>
10:15 AM – 10:35 AM	Dr. Christopher Bitetzakis: <i>"Case Study on Shock and Acute MI"</i>

**10.45 AM – 11.00 AM**      **Coffee Break**

**11:00 AM – 12:30 PM**      **Oral Presentation Session 5**

(Three concurrent symposia - Each Presentation will be for 15 minutes and 5 minutes for Q&A)

### Symposium 13: Diabetes, Obesity, and Cardiovascular Complications

**Location:** Grand Ballroom (Salon D, E)

**Symposium Chairs:** Dr. Lilei Zhang and Dr. Konstantinos Drosatos

11:00 AM – 11:20 AM	Dr. Konstantinos Drosatos: <i>"GLUT1: A Central Element of KLF5 Activation and Diabetic Cardiomyopathy"</i>
11:20 AM – 11:40 AM	Dr. Srinivas Tipparaju: <i>"Nampt-mediated Strategies to Mitigate Diabetic MI"</i>
11:40 AM – 12:00 PM	Dr. Lilei Zhang: <i>"Novel pan-ERR Agonists Ameliorate Heart Failure through Enhancing Cardiac Fatty Acid Metabolism and Mitochondrial Function"</i>
12:00 PM – 12:20 PM	Dr. Gary Lopaschuk: <i>"High Cardiac Fatty Acid Oxidation Rate Impairs Contractile Dysfunction in Heart Failure with Preserved Ejection Fraction"</i>

### Symposium 14: Advances in MI and Heart Failure

**Location:** Salon A, B, C

**Symposium Chairs:** Dr. Ravichandran Ramasamy and Dr. Nicholas Carris

11:00 AM – 11:20 AM	Dr. Nicholas Carris: <i>"Dysglycemia, Microvascular Disease, and HFpEF"</i>
11:20 AM – 11:40 AM	Dr. Jianjie Ma: <i>"Developing rhMG53 Protein as a Therapeutic to Mitigate the Transition from Myocardial Infarction to Heart Failure"</i>
11:40 AM – 12:00 PM	Dr. Ravichandran Ramasamy: <i>"DIAPH1 and Interorganelle Contact in the Pathogenesis of Cardiac Ischemia-Reperfusion Injury"</i>
12:00 PM – 12:20 PM	Dr. Naranjan S. Dhalla: <i>"Role of Oxidative Stress in the Attenuation of Adrenoceptor-mediated Signal Transduction in Heart Failure"</i>

# Program Agenda

**Saturday, September 9, 2023**

**Symposium 15: Cardiovascular metabolism and abnormalities**

**Location:** Salon F, G

**Symposium Chairs:** Dr. Vladimir Jakovljevic and Dr. Dinender K. Singla

11:00 AM – 11:20 AM	Dr. Henrique Furtado: <i>“Coronary-Artery Bypass Surgery in Patients with Ischemic Cardiomyopathy”</i>
11:20 AM – 11:40 AM	Dr. Pram Tappia: <i>“Pathophysiology of Obesity-induced Cardiovascular Dysfunction”</i>
11:40 AM – 12:00 PM	Dr. Antoinette Blackman: <i>“Cardiovascular Effects related to the Consumption of Products containing Caffeine and Taurine”</i>
12:00 PM – 12:20 PM	Dr. Jovana Joksimovic Jovic: <i>“Cardiometabolic Abnormalities in a Rat Model of Polycystic Ovary Syndrome”</i>

**12:30 PM – 1:30 PM**

**Lunch**

**Location:** Grand Ballroom (Salon D, E)

For council members: IACS World Council meeting in Cypress Room (2<sup>nd</sup> floor)

1:30 PM – 2:00 PM

**Location:**

**Plenary Lecture 4**

Grand Ballroom (Salon D, E)

**“Diabetic Heart and Metabolism”**

E. Dale Abel, M.D., Professor and Chairman, Department of Medicine,

David Geffen School of Medicine at UCLA

Introduced by Dr. Srinivas Tipparaju

2:10 PM – 3:40 PM

**Oral Presentation Session 6**

(Three concurrent symposia – Each Presentation will be for 15 minutes and 5 minutes for Q&A)

**Symposium 16: Novel Therapeutic Targets in Cardiovascular and Microvascular Diseases**

**Location:** Grand Ballroom (Salon D, E)

**Symposium Chairs:** Dr. Harpal Buttar and Dr. Ravikumar Manickam

2:10 PM – 2:30 PM	Dr. Michael Czubyrt: <i>“Scleraxis: A Master Regulator of Wound Healing and Scarring”</i>
2:30 PM – 2:50 PM	Dr. Rajshekhar Kore: <i>“MSC Exosomes Stimulate Notch-1 Signaling in Ischemic Myocardium”</i>
2:50 PM – 3:10 PM	Dr. Ravikumar Manickam: <i>“Nampt activator study for 3 months enhances diabetic muscle phenotype”</i>
3:10 PM – 3:30 PM	Dr. Harpal Buttar: <i>“Clinically relevant Interactions between Cardiovascular Drugs, Herbal Remedies and Fruit Juices: Mechanisms of Interactions and Prescribing Strategies”</i>



# Program Agenda

## Saturday, September 9, 2023

### **Symposium 17: IACS North American Section Supported Symposium in Cardiovascular Diseases**

**Location:** Salon A, B, C

**Symposium Chairs:** Dr. Jianjie Ma and Dr. Sobuj Mia

2:10 PM – 2:30 PM	Dr. Chiara Giannarelli: <i>"Immune Profiling in Cardiovascular disease: opportunities for drug discovery"</i>
2:30 PM – 2:50 PM	Dr. Peter Liu: <i>"From Heart Break to Insight of Mind: Senescence and Inflammation in Heart Failure"</i>
2:50 PM – 3:10 PM	Dr. Sobuj Mia: <i>"A Hepato-Cardiac FGF21 Signaling Axis Promotes Pathological Cardiac Hypertrophy"</i>
3:10 PM – 3:30 PM	Dr. Jovana Bradic: <i>"Therapeutic Potential of Wild Garlic Essential Oil in Countering Doxorubicin-induced Cardiotoxicity in Rats"</i>

### **Symposium 18: Drug Delivery and Drug Targeting to Cardiovascular System, Nanotechnology**

**Location:** Salon F, G

**Symposium Chairs:** Dr. Vijay Sutariya and Dr. Ren-Ke Li

2:10 PM – 2:30 PM	Dr. Vijay Sutariya: <i>"Nanodelivery of Anti-VEGF Agents for CNV (choroidal neovascularization): Pre-clinical Model"</i>
2:30 PM – 2:50 PM	Dr. Manoj Ram: <i>"The Sustainable Energy Storage Supercapacitor Device from Biomaterials"</i>
2:50 PM – 3:10 PM	Dr. Venu Varanasi: <i>"Semiconductor Technology and Materials that Promote Rapid Bone Healing"</i>
3:10 PM – 3:30 PM	Dr. Pranav Patel: <i>"Micellar Nanoparticle Technology and its Application in Drug Delivery Platforms"</i>

**3:40 PM – 4:00 pm**                      **Coffee Break**

**4:00 PM – 5.00 PM**                      **Fireside Chat with Legends in the field**

Topics: Path to success, Successful clinician, Inspiring the trainee, Mid-Career, Mix-and-match, Entrepreneur.

(Attendees: Please select one of the following fireside chat at the time of registration)

Fireside chat 1:                      Dr. Edward Yeh (Moderator: Dr. Guilherme Oliveira)

**Location:** Salon F, G

Fireside chat 2:                      Dr. E. Dale Abel (Moderator: Dr. Srinivas Tipparaju)

**Location:** Salon A, B, C

4:00 PM – 5:30 PM                      Hors d'oeuvre

# Program Agenda

**Saturday, September 9, 2023**

**Awards Ceremony and Gala Dinner**

**Location: Grand Ballroom (Salon D, E)**

6:15 PM – 7:15 PM      **Announcements, Recognitions and Awards**

**Recognition by USF Health**

**Chairs:** Dr. Charles Lockwood, Dr. Kevin Sneed, Dr. Guilherme Oliveira, Dr. Srinivas Tipparaju

- \* USF Saunders Endowed Lecture and Distinguished Recognition: Mukesh Jain, MD
- \* Special Distinguished Recognition by Committee: Dr. John Couris
- \* Special Distinguished Recognition to the Saunders Endowment: Saunders Family
- \* Special Distinguished Recognition by USF Tampa: Devendra K. Agrawal, PhD, MBA

**IACS Awards**

**Chair:** Dr. Naranjan S. Dhalla

**Congratulatory Remark:** Dr. Naranjan S. Dhalla

**Presentation of IACS Awards:** Dr. Grant Pierce, Dr. Roberto Bolli, and Dr. John Couris

- \* **IACS Medal of Merit:** Dr. Joseph Hill
- \* **IACS Lifetime Achievement Award:** Dr. Charles Lockwood
- \* **IACS Distinguished Service Award:** Dr. Kevin Sneed
- \* **IACS Distinguished Leadership Award:** Dr. Guilherme Oliveira
- \* **IACS Distinguished Leadership Award:** Dr. Srinivas Tipparaju

**Established Investigator Awards**

**Presentation of Established Investigator Awards by** Dr. Grant Pierce and Dr. Srinivas Tipparaju

**Dennis B. McNamara Award for Excellence in Cardiovascular Sciences**

Istvan Baczko, MD, PhD, FIACS

**Naranjan S. Dhalla Award for Innovation in Cardiovascular Sciences**

Vladimir Jakovljevic, MD, PhD, FIACS

**Howard Morgan Award for Distinguished Achievements in Cardiovascular Research**

Evan Dale Abel, MD, PhD

**Jawahar (Jay) Mehta Award for Clinical Scientist**

Robert Reis, D.Phil.

# Program Agenda

**Saturday, September 9, 2023**

cont.

**Grant Pierce Award for Excellence in Cardiovascular Sciences**

Rhian M. Touyz

**Paul Ganguly Distinguished Lecture Award in Cardiovascular Sciences**

Ren-Ke, Li, PhD, MD

**James Willerson Award for Excellence in Cardiovascular Sciences**

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

**Amarjit Arneja Distinguished Lecture Award for Prevention of Heart Disease**

Buddha Dawn, MD

**Young Investigator Awards**

**Presentation of Young Investigator Awards:**

Dr. Michael Czubryt, Dr. Devendra K. Agrawal, and Dr. John Couris

**Roberto Bolli Young Investigator Award**

**Gary Lopaschuk Graduate Student Award**

**Buddha Dawn Early Career Award**

**Poster Awards**

**Presentation of Poster Awards:**

Dr. Michael Czubryt, Dr. Devendra K. Agrawal, and Dr. Gary Lopaschuk

**Margaret Moffat (4) and Morris Karmazyn (4) Poster Awards**

7:15 PM – 7:20 PM      Recognitions and Vote of Thanks by Conference Chairs:  
Dr. Guilherme Oliveira and Dr. Srinivas Tipparaju

7:20 PM – 7:25 PM      Introduction of 2024 Annual meeting of the IACS-NAS:  
Dr. Michael Czubryt

7:30 PM – 9:30 PM      **Banquet Dinner**

# List of Posters

(Presenting author is underlined)

1. Alexander Pyronneau, Erlyana Clarke Shaw, George Skaf, Rami Akel, Rias Ali. *An atypical presentation of right sided native valve infective endocarditis.*
2. Andrew Sagalov, Mohamed Adil Sheikh, Zurain Niaz, Michael Buhnerkempe, Steve Scaife, Abhishek Kulkarni, Abdul Hafiz. *Transcatheter edge-to-edge repair versus annuloplasty in the treatment of functional mitral valve regurgitation: An analysis of mortality and complications in patients with heart failure with reduced ejection fraction.*
3. Andrew Sagalov, Waqas Ullah, Eugene Brailovsky, Michael Buhnerkempe, Steve Scaife, Abhishek Kulkarni, Mohamed Labedi, Shruti Hegde. *Cardiac amyloidosis versus other restrictive cardiomyopathies: A retrospective analysis of cardiovascular outcomes and arrhythmic burden.*
4. Anish Potti, Adnan Rahman. *Comparative analysis of post-operative recovery care after coronary by-pass graft surgery (CABG).*
5. Besher M. Abual'anz, Sara Haji Rasul, Sunil G. Rattan, Peter C. Kienesberger, Ian M. Dixon. *Sex-related differences in survival rate and extracellular matrix composition in periostin knockout mice.*
6. Brian Villa, Allyson Hansen. *Transesophageal echocardiographic (TEE) implementation and use in Tampa General hospital Emergency Department.*
7. Charles Boadu, Erlyana Clarke Shaw, Vindhya Pandayaram, Tochukwu Nzeako, Masi Javeed, Peter Di Martino. *Simultaneous thrombosis of LAD and RCA in a patient presenting with STEMI.*
8. Cyrille K. Cornelio. *The role of the pharmacists in heart failure recovery clinics.*
9. David Russ, Kassidy Banford, Noah Weisleder. *Fish oil supplement mitigates injury in vivo and in cell culture.*
10. Erlyana Clarke Shaw, Ziran Yang, Bir Singh, Masi Javeed, Rene Kunhardt, Johnathan Frunzi. *Alarming stroke risk in a patient with systemic lupus erythematosus, right atrial chiari network, atrial septal aneurysm and persistent foramen ovale.*
11. Gunjan Upadhyay. *Doxorubicin slams inflammation resolution signaling in spleen and heart in Arachidonate 5 Lipoxygenase deficient mice.*
12. Haohan Zhao, John Tatum, Jonah Gordon, Ali Husain, Srinivas Tipparaju, Kirpal S. Bisht. *Synthesis of substituted small molecule for cardiovascular disease and aging related diseases.*
13. James Plumb, Ali Alkhayru, Christopher Wilson, Clarence Owen. *Rare case of native aortic valve endocarditis from Corynebacterium striatum bacteremia.*
14. Jenő Antal Pintér. *Altered cardiac repolarization associated with cellular electrophysiological remodeling following chronic testosterone administration in a large animal model.*

# Posters

15. Joung Woul Kim, Ravikumar Manickam, Puja Sinha, Srinivas M. Tipparaju. *A small molecule improves barium chloride-induced skeletal muscle injury repair.*
16. Kevyn Niu, Laura McLean, Thomas Rishling. *Lamb's excrescence unveiled: A case of mistaken identity as aortic valve endocarditis.*
17. Kruten Patel, Kevin Schenider, Matthew Meleka, Seth Maxwell, Merrill Krolick. *Combination of excimer-laser coronary angioplasty and intravascular lithotripsy to treat severe in-stent restenosis.*
18. Kruten Patel, Kevin M. Schneider, Yash S. Suthar, Ryan Malek, Merrill A. Krolick, Jesse Klein. *Simultaneous presentation of an inferior STEMI and acute limb ischemia in a patient.*
19. Leena Regi Saleth, Alireza Rafieerad, Weiang Yan, Keshav N. Alagarsamy, Abhay Srivastava, Niketa Sareen, Sanjiv Dhingra. *Treatment and prevention of transplant vasculopathy using immunoengineered Ti3C2TxMXene nanosystem.*
20. Lei Xi, Donatas Kraskauskas, Sakthivel Muniyan, Surinder K. Batra, Rakesh C. Kukreja. *Androgen-deprivation therapy with leuprolide increases abdominal adiposity without causing cardiac dysfunction in middle-aged male mice: effect of Sildenafil.*
21. Madison Noom, Theo Sher, Samer Ganam, Joseph Sujka, Christopher DuCoin. *Temporary impella implantation used for cardiac support during bariatric surgery in a patient with severe heart failure.*
22. Manisha Deogharia, Akansha Agrawal, Miusi Shi, Abhinav K. Jain, Kevin J. McHugh, Francisco Altamirano, Ali J. Marian, Priyatansh Gurha. *Histone demethylase KDM5 regulates cardiomyocyte maturation by promoting fatty acid oxidation, oxidative phosphorylation, and myofibrillar organization.*
23. Maryam Zaffer, Magid Abdo, Fawaz Hussain, Islaam Elnagar. *A case of Amiodarone-induced thyrotoxicosis.*
24. Maya Khodor, Sammy Tran, Hamza Alkowati, Daniela Rodrigues. *BRASH syndrome; a poorly recognized but potentially lethal clinical syndrome.*
25. Milica Gajic. *Vasodilatory effects of benzodiazepine ligands at vascular GABAA receptors in rat aorta.*
26. Molly Crandall, Inna Rabinovich-Nikitin, Lorrie A. Kirshenbaum. *Mitochondrial autophagy and cell survival is regulated by the circadian clock gene in cardiac myocytes during ischemic stress.*
27. Nameer Ascander, Bobby Malik, Mihai Macelaru, Tesnim Hamdan, Amatul Khan, Michael Schandorf-Lartey, Payman Benharash. *Outcomes and readmission after transcatheter aortic valve replacement in patients with peripheral artery disease.*

# Posters

28. Neha Patel, Taylor Kirkman, Zachary Whiteside, Rami Akel. *Post-myocardial infarction ventricular septal rupture and optimal timing of subsequent intervention.*
29. Neha Patel, Taylor Kirkman, Keshav Ramireddy. *Acute aortic dissection status post valve transaortic valve replacement for failing porcine aortic valve.*
30. Neha Patel, Taylor Kirkman, Andrew Jung, Rami Akel. *Removal of free-floating aortic arch thrombus using angioVac and sentinel cerebral protection devices.*
31. Poojitha Palanisamy. *Introverts vs Extroverts: Who's at a higher risk of heart disease?*
32. Pranav Madabhushi, Finosh Thankam. *Ischemia-driven HSP90 release by cardiac stromal fibroblasts and expression profiling in the infarcted myocardium and epicardial fat.*
33. Priyanka Sharma, Priyanka Bhat, Rishi Gandhi, Vijaykumar Sutariya. *Honokiol nanoparticles for the treatment of ocular neovascularization.*
34. Rishi Gandhi, Priyanka Sharma, Feng Cheng, Sheeba Varghese Gupta, and Vijaykumar Sutariya. *Chest pain risk of patients prescribed Sumatriptan.*
35. Sandhya Santhana. *Demand for Physician Assistance professionals in the United States: Focus on Geriatrics.*
36. Sanjana Anumukonda. *The heart in orbit: Gravity's effect on the heart.*
37. Shaikh Afaq, Haider Abidali, Kaylee Watson, Timothy Beuca, Olu Oyesanmi, Nikolay Mitzov, Salman Muddassir. *Is PO Metolazone under-utilized in heart failure? A secondary data analysis of Metolazone with loop diuretic therapy.*
38. Shraddha Tipparaju. *Diabetes in South Asians.*
39. Sikta Chattopadhyaya. *Role of scleraxis in angiotensin II-induced cardiac fibrosis.*
40. Sunny Kahlon, Carla C. Moodie, Joseph R. Garrett, Jenna R. Tew, Jobelle J. Baldonado, Jacques P. Fontaine, Eric M. Toloza. *Effects of small body habitus on perioperative outcomes and overall survival after robotic-assisted video-thoracoscopic pulmonary lobectomy.*
41. Sunny Kahlon, Carla C. Moodie, Joseph R. Garrett, Jenna R. Tew, Jobelle J. Baldonado, Jacques P. Fontaine, Eric M. Toloza. *Effects of obesity on perioperative outcomes and overall survival after robotic-assisted video-thoracoscopic pulmonary lobectomy.*
42. Susmita Gudla, Dexter Fredrick, Grace Glenn. *A study on the impact of intervention to improve chronic illness in underserved populations.*
43. Tabatha de Oliveira Silva, Carolina A. Lino, Guilherme Lunardon, Amanda A. Silva, Maria Claudia Irigoyen, Maria Luiza M. Barreto-Chaves, DaZhi Wang, Gabriela P. Diniz. *Senolytic therapy alleviates metabolic and cardiac dysfunctions in obese female mice.*



# Posters

44. Talan Tran, Natalia Noto, Yazmin Restrepo, Ariana Hernandez, Victoria Pulido-Correa, Zachary Lawrence, Shalet James, Iliana Uribe, Robert C. Speth, Lisa S. Robison, Narasimman Gurusamy. *Ketogenic diet study indicates long non-coding RNA Caren in regulating cardiac cell survival.*
45. Zhiqi Liang, Shuhong Li, Ren-Ki Li. *Aging alters bone marrow niche cells to reduce stem cell function by changing cellular gene expression.*
46. Ziran Yang, Masi Javeed, Kyle Risos, Bir Singh, Charles Boadu, Gauthier Stepman, Nader Chadda. *Case of Pembrolizumab-induced heart block secondary to suspected myocarditis.*

# Travel Awardees and Special Thanks

## Travel Awardees

### IACS-ES:

Dr. Jenő Antal Pintér

Dr. Jovana Bradic

Ms. Milica Gajic Bojic

### IACS-NAS:

Dr. Chiara Giannarelli

Dr. Peter Liu

## Special Thanks

### Tampa General Hospital

TGH Marketing and Communications office

TGH Corporate Event Planner

### USF Health, University of South Florida

USF TCOP – DPS office

USF TCOP ORB

USF Health Marketing and Communications office

USF Health Development Office

Conference Event Staff

# IACS-NAS 2023 Fees and Accommodations

## IACS NAS 2023, Conference Registration Fees

Early Bird registration: \$450 USD (Early bird registration is open until July 15, 2023)

Late Registration: \$600 USD (July 16 – August 15, 2023)

Onsite Registration: \$700 USD (only personal checks or Cash accepted) Checks payable to: Academy of Cardiovascular Sciences Foundation USA Inc.

Student/Trainee Early Registration: \$300 USD

(Late) Student/Trainee Registration: \$400 USD or onsite registration

Industry Attendee Registration: \$750

Registration fees will cover attendance for the sessions, program, conference badge, two lunches, Reception dinner, coffee breaks, and Banquet Dinner/Awards function.

[www.iacs-nas.com](http://www.iacs-nas.com) for meeting registration, abstract submission, hotel booking, TPA airport details and other conference related information.

## Disclaimer

The conference scientific committee reserves the right to make changes. The program is for information and planning purposes only.

## Hotel and Transportation Information

- Conference Location and Hotel stay: Embassy Suites by Hilton at USF Busch Gardens will allow at the rate of \$169 USD + applicable Tax/ night if booked by August 8, 2023 using the link. This rate is for the 3 nights i.e., September 7, 8 and 9, 2023.
- \$12 for overnight parking (self-parking), Valet parking is not available at Embassy Suites
- Group rate is for single or double room (children below 5-year-old are free)
- Based on availability additional conference guests will either utilize market rate and book at Embassy Suites USF, or Hotels conveniently located across street on Fowler Avenue.
- Guests need to book before August 13, 2023 (cutoff date). IACS has blocked certain rooms at the above rooms therefore important to book the room before August 13, 2023
- Embassy suites contact person: Brooke Powell 813.903.6626
- Home 2 Suites, 11606 McKinley Dr, Tampa, FL 33612
- La Quinta, 3701 E Fowler Ave, Tampa, FL US 33612
- Holiday Inn Express & Suites Tampa -USF-Busch Gardens, an IHG Hotel, 2807 E Busch Blvd, Tampa, FL 33612

## Conference Hotel WiFi:

Network: HiltonHonorsMeeting

Promotion Code: EmbassyUSF

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**USF Conference Support Grant**

**USF Research One**

**Visual Sonics Fuji Film**

**William Saunders Endowed Chair in Geriatric Pharmacotherapy**

## **Acknowledgements:**

**Dr. Roberto Bolli, USA**

**Dr. Gary Lopaschuk, Canada**

**Dr. Buddha Dawn, USA**

**Dr. Morris Karmazyn, Canada**

**Dr. Margaret Moffat, Canada**

**USF TCOP**

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