

Hybrid Event (in-person & virtual)

# The Arizona Brain and Heart Symposium

*A Collaboration of Barrow Neurological Institute and Arizona Heart Rhythm Center*



**Saturday, October 30, 2021**

Hybrid Conference (in-person & virtual)

7 a.m. - 5 p.m. PDT

Goldman Auditorium at Barrow Neurological Institute

350 W. Thomas Rd., Phoenix Arizona, 85013



**Barrow**  
Neurological Institute

**Petznick**  
**Stroke Center**



ARIZONA  
**HEART RHYTHM**  
CENTER

## Who Should Attend

The program has been designed to meet the educational goals of cardiologists and neurologists, including residents and fellows in training in both specialties, as well as internists, physicians, nurses and health care workers involved in the evaluation and treatment of patients with neurologic and cardiac disorders.

## Objectives

- Define the common conditions of brain-heart related disorders such as stroke, seizure, encephalopathy, arrhythmia
- Cite the updated recommendation on the diagnostic work up of the above mentioned conditions
- Manage medically in terms of stroke prevention, arrhythmia control and seizure control
- Explain the options in interventional treatment of cardiac arrhythmia, rhythm control and stroke prevention

## Designation

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of the American College of Surgeons and the Barrow Neurological Institute. The American College of Surgeons is accredited by the ACCME to provide continuing medical education for physicians.

The American College of Surgeons designates this Other activity (hybrid: in-person and virtual stream) for a maximum of 8 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

CommonSpirit CNE Administration is accredited as a provider of nursing continuing professional development by the American Nurses Credentialing Center's Commission on Accreditation.

To successfully obtain CNEs for this activity, the learner must: miss no more than 10 minutes and complete a post conference evaluation.



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DIVISION OF EDUCATION

## Disclosure Policy

It is the policy of St. Joseph's Hospital and Medical Center to ensure balance, independence, objectivity and scientific rigor in all of its educational programs. All those in control of content will disclose all relevant relationships with commercial interests. Detailed disclosures will be made in the activity handout materials.

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350 W. Thomas Rd., Phoenix, AZ 85013

Seating is limited

# AGENDA Saturday, October 30, 2021 (Pacific Daylight Time)

## 7:00 am Registration and Vendor Exhibit

### Welcome & Introductions

*David Wang, DO, Vijendra Swarup, MD, Robert Lemery, MD*

7:30 am Brain Health 2021

*David Wang, DO*

7:40 am Cardiology and Cardiac Electrophysiology in 2021

*Vijendra Swarup, MD*

7:50 am Brain-Heart: Brief Historical Perspectives and New Frontiers

*Robert Lemery, MD*

## Early Morning Session: An Introduction to Heart-Brain Interactions

**Moderator: Robert Lemery, MD**

8:00 am The Brain's in Charge: Basic Understanding of the Sympathetic and Parasympathetic Nervous System

*Justin Hoskin, MD*

8:15 am The Heart's in Charge: The Concept of the Little Brain on the Heart: The Intrinsic Cardiac Nervous System (ICNS)

*Robert Lemery, MD*

8:30 am Autonomic Imbalance and Dysautonomias: Primary Neurologic Disorders Affecting Day-to-Day Regulation of Blood Pressure

*Terry D. Fife, MD*

8:45 am Cardiac Syncope: Primary Cardiac Causes of Loss of Consciousness: Bradycardia, Tachycardia and Other

*Sudarone Thihalolipavan, MD*

9:00 am Panel Discussion, Q&A: *Justin Hoskin, MD, Robert Lemery MD, Terry D. Fife, MD, Sudarone Thihalolipavan, MD*

## Mid-Morning Session: Brain-Heart, Thrombus and Bleeding

**Moderators: David Wang, DO | Pallavi Bellamkonda, MD**

9:15 am Antithrombotics for Stroke and TIA: Pathophysiology and the Neurologist Perspective

*Supreet Kaur, MD*

9:30 am Brain Bleeds: The Neurosurgeon to the Rescue

*Andrew Ducruet, MD*

9:45 am Panel Discussion, Q&A: *David Wang DO, Pallavi Bellamkonda MD, Supreet Kaur, MD, Andrew Ducruet MD*

## 10:00 am Exhibits and Coffee Break

10:15 am **LIVE and Pre-Recorded Cases, Presentations and Debate**

**Moderators: Saibal Kar, MD | David Wang, DO | Robert Lemery, MD**

LIVE and Pre-Recorded Cases: LAA Closure Device, PFO Closure and Catheter ablation of Atrial Fibrillation and Atrial Flutter

*Vijendra Swarup, MD, Hursh Naik, MD, Sudarone Thihalolipavan, MD*

Left Atrial Appendage: Clinical Trials of Appendage Closure

*Saibal Kar, MD*

Debate: Patients with Cryptogenic Stroke Should Undergo Foramen Ovale (PFO) Closure

*(PRO) Hursh Naik, MD and (CON) Paul MacDonald, MD*

Emerging evidence: Ablation of Atrial Fibrillation for the Prevention of Stroke

*Vijendra Swarup, MD*

11:45 am Panel Discussion, Q&A: *Vijendra Swarup, MD, Hursh Naik, MD, Sudarone Thihalolipavan, MD, Paul MacDonald, MD, Saibal Kar, MD, David Wang, DO, Robert Lemery, MD*

### **12:00 pm Exhibits and Lunch**

#### **Early afternoon Session: New Therapies for Cardiac Arrhythmias: Renal Denervation and Cardiac Sympathetic Denervation**

**Moderators: David Wang, DO | Vijendra Swarup, MD | Robert Lemery, MD**

1:00 pm Renal Denervation to treat AF and VT: The Re-Emergence of a Promising Therapy  
*Vivek Reddy, MD*

1:30 pm The Cardiac Patient with VT or ICD Storm: Stellate Ganglion Block and Cardiac Sympathetic Denervation  
*Kalyanam Shivkumar, MD*

2:00 pm Panel Discussion, Q&A: *Vivek Reddy, MD, Kalyanam Shivkumar, MD, David Wang, DO, Vijendra Swarup, MD, Robert Lemery, MD*

#### **Mid Afternoon Session: Sudden Death, from Heart or Brain?**

**Moderators: Robert Roberts, MD | Sudarone Thihalolipavan, MD**

2:15 pm The Epileptic Heart  
*Asim Haque, MD*

2:30 pm Genetics and Sudden Death: The Current  
*Robert Roberts, MD*

2:45 pm Panel Discussion, Q&A: *Asim Haque, MD, Robert Roberts, MD, Sudarone Thihalolipavan, MD*

### **3:00 pm Exhibits and Coffee Break**

#### **Final Session: CHF and Autonomic Regulation**

**Moderators: Pallavi Bellamkonda, MD | David Wang, DO | Vijendra Swarup, MD**

3:15 pm Covid-19 and Brain-Heart Dilemmas  
*Dhanunjaya Lakkireddy, MD*

3:30 pm The Management of End-Stage Heart Failure  
*Rajakrishna Vijaykrishnan, MD*

3:45 pm LVAD and Other Emerging Bridge to Permanent Devices  
*Kevin Brady, MD*

4:00 pm Mechanical Circulatory Support Devices and Stroke: A Review  
*Teddy Youn, MD*

4:15 pm Strategies to reduce LA Pressure: Percutaneous Creation of Inter-Atrial Shunt for the Management of CHF  
*Vijendra Swarup, MD*

4:30 pm Panel Discussion, Q&A: *Dhanunjaya Lakkireddy, MD, Rajakrishna Vijaykrishnan, MD, Kevin Brady, MD, Teddy Youn, MD, Vijendra Swarup, MD, Pallavi Bellamkonda, David Wang, DO*

4:45 pm Concluding Remarks  
*David Wang, DO, Vijendra Swarup, MD, Robert Lemery, MD*

### **5:00 pm Meeting Adjourns**

## Barrow Neurological Institute & St. Joseph's Hospital and Medical Center Faculty

### **David Wang, DO, FAAN, FAHA**

Co-Director  
Division of Vascular Neurology

### **Terry D. Fife, MD**

Director  
Balance Disorders and Vestibular  
Neurology Program

### **Justin Hoskin, MD**

Neurologist  
Balance Disorders and Vestibular  
Neurology Program

### **Supreet Kaur, MD**

Neurologist  
Division of Vascular Neurology

### **Paul MacDonald, MD**

Neurologist  
Division of Vascular Neurology

### **Andrew Ducruet, MD**

Neurosurgeon  
Division of Endovascular Neurosurgery

### **Asim Haque, MD, PhD, MPH**

Neurologist  
Division of Epilepsy

### **Teddy Youn, MD**

Neurologist  
Division of Vascular Neurology

### **Robert Roberts, MD**

Executive Director  
Heart and Vascular Institute  
St. Joseph's Hospital and Medical Center

### **Kevin Brady, MD**

Cardiothoracic Surgeon  
Heart and Vascular Institute  
St. Joseph's Hospital and Medical Center

### **Pallavi Bellamkonda, MD**

Cardiologist  
Heart and Vascular Institute  
St. Joseph's Hospital and Medical Center

### **Hursh Naik, MD**

Cardiologist  
Heart and Vascular Institute  
St. Joseph's Hospital and Medical Center

### **Rajakrishna Vijaykrishnan, MD**

Cardiologist  
Norton Thoracic Institute  
St. Joseph's Hospital and Medical Center

## Arizona Heart Rhythm Center Faculty

### **Vijendra Swarup, MD, FACC, FHRS**

Medical Director

### **Robert Lemery, MD, FACC, FHRS**

Electrophysiologist

### **Sudarone Thihalolipavan, MD**

Electrophysiologist

## Guest Faculty

### **Saibal Kar, MD**

Physician  
Director of Structural Heart Disease and  
Research at HCA Healthcare

### **Dhanunjaya R. Lakkireddy, MD, FHRS**

Executive Medical Director  
Kansas City Heart Rhythm Institute

### **Vivek Reddy, MD, FACC, FHRS**

Medical Director  
Mount Sinai Cardiac Arrhythmia Services

### **Kalyanam Shivkumar, MD, FACC, FHRS**

Medical Director  
UCLA Cardiac Arrhythmia Center

## Course Directors



### **Vijendra Swarup, MD, FACC, FHRS**

Medical Director  
Arizona Heart Rhythm Center



### **David Wang, DO, FAAN, FAHA**

Co-Director  
Division of Vascular Neurology  
Barrow Neurological Institute



### **Robert Lemery, MD, FACC, FHRS**

Electrophysiologist  
Arizona Heart Rhythm Center