

Arrhythmias and the Heart: A Cardiovascular Update

January 31 - February 5, 2027

Sunday, January 31, 2027

1:45-6:00 p.m. **Registration - Ballroom Foyer**

ECG Interpretation for Daily Practice

Moderator: Fred Kusumoto, MD

This interactive session will focus on the practical interpretation of ECGs encountered in daily clinical practice and the electrophysiology laboratory. Through a case-based review of ECG tracings, participants will strengthen their approach to rhythm analysis, arrhythmia diagnosis, conduction abnormalities, and localization of cardiac electrical disorders. Emphasis will be placed on recognizing key ECG patterns, avoiding common pitfalls, and applying findings to clinical decision-making and EP procedures. The session is designed to enhance confidence and accuracy in ECG interpretation for both general cardiology and electrophysiology practice.

2:00 p.m. **Special Optional Session: Level Setting
Introduction to All Those Squiggly Lines**

2:15 p.m. **Basic ECG Reading I**
Fred Kusumoto MD

3:00 p.m. **Basic ECG Reading II**
Fred Kusumoto MD

3:45 p.m. **Clues for Cardiovascular Assessment and Exam**
Leslie Janik, APRN

4:00 p.m. **Refreshment Break**

4:15 p.m. **Basic Electrograms in the EP Lab**
Fred Kusumoto MD

5:15p.m. **Basic Electrograms from Implanted Devices**
Melinda Barber RN

6:00 p.m. **Summary To All Those Squiggly Lines**

6:15 p.m. **Adjourn**

Monday, February 1, 2027

6:30 a.m. **Registration and Continental Breakfast | Ballroom Foyer**

7:00 a.m. **Welcome and Introductions**
Fred Kusumoto, MD

ATRIAL FIBRILLATION & STROKE PREVENTION: Application of Guidelines into Everyday Practice for Clinicians

Moderator: Fred Kusumoto, MD

7:15 a.m. **Lifestyle Modification in AF Management: How to Translate the Guidelines Into Practice?**
Fred Kusumoto, MD

7:35 a.m. **Stroke Prevention in Atrial Fibrillation: Who and How?**
Peter Noseworthy, MD

7:55 a.m. **Device Detected Subclinical Atrial Fibrillation: When Do I Recommend Anticoagulation and What Is the Evidence?**
Duy Nguyen, MD

8:15 a.m. **Left Atrial Appendage Occlusion: Better Than (or As Good As) Anticoagulation?**
Alan Sugrue, MD

8:35 a.m. **Ablation of Paroxysmal Atrial Fibrillation: Everyone?**
Anca Chiriac, MD

8:55 a.m. **National Registries: Valuable or Just More Paperwork?**
Sana Al-Khatib, MD

9:15 a.m. **Questions/Discussion**
Moderator: Dr. Kusumoto
Drs. Noseworthy, Nguyen, Sugrue, Chiriac, and Al-Khatib

9:40 a.m. **Refreshment Break – Visit Exhibits**

Case Conundrums: Atrial Fibrillation Management

Moderator: Malini Madhavan, MBBS

The following format is a case-based presentation and discussion

- 4 minutes for case presentation (**max 3 slides**)
- **2-3 questions** for the panel and attendees
- Teaching and take-home points (**1 slide**)

Atrial Fibrillation Directed Treatment

Panel: Drs. Sugrue, Chiriac, and Ms. Janik

10:05 a.m. **My 85-Year-Old Patient Has Recurrent and Symptomatic PAF, COPD, and CKD, Intolerant of Drugs: Ablation or PM Implantation with AVN Ablation?**
Alan Sugrue, MD

- 10:20 a.m. **A 68-Year-Old Patient Has Asymptomatic Persistent Atrial Fibrillation for at Least Two Years Referred to You: Would You Recommend Rhythm Control, and How Would You Evaluate?**
Anca Chiriac, MD, PhD
- 10:35 a.m. **65-Year-Old Female Undergoes Combined AF Ablation and Left Atrial Appendage Occlusion Complicated by Pericardial Effusion Requiring a Pericardial Drain. When or Do I Start Anticoagulation?**
Leslie Janik, APRN
- 10:50 a.m. **Questions/Discussion**
Moderator: Malini Madhavan, MBBS
Drs. Sugrue, Chiriac, and Ms. Janik
- Stroke Risk Reduction Treatment**
Panel: Drs. Noseworthy, Shen, and Nguyen
- 11:05 a.m. **75-Year-Old Male with AF Ablation a Year Ago Without Perceived Recurrence. Stop Anticoagulation?**
Peter Noseworthy, MD
- 11:20 a.m. **A 68-Year-Old Patient with Persistent AF Has a Stroke While on Usual Doses of DOAC. What Next?**
Win-Kuang Shen, MD
- 11:35 a.m. **63-Year-Old Woman with Well Controlled Hypertension. Her Pacemaker Reveals a High Atrial Rate Episode of 8 Hours. Start Anticoagulation?**
Duy Nguyen, MD
- 11:50 a.m. **63-Year-Old Male – Stroke Risk Prediction - CHA2DS2-VASc and Artificial Intelligence**
Paul Friedman, MD
- 12:05 p.m. **Questions/Discussion**
Moderator: Malini Madhavan, MBBS
Drs. Noseworthy, Shen, Nguyen, and Friedman
- 12:25 p.m. **4 Things to Know**
Malini Madhavan, MBBS
- 12:35 p.m. **Adjourn for the Day**

Tuesday, February 2, 2027

6:30 a.m. **Continental Breakfast**

VENTRICULAR ARRHYTHMIAS AND SUDDEN CARDIAC DEATH PREVENTION: State-of-the-Art and Guideline-Based Practice

Moderator: Win-Kuang Shen, MD

- 7:00 a.m. **ECG PEARLS: Wide QRS Tachycardia**
Srivathsan Komandoor, MD
- 7:30 a.m. **Primary SCD Prevention in Patients with Non-Ischemic Cardiomyopathy:
Does ICD Provide Incremental Benefit to Contemporary Medical Therapy?**
Alan Sugrue, MD
- 7:50 a.m. **PVCs and Idiopathic VT: How Many PVCs Are Too Many, and How Do I
Manage?**
Anca Chiriac, MD, PhD
- 8:10 a.m. **Ablation or Medications for Ventricular Arrhythmias in Patients with Heart
Disease**
Suraj Kapa, MD
- 8:30 a.m. **Ablation of Ventricular Arrhythmias in Patients with LVADs or
Hemodynamic Support: We Can Do This, But Should We?**
Srivathsan Komandoor, MD
- 8:50 a.m. **Abnormal Gene Equals ICD Implant?**
Michael Ackerman, MD, PhD
- 9:10 a.m. **Choosing an ICD: Transvenous, Subcutaneous or Substernal:
Which Device for Which Patient?**
Paul Friedman, MD
- 9:30 a.m. **Panel Discussion**
Moderator: Dr. Shen
Drs. Komandoor, Sugrue, Chiriac, Kapa, Ackerman, and Friedman
- 9:55 a.m. **Refreshment Break – Visit Exhibits**

VENTRICULAR ARRHYTHMIAS AND SUDDEN CARDIAC DEATH PREVENTION:

Cases

Moderator: Paul Friedman, MD

Case Conundrums: Ventricular Arrhythmia Management

Moderator: Paul Friedman, MD

Panel: Drs. Sugrue, Madhavan, Barber, Kapa, Del-Carpio Munoz, Ackerman, and Ms. Koch

The following format is a case-based presentation and discussion

- 4 minutes for case presentation (**max 3 slides**)
- **2-3 questions** for the panel and attendees
- Teaching and take-home points (**1 slide**)

- 10:25 a.m. **74-Year-Old Man with Nonischemic Cardiomyopathy and an LVEF of 33% by Echocardiography After 3 Months of Guideline-Directed Medical Therapy. ICD?**
Suraj Kapa MD
- 10:40 a.m. **40-Year-Old with LMNA Mutation Presents with 5 ICD Shocks for Polymorphic VT. How Would You Manage?**
Freddy Del-Carpio Munoz, MD
- 10:55 a.m. **65-Year-Old with Ischemic Cardiomyopathy, EF 35%, Presents with 5 Episodes of Monomorphic VT Terminated with ATP. AAD or Ablation or Both?**
Melinda Barber, APRN
- 11:10 a.m. **58-Year-Old Male with History of HCM, VT and AF Presents with ICD Shock. How Do You Distinguish Appropriate from Inappropriate Shocks? How Do You Manage Inappropriate Shocks Due to SVT?**
Malini Madhavan, MBBS
- 11:25 a.m. **64-Year-Old Male is Admitted with Anterior STEMI S/P Revascularization, LVEF of 35% and NSVT Episode. Would You Prescribe a Wearable Defibrillator?**
Morgan Koch, PA-C, PA, MS
- 11:40 a.m. **35-Year-Old Healthy Female Presents with Wide Complex Tachycardia and Syncope During Exercise. Medication, Ablation or Defibrillator?**
Alan Sugrue, MD
- 11:55 a.m. **Questions/Discussion**
Moderator: Paul Friedman
Panel: Drs. Kapa, Del-Carpio Munoz, Madhavan, and Sugrue, Ms. Barber and Ms. Koch
- 12:20 p.m. **4 Things to Know**
Paul Friedman, MD
- 12:30 p.m. **Adjourn for the Day**

Wednesday, February 3, 2027

6:30 a.m. **Continental Breakfast**

HEART FAILURE AND OTHER CONDITIONS

Moderator: Peter Noseworthy, MD

7:00 a.m. **ECG PEARLS: Interesting ECG's SVT, Conduction**

Malini Madhavan, MBBS

7:30 a.m. **Medical Management of New Heart Failure with Reduced LVEF**

Elizabeth Dineen, DO

7:50 a.m. **Advanced Heart Failure Management: When to Refer for LVAD and Transplant?**

Daniel Yip, MD

8:10 a.m. **Management of HFpEF: A Practical Approach and Advances in Therapy**

J. Christopher Ray, MD

8:30 a.m. **Management of AF in Heart Failure: Rate vs Rhythm Control**

Freddy Del-Carpio Munoz, MD

8:50 a.m. **Pulmonary Embolism: It Used to Just be Heparin and Pray...?**

Riyaz Bashir, MBBS, MD

9:10 a.m. **Questions/Discussion**

Moderator: Dr. Noseworthy

Drs. Madhavan, Dineen, Yip, Ray, Del-Carpio Munoz, and Bashir

9:35 a.m. **Refreshment Break – Visit Exhibits**

HEART FAILURE AND OTHER CONDITIONS II

Moderator: Malini Madhavan, MBBS

10:05 a.m. **Top Five Heart Failure Studies in 2026-2027**

Daniel Yip, MD

10:25 a.m. **Diagnostic Evaluation of Newly Diagnosed Non-Ischemic Cardiomyopathy: Role of Imaging**

Kyle Klarich, MD

10:45 a.m. **Rhythm Disorders in Hypertrophic Cardiomyopathy: Role of AAD, Ablation and Devices**

Duy Nguyen, MD

11:05 a.m. **Rhythm Disorders in Cardiac Sarcoidosis: Role of AAD, Ablation and Devices**

Fred Kusumoto, MD

- 11:25 a.m. **Rhythm Disorders in Arrhythmogenic Cardiomyopathy: Role of AAD, Ablation and Devices.**
Abhishek Deshmukh, MD
- 11:45 a.m. **Cardio-Oncology: An Update on Cardiac Effects of Immunotherapy**
J. Christopher Ray, MD
- 12:05 p.m. **Questions/Discussion**
Moderator: Malini Madhavan, MBBS
Drs. Yip, Klarich, Nguyen, Kusumoto, Deshmukh, and Ray
- 12:25 p.m. **4 Things to Know**
Malini Madhavan, MBBS
- 12:30 p.m. **Adjourn for the Day**

Thursday, February 4, 2027

- 6:30 a.m. **Continental Breakfast**

HEART RHYTHM RELATED CONDITIONS: Complications and Syncope

Moderator: Paul Friedman, MD

- 7:00 a.m. **ECG PEARLS: Paced Rhythms**
Siva Mulpuru, MD, MPH
- 7:30 a.m. **Venous Thrombosis After CIED Implant: Too Little Adoo Over Something?**
Riyaz Bashir, MBBS, MD
- 7:50 a.m. **Taking Care of Patients After Catheter Ablation: What Can Go Wrong?**
Leslie Janik, APRN
- 8:10 a.m. **Management of New-Onset Atrial Fibrillation After Surgery**
Morgan Koch, PA-C, PA, MS
- 8:30 a.m. **Syncope: What Do Guidelines Tell Us and When Can Patients Drive?**
Danesh Kella, MBBS
- 8:50 a.m. **Neurocardiogenic Syncope, POTS, and IAST: Aren't They All the Same?**
Win-Kuang Shen, MD
- 9:10 a.m. **Questions/Discussion**
Moderator: Dr. Friedman
Drs. Mulpuru, Bashir, Kella, Shen and Ms. Janich and Ms. Koch
- 9:30 a.m. **Refreshment Break – Visit Exhibits**

HEART RHYTHM RELATED CONDITIONS: Cardiac Device Management

Moderator: Win-Kuang Shen, MD

- 9:50 a.m. **CIED Infection: Key Take Aways from the New Guidelines for the Primary Cardiologist**
Siva Mulpuru, MD, MPH
- 10:10 a.m. **When to Pace or Not to Pace After TAVR: Indications and Outcomes**
Ciorsti MacIntyre, MD
- 10:30 a.m. **Physiologic Pacing vs Coronary Sinus Pacing for Cardiac Resynchronization. What Do We Know in 2027?**
Sana Al-Khatib, MD, MHS
- 10:50 am **Interesting Intracardiac Electrograms (EGMs) in Device Patients**
Melinda Barber, APRN

Cardiac Device Workshop

Moderator: Win-Kuang Shen, MD

Panel: Drs. MacIntyre, Klarich, Mulpuru, Al-Khatib, and Ms. Barber

The following format is a case-based presentation and discussion

- 4 minutes for case presentation (**max 3 slides**)
- **2-3 questions** for the panel and attendees
- Teaching and take-home points (**1 slide**)

- 11:10 a.m. **63-Year-Old Pacemaker Dependent Patient Gets an Alert for Ventricular Lead Noise: Now What?**
Ciorsti MacIntyre MD
- 11:25 a.m. **75-Year-Old with a Lead Related Mass Identified on Transthoracic Echo: Endocarditis or Something Else?**
Kyle Klarich, MD
- 11:40 a.m. **35-Year-Old with Non-Ischemic Cardiomyopathy and an ICD with EF Recovery from 35% to 55% Who Has Never Required Therapy Presents for Generator Replacement: Now What?**
Siva Mulpuru, MD, MPH
- 12:05 p.m. **Questions/Discussion**
Moderator: Win-Kuang Shen, MD
Panel: Drs. MacIntyre, Klarich, Mulpuru, Al-Khatib, and Ms. Barber
- 12:25 p.m. **4 Things to Know**
Win-Kuang Shen, MD
- 12:30 p.m. **Adjourn for the Day**

Friday, February 5, 2027

6:30 a.m. **Continental Breakfast**

STATE-OF-THE-ART SESSION – LOOKING FORWARD

Moderator: Peter Noseworthy, MD, MBA

7:00 a.m. **ECG PEARLS: Diagnosing Heart Disease**
Abhishek Deshmukh, MD

7:30 a.m. **Advances in Cardiac Ablation: What Do I See in the Crystal Ball?**
Suraj Kapa, MD

7:50 a.m. **Plenary Lecture**
The Future of Medicine: How Health Policy, Technology, and ? Will Impact Care
Sana Al-Khatib, MD, MHS

8:20 a.m. **Wearables and Consumer Medical Electronics: Current Application in Clinical Medicine. What's Next?**
Peter Noseworthy, MD

8:40 a.m. **Integrating Artificial Intelligence into Clinical Practice: Present and Future**
Paul Friedman, MD

9:00 a.m. **Five Studies That Impacted my Practice in 2026. What to Look For in 2027**
Danesh Kella, MBBS

9:20 am. **Panel Discussion**
Moderator: Dr. Noseworthy
Drs. Kapa, Al-Khatib, Friedman, and Kella

9:35 a.m. **Refreshment Break**

9:50 a.m. **Picture Contest – Voting**

UPDATE ON SELECT TOPICS

Moderator: Fred Kusumoto, MD

10:00 a.m. **Gene Therapy for Cardiac Arrhythmias: Present and Future**
Michael Ackerman, MD, PhD

10:20 a.m. **Pulmonary Embolism: It Used to Just Be Heparin and Pray?**
Riyaz Bashir, MBBS, MD

10:40 a.m. **Arrhythmia Management in Complex Congenital Heart Disease: Drugs, Ablation, Device?**
Malini Madhavan, MBBS

11:00 a.m. **The Athlete's ECG: Any Special Considerations?**
Elizabeth Dineen, DO

11:20 a.m. **Questions/Discussion**
Moderator: Dr. Kusumoto
Drs. Ackerman, Bashir, Madhavan, and Dineen

11:30 a.m. **Closing Comments, Course Overview**

11:35 a.m. **Course Adjourns**