

The CME/CNE-accredited symposium, **The Mark E. Josephson Twenty-Seventh Annual State-of-the-Art Arrhythmia Symposium 2019** will be presented Saturday, September 7, 2019 at the Hilton Philadelphia at Penn's Landing, 201 South Christopher Columbus Boulevard, Philadelphia, PA 19106. For your review, I am attaching the exhibitor agreement and the course brochure with agenda.

Exhibit space is available during this event at **\$3,000** per table. Each exhibitor will receive a standard 8' table. A tablecloth and electric will be provided, if required. Your company will be acknowledged in the conference materials, on the signage and by the course director(s) during the welcome address. Exhibitors will be set-up in the lobby, just outside of the auditorium. The CME activities will be held behind closed doors, in the auditorium, separate and apart from the exhibits. We anticipate approximately 200 attendees and speakers. **Please act quickly as space is limited!**

Program Overview & Target Audience

This program is designed to provide electrophysiologists, cardiologists, internists, and associated professionals with state-of-the-art information on invasive and non-invasive electrocardiographic and electrophysiologic tools used in the diagnosis, evaluation, and treatment of cardiac rhythm disorders. Attendees of the symposium will develop an understanding of the best practice approaches to diagnosing and treating patients with atrial fibrillation, other atrial and ventricular tachycardias, and risk factors of sudden death.

If you are interested in reserving exhibit space, please complete and sign the attached Exhibitor Agreement and return it along with your exhibit fee to:

Crystal Mathis
Conference/Project Manager
Continuing Medical and Interprofessional Education at Penn Medicine
3620 Hamilton Walk, 150 Anatomy/Chemistry
Philadelphia, PA 19104-6061
Phone: 215-898-8005/Fax: 215-898-1888
Email: ycry@upenn.edu
<https://upenn.cloud-cme.com/arrhythmia2019>

Exhibitor Agreement

Mark E. Josephson 27th Annual State-of-the-Art Arrhythmia Symposium: Arrhythmia Diagnosis & Treatment Standards 2018 and Leonard N. Horowitz, MD Memorial Lecture

Saturday, September 7, 2019

Company Name: _____ ("Exhibitor")

(As acknowledged in course materials)

Exhibit Fee: \$3,000.00 per Table-top Exhibit

of Tables Requested _____ @ \$3,000 each = \$ _____

Representative Names (*only 2 representatives will be allowed on-site*):

1) _____ 2) _____

Email: _____ Email: _____

Phone: _____ Phone: _____

Fax: _____ Fax: _____

Exhibit

September 7, 2019

7:15 am – 5:00 pm

All exhibitors will be provided with an 8' table and chairs. Set-up begins on Saturday, September 8, 2018 at 6:30 am. If you require additional set-up time, please contact us, and we will assist in any way we can. Exhibitors should expect participants to begin arriving at 7:15 am. Although the exhibit area is secured, vendors are discouraged to leave any valuable items, such as laptops or phones unattended.

Break-down of exhibits must be completed by 6:00 pm on Saturday, September 7, 2019.

Display Information

Exhibitors are responsible for supply, set-up, take-down, delivery, and any additional costs of display needs beyond the 8' skirted table. Please let us know what your needs are so that we can accommodate your display:

Will you be bringing your own tablecloth? Yes No

Will you need electricity for your display? Yes No

Will you bring your own extension cord? Yes No

What type of equipment is being displayed (lights, machines, etc.)? _____

How many pieces of equipment need electricity? _____

Do any machines require any special outlets for operation? Name outlet type: _____

What additional information regarding your exhibit should we know? _____

Saturday, September 7, 2019

Meeting Location & Display Details

The Mark E. Josephson 27th Annual State-of-the-Art Arrhythmia Symposium: Arrhythmia Diagnosis & Treatment Standards 2018 and Leonard N. Horowitz, MD Memorial Lecture will be held Saturday, September 7, 2019 in the Grand Ballroom at The Hilton Philadelphia at Penn's Landing, 201 South Christopher Columbus Blvd, Philadelphia, PA 19106.

Table assignments will be designated on a 1st come, 1st serve basis. Continental breakfast and breaks will be set-up among the exhibits in the foyer. Each exhibitor can expect to receive one 8' skirting table and 2 chairs. Please be sure your exhibit materials fit within the specs of 8'x8'. If needed, you are welcome to purchase additional booth space.

Attendee Registration

If you would like to attend all or any of the sessions during the Mark E. Josephson 26th Annual State-of-the-Art Arrhythmia Symposium, you must complete the registration form either online or by fax or mail and submit payment. Please visit <http://upenn.cloud-cme.com/arrhythmia2019> for registration and additional conference information.

Shipping Information

(Please label all boxes with the following information)

Hilton Philadelphia at Penn's Landing
201 South Christopher Columbus Blvd
Philadelphia, PA 19106

Attention: Cheryl Latvala /Ansheai Spence-Jones
215-928-1234

HOLD FOR GRAND BALLROOM
Cheryl Latvala /Ansheai Spence-Jones
27th State-of-the-Art Arrhythmia Symposium
Saturday, September 7, 2019

[YOUR COMPANY] ♦ [REPRESENTATIVE'S NAME]
Package # _____ of _____

**Please do not ship any materials to the venue
before Friday, September 6, 2019**

Saturday, September 7, 2019

Payment Methods (check the one that applies):

Check

Make your check payable to the **Trustees of the University of Pennsylvania/CME** and return it with the completed exhibit agreement to the address below (Our Tax ID number is 23-1352685):

Crystal Mathis
Office of Continuing Medical & Interprofessional Education
Penn Medicine
150 Anatomy Chemistry Building, 3620 Hamilton Walk
Philadelphia, PA 19104-6061

Credit Card (**DO NOT INCLUDE CREDIT CARD INFORMATION ON THIS FORM**)

If paying by Credit Card, you may fax or email this completed form.

Fax: 215-898-1888 or Email: ycry@upenn.edu

You will then be contacted by Crystal Mathis to complete the transaction.

Contact Person: _____

Phone: _____

E-Mail: _____

Questions: [Elizabeth Butler](#): 215-898-6126 or [Crystal Mathis](#) or 215-746-8133

A wire transfer is also available for payment

Please contact Crystal Mathis at ycry@upenn.edu for further instructions

Terms & Conditions

Educational activities in the exhibit area which appear to compete with the scientific program and present research results that are being presented concurrently in the scientific program are prohibited. This includes, but is not limited to, displaying posters or other promotional materials summarizing research results, promoting meeting faculty, or distributing meeting materials such as syllabi, handouts, slides, or invitations.

The only activities which may be appropriate in exhibits are for the purpose of informing meeting participants about an organization and its products and services.

The distribution (either for free or for sale) of educational enduring materials on-site that award CME credit, including but not limited to full-text reprints or copies of articles or journal self-study programs, audiotapes, videotapes, or CD ROMs, is prohibited.

Exhibitor assumes entire responsibility for all claims, losses, costs, expenses, and damages to persons or property, as well as governmental charges or fines and attorney's fees arising out of or caused by Exhibitor's installation, removal, maintenance, occupancy, or use of the exhibition premises or a part thereof.

In addition, Exhibitor does not hold the meeting venue or the University of Pennsylvania responsible for maintaining insurance to cover Exhibitor's property.

By signing below, you agree to the terms and conditions of this agreement.

Authorized Exhibitor Representative

Date



Penn Medicine

Continuing Medical and
Interprofessional Education

The Mark E. Josephson Twenty-Seventh Annual

State-of-the-Art Arrhythmia Symposium

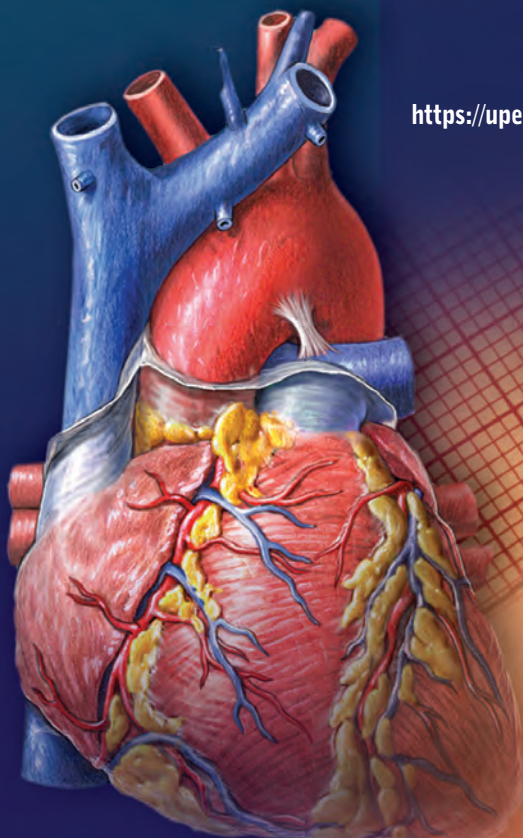
**Arrhythmia Diagnosis & Treatment Standards 2019
and Leonard N. Horowitz, MD
Memorial Lecture**

A CME/CNE-ACCREDITED SYMPOSIUM

Saturday, September 7, 2019


Hilton Philadelphia at Penn's Landing
201 South Christopher Columbus Blvd
Philadelphia, PA 19106

<https://upenn.cloud-cme.com/arrhythmia2019>



Co-sponsored with:





**The Department of Medicine, Division of Cardiology,
Electrophysiology Program**

At the University of Pennsylvania Health System

Presents

PROGRAM OVERVIEW & TARGET AUDIENCE

This program is designed to provide electrophysiologists, cardiologists, internists, and associated professionals with state-of-the-art information on invasive and non-invasive electrocardiographic and electrophysiologic tools used in the diagnosis, evaluation, and treatment of cardiac rhythm disorders. Attendees of the symposium will develop an understanding of the best practice approaches to diagnosing and treating patients with atrial fibrillation, other atrial and ventricular tachycardias, and risk factors of sudden death.

This symposium pays tribute to the scientific and clinical legacy of Dr. Mark E. Josephson who served as a mentor to many of the faculty.

The symposium is coupled with the Leonard N. Horowitz, MD Memorial Lecture. This annual lecture serves as an ongoing salute to a colleague and friend who dedicated his much too brief career successfully advancing the field of arrhythmia management.

Learning Objectives

Upon completion of this activity, participants should be able to:

- Describe the differences in the various oral anticoagulants including appropriate use, dosing, risks, and contraindications.
- Identify the value of risk factor modification to improve atrial fibrillation outcome.
- Explain use and value of new techniques and technologies employed for complex EP device and ablation cases.
- Discuss the use of genetic testing for patients and family members of patients with inherited arrhythmia syndromes.
- Review key changes in new arrhythmia and device management guidelines.
- Describe the monitoring techniques available for arrhythmia detection and appropriate patient selection.
- Discuss new pacing indications and techniques and ways to optimize device programming.
- Identify ECG clues to detect patients at risk for sudden death.
- Describe the complex interaction between patients with heart failure and arrhythmias and principles of treatment including ablation and device therapy.
- Explain the long term impact of atrial fibrillation on cognitive function.

The Mark E. Josephson Twenty-Seventh Annual State-of-the-Art Arrhythmia Symposium

Arrhythmia Diagnosis & Treatment Standards 2019
and Leonard N. Horowitz, MD Memorial Lecture

A CME/CNE-Accredited Symposium

SCIENCE

Saturday, September 7, 2019

Hilton Philadelphia at Penn's Landing
201 South Christopher Columbus Blvd.
Philadelphia, PA 19106
215-928-1234

Hosting Department

The Mark E. Josephson Twenty-Seventh Annual State-of-the-Art Arrhythmia Symposium is hosted by the Department of Medicine, Division of Cardiology, Electrophysiology Section, University of Pennsylvania Health System.

Accreditation



In support of improving patient care, Penn Medicine is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide

continuing education for the healthcare team.

Designation of Credit

Physicians: Penn Medicine designates this live activity for a maximum of 7.75 *AMA PRA Category 1 Credits*[™]. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nurses: This program provides 7.75 contact hours.

Physician Assistants: AAPA accepts certificates of participation for educational activities certified for *AMA PRA Category 1 Credit*[™] from organizations accredited by ACCME or a recognized state medical society. PAs may receive a maximum of 7.75 Category 1 credits for completing this activity.

Certificates and Transcripts: After the conference has concluded, all participants will receive a follow-up email with instructions and a link. Once participants submit the request for credit, the earned credits will be available for viewing on a transcript and certificates will be available for printing at <https://upenn.cloud-cme.com>. Please note that the individual certificate will not be mailed.

Registration Fees

The registration fees for *The Mark E. Josephson Twenty-Seventh Annual State-of-the-Art Arrhythmia Symposium* are \$120 for physicians and industry employees, \$100 for nurse practitioners, physician assistants, nurses and healthcare professionals, and \$65 for residents, fellows and retired physicians. Registration fees for Penn Medicine & affiliated employees are \$100 for physicians, \$65 for nurse practitioners, physician assistants, nurses and healthcare professionals and \$60 for residents, fellows and students. A valid Penn Medicine email address is required to receive the special rate.

The registration fee includes attendance to the symposium, a course booklet and a link to view the presentations online, credit certificate, continental breakfast, mid-morning and afternoon refreshments, lunch, post-symposium reception and garage-only parking at the Hilton Philadelphia at Penn's Landing.

If you are registering with a credit card, please register online at <https://upenn.cloud-cme.com/arrhythmia2019>. You must log-in with your Penn ID or your email and password or if you do not already have a profile, you must create one before you can register for an event. We cannot accept faxed or mailed registration forms with credit card information. To pay by check, complete the registration form and mail it in with your check. Please see the registration form for mailing information. Please note: mailed registrations can take up to 5-10 business days before they are received. All registrations will be confirmed by email as long as your registration is received no later than August 25, 2019.

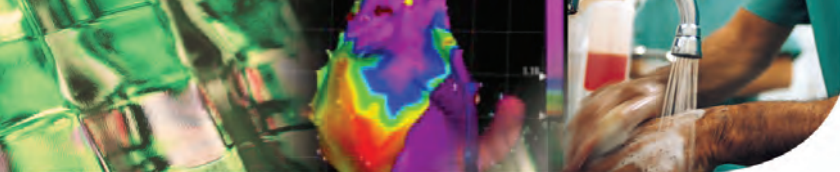
Cancellation and Refund Policy

In order to process refunds for course withdrawals, cancellations must be received in writing by August 25, 2019 (subject to a \$15 service charge). No refunds will be issued thereafter.

The University reserves the right to cancel or postpone any course due to unforeseen circumstances. In the event of cancellation or postponement, the University will refund registration fees but is not responsible for related costs or expenses to participants, including cancellation fees assessed by hotels, airlines, and travel agencies.

Services for the Disabled If special arrangements are required for an individual with a disability to attend this meeting, please contact the Office of Continuing Medical and Interprofessional Education no later than August 25, 2019, at 215-898-6400.

Nondiscrimination Statement The University of Pennsylvania values diversity and seeks talented students, faculty, and staff from diverse backgrounds. The University of Pennsylvania does not discriminate on the basis of race, sex, sexual orientation, gender identity, religion, color, national or ethnic origin, age, disability, or status as a Vietnam Era Veteran or disabled veteran in the administration of educational policies, programs or activities; admissions policies; scholarship and loan awards; athletic, or other University administered programs or employment. Questions or complaints regarding this policy should be directed to Executive Director, Office of Affirmative Action and Equal Opportunity Programs, 3600 Chestnut Street, Sansom Place East Suite 228, Philadelphia PA 19104-6106 or 215-898-6993 (Voice) or 215-898-7803 (TDD). www.upenn.edu/affirm-action.



Meeting Location and Parking

The Mark E. Josephson Twenty-Seventh Annual State-of-the-Art Arrhythmia Symposium will take place at the Hilton Philadelphia at Penn's Landing, 201 South Christopher Columbus Boulevard, Philadelphia, PA. The hotel's main number is 215-928-1234. If you need overnight reservations, please call 1-800-233-1234. Please visit the Hilton's website at www.pennslanding.hilton.com for directions and additional information.

The Hilton parking garage is located just past the hotel's main entrance. The parking fee is included in your registration fee. Your parking in the Hilton garage will be validated at the registration desk on the day of the conference.

For information on additional overnight accommodations or what to do or see while you're in Philadelphia, please go to www.gophila.com.

Disclosures

Penn Medicine, Office of Continuing Medical and Interprofessional Education, adheres to the ACCME *Standards for Commercial Support*. Faculty disclosure information will be made available in the conference materials and syllabus. Faculty members are also expected to disclose to participants any discussions of off-label and/or investigational uses of pharmaceutical products within their presentations.

Symposium Director

Francis Marchlinski, MD

*Richard T. and Angela Clark President's Distinguished Professor
Director, Cardiac Electrophysiology
Director, Electrophysiology Laboratory
University of Pennsylvania Health System
Philadelphia, PA*

Guest Faculty

Andrew Costin, MD

*Princeton Medical Group
University Medical Center at Princeton
Princeton, NJ*

Mariell Jessup, MD, FAHA

*Chief Science and Medical Officer
American Heart Association
Dallas, TX*

Stavros Mountantonakis, MD, MBA

*Professor of Cardiology
Director, Cardiac Electrophysiology
Fellowship Program
Lenox Hill Hospital
New York, NY*

Jonathan Piccini, MD, MHS

*Associate Professor of Medicine
Duke University Medical Center
Duke Clinical Research Institute
Durham, NC*

Faculty

All faculty are affiliated with the Perelman School of Medicine at the University of Pennsylvania Philadelphia, PA

Jeffrey Arkles, MD

*Assistant Professor of Medicine
Cardiac Electrophysiology*

Trevor Bonney, PA-C

*Physician Assistant
Cardiac Electrophysiology*

John Bullinga, MD

*Clinical Associate Professor of Medicine
Director, Cardiac Electrophysiology
Laboratory
Penn Presbyterian Medical Center*

David Callans, MD

*Professor of Medicine
Cardiac Electrophysiology*

Nancy Cash, DNP, CRNP

*Nurse Practitioner
Cardiac Electrophysiology*

Rajat Deo, MD

*Assistant Professor of Medicine
Cardiac Electrophysiology*

Sanjay Dixit, MD

*Professor of Medicine
Director, Electrophysiology Laboratory
Philadelphia VA Medical Center*

Andrew Epstein, MD

*Professor of Medicine
Chief, Cardiology Section
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Amanda Every, PA-C, MHS

*Physician Assistant
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*Assistant Professor of Medicine
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Fermin Garcia, MD

*Assistant Professor of Clinical Medicine
Director, Cardiac Electrophysiology
Laboratory
Pennsylvania Hospital*

Robert Hipp, PA-C, MS, MBA

*Physician Assistant
Cardiac Electrophysiology*

Matthew Hyman, MD, PhD

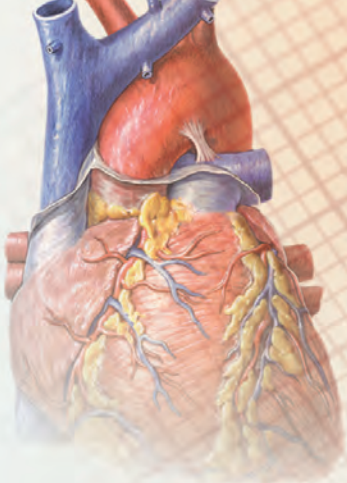
*Assistant Professor of Medicine
Cardiac Electrophysiology*

Ramanan Kumareswaran, MD

*Assistant Professor of Clinical Medicine
Cardiac Electrophysiology*

David Lin, MD

*Associate Professor of Medicine
Cardiac Electrophysiology*



Jeffrey Luebbert, MD

*Clinical Assistant Professor of Medicine
Pennsylvania Hospital*

Nina Mirachi, PA-C

*Physician Assistant
Cardiac Electrophysiology*

Tracey Munson, CRNP

*Nurse Practitioner
Cardiac Electrophysiology*

Saman Nazarian, MD, PhD

*Associate Professor of Medicine
Cardiac Electrophysiology*

Tara Parham, CRNP

*Nurse Practitioner
Cardiac Electrophysiology*

Allyson Prasad, CRNP

*Nurse Practitioner
Cardiac Electrophysiology*

Michael Riley, MD, PhD

*Assistant Professor of Clinical Medicine
Cardiac Electrophysiology*

Pasquale Santangeli, MD, PhD

*Assistant Professor of Medicine
Cardiac Electrophysiology*

Robert Schaller, DO

*Assistant Professor of Clinical Medicine
Cardiac Electrophysiology*

Gregory Supple, MD

*Assistant Professor of Clinical Medicine
Co-Director, Electrophysiology
Fellowship Program*

Cory Tschabrunn, PhD

*Director, Translational
Electrophysiology Program*

Christian Yacono, PA-C, CCDS

*Physician Assistant
Cardiac Electrophysiology*

Erica Zado, PA-C, FHRS

*Physician Assistant
Cardiac Electrophysiology*

The Mark E. Josephson Twenty-Seventh Annual State-of-the-Art Arrhythmia Symposium

Saturday, September 7, 2019

AGENDA

7:15 – 7:45 AM

Registration and Continental Breakfast

General Cardiology

Morning Session – 7:45 – 10:50 AM

Moderator: Francis Marchlinski, MD

7:45 – 7:50 AM

Welcome & Introduction

Francis Marchlinski, MD

7:50 – 8:15 AM

Josephson Keynote ECG Lecture

EP-ECG Emergencies: “Burn it in Your Brain”

Andrew Epstein, MD

- Phase 4 infranodal block
- Identifying BBB in the setting of acute MI
- Hyperkalemia
- ECG markers for sudden death risk
- Idiopathic VF triggers

8:15 – 8:50 AM

AF Burden and Cardiovascular Outcomes

Jonathan Piccini, MD, MHS

- 30 seconds of AF to assess ablation efficacy
- 5 minutes, 4 hours, 24 hours – what is too long?
- Burden associated with stroke and heart failure risk
- Best techniques for assessing burden

8:50 – 9:20 AM

Defining Arrhythmia Risk in “Low Risk” Patients

Saman Nazarian, MD, PhD

- Recognizing subtle ECG clues
- Use of imaging
- Role of exercise testing
- Monitoring clues

9:20 – 10:00 AM

Challenging Cases: Improving Management

of Patients with Ventricular Arrhythmias:

Drugs, Devices, Ablation

Moderator: Francis Marchlinski, MD

Panel: Mariell Jessup, MD, Gregory Supple, MD, Robert Schaller, DO, David Callans, MD, Andrew Costin, MD

- When to ablate frequent asymptomatic PVCs
- Amiodarone for sustained ventricular arrhythmias
- Role of LVAD/transplant for ventricular arrhythmias
- Selecting subcutaneous versus transvenous ICD

10:00 – 10:25 AM

Risk Factors for Afib –

Evidence to Support Preventive Therapy

Sanjay Dixit, MD

- Risk factors
- Physiology and pathophysiology for increase in Afib
- Evidence to support the benefit of risk reduction
- Penn AF Care Program

10:25 – 10:50 AM

Improving Cardiac Function with Device Therapy and Ablation

Robert Schaller, DO

- His bundle pacing
- BiV device strategies – what is new?
- Reversal of PVC and Afib induced cardiomyopathy

10:50 – 11:00 Break

11:00 AM – 12:00 PM

Leonard N. Horowitz, MD

Memorial Lecture

Bridging the Gap Between Scientific

Investigation and Clinical Care:

Important Considerations

Mariell Jessup, MD

12:00 – 1:00 PM Lunch

General Cardiology

Afternoon Session – 1:00 – 2:40 PM

Moderator: David Frankel, MD

1:00 – 1:25 PM

Atrial Fibrillation Ablation: Who, How, Expected Results and Special Considerations

Francis Marchlinski, MD

- Current indications
- PV isolation – making it stick
- What to do beyond pulmonary vein isolation in persistent AF
- AF ablation and mitral regurgitation/heart failure

1:25 – 1:50 PM

Catheter Ablation of AF –

Impact on Neurologic Function

Jonathan Piccini, MD, MHS

- AF and dementia – what is the evidence for a link?
- Stroke reduction with ablation

1:50 – 2:35 PM

Anticoagulation Challenges in Arrhythmia

Management: Case Based Presentation/

Audience Participation:

Moderator: David Frankel, MD

Panel Members: Jonathan Piccini, MD, MHS, Mariell Jessup, MD, Andrew Costin, MD, Pasquale Santangeli, MD, PhD, John Bullinga, MD

- Recognizing and preventing stroke with apical aneurysm
- Indications for LAA occlusion device
- Anticoagulation at time of device implant or ablation
- Role of “as needed” anticoagulation in lower risk patients
- Picking best OAC: considerations

2:35 – 3:00 PM

Role of Genetic Testing in Arrhythmias Disorders

Rajat Deo, MD

- How genetic diagnoses influence arrhythmia management
- Atrial scar as a marker for cardiomyopathy
- What to do with family members

3:00 – 3:20 PM Break

General Cardiology

Afternoon Session – 3:00 – 5:00 PM

Moderator: David Callans, MD

3:20 – 3:50 PM

Cardiac Monitoring: From Simple to Complex – Present and Future

David Lin, MD

- Role of Holter, ECG patch monitor, MCOT
- When to implant loop recorder?
- Importance/accuracy of pulse assessment
- Any role for the Apple watch and other “wearables”?

3:50 – 4:20 PM

Six Most Common Mistakes Made in Arrhythmia

Management: How to Recognize and Avoid

David Frankel, MD

- Calling coarse Afib, atrial flutter
- Under-recognizing the role of Afib/VPDs in cardiomyopathy
- Failing to prevent inappropriate ICD shocks
- Ignoring risk of recurrent VT at time of LVAD implantation

4:20 – 5:00 PM

Management of Syncope:

Case Based Presentations

Moderator: David Callans, MD

Panel Members: Michael Riley, MD, PhD, Gregory Supple, MD, Matthew Hyman, MD, PhD

Sanjay Dixit, MD, Jeffrey Luebbert, MD

- Syncope in the athlete
- Non-arrhythmic considerations
- When to implant a monitoring device
- Some important ECG clues
- What you can learn in the EP lab?

Advanced EP

Afternoon Session – 1:00 – 2:45 PM

Moderator: Michael Riley, MD, PhD

1:00 – 1:45 PM

Papillary Muscle Localization and Ablation

Gregory Supple, MD

- Role of imaging
- Role of detailed activation and pace mapping
- When to freeze
- Is it ever a good idea to isolate the papillary muscle?

1:45 – 2:15 PM

Septal Venous Mapping for Focal and Scar Related Arrhythmias: Tools and Tricks

Fermin Garcia, MD

- Defining the venous anatomy
- Tools of the trade
- Identifying abnormal signals
- Targeting adjacent endo versus intravenous alcohol ablation

2:15 – 2:45 PM

Atrial Tachycardias Post AF Ablation:

Localization and Ablation

Pasquale Santangeli MD, PhD

- Activation mapping with small electrodes
- Role of entrainment mapping
- Best lines to draw and how to show efficacy
- Epicardial bundles – how to diagnose and treat?

2:45 – 3:05 PM Break

Advanced EP

Afternoon Session – 3:05 – 5:00 PM

Moderator: Francis Marchlinski, MD

3:05 – 3:30 PM

Use of Entrainment in Diagnosis and

Localization of SVT and VT

Ramanan Kumareswaran, MD

- Appropriate techniques
- Diagnosis of mechanism
- Return cycle mapping: power and pitfalls

3:30 – 4:00 PM

Implications of CABANA for Practice

and Future Clinical Trials

Jonathan Piccini, MD, MHS

- Intention-to-treat versus on-treatment analysis
- Practitioner versus trialist points of view
- Is it enough to improve quality of life and eliminate AF?
- The dangers of subgroup and post hoc analysis

4:00 – 4:25 PM

Six Most Common Mistakes Made in

Device Management and Follow-up

Robert Schaller, DO

- Best venous access site and what techniques to avoid
- Avoiding LA or endo LV placement
- Minimizing risk of perforation
- Other tricks of the trade

4:25 – 5:00 PM

Rapid Fire New Technology/Techniques

Panel Members: Stavros Mountantonakis, MD

Pasquale Santangeli, MD, PhD, Cory Tschabrunn, PhD

Jeffrey Arkles, MD

- Protecting the esophagus
- Making more effective/safer ablation lesions
- Radiotherapy to treat VT
- Q & A (5-minute panel discussion)

Associated Professional

Afternoon Breakout Session – 1:00 – 3:00 PM

Moderator – Robert Hipp, PA-C, MS, MBA

1:00 – 1:40 PM

Selecting Appropriate Device Therapy:

Case Based Tutorial

Christian Yacono, PA-C, CCDS

- Pacemaker or implantable defibrillator?
- Single chamber, dual chamber or cardiac resynchronization
- Transvenous vs subcutaneous ICD
- Indications for leadless pacemaker

1:40 – 2:15 PM

Recognition and Treatment of EP Emergencies

Nina Mirachi, PA-C

- VT/VF storm
- Device malfunction
- Post procedure complications

2:15 – 2:55 PM

Device and Lead Extraction

Jeffrey Arkles, MD

- Indications
- Considerations and alternatives
- Complications including mortality risk
- Timing of device reimplant

2:55 – 3:15 PM Break

Associated Professional

Afternoon Breakout Session – 3:15 – 5:00 PM

Moderator – Nancy Cash, DNP, CRNP

3:15 – 3:55 PM

Anticoagulation for EP Procedures

Tara Parham, CRNP

- EP procedures that require systemic anticoagulation
- What to do with oral anticoagulants around the time of EP procedures
- Reversal of anticoagulation in emergencies

3:55 – 5:00 PM

EP Jeopardy

Moderator: Erica Zado PA-C, FHRS

Panel Members: Trevor Bonney, PA-C

Allyson Prasad, CRNP, Amanda Every, PA-C

Tracey Munson, CRNP

- Inherited arrhythmia disorders
- Tachy and brady arrhythmias
- Commonly used tools and scores
- Remote monitors, wearables and personal monitors

5:00 PM Adjourn

5:00 – 6:00 PM Reception

**The Mark E. Josephson Twenty-Seventh Annual
State-of-the-Art Arrhythmia Symposium**
**Arrhythmia Diagnosis and Treatment Standards 2019 and
Leonard N. Horowitz, MD Memorial Lecture**
Saturday, September 7, 2019

If you are registering using your credit card, please register online at:
<https://upenn.cloud-cme.com/arrhythmia2019>

Questions? Contact us at:

Phone: 215-898-6400 or 215-898-8005 • penncme@pennmedicine.upenn.edu

Please note we are unable to accept faxed registration forms.

PLEASE PRINT OR TYPE

Name (First) _____ (Last) _____

Academic Degree _____

Medical Specialty _____

Affiliation (Hospital, Office, or Company) _____

Address (affiliation home) _____

City _____ State _____ Zip _____

Phone _____ Fax _____

E-mail _____

Breakout Session Preference (Please Check One)

General Cardiology Associated Professionals Advanced EP

Registration Fees

(pre-payment is required to be officially registered)

\$120 Physicians or Industry

\$100 Nurses or Healthcare Professionals

\$65 Residents, Fellows, Students and Retired Physicians

\$100 Penn Medicine Physicians

\$65 Penn Medicine Nurses or Healthcare Professionals

\$60 Penn Medicine Residents, Fellows & Students

Payment Method

- If you are paying by credit card, please register online at
<https://upenn.cloud-cme.com/arrhythmia2019>
- If you are paying by check, you may mail your completed registration form and check, made payable to **The Trustees of the University of Pennsylvania/CME**, to:
Conference Coordinator, Penn Medicine, Office of Continuing Medical and Interprofessional Education, 150 Anatomy/Chemistry Building,
3620 Hamilton Walk, Philadelphia, PA 19104-6061
- Do not include any credit card information on the registration form or email any credit card information

Please Note: Walk-in registrants must bring payment to the program.



150 Anatomy/Chemistry Building
3620 Hamilton Walk
Philadelphia, PA 19104-6061
PHONE: 215-898-9800

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**The Mark E. Josephson Twenty-Seventh Annual
State-of-the-Art Arrhythmia Symposium**
ARRHYTHMIA DIAGNOSIS AND TREATMENT STANDARDS 2019

A CME/CNE-Accredited Symposium

Saturday, September 7, 2019

Hilton Philadelphia at Penn's Landing
201 S. Christopher Columbus Blvd.
Philadelphia, PA 19106