

Continuing Medical Education



Perelman
School of Medicine
UNIVERSITY of PENNSYLVANIA

Twenty Second Annual State-of-the-Art Arrhythmia Symposium

**Arrhythmia Diagnosis & Treatment Standards 2014
and Leonard N. Horowitz, MD
Memorial Lecture**

A CME-CERTIFIED COURSE

Saturday, September 13, 2014

Hyatt Regency Philadelphia
at Penn's Landing

201 South Christopher Columbus Blvd
Philadelphia, PA 19106

In Conjunction with
Hospital of the University of Pennsylvania
Department of Nursing Education
Innovation and Professional Development

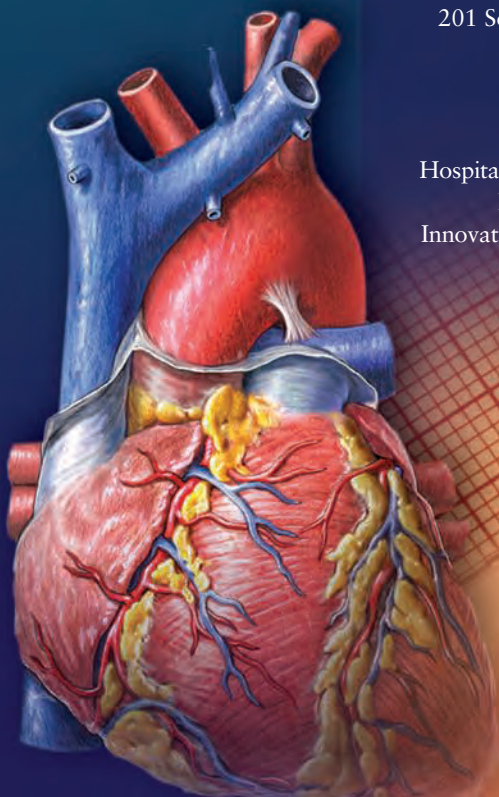
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**The Department of Medicine, Division of Cardiology,
Electrophysiology Program
At the University of Pennsylvania Health System
*Presents***

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 for sudden death.

Learning Objectives

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

- Discuss role of ablation for patients with atrial fibrillation including current guidelines and expected outcomes
- Describe the evaluation and treatment of syncope
- Recognize common complications associated with electrophysiologic procedures and initiate treatment
- Review the role of anticoagulation in arrhythmia patients
- Describe new techniques and technologies used during complex EP device and ablation cases
- Identify patients with inherited channelopathies such as long QT and Brugada syndromes
- Review types and use of various cardiac monitors

Hosting Department

The *Twenty Second 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

Physicians: The Perelman School of Medicine at the University of Pennsylvania is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

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Philadelphia, PA 19106
215-928-1234

AUDIENCE

Nurses: The Hospital of the University of Pennsylvania, Department of Nursing Education, Innovation and Professional Development is an approved provider of continuing nursing education by the PA State Nurses Association, and an accredited approver by the American Nurses Credentialing Center's Commission on Accreditation.

Designation of Credit

Physicians: The Perelman School of Medicine at the University of Pennsylvania designates this live activity for a maximum of 7.25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Nurses: Hospital of the University of Pennsylvania, Department of Nursing Education, Innovation and Professional Development awards this activity 7.25 contact hours.

Certificates and Transcripts: A few days prior to the symposium, pre-registered participants will receive an email containing directions, additional symposium information and a link to the symposium pre-test, which is an anonymous, short questionnaire that will be used to gauge participant knowledge. After the symposium has concluded, all participants will receive a follow-up email containing a link to the post-test, symposium evaluation and request for credit (please note that certificates are not automatically issued). Once participants submit the request for credit, the credit can be viewed on a transcript by logging onto www.pennmcmeonline.com two weeks after the symposium. Additionally, a certificate will be mailed via the US postal service 4-6 weeks after the symposium has concluded.

Registration Fees

The registration fees for the *Twenty Second Annual State-of-the-Art Arrhythmia Symposium* are \$120 for physicians and industry employees, \$100 for nurses and healthcare professionals, and \$65 for residents, fellows and retired physicians. Penn Medicine employees, faculty, staff and students will receive special course rates of \$100 for physicians, \$65 for nurses, healthcare professionals, residents and fellows and \$60 for students. A valid Penn Medicine ID 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, continental breakfast, mid-morning and afternoon refreshments, lunch, post-symposium reception and garage-only parking at the Hyatt Regency Philadelphia at Penn's Landing.

You may register online for the course by visiting www.pennmcmeonline.com and click on CME Activities. You may also mail or fax your completed registration form and payment. Please see the top of the registration form for mailing and faxing information. All registrations will be confirmed in writing if your registration form and fee are received by August 29, 2014.

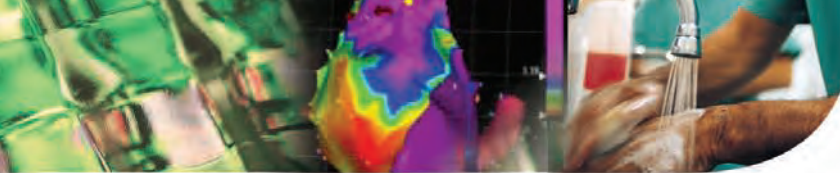
Cancellation and Refund Policy

In order to process refunds for course withdrawals, cancellations must be received in writing by August 29, 2014 (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 Education no later than August 29, 2014, 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 *Twenty Second Annual State-of-the-Art Arrhythmia Symposium* will take place at the Hyatt Regency 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 Hyatt's website at www.pennslanding.hyatt.com for directions and additional information.

The Hyatt parking garage is located just past the hotel's main entrance. The parking fee is included in your registration fee. Your parking in the Hyatt 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

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

Course Director

Francis Marchlinski, MD

*Professor of Medicine
Director, Cardiac Electrophysiology
University of Pennsylvania
Health System
Philadelphia, PA*

Guest Faculty

David Birnie, MD

*Director, Arrhythmia Service
University of Ottawa Heart Institute
Department of Medicine
University of Ottawa
Ottawa, Canada*

Jeremy Ruskin, MD

*Director Cardiac Arrhythmia Service
Massachusetts General Hospital
Boston, MA*

Maully J. Shah, MD

*Associate Professor of Pediatrics
Perelman School of Medicine
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Philadelphia, PA*

Cory Tschabrunn, CEPS

*Research Associate
Harvard Medical School
Harvard-Thorndike Electrophysiology
Institute Beth Israel Deaconess
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Boston, MA*

Faculty

All faculty are affiliated with the
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David Callans, MD

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Kurt Schillinger, MD, PhD

*Fellow
Cardiac Electrophysiology*

Gregory Supple, MD

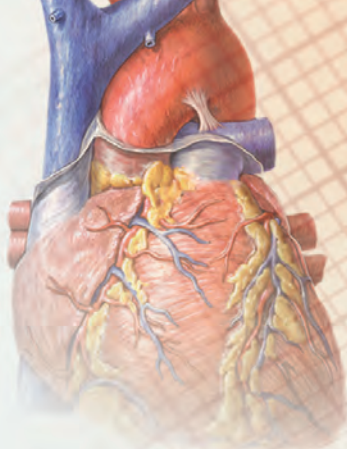
*Assistant Professor of Clinical Medicine
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Erica Zado, PA-C

*Physician Assistant
Clinical Cardiac Electrophysiology*

Susan Zimmerman, CRNP

*Nurse Practitioner
Cardiac Electrophysiology*



Twenty First Annual State-of-the-Art Arrhythmia Symposium
Saturday, September 13, 2014

AGENDA

7:15 – 7:45 AM
Registration and Continental Breakfast

**General Cardiology
Morning Session – 7:45 – 11:00 AM**
Moderator: Francis Marchlinski, MD

Welcome & Introduction
Francis Marchlinski, MD

8:00 – 8:20 AM
**PVCs and Nonsustained VT –
When to worry?, How to Treat?**
Francis Marchlinski, MD

- Common symptoms with PVCs
- Reversible cardiomyopathy – identifying risk
- Common anatomic targets
- PVC triggered VF

8:25 – 8:50 AM
**The Working Man's Guide to ICD and
CRT Indications: Making Sense Out of
the Various Guidelines**
Andrew Epstein, MD

- What is the basis for the new criteria for LBBB & QRS duration?
- Basis for the waiting period after MI
- Basis for the waiting period after the diagnosis of heart failure
- Reconciling the various guidelines, appropriate use criteria and other recommendations with what Medicare pays, and what you want to do

8:55 – 9:15 AM
**Anticoagulation Management in
Arrhythmia Patients**
David Callans, MD

- When to start and stop anticoagulation in AF patient
- Thrombus on device /leads
- Anticoagulation during and after AF ablation
- OAT and other anticoagulation trials

9:20 – 10:00 AM
**Case Presentation/Audience Participation:
Recognition and Management of Inherited
Arrhythmia Syndromes**
Moderator: Francis Marchlinski, MD
Panel: Sanjay Dixit, MD, David Birnie, MD, David Lin, MD, Jeremy Ruskin, MD, Maully Shah, MD

- Brugada Syndrome
- Catecholaminergic polymorphic VT
- Long QT syndrome
- Wolff-Parkinson-White syndrome
- Role of genetic testing, EP testing
- Special considerations in children

10:00 – 10:25 AM
Syncope – When to be Concerned
David Birnie, MD

- Appropriate monitoring
- When to do EP testing
- Role of tilt table testing
- ECG or imaging markers of risk

10:30 – 11:00 AM
Break/Visit Exhibits

11:00 – 11:50 AM
Leonard N. Horowitz, MD
Memorial Lecture
**Atrial Fibrillation –
Mechanistic Insights and Future
Directions in Therapy**
Jeremy Ruskin, MD

12:00 – 1:00 PM Lunch
**General Cardiology
Afternoon Session – 1:00 – 3:00 PM**
Moderator: David Callans, MD

1:00 – 1:30 PM
**Advanced Device Therapy for Severe Arrhythmia
Related Heart Disease: Important Considerations**
Fermin Garcia, MD

- Left atrial appendage occlusion devices
- LVADs: Dealing with proarrhythmia
- Renal artery denervation
- Future considerations

1:35 – 1:55 PM
**Stroke and Dementia:
Why the EP Doctor May Need to be Involved**
Mathew Hutchinson, MD

- Mechanisms and prevalence of AF related stroke
- The importance of asymptomatic AF
- Optimal monitoring strategies to detect AF
- Timing of anticoagulation: AF duration of clinical phenotype

2:00 – 2:45 PM
**Case Presentation/Audience Participation:
Management of AF With Ablation**
Moderator: David Callans, MD
Panel: Jeremy Ruskin, MD, David Lin, MD, Fermin Garcia, MD, Harold Litt, MD,

- What are expected outcomes for paroxysmal and persistent AF
- Techniques to avoid common complications
- Is it worthwhile repeating ablation?
- The role of imaging during ablation procedures; can we identify patients who will not benefit from ablation?

2:45 – 3:05 PM Break
**General Cardiology
Afternoon Session – 3:00 – 5:00 PM**
Moderator: Michael Riley, MD, PhD

3:05 – 3:30 PM
**Exercise and Exercise Testing in Patients
With Arrhythmias**
Gregory Supple, MD

- Role of exercise testing to evaluate arrhythmias
- Common arrhythmias with exercise
- Exercise in patients with long QT syndrome
- Exercise recommendations in patients with prior infarction
- Can exercise really make RV or LV function worse?

3:35 – 4:00 PM
**Current Status of Novel Anticoagulants
for Stroke Prevention in 2014**
David Frankel, MD

- RE-LY, ROCKET-AF and ARISTOTLE Trials
- When and how to switch from warfarin?
- When is warfarin the preferred agent?
- Clinical considerations around the time of surgery
- Status of reversal agents

4:05 – 5:00 PM
**Case Presentation/Audience Participation:
Challenges and Controversies in Arrhythmia
Management and Diagnosis**
Moderator: Michael Riley, MD, PhD
Panel: Andrew Epstein, MD, Rupa Bala, MD, Sanjay Dixit, MD, David Lin, MD, Jeffrey Luebbert, MD

- Atrial fibrillation and mitral valve dysfunction
- Rate control during AF: best target
- Atrial flutter ablation-when to consider concomitant AF ablation
- Newly diagnosed cardiomyopathy-timing of primary prevention ICD
- Wide QRS and persistent LV dysfunction: what to do with borderline cases

**Associated Professional
Afternoon Breakout Session
1:00 – 3:00 PM**
Moderator – Karen Crisfulla, MS, CNS

1:00 – 1:45 PM
Ablation Made Simple
Cory Tschabrunn, CEPS

- How to get your patients into and out of the lab safely
- Interpreting the doctor's note and EP report
- Risks and expected success rates
- Imaging-what those pictures mean

1:50 – 2:40 PM
Remote Monitoring of Devices
Erica Zado, PA-C

- Managing the piles of data
- Electrogram analysis made simple
- Device troubleshooting from afar
- Reimbursement and legal issues

2:45 – 3:05 PM Break
**Associated Professional
Afternoon Breakout Session
3:00 – 5:00 PM**
Moderator – Susan Zimmerman, CRNP

3:05 – 3:50 PM
Selecting Appropriate ECG Monitoring
Allyson Prasad, CRNP

- When initiating drug therapy
- With intermittent arrhythmia events
- When is a Holter monitor still of value?
- Types of monitors available – choosing what is best for your patient

3:55 – 5:00 PM
**Challenges in Pre/post Procedure Management –
Cases/Audience Participation**
Nancy Cash, DNP, CRNP, Katie Rettler, CRNP, Tara Parham, CRNP, Tracey Munson, PA-C

- Anticoagulation management pre and post procedures
- Arrhythmias post ablation-when to worry
- Pain management
- Monitoring for and dealing with complications
- When to call in other specialists (heart failure, pulmonary, sleep medicine)
- Indications and use of wearable defibrillator

**Advanced EP
Afternoon Session – 1:00 – 5:00 PM**
Moderator: Francis Marchlinski, MD

1:00 – 1:45 PM
**Dealing with Family Members
of Sudden Death Victims**
Panel: David Birnie, MD, Jeremy Ruskin, MD, Rajat Deo, MD, Maully Shah, MD

- Genetic autopsy
- Routine ECG screening
- Creating a regional or national policy
- Standards developed in other countries

1:45 – 2:10 PM
Cardiac Sarcoidosis in Electrophysiology
David Birnie, MD

- Appropriate imaging and diagnostic testing
- Use/timing of immunosuppression
- Who gets an ICD?
- Considerations for VT ablation: success rate, expected substrate

2:15 – 2:40 PM
**Mapping the Substrate in Atrial Fibrillation–
Is there a Method in the Madness?**
Kurt Schillinger, MD, PhD

- What are rotors and are they important?
- Does targeting rotors for ablation make a difference?
- The Penn experience with rotor mapping
- Future considerations

2:45 – 3:05 PM Break

3:05 – 3:40 PM
Epicardial VT Ablation: Optimal Timing and Techniques
Mathew Hutchinson, MD

- First line strategy or after a failed procedure?
- How to approach the patient with difficult access
- Common pitfalls in epicardial mapping

3:45 – 4:20 PM
Recalled Leads: Current Guidelines/Recommendations
Robert Schaller, DO

- Lessons learned from the past
- Fidelis, Riata, and beyond
- So what do we do now?

4:25 – 4:55 PM
**How to Deal with Difficult CS Lead Implant:
Common Challenges**
Fermin Garcia, MD

- Anatomic variations that make life difficult
- Use of sheaths, dilators, and other special tools
- Options when you fail

5:00 – 6:00 PM Reception

6:00 PM Adjourn

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and click on **CME Activities**

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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

☐ \$100 Penn Medicine Physicians

☐ \$65 Residents and Fellows (Penn and Non-Penn)

☐ \$65 Retired Physicians

☐ \$65 Penn Medicine Nurses or Healthcare Professionals

☐ \$60 Penn Medicine Students

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*Please Note: Walk-in registrants must bring payment to the program.
Seating may be limited for walk-in registrants.*

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ARRHYTHMIA DIAGNOSIS AND TREATMENT STANDARDS 2014
A CME-certified Course

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