



Division of Cardiovascular Diseases

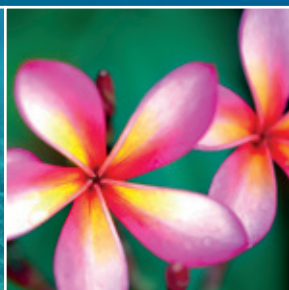
*23rd Annual Mayo Clinic*

# Arrhythmias & the Heart

## A Cardiovascular Update

*February 1-5, 2016*

**Fairmont Kea Lani on Maui**  
**Wailea, Hawaii**



Course Directors:

*Douglas L. Packer, M.D.*

*Paul A. Friedman, M.D.*

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[celinks.mayo.edu/hicardiacupdate](http://celinks.mayo.edu/hicardiacupdate)

REGISTER ONLINE TODAY!

## Course Description

The Arrhythmias and the Heart: A Cardiovascular Update will highlight topics in cardiology that are important for any practice that includes patients with heart disease or risk factors. We will provide comprehensive updates on diagnosis, treatment, and management of cardiac conditions with a special emphasis on common arrhythmia problems and on areas with recent dramatic advances. This course will provide practical and concise reviews on how to incorporate the newest evidence to best practice cardiovascular medicine. Lectures and discussion will review optimal patient management, with case-based presentations and panel discussion sessions to provide interaction between the faculty and attendees. Special audience voting-based sessions will provide core skills practice, such as ECG interpretation. Mayo Clinic and guest faculty will share “pearls” to aid in the evaluation and assessment of patients with commonly seen cardiovascular diseases.

### Program topics to include:

- Atrial Fibrillation: Drugs, Ablation, Stroke Prevention, New Drugs, and Closure Devices
- ECG Pearls for Clinical Practice
- Heart Failure Update: Drugs, Devices, and Remote Monitoring
- Long QT Syndrome
- Ventricular Arrhythmias and Sudden Cardiac Death
- Coronary Artery Disease – Risk Factor Management and Treatment of MI
- Cardiac Resynchronization

## Special Evening Session and Dinner

**Living to 100 – John D. Day, M.D.**

**Tuesday, February 2, 2016**

**Dinner & Lecture: 6:00-8:00 p.m.**

**Meeting Participant - Complimentary**

**Guest(s) - \$60 per person**

*Additional fees apply, no refunds.*

John D. Day, M.D., specializes in heart rhythm disorders at the Intermountain Medical Center Heart Institute. He is the president of the Heart Rhythm Society and is the Editor-In-Chief of the Journal of Innovations in Cardiac Rhythm Management. He has published over 100 medical articles and has an upcoming book entitled, “The Longevity Plan: Lessons Learned from China’s Longevity Village on How to Lose Weight, Feel Great, and Live Healthy to 110.”

This evening session provides an opportunity to meet participants, guests, and faculty. The presentation will provide information for quality of life improvements for both the professional and patient. Dinner will be served at 6:00 p.m. followed by the lecture at 7:30 p.m. *Pre-registration is required for the event. Sign-up at the time of registration.*

## Course Learning Objectives

**Upon conclusion of this program, participants should be able to:**

- Describe the current status of stroke prevention options in atrial fibrillation;
- Demonstrate appropriate use of medications and cardiac resynchronization therapy for heart failure;
- Review the role of new treatments for heart failure including LVADs and transplantation;
- Describe cardiovascular risk factors, current guidelines, and new strategies for prevention of cardiovascular disease.

Attendance at this Mayo course does not indicate nor guarantee competence or proficiency in the performance of any procedures which may be discussed or taught in this course.

## Intended Audience

The symposium is designed for cardiologists, internists, family practitioners, physician’s assistants and cardiovascular nurse practitioners and specialists caring for patients with cardiovascular disease.

# Credit

Mayo Clinic College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Mayo Clinic College of Medicine designates this live activity for a maximum of 24.25 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

**Other Health Care Professionals** – A certificate of attendance will be provided to other health care professionals for requesting credits in accordance with state nursing boards, specialty societies, or other professional associations.

Attendees should ensure in advance that their credentialing or licensing organization accepts CME credits from the sponsor of this activity.

# Date and Location

*Arrhythmias & the Heart* will be held **February 1-5, 2016**. The program will be held in the Grand Ballroom of the Fairmont Kea Lani on Maui, Wailea, Hawaii.

You may wish to visit [www.gohawaii.com/maui](http://www.gohawaii.com/maui) for area information.

# Lodging Accommodations



Guestrooms have been reserved for attendees and their guests with special course rates at the Fairmont Kea Lani. To ensure accommodations and the discounted rate, *please make your reservations before the room block is filled or before **Wednesday, December 30, 2015***. Please identify yourself as a participant of the Mayo Arrhythmias & the Heart meeting.

**The Fairmont Kea Lani, Maui**  
400 Wailea Alanui Drive  
Wailea, Maui, Hawaii 96753



**Telephone:** 1-800-659-4100  
**Online Hotel Reservation:**  
<https://resweb.passkey.com/go/mcarrhythh>  
(Reservations can be modified or canceled by individuals online.)

| Room Category             | Rate (Single/Double) |
|---------------------------|----------------------|
| Fairmont Suites           | \$325                |
| Partial Ocean View Suites | \$395                |
| Ocean View Suites         | \$455                |

For specialty suites and villas please contact a reservation agent at 866-532-5264.  
For information on the Fairmont Kea Lani visit: <http://www.fairmont.com/kea-lani-maui>

Reservations will be guaranteed upon receipt of two nights deposit. All rates are per night and additional standard fees apply: state and local taxes. All other gratuities are at the discretion of the guest. The room rate is in effect three days pre and post program. The hotel room block is scheduled to be held until December 30, 2015, but may be sold out before this date. Therefore, we advise you to register for the program and reserve your lodging as soon as possible. Please be sure to ask about any additional resort fees, early departure fees, or cancellation penalties. Room type is not guaranteed on the group reservations. We do our absolute best to accommodate guest requests based on availability. Cancellations of individual reservations made up to 14 days prior to arrival will be accepted and the deposit refunded for those rooms for the full nights stay. *Lodging arrangements are the sole responsibility of the individual registrant.*

Mayo Clinic CV CME is not responsible for expenses incurred by an individual who is not confirmed and for whom space is not available at the meeting. Costs incurred by the registrant such as airline or hotel fees or penalties are the responsibility of the registrant.

# Parking

The cost for parking is not included in the registration fee. Self-parking is available on a complimentary basis.

## Travel

Travel arrangements for air travel may be made for the following airport:  
Kahului Airport (OGG)

A number of Airlines offer non-stop flights to/from Los Angeles and San Francisco. Hawaiian Airlines and Aloha Airlines serve Maui with frequent inter-island flights from Honolulu.

Access to and from the airport is available via rental car or taxi or limousine service. To really experience all that Maui has to offer you should consider renting a car.

The Kahului Airport (OGG) is located 17 miles (27 km) from The Fairmont Kea Lani, Maui hotel. Travel time is approximately 30 minutes.

*Travel arrangements are the sole responsibility of the individual registrant.*

## Electronic Syllabus

The symposium syllabus (presentations in PDF form) will be provided to registrants on the registration web site. Attendees should have log-in information available to access information. The materials will be available during and after the program (6 months). Attendees are encouraged to bring a laptop and/or electronic tablet to the program to view the materials. Attendees should be familiar with using their device prior to accessing materials.

## Faculty

### Course Directors

*Douglas L. Packer, M.D.*

Division of Cardiovascular Diseases  
Mayo Clinic, Rochester, MN

*Paul A. Friedman, M.D.*

Division of Cardiovascular Diseases  
Mayo Clinic, Rochester, MN

### Mayo Faculty

*Michael J. Ackerman, M.D., Ph.D.*

*Samuel J. Asirvatham, M.D.*

*Barry A. Borlaug, M.D.*

*Rajiv Gulati, M.D., Ph.D.*

*Stephen C. Hammill, M.D.*

*David R. Holmes, Jr., M.D.*

*Suraj Kapa, M.D.*

*Fred Kusumoto, M.D.*

*Robert D. McBane, M.D.*

*Thomas M. Munger, M.D.*

*Margaret M. Redfield, M.D.*

*Guy S. Reeder, M.D.*

*Hartzell V. Schaff, M.D.*

*Win-Kuang Shen, M.D.*

*Virend K. Somers, M.D., Ph.D.*

*R. Scott Wright, M.D.*

### Guest Faculty

*John D. Day, M.D.*

Intermountain Healthcare, Murray, UT

*Roy S. Small, M.D.*

The Heart Group of Lancaster General  
Health, Lancaster, PA

*William G. Stevenson, M.D.*

Brigham and Women's Hospital,  
Boston, MA

*Lynne W. Stevenson, M.D.*

Brigham and Women's Hospital,  
Boston, MA

*Sabrina D. Phillips, M.D.*

Oklahoma University College of  
Medicine, Oklahoma City, OK

## Faculty Disclosure

As a provider accredited by ACCME, Mayo Clinic College of Medicine (Mayo School of Continuous Professional Development) must ensure balance, independence, objectivity and scientific rigor in its educational activities. Course director(s), planning committee, faculty, and all others who are in a position to control the content of this educational activity are required to disclose all relevant financial relationships with any commercial interest related to the subject matter of the educational activity. Safeguards against commercial bias have been put in place. Faculty also will disclose any off-label and/or investigational use of pharmaceuticals or instruments discussed in their presentation. Disclosure of this information will be published in course materials so those participants in the activity may formulate their own judgments regarding the presentation.

## National Physician Payment Transparency Program

Mayo Clinic College of Medicine complies with the requirements of the National Physician Payment Transparency Program OPEN PAYMENTS (Physician Payments Sunshine Act).

# Program Schedule

## Monday, February 1, 2016

6:50 a.m. Registration and Continental Breakfast

7:10 a.m. Welcome and Introductions

*Douglas L. Packer, M.D.*

### ATRIAL FIBRILLATION

Moderator: *Douglas L. Packer, M.D.*

7:30 a.m. Atrial Fibrillation and Stroke -- Cause and Effect or Guilt by Association  
*Paul A. Friedman, M.D.*

7:55 a.m. Old & New Risk Factors for Atrial Fibrillation: Inflammation, Obesity, and Upstream Therapies  
*Suraj Kapa, M.D.*

8:20 a.m. Achieving Rate Control for Atrial Fibrillation: Medications vs. AV Node Ablation  
*Win-Kuang Shen, M.D.*

8:45 a.m. Maintaining Sinus Rhythm: The 10 Most Important Changes to the Atrial Fibrillation Guidelines  
*John D. Day, M.D.*

9:10 a.m. Panel Discussion  
*Drs. Friedman, Kapa, Shen, and Day*

9:30 a.m. Refreshment Break

10:00 a.m. Preventing Stroke in AF Without Drugs: Left Atrial Occlusion Therapy: Truth or Dare  
*Thomas M. Munger, M.D.*

10:25 a.m. Curative Ablation for Atrial Fibrillation: Whom to Treat, Expectations, and Post-Ablation Management  
*Douglas L. Packer, M.D.*

10:50 a.m. Remote Healthcare: Current Practice and Future Applications. The Opportunities and Challenges  
*Paul A. Friedman, M.D.*

11:15 a.m. Is Coumadin Dead? Are NOAC's the Chosen Therapy? Which One to Use?  
*Robert D. McBane, M.D.*

11:40 a.m. Atrial Fibrillation & Flutter – Cases and Panel Discussion  
Presenter: *Dr. Kapa*  
Panelists: *Drs. Friedman, Day, Packer, Phillips, and McBane*

12:15 p.m. Adjourn

## Tuesday, February 2, 2016

6:30 a.m. Continental Breakfast

### VENTRICULAR ARRHYTHMIAS

Moderator: *Paul A. Friedman, M.D.*

7:00 a.m. ECG Pearls: Wide QRS Tachycardia  
*Stephen C. Hammill, M.D.*

7:30 a.m. The Cardiac Channelopathies: Who Needs What?  
*Michael J. Ackerman, M.D., Ph.D.*

7:55 a.m. Ablation Therapy in Patients in the Setting of Structural Heart Disease  
*William G. Stevenson, M.D.*



# Program Schedule

- 8:20 a.m.      **Primary and Secondary Prevention of Sudden Death: Staying out of Patient and Physician Danger**  
*Samuel J. Asirvatham, M.D.*
- 8:45 a.m.      **ICD Management for the Non-EP Doc: Dealing with Everything from Cell Phones to Airports and from the Patient with Shocks To MRI**  
*Suraj Kapa, M.D.*
- 9:10 a.m.      **Panel Discussion**  
*Drs. Ackerman, Stevenson, Asirvatham, and Kapa*
- 9:30 a.m.      **Refreshment Break**
- 9:50 a.m.      **Role in Practice of New and Emerging Device Therapies to Treat Arrhythmias: Life Vest, Subcutaneous ICD, and Leadless Pacemaker and More**  
*Paul A. Friedman, M.D.*
- 10:20 a.m.     **Identifying and Treating Idiopathic VT in the Normal Heart**  
*Suraj Kapa, M.D.*
- 10:45 a.m.     **Channelopathies, Cardiomyopathies and Hypertrophic Cardiomyopathy: When Genetic Testing Should NOT Be Performed**  
*Michael J. Ackerman, M.D., Ph.D.*
- 11:10 a.m.     **The Great Debate: Life Vests for Death Prevention**  
Pro: *Dr. Thomas M. Munger* & Con: *Dr. John D. Day*
- 11:30 a.m.     **Case-Based Workshop: Ventricular Arrhythmias**  
Presenter: *Samuel J. Asirvatham, M.D.*  
Panelists: *Drs. Kapa, Friedman, Munger, and Day*
- 12:15 p.m.     **Adjourn – NOTE – Special Evening Session**

- 6:00 p.m.      **Special Evening Session: Dinner and Lecture**  
Living to 100 | *John D. Day, M.D.*

This evening session provides an opportunity to meet participants, guests and faculty. The presentation will provide information for quality of life improvements for both the professional and patient. Dinner will be served at 6:00 p.m. followed by the lecture at 7:30 p.m. Pre-registration is required for the event. Sign-up at the time of registration.

## Wednesday, February 3, 2016

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

### HEART FAILURE

Moderator: *Douglas L. Packer, M.D. and Barry A. Borlaug, M.D.*

- 7:00 a.m.      **Learning From the 12-lead ECG: Atrial Fibrillation, Flutter and Others**  
*Stephen C. Hammill, M.D.*
- 7:30 a.m.      **Diagnosis and Management of Congestive Heart Failure in Patients with Systolic Dysfunction**  
*Barry A. Borlaug, M.D.*
- 7:55 a.m.      **Heart Failure with Normal Systolic Function: What Is It and How Is It Treated?**  
*Margaret M. Redfield, M.D.*
- 8:20 a.m.      **Keys to Selecting and Managing Patients Receiving CRT Systems**  
*Lynne W. Stevenson, M.D.*
- 8:45 a.m.      **Heart Failure Treatment: Clinical Practice and Indwelling Monitoring**  
*Margaret M. Redfield, M.D.*

# Program Schedule

- 9:10 a.m. **Panel Discussion**  
*Drs. Borlaug, Redfield, and Stevenson*
- 9:30 a.m. **Refreshment Break**
- 10:00 a.m. **Treatment Options for End-Stage Heart Failure When Medications and CRT are not Helping: LVADs and Transplantation**  
*Lynne W. Stevenson, M.D.*
- 10:25 a.m. **Sleep, Heart Failure, and Ventricular Arrhythmias**  
*Virend K. Somers, M.D., Ph.D.*
- 10:50 a.m. **Managing Atrial Fibrillation in Heart Failure**  
*Douglas L. Packer, M.D.*
- 11:15 a.m. **Case-Based Workshop: Heart Failure Management with Medications & Devices**  
Moderator: *Barry B. Borlaug, M.D.*  
Panelists: *Drs. Redfield, Stevenson, Small, Somers, and Packer*
- 12:15 p.m. **Adjourn**

## Thursday, February 4, 2016

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

### **SPECIAL PATIENTS/SPECIAL CARE**

Moderator: *Win-Kuang Shen, M.D.*

- 7:00 a.m. **Interesting ECG's: SVT, Conduction, and Pacing**  
*Stephen C. Hammill, M.D.*
- 7:30 a.m. **The Healthy Heart and SVT: AV Node Reentry, WPW, and Atrial Tachycardia**  
*Fred Kusumoto, M.D.*
- 7:55 a.m. **Challenges in the Young: POTS, Inappropriate Sinus Tachycardia, and Recurrent Vasovagal Syncope**  
*Win-Kuang Shen, M.D.*
- 8:20 a.m. **Syncope: Can I Drive or Not?**  
*William G. Stevenson, M.D.*
- 8:45 a.m. **Panel Discussion**  
*Drs. Kusumoto and Stevenson*
- 9:10 a.m. **Syncope, POTS, and Inappropriate Sinus Tachycardia Cases**  
Presenter: *Win-Kuang Shen, M.D.*  
Panelists: *Drs. Kusumoto and Stevenson*
- 9:25 a.m. **Refreshment Break**

### **RISK FACTOR MANAGEMENT**

- 9:45 a.m. **LDL and HDL Particle Values: Does This Enhance Our Understanding of Risk Assessment?**  
*R. Scott Wright, M.D.*
- 10:10 a.m. **Sleep, Hypertension, and Stroke: What You Need to Know for Practice**  
*Virend K. Somers, M.D., Ph.D.*
- 10:35 a.m. **The New Lipid Guidelines: When are Statins Second Rate?**  
*R. Scott Wright, M.D.*
- 11:00 a.m. **Interventional Treatment of Hypertension: State-of-the-Art**  
*Rajiv Gulati, M.D., Ph.D.*
- 11:25 a.m. **Deep Vein Thrombosis: Drugs & Secondary Prevention**  
*Robert D. McBane, M.D.*

# Program Schedule

- 11:50 a.m.      **Pregnancy and Heart Disease**  
*Sabrina D. Phillips, M.D.*
- 12:15 p.m.      **Panel Discussion**  
*Drs. Wright, Somers, Gulati, McBane, and Phillips*
- 12:30 p.m.      **Adjourn**

## *Friday, February 5, 2016*

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

### **CORONARY DISEASE**

Moderator: *Douglas L. Packer, M.D.*

- 7:00 a.m.      **ECGs for the Clinician: Diagnosing Heart Disease**  
*Stephen C. Hammill, M.D.*
- 7:30 a.m.      **Management of STEMI: Update 2015**  
*David R. Holmes, Jr., M.D.*
- 7:55 a.m.      **Dealing with Non-STEMI Infarction**  
*Guy S. Reeder, M.D.*
- 8:20 a.m.      **Spontaneous Coronary Artery Dissection**  
*Rajiv Gulati, M.D., Ph.D.*
- 8:50 a.m.      **Picture Contest - View**
- 9:00 a.m.      **Panel Discussion**  
*Drs. Holmes, Reeder, and Gulati*
- 9:20 a.m.      **Refreshment Break**
- 9:30 a.m.      **Picture Contest - Voting**

### **VALVE DISEASE AND CONGENITAL HEART DISEASE**

Moderator: *Douglas L. Packer, M.D.*

- 9:40 a.m.      **Valvular Heart Disease: Repair or Replacement**  
*David R. Holmes, Jr., M.D.*
- 10:05 a.m.      **Mitral Valve Disease: Making the best Selection for the Patient**  
*Hartzell V. Schaff, M.D.*
- 10:30 a.m.      **Knowledge Assessment**
- 10:45 a.m.      **Assessment of Septal Defects**  
*Sabrina D. Phillips, M.D.*
- 11:10 a.m.      **PFO and Atrial Septal Defect: When Should you Close and How?**  
*Guy S. Reeder, M.D.*
- 11:35 a.m.      **Congenital Heart Disease: Born to Be Bad**  
*Sabrina D. Phillips, M.D.*
- 12:00 p.m.      **Panel Discussion**  
*Drs. Holmes, Schaff, Phillips, and Reeder*
- 12:20 a.m.      **Closing Comments and Course Overview**
- 12:30 p.m.      **Adjourn**



# REGISTRATION



**Register online:**  
*[celinks.mayo.edu/hicardiacupdate](http://celinks.mayo.edu/hicardiacupdate)*

## **Registration Fee:**

|   |              |
|---|--------------|
| <b>Course Registration (MD, PhD, DO, PharmD)</b>        | <b>\$855</b> |
| <b>Reduced Course Registration (Fellow, RN, NP, PA)</b> | <b>\$700</b> |

## **Evening Dinner and Lecture**

|                             |                      |
|-----------------------------|----------------------|
| <i>Meeting Participants</i> | <b>Complimentary</b> |
| <i>Guests</i>               | <b>\$60</b>          |

Mayo Clinic Division of Cardiology has implemented an online conference registration system. If this is your first time using the online system, you will need to create a profile and log-in account.

Register by entering the website above and click on Register Now. The system will step you through the profile and login process. An email address is required upon registration. A letter of confirmation will be forwarded to this address upon receipt of payment and submitted registration. Present this letter of confirmation when checking in at the meeting registration desk.

The registration fee includes tuition, electronic course syllabus, continental breakfasts and break refreshments.

Although it is not Mayo School of Continuous Professional Development (CPD) policy to limit the number of registrants for a course, conference room facilities may necessitate closing of enrollment; therefore, early registration is advised. Enrollment for this program is limited.

## **For additional information, contact:**

Cardiovascular Continuing Education  
200 First Street SW - Gonda 6  
Rochester, MN 55905

**Website:** *[celinks.mayo.edu/hicardiacupdate](http://celinks.mayo.edu/hicardiacupdate)*

**E-mail:** *[cvcme@mayo.edu](mailto:cvcme@mayo.edu)*

**Phone:** 800-283-6296

## **CANCELLATION POLICY**

If you cancel your participation in this course, your registration fee, less a \$75 administrative fee, will be refunded when written notification is received by Mayo Cardiovascular CME before **January 22, 2016** (e-mail: [cvcme@mayo.edu](mailto:cvcme@mayo.edu)). **No refunds will be made on or after January 22, 2016.** Canceled registrations are non-transferable.

Mayo Clinic Division of Cardiovascular Diseases reserves the right to cancel or postpone any course due to unforeseen circumstances. In the unlikely event Mayo Clinic Division of Cardiovascular Diseases must cancel or postpone this course, we will refund the registration fee, but is not responsible for any related costs, charges, or expenses to participants, including fees assessed by airline/travel/lodging agencies.

**MAYO CLINIC**  
200 First Street SW  
Rochester, MN 55905

*Escape to Maui*  
**23rd Annual Mayo Clinic  
Arrhythmias  
& the Heart  
A Cardiovascular Update**

**February 1-5, 2016  
WAILEA, HAWAII**

**Topics to be discussed include:**

- Atrial fibrillation: drugs, ablation, stroke prevention
- Preventing sudden death
- ECG pearls for clinical practice
- Heart failure update: drugs and devices
- Update on channelopathies and sports
- Risk factors and prevention
- Coronary artery disease



**For information about the conference and to register, visit the conference website:**

**[celinks.mayo.edu/hicardiacupdate](https://celinks.mayo.edu/hicardiacupdate)**



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