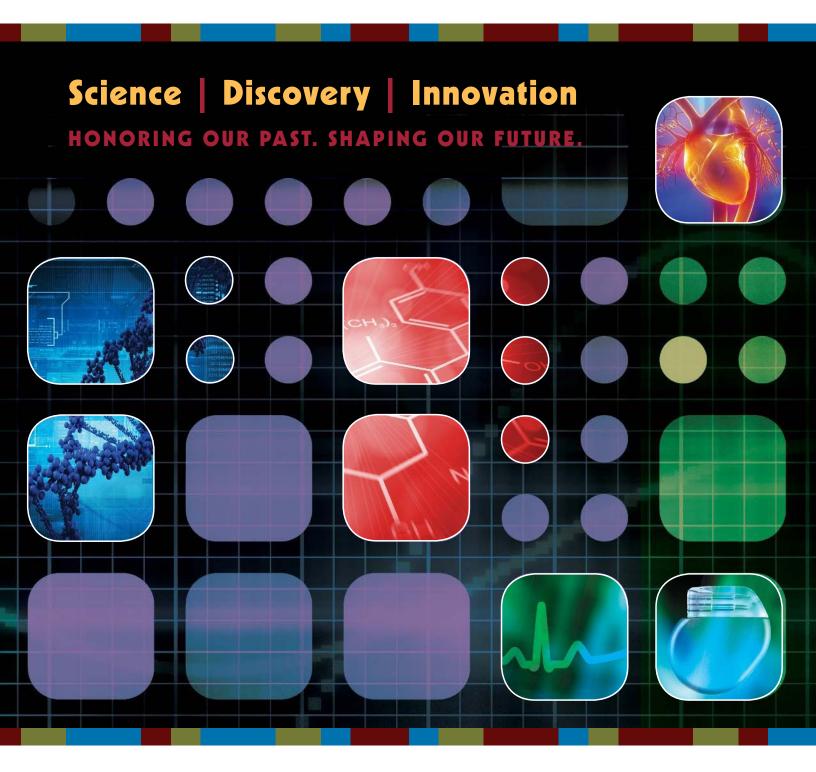
2013 ADVANCE PROGRAM





34TH ANNUAL SCIENTIFIC SESSIONS | MAY 8-11, 2013 | DENVER, CO



FEATURING KEYNOTE SPEAKER:

President Bill Clinton

Founder, William J. Clinton Foundation and 42nd President of the United States



An Invitation to Heart Rhythm 2013



HEART RHYTHM 2013 SCIENTIFIC SESSIONS PROGRAM COMMITTEE

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Dear Heart Rhythm Professional,

Over the past 34 years, the Heart Rhythm Society has transformed from a small organization representing a niche interest in pacing to a society representing a worldwide community of tens of thousands of heart rhythm specialists dedicated to the common goal of reducing death and suffering due to heart rhythm disorders.

Heart Rhythm 2013 in Denver will celebrate our Society's evolution, focusing on "Honoring Our Past. Shaping Our Future." As we explore the latest advances in science, discovery, and innovation, we will look back at the groundbreaking events that made such advances possible and how what we know today will improve patient care tomorrow.

We are excited about our **34th Annual Scientific Sessions**, which will be held May 8–11 at the Colorado Convention Center. President Bill Clinton will deliver the keynote address at the Opening Plenary session.

Building on years of tradition, **Heart Rhythm 2013** will again bring together a faculty of more than 900 of the world's most noted experts in cardiac rhythm management. Physicians, allied health professionals, and scientists will have a multitude of opportunities to network and explore the latest education and technology aimed at advancing this dynamic field and improving patient care.

We are pleased to present more than 250 educational sessions from which attendees can choose, representing all aspects of pacing, defibrillation, clinical arrhythmia management, ablation, pharmacology, genetics, basic science, and health policy.

Most of these sessions are designed to offer practical information and knowledge that can be taken back and immediately applied to the care of our patients and the advancement of heart rhythm disorders-related research. In addition, we believe that we "stand on the shoulders of giants" and have thus created several sessions to meet the founders and pioneers of our profession and honor their significant contributions to our rich history.

Attendees also can access an exciting mix of products and services through the technical exhibition in the Exhibit Hall, including more than 130 exhibitors showcasing the latest arrhythmia products and services and an expanded Innovation Place.

For the fourth consecutive year, we are pleased to offer joint sessions with our international colleagues. These sessions continue to enhance the clinical and scientific excellence of the meeting and provide a unique opportunity for the global exchange of ideas and best practices.

Registration is now open for this important international conference. Visit **HRSonline.org/ ADV** or call **1-800-748-5052** (within North America) or **1-508-743-0529** (outside North America) for more information.

We look forward to bringing the worldwide arrhythmia community together and to seeing you this spring in Denver!



Richard I. Fogel, MD, FHRS, CCDS

and Farel, MD

Chair, Scientific Sessions Program Committee



OPENING PLENARY SESSION

President Bill Clinton

Wednesday, May 8, 2013 | 5 p.m.

The Heart Rhythm Society is pleased to announce that President Bill Clinton will present the keynote address at the Opening Plenary Session at Heart Rhythm 2013 in Denver, Colorado.

President Clinton remains an influential international figure.

His passion for improving lives through innovation and activism positions him as the perfect complement to our program, as we celebrate how our pioneering past is shaping our promising future.

President Clinton served the United States for eight years during a time of unprecedented prosperity and change. Now President Clinton is a powerful voice for progress around the world as he shares his unique insights and observations with audiences around the world. President Clinton's public speeches describe the challenges of globalization, emphasize our growing interdependence, and point the way toward a common future based on shared goals and values.

President Bill Clinton is the Founder of the William J. Clinton Foundation and 42nd President of the United States. After leaving the White House, President Clinton established the William J. Clinton Foundation with the mission to improve global health, strengthen economies, promote healthier childhoods, and protect the environment by fostering partnerships among governments, businesses, nongovernmental organizations, and private citizens to turn good intentions into measurable results.



President Clinton's keynote address is made possible in part through the support of VISIT Denver and the Denver Hotel and Hospitality Community.



TABLE OF CONTENTS

Highlighted Sessions
and Events3
Program Overview
Meetings-at-a-Glance8
AF Summit 17
VT/VF Summit19
Allied Professional Forums20
Basic/Translational Science Forum22
Lead Management Forum24
Ticketed Sessions26
Faculty30
Official Educational Satellite Symposia36
Exhibit Hall Highlights37
Registration Information40
General and Hotel Information44

HEART RHYTHM 2013 GLOBAL GREEN INITIATIVE

The Heart Rhythm Society is going green in 2013! In an effort to reduce our footprint in Denver, we have made a few changes to how things will be distributed at Heart Rhythm 2013. Here's what you need to know:

- Final Program Book: Print versions of the Final Program Book will be available to attendees *upon prior request only*. If you would like to receive a print version of the Final Program Book, you must indicate your interest at the time you register. An electronic version of the Final Program Book (eBook) will be available for viewing on a computer or tablet devices.
- Conference Badges: This year, you will need to pick up your badge on site conference badges will not be mailed in advance. Attendees will be able to pick up their badges in Lobby A of the Colorado Convention Center (CCC) beginning Tuesday, May 7 at 3 p.m.
- Attendee Bags: Bring your favorite Heart Rhythm Meeting Bag to Denver! This year, we will have a limited number of bags to distribute to attendees, so we encourage you to bring your favorite bag from a past meeting.

ABOUT DENVER

Denver, known as "the Mile High City," is Colorado's capital and largest city. Home to a thriving arts and cultural scene, world-class attractions, 300 days of sunshine, a walkable downtown, exciting nightlife, and abundant outdoor recreation activities, all with the magnificent Rockies as a backdrop, Denver is a spectacular destination that will awaken your senses. Getting around is easy — free shuttles give visitors quick access to galleries, wine bars, restaurants, and nighttime entertainment and music around the city, including the popular Larimer Square and historic LoDo district.

Getting There

Denver International Airport (DIA) is open 24 hours a day, seven days a week and is served by most major airlines and select charters, providing nonstop daily service to more than 130 national and international destinations.

Getting Around

Whether on foot, by car, or by light rail, Denver is an easy city to get around. Downtown is pedestrian friendly, but you can also hop on the free shuttle that runs along the 16th Street Mall. The light rail connects downtown to the suburbs; buses and taxis offer additional convenient transportation options.

Visit http://www.denver.org/visitdenver/hrs to plan your dining and activities while in Denver!

Learn more about HeartRhthym 2013 — scan this QR code using your smartphone.



HEART RHYTHM 2013 HIGHLIGHTED SESSIONS AND EVENTS

The Heart Rhythm Society's 34th Annual Scientific Sessions will attract leading cardiac arrhythmia professionals from the United States and more than 75 countries across the globe to share the latest in science, discovery, and innovation in this dynamic field. Acquire first-hand knowledge and best practices that can be immediately put into practice and learn about the emerging technologies of the future.

PIONEERS UNPLUGGED



Thursday, May 9 Friday, May 10 12:15 - 1:15 p.m. 12:15 - 1:15 p.m.

In recognition of our historic past, the Program Committee has developed a new session format that highlights the history, technical changes, and evolution of modern practice and patient care. These informal discussions will be held in the Exhibit Hall.

BATTLE OF THE TITANS



Thursday, May 9 Thursday, May 9 4:30 - 5:15 p.m. 5:30 - 6:15 p.m.

For the first time at Heart Rhythm, let's get ready to rumble! Two new debate sessions will place "Titan against Titan," featuring world-renowned experts with very different opinions. Don't miss these battles of a lifetime. Both sessions will be held on Thursday in the CCC.

- Warfarin is Obsolete, featuring Michael D. Ezekowitz. MD. PhD vs. John Camm. MD. FHRS
- Are ICDs Over-Used or Under-Used, featuring Mark E. Josephson, MD vs. Eric N. Prystowsky, MD, FHRS

RAPID FIRE SESSIONS



Get the latest information – fast! New this year is the introduction of "rapid fire cases." These 60-minute "brown bag" lunchtime sessions will feature five 4-minute case presentations followed by a 7-minute expert panel discussion and Q & A. Experts will rapidly evaluate each case and discuss potential treatment options.

Thursday's session will focus on atrial fibrillation cases; Friday's session will focus on device cases.

LEAD MANAGEMENT FORUM



Supported by an unrestricted educational grant from Spectranetics and St. Jude Medical

Attendees asked for it and HRS delivered! Lead management is a "hot topic" for the EP field. This newly added forum, included in the registration fee, explores practical aspects of lead development, implantation, follow up, and extraction.

VT/VF SUMMIT



VT/VF represents another "hot topic" for cardiac arrhythmia professionals. This newly added session will discuss the historical development and state-of-the-art application of strategies to diagnose, evaluate, and treat patients with ventricular arrhythmias in the context of different cardiac diseases.

FELLOWS-IN-TRAINING SESSIONS

Wednesday, May 8-Saturday, May 11

Several sessions for Fellows-in-Training as well as a dedicated lounge will be offered at Heart Rhythm 2013. Fellows can customize their learning experiences by attending sessions tagged *Fellows-in-Training*, including case-based discussions, Mini-Board Review, and How-To Sessions.

PRACTICE MANAGEMENT SESSIONS

Wednesday, May 8-Saturday, May 11

These educational offerings highlight sessions with a variety of business-related topics, including running an EP Lab and starting a private practice.

MINI-COURSES

Traditionally held on Wednesday, mini-courses are included in the general meeting registration fee.

Attendees must indicate their mini-course selections when registering.

LIVE CASES

Thursday, May 9 Friday, May 10 8 – 9:30 a.m.

8 - 9:30 a.m.

Live Case Presentations are an essential component of the Heart Rhythm Annual Scientific Sessions and provide a real time, case-based opportunity for enhanced comprehension of optimal performance of complex ablations. This year, two sessions will be presented at Heart Rhythm 2013 by our hosting institutions, Intermountain Medical Center located in Salt Lake City, UT and Mayo Clinic located in Rochester, MN.

WOMEN IN EP NETWORKING LUNCHEON

Friday, May 10 15

12:15 - 1:15 p.m.

This luncheon will feature a presentation from current HRS President Anne M. Gillis, MD, FHRS, who will offer her perspective on achieving professional and personal goals in a career in electrophysiology. Participants will have the opportunity to interact with Dr. Gillis and participate in a discussion focusing on women in EP.

FOUNDERS' LECTURESHIP AWARD

Wednesday, May 8

8 - 9:30 a.m.

The Founders' Lectureship Award is presented to an individual who has made a significant and unique contribution to the field of cardiac pacing and electrophysiology. The lecture, *The Science of Atrial Fibrillation 2013: Determinants of Occurrence and Implications for Therapy*, will be presented by Heart Rhythm 2013 award recipient Stanley Nattel, MD, FHRS, during the AF Summit (ticket required).

DOUGLAS P. ZIPES LECTURESHIP AWARD

Wednesday, May 8

3 - 3:30 p.m.

The lectureship award named for Douglas P. Zipes, MD, FHRS, recognizes an individual who has contributed to the advancement of cardiac electrophysiology in the area of basic science. The Heart Rhythm 2013 recipient is Raymond Ideker, MD, PhD, FHRS, who will present his lecture, *Rabbit Warren or Beehive: The Mechanisms of Fibrillation and Defibrillation*, during the Basic/Translational Science Forum.

HANDS-ON EDUCATIONAL SESSION

Wednesday, May 8

11 a.m. - 3:30 p.m.

Returning this year, the Hands-On Session with Discussions in the Round at Heart Rhythm 2013 continues to offer a unique and valuable learning opportunity for attendees. Engage in informal discussion with key opinion leaders in electrophysiology and one-on-one demonstrations of the newest technology and equipment, presented by industry experts in a relaxed learning environment. The session closely aligns with the needs of our attendees with an intuitive format and flow based on educational topics and complementary didactic minicourses. Discussions in the Round will be discussed every 15 to 20 minutes between 11 a.m. and 3:30 p.m.

Presentation Topics:

- Ethical Considerations in the Device Clinic
- Maximizing Workflow How To Do More with Less
- Decoding the Coding Mystery Are You Coding Appropriately?
- Setting up and Running an Efficient and Profitable Device Clinic
- Setting up a Quality Assurance Program in the EP Lab

SOCIETY LEADERSHIP LUNCH FORUM

Wednesday, May 8

Noon – 1 p.m.

Network with Heart Rhythm Society leaders, including President Anne M. Gillis, MD, FHRS, at our annual meeting of the membership. The interactive discussion will include the Society's recent accomplishments, upcoming activities, and how to maximize the value of membership. Non-members are encouraged to attend; beverages and light lunch will be provided.

ERIC N. PRYSTOWSKY ABSTRACT AWARDS

The abstract awards named for Eric N. Prystowsky, MD, FHRS, recognize a fellow and early career researcher in the Clinical Electrophysiology and Catheter Ablation abstract categories. Participants indicate their interest in these awards during the abstract submission process. The Heart Rhythm 2013 recipients of the following awards will be announced in the spring:

The Eric N. Prystowsky Fellow Clinical Research Award

The Eric N. Prystowsky Early Career Researcher Award

TRANSLATIONAL ELECTROPHYSIOLOGY SESSIONS

Thursday, May 9 and Friday, May 10

These popular sessions always draw a crowd. During the 90-minute sessions, three or four speakers have their presentations interpreted by a "translator" to ensure that physicians and scientists are "speaking the same language." Don't miss out on these exciting exchanges! Session titles include:

- From Cage to Bedside and Back: The Mysterious Story of SCN10a
- Automaticity and Triggering: New Perspectives
- Inflammation: Emerging Mechanistic Links with Arrhythmia
- Stem Cells and Regenerative Medicine: Promise and Pitfalls
- Remodeling of Human Heart
- Mechanical Electrical Feedback: More Than Just Stretch Activated Channels

POSTER TOWN

Wednesday, May 8 6 a.m. - 7:30 p.m. Thursday, May 9 9:30 a.m. - 5 p.m. Friday, May 10 9:30 a.m. - 5 p.m.

Our designated area for posters, Poster Town, features lounge areas and a presentation theater for moderated poster sessions. Poster Town is the largest committed space on the exhibit floor, providing a unique meeting place for attendees and an opportunity to directly experience science, discovery, and innovation. A special dedicated section will feature basic science posters.

Back by popular demand! Wednesday's Featured Poster Session and Reception immediately follows the Opening Plenary Session and will take place in Poster Town located in the Exhibit Hall.

Saturday's Poster Session will be held from 9 a.m. – noon in Lobby D.

HYDE PARK CORNER

Thursday, May 9 and Friday, May 10

Hyde Park Corner is a free-standing, slideless session where an appointed speaker introduces new or controversial ideas or techniques. The individual will be espousing the virtues of the idea, even if it has not been sufficiently tested in a clinical trial to allow it to stand on "guideline-level" merits. The topics to be presented include:

- ICDs and End-of-Life Care
- Tasers
- Obamacare Our Salvation?
- Is There a Future for Academic EPs?

IDEAS ON TRIAL

Thursday, May 9 and Friday, May 10

Ideas on Trial sessions are debate sessions of the future! These three interactive 90-minute sessions leave the traditional debate sessions on the floor of the EP lab. Instead of two debaters taking the pro and con side of an issue, the actual "idea" goes on trial with a Chief Justice and two Associate Justices presiding. Attorneys may call witnesses to help make their point to the jury, which is the audience, to make a decision as to whether the idea is "appropriate" or "guilty." Three Ideas on Trial sessions will be presented!

"Arrest the Risk" Awareness Campaign

Thursday, May 9, 12:15 – 1:15 p.m.

The "Arrest the Risk" special session is an ideal opportunity to learn about the Society's latest research in Sudden Cardiac Arrest, which helps to identify current awareness levels and perceptions of SCA by electrophysiologists, general cardiologists, primary care practitioners and consumers. The session will be chaired by Walter K. Clair, MD, FHRS, and Kevin L. Thomas, MD.

YOUNG INVESTIGATORS AWARD COMPETITION

Thursday, May 9

1:30 - 3:30 p.m.

The Young Investigators Awards (YIA) Competition, now in its 32nd year, recognizes and encourages the work of young investigators and their parent institutions. All submissions to the YIA Competition are reviewed by the YIA Subcommittee (part of the Scientific Sessions Committee and comprised of senior researchers, clinicians, and scientists), who select six finalists to present their work during Heart Rhythm 2013.

FELLOW OF THE HEART RHYTHM SOCIETY RECOGNITION AND INDUCTION LUNCH

Friday, May 10

Noon – 1 p.m. *Invitation only*

Fellows of the Heart Rhythm Society (FHRS) are invited to join their colleagues and celebrate the induction of new Fellows by Anne M. Gillis, MD, FHRS, Heart Rhythm Society President.

The FHRS designation distinguishes members among health care providers for their specialization in electrophysiology and pacing. Fellows are characterized by advanced training, certification, and/or prominence in research. A current list of FHRS members and application information are available at www.HRSonline.org/FHRS.

AWARDS CEREMONY AND PRESIDENTS' RECEPTION

Friday, May 10

6 – 7:45 p.m.

The annual Awards Ceremony and Presidents' Reception is an ideal opportunity to network with colleagues, congratulate distinguished award winners, hear final remarks by Heart Rhythm Society President Anne M. Gillis, MD, FHRS, and welcome Hugh Calkins, MD, FHRS, CCDS, as the next Society President.

JOINT SESSIONS

Thursday, May 9 - Saturday, May 11

Eighteen 90-minute sessions will be offered on topics of medical and scientific interest to attendees, jointly sponsored by the international EP community. Participating organizations include:

- American Society of Echocardiography
- Asia Pacific Heart Rhythm Society
- Associazione Italiana di Aritmologia e Cardiostimolazione (Italian Heart Rhythm Society)
- Brazilian Society of Cardiac Arrhythmias
- Canadian Heart Rhythm Society
- China Heart Rhythm Society
- Chinese Society of Pacing and Electrophysiology
- European Heart Rhythm Association
- Hungarian Society of Cardiology
- Israeli Working Group of Pacing and EP
- Indian Heart Rhythm Society
- Japanese Heart Rhythm Society
- Oregon Health & Science University
- Sociedad Latino Americana de Estimulación Cardíaca y Electrofiología (SOLAECE)
- Society of Cardiology of the Russian Federation
- Society of Thoracic Surgeons
- Taiwan Heart Rhythm Society
- University of Insubria, Varese, Italy
- World Society of Arrhythmias



PROGRAM OVERVIEW

The sessions described in this program are organized by the Heart Rhythm Society Scientific Sessions Program Committee and comprised of world-renowned faculty who have been invited to speak at the 34th Annual Scientific Sessions.

LEARNING OBJECTIVES

- 1. Encourage the exchange of knowledge and ideas related to cardiac pacing and electrophysiology through oral and poster presentations, core curricula, debates, mini-courses, forums, and symposia.
- Identify and share throughout the world new advances in basic electrophysiology, arrhythmiarelated genetics, clinical pharmacology, cardiac pacing, defibrillation, catheter ablation, and noninvasive diagnostic techniques.
- Promote best practices for the treatment of patients with cardiac arrhythmias through a review and application of medical society guidelines and consensus documents.
- 4. Critically review the results of the most recent clinical trials as they relate to the care of patients with cardiac arrhythmias and heart failure.
- Educate attendees about governmental rules and regulations to optimize compliance with all applicable laws and policies.
- Recognize how new technologies can improve the quality and maximize the efficiency of electrophysiology care.

DISCLAIMER

The Annual Scientific Sessions provides a forum for the open exchange and discussion of research results and scientific advancements in the field of cardiovascular pacing and electrophysiology; however, the Society makes no representation or warranty as to the truth, originality, or accuracy of the information presented at the Annual Scientific Sessions or in materials distributed in connection with them. Nor are the views expressed by the individual speakers necessarily the views of the Society. The Heart Rhythm Society supports the ACCME's policy on evidence-based content and encourages faculty to adhere to these standards when planning a presentation.

EARN CONTINUING EDUCATION CREDIT

Accreditation

The Heart Rhythm Society is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Continuing Medical Education (CME)

The Heart Rhythm Society designates this educational activity for a maximum of 24 *AMA PRA Category* 1 *Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

The AMA has determined that physicians not licensed in the USA who participate in this CME activity are eligible for *AMA PRA Category 1 Credits*TM.

Nursing and ASRT Credit will be available where appropriate. Visit **www.HRSonline.org/Sessions** for specific credit information.

DISCLOSURE OF FACULTY'S COMMERCIAL RELATIONSHIP(S)

It is the policy of the Heart Rhythm Society to ensure balance, independent objectivity, and scientific rigor in all its certified educational activities. Everyone involved in the planning and participation of continuing medical education activities is required to disclose any real or apparent conflict of interest related to the content of his or her presentations and also disclose discussions of unlabeled/unapproved uses of drugs or devices during his or presentations. In accordance with the ACCME's Standards for Commercial Support of Continuing Medical Education, all faculty and planning partners must disclose any financial relationship(s) or other relationship(s) held within the past 12 months. The Heart Rhythm Society implements a mechanism to identify and resolve all conflicts of interest prior to delivering the educational activity to learners. Detailed disclosure information will be available prior to the activity and in the activity slides.

MEETINGS-AT-A-GLANCE

SESSION TYPES

CBT Case-Based Tutorials

Teaching groups encouraging audience discussion with faculty select cases sessions utilizing the Audience Response System (ARS).

CC Core Curricula

Didactic sessions in all major categories that provide comprehensive, timely information relevant to the care of patients or to research.

DB Debates

Spirited debate sessions on controversial issues. New for Heat Rhythm 2013: *Battle of the Titans!*

SY Featured Symposia

Cross-discipline showcase sessions with subject matter experts.

HP Hyde Park Corner

A free-standing, slideless session where an appointed speaker introduces new or controversial ideas or techniques.

HT How-To

Didactic teaching sessions on how to perform a high-level clinical procedure.

IT Ideas on Trial

A dynamic and interactive modification of the traditional debate session. Instead of two presenters taking the pro and con side of an issue, the actual 'idea' goes on trial.

MBR Mini-Board Review

Held on Saturday morning, these didactic sessions will review complex questions from the board exam or IBHRE exam.

MC Mini-Courses

Didactic courses providing indepth updates on hot, new topics with a question and answer period to follow. Additional fee is no longer required but attendees must indicate their mini-course selections when registering.

ME Meet-the-Experts Luncheons

Small lunch talks, without the use of audiovisual aids, which provide a scholarly exchange of information between experts and interested clinicians. Additional fee required.

TE Translational Electrophysiology Sessions

The session format features a translator interpreting information for physicians and scientists.

AB/ Oral/Poster/Moderated

PO/MP Poster Abstracts

Presentations in oral and poster format that provide the most up-to-date scientific research.

SP Special Sessions

Examples include: Opening Plenary Session; Allied Professionals Orientation, and two networking lunchtime sessions; Rapid Fire Sessions; Women in EP Networking Luncheon; Young Investigator Awards Competition; Awards Ceremony and Presidents' Reception.

SPECIALTY TRACKS

AP

Allied Professionals

BS

Basic/Translational Science

CIED/HF

Cardiovascular Implantable Electronic Devices and Heart Failure

CECA

Clinical EP and Catheter Ablation

PEDS

Pediatric/Adult Congenital Heart Disease

PPP

Policy, Payment, and Practice

SP

Special Session

SESSION TAGS

- **Ticketed Sessions**
- Fellows-in-Training
- Practice Management

Wednesday, May 8						ning	gement
	Track	Type	Session #	Session Title	Tickets	Fellows-in-Training	Practice Management
	n doit	1,700	00001011 11	7 – 7:45 a.m.			
	AP	SP	SP01	Allied Professionals: New Attendee Orientation			
				8 a.m. – 4 p.m.			
		SP	AF01-04	AF Ablation: State of the Art 2013	\$		
	SP	SP	VT/VF01-04	VT/VF Summit: Techniques for Success and Tools for the Future	\$ \$		
	CIED/HF	SP	LM01-04	Lead Management Forum		•	
		SP	SP02	Allied Professionals Forum I: Introduction to EP for the Novice Allied Professional			
	AP	SP	SP03	Allied Professionals Forum II: Introduction to Device Therapies for the Novice Allied Professional			
L		SP	SP04	Allied Professionals Forum III: Insights into Managing Complex Arrhythmia and Device Patients for the Advanced Allied Professional	De la companya del companya de la companya del companya de la companya del companya de la companya de la companya de la companya del companya de la companya della companya della companya de la companya della companya		
	BS	SP	SP06	Basic/Translational Science Forum: Heart Rhythm Systems Physiology			
				8 – 11 a.m.			
ı	CIED/HF	MC	MC01	The Future of Pacing and Defibrillation: Promises and Challenges			
<u> </u>	CILD/I II	MC	MC02	ICD Implant Complications and Reducing Risk			
		MC	MC03	Occupational Risk in the EP Lab		•	
	CECA	MC	MC04	Genomics of Complex Arrhythmias: Where Are We in 2013?			
	OLON	MC	MC05	Catheter Ablation of Accessory Pathways: Facing the Challenges	•		
<u> </u>		MC	MC06	Risk Stratification and Prevention of Sudden Death in Congenital Heart Disease		•	
ᆫ	CIED/HF	SP	SP17	Cardiac Resynchronization Therapy Guidelines Update: International Perspective			
				11 a.m. – 3:30 p.m.			
	SP	SP	SP05	Hands-On Educational Session			
				1 – 3:30 p.m.			
	CIED/HF	MC	MC07	Indications for ICD Therapy: Gaps in the Guidelines			
╙	,	MC	MC08	Safety of Sports for Patients with Arrhythmogenic Conditions			
		MC	MC09	Syncope: Making That Difficult Diagnosis			
		MC	MC10	Approaches for Autonomic Modulation to Treat Refractory Arrhythmia			
	CECA	MC	MC11	Sudden Cardiac Arrest (SCA): State of the Art 2013			
		MC	MC12	Back to Future — The Trajectory of Science and Technology in Pediatric EP			
_		MC	MC13	Diagnosis and Management of Fetal Arrhythmias			
	0.00	OF	0007	5 – 6 p.m.			
	SP	SP	SP07	Opening Plenary			
	SP	PO	PO01	6 – 7:30 p.m. Featured Poster Session and Reception			

Thursday, May 9						ing	ement
					ets	ows-in-Traini	Practice Management
	Track	Туре	Session #	Session Title	Tick	Fellc	Prac
				8 – 8:45 a.m.			
Γ	CECA	DB	011	All Patients Should Undergo Cardiac Imaging to Rule Out Pulmonary Vein Stenosis following AF Ablation			
Г	PPP	DB	021	At ERI, Primary Prevention CRT-ICDs Should Be Replaced with CRT-Pacemakers if LVEF >35%			
				8 – 9:30 a.m.			
	AP	CC	001	Use of the ECG in Mapping and Ablation Procedures			
	ΛΙ	CC	002	Lead Management in The Device Clinic			
	BS	HT	003	How to Study Mitochondria			
Ш	ВЗ	TE	004	From Cage to Bedside and Back: The Mysterious Story of SCN10a			
		CBT	005	Interpretive and Programming Problems in ICD Management			
		CC	006	Common Patient Concerns about Undergoing ICD Implantation			
		CC	007	Silent Atrial Arrhythmias: Can They be Heard?			
	CIED/HF	CC	008	An Update on Optimal RA and RV Lead Positions			
		CC	009	Optimization of CRT Using Sensor and Device Diagnostics			
		SY	010	50+ Years of Pacing and Defibrillation	Tickets Tickets		
Г		CBT	012	Difficult Supraventricular Tachycardia Ablation		•	
		CBT	013	Syncope in Patients with an Inherited Arrhythmic Syndromes			
		СС	014	Ablation of Focal Atrial Tachycardia: When the Going Gets Tough		•	
		СС	015	Techniques and Outcomes of AF Ablation in Unique Patient Subgroups	•		
	CECA	СС	016	Catheter Ablation of Outflow Tract VT and PVCs: Strategies to Maximize Success			
	CECA	CC	017	The Prime Directive: Preserve the Brain — Preventing Strokes in Patients with Atrial Fibrillation			
		CC	018	Management of Arrhythmias in the Pregnant Patient			
		JS	019	Revisit of Brugada Syndrome: From Basic Mechanism to Catheter Ablation			
		CC	020	AV Nodal Reentrant Tachycardia in Children — Mechanisms and Management			
		SY	022	ACC/HRS Joint Session: Leveraging Clinical Registries to Navigate Healthcare Reform		•	
	PPP	CC	023	Real-World Device Surveillance: Ensuring Device Safety Beyond Fidelis and Riata			
	SP	SP	SP18	Live Case Presentations			
				9 – 9:45 a.m.			
	CECA	DB	024	Minimally Invasive Surgical AF Ablation is Better than Catheter Ablation of AF	T		
	PPP	DB	025	Patients with End-Stage Renal Disease Should Receive Primary Prevention ICDS			
				9:30 – 9:45 a.m.			
	SP	HP	HP01	ICDs and End-of-Life Care			
				10:30 – 11:15 a.m.			
	CECA	DB	036	Pulmonary Vein Isolation Alone is Sufficient for Ablation of Longstanding Persistent AF	Т		
				10:30 a.m. – noon			
		СС	026	Syncope and POTS: Current Strategies for Evaluation and Treatment			
	AP	CC	027	Psychosocial Issues and Arrhythmias	+-		\Box
	"	CC	028	Jeopardy	+		$\vdash \vdash$
		CC	029	Arrhythmogenic Ventricular Cardiomyopathy Update	+		
	BS	TE	030	Automaticity and Triggering: New Perspectives	+		
_			,				

Thursday, May 9						Practice Management
				Tickets	llows-in-T	actice Ma
Track	Туре	Session #	Session Title	ļ ji	Fe	Pre
			10:30 a.m. – noon (cont.)			
	CC	031	Important Decisions at Time of ICD Implantation		•	
	CC	032	Non-traditional Indications for CRT		•	•
CIED/HF	CC	033	ICD Lead Failure: Mechanisms and Diagnosis		•	
	IDT	034	All ICD Leads with Externalized Conductors Should Be Extracted		•	
	HT	035	How to Optimize ICD Programming		•	
	CBT	037	Peri-Procedural Imaging: How Does this Contribute to Improving the AF Ablation Procedure?		•	
	CC	038	Catheter Ablation of AVNRT: State of the Art 2013			
	CC	039	Imaging Modalities for Beginners			
0504	CC	040	Safe and Effective Epicardial Catheter Ablation of VT		•	
CECA	CC	041	Postural Tachycardia Syndrome			
	HT	042	How to Utilize and Interpret Genetic Testing: What an EP Needs to Know			
	JS	043	Tough Calls in Chagas' Heart Disease Related Arrhythmias: A Case-based Symposium			
	CBT	044	Did I Do This Right?			
	CC	045	Anatomy of Surgically Corrected Congenital Heart Disease: What the EP Needs to Know		•	
PPP	CC	046	Federal Oversight of Health Care: Staying Out of Trouble			
rrr	SY	047	AHA/HRS Joint Session: Guideline Updates, Evidence Gaps, and Clinical Controversies			
CECA	JS	067	Challenge and Strategy of Therapy in Patients with Chronic AF			
			11:30 a.m. – 12:15 p.m.			
CECA	DB	048	Brugada Syndrome: We Need New Guidelines for ICD Implantation			
			12:15 – 1:15 p.m.			
BS	ME	ME01	Heart Rhythm Research: Funding Landscape	• \$ ◀	•	•
CIED/HF	ME	ME02	Latest ICD Technology: The Totally Subcutaneous Device	• \$ ◀		
CILD/III	ME	ME03	Success in Lead Extraction: What I Have Learned	• \$ ◀		
CECA	ME	ME04	The Past, the Present, and Future of VT Ablation: An Expert's Perspective	▶ \$ <	•	
CLCA	ME	ME05	The Business of Pediatric EP	▶ \$ <	•	
PPP	ME	ME06	The Disconnect between Reimbursement and the Guidelines: Life after the DOJ Investigation	\$ 4		
CECA	ME	ME07	An Expert's Approach to the Management of AF	\$ \$ <	•	
AP	SP	SP08	Allied Professional Luncheon: Preparing for the IBHRE Exams			
SP	SP	SP11	Rapid Fire: AF			
			1:30 – 3 p.m.			
SP	AB	AB	Oral Abstract Sessions			
			1:30 – 3:30 p.m.			
SP	SP	SP12	Young Investigator Awards Competition		•	
			3 – 3:15 p.m.			
SP	HP	HP02	Tasers			
			4:30 – 5:15 p.m.			
CECA	DB	060	Battle of the Titans: Warfarin is Obsolete			

Thursday, May 9 4:30 - 6 p.m. CC 049 What Do Device Specialists Need to Know about Heart Failure? ΑP CC 050 AF Ablation and Complications CC 051 Arrhythmias from Oxidation in Small Places BS ΤE 052 Inflammation: Emerging Mechanistic Links with Arrhythmia CBT 053 The Challenging CS Lead: Beyond the Basics CC 054 Management of ICD Shocks CC 055 Practical Issues in Lead Management CIED/HF CC 056 Difficult Device Discussions CC 057 CRT — Will We Ever be Able to Improve the Non-Responder Rate? SY 058 The Disconnect between Evidence and Reimbursement Policies CC 059 MRI in Patients with Implanted Devices: Current Status CBT 061 Catheter Ablation of Ventricular Tachycardia: A Case-Based Approach CC 062 Imaging and VT Ablation CC 063 Evolution in Diagnosis and Management of Long QT Syndrome CC 064 Risk Stratification for Sudden Death: Beyond the EF CECA ΗТ 065 How To Diagnose and Manage Complications Associated with AF Ablation CC 066 Learning at the Stimulator: Understanding Intra-cardiac Electrophysiology CC 068 Application of Advanced Mapping and Ablation Technologies НТ 069 How To: Ablation of Challenging Accessory Pathways PPP CC 070 EP Practice Survival 2013 JS 072 AF: Lessons from the Past and Future Challenges CECA 5:30 – 6:15 p.m. 071 CIED/HF DB Battle of the Titans: Are ICDs Over-Used or Under-Used

Friday, May 10							ement
					kets	lows-in-Train	Practice Management
_	Track	Туре	Session #	Session T tle	ίΞ	回	Pra
				8 – 8:45 a.m.			
┕	CIED/HF	DB	077	All Superfluous Leads Should be Extracted in Young Patients			
		00	070	8 – 9:30 a.m.			
	AP	CC	073	State-of-the-Art in VT Ablation			
┞		CC HT	074	Update on Pediatric EP			
	BS	TE	076	How to Find the Missing Genetic Factors in Inherited Heart Disease Stem Cells and Regenerative Medicine: Promise and Pitfalls			\vdash
		CBT	078	ICDs in Genetic Heart Diseases			
		JS	079	Advances in CRT			
	CIED/HF	CC	080	Advances in HF Diagnostics			
	0.22,	HT	081	How to Set up a Successful Lead Management Program		•	
		JS	082	Current Status and Future Trend of Device/Patient Follow up in Asia			
厂		CBT	083	Balloon and Single Shot Devices to Achieve PV Isolation		•	
		CBT	084	Inherited Arrhythmic Syndromes: Familial Screening and Management		•	
		СС	085	Strategies for Ablation of Long-Standing Persistent AF		•	
		СС	086	Catheter Ablation of VT in Dilated Cardiomyopathy: Maximizing Safety and Efficacy		•	
		СС	087	Back to the Future: The Current Role of Antiarrhythmic Drugs in Arrhythmia Management			
	CECA	СС	088	Modern Management of Atrial Fibrillation: A Master Clinician's View			
	020/1	SY	089	30 Years of Ablation	n		
		IDT	090	Left Atrial Appendage Closure is Better than Anticoagulation Therapy for Stroke Prevention in AF			
		JS	091	Advances in Catheter Ablation for the Treatment of VT/VF			
		JS	092	Risk Stratification of Thromboembolic Events in AF			
<u> </u>		CC	093	Lifestyle Management, Screening, and SCD Prevention in Young People		•	
	PPP	CC	094	Quality Improvement in CIEDs: The Present and The Future		•	
ᆫ		JS	095	Simulators for Electrophysiology Training: A New Paradigm on the Horizon?			
	SP	SP	SP19	Live Case Presentations			
	0.55 # 15			9 – 9:45 a.m.			
┕	CIED/HF	DB	096	All Lead Extractions Should be Performed in the OR			
	CD	LID	LIDOO	9:30 – 9:45 a.m.			
	SP	HP	HP03	Obamacare — Our Salvation?			
	CIED/HF	DB	101	10:30 – 11:15 a.m. Defibrillation Testing Must Be Performed at Implant			
├	CECA	DB	115	Competitive Sports for Pediatric LQTS Patients?			
	OLOA		110	10:30 a.m. – noon			
		СС	097	Channelopathies: Ions and Arrhythmias		•	
	AP	HT	098	How to Troubleshoot Pacemakers and ICDs		•	\vdash
		CC	099	Inflammation, CAD, and Arrhythmias: Systemic, Local, or Both?		•	
	BS	TE	100	Remodeling of Human Heart		•	
		CBT	102	Should I Be Alarmed When an HF Diagnostic Alarms?		•	
		JS	103	Challenges In Cardiac Resynchronization Therapy: The Devil is in the Details		\vdash	
	CIED/HF	CC	104	How Different Imaging Modalities Can Facilitate CRT			\Box
		HT	105	How to Implant an ICD		•	

Friday, May 10						guir	gement
					Tickets	ows-in-Trair	ctice Manaç
	Track	Туре	Session #	Session T tle	Ţ	Fell	Pra
				10:30 a.m. – noon (cont.)			
		CC	106	Lead Extraction 101		•	
	CIED/HF	JS	107	How to Manage Anticoagulation and Antiplatelet Agents at Time of PPM and ICD Procedures			
		CBT	108	Utility of MRI in Predicting Arrhythmogenic Substrate in Myocardial Disease		•	
		CC	109	Arrhythmogenic Right Ventricular Dysplasia		•	•
		CC	110	Genetic Evaluation in Inherited Cardiomyopathies		•	
	CECA	CC	111	Left Atrial Appendage Closure			
	OLON	HT	112	How to Ablate AF			
		CC	113	Complications during VT Ablation: Techniques to Minimize Risk			
		JS	114	Integrating Percutaneous and Transthoracic Atrial Ablation			
<u> </u>		CC	116	Ethical Issues in Pediatric and Congenital EP		•	
	PPP	SY	117	First Do No Harm: Promoting a Culture of Safety			
		CC	118	Appropriate Use Criteria for ICD/CRT		•	
				11:30 a.m. – 12:15 p.m.			
	CIED/HF	DB	119	ICD Shocks for VT/VF Increase Mortality		•	
	CECA	DB	120	Arrhythmias in Adult Congenital Heart Disease Patients Should be Managed by a Pediatric EP		•	
				12:15 – 1:15 p.m.			
	CIED/HF	ME	ME08	CIED Reuse: A Humanitarian Effort	▶ \$ ◀		
		ME	ME09	Antiarrhythmic Drugs vs. VT Ablation in Patients with Appropriate ICD Shocks	▶ \$ ◀	• \$ • • \$ • • • • • • • • • • • • • • • • •	
	CECA	ME	ME10	Success in AF Ablation: What I Have Learned	▶ \$ 4		
		ME	ME11	Risk Stratification Strategies in Pediatric and Congenital EP	▶ \$ <		
	PPP	ME	ME12	Toward More Optimal Use of ICDs and CRTs	▶\$ 4	•	
	CECA	ME	ME13	Pioneers of Pediatric and Congenital EP	\$ \$		
	AP	SP	SP09	Allied Professional Luncheon: Quality Initiatives and Performance Measures — An EP Perspective			•
	CD	SP	SP10	Women in EP Networking Luncheon	\$ 4		
	SP	SP	SP13	Rapid Fire: Device			
				1:30 – 3 p.m.			
	ALL	AB	AB	Oral Abstract Sessions			
				3 – 3:15 p.m.			
	SP	HP	HP04	Is there a Future for Academic EPs?			
				4:30 – 6 p.m.			
	A.D.	CC	121	New and Future Technologies for Catheter Ablation			
	AP	HT	122	How to Manage AF in the Office Setting			•
	DO	CC	123	Non-Coding RNAs in Arrhythmia Mechanism, Diagnosis, and Therapy		•	
	BS	TE	124	Mechanical Electrical Feedback: More Than Just Stretch Activated Channels		•	
		CBT	125	Lead Extraction 2013			•
		JS	126	Impact of Cardiovascular Ultrasound in Cardiac Resynchronization Therapy			
	CIED/HF	CC	127	Implanted Devices for Autonomic Nervous System Modulation in HF			•
		CC	128	Riata Lead Failure: Externalized Conductors and Electrical Failures			•
		СС	129	CRT — Bias, Disparities, and Under Use: Why We Need to Do Better			

Fi	ʻiday,	Ma	ay 10		Tickets	Fellows-in-Training	Practice Management
	Track	Туре	Session #	Session Title	≓	<u>a</u>	Pre
				4:30 – 6 p.m. (cont.)			
		CBT	130	Interpretation of Intracardiac Ventricular Electrograms during VT Ablation: What Is Important?			
			HT	131	How To Perform Substrate and Autonomic Ablation for AF		
		CC	132	Atrial Tachycardia: Complex Situations		•	
	CECA	CC	133	Ablation for Renal Denervation: What Does the EP Need to Know?			
		HT	134	How To Use the New Oral Anticoagulants			
		CC	135	Utility of the ECG in Sudden Death Risk Stratification			
		JS	136	Real-Life Epidemiology, Management, and Outcomes of the AF Ablation			
	CIED/HF	JS	137	ICD Indications and Outcomes: Lessons from Registries			
	CECA	CC	138	Measuring Clinical Outcomes in Pediatric and Congenital EP			
	CECA	HT	139	How To Perform Cardiac Resynchronization Therapy in the Pediatric Population		•	
	PPP	CC	140	Health Information Technology for the Practicing EP			

Interventional Device Implantation: Improve Success and Reduce Implant Times

CIED/HF

SP

SP20

Sa	Saturday, May 11						
	Track	Туре	Session #	Session Title	Tickets	Fellows-in-Training	Practice Management
				8 – 9:30 a.m.			
	AP	CC	141	Remote Monitoring of Devices in 2013			•
	ΔΙ	MBR	142	Preparing For the EP IBHRE Exam: Challenging Cases and Questions			
	BS	CC	143	Systems Level Modeling of Arrhythmias			
Ш	טט	HT	144	How To Perform Low Energy Anti-Fibrillation			
	CIED/HF	CC	145	CRT — Indications and Treatment Options for Patients in the Gray Zone			
	CIED/HF	MBR	146	Preparing For the EP Board Exam: CIEDs			
		JS	147	Ventricular Arrhythmias: Clinical Aspects and Ablation Techniques			
	CECA	CC	148	VT Management, Mechanisms, Diagnosis, and Treatment			
	CLOA	JS	149	Recent Developments in Understanding and Management of Complex Arrhythmias			
Ш		CC	150	Lead Management Issues in Pediatric and Congenital Patients			
				10:30 a.m. – noon			
	AP	MBR	151	Preparing For the Device IBHRE Exam: Challenging Cases and Questions			
	Ar	CC	152	Pharmacologic Management of AF			
	BS	CC	153	Mitochondrial Function and Arrhythmia			
Ш	טט	CC	154	Cytoskeletal Proteins and Arrhythmia			
		CC	155	Managing ICD Shocks for VT/VF			•
	CIED/HF	CC	156	Controversies In Device Therapy			
		JS	157	New Technologies in Pacemakers and ICDs			
		CC	158	New Technologies for AF Ablation: Do They Add Value?			
	CECA	MBR	159	Preparing For the EP Board Exam: Intracardiac Electrograms, Arrhythmia Mechanisms, and Mapping		•	
L		CC	160	Heritable Arrhythmias in Children — What's New?		•	

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The Heart Rhythm Society's Infinity Circle acknowledges our year-round supporters for their significant contributions. Infinity Circle members help fund a wide range of Heart Rhythm Society initiatives and programs, which ultimately lead to improved quality, patient diagnosis, treatment and care. The Heart Rhythm Society gratefully acknowledges the companies in the 2012 Infinity Circle.

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AF SUMMIT IS Ticketed Session

AF ABLATION: STATE OF THE ART 2013

The 2013 AF Summit is an all-day program providing a comprehensive review of AF ablation and evolving therapies that are changing the field. Session topics include tools and technologies for AF ablation, catheter ablation of paroxysmal AF, catheter ablation of long-standing persistent AF, and stroke prevention therapies. The AF Summit will also showcase the recipient of the Founders' Lectureship Award.

Attendees will leave this session with advanced knowledge of this rapidly evolving field. A separate registration fee is required for the day-long session.

For accreditation information regarding this one-day event, please visit the Society's website at www.HRSonline.org/Sessions.

WEDNESDAY, MAY 8

AF01 SP

8 - 9:35 a.m.

CATHETER ABLATION OF PAROXYSMAL AF

Session Description: This session will discuss the key aspects and considerations of catheter ablation of paroxysmal atrial fibrillation.

Chairs:

David J. Callans, MD, FHRS, CCDS University of Pennsylvania, Philadelphia, PA

Riccardo Cappato, MD, FHRS IRCCS Policlinico San Donato, San Donato Milanese, Italy

Summit Introductions and Overview

Hugh Calkins, MD, FHRS, CCDS Johns Hopkins Hospital, Baltimore, MD

Techniques and Long-Term Outcomes of Ablation of Paroxysmal AF

Jonathan S. Steinberg, MD, FHRS Valley Health System, New York, NY

Founders Lectureship Award — The Science of AF 2013: Determinants of Occurrence and Implications for Therapy

Stanley Nattel, MD, FHRS Montreal Heart Institute/Université de Montréal, Montreal, QC, Canada

Techniques and Outcomes of Autonomic Ganglion Ablation: Does it Really Add?

Sunny S. Po, MD, PhD Oklahoma University Health Science Center, Oklahoma City, OK

Panel Discussion

BREAK

9:30 - 9:45 a.m.

AF02 SP

9:50 a.m. - noon

CATHETER ABLATION OF PERSISTENT AND LONG-STANDING PERSISTENT AF

Session Description: This session will discuss the key aspects and considerations of catheter ablation of persistent and long-standing persistent atrial fibrillation.

Chairs:

David E. Haines, MD, FHRS William Beaumont Hospital, Royal Oak, MI

Francis E. Marchlinski, MD, FHRS University of Pennsylvania, Philadelphia, PA

Basic Mechanisms of Persistent and Long-Standing Persistent AF

Jose Jalife, MD, FHRS University of Michigan, Ann Arbor, MI

Mapping of AF in Humans: Lesson Learned

Albert L. Waldo, MD, FHRS, CCDS Case Western Reserve University/University Hospitals, Case Medical Center, Cleveland, OH

The Sequential Approach to Ablation of Long-Standing Persistent AF

Thomas Rostock, MD University Hospital Eppendorf, Hamburg, Germany

Techniques and Outcomes of Rotor-Based Ablation of Persistent and Long-Standing Persistent AF

Sanjiv M. Narayan, MD, PhD, FHRS University of California, San Diego VA Medical Center, San Diego, CA

Mapping Human AF to Guide Catheter Ablation

Michel Haissaguerre, PhD

Hopital Cardiologique Haut Leveque; Université Bordeaux, Pessac, France

Surgical and/or Hybrid Ablation of Long-Standing Persistent AF: Techniques and Results

TBD

Panel Discussion

BREAK

Noon – 12:30 p.m.

AF03 SP

12:30 - 2:15 p.m.

NEW AND OLD TECHNOLOGIES FOR AF ABLATION

Session Description: This session will discuss new technologies and old time-proven technologies associated with catheter ablation of atrial fibrillation.

Chairs:

David T. J. Keane, MD, PhD, FHRS, CCDS St. Vincent's University Hospital, Dublin 4, Ireland

Walid I. Saliba, MD, FHRS Cleveland Clinic Foundation, Cleveland, OH

Creating Lesions with Catheters: What Energy Source or Approach Leads to the Best Lesions?

David E. Haines, MD, FHRS William Beaumont Hospital, Royal Oak, MI

The Cabana Trial: An Update

Douglas Packer, MD, FHRS Mayo Clinic — St. Mary's Hosptal, Rochester, MN

Force Sensing Catheters: Have Our Hopes Been Realized?

Karl-Heinz Kuck, MD, FHRS Asklepios Klinik St. Georg, Hamburg, Germany

Catheter Cryoballon: Current Techniques and Outcomes

D. Wyn Davies, MD, FHRS St. Mary's Hospital, London, United Kingdom

Renal Denervation to Facilitate Outcome of AF Ablation

Dominik K. Linz, MD Universitätsklinikum des Saarlandes, Klinik für Innere Medizin III, Homburg/Saar, Germany

Catheter Ablation of AF Guided by MR Imaging: Are We There Yet?

Nassir F. Marrouche, MD, FHRS University of Utah, Salt Lake City, UT

Real-Time Monitoring of Lesion Development: Ready for Prime Time?

Dipen C. Shah, MD, FHRS Hopital Cantonal De Geneve, Geneva, Switzerland

Preventing Complications of AF Ablation: Back to the Basics in High-Tech World

John D. Day, MD, FHRS Intermountain Medical Center, Salt Lake City, UT

Panel Discussion

BREAK

2:15 - 2:30 p.m.

AF04 SP

2:30 - 4 p.m.

STROKE PREVENTION IN AF PATIENTS

Session Description: This session will discuss how to prevent atrial fibrillation strokes as well as potential treatment options to minimize the atrial fibrillation stroke risk.

Chairs:

Albert L. Waldo, MD, FHRS, CCDS Case Western Reserve University, Cleveland, OH

Michael D. Ezekowitz, MD, PhD Lankenau Medical Center, Wynnewood, PA

Coumadin: A Look Back and a Look Forward

John Camm, MD, FHRS St. George's Hospital Medical School, London, United Kingdom

Dabigatran, Xarelto, and Apixaban: What Have

We Learned in Clinical Trials and with Clinical Experience?

Michael D. Ezekowitz, MD, PhD Lankenau Medical Center, Wynnewood, PA

Risk Stratification of Stroke Risk in AF Patients

Paulus F. Kirchhof, MD

University of Birmingham, Birmingham, United Kingdom

How Effective is Appendage Ligation/Occlusion/ Resection in Reducing Stroke Risk: My Perspective

Andre D'Avila, MD, PhD Mount Sinai Hospital, New York, NY

Mechanical Appendage Occlusion Devices: Where Are They Now?

Vivek Y. Reddy, MD Mount Sinai School of Medicine, New York, NY

The Lariat Device and Other Epicardial Approaches for Appendage Occlusion

Randall J. Lee, MD, PhD University of California, San Francisco, CA

Closing Remarks

John D. Day, MD, FHRS Intermountain Medical Center, Salt Lake City, UT

VT/VF SUMMIT IS Ticketed Session

TECHNIQUES FOR SUCCESS AND TOOLS FOR THE FUTURE

This session will discuss the historical development and state-of-the-art application of strategies to diagnose, evaluate, and treat patients with ventricular arrhythmias in the context of different cardiac diseases.

For accreditation information regarding this one-day event, please visit the Society's website at www.HRSonline.org/Sessions.

WEDNESDAY, MAY 8

VT01 SP

8 - 9:35 a.m.

HISTORICAL BASIS: FUNDAMENTAL CONCEPTS FOR UNDERSTANDING THE PHYSIOLOGY OF VT

Chair:

Mark E. Josephson, MD Beth Israel Deaconess Medical Center, Boston, MA

Anatomic and Electrical Substrate of VT

Mark E. Josephson, MD Beth Israel Deaconess Medical Center, Boston, MA

Insights from Interoperative Mapping

John M. Miller, MD, FHRS Indiana University School of Medicine, Indianapolis, IN

Autonomic Nervous System Influences on VT and VF

Douglas P. Zipes, MD, FHRS Krannert Institute of Cardiology, Indianapolis, IN

Understanding the Nature of Ventricular Fibrillation and Defibrillation

Raymond E. Ideker, MD, PhD, FHRS University of Alabama, Birmingham, AL

Ablation of VF

Samuel J. Asirvatham, MD, FHRS Mayo Clinic, Rochester, MN

VT02 SP

9:50 a.m. - noon

EVOLUTION OF VT SUBSTRATE

Chair:

Timm-Michael Dickfeld, MD, PhD University of Maryland, Baltimore, MD

CT/MR Imaging

Saman Nazarian, MD, FHRS Johns Hopkins University, Baltimore, MD

PET/ICE Imaging

Mathew D. Hutchinson, MD, FHRS University of Pennsylvania, Philadelphia, PA

Historical Development of the Science of Risk Stratification

Ralph Lazzara, MD, FHRS University of Oklahoma Health Sciences Center, Oklahoma City, OK

Non-Imaging Approaches to Arrhythmia Substrate

Jeffrey J. Goldberger, MD, FHRS Northwestern Memorial Hospital, Chicago, IL

VT03 SP

12:30 - 2:15 p.m.

CLINICAL MANAGEMENT

Chair:

Francis E. Marchlinski, MD, FHRS University of Pennsylvania Health System, Philadelphia, PA

Overview: Evaluation of Patients with VT, Understanding ECG/Anatomy

William G. Stevenson, MD, FHRS Brigham and Women's Hospital, Boston, MA

Acute and Chronic Pharmacologic Therapy

Peter R. Kowey, MD, FHRS Mainline Heart Center, Wynnewood, PA

Device Treatment: New Algorithms to Prevent Shock, Effect of BiV Pacing, SubQ ICD

Michael R. Gold, MD, PhD, FHRS Medical University of South Carolina, Charleston, SC

Where Ablation Fits in the Course of Patients with VT

David J. Callans, MD, FHRS, CCDS University of Pennsylvania, Philadelphia, PA

VT04 SP

2:30 – 4 p.m.

ARE WE THERE YET? NEW ENDGAME STRATEGIES AND FUTURISTIC ABLATION TECHNOLOGY

Chair:

Douglas Packer, MD, FHRS Mayo Clinic — St. Mary's Hospital, Rochester, MN

LAVA Ablation

Pierre Jais, MD, CHU Bordeaux University, Bordeaux, France

Anatomic Endpoints for Substrate Ablation

Francis E. Marchlinski, MD, FHRS University of Pennsylvania, Philadelphia, PA

Surgical Ablation

Sanjay Dixit, MD, FHRS University of Pennsylvania, Philadelphia, PA

VF Ablation and New Ablation Technologies

Samuel J. Asirvatham, MD, FHRS Mayo Clinic — St. Mary's Hospital, Rochester, MN

ALLIED PROFESSIONAL FORUMS

The Allied Professional (AP) Forums promote quality education for allied professionals and inspire attendees to expand scientific discovery and apply it to their daily practice. Three complimentary forums will be offered: two for those beginning their careers, emphasizing the fundamentals of EP and devices; the third with an advanced content focus. The forums include a Hands-on Educational Session, an Allied Professional Orientation for those attending their first Scientific Sessions, and the Opening Plenary Session.

WEDNESDAY, MAY 8

SP02 AP FORUM I AP

8 a.m. - 3:30 p.m.

INTRODUCTION TO EP FOR THE NOVICE ALLIED PROFESSIONAL

Session Description: This session is designed for the Allied Professional who is relatively new to the field. It will include an overview of diagnostic and therapeutic EP procedures and will feature an interactive format using the audience response system. Time will be provided after the didactic sessions for "hands-on" with EP diagnostic and therapeutic equipment.

Chairs:

Jill L. Repoley, MSN, NP, FHRS, CCDS, CEPS
The Heart Group of Lancaster General Health, Lancaster, PA

Christine C. Chiu-Man, MS, FHRS, CCDS, CEPS The Hospital for Sick Children, Toronto, ON, Canada

Cardiac Anatomy Relevant to Electrophysiology TBD

Cellular Electrophysiology: The Action Potential and Ion Channels

Joshua M. Cooper, MD Hospital of the University of Pennsylvania, Philadelphia, PA

Basic Catheter Placement and Electrogram Interpretation

Rutuke K. Patel, PA-C Hospital of the University of Pennsylvania, Philadelphia, PA

BREAK

10 – 10:15 a.m.

Pacing Protocols and Electrophysiologic Evaluation

Esther M. Weiss, APN, CNS, MSN, CCDS, CEPS Sherman Hospital, Elgin, IL

What Rhythms Do We Treat with Ablation and How Do We Do It?

Eric C. Stecker, MD, MPH Oregon Health & Science University, Portland, OR

Putting it all Together: Case Presentations from the Lab

Pamela K. Mason, MD

University of Virginia Health System, Charlottesville, VA

Hands-On Educational Session

Elizabeth A. Ching, RN, FHRS, CCDS Cleveland Clinic Foundation, Cleveland, OH

Lon W. Castle, MD Cleveland Clinic, Westlake, OH

SP03 AP FORUM II AP

8 a.m. - 3:30 p.m.

INTRODUCTION TO DEVICE THERAPIES FOR THE NOVICE ALLIED PROFESSIONAL

Session Description: This session is designed for the Allied Professional who is relatively new to the field. It covers the basic principles of device function and programming and features an interactive format with the audience response system. Time is provided after the didactic sessions for "hands-on" experience with the devices.

Chairs:

Laurie K. Racenet, ANP, CEPS, CCDS Alaska Heart Institute, Anchorage, AK

Heather M. Ross, DNP, ANP-BC, FHRS, CCDS Arizona Arrhythmia Consultants, Scottsdale, AZ

Pacing and ICD Indications

Rosemary S. Bubien, RN, MSN, FHRS, CCDS University of Alabama at Birmingham, Birmingham, AL

Basic Pacing Timing Cycles

Mark W. Sweesy, FHRS, CCDS, CEPS Arrhythmia Technologies Institute, Greenville, SC

Making Timing Cycles Work for Your Patient

Mark W. Sweesy, FHRS, CCDS, CEPS Arrhythmia Technologies Institute, Greenville, SC

BREAK

10 - 10:15 a.m.

Device Diagnostics: What Does the Device Tell You?

Donna Gerity, RN, MN, CCDS, CEPS Swedish Heart & Vascular, Seattle, WA

Understanding the Concepts of Arrhythmia Detection in the ICD

Linda K. Ottoboni, MS, RN, MS, CNS, FHRS, CCDS Stanford University Hospital, Stanford, CA

Programming ICDs to Reduce Shock

Mark S. Link, MD, FHRS Tufts Medical Center, Boston, MA

Hands-On Educational Session

Elizabeth A. Ching, RN, FHRS, CCDS Cleveland Clinic Foundation, Cleveland, OH

Lon W. Castle, MD Cleveland Clinic, Westlake, OH

SP04 AP FORUM III AP

8 a.m. – 4 p.m.

INSIGHTS INTO MANAGING COMPLEX ARRHYTHMIA AND DEVICE PATIENTS FOR THE ADVANCED ALLIED PROFESSIONAL

Session Description: This session is designed to explore more advanced concepts in the management of patients with arrhythmias. It will include "hands-on" time with Rhythm Management Devices, Ablation Systems, and EP Recording Systems.

Chairs:

Craig Swygman, CVT, FHRS, CEPS St. Vincent Hospital, Portland, OR

Robin A. Leahy, RN, BSN, FHRS, CCDS Sanger Heart and Vascular Institute, Charlotte, NC

Anticoagulation and Devices for Stroke Prevention in 2013

Gerilynn M. Schott, MSN, CRNP Hospital of the University of Pennsylvania, Philadelphia, PA

Special Considerations in Epicardial Ablation of VT: Pre-procedure, Procedural, and Post-procedure

Cory M. Tschabrunn, CEPS Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA

Cardiac Rhythm Devices and the Pediatric Population

Vicki L. Zeigler, RN, PhD, FHRS, CEPS, CCDS Texas Woman's University, Denton, TX

BREAK

9:35 - 10 a.m.

Genetic Testing: Channelopathies, HOCM, ARVC

David Tester, BS Mayo Clinic, Rochester, MN

Current Strategies for Lead Management

Julie B. Shea, MS, RNCS, FHRS, CCDS Brigham and Women's Hospital, Boston, MA

MRIs and Devices: When and How?

Roseann Hansford, RN, MPH Johns Hopkins Hospital, Baltimore, MD

Post-Ablation Follow up of the Atrial Fibrillation Patient

Salwa Beheiry, RN, BSN, CCRN California Pacific Medical Center, San Francisco, CA

LUNCH BREAK

Noon – 12:30 p.m.

Hands-On Educational Session

Elizabeth A. Ching, RN, FHRS, CCDS Cleveland Clinic Foundation, Cleveland, OH

Lon W. Castle, MD Cleveland Clinic, Westlake, OH

Managing Complications in the EP Lab

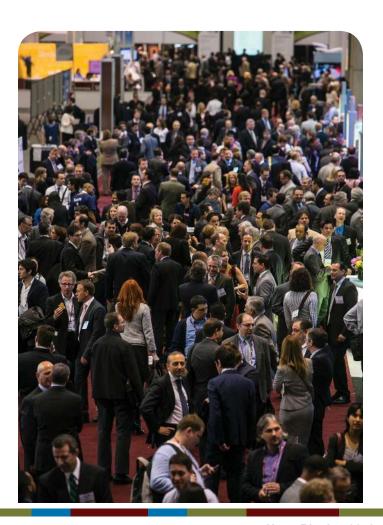
Joseph B. Hejlik, RN, BSN Mayo Clinic, Phoenix, AZ

Syncope: Current Diagnostic and Treatment Strategies

Tracey J. Littlefield, RN, BSN Bringham and Women's Hospital, Boston, MA

Use of 12-Lead ECG in the EP Lab

Scott J. Cox, MS, PAC Main Line Health System, Lankenau Medical Center, Wynnewood, PA



BASIC/TRANSLATIONAL SCIENCE FORUM

HEART RHYTHM SYSTEMS PHYSIOLOGY

WEDNESDAY, MAY 8

SP06 BS

8 a.m. – 4 p.m.

HEART RHYTHM SYSTEMS PHYSIOLOGY

Session Description: Designed in partnership with the Cardiac Electrophysiology Society (CES), the Basic/
Translational Science Forum is an all-day program comprised of state-of-the-art talks relevant to experimental electrophysiology, mechanisms of heart rhythm disorders, and novel therapeutics. This year's forum places particular emphasis on systems physiology approaches to heart rhythm research and therapy.

SESSION ONE

HEART RHYTHM BIOINFORMATICS

Chair:

Yoram Rudy, PhD, FHRS Washington University in St. Louis, St. Louis, MO

EP in the "Cloud": The Cardio Vascular Research Grid Project

Raimond Winslow, PhD Johns Hopkins University, Baltimore, MD

Patient-specific Models: Computational Pipeline for the Arrhythmia Simulation

Robert Macleod, PhD University of Utah, Salt Lake City, UT

Virtual Rat: Computational Systems Physiology TBD

Moderated Discussion

SESSION TWO

CARDIAC CIRCADIAN RHYTHM AND ARRHYTHMIA

Chair:

Marek Malik, MD, PhD, FHRS St Paul's Cardiac Electrophysiology and St George's, University of London, London, United Kingdom

Autonomic Modulation in the Prevention of Lifethreatening Arrhythmias

Peter J. Schwartz, MD University of Pavia/Fondazione IRCCS Policlinico San Matteo, Pavia, Italy

Myocardial Metabolic and Physiological Daily Rhythms

Martin Young, MD UAB Comprehensive Diabetes Center, Birmingham, AL

Circadian Transcriptional Regulation in Cardiac Ion Channels and Arrhythmia

Mukesh Jain, MD Case Western Reserve University, Cleveland, OH

Moderated Discussion

BREAK

10 - 10:30 a.m.

SESSION THREE

MAKING A PACEMAKING AND CONDUCTION SYSTEM

Chair:

Michiko Watanabe, PhD Case Western Reserve University, Cleveland, OH

Programming and Reprogramming the Conduction System

Vincent M. Christoffels University of Amsterdam, Amsterdam, Netherlands

Notch Signaling in Conduction Cell Specification

Stacey Rentschler, MD, PhD Washington University in St. Louis, St. Louis, MO

Gene Regulatory Networks in Conduction System Function and Disease

Ivan Moskowitz, PhD University of Chicago, Chicago, IL

Moderated Discussion

SESSION FOUR

OXIDATIVE STRESS AND ARRHYTHMIA: NOVEL SIGNALING PATHWAYS

Chair:

Bjorn C. Knollmann, MD, PhD Vanderbilt University Medical Center, Nashville, TN

Oxidized Ryanodine Receptor-mediated Arrhythmias

Kenneth R. Laurita, PhD Case Western Reserve University, Cleveland, OH

Is AF an Oxidant Injury?

Barbara Casadei, MD University of Oxford, Oxford, United Kingdom

The Role of Oxidation in Sudden Death TBD

Moderated Discussion

LUNCH BREAK

12:30 - 1:30 p.m.

SESSION FIVE

AUTONOMIC CONTROL OF HEART RHYTHM AND ARRHYTHMIA

Chair:

Douglas P. Zipes, MD, FHRS Krannert Institute of Cardiology, Indianapolis, IN

Molecular Mechanisms of Remodeling of Sympathetic Nerves and Receptors and Arrhythmia

Beth A. Habecker, PhD Oregon Health & Science University, Portland, OR

Neural Remodeling and Cardiac Arrhythmia in Animal Models

Peng-Sheng Chen, MD, FHRS Indiana University School of Medicine, Indianapolis, IN

Neural Remodeling and Cardiac Arrhythmia in Humans

Kalyanam Shivkumar, MD, PhD, FHRS UCLA Cardiac Arrhythmia Center, Los Angeles, CA

Moderated Discussion

BREAK

2:30 - 3 p.m.

DOUGLAS P. ZIPES LECTURESHIP AWARD

Rabbit Warren or Beehive: The Mechanisms of Fibrillation and Defibrillation

Raymond E. Ideker, MD, PhD, FHRS University of Alabama, Birmingham, AL



LEAD MANAGEMENT FORUM

Supported by an unrestricted educational grant provided by Spectranetics and St. Jude Medical

WEDNESDAY, MAY 8

LM01 CIED/HF

8 - 9:35 a.m.

LEAD DEVELOPMENT

Session Description: This session will provide an historical overview of lead development, including lead failures from which to learn. Present development, bench testing, clinical trialing, and regulatory processes will be described, as well as requirements for future leads.

Chairs:

G. Frank O. Tyers, MD Vancouver Acute Care Hospitals, Vancouver, BC, Canada Ali Oto, MD, FHRS Hacettepe University School of Medicine, Ankara, Turkey

A Historic Perspective on Lead Development

Harry Mond, MD, FHRS, CCDS Royal Melbourne Hospital, Victoria, Australia

Lessons Learned: Earlier Lead Failures

Andrew E. Epstein, MD, FHRS University of Pennsylvania, Philadelphia, PA

New Leads: Development, Testing, Clinical Evaluation, and Regulatory Approval

Jeffrey A. Brinker, MD Johns Hopkins Hospital, Baltimore, MD

Are Leads Needed in the Future and if So, What are the Requirements?

Bruce L. Wilkoff, MD, FHRS, CCDS Cleveland Clinic, Cleveland, OH

LM02 CIED/HF

9:50 a.m. - noon

LEAD IMPLANTATION

Session Description: This session will describe how to select the best lead for each purpose, implantation techniques, and the prevention and treatment of implantation related complications.



Chairs:

Antonio Raviele, MD, FHRS ALFA-Alliance to Fight Atrial Fibrillation, Venice-Mestre, Italy

Michael Glikson, MD Sheba Medical Center, Ramat Gan, Israel

Selecting the Best Lead for Each Purpose and Patient

Charles J. Love, MD, FHRS, CCDS Ohio State University, Columbus, OH

Best Cephalic, Subclavian, and Alternative Implantation Techniques

Suneet Mittal, MD, FHRS Valley Health System of NY and NJ, New York, NY

LV Lead Implantation Techniques, including Epicardial

Seth J. Worley, MD, FHRS Heart Group of Lancaster General, Lancaster, PA

Prevention and Treatment of Lead Implantation Complications, including Treatment of Leads in the LA/LV

Neil F. Strathmore, MBBS, FHRS, CCDS Royal Melbourne Hospital, Melbourne, Australia

LM03 CIED/HF

12:30 – 2:15 p.m.

LEAD FOLLOW UP, TROUBLESHOOTING, AND MANAGEMENT

Session Description: This session will describe methods for lead follow up and troubleshooting, as well as the management of infected, superfluous, and recalled leads.

Chairs:

Massimo Santini, MD Ospedale San Filippo Neri, Rome, Italy

John Camm, MD, FHRS St. George's Hospital Medical School, London, United Kingdom

Follow up and Troubleshooting of Brady, Tachy, CS, and Epicardial Leads

Paul A. Levine, MD, FHRS, CCDS Loma Linda University School of Medicine and UCLA, Loma Linda, CA

Managing Infected Leads

Maria Grazia Bongiorni, MD University Hospital of Pisa, Pisa, Italy

Managing Functional and Non-functional Superfluous Leads

Seth J. Worley, MD, FHRS The Heart and Vascular Institute of Lancaster General, Lancaster, PA

Managing Recalled Leads

Frank A. Bracke, MD Catharina Hospital, Eindhoven, Netherlands

LM04 CIED/HF

2:30 - 4 p.m.

LEAD EXTRACTION

Session Description: This session will describe techniques for lead extraction and the management of patients with occluded veins, as well as prevention of lead extraction complications.

Chair:

Charles Kennergren, MD, PhD, FHRS Sahlgrenska University Hospital, Gothenburg, Sweden

Techniques for Lead Extraction

Oussama M. Wazni, MD Cleveland Clinic, Cleveland, OH

Past and Present Results of Lead Extraction in Small, Medium, and Large Centers

Gemma Pelargonio, MD Catholic University, Istituto Di Cardiologia, Rome, Italy

Managing Patients with Occluded Veins from a Leads Perspective

Roger G. Carrillo, MD, FHRS, CCDS University of Miami Hospital, Miami, FL

Prevention and Treatment of Lead Extraction Complications

Charles L. Byrd, MD CL Byrd, MD, Weston, FL

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TICKETED SESSIONS Ticketed Sessions

MEET-THE-EXPERTS LUNCHEONS

THURSDAY, MAY 9 12:15 – 1:15 p.m.

ME01 BS

HEART RHYTHM RESEARCH: FUNDING LANDSCAPE

Session Description: The session will teach basic and clinical heart rhythm researchers the art of getting federal funding for their research projects and laboratories. Experts from NIH NHLBI, NIH Center for Scientific Review, and academic researchers at different career stages will present their visions and advice on building and maintaining a successful scientific enterprise in the field of cardiac arrhythmia.

Chair:

Jose Jalife, MD, FHRS University of Michigan, Ann Arbor, MI

NHLBI Support of Arrhythmia Research

David A. Lathrop, PhD National Heart Lung & Blood Institute, Bethesda, MD

Navigating the Peer-review Process during Challenging Times

Yuanna Cheng, MD, PhD NIH Center of Science Research, Washington, DC

How to Make It to the Big League and Get Your First R01

Crystal M. Ripplinger, PhD University of California — Davis, Davis, CA

Staying Afloat — Building and Funding Productive Teams

James Weiss, MD University of California — Los Angeles, Los Angeles, CA

ME02 CIED/HF

LATEST ICD TECHNOLOGY: THE TOTALLY SUBCUTANEOUS DEVICE

Session Description: The indications, implantation technique, and potential risks and benefits of the totally subcutaneous ICD system will be discussed.

Chair:

Michael R. Gold, MD, PhD, FHRS Medical University of South Carolina, Charleston, SC

The Subcutaneous ICD: Overview and Procedure

Martin Burke, DO University of Chicago Hospitals, Chicago, IL

The Subcutaneous ICD: Indications

Bradley P. Knight, MD, FHRS Northwestern Memorial Hospital, Chicago, IL

The Subcutaneous ICD: Benefits and Risks

Peter H. Belott, MD, FHRS Sharp Grossmont Hospital, La Mesa, CA

ME03 CIED/HF

SUCCESS IN LEAD EXTRACTION: WHAT I HAVE LEARNED

Session Description: This session will highlights three world-renowned lead extractors and their success and lessons learned in lead extraction.

Chair:

Charles Kennergren, MD, PhD, FHRS Sahlgrenska University Hospital, Gothenburg, Sweden

Patient Selection

Charles L. Byrd, MD CL Byrd, MD, Weston, FL

Techniques

Roger G. Carrillo, MD, FHRS, CCDS University of Miami Hospital, Miami, FL

Minimizing Complications

George H. Crossley, MD, FHRS, CCDS St. Thomas Research Institute and University of Tennessee College of Medicine, Nashville, TN

ME04 CECA

THE PAST, PRESENT, AND FUTURE OF VT ABLATION: AN EXPERT'S PERSPECTIVE

Session Description: Leading experts outline the historical context in our understanding of ventricular arrhythmogenesis. They will lay the basis for present approaches for ablative management in patients without structural heart disease, the underlying anatomy and correlation with new electrophysiological insights as to why these arrhythmias occur, and thus refine an approach for ablation, which will be presented. The unique causes for difficulty and troubleshooting errors that may occur with ablative management in patients with structural heart disease will be explained.

Chair:

William G. Stevenson, MD, FHRS Brigham and Women's Hospital, Boston, MA

How Did We Succeed with VT Ablation?

William G. Stevenson, MD, FHRS Brigham and Women's Hospital, Boston, MA

VT Ablation Success: Is it Mapping, Physiology, or Biophysics?

Francis E. Marchlinski, MD, FHRS University of Pennsylvania Health System, Philadelphia, PA

The Future of VT Ablation: Anatomy, Physiology, and Fibrillation

David J. Wilber, MD, FHRS, CCDS Loyola University Medical Center, Maywood, IL

ME05 CECA

THE BUSINESS OF PEDIATRIC EP

Session Description: This session will explore the economic and business models that influence the pediatric EP practice.

Chair:

TBD

Managing a Pediatric EP Practice in Academic Medicine

Richard A. Friedman, MD, MBA, FHRS, CCDS Columbia University Medical Center, New York, NY

The Economics of Medical Devices in Pediatric EP

Peter P. Karpawich, MD, FHRS Children's Hospital of Michigan, Wayne State University, Detroit, MI

ME06 PPP

THE DISCONNECT BETWEEN REIMBURSEMENT AND THE GUIDELINES: LIFE AFTER THE DOJ INVESTIGATION

Session Description: Hospitals have been investigated by the U.S. Department of Justice due to the misalignments between contemporary evidence-based medical practice and the National Coverage Determination for ICDs. This session will summarize the DOJ investigation and provide guidance on how to minimize the risk of investigation.

Chair:

Richard L. Page, MD, FHRS University of Wisconsin School of Medicine, Madison, WI

The Buckets

Andrea M. Russo, MD, FHRS UMDNJ/Robert Wood Johnson Medical School, Cooper University Hospital, Camden, NJ

Reimbursement Disconnect

Bruce D. Lindsay, MD, FHRS, CCDS Cleveland Clinic Foundation, Cleveland, OH

Practice Recommendations

Bruce L. Wilkoff, MD, FHRS, CCDS Cleveland Clinic, Cleveland, OH

ME07 CECA

AN EXPERTS' APPROACH TO THE MANAGEMENT OF AF

Session Description: This session will discuss putting AF ablation into clinical context.

Chair:

Francisco G. Cosio, MD, FHRS Hospital Universitario Getafe, Getafe, Spain

Anticoagulation and Stroke Reduction in AF TBD

When to Ablate - When Not to Ablate

D. Wyn Davies, MD, FHRS St. Mary's Hospital, London, United Kingdom

AF Ablation: Tricks of the Trade

Luigi Di Biase, MD, PhD, FHRS Texas Cardiac Arrhythmia Institute, Austin, TX

FRIDAY, MAY 10

12:15 - 1:15 p.m.

ME08 CIED/HF

CIED REUSE: A HUMANITARIAN EFFORT

Session Description: Societal benefits and safety of CIED reuse will be discussed in this session.

Chair:

Behzad B. Pavri, MD Thomas Jefferson University Hospital, Philadelphia, PA

Ethical Issues and Societal Benefits of Reuse

Andrew D. Krahn, MD, FHRS Sauder Family and Heart & Stroke Foundation of BC, Vancouver, BC, Canada

Safety of Reuse

TBD

What Should We Do Next to Enhance Awareness?

TBD

ME09 CECA

ANTIARRHYTHMIC DRUGS VS. VT ABLATION IN PATIENTS WITH APPROPRIATE ICD SHOCKS

Session Description: In this session, experts will review the relative value of medical therapy and interventional strategies, including radiofrequency ablation and autonomic manipulation for minimizing ICD shocks in patients with malignant ventricular arrhythmias.

Chair:

David S. Cannom, MD, FHRS Good Samaritan Hospital, Los Angeles, CA

Antiarrhythmic Therapy to Prevent ICD Shocks: Amiodarone, Ranolazine, and Others

Gerald V. Naccarelli, MD, FHRS Penn State Hershey Heart and Vascular Institute, Hershey, PA

VT Ablation to Prevent ICD Shocks

John M. Miller, MD, FHRS Indiana University School of Medicine, Indianapolis, IN

How Early Should We Intervene for ICD Shocks?

Vivek Y. Reddy, MD

Mount Sinai School of Medicine, New York, NY

ME10 CECA

SUCCESS IN AF ABLATION: WHAT I HAVE LEARNED

Session Description: In this session, experts will review the difficult issues related to assessing AF ablation and comparing defined techniques in the EP laboratory to distinguish successful approaches.

Chair:

Riccardo Cappato, MD, FHRS IRCCS Policlinico San Donato, San Donato Milanese, Italy

Patient Selection

Steven C. Hao, MD, FHRS Sutter Pacific Medical Foundation, San Francisco, CA

Techniques

Robert C. Kowal, MD, PhD, FHRS HeartPlace/Baylor University Medical Center, Dallas, TX

Avoiding Complications

James M. Irwin, MD Bay Heart Group, PA, Tampa, FL

ME11 CECA

RISK STRATIFICATION STRATEGIES IN PEDIATRIC AND CONGENITAL EP

Session Description: An assessment of risk of sudden death and its management in pediatric patients will be discussed from several perspectives in an interactive format.

Chair:

Steven B. Fishberger, MD, FHRS, CCDS Miami Children's Hospital, Miami, FL

Noninvasive Risk Stratification — HRV< SAECG, TWA

Andrew M. Davis, MBBS, MD, FHRS Royal Children's Hospital, Melbourne, Australia

Use of Genotyping for Risk Assessment

Martin Tristani-Firouzi, MD University of Utah, Salt Lake City, UT

WPW Risk Stratification

Mitchell Cohen, MD, FHRS Phoenix Children's Hospital, Phoenix, AZ

ME12 PPP

TOWARD MORE OPTIMAL USE OF ICDS AND CRTS

Session Description: A review of current data on addressing racial, gender, and age-related disparities in the use of ICDs and CRTs.

Chair:

Clyde W. Yancy, MD, MSc Northwestern University, Chicago, IL

Addressing Racial Disparities in the Use of ICDs and CRTs

Kevin L. Thomas, MD Duke University, Durham, NC

Optimal Identification of Patients in One's Clinical Practice Who Could Benefit from an ICD and/or CRT

Rachel Lampert, MD, FHRS Yale University School of Medicine, New Haven, CT

Women and Devices: Where are the Gaps, How Do We Address Them?

Samuel F. Sears, PhD East Carolina University, Greenville, NC

ME13 CECA

PIONEERS OF PEDIATRIC AND CONGENITAL EP

Session Description: Founders of pediatric and congenital electrophysiology practice and clinical research will be recognized. Their academic careers will be placed into the perspective of the development of the field, and the audience will have the opportunity to ask questions about the evolution of modern practice.

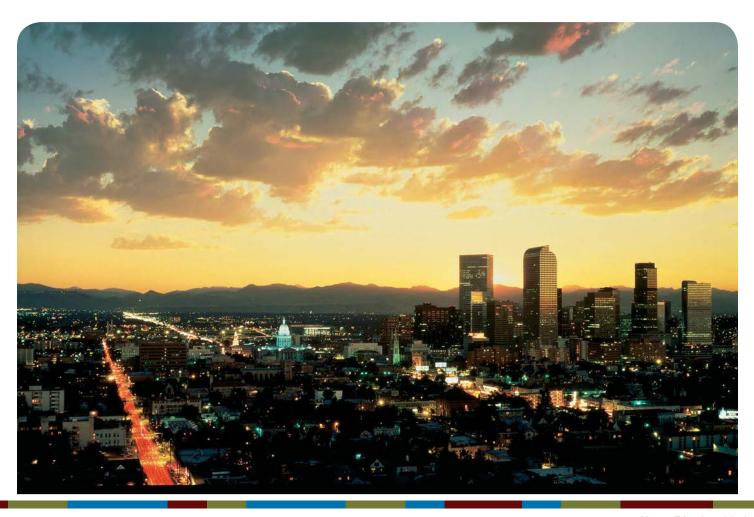
Chairs:

J. Philip Saul, MD, FHRS Medical University of South Carolina, Charleston, SC

Edward P. Walsh, MD, FHRS Boston Children's Hospital, Boston, MA

Invited Speaker:

Grace S. Wolff, MD University of Miami, Jackson Memorial Medical Center, Miami, FL



HEART RHYTHM 2013 CONFIRMED FACULTY

Α

William T. Abraham, MD Columbus, OH

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Nazem W. Akoum, MD, FHRS Salt Lake City, UT

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Stuart Berger, MD, FHRS Milwaukee, WI

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T. Jared Bunch, MD Murray, UT

Martin Burke, DO Chicago, IL

David M. Bush, MD, PhD Fort Worth, TX

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Charles L. Byrd, MD Weston, FL



Jose A. Cabrera, MD, PhD Madrid, Spain

Hugh Calkins, MD, FHRS, CCDS Baltimore, MD

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Kevin R. Campbell, MD Raleigh, NC

David S. Cannom, MD, FHRS Los Angeles, CA

Bryan C. Cannon, MD Rochester, MN

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Yong-Mei Cha, MD, FHRS Rochester, MN

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Vijay S. Chauhan, MD Toronto, Canada

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Ming-Long Chen, MD, PhD Nan Jing, China

Shih-Ann Chen, MD Taipei, Taiwan

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James L. Cox, MD Naples, FL

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Jane E. Crosson, MD Baltimore, MD

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Antonio Curnis, MD Brescia, Italy

Anne B. Curtis, MD, FHRS, CCDS Buffalo, NY

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Gopi Dandamudi, MD, FHRS Wilkes-Barre, PA

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Andre D'Avila, MD, PhD New York, NY

Andrew M. Davis, MBBS, MD, FHRS Melbourne, Australia

John D. Day, MD, FHRS Salt Lake City, UT

Sharlene Day, MD Ann Arbor, MI

Natasja M. S. De Groot, MD, PhD Leiden, Netherlands

Roberto De Ponti, MD, FHRS Varese, Italy

Barbara J. Deal, MD Chicago, IL

Thomas F. Deering, MD, FHRS Atlanta, GA

Isabel V. Deisenhofer, MD Munich, Germany

Brian P. Delisle, PhD Lexington, KY

Paolo Della Bella, MD Milano, Italy

Mario Delmar, MD, PhD, FHRS New York City, NY

Isabelle Deschenes, PhD Cleveland, OH

Sanjay S. Deshpande, MD, FHRS Milwaukee, WI

Luigi Di Biase, MD, PhD, FHRS Austin, TX

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John P. DiMarco, MD, PhD, FHRS Charlottesville, VA

Sanjay Dixit, MD, FHRS Philadelphia, PA

Dobromir Dobrev, MD, PhD Mannheim, Germany

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OFFICIAL EDUCATIONAL SATELLITE SYMPOSIA

TUESDAY, MAY 7, 2013

7 a.m. - 4:30 p.m.

THE 26th ANNUAL FELLOWS COURSE: INTERPRETING THE UNKNOWN ELECTROGRAM

Jointly sponsored by Postgraduate Institute for Medicine and Medtelligence, LLC



This independent educational activity is supported by an educational grant and in-kind support of the large calipers from Bard Electrophysiology

This one-day intensive course has been designed to educate participants on best practices to effectively develop approaches for diagnosing many arrhythmias based on ECG and electrogram tracings, and review key factors in understanding arrhythmogenic electrocardiographic features. Now in its 26th year, an outstanding faculty lead by Dr. Eric Prystowsky will engage the participants in a highly interactive format. A full luncheon and coffee breaks will be provided.

Accreditation Statement: This activity has been planned and implemented in accordance with the Essential Areas and policies of the Accreditation Council for Continuing Medical Education through the joint sponsorship of Postgraduate Institute for Medicine and Medtelligence, LLC. The Postgraduate Institute for Medicine is accredited by the ACCME to provide continuing medical education for physicians.

The Postgraduate Institute for Medicine designates this live activity for a maximum of 7.0 AMA PRA Category 1 Credits™. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

WEDNESDAY, MAY 8, 2013

11 a.m. - 1 p.m.

10th ANNUAL LEARN FROM THE EXPERTS — APPROACH TO THE UNKNOWN TRACING

Supported by an unrestricted educational grant provided by Medtronic, LLC



This activity is specific to the needs of Fellows-in-Training

Utilizing a case-based approach, this course is designed to instruct EP Fellows on the interpretation of electrocardiographic and intracardiac tracings. The course will include discussions on mechanisms, diagnosis, and treatment of arrhythmias. Discussion by faculty will accompany the case presentation.

11 a.m. - 1 p.m.

THE FUTURE OF ELECTROPHYSIOLOGY

Sponsored by MediaSphere Medical, LLC and Cine-Med



Supported by an unrestricted educational grant provided by St. Jude Medical



This symposium will review advancements in the ever-evolving field of electrophysiology that will meet current and future challenges for the achievement of optimal outcomes in daily practice. The expert faculty will share their insights about innovative approaches and best practices, which will profoundly impact the future of patient care.

The engaging lecture topics, complemented with interactive discussions, will address important clinical decision-making strategies for reducing Fluoroscopy in the EP Lab, assess emerging techniques to effectively manage patients with VT, and investigate the impact of advances in 3D Mapping for Model Creation and Mapping Display.

Accreditation Statement: This activity has been planned and implemented in accordance with the essential areas and policies of the Accreditation Council for Continuing Medical Education through joint sponsorship of Cine-Med and MediaSphere Medical. Cine-Med is accredited by the ACCME to provide continuing medical education for Physicians.

Cine-Med designates this educational activity for a maximum of 1 AMA PRA CATEGORY 1 Credit(s). Physicians should only claim credit commensurate with the extent of their participation in the activity.

MediaSphere Medical is approved by the California Board of Registered Nursing, Provider Number 15880. MediaSphere Medical designates this educational activity for 1 Contact Hour. Nurses should only claim credit commensurate with the extent of their participation in the activity.

7:30 - 9:30 p.m.

THE 25th ANNUAL MICHEL MIROWSKI SUDDEN CARDIAC DEATH SYMPOSIUM AND AWARD PRESENTATION

Sponsored by Medscape, LLC

Medscape

Supported by an unrestricted educational grant provided by Boston Scientific Corporation

* Scientific

The Mirowski Symposium began in 1989 to honor the pioneering work of Dr. Michel Mirowski in the development of the implantable cardioverter defibrillator. The Mirowski Award for Excellence in Clinical Cardiology and Electrophysiology is given annually to recognize an individual who has made a fundamental contribution to the understanding and/or treatment of cardiac arrhythmias. This year's Symposium marks the 25th presentation of the Mirowski Award and will focus on the pioneering vision and innovative strategies that will shape and advance the role of electrophysiology and clinical cardiology in 2013 and beyond.

Accreditation Statement: Medscape, LLC is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Medscape, LLC designates this live activity for a maximum of 1.25 AMA PRA Category 1 Credit(s) TM . Physicians should claim only the credit commensurate with the extent of their participation in the activity.

EXHIBIT HALL HIGHLIGHTS

TECHNICAL EXHIBITION

The Exhibit Hall is the place to be for technology and innovation! More than 130 exhibitors will be displaying and demonstrating the latest arrhythmia products and services, and opportunities to network with thousands of physicians, scientists, allied professionals, and industry leaders will abound. By popular demand, the Exhibit Hall will once again open on Wednesday, May 8 at 6 p.m., kicking off with the Featured Poster Session & Reception in Poster Town.

Wednesday, May 8 6 − 7:30 p.m.

Thursday, May 9 9:30 a.m. – 5 p.m.

Friday, May 10 9:30 a.m. – 5 p.m.

HEART RHYTHM PLACE | BOOTH 739

Heart Rhythm Place is the official HRS exhibit booth and your source for the latest Society tools and resources for providers, patients, and caregivers. Heart Rhythm Place will feature:

- New clinical documents and guidelines
- Information on educational resources and programs
- Membership services and information about FHRS
- Free issues of the Heart Rhythm Journal
- *Meet the Authors* networking opportunities
- Health Policy news and information
- Coding and Reimbursement services
- International Board of Heart Rhythm Examiners (IBHRE)
- Heart Rhythm On Demand
- Logo merchandise (purchase through the HRS online store)
- Patient education materials and more!

RHYTHMS IN TIME

Rhythms in Time, a component of the Furman Fund, is the Heart Rhythm Society's history theatre. The Furman Fund was established in 2007 to promote founding father Dr. Seymour (Sy) Furman's visions: preserve an historic view

of cardiac pacing and electrophysiology; inspire clinicians, students, and patients with the rhythmic wonder of the human heart; and educate the health care and patient community about the field of heart rhythm management, its history of innovation, and future potential for improving and extending the lives of cardiac arrhythmia patients. These objectives are enhanced by the awarding of three travel scholarships to the Heart Rhythm Society's annual Scientific Sessions, supported by generous donors.

This year's *Rhythms in Time* educational EP History Session will focus on Dr. Gordon Moe, Director of Research of the Masonic Medical Research Laboratory in Utica, NY.

As part of the history theatre, devices on loan from the Furman Estate and Heart Rhythm Society history collection will also be showcased at Heart Rhythm Place.



LISTING OF EXHIBITING COMPANIES

AADCO Medical Inc.

Abiomed

ADInstruments

Affinity Medical Technologies

AtriCure, Inc.

Bard Electrophysiology

Baylis Medical Company

Biomedical Systems

Biosense Webster

BIOTRONIK

Boston Scientific Corporation

CardioFocus, Inc.

Cardiolnsight Technologies Inc.

CardioNet

CardioTek B.V.

Cardiotext Publishing

Cardiovascular Business

Cardiovascular Credentialing International-CCI

Carrot Medical, LLC

Cascade Refining, Inc.

Catheter Robotics Inc.

CNSystemsMedizintechnikAG

Cook Medical

eCardio Diagnostics

Elsevier

EPreward Inc.

European Heart Rhythm

Finapres Medical Systems

Fischer Medical Technologies

Flexible Informatics, LLC

GeneDx

Greatbatch Medical

Hansen Medical, Inc.

Heraeus Medical Components

HRA Healthcare Research & Analytics

Integrated Medical Devices, Inc

Janssen Pharmaceuticals Inc.

LifeWatch Services Inc.

Lippincott Williams & Wilkins-Wolters

Kluwer

McKesson

MEDICALgorithmics S.A.

Medicomp, Inc.

Mednet Healthcare Technologies

Medtronic, Inc.

Mogul Enterprises/Tyche Med Tech

Inc.

Mortara Instrument Inc.

National Manufacturing Co. Inc.

nContact, Inc.

Omega Medical Imaging, LLC

Oscor Inc.

Oxford University Press

Pace Medial Inc.

Philips

Pressure Products, Inc.

Protech Leaded Eyewear, Inc.

ScottCare Cardiovascular Solutions

Siemens Medical Solutions USA, Inc.

Sorin Group

Spectocor

Spectranetics

ST Cardio Technologies

St. Jude Medical

Stereotaxis, Inc.

StopAfib.org

Stryker Sustainability Solutions

Texas Childrens Hospital

Thoratec Corporation

Toshiba American Medical

Systems, Inc.

Transgenomic, Inc.

VENICEARRHYTHMIAS 2013

Weaver and Company

Wiley

Xeridiem

Z0LL

(As of February 1, 2013)

RHYTHM THEATRES

INDUSTRY-EXPERT PRESENTATIONS

The Exhibit Hall will feature two Rhythm Theatres, providing even more opportunities for attendees to learn about new data, products, and services. Come hear industry expert presentations on the latest clinical information and innovation.

(Note: The Industry-Expert Presentations are not approved for Continuing Medical Education [CME] or Continuing Education [CE] credit.)

EXHIBITOR ADVISORY COUNCIL

The Heart Rhythm Society Exhibitor Advisory Council (EAC) is comprised of corporate representatives from companies participating as exhibitors in the Annual Scientific Sessions. The EAC serves a critical role in educating, informing, and advising the Heart Rhythm Society leadership regarding the successful operation of the Society's Annual Technical Exhibit Program.

EAC Chair: Jill Schmitt, Medtronic, Inc.

Bill Abboud, ST Cardio Technologies

Carol Bethea, St. Jude Medical

Noreen Browne, Perminova Inc.

Karen Gilseth, Boston Scientific

Terrie Holahan, AtriCure, Inc.

Larry Lawson, eCardio Diagnostics

Mark LeRose, Protech Leaded Eyewear, Inc.

Laura MacGuire, GE Healthcare

Jacky Melikian, BIOTRONIK

Millicent Victorian, Stereotaxis, Inc.

Annie Yao, Biosense Webster





Science | Discovery | Innovation Honoring our past. Shaping our future.















Purchase Heart Rhythm On Demand during Your Registration and Save up to \$100!

Heart Rhythm On Demand is a comprehensive digital library of more than 250 sessions from the Heart Rhythm 2013 Scientific Sessions.

- View recordings online of the presentations—presenter slides, videos, or animation included by the presenters—and hear their voices as if you were in the room
- Access online content as early as 24 hours after each session ends
- Earn additional CME credits on select sessions above and beyond what you earn at the meeting
- View content on your mobile device iPhone ®, iPad ®, Android ™, and tablets.
- Take the content with you while traveling using a companion USB drive and downloadable MP3s
- Download PDFs of the speakers' slides



Conveniently order now as part of your registration, avoid the lines, and save up to \$100 off the onsite price!

Purchase Heart Rhythm On Demand as part of your registration at http://www.hrsonline.org/HRS13Registration

REGISTRATION INFORMATION

IMPORTANT DATES

January 9, 2013 Registration Open for All

Attendees

March 9, 2013 Early Registration Deadline

April 12, 2013 Deadline to Cancel

Registration with Refund
Deadline to Request a
Registration Substitution

May 4, 2013 Advance Registration

Deadline

CHOOSE ONE OF FOUR WAYS TO REGISTER!

Online www.HRSonline.org/Sessions

By Mail/Fax Please visit www.HRSonline.org/

Sessions to download a copy of

the paper registration form.

By Phone 800-748-5052 or 508-743-0529

Register Early! Registrations are processed on a first-come, first-served basis. Seating is limited for ticketed sessions, and the sessions are expected to reach capacity. All requested information must be provided and complete payment received for registration to be processed.

The Heart Rhythm Society accepts the following payment methods: American Express, VISA, MasterCard, and checks drawn by a United States bank in United States dollars. The registrant MUST pay all fees or charges connected with registration at the time of registration. Credit cards will be charged immediately. Checks MUST be made payable to the Heart Rhythm Society.

Please note: Confirmation is provided via e-mail within 72 hours of receipt of your registration including full payment and any documentation needed. If you do not receive confirmation within 72 hours, please contact Convention Data Services (CDS) at 800-748-5052 or 508-743-0529 or HRS@xpressreg.com.

MEMBER REGISTRATION REQUIREMENTS

Become a member now at www.HRSonline.org/Join and save up to \$360 on meeting registration. Individuals applying for membership with the Heart Rhythm Society during the Heart Rhythm 2013 registration period must have their completed application packet (application, CV, and dues) approved by the Society prior to registering for Heart Rhythm 2013. The Society will not reimburse the difference between the member and nonmember rates to Heart Rhythm 2013 attendees whose completed applications are approved after they register for Heart Rhythm 2013. If you have questions regarding your membership status or would like information about Heart Rhythm Society membership, please contact Membership@HRSonline.org.

FELLOWS-IN-TRAINING NON-MEMBER DOCUMENTATION

Non-member Physicians-in-Training, Scientists-in-Training, Interns, and Residents must submit a letter from their department head (stating status of their fellowship with dates of service) along with their registration. This documentation must be received within two weeks of registering for Heart Rhythm 2013, or the registration fee will change to the Non-member Physician rate. In addition to your name, the documentation should also include your Heart Rhythm Society Customer ID Number. *Please fax or mail documentation to the registration company.*

UNDERGRADUATE STUDENTS DOCUMENTATION

Non-degreed Undergraduate Students may register in advance of Heart Rhythm 2013. Undergraduate Students must present their student identification, current through May 31, 2013, at the on-site registration counter in Lobby A of the CCC.

ON-SITE REGISTRATION

On-site registration begins Tuesday, May 7, at 3 p.m. in Lobby A of the CCC. Accepted credit cards include: American Express, VISA, and MasterCard. Checks MUST be made payable to the Heart Rhythm Society drawn by a United States bank in U.S. dollars.

Non-member Physicians-in-Training, Scientists-in-Training, Interns, and Residents registering on site must bring the required documentation (see above).

REGISTRATION CATEGORIES AND FEES

The fee for **Heart Rhythm 2013** includes admission to the Mini-Courses, Allied Health Professional Forums, the Basic/Translational Science Forum, Lead Management Forum, Hands-On Session, Opening Plenary Session, Case-Based Tutorials, Core Curricula, Oral Abstract and Poster Presentations, Featured Symposia, Debates, Translational EP Sessions, Technical Exhibits, Featured Poster Session & Reception, and the Awards Ceremony and Presidents' Reception. An **additional fee** is required for the AF Summit, VT/VF Summit, Meet-the-Expert Luncheons, and the Women in EP Networking Luncheon.

ONE-DAY REGISTRATION

One-day registration options are available for Wednesday, Thursday, Friday, or Saturday. Access to non-ticketed sessions and the Technical Exhibits is for the day of purchase only. Saturday's one-day registration does not include the Technical Exhibits. Ticketed functions are extra for all one-day registrants.

Not a member? Join now at www.HRSonline.org/join and save up to \$360 on registration!

HEART RHYTHM 2013 SCIENTIFIC SESSIONS FEE CATEGORIES	Early through March 9	Advance March 10 – May 4	On Site May 5 – May 11
Faculty/Chairs – Invited speakers or chairs of plenary, clinical tutorials, featured symposia, debates, and core curricula sessions. Includes chairs for abstract sessions but does not apply to poster or abstract presenters.	\$0	\$0	\$0
Abstract Presenters – Invited poster and abstract submitters. Applies to first/primary author only.	\$355	\$355	\$355
Physician Members – Physician members of the Heart Rhythm Society.	\$755	\$865	\$895
Industry Members – Industry members of the Heart Rhythm Society.	\$755	\$865	\$895
Scientist Members – Scientist members of the Heart Rhythm Society or members of the Cardiac Electrophysiology Society (CES).	\$395	\$485	\$495
Allied Health Professional Members – Allied Professional members of the Heart Rhythm Society, including physician assistants and hospital administrators.	\$395	\$485	\$495
Affiliate Members – Physicians-in-Training and Scientists-in-Training who are members of the Heart Rhythm Society.	\$275	\$385	\$495
Emeritus Members – Emeritus members of the Heart Rhythm Society.	\$0	\$0	\$0
Physician Non-members – Physicians who hold an MD or equivalent degree.	\$995	\$1,135	\$1,155
Industry Non-members – Employees of organizations or companies that do not provide direct patient care and/or companies that manufacture and sell device, pharmaceutical, or other products.	\$995	\$1,135	\$1,155
Scientist Non-members – Scientists who hold a doctoral degree and a faculty position at an academic institution.	\$785	\$895	\$915
Allied Health Professional Non-members – Non-physician and non-scientist professionals actively involved with the technical aspects of pacemaker/ICD or the performance of electrophysiological techniques who are affiliated with an academic institution/clinical practice setting or equivalent. Includes nurses, technicians, physician assistants, and hospital administrators.	\$595	\$725	\$735
Fellow-in-Training Non-members – Physicians-in-Training (MDs enrolled in an ACGME training program or equivalent) and Scientists-in-Training (graduate students or post-doctoral fellows actively involved in research training) who are not members of the Heart Rhythm Society. Requires a letter from department head stating status and dates of internship or residency; degree includes MD, PhD.	\$595	\$725	\$735
Exhibiting Company Personnel Attending Scientific Sessions – Non-member physicians or scientists employed by a Heart Rhythm 2013 exhibiting company. Requires booth number.	\$785	\$885	\$915
Group – International groups of 10 or more organized by travel agents or tour operators. Does not apply to Invited Faculty/Chairs, Abstract Presenters, and/or Society members.	\$935	\$1075	\$1,095
Undergraduate Students – An undergraduate student enrolled in an accredited college or university. Requires copy of student identification current through May 31, 2013.	\$175	\$175	\$175
Guests – A spouse, significant other, guest, or family member of the registrant, over the age of 16, who is not involved in or studying the fields of cardiology, electrophysiology, or pacing. Good for admission to the Exhibit Hall, poster sessions, and President's Reception ONLY. Guests cannot attend sessions and are not eligible for credits. Children under 16 years of age may not enter the Exhibit Hall at any time.	\$85	\$85	\$85

ONE-DAY REGISTRATION (EARLY, ADVANCE, AND ON SITE)	Wednesday or Saturday	Thursday or Friday
Members	\$295	\$415
Non-Members	\$415	\$530
AF SUMMIT with HR 2013 REGISTRATION (EARLY, ADVANCE, AND ON SITE)		
Members (Physicians, Industry, Scientists, and Emeritus)	\$335	
Members (Allied Health Professionals, including Physician Assistants and Hospital Administrators)	\$135	
Affiliate Members	Complimentary	
Non-members (Physicians, Scientists, Industry Exhibiting Company Personnel Attending Scientific Sessions, and Exhibitor Conference)	\$445	
Non-members (Allied Health Professionals, Physician Assistants, Hospital Administrators, and Undergraduate Students)	\$235	
Non-member Fellows- or Scientists-in-Training	\$135	
AF SUMMIT ONLY (EARLY, ADVANCE, AND ON SITE)		
Members (Physicians, Industry, Scientists, and Emeritus)	\$52	25
Members (Affiliate/Allied Health Professionals, including Physician Assistants and Hospital Administrators)	\$295	
Non-members (Physicians, Industry, Scientists, and Exhibiting Company Personnel NOT Attending Scientific Sessions)	\$62	25
Non-members (Allied Health Professionals, Physician Assistants, Hospital Administrators, Fellowsor Scientists-in-Training, and Undergraduate Students)	\$39	95
VT/VF SUMMIT with HR 2013 REGISTRATION (EARLY, ADVANCE, AND ON SITE)		
Members (Physicians, Industry, Scientists, and Emeritus)	\$335	
Members (Allied Health Professionals, including Physician Assistants and Hospital Administrators)	\$135	
Affiliate Members Non-members (Physicians, Scientists, Industry Exhibiting Company Personnel Attending Scientific	Complimentary	
Non-members (Physicians, Scientisis, Industry Exhibiting Company Personnel Attending Scientific		
	\$44	
Sessions, and Exhibitor Conference) Non-members (Allied Health Professionals, Physician Assistants, Hospital Administrators, and Undergraduate Students)	\$23	15
Sessions, and Exhibitor Conference) Non-members (Allied Health Professionals, Physician Assistants, Hospital Administrators, and Undergraduate Students)		45 35
Sessions, and Exhibitor Conference) Non-members (Allied Health Professionals, Physician Assistants, Hospital Administrators, and Undergraduate Students) Non-member Fellows- or Scientists-in-Training	\$23	45 35
Sessions, and Exhibitor Conference) Non-members (Allied Health Professionals, Physician Assistants, Hospital Administrators, and Undergraduate Students) Non-member Fellows- or Scientists-in-Training VT/VF SUMMIT ONLY (EARLY, ADVANCE, AND ON SITE)	\$23	35 35
Sessions, and Exhibitor Conference) Non-members (Allied Health Professionals, Physician Assistants, Hospital Administrators, and Undergraduate Students) Non-member Fellows- or Scientists-in-Training VT/VF SUMMIT ONLY (EARLY, ADVANCE, AND ON SITE) Members (Physicians, Industry, Scientists, and Emeritus) Members (Affiliate/Allied Health Professionals, including Physician Assistants and Hospital	\$23	45 35 35 25
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Sessions, and Exhibitor Conference) Non-members (Allied Health Professionals, Physician Assistants, Hospital Administrators, and Undergraduate Students) Non-member Fellows- or Scientists-in-Training VT/VF SUMMIT ONLY (EARLY, ADVANCE, AND ON SITE) Members (Physicians, Industry, Scientists, and Emeritus) Members (Affiliate/Allied Health Professionals, including Physician Assistants and Hospital Administrators) Non-members (Physicians, Industry, Scientists, and Exhibiting Company Personnel NOT Attending Scientific Sessions) Non-members (Allied Health Professionals, Physician Assistants, Hospital Administrators, Fellows-or Scientists-in-Training, and Undergraduate Students)	\$23 \$13 \$52 \$29 \$62 \$39	45 35 35 35 25 25 25 Meet-the

GROUP REGISTRATION

If you are registering and housing a group of more than 10 people, contact the Group Coordinator at CDS at 800-748-5052 or 508-743-0529. Special group registration guidelines and instructions will be sent directly to you.

CANCELLATIONS AND REFUNDS

In order to receive a refund, written notification of cancellation must be received by CDS on or before Friday, April 12, 2013. A \$75 processing fee will be withheld. Telephone requests cannot be honored. Fees will not be refunded for no-shows. No refunds will be issued for cancellations received after April 12, 2013 at 11:59 p.m. EDT.

SUBSTITUTIONS

Written notification of substitutions must be received by CDS on or before April 12, 2013. The Heart Rhythm Society reserves the right to collect or retain the balance of registration fees in the event that the substitute's membership category differs from that of the original registrant. Submit substitutions in writing to:

Heart Rhythm 2013

c/o Convention Data Services 107 Waterhouse Road Bourne, MA 02532 USA

Fax: 508-743-0529

E-mail: HRS@xpressreg.com

FREQUENTLY ASKED QUESTIONS

WHAT SESSIONS REQUIRE ADDITIONAL FEES?

Additional fees are required for the AF Summit and VT/VF Summit on Wednesday, the Meet-the-Experts Luncheons (ME) on Thursday and Friday, and the Women in EP Networking Luncheon on Friday.

WHAT IS MY HEART RHYTHM SOCIETY CUSTOMER ID NUMBER? WHERE DO I FIND IT?

The Heart Rhythm Society Customer ID Number is a unique, six-digit number assigned to your customer record. If you are a Heart Rhythm Society member or a previous Scientific Sessions attendee, this number was provided with your registration notice. If you do not have your Customer ID Number, contact the Heart Rhythm Society at Info@HRSonline.org.

I AM NOT A SOCIETY MEMBER. HOW DO I DETERMINE IF I HAVE A CUSTOMER ID NUMBER?

You probably still have a customer record. Log in to www.HRSonline.org/MyHRS to view it or contact the Heart Rhythm Society at Info@HRSonline.org or enter your last name and e-mail address to register online.

HOW DO I CORRECT OUTDATED CONTACT INFORMATION IN MY CUSTOMER RECORD?

Log in or create an account at www.HRSonline.org/MyHRS and click "Update/Edit My Profile." Changes to your profile will be visible in the registration database within one day.

WHEN WILL I RECEIVE MY BADGE AND TICKETS?

You may pick up your badge and tickets at registration in Lobby A of the CCC.

WHAT HAPPENS IF I REGISTER FOR THE MEETING AND THEN FIND OUT I AM AN ABSTRACT PRESENTER? DO I GET A REFUND?

Yes, your Scientific Sessions registration fee, less the \$355 Abstract Presenter fee, will be refunded automatically by CDS. This applies only to the first/primary author. There are additional fees for the AF Summit, VT/VF Summit, Meet-the-Experts Luncheons, and the Women's in EP Networking Luncheon.

GENERAL AND HOTEL INFORMATION

GENERAL INFORMATION

AMERICANS WITH DISABILITIES ACT STATEMENT

The Heart Rhythm Society supports the Americans with Disabilities Act. Should you require specific aids or other services to accommodate your participation at Heart Rhythm 2013, please indicate so at the time of registration. A staff member will contact you to assist with special arrangements.

AGE POLICY

Due to liability restrictions, no one under the age of 16, including infants and toddlers, will be permitted to attend Heart Rhythm 2013 or to enter the Exhibit Hall at any time.

ATTIRE

Business dress is encouraged for all events at the Scientific Sessions. It is often difficult to control the temperature in a large ballroom, so plan to dress in layers and/or bring a sweater or jacket. Comfortable shoes are a must!

DIETARY NEEDS

If you are attending either the AF Summit or VT/VF Summit on Wednesday, Meet-the-Experts Luncheons, and/or the Women in EP Networking Luncheon on Friday and have special dietary needs such as kosher or vegetarian, please indicate so at the time of registration. Kosher or vegetarian meals will not be available unless notification is provided in advance. Special meal tickets will be included in your registration packet. Kosher meals must be requested by May 1, 2013.

LANGUAGE

The official language of the Annual Scientific Sessions is English. Simultaneous translation will not be available.

LOCATION

Most official sessions and events will be held at the Colorado Convention Center (CCC) which is located at 700 14th Street, Denver, CO. Some sessions may be held at the Hyatt Colorado Convention Center and the Embassy Suites Denver.

MEDIA

The Press Room will be located in Room 610 of the CCC. Inquiries regarding press badges, news releases, and media briefings should be directed to Kennesha Baldwin, Manager, Communications and Public Relations, at media@HRSonline.org. The Press Room opens on Tuesday, May 7, 2013, at 3 p.m.

SHUTTLE SERVICE

Continuous shuttle bus service will be provided from most of the official hotels to the CCC throughout the meeting. Shuttle service will begin on Wednesday, May 8 and continue through Saturday, May 11. Shuttle service will not be available to designated hotels within walking distance of the CCC. Complete route information and schedules will be available in the Final Program.

TRAVEL INFORMATION

For updated information on travel discounts, please visit **www.HRSonline.org/Sessions**.

VISA/INTERNATIONAL ATTENDEE INFORMATION

If you are a non-U.S. resident traveling from outside the United States, you may need a visa to attend Heart Rhythm 2013. To assist in your visa request, you may request a letter of invitation to attend Heart Rhythm 2013. Please note: requirements to travel visa-free changed in 2008; the Department of Homeland Security (DHS) has implemented the Electronic System for Travel Authorization (ESTA), a fully automated, electronic system for screening passengers before they begin travel to the United States. ESTA applications may be submitted at any time prior to travel to the United States, and VWP travelers are encouraged to apply for authorization as soon as they begin to plan a trip to the United States. For more information on applying for a visa, visit www.HRSonline.org/Sessions.

Letters of Invitation, for visa purposes, will be provided online. It should be understood that the invitation is meant to help visitors obtain a visa and is not a commitment on the part of the Society to provide any financial support. The decision to grant a visa belongs solely to the embassy/consulate. Should your application be denied, the Heart Rhythm Society cannot change the decision of the government agency.

HOTEL INFORMATION

Housing Deadline is Friday, April 12, 2013

HOTEL ACCOMMODATIONS

Travel Planners, the designated Heart Rhythm 2013 vendor, will administer housing. Blocks of rooms have been reserved at major hotels in Denver. See information about each hotel on page 46. To receive these special Heart Rhythm Society rates, you must obtain your housing through Travel Planners.

In order to obtain housing, you must be registered for Heart Rhythm 2013. Please register for both your hotel and the Scientific Sessions by going to www.HRSonline.org/Sessions.

- All reservations require deposits of one night's room and tax. Deposits will be charged by the hotel on or around April 5, 2013.
- Deposits may be made in the form of a credit card which must be provided at the time of reservation. Checks must be drawn on a U.S. bank and made payable to Travel Planners and sent to 381 Park Avenue South, New York, NY 10016 USA.
- Confirmation will be sent by Travel Planners shortly after your reservation is made.
- Hotel rooms are assigned on a first-come, firstserved basis as received by Travel Planners.

REFUND OF HOUSING DEPOSIT

Your housing deposit will be forfeited entirely if cancellations are not made in accordance with the individual hotel cancellation policy, which appears in your housing confirmation.

HOTEL CHANGES/CANCELLATIONS

Up to three days prior to your arrival, changes to hotel reservations can be made online or by calling Travel Planners at 888-337-2665 or 212-532-1660 or via email to **HRS@tphousing.com**. All changes are subject to hotel availability. Within three days of your arrival, changes must be made by contacting the assigned hotel directly.

ROOM TAXES/RATES

Room rates do not include the local taxes for Denver, CO. Some hotels may charge additional fees for rooms with more than two occupants. Note that early checkout from hotels may result in a penalty charge. Check with your hotel directly.

Acceptable credit cards are VISA, MasterCard, and American Express. Wire transfers cannot be accepted.

QUESTIONS?

About Heart Rhythm 2013? Visit www.HRSonline.org/Sessions

About Heart Rhythm 2013 Registration? Contact CDS at 800-748-5052 or 508-743-0529 (outside North America) or email **HRS@xpressreg.com**.

About Heart Rhythm 2013 Housing?

Contact Travel Planners at 888-337-2665 or 212-532-1660 (outside North America) or email **HRS@tphousing.com**. Pre-registration is required.

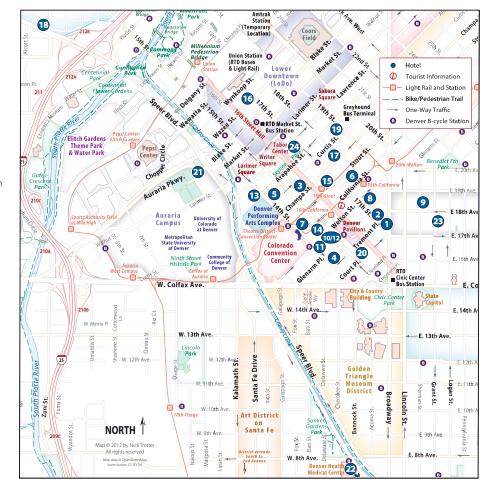
DENVER ACCOMMODATIONS

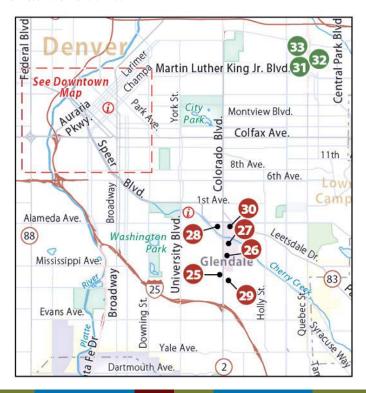
DOWNTOWN HOTELS	Single Rate From	Room Service	Fitness Center	Parking	Shuttle Service	Internet	Distance from CC
Brown Palace Hotel and Spa	\$289	24 Hours	At Comfort Inn DT	\$	Yes	\$13.95	5.0 Blocks
Comfort Inn Downtown	\$169	24 Hours	Yes	\$	Yes	Free	5.0 Blocks
Courtyard by Marriott Denver Downtown	\$216	No	Yes	\$	No	Free	4.0 Blocks
Crowne Plaza	\$168	Yes	Yes	\$	No	Free	2.0 Blocks
The Curtis, a Doubletree Hotel by Hilton	\$206	Yes	Yes	\$	No	Free	2.0 Blocks
Denver Marriott City Center	\$244	Yes	Yes	\$	No	\$12.95	4.0 Blocks
Embassy Suites Denver Downtown	\$243	Yes	Yes	\$	No		.02 Blocks
Grand Hyatt Denver	\$225	24 Hours	Yes	\$	No	\$9.99	4.0 Blocks
Hampton Inn and Suites Downtown	\$188	No	Yes	\$	Yes	Free	8.0 Blocks
Hampton Inn and Suites Downtown CC	\$220	Yes	Yes	\$	No	Free	2.0 Blocks
Hilton Garden Inn Downtown	\$213	Yes	Yes	\$	No	Free	1.0 Block
Homewood Suites Denver Downtown	\$235	Yes	Yes	\$	No	Free	2.0 Blocks
Hotel Teatro	\$253	24 Hours	Yes	\$	No	Free	2.0 Blocks
Hyatt Regency Denver CCC	\$225	Yes	Yes	\$	No	\$9.99	0.5 Block
Magnolia Hotel	\$221	Yes	Yes	\$	No	Free	4.0 Blocks
Oxford Hotel	\$229	Yes	Yes	Free	Yes	Free	6.0 Miles
Residence Inn Denver City Center	\$210	Yes	Yes	\$	Yes	Free	6.0 Blocks
Residence Inn Denver Downtown	\$194	No	Yes	Free	Yes	Free	2.0 Miles
Ritz-Carlton Denver	\$364	24 Hours	Yes	\$	Yes	\$9.95	7.0 Miles
Sheraton Denver Hotel	\$223	Yes	Yes	\$	No	\$10.72	5.0 Blocks
The Warwick Hotel	\$261	24 Hours	Yes	\$	Yes	\$9.95	1.0 Mile
Towne Place Suites by Marriott	\$169	No	Yes	Free	Yes	Free	2.4 Miles
Westin Denver Downtown	\$259	Yes	Yes	\$	Yes	\$10.67	7.0 Blocks
CHERRY CREEK HOTELS	Single Rate From	Room	Fitness	Parking	Shuttle Service	Internet	Distance
	_	Service	Center			F.	from CC
Courtyard by Marriott Cherry Creek	\$178	No	Yes	Free	Yes	Free	6.6 Miles
Courtyard by Marriott Cherry Creek Hampton Inn and Suites Cherry Creek	\$178 \$167	No No	Yes Yes	Free	Yes Yes	Free	6.6 Miles 5.8 Miles
Courtyard by Marriott Cherry Creek Hampton Inn and Suites Cherry Creek Hilton Garden Inn Denver Cherry Creek	\$178 \$167 \$139	No No Yes	Yes Yes Yes	Free Free	Yes Yes Yes	Free Free	6.6 Miles 5.8 Miles 6.0 Miles
Courtyard by Marriott Cherry Creek Hampton Inn and Suites Cherry Creek Hilton Garden Inn Denver Cherry Creek Holiday Inn Select Cherry Creek	\$178 \$167 \$139 \$172	No No Yes Yes	Yes Yes Yes Yes	Free Free Free	Yes Yes Yes Yes	Free Free Free	6.6 Miles 5.8 Miles 6.0 Miles 4.7 Miles
Courtyard by Marriott Cherry Creek Hampton Inn and Suites Cherry Creek Hilton Garden Inn Denver Cherry Creek Holiday Inn Select Cherry Creek Loews Denver Hotel	\$178 \$167 \$139 \$172 \$196	No No Yes Yes 24 Hours	Yes Yes Yes Yes Yes Yes	Free Free Free	Yes Yes Yes Yes Yes Yes	Free Free Free \$9.95	6.6 Miles 5.8 Miles 6.0 Miles 4.7 Miles 5.5 Miles
Courtyard by Marriott Cherry Creek Hampton Inn and Suites Cherry Creek Hilton Garden Inn Denver Cherry Creek Holiday Inn Select Cherry Creek	\$178 \$167 \$139 \$172	No No Yes Yes	Yes Yes Yes Yes	Free Free Free	Yes Yes Yes Yes	Free Free Free	6.6 Miles 5.8 Miles 6.0 Miles 4.7 Miles
Courtyard by Marriott Cherry Creek Hampton Inn and Suites Cherry Creek Hilton Garden Inn Denver Cherry Creek Holiday Inn Select Cherry Creek Loews Denver Hotel	\$178 \$167 \$139 \$172 \$196	No No Yes Yes 24 Hours	Yes Yes Yes Yes Yes Yes	Free Free Free	Yes Yes Yes Yes Yes Yes	Free Free Free \$9.95	6.6 Miles 5.8 Miles 6.0 Miles 4.7 Miles 5.5 Miles
Courtyard by Marriott Cherry Creek Hampton Inn and Suites Cherry Creek Hilton Garden Inn Denver Cherry Creek Holiday Inn Select Cherry Creek Loews Denver Hotel Staybridge Suites Denver/Cherry Creek	\$178 \$167 \$139 \$172 \$196 \$173	No No Yes Yes 24 Hours No	Yes Yes Yes Yes Yes Yes Yes Fitness	Free Free Free Free	Yes Yes Yes Yes Yes Yes Yes Yes Yes	Free Free \$9.95 Free	6.6 Miles 5.8 Miles 6.0 Miles 4.7 Miles 5.5 Miles 5.4 Miles
Courtyard by Marriott Cherry Creek Hampton Inn and Suites Cherry Creek Hilton Garden Inn Denver Cherry Creek Holiday Inn Select Cherry Creek Loews Denver Hotel Staybridge Suites Denver/Cherry Creek STAPLETON HOTELS	\$178 \$167 \$139 \$172 \$196 \$173 Single Rate From	No No Yes Yes 24 Hours No Room Service	Yes Yes Yes Yes Yes Yes Yes Tes Yes	Free Free Free Free Free Parking	Yes Yes Yes Yes Yes Yes Shuttle Service	Free Free \$9.95 Free	6.6 Miles 5.8 Miles 6.0 Miles 4.7 Miles 5.5 Miles 5.4 Miles Distance from CC

(As of December 1, 2012)

DOWNTOWN HOTELS

- 1 Brown Palace Hotel and Spa
- 2 Comfort Inn Downtown
- 3 Courtyard by Marriott Denver Downtown
- 4 Crowne Plaza
- **5** The Curtis, a Doubletree Hotel by Hilton
- 6 Denver Marriott City Center
- 7 Embassy Suites Denver
 - Downtown Convention Center
- 8 Grand Hyatt Denver
- **9** Hampton Inn & Suites by Hilton, Denver Downtown
- **10** Hampton Inn & Suites Denver Downtown
 - Convention Center
- 11 Hilton Garden Inn Downtown Denver
- **12** Homewood Suites Denver Downtown
 - Convention Center
- **13** Hotel Teatro
- **14** Hyatt Regency Denver at Colorado Convention Center (Headquarter Hotel)
- 15 Magnolia Hotel Denver
- 16 Oxford Hotel
- **17** Residence Inn by Marriott Denver City Center
- 18 Residence Inn Denver Downtown
- 19 The Ritz-Carlton Denver
- 20 Sheraton Denver Downtown Hotel
- **21** SpringHill Suites Denver Downtown at Metro State
- **22** TownePlace Suites by Marriott Denver Downtown
- 23 Warwick Denver Hotel
- 24 The Westin Denver Downtown





CHERRY CREEK

- **25** Courtyard by Marriott Cherry Creek
- 26 Hampton Inn & Suites Cherry Creek
- 27 Hilton Garden Inn Denver Cherry Creek
- 28 Holiday Inn Select Denver Cherry Creek
- 29 Loews Denver Hotel
- 30 Staybridge Suites Denver/Cherry Creek

EAST METRO/AIRPORT

- **31** Doubletree by Hilton Denver Stapleton
- **32** DoubleTree by Hilton Denver- Stapleton North
- **33** Renaissance Denver Hotel

NOTES			



The Heart Rhythm Society increases public knowledge of heart rhythm disorders and treatment through its Awareness Campaigns:

Atrial Fibrillation (AFib)

The "AFib Feels Like" Awareness Campaign increases public knowledge of AFib, its symptoms, warning signs, and available treatment options.











...FISH
FLOPPING

Sponsors: Boeringer-Ingelheim, Janssen Pharmaceuticals, St. Jude Medical



Sudden Cardiac Arrest (SCA)

The Society's award-winning "Apples and Oranges" Awareness Campaign uses a simple analogy to educate people about the difference between a heart attack and SCA. The campaign targets heart attack survivors, who are at the highest risk for SCA.

www.StopSCA.org

Sponsors: Boston Scientific, Medtronic, Zoll

Arrest the Risk

"Arrest the Risk" is the Society's newest awareness campaign. Launched in the U.S. in partnership with the Association of Black Cardiologists, this campaign aims to overcome the barriers to proper diagnosis and treatment of SCA, particularly in the African American community. Emmy Award-winning journalist Shaun Robinson is lending her voice and support to the campaign.

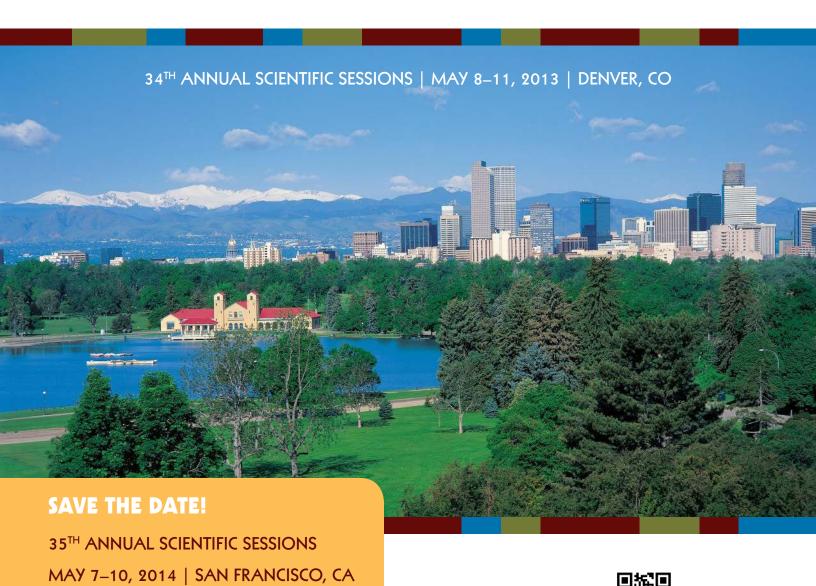
www.ArrestTheRisk.org

Sponsor: Medtronic





1400 K Street, NW Suite 500 Washington, DC 20005



Scan with your smartphone.