Session SP20. STRATEGIES FOR PUBLICATION IN HIGH IMPACT JOURNALS - SPONSORED BY THE WOMEN OF EP COMMUNITY OF PRACTICE
Special Session
Room 120, Moscone North 7 - 7:45 a.m.

Session Description: Join the Women in EP Community of Practice as Anne B. Curtis, MD, FHRS; Anne M. Gillis, MD, FHRS; Jeanne E. Poole, MD, FHRS and Penelope A. Boyden, PhD share their expertise as Editors of prominent EP journals. Learn and ask qu

7 a.m. Presenters
Anne B. Curtis, MD, FHRS, CCDS. University at Buffalo, Buffalo, NY
Anne M. Gillis, MD, FHRS. University of Calgary, Calgary, AB, Canada
Jeanne E. Poole, MD, FHRS, CCDS. University of Washington, Seattle, WA
Penelope Boyd, PhD. Columbia University, New York, NY

Session 060. ELECTRICAL ISOLATION OF THE LEFT ATRIAL APPENDAGE SHOULD BE FOLLOWED BY DEVICE EXCLUSION IN PERSISTENT AF?
Catheter Ablation - Ablation of AF and Atrial Flutter (including surgical ablation)
Room 3018, Moscone West 8 - 8:45 a.m.
Debate F
CME/CE Hours: 0.75
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: This debate will explore the controversial relationship between left atrial appendage electrical isolation and percutaneous device exclusion

Chair: Tom Wong, MD. Royal Brompton Hospital, London, United Kingdom

8:05 a.m. This House Believes that Electrical Isolation of the Left Atrial Appendage Should be Followed by Device Exclusion in Patients with Persistent AF
Lucas V. A. Boersma, MD, PhD. St. Antonius Ziekenhuis, Nieuwegein, Netherlands

8:20 a.m. This House Does Not Believe that Electrical Isolation of the Left Atrial Appendage Should be Followed by Device Exclusion in Persistent AF
Thorsten Lewalter, MD, PhD. Isar Heart Center, Munich, Germany

8:35 a.m. Rebuttal
Lucas V. A. Boersma, MD, PhD. St. Antonius Ziekenhuis, Nieuwegein, Netherlands

8:40 a.m. Rebuttal
Thorsten Lewalter, MD, PhD. Isar Heart Center, Munich, Germany

Session 035. PATIENT-CENTERED AF CARE
Special Session

Session 061. ANTICOAGULATION QUESTIONS AND CONTROVERSIES
Allied Professionals
Room 135, Moscone North 8 - 9:30 a.m.
Featured Symposium ARS
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Bristol-Myers Squibb and Pfizer, Inc.

Session Description: This session will be reviewing methods of preventing thromboembolism in patients with AF including target specific anticoagulants, left atrial appendage occlusion and correct patient and treatment choice.

Chair: Melissa Cliver, MSN, CRNP, CCDS. Doylestown Cardiology Associates, Doylestown, PA
Justina Antonio, PAC. Monetfiore Hospital, NY

8:05 a.m. Left Atrial Appendage Occlusion-Only for Those Who Can't Take Long Term Oral Anticoagulation?
Judy R. Wanning, FNP. Medical University of South Carolina, Charleston, SC

8:25 a.m. Risk Factors for Stroke in AF-What to Consider? (Hint-it's Not Just the CHA2DS2-VASc Score)
Tara Parham, MSN, CRNP. Hospital of the University of Pennsylvania, Philadelphia, PA

8:45 a.m. Which Anticoagulant for Which Patient (or What is Valvular Heart Disease)?
Esther Pimplekar, MSN, ACNP-BC. Sanger Heart and Vascular Institute, NC

9:05 a.m. How Do You Reverse Your Patient Who Needs Urgent Surgery or is Bleeding?
Session 062. CRT BAILOUTS: TURNING NON-RESPONDERS INTO RESPONDERS
Allied Professionals - Resynchronization Therapy: Science, Techniques, and Outcomes
Room 132, Moscone North 8 - 9:30 a.m.
Core Curriculum PM
CME/CE Hours: 1.5
ASRT/ARRT: DCD0056098

Session Description: This session will be describing the various methods of proving response to CRT through programming, implantation techniques/lead placement and use of remote monitoring to optimize response.

Chairs: Tammy Gottshalk, MSN, FNP-BC. Medical University of South Carolina, Charleston, SC
Jolly Samuel, CRT, CRTH, RT, ON, Canada

8 a.m. Programming Algorithms for CRT Optimization
Cindy Reid, RN, CCDS. Sanger Heart & Vascular Institute, Rock Hill, SC

8:30 a.m. Novel Approaches to Achieving CRT: Multisite Pacing, His Bundle Pacing, Role of Vector Selection and LV Pacing with the Leadless Pacemaker
Sarah Worsnick, PA. Geisinger Heart Institute, Wilkes Barre, PA

9 a.m. Using Remote CIED and Hemodynamic Monitoring Data to Optimize CRT Response
Linda K. Ottoboni, Ms., RN, MS, CNS, FHRS, CCDS. Stanford University School of Medicine, Stanford, CA

Session 063. TRANSCRIPTIONAL AND TRANSLATIONAL REGULATION OF ION CHANNEL COMPLEXES
Basic Translational Science
Room 304, Moscone South 8 - 9:30 a.m.
Core Curriculum
CME/CE Hours: 1.5

Session Description: This session will center around specifications of gene transcription and the regulation of translation are fundamental steps in the production of ion channel complexes. The resulting products fundamentally determine electrical

Chairs: Samuel C. Dudley, MD, PhD. Brown University, Providence, RI
Glenn I. Fishman, MD, FHRS. New York University, New York, NY

8:05 a.m. Transcriptional Regulation of Sodium Channel Expression
Connie R. Bezzina, PhD. Academic Medical Center, Amsterdam, Netherlands

8:25 a.m. Transcriptional Specification of the Electrical Phenotype in the Conduction System
David S. Park, MD, PhD. New York University - School of Medicine, New York, NY

8:45 a.m. Translational Control of Cardiac Excitability
Gail A. Robertson, PhD. University of Wisconsin, Madison, WI

9:05 a.m. Alternative Splicing and Heart Disease
Calum A. MacRae, MD. Brigham and Women's Hospital, Boston, MA

Session 064. RENAL SYMPATHETIC DENERVATION FOR TREATING ARRHYTHMIA - FAD OR FACT?
Basic Translational Science - Ventricular Tachycardia & Ventricular Fibrillation: Management, Mechanics, Diagnosis, and Ablation
Room 307, Moscone South 8 - 9:30 a.m.
Translational Electrophysiology F
CME/CE Hours: 1.5

Session Description: The Session will provide an update on the basic mechanism(s) and clinical data for and against renal sympathetic denervation as treatment for atrial and ventricular arrhythmia.

Translator: Peter J. Schwartz, MD. Istituto Auxologico Italiano, Milan, Italy

8 a.m. Antiarrhythmic Efficacy of Renal Denervation - Clinical Data
Michela Faggioni, MD. Vanderbilt University Medical Center, Nashville, TN

8:25 a.m. Antiarrhythmic Efficacy of Renal Denervation - Animal Data
Ulrich Schotten, MD, PhD. Maastricht University, Maastricht, Netherlands

8:50 a.m. Renal Denervation in Catacholaminergic Polymorphic Ventricular Tachycardia
Bjorn C. Knollmann, MD, PhD. Vanderbilt University, Nashville, TN

Session 065. ISSUES AND CONTROVERSIES IN LEAD EXTRACTION
Cardiovascular Implantable Electronic Devices - Device and Lead Management Considerations, including Lead Extraction
Room 2006, Moscone West 8 - 9:30 a.m.
Core Curriculum F PM
CME/CE Hours: 1.5
Supported by unrestricted educational grants provided by Boston Scientfic and Spectranetics

Session Description: This session will review important considerations surrounding lead extraction.

Chairs: Richard A. Friedman, MD, MBA, FHRS, CCDS. North Shore - Long Island Jewish Health System, Hyde Park, NY
Philippe Ritter, MD. Hôpital Haut-Lévêque, Pessac, France

8:05 a.m. Successful New and Old Techniques in Lead Extraction
Pascal Defaye, MD. University Hospital, Grenoble, France

8:25 a.m. Avoiding Mortality - A Critical Issue in Lead Extraction
Jude Clancy, MD. Yale University School of Medicine, New Haven, CT

8:45 a.m. What are the Reasons for the Lack of Awareness of Extraction in Lead Management?
Charles A. Henrikson, MD, FHRS. Oregon Health and Science University, Portland, OR

9:05 a.m. Why is Bacteremia Not as Clear an Indication for Extraction as Endocarditis and Pocket Infection?
Muhammad R. Sohail, MD. Mayo Clinic, Rochester, MN
Session 066. PACING IN SPECIAL PATIENT POPULATIONS
Cardiovascular Implantable Electronic Devices - Bradycardia, AV Block, and Bradycardia Devices
Room 2007, Moscone West 8 - 9:30 a.m.
Core Curriculum F PM
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Boston Scientific.

Session Description: This session will explore the role of pacing in special patient populations.

Chairs: David G. Benditt, MD, FHRS, CCDS. University of Minnesota, Minneapolis, MN
E. Kevin Heist, MD, PhD, FHRS. Massachusetts General Hospital, Boston, MA

8:05 a.m. Patients with Neurally-Mediated Syncope
Michele Brignole, MD. Ospedali del Tigullio, Lavagna, Italy

8:25 a.m. Patients with Hypertrophic Cardiomyopathy
Martin Maron, MD. Tufts Medical Center, Boston, MA

8:45 a.m. Patients with Myotonic Dystrophy
Vincenzo Russo, MD, PhD, MMSc. Second University of Naples - Monaldi Hospital, Naples, Italy

9:05 a.m. Post-TAVR Patients
Bernard Thibault, MD. Montreal Heart Institute, Montreal, QC, Canada

Session 067. ABLATION OF COMPLEX ACCESSORY PATHWAYS
Catheter Ablation - SVT/AVNRT/ WPW/AT Management, Mechanisms, Diagnosis, and Ablation
Room 3022, Moscone West 8 - 9:30 a.m.
Core Curriculum ARS F
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: This session addresses situations where intervention is not straightforward and offers advice on achieving a successful outcome.

Chairs: Peter Leong-Sit, MD, FHRS. London Health Sciences Centre, London, ON, Canada
J. Marcus Wharton, MD. Medical University of South Carolina, Charleston, SC

8:05 a.m. Electrogram Characteristics at the Site of Repeat Ablation: The Difference Between Success and Failure
Pipin Kojodjojo, MBBS, PhD, FHRS. National University Heart Centre, Singapore, Singapore

8:25 a.m. Accessory Atrioventricular Pathways Refractory to Catheter Ablation: Role of the Percutaneous Epicardial Approach
Eduardo B. Sternick, MD, PhD, FHRS. Biocor Instituto, Belo Horizonte, Brazil

8:45 a.m. Recognition, Characterization and Ablation of Manifest Nodofascicular and Nodovenous Accessory Pathways
Kurt Hoffmayer, MD, FHRS. University of Wisconsin, Madison, WI

9:05 a.m. Catheter Ablation of Accessory Atrioventricular Pathways in Ebstein’s Anomaly: Overcoming the Challenges
Riccardo Cappato, MD, FHRS, IRCCS Humanitas Research Hospital, Rozzano Milan, Italy

Session 068. HOW TO DETECT AND MANAGE COMPLICATIONS OF AF ABLATION
Catheter Ablation - Ablation of AF and Atrial Flutter (including surgical ablation)
Room 2010, Moscone West 8 - 9:30 a.m.
How-To F PM
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: This session reviews some of the complications which pose particular problems for detection and treatment.

Chairs: Richard J. Schilling, MD. St. Bartholomew’s Hospital, London, United Kingdom
Brian Olshansky, MD, FHRS, CCDS. University of Iowa, Iowa City, IA

8:05 a.m. Atrio-Esophageal Fistula Following AF Ablation: Suspicion, Recognition, Management and Prevention
Andre d’Avila, MD, PhD. Hospital Cardiologico, Florianopolis, Brazil

8:25 a.m. Intrathoracic Collateral Neurological Injury During AF Ablation: Consequences and Management
Frederic Anselme, MD. Hopital Charles Nicolle, Rouen, France

8:45 a.m. Symptomatic and Asymptomatic Cerebral Emboli During AF Ablation: Causes, Recognition, Treatment and Prevention
Fiorenzo Gaita, MD. Città della Salute e della Scienza, Torino, Italy

9:05 a.m. Acute and Delayed Cardiac Tamponade - Mechanisms and Management
Matthew J. Wright, MBBS, PhD, FHRS. St. Thomas’ Hospital, London, United Kingdom

Session 069. HOW TO USE ICE TO GUIDE AF AND VT/PVC ABLATION
Catheter Ablation - Ablation of AF and Atrial Flutter (including surgical ablation)
Room 3002, Moscone West 8 - 9:30 a.m.
How-To F
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: This session will review the use of ICE during catheter ablation procedures to manage atrial and ventricular arrhythmias.

Chairs: Haris M. Haqqani, MBBS, PhD, FHRS. University of Queensland, Brisbane, Queensland, Australia
Saurabh Kumar, BSc(Med), MBBS. Royal Melbourne Hospital, Melbourne, Australia

8:05 a.m. Using ICE to Guide PVI: Optimizing Safety and Efficacy
Oussama M. Wazni, MD. Cleveland Clinic, Cleveland, OH

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8:25 a.m. | The Role of ICE in Outflow Tract PVC Ablation
Thomas C. Crawford, MD, FHRS. University of Michigan, Ann Arbor, MI

8:45 a.m. | Using ICE to Guide Papillary Muscle PVC Ablation
Frank M. Bogun, MD. University of Michigan, Ann Arbor, MI

9:05 a.m. | The Role of ICE in Ablation of Scar-Related VT: What Does it Add?
Mathew D. Hutchinson, MD, FHRS. University of Pennsylvania, Philadelphia, PA

Session 070. PREVENTION AND MANAGEMENT OF COMPLICATIONS DURING LAA CLOSURE DEVICE PLACEMENT
Clinical Electrophysiology - Implantable Monitors, Sensors, and Novel CIED Devices
Room 2014, Moscone West 8 - 9:30 a.m.
Complication Theatre F
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Boston Scientific.

Session Description: Come learn how to prevent and manage common complications with LAA closure devices.

Chair: Peter N. Smith, MD, FHRS. Marshfield Clinic, Marshfield, WI

8:05 a.m. | Pericardial Effusion and LAA Laceration with Percutaneous Closure Devices
Shephal K. Doshi, MD. Pacific Heart Institute, Santa Monica, CA

8:25 a.m. | Incomplete Surgical LAA Ligation
A. Marc Gillinov, MD. Cleveland Clinic Foundation, Cleveland, OH

8:45 a.m. | Thromboembolism After Successful Percutaneous LAA Closure
Vivek Y. Reddy, MD. Mount Sinai School of Medicine, New York, NY

9:05 a.m. | LAA Leaks After Percutaneous Closure Device Deployment
Jayasree Pillarisetti, MD. University of Kansas Hospital, Kansas City, KS

Session 071. BRUGADA ECG: HISTORY, MIMICKERS, AND MANAGEMENT
Clinical Electrophysiology - Sudden Death Risk Assessment and Treatment
Room 3003, Moscone West 8 - 9:30 a.m.
Core Curriculum F MOC-ABIM
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: Come learn about the history, mechanism, diagnosis, and evaluation of Brugada syndrome and the Brugada ECG pattern.

Chairs: Eugene H. Chung, MD. U of North Carolina at Chapel Hill, Chapel Hill, NC
Josep Brugada Terradellas, MD, PhD. Hospital Clinic, Barcelona, Spain

8:05 a.m. | Brugada Syndrome: Genetics and Mechanism
Arthur A. M. Wilde, MD, PhD. University of Amsterdam, Amsterdam, Netherlands

8:25 a.m. | Ethnic Differences in Brugada Syndrome Phenotype and Prognosis
Koonlawee Nademanee, MD, FHRS, CCDS. Pacific Rim Electrophysiology Research Institute Center, Los Angeles, CA

8:45 a.m. | Brugada ECG in Athletes
Sami Viskin, MD. Tel Aviv Medical Center, Tel Aviv, Israel

9:05 a.m. | Brugada Phenocopies
Adrian M. Baranchuk, MD. Kingston General Hospital, Kingston, ON, Canada

Session 072. CRT: IT’S NOT ALL ABOUT THE LEAD: INTEGRATING PROGRAMMING AND NEW DEVICE TECHNOLOGY
Heart Failure - Resynchronization Therapy: Science, Techniques, and Outcomes
Room 2020, Moscone West 8 - 9:30 a.m.
Case Based Tutorial ARS F
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Amgen

Session Description: This session for go over the evidence for new programming algorithms and optimization to improve CRT outcome.

Chair: Darrel P. Francis, MD, MA. National Heart and Lung Institute, London, United Kingdom

8:05 a.m. | The Role of LV-Only Pacing in Improving CRT Outcome
Marye J. Gleva, MD, FHRS. Washington University, St. Louis, MO

8:25 a.m. | Rationale and Methods for Achieving AV and VV Optimization
Christophe Leclercq, Pr, MD, PhD. University Hospital, Rennes, France

8:45 a.m. | Optimal Programming for Shock Reduction in CRT Patients
Laurence D. Sterns, MD. Vancouver Island Arrhythmia Clinic, Victoria, BC, Canada

9:05 a.m. | The Impact of Rate Response in HF Patients
Niraj Varma, MD, PhD. Cleveland Clinic, Cleveland, OH

Session 073. AUTONOMIC MODULATION OF HEART FAILURE TO TREAT ARRHYTHMIAS
Heart Failure - Heart Failure: Etiology, Diagnosis, and Management
Room 2003, Moscone West 8 - 9:30 a.m.
Core Curriculum F
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Amgen

Session Description: This sessions will be reviewing autonomic modulation of heart failure offers possible treatment options for both heart failure and associated arrhythmias. This session will review the latest developments in the field.

Chairs: Douglas P. Zipes, MD, FHRS. Krannert Institute of Cardiology, Indianapolis, IN
Ronald D. Berger, MD, PhD, FHRS. Johns Hopkins University, Baltimore, MD

8:05 a.m. | Autonomic Modulation of Arrhythmias in Heart Failure

Session 074. CARDIAC RESYNCHRONIZATION THERAPY IN SPECIFIC PATIENT POPULATIONS
Heart Failure - Resynchronization Therapy: Science, Techniques, and Outcomes
Room 2002, Moscone West 8 - 9:30 a.m.
Core Curriculum F CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Amgen

Session Description: This session will explain the role of CRT in specific medical conditions not addressed by clinical trials is discussed.

Chairs:
Emile G. Daoud, MD, FHRS. The Ohio State University, Columbus, OH
Anne M. Gillis, MD, FHRS. University of Calgary, Calgary, AB, Canada

8:05 a.m. CRT in Patients with Permanent Atrial Fibrillation
Harish Manyam, MD. University Hospitals Case Medical Center, Cleveland, OH

8:25 a.m. CRT in Patients with Non-LBBB on EKG
Christine Tompkins, MD. University of Colorado, Aurora, CO

8:45 a.m. CRT with RV Septal Pacing in Patients with RBBB
Michael C. Giudici, MD, FHRS. University of Iowa, Iowa City, IA

Session 075. LEARNING FROM OUR EXPERIENCE: COMPLICATION THEATRE IN PEDIATRICS
Pediatrics and Adult Congenital Heart Disease - Sudden Death Risk Assessment and Treatment
Room 102, Moscone South 8 - 9:30 a.m.
Special Session F CME/CE Hours: 1.5

Session Description: A series of case presentations exploring challenging cases with learning opportunities.

Chair: George F. Van Hare, MD, FHRS, CCDS, CEPS. Washington University, St. Louis, MO

8:05 a.m. Pacemaker Complications
Ian H. Law, MD, FHRS. University of Iowa, Iowa City, IA

8:25 a.m. Ablation Complications
Yaniv Bar-Cohen, MD. Children's Hospital, Los Angeles, CA

8:45 a.m. ICD Complications
Maully J. Shah, MBBS, CCDS, CEPS. Children's Hospital of Philadelphia, Philadelphia, PA

9:05 a.m. Antiarrhythmic Complications
Jason M. Garreiter, MD. Saint Louis University School of Medicine, St. Louis, MO

Session 076. THE CHANGING FACE OF HYPERTROPHIC CARDIOMYOPATHY
Pediatrics and Adult Congenital Heart Disease - Sudden Death Risk Assessment and Treatment
Room 104, Moscone South 8 - 9:30 a.m.
Core Curriculum F CME/CE Hours: 1.5

Session Description: This session will highlight some of the newest research as related to hypertrophic cardiomyopathy and will focus on refining risk, the importance of genetic information and new options for early therapeutic intervention.

Chairs: Seshadri Balaji, MBBS. Oregon Health and Science University, Portland, OR
Anne M. Dubin, MD, FHRS. Stanford University, Palo Alto, CA

8:05 a.m. Hypertrophic Cardiomyopathy: The Value of Early Recognition and Treatment
Carolyn Y. Ho, MD. Brigham and Women's Hospital, Boston, MA

8:25 a.m. The Changing Predictors of Sudden Death in Hypertrophic Cardiomyopathy
Andrew M. Davis, MBBS, MD, FHRS. Royal Children's Hospital, Melbourne, Australia

8:45 a.m. The Increasing Importance of Genetics in Hypertrophic Cardiomyopathy
Jeffrey A. Towbin, MD. Cincinnati Children's Hospital, Cincinnati, OH

9:05 a.m. Hypertrophic Cardiomyopathy: Targeted Therapies. Translating Research into Clinical Practice
Diane Fatkin, MD. Victor Chang Cardiac Research Institute, Darlinghurst NSW 2010, Australia

Session SP21. MOVING AN INVENTION FORWARD: CARDIAC ELECTROPHYSIOLOGY INNOVATION AND FDA PERSPECTIVE
Policy, Payment, and Practice
Room 2001, Moscone West 8 - 9:30 a.m.
Special Session F CME/CE Hours: 1.5

Session Description: Key questions any innovator should consider, what FDA and CMS (or private payers) will require different data for approval, and what you should consider as you design your pivotal trial will be discussed in this session.

Chairs: Mitchell J. Shein, MS, FHRS, CCDS. Food and Drug Administration, Silver Spring, MD
David J. Slotwiner, MD. Weill Cornell Medical College, NY Presbyterian Queens, New Hyde Park, NY

8 a.m. Six Key Questions to Ask Yourself
Uday N. Kumar, MD. Element Science, Inc., San Francisco, CA

8:20 a.m. Developing a Concept: Moving an Innovation Forward
Gregory M. Marcus, MD, FHRS. University of California - San Francisco, San Francisco, CA

8:40 a.m. Study Design: Defining the Objectives
Session JS08. GENE-GUIDED MANAGEMENT OF AF
Special Session - Ablation of AF and Atrial Flutter (including surgical ablation)
Room 308, Moscone South 8 - 9:30 a.m.
Joint Session
CME/CE Hours: 1.5
Japanese Heart Rhythm Society

Session Description: This session will discuss emerging directions of gene-guided therapy of AF. To refine cutting edge information on gene-guided management of AF patients

Chairs: Dierk Thomas, MD, FHRSA. Heidelberg University, Heidelberg, Germany
Naomasa Makita, MD, PhD. Nagasaki University, Nagasaki, Japan

8:05 a.m. Gene-Guided Therapy in AF
Tetsushi Furukawa, MD. Tokyo Medical and Dental Univ, Japan

8:25 a.m. Common Genetic Variants and Response to AF Ablation
Moore B. Shoemaker, MD. Vanderbilt University, Nashville, TN

8:45 a.m. Gene-Guided Selection of Ablation Strategy
Yoshitake Takahashi, MD. Disaster Medical Center, Tachikawa, Tokyo, Japan

9:05 a.m. Emerging Directions in the Genetics of AF
Patrick T. Ellinor, MD, PhD. Massachusetts General Hospital, Boston, MA

Session JS09. GLOBAL APPROACH TO ARRHYTHMIA MANAGEMENT: MY PREFERRED APPROACH
Special Session
Room 303, Moscone South 8 - 9:30 a.m.
Joint Session
CME/CE Hours: 1.5
HRS/EHRA Joint Women in EP Session

Session Description: With advancements in technology, there are many approaches to the treatment of patients with complex arrhythmias and structural heart disease. This session will discuss various global approaches to arrhythmia management, including

Chairs: Andrea M. Russo, MD, FHRSA. Cooper University Hospital, Camden, NJ
Andrea Sarkozy, OLVZ Aalst, Antwerpen, Belgium

8 a.m. Contemporary Ablation of Ischemic Ventricular Tachycardia: My Preferred Approach
Katja Zeppenfeld, MD, PhD. Leiden University Medical Center, Leiden, Netherlands

8:10 a.m. Commentator: VT Ablation
Yong-Mei Cha, MD. Mayo Clinic, Rochester, MN

8:15 a.m. Cutting Edge Technology For Ablation of Persistent Atrial Fibrillation: How To Enhance Success
Isabel Deisenhofer, MD. Deutsches Herzzentrum München, Munich, Germany

8:35 a.m. Commentator: AF Ablation
Sabine Ernst, MD. Royal Brompton Hospital, London, United Kingdom

8:40 a.m. My Preferred Approach To Lead Extraction and Case Selection: How To Improve Success and Reduce Risk
Ulrika Birgersdotter-Green, MD, FHRSA, CCDS. University of California - San Diego, La Jolla, CA

8:55 a.m. Commentator: Lead Extraction
Maria Grazia Bongiorni, MD. University Hospital of Pisa, Pisa, Italy

9 a.m. Who Should Have Genetic Testing: My Recommendations For the Practicing Electrophysiologist
Silvia G. Priori, MD, PhD. Fondazione Salvatore Maugeri, Pavia, Italy

9:10 a.m. Commentator: Genetic Testing
Jan Till, MD. Royal Brompton Hospital, London, United Kingdom

9:15 a.m. Global Approach to Arrhythmia Management: My Preferred Approach
Fakhar Z. Khan, MA, MBBS. Addenbrooke's Hospital, Cambridge, United Kingdom

9:25 a.m. Commentator: CRT
Jeanne E. Poole, MD, FHRSA, CCDS. University of Washington, Seattle, WA

Session JS10. IMAGING FOR GUIDANCE OF LEFT ATRIAL APPENDAGE CLOSURE DEVICES
Special Session
Room 3014, Moscone West 8 - 9:30 a.m.
Joint Session
CME/CE Hours: 1.5
American Society of Echocardiography

Session Description: Recent FDA approval of the Watchman device makes left atrial appendage closure devices for atrial fibrillation an increasing therapeutic option. Echocardiography imaging plays an important role in the screening, intraprocedural

Chairs: Mohammed Saric. New York University, New York, NY
Robert Seigel, MD. Cedars-Sinai Medical Center, Los Angeles, CA

8 a.m. Left Atrial Anatomy: Not Just One Lobe; Normal Variants; Tips on How to Completely Image
Nassir F. Marrouche, MD, FHRSA. University of Utah, Salt Lake City, UT

8:15 a.m. Pre-Procedural Assessment: LAA Anatomy to Avoid; Thrombus, Funny Lobes, Too Small, Too Large
Sabine Ernst, MD. Royal Brompton Hospital, London, United Kingdom

8:30 a.m. Imaging for Guidance of Left Atrial Appendage Closure Devices
Robert Seigel, MD. Cedars-Sinai Medical Center, Los Angeles, CA

8:45 a.m. Post Procedure Assessment
Wael Adib. Jabar, MD. Cleveland Clinic, Cleveland, OH

9 a.m. Cases: The Good, Bad and the Ugly
Mohammed Saric. New York University, New York, NY
9:10 a.m. Cases: The Good, Bad and the Ugly
Robert Seigel, MD. Cedars-Sinai Medical Center, Los Angeles, CA

9:20 a.m. Cases: The Good, Bad and the Ugly
Wael Adib Jaber, MD. Cleveland Clinic, Cleveland, OH

Session SP22. LIVE CASES PRESENTATIONS:
CLEVELAND CLINIC
Special Session
Main Stage - Level 3, Moscone West 8 - 9:30 a.m.
Special Session ARS
CME/CE Hours: 1.5

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

8 a.m. Operator - Case 1
Mohamed Kanj, MD. Cleveland Clinic, Cleveland, OH

8 a.m. Operator - Case 2
Mark J. Niebauer, MD, PhD, FHRS. Cleveland Clinic Foundation, Cleveland, OH

8 a.m. Moderator - Case 1
Bryan Baranowski, MD. Cleveland Clinic, Cleveland, OH

8 a.m. Moderator - Case 2
Bruce D. Lindsay, MD, FHR, CCDS. Cleveland Clinic Foundation, Cleveland, OH

8 a.m. Moderator eQ&A
Vivek Y. Reddy, MD. Mount Sinai School of Medicine, New York, NY

8 a.m. Panelists
T. Jared Bunch, MD. Intermountain Medical Center, Murray, UT
Shephal K. Doshi, MD. Pacific Heart Institute, Santa Monica, CA
Petr Neuzil, MD, PhD. Na Homolce Hospital, Prague, Czech Republic

Session SP37. THE USC VIRTUAL CARE CLINIC:
SOLUTIONS FOR DELIVERING BORDERLESS HEALTH CARE
Special Session
Room 134, Moscone North 8 - 9:30 a.m.
Special Session
CME/CE Hours: 1.5

Session Description: The next level of on-demand expert medical care is here. The USC Center for Body Computing, in collaboration with 8 strategic partners has announced an anytime, anywhere disruptive health care model to deliver borderless health care.

8 a.m. Presenters
Leslie A. Saxon, MD, FHR. University of Southern California, Los Angeles, CA
George Savage, MD. Proteus Digital Health, Redwood City, CA
Jay Sales, Co-Director. The SHOP, VSP Global, Sacramento, CA
Michael Krupnick, Director, Business Development. IMS Health, Danbury, CT
Todd Feinman, MD, Doctor Evidence, Santa Monica, CA
Todd Richmond, PhD. USC Institute for Creative Technologies, Playa Vista, CA

Session 077. DO LINEAR LESIONS AND CFAE ABLATION STILL HAVE A ROLE IN ABLATION OF PERSISTENT AF?
Catheter Ablation - Ablation of AF and Atrial Flutter (including surgical ablation)
Room 3018, Moscone West 9 - 9:45 a.m.
Debate
CME/CE Hours: 0.75
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.
Session Description: This session will explore the background of persistent AF ablation and the concepts associated with the need for substrate based ablation techniques.

Chair: Hans Kottkamp, MD, Hirslanden Hospital, Zurich, Switzerland

9:05 a.m. Linear Ablation and CFAE do not have a Role in Persistent AF Ablation
Atul Verma, MD, FHRs. Southlake Regional Health Centre, Newmarket, ON, Canada

9:20 a.m. Additional Substrate Modification is Essential for Success in Persistent AF Ablation
Mélèze Hocini, MD. Hôpital Haut-Lévêque, Bordeaux-Pessac, France

9:35 a.m. Rebuttal
Atul Verma, MD, FHRs. Southlake Regional Health Centre, Newmarket, ON, Canada

9:40 a.m. Rebuttal
Mélèze Hocini, MD. Hôpital Haut-Lévêque, Bordeaux-Pessac, France

Session SP23. HEART RHYTHMS' RESEARCH FELLOWSHIP AWARDS BREAKFAST

Session Description: This moderated poster session presents methods for improving CRT response such as a screening tool, dual LV site pacing and optimal pacing sites in ischemic cardiomyopathy patients.

Chair: Douglas Packer, MD, FHRS. Mayo Clinic, Rochester, MN

9:30 a.m. MP03-01: Derivation and Validation of the ScREEN Score - A New tool for the identification of responders and super-responders to cardiac resynchronization therapy
Rui Providencia, MD, PhD, Serge Boveda, MD, Pascal Defaye, MD, Pierre D. Lalive, MD, Sergio Barra, MD, Girish Ganesha Babu, MD, Vincent Algalarrondo, MD, Oliver R. Segal, MD, Sharad C. Agarwal, MD, Nicolas Sadoul, MD, Nikolaos Papageorgiou, MD, PhD, Syed Ahsan, MD, Olivier Piot, MD, Didier Klug, MD, Marie-Cecile Perier, MPH, Martin Lowe, PhD, Abdesselam Bouzeman, MD, Laurent Fauchier, MD, PhD, Pierre Bordachar, MD, Adam Ioannou, MBBS, Dominique Babuty, MD, PhD, Jean-Claude Deharo, MD, Cristophe Leclercq, MD, PhD and Eloi Marijon, MD, PhD. Clinique Pasteur, Toulouse, France, CHU Grenoble, Grenoble, France, Barts Heart Centre, London, United Kingdom, Papworth Hospital NHS Foundation Trust, Cambridge, United Kingdom, Aphp - Hopital Antoine Beclere, Clamart, France, CHU Nancy Brabois, Vandoeuvre Les Nancy, France, Centre Cardiologique du Nord, Saint Denis, France, CHRU Lille, Lille, France, Hôpital Européen Georges Pompidou, Paris, France, Centre Hospitalier Universitaire Trousseau, Tours, France, Hospital Du Haut-Leveque, Pessac, France, University College London, London, United Kingdom, CHU Trousseau, Tours, France, Hospital Du Haut-Leveque, Pessac, France, University College London, London, United Kingdom, CHU Trousseau, Tours, France, Hôpital La Timone, Marseille, France, CHU Pontchaillou, Rennes, France

MP03-02: Echocardiographic Response to Dual Left Ventricular Versus Single Optimal Left Ventricular Cardiac Resynchronization Therapy
Kanwar Singh, MD, Firas Zahwe, MD, Wassim Bailany, MD, Christopher Hayes, MS, Rebecca Dahme, RN and Imran Niazi, MD, FHRs. Aurora Cardiovascular Services, Aurora Sinai/Aurora St Luke's Medical Centers, Milwaukee, WI, Medtronic, Mounds View, MN

MP03-03: The superiority of endocardial vs. epicardial LV lead placement, for delivering biventricular pacing to ischemic patients with poor response to CRT
Jonathan M. Behar, MRCP, Tom A. Jackson, MRCP, Eoin Hyde, PhD, Simon Cleary, MRCP, Jayewinder Gill, MD, Julian Bostock, PhD, FHRS, Manav Sohal, MRCP, Bradley Porter, MRCP, Mark O'Neill, DPhil, MD, FHRS, Reza Razavi, MD, FRCP, Steve Niederer, PhD and Christopher Aldo. Rinaldi, MD, FHRS. Imaging Sciences, Kings College London & Guy's and St Thomas' NHS Foundation Trust, London, United Kingdom

MP03-04: Assessment of left ventricular systolic function: head-to-head comparison between electromechanical mapping and MRI
Francesco Maffessanti, PhD, Wilco Kroon, PhD, Frits W. Prinzen, PhD, Mark Potse, PhD, Francois D. Regoli, MD, Romina Muzzilli, MD, Rolf Krause, PhD and Angelo
Session PU03. PIONEERS IN PEDIATRIC AND ADULT CONGENITAL HEART DISEASE

Special Session
EPicenter Theater 2, Hall D 9:30 - 10:30 a.m.
Pioneers Unplugged

Session Description: In recognition of our historic past in pediatric electrophysiology, this session highlights the history, technical changes, and evolution of modern practice and patient care of children with rhythm disorders

Chair: George F. Van Hare, MD, FHRS, CCDS, CEPS. Washington University, St. Louis, MO

9:30 a.m. Panelists
Arthur Garson, Jr., MD, MPH. Texas Medical Center, Houston, TX
Edward P. Walsh, MD, CCDS. Boston Children's Hospital, Boston, MA
Barbara J. Deal, MD. Ann and Robert H. Lurie Children's Hospital, Chicago, IL

Session 078. SPONTANEOUS CALCIUM RELEASE IS RESPONSIBLE FOR AF
Basic Translational Science - Genetics of Cardiac Arrhythmias: AF Mechanisms and Prevention
Room 303, Moscone South 10:30 - 11:15 a.m.
Debate CME/CE Hours: 0.75

Session Description: This session will explain spontaneous calcium.

Chair: Dobromir Dobrev, MD, PhD. University of Duisburg-Essen, Essen, Germany

10:35 a.m. Spontaneous Calcium Release is Responsible for AF
Xander H. T. Wehrens, MD, PhD, FHRS. Baylor College of Medicine, Houston, TX

10:50 a.m. Spontaneous Calcium Release is NOT Responsible for AF
Ulrich Schotten, MD, PhD. Maastricht University, Maastricht, Netherlands

11:05 a.m. Rebuttal
Xander H. T. Wehrens, MD, PhD, FHRS. Baylor College of Medicine, Houston, TX

11:10 a.m. Rebuttal
Ulrich Schotten, MD, PhD. Maastricht University, Maastricht, Netherlands

Session 079. IS ENTRAINMENT MAPPING OBSOLETE IN THE ERA OF RAPID HIGH DENSITY 3D MAPPING?
Clinical Electrophysiology - Ablation of AF and Atrial Flutter (including surgical ablation)
Room 3018, Moscone West 10:30 - 11:15 a.m.
Debate CME/CE Hours: 0.75
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: Novel 3D mapping techniques have been proposed to overcome the inherent limitation of sequential mapping by simultaneous acquisition of multiple site's of activation. This may eliminate the need for basic EP stimulation maneuver

Chair: Noel G. Boyle, MD, PhD, CCDS. University of California - Los Angeles, Los Angeles, CA

10:30 a.m. Entrainment Mapping of Atrial Arrhythmias is now Obsolete in the Era of Rapid High Density 3D Mapping
Hiroshi Nakagawa, MD, PhD. University of Oklahoma, Oklahoma City, OK

10:45 a.m. Entrainment Mapping is Not Obsolete in the Era of Rapid High Density 3D Mapping
Jonathan M. Kalman, MBBS, PhD, FHRS. Royal Melbourne Hospital, Melbourne, Australia

11 a.m. Rebuttal
Hiroshi Nakagawa, MD, PhD. University of Oklahoma, Oklahoma City, OK

11:05 a.m. Rebuttal
Jonathan M. Kalman, MBBS, PhD, FHRS. Royal Melbourne Hospital, Melbourne, Australia

Session EP12. APPLYING DIGITAL HEALTH TECHNOLOGY TO ENGAGE PATIENTS AND CONSUMERS TO BETTER HEALTH

Special Session
EPicenter Theater 1, Hall D 10:45 - 11:20 a.m.

Session Description: The presentation will cover the latest trends on how connected digital devices and wearables will be able to monitor one's health so that one can be proactive in their own healthcare.

Chair: David Rhew, MD. Samsung SDS, Moonachie, NJ

10:45 a.m. Presenter
David Rhew, MD. Samsung SDS, Moonachie, NJ

Session EP11. IAC ACCREDITATION IN CARDIAC ELECTROPHYSIOLOGY: EASY AS 1,2,3

Special Session
EPicenter Theater 2, Hall D 10:45 - 11:45 a.m.

Session Description: This session will highlight the IAC Accreditation in Cardiac Electrophysiology and discuss how to evaluate your program, preparing your documentation and completing your application
10:45 a.m.  Presenter
Frank Vermeiren, MS, RT (R)(CV), RDCS. International Accreditation, Ellicott City, MD

Session 080. COMPLEX ABLATION: MAXIMIZE OUTCOMES AND MINIMIZE COMPLICATIONS
Allied Professionals - SVT/AVNRT/ WPW/AT Management, Mechanisms, Diagnosis, and Ablation
Room 130, Moscone North  10:30 - 12 p.m.
Core Curriculum
CME/CE Hours: 1.5
ASRT/ARRT: DCD0056099

Session Description: This session will review the fundamentals of complex ablation procedures, including atrial fibrillation and ventricular tachycardia. Outcomes, safety considerations, and strategies to avoid complications during AF and VT ablation.

Chairs:  Esther M. Weiss, MSN, APN, CNS, FHRIS, CCDS, CEPS. Advocate Sherman Hospital, Elgin, IL
Hyun-Soo Lee, MPH, CEPS. Korea University Cardiovascular Center, Seoul, Korea, Republic of Korea

10:30 a.m.  PVC/VT Ablation in Patients with Structural Heart Disease
Cory M. Tschabrunn, CEPS. Beth Israel Deaconess Medical Center, Boston, MA

11 a.m.  AF and Left Sided AT/Flutter Ablation
Amanda Z. Beirne, RN, ACNP. MedStar Washington Hospital Center, Washington, DC

11:30 a.m.  Other Procedural Considerations: Reducing Radiation, Utilization of Imaging, and Hemodynamic Support
Wendy S. Tzou, MD, FHRIS. University of Colorado, Denver, CO

Session 081. HOW TO DETECT AND TREAT DEVICE INFECTION
Allied Professionals - ICDs: Implantation, Programming and Follow-up Considerations
Room 132, Moscone North  10:30 - 12 p.m.
How-To
CME/CE Hours: 1.5
ASRT/ARRT: DCD0056100

Session Description: This “how to” session will discuss best practice management of patients with device infections, including a review of current guidelines and clinical experience of the invited speakers.

Chairs:  Julie B. Shea, MS, RNCS, FHRIS, CCDS. Brigham and Women’s Hospital, Boston, MA
Rutuke K. Patel, PA-C. Temple University Hospital, Philadelphia, PA

10:35 a.m.  How to Reduce Infections in the EP Lab
Anastasios Manaris, MD, FHRIS. Progressive Arrhythmia and Cardiac Care

10:55 a.m.  How to Detect Device Infection and Determine Indication for Extraction
Ayman A. Hussein, MD. Cleveland Clinic Foundation, Cleveland, OH

11:15 a.m.  Who gets Reimplanted and Timing of Reimplant
Peter J. Zimetbaum, MD, FHRIS. Beth Israel Deaconess Medical Center, Boston, MA

11:35 a.m.  How to Care for your Patient Before and After Extraction Procedures
Robert D. Schaller, DO. Hospital of the University of Pennsylvania, Philadelphia, PA

Session 082. EP CASES FROM THE LAB TO THE FLOOR
Allied Professionals
Room 134, Moscone North  10:30 - 12 p.m.
Rapid Fire Cases
CME/CE Hours: 1.5
ASRT/ARRT: DCD0056101

Session Description: Case based review of patient care topics including interesting cases from the EP lab and floor in rapid fire format. Cases will have a brief presentation with questions from the panel and audience.

Chair:  Aileen M. Ferrick, RN, PhD, ACNP, FHRIS. Westchester Medical Center, Hawthorne, NY

10:30 a.m.  Invited Speaker
David J. Orenstein, Biomedical Technology. Ashkelon Academic College, Ashkelon, Israel

10:45 a.m.  Interesting Electrogram or Imaging Case
James Kulig, PA-C. Brigham and Women’s Hospital, Boston, MA

11 a.m.  VT/PVC Case
Andrea Schelli, PA-C. Hospital of the University of Pennsylvania, Philadelphia, PA

11:15 a.m.  Lab Complication Case
Lyle Larson, PhD, PA-C. University of Washington, Seattle, WA

11:30 a.m.  Panelists
Salwa Beheiry, RN, BSN, CCRN. California Pacific Medical Center, San Francisco, CA
Mark D. Heimann, MSN, ACNP-BC, CCDS, CEPS. Paoli Medical Center, Paoli, PA
Gerilynn M. Schott, MSN, CRNP. University of California - San Francisco, San Francisco, CA

Session 083. MECHANISMS OF AF: FROM GENES TO FUNCTION
Basic Translational Science - Genetics of Cardiac Arrhythmias: AF Mechanisms and Prevention
Room 304, Moscone South  10:30 - 12 p.m.
Core Curriculum
CME/CE Hours: 1.5

Session Description: The goal of this session is to provide a detailed assessment of the state of atrial fibrillation genomics and functional evaluation of AF genes.

Chairs:  Christine M. Albert, MD. Brigham and Women's Hospital, Boston, MA
Stefan Kaab, MD, PhD. Munich Klinikum Grosshadern, Munich, Germany

10:35 a.m.  RNA Sequencing to Identify New AF Genes
Mina K. Chung, MD, FHRS. Cleveland Clinic, Cleveland, OH
10:55 a.m.  TBX5 Gene Regulatory Network Underlying AF  
Ivan Moskowitz, MD, PhD. University of Chicago, Chicago, IL

11:15 a.m.  High Throughput Methods for Identifying Causative Genetic Variants  
Steven A. Lubitz, MD. Massachusetts General Hospital, Boston, MA

11:35 a.m.  Lessons from PITX2 Knockout Mice  
James F. Martin, MD, PhD. Baylor College of Medicine, Houston, TX

Session 084. WHEN AND HOW TO USE INDUCED PLURIPOTENT STEM CELLS IN ARRHYTHMIA RESEARCH

Basic Translational Science - Ventricular Tachycardia & Ventricular Fibrillation: Management, Mechanisms, Diagnosis, and Ablation  
Room 307, Moscone South 10:30 - 12 p.m.  
How-To  
CME/CE Hours: 1.5

Session Description: The purpose of the session is to provide a basic introduction on when and how to best use iPSC in arrhythmia research. This is increasingly important since the iPSC technology is becoming widely available to researchers.

When and How to Use Induced Pluripotent Stem Cells in Arrhythmia Research:  
Lior Gepstein, MD, PhD. Technion - Israel Institute of Technology, Haifa, Israel  
Steven M. Pogwizd, MD. University of Alabama at Birmingham, Birmingham, AL

10:30 a.m.  How to Make Good iPSC Cardiomyocytes  
Timothy J. Kamp, MD, PhD. University of Wisconsin, Madison, WI

11 a.m.  When and When Not to Use iPSC for Disease Modeling  
Lior Gepstein, MD, PhD. Technion - Israel Institute of Technology, Haifa, Israel

11:30 a.m.  When and When Not to Use iPSC for Drug Testing  
Andrew A. Grace, MD, PhD. University of Cambridge, Cambridge, United Kingdom

Session JS11. ELECTROPHYSIOLOGY OF THE AGING HEART

Basic Translational Science  
Room 2007, Moscone West 10:30 - 12 p.m.  
Joint Session  
CME/CE Hours: 1.5

ESC Working Group on Cellular Cardiac Electrophysiology

Session Description: This session describes the most recent information concerning the effects of gaining on cardiac electrophysiology. The topic is appealing because these issues are an increasing issue to clinicians and yet the basic science is a

Chair:  Antoons Gudrun, PhD. Maastricht University, Maastricht, Netherlands

10:30 a.m.  Sinus Node and Aging  
Oliver Monfredi, MD, PhD. National Institute on Aging - National Institute of Health, Manchester, MD

10:50 a.m.  Intracellular Ca and Aging in the Sinus Node  
Edward Lakatta, MD. National Institute on Aging - National Institute of Health, Baltimore, MD

11:10 a.m.  Atrial Remodeling With Age  
Penelope Boyden, PhD. Columbia University, New York, NY

11:30 a.m.  Cardiac Myocyte-nonmyocyte Electronic Coupling: Fact or Fiction?  
Peter Kuhl, MD, PhD, FHRS. National Heart and Lung Institute, London, United Kingdom

11:45 a.m.  Altered Fibroblast Phenotype in Aging  
Huei-Sheng V. Chen, MD, PhD. Sanford-Burnham Medical Research Institute, La Jolla, CA

Session 085. THE ROLE OF LONG TERM ECG MONITORING USING AN IMPLANTABLE LOOP RECORDER IN SPECIFIC PATIENT POPULATIONS

Cardiovascular Implantable Electronic Devices - Implantable Monitors, Sensors, and Novel CIED Devices  
Room 2014, Moscone West 10:30 - 12 p.m.  
Case Based Tutorial  
CME/CE Hours: 1.5

Supported by an unrestricted educational grant provided by Boston Scientific.

Session Description: This sessions will review the role of long term ECG monitoring with an implantable loop recorder in specific patient populations.

Chair:  Nils G. Edvardsson, MD, PhD. Sahlgrenska Univ Hospital

10:35 a.m.  The ILR in Patients with Unexplained Syncope  
Michele Brignole, MD. Ospedali del Tigullio, Lavagna, Italy

10:55 a.m.  Biophysics for Electrophysiologists  
Carlos A. Morillo, MD, FHRS. McMaster University, Hamilton, ON, Canada

11:15 a.m.  The ILR in Patients with a High CHA2DS2-VASc Score  
James A. Reiffel, MD, FHRS, CCDS. Columbia University, New York, NY

11:35 a.m.  The ILR Post-Cryptogenic Stroke  
Johannes Brachmann, MD, PhD. Klinikum Coburg, Coburg, Germany

Session 086. OPTIMIZING ICD PROGRAMMING PARAMETERS TO IMPROVE PATIENT OUTCOMES

Cardiovascular Implantable Electronic Devices - ICDs: Implantation, Programming and Follow-up Considerations  
Room 2006, Moscone West 10:30 - 12 p.m.  
Core Curriculum  
CME/CE Hours: 1.5

Supported by an unrestricted educational grant provided by Boston Scientific.

Session Description: We will discuss optimal programming parameters for ICDs

Chairs:  Charles Swerdlow, MD, FHRS, CCDS. Cedars-Sinai Medical Center, Los Angeles, CA  
Ronald D. Berger, MD, PhD, FHRS. Johns Hopkins University, Baltimore, MD

10:30 a.m.  Optimal Brady Parameters for ICD Patients  
James P. Daubert, MD, FHRS. Duke University Medical Center, Durham, NC

11 a.m.  Optimal Tachy Detection Parameters for ICD Patients
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10:35 a.m. Ablation of Ventricular Arrhythmias Originating in Papillary Muscles
Haris M. Haqqani, MBBS, PhD, FHRS. University of Queensland, Brisbane, Queensland, Australia

10:55 a.m. Ablation of Ventricular Arrhythmias in Brugada Syndrome
Koonlawee Nademanee, MD, FHRS, CCDS. Pacific Rim Electrophysiology Research Institute Center, Los Angeles, CA

11:15 a.m. Ablation of Triggers in Idiopathic VF and Early Repolarization
Stephan Willems, MD, PhD. University Heart Centre Hamburg, Hamburg, Germany

11:35 a.m. Sympathectomy to Treat LQTS and CPVT
Christopher Moir, MD. Mayo Clinic, Rochester, MN

Session 091. CONTEMPORARY MANAGEMENT OF VENTRICULAR ARRHYTHMIAS: CASES TO ILLUSTRATE THE GUIDELINES
Clinical Electrophysiology - Ventricular Tachycardia & Ventricular Fibrillation: Management, Mechanisms, Diagnosis, and Ablation
Room 3002, Moscone West 10:30 - 12 p.m.
Rapid Fire Cases F PM
CME/CE Hours: 1.5

Session Description: This session will provide a case based approach to illustrate the recently released guidelines as to how to manage ventricular arrhythmias.

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

10:30 a.m. Case 1
Eric J. Rashba, MD, FHRS. Stony Brook Medicine, Stony Brook, NY

10:45 a.m. Case 2
John L. Sapp, MD, FHRS. Queen Elizabeth II Health Sciences Centre, Halifax, NS, Canada

11 a.m. Case 3
Hiroshi Tada, MD, PhD, FHRS. University of Fukui, Fukui, Japan

11:15 a.m. Case 4
Saurabh Kumar, BSc(Med), MBBS. Royal Melbourne Hospital, Melbourne, Australia

11:30 a.m. Case 5
Antonio Berruezo, MD, PhD. Cardiovascular Institute - Hospital Clinic - University of Barcelona, Barcelona, Spain

11:45 a.m. Case 6
Katja Zeppenfeld, MD, PhD. Leiden University Medical Center, Leiden, Netherlands

10:30 a.m. Panelists
Edward P. Gerstenfeld, MD, FHRS. University of California - San Francisco, San Francisco, CA
Christopher Piorkowski, MD. University of Dresden - Heart Center, Dresden, Germany
Etienne M. Aliot, MD, FHRS. University of Nancy, Vandoeuvre Les Nancy, France

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Session 093. MAKING THE MOST OF REMOTE MONITORING IN CRT PATIENTS
Heart Failure - Resynchronization Therapy: Science, Techniques, and Outcomes
Room 2002, Moscone West 10:30 - 12 p.m.
Core Curriculum PM
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Amgen

Session Description: This session will give an up to date review of use of remote monitoring in CRT. The new HRS consensus document will be reviewed. Impact on survival and compliance with monitoring and programming of parameters will be discussed.

Chairs: Paul Dorian, MD, FHRS. University of Toronto & St. Michael's Hospital, Toronto, ON, Canada
        Anne M. Gillis, MD, FHRS. University of Calgary, Calgary, AB, Canada

10:35 a.m. What the New HRS Expert Consensus Statement Tells Us
Taya Glotzer, MD, FHRS. Hackensack University Medical Center, Hackensack, NJ

10:55 a.m. Impact of Remote Monitoring on Outcome and Survival in CRT Patients
Niraj Varma, MD, PhD. Cleveland Clinic, Cleveland, OH

11:15 a.m. Compliance with Remote Monitoring in Real World Practice
Lynda E. Rosenfeld, MD, FHRS. Yale University School of Medicine, New Haven, CT

11:35 a.m. Integrating Remote Monitoring in Practice: What Parameters do you Really Need to Follow?
Eric Adler, MD, University of California - San Diego, San Diego, CA

Session 094. UPDATE ON PACING INDUCED HEART FAILURE
Heart Failure - Heart Failure: Etiology, Diagnosis, and Management
Room 2003, Moscone West 10:30 - 12 p.m.
Core Curriculum F MOC-ABIM
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Amgen

Session Description: This session will describe the pathophysiology, prevention of, and therapeutic approaches to pacing-induced heart failure.

Chairs: David D. Spragg, MD, FHRS. Johns Hopkins University, Baltimore, MD
        Robert H. Helm, MD, FHRS. Boston Medical Center, Boston, MA

10:35 a.m. Predictors of RV Pacing-Induced Cardiomyopathy
David S. Frankel, MD, FHRS. Hospital of the University of Pennsylvania, Philadelphia, PA

10:55 a.m. Mechanisms of Pacing-Induced Dyssynchrony and Heart Failure
Alan J. Bank, MD, United Heart & Vascular Clinic, St. Paul, MN

11:15 a.m. How to Treat Pacing-Induced Heart Failure
Robert H. Helm, MD, FHRS. Boston Medical Center, Boston, MA

11:35 a.m. Reverse Remodeling with Treatment of Pacing-Induced Heart Failure
John W. Rickard, MD, MPH. Johns Hopkins Bayview Medical Center, Baltimore, MD

Session 096. RECOGNIZING PRENATAL ARHYTHMIAS AND TREATING THE FETUS
Pediatrics and Adult Congenital Heart Disease - Bradycardia, AV Block, and Bradycardia Devices
Room 104, Moscone South 10:30 - 12 p.m.
How-To F MOC-ABP
CME/CE Hours: 1.5

Session Description: This session focuses on recognition of arrhythmias in the fetus, standard of care therapies and cutting edge technology for fetal arrhythmia management

Chairs: Nico A. Blom, MD, PhD. Leiden University Medical Center, Leiden, Netherlands
        Michael J. Silka, MD. Children's Hospital, Los Angeles, CA

10:35 a.m. Channelopathies in Fetal Life: Recognition and Treatment
Bettina F. Cuneo, MD. The Heart Institute of Children's Hospital Colorado, Aurora, CO

10:55 a.m. Treating Fetal Heart Block in the Next Century
Yaniv Bar-Cohen, MD. Children's Hospital of Wisconsin, Milwaukee, WI

11:15 a.m. Multiple Arrhythmias: One Fetus
Janette F. Strasburger, MD. Children's Hospital of Wisconsin, Milwaukee, WI

11:35 a.m. Early Lessons from the FAST Trial
Nico A. Blom, MD, PhD. Leiden University Medical Center, Leiden, Netherlands

Session JS19. MAPPING A SUCCESSFUL CAREER IN ELECTROPHYSIOLOGY
Pediatrics and Adult Congenital Heart Disease
Room 102, Moscone South 10:30 - 12 p.m.
Joint Session ARS F PM
CME/CE Hours: 1.5
A Joint Session presented by PACES

Session Description: This session is designed to provide experiential guidance to physicians in the first decade of their careers, or making career transitions. The panel consists of well-respected electrophysiologists who are “doing it all”.

Chairs: Shubhayan Sanatani, MD, FHRS, CCDS. Children's Heart Centre, Vancouver, BC, Canada
        George J. Klein, MD. University of Western Ontario, London, ON, Canada

10:30 a.m. The Clinic Is My Lab: How to Build a Productive Research Agenda Into Clinical Practice
Andrew D. Krahn, MD, FHRS. Gordon and Leslie Diamond Health Care Centre, Vancouver, BC, Canada

10:50 a.m. Searching for the 25th Hour in Both Academia and Private Practice
Mitchell Cohen, MD, CCDS. Phoenix Children's Hospital, Phoenix, AZ
11:10 a.m.  The Two Faces of the Chief: What the Chief Wants from Junior Faculty and What They Need from the Chief
Charles I. Berul, MD, FHRS, CCDS. Children's National Medical Center, Washington, DC

11:25 a.m.  The Two Faces of the Chief: What the Chief Wants from Junior Faculty and What They Need from the Chief
Kara S. Motonaga, MD. Lucile Packard Children's Hospital, Palo Alto, CA

11:40 a.m.  Balancing it All Without Letting Anything Drop: A Professional Juggler
Andrea M. Russo, MD, FHRS. Cooper University Hospital, Camden, NJ

Session SP24. HISTORY SESSION: HARRY FOZZARD SYMPOSIUM - CARDIAC ELECTROPHYSIOLOGY PIONEER
Special Session
Room 2001, Moscone West 10:30 - 12 p.m.
Special Session
CME/CE Hours: 1.5

Session Description: This session will highlight the work and accomplishments of Harry Fozzard and celebrate the impact Dr. Fozzard had on the care and treatment of heart rhythm disorders.

Chairs: Jose Jalife, MD, FHRS. University of Michigan, Ann Arbor, MI
Yoram Rudy, PhD, FHRS. Washington University, St. Louis, MO

10:30 a.m.  Harry Fozzard as a Visionary
Craig T. January, MD, PhD. University of Wisconsin, Madison, WI

10:50 a.m.  Harry Fozzard as a Scientist
Jonathan C. Makielski, MD. University of Wisconsin, Madison, WI

11:10 a.m.  Harry Fozzard as a Mentor/Physician
Samuel C. Dudley, MD, PhD. Brown University, Providence, RI

11:30 a.m.  My Experience with Harry
Shey-Shing Sheu, MD. University of Rochester Medical Center, Rochester, NY

11:50 a.m.  Expert Commentator
Alfred L. George, MD. Northwestern University, Chicago, IL

Session 097. SHOULD NOACS BE PRESCRIBED FOR INITIAL THERAPY AFTER CRYPTOGENIC STROKE?
Clinical Electrophysiology - Implantable Monitors, Sensors, and Novel CIED Devices
Room 3018, Moscone West 11:30 - 12:15 p.m.
Debate
CME/CE Hours: 0.75
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: Come hear experts on NOACs and occult AF detection debate the best initial treatment approach for patients with cryptogenic stroke.

Chair: Jeffrey S. Healey, MD, FHRS. Population Health Research Institute, Hamilton, ON, Canada

11:35 a.m.  NOACS Should be Prescribed for Initial Therapy After Cryptogenic Stroke
A. John Camm, MD, FHRS. St. George's University of London, London, United Kingdom

11:50 a.m.  NOACS Should Not be Prescribed for Initial Therapy After Cryptogenic Stroke
Rod S. Passman, MD, MSCE, FHRS. Northwestern Memorial Hospital, Chicago, IL

12:05 p.m.  Rebuttal
A. John Camm, MD, FHRS. St. George's University of London, London, United Kingdom

12:10 p.m.  Rebuttal
Rod S. Passman, MD, MSCE, FHRS. Northwestern Memorial Hospital, Chicago, IL

Session EP13. PEARLS OF WISDOM FROM A GEOGRAPHICALLY AND SCIENTIFICALLY DIVERSE GROUP OF EXPERTS - SPONSORED BY THE EMERGING LEADERS COMMUNITY OF PRACTICE
Special Session
EPicenter Theater 2, Hall D 12:15 - 1:15 p.m.

Session Description: A panel of international leaders will share personal and professional insights on how to thrive in the exciting and competitive landscape of heart rhythm research. Join renowned leaders in a highly interactive and informal disc

Chairs: Elena Arbelo, MD, PhD. Hospital Clinic - University of Barcelona, Barcelona, Spain
Patrick M. Boyle, PhD. Johns Hopkins University, Baltimore, MD
Junaid A. Zaman, BBCh MA MRCP. Stanford University & Imperial College London, Palo Alto, CA
Sandeep Goyal, MD, FHRS. Piedmont Heart Institute, Atlanta, GA

12:15 p.m.  Expert Commentator
Connie R. Bezzina, PhD. Academic Medical Center, Amsterdam, Netherlands
Heather M. Ross, DNP, ANP-BC, FHRS, CCDS, CEPS. Arizona Arrhythmia Consultants, Scottsdale, AZ
Gregory F. Michaud, MD, FHRS. Brigham and Women's Hospital, Boston, MA

Session EP14. HOW TO COMMUNICATE VIA SOCIAL MEDIA, MAINSTREAM MEDIA, AND BEYOND
Special Session
EPicenter Theater 1, Hall D 12:15 - 1:15 p.m.

Session Description: This session will present an educational symposium that would instruct attendees on how to further our Society's core mission through better communication with the media in order to allow for a better understanding of heart rhy

Chairs: Kevin R. Campbell, MD. North Carolina Heart and Vascular, Raleigh, NC
Session ME04. DEVELOPING YOUR CAREER IN ARRHYTHMIA RESEARCH

Basic Translational Science
Room 303, Moscone South 12:15 - 1:15 p.m.
Meet-The-Experts F
CME/CE Hours: 1

Session Description: This session is targeted at research and clinical fellows interested in developing a research career. The goal is to have an interactive discussion with leaders in the field about lessons they have learned

Chair: Christine M. Albert, MD. Brigham and Women’s Hospital, Boston, MA

12:15 p.m. Developing a Career in Arrhythmia Research
Dan M. Roden, MD, FHRS. Vanderbilt University, Nashville, TN

12:35 p.m. Developing a Career in Arrhythmia Research
Xander H. T. Wehrens, MD, PhD, FHRS. Baylor College of Medicine, Houston, TX

12:55 p.m. Developing a Career in Arrhythmia Research
Phillip Cuculich, MD. Washington University, St. Louis, MO

Session ME05. THE FUTURE OF CRT DELIVERY: ARE WE THERE?
Heart Failure - Heart Failure: Etiology, Diagnosis, and Management
Room 2011, Moscone West 12:15 - 1:15 p.m.
Meet-The-Experts F
CME/CE Hours: 1

Session Description: This session offers an opportunity to meet and hear from the main investigators in recent clinical trials involving targeted LV placement, multisite pacing and leadless LV pacing. Outcome of recent studies and the future of new

Chair: Christopher A. Rinaldi, MD, FHRS. Guy’s and St. Thomas Hospitals, London, United Kingdom

12:15 p.m. Feasibility and Outcome of Targeted LV Lead Placement
John Gorcsan, III, MD. University of Pittsburgh, Pittsburgh, PA

12:35 p.m. Multisite Pacing: Establishing the Benefits
Frits W. Prinzen, PhD. Maastricht University, Maastricht, Netherlands

12:55 p.m. Leadless LV Endocardial Pacing: Ready for Prime Time?
Angelo Auricchio, MD, PhD. Fondazione Cardiocentro Ticino, Lugano, Switzerland

Session ME06. MEET THE EXPERTS: LESSONS LEARNED FROM THE SADS EXPERIENCE
Pediatrics and Adult Congenital Heart Disease - Genetics of Cardiac Arrhythmias: AF Mechanisms and Prevention
Room 104, Moscone South 12:15 - 1:15 p.m.
Meet-The-Experts F
CME/CE Hours: 1

Session Description: This session will introduce the attendees to the leading medical experts in the field of inherited cardiac channelopathies. The organization will be a question and answer format, expert experiences about diagnosing and treating

Chair: Mitchell Cohen, MD, CCDS. Phoenix Children’s Hospital, Phoenix, AZ

12:15 p.m. Lessons Learned from the SADS Experience
Silvia G. Priori, MD, PhD. Fondazione Salvatore Maugeri, Pavia, Italy

12:35 p.m. Lessons Learned from the SADS Experience
Arthur A. M. Wilde, MD, PhD. University of Amsterdam, Amsterdam, Netherlands

12:55 p.m. Lessons Learned from the SADS Experience
Sami Viskin, MD. Tel Aviv Medical Center, Tel Aviv, Israel

Session SP25. ALLIED PROFESSIONALS LUNCHEON: NEW PARADIGMS OF PRACTICE AND NOVEL WAYS TO TREAT PATIENTS - EXPANDING OUR ROLE!
Allied Professionals
Room 121, Moscone North 12:15 - 1:15 p.m.
Special Session PM
CME/CE Hours: 1
ASRT/ARRT: DCD0056112

Session Description: Luncheon session with short talks and lots of discussion highlighting new ways allied professionals can treat patients.

Chair: Aileen M. Ferrick, RN, PhD, ACNP, FHRS. Westchester Medical Center, Hawthorne, NY

12:15 p.m. How to Implant ILRs
Scott J. Cox, MS, PA-C, CCDS, CEPS. Lankenau Medical Center, Wynnewood, PA

12:15 p.m. Telemedicine/Remote Visits Including Incision Checks
Esther Pimplekar, MSN, ACNP-BC. Sanger Heart and Vascular Institute, Charlotte, NC

12:35 p.m. Allied Professional Lead AF Clinic
Jeroen M. Hendriks, PhD. Centre for Heart Rhythm Disorders, Royal Adelaide Hospital, University of Adelaide, Adelaide, Australia

12:55 p.m. Allied Professional Lead Cardioversion Program
Angela Tsiperfal, NP, CCDS. Stanford Hospital and Clinics, Stanford, CA

Session SP26. HEARTRHYTHM JOURNAL PRESENTS - NEW APPROACHES TO ARRHYTHMIA AND HEART FAILURE THERAPY
Special Session
Room 1010, Moscone West 12:15 - 1:15 p.m.
Special Session
CME/CE Hours: 1
Session Description: This session is focused on new modalities of therapy of arrhythmia and heart failure. The speakers will describe new methods of pacing that can improve ventricular function in humans and new molecular/genetic manipulations that

Chairs: Charles Antzelevitch, PhD, FHRS. Masonic Medical Research Laboratory, Utica, NY
Andrew D. Krahn, MD, FHRS. Gordon and Leslie Diamond Health Care Centre, Vancouver, BC, Canada

12:15 p.m.
Cardiac-specific Ablation of Synapse-associated Protein SAP97 in Mice Decreases Potassium Currents but not Sodium Current
Ludovic Gillet, PhD. University of Bern, Bern, Switzerland

12:30 p.m.
Multipoint Pacing by a Left Ventricular Quadripolar Lead Improves the Acute Hemodynamic Response to CRT Compared with Conventional Biventricular Pacing at any Site
Francesco Zanon, MD. Ospedale S. Maria Della Misericordia, Rovigo, Italy

12:45 p.m.
Resveratrol, a Red Wine Antioxidant, Reduces Atrial Fibrillation Susceptibility in the Failing Heart by PI3K/AKT/eNOS Signaling Pathway Activation
Shih-Ann Chen, MD. Taipei Veterans General Hospital, Taipei, Taiwan

1 p.m.
His-bundle Pacing Versus Biventricular Pacing in Cardiac Resynchronization Therapy Patients: A Crossover Design Comparison
Daniel L. Lustgarten, MD, PhD, FHRS. Fletcher Allen Health Care - The University of Vermont, Burlington, VT

Session Description: This session will provide an overview of primary barriers to medical device innovation in the U.S. The FDA’s strategy of monitoring implantable cardiovascular devices and the general regulatory payment approval hurdles of desig

Chairs: Fred M. Kusumoto, MD, FHRS. Mayo Clinic, Jacksonville, FL
Mitchell J. Shein, MS, FHRS, CCDS. Food and Drug Administration, Silver Spring, MD

12:15 p.m.
Proceedings from the HRS-FDA Strategic Partnership to Facilitate Development of Emerging Technology
Paul D. Varosy, MD, FHRS. University of Colorado, Denver, CO

12:30 p.m.
HRS Health Policy Statement on Structured Reporting for Cardiac Electrophysiology
Robert L. Abraham, MD. Vanderbilt University, Nashville, TN

12:45 p.m.
HRS Health Policy Statement on Structured Reporting for Cardiac Electrophysiology
Gerald A. Serwer, MD, FHRS. University of Michigan, Ann Arbor, MI

Session SP28. CCEP PROGRAM DIRECTORS' LUNCHEON: CCEP TRAINING IN 2016
Special Session
Room 120, Moscone North 12:15 - 1:15 p.m.
Special Session
CME/CE Hours: 1

Welcome & Introduction: James P. Daubert, MD, FHRS. Duke University Medical Center, Durham, NC

12:15 p.m.
ERAS and NRMP Update
James P. Daubert, MD, FHRS. Duke University Medical Center, Durham, NC

12:25 p.m.
In-Training Exam Proposal Overview and Update
Jose Joglar, MD, FHRS. University of Texas Southwestern Medical Center, Dallas, TX

12:35 p.m.
ABIM & ACGME Updates
John D. Fisher, MD, FHRS, CCDS. Montefiore Medical Center, Bronx, NY

12:45 p.m.
CCEP Program Director Survey Results
James P. Daubert, MD, FHRS. Duke University Medical Center, Durham, NC

Session SP29. FELLOWS OF THE HEART RHYTHM SOCIETY RECOGNITION AND INDUCTION LUNCHEON
Special Session
Main Stage - Level 3, Moscone West 12:15 - 1:15 p.m.

12:15 p.m.
Fellows of the Heart Rhythm Society Recognition and Induction Luncheon
TBD Tbd, MD. Heart Rhythm Society, Washington, DC

Session EP15. HAVE A GREAT MENTOR/MENTEE EXPERIENCE – ADVICE FROM THE EXPERTS
EPicenter Theater 2, Hall D 1:30 - 2:45 p.m.
EPicenter

Session Description: Learn from the experiences of these great Mentors and Mentees and how best to establish an effective Mentor-Mentee relationship. The session will be a candid dialogue moderated by Dr. David Cannom and Dr. Michael Barber.

Chairs: Michael J. Barber, MD, PhD, FHRS. International Health and Wellness Center, Colorado Springs, CO
David S. Cannom, MD, FHRS. Good Samaritan Hospital, Los Angeles, CA

1:30 p.m.
Mentor
Francis E. Marchlinski, MD, FHRS. University of Pennsylvania, Philadelphia, PA

1:30 p.m.
Mentor
David S. Frankel, MD, FHRS. University of Pennsylvania, Philadelphia, PA

1:45 p.m.
Mentor
David G. Benditt, MD, FHRS, CCDS. University of Minnesota, Minneapolis, MN

2 p.m.
Mentor
William G. Stevenson, MD, FHRS. Brigham and Women's Hospital, Boston, MA

2 p.m.
Mentee

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Special Session

EPicenter Theater 1, Hall D 1:30 - 2:45 p.m.

Session Description: Join the conversation on Twitter, using #AFibHRS and #HRS2016. Tweet your questions about AFib and get answers from Nassir Marrouche, MD, FHRS (@nmarrouche), Suneet Mittal, BA, MD, FHRS (@sruneeet), Oussama M. Wazni, MD, FHRS (@OussamaWazni).

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

1:30 p.m. Panelists

John K. Friedman, MD, FHR, CCDS, CEPS, Boston Children’s Hospital, Boston, MA

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

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

Mintu P. Turakhia, MD, MS. Stanford University, Palo Alto, CA

Prashanthan Sanders, MBBS, PhD, FHRS. University of Adelaide and Royal Adelaide Hospital, Adelaide, Australia

Session AB21. CLINICAL RESEARCH ABSTRACTS

Allied Professionals

Room 130, Moscone North 1:30 - 3 p.m.

Abstract PM

CME/CE Hours: 1.5

Session Description: This session will review clinical research performed and presented by allied professionals investigating scientific and practice based aspects of care of the arrhythmia patient.

Chairs: Cory M. Tscharbunn, CEPS. Beth Israel Deaconess Medical Center, Boston, MA

Erica S. Zado, PA-C, FHRS. Hospital of the University of Pennsylvania, Philadelphia, PA

1:30 p.m. AB21-01: Injectable Loop Recorder Implantation in a Non-EP Lab Setting: Analysis of Complication Rates

Natalia Young, PA, Ann E. Barnett, PA, Michael E. Field, MD, FHRS, Miguel A. Leal, MD, Douglas E. Kopp, MD, Ryan Kipp, MD, Lee L. Eckhardt, MD, FHRS, Kurt Hoffmayer, MD and Jennifer M. Wright, MD, University of Wisconsin Hospital and Clinics, Madison, WI, University of Wisconsin School of Medicine, Madison, WI, University of Wisconsin, Madison, WI, University of Wisconsin Hospital and Clinics, Madison, WI, University of Wisconsin Hospitals and Clinics, Madison, WI, University of Wisconsin Hospital Clinics, Madison, WI

1:45 p.m. AB21-02: Impella Percutaneous Ventricular Assist Device Use in Ventricular Tachycardia Catheter Ablation: a Four-Year Single-Center Experience

Gregory S. Troutman, BS, Nelson W. McNaughton, MS, Tara B. Lockstein, BS, Kate N. Warren, BA, Craig J. Carcuffe, BS, Deviprasad Venugopal, MD, Mary M. Gnnap, BSN, MBE, Sanjay Dixit, MD, FHRS, David S. Frankel, MD, FHRS, Fermin C. Garcia, MD, Mathew D. Hutchinson, MD, FHRS, David Lin, MD, FHRS, Pasquale Santangeli, MD, Robert Schaller, DO, David J. Callam, MD, FHRS, Francisco Marchlinski, MD, FHRS, Erica S. Zado, PA and Gregory E. Supple, MD. University of Pennsylvania, Philadelphia, PA

2 p.m. AB21-03: Cryoballoon Ablation of Pulmonary Veins: Ganglionic Plexi Modification and AF recurrence

Sarah Worsnick, PA, Angela Naperkowski, RN, Danielle E. Donald, CVT, Faiz Subzposh, MD, Gopi Dandamudi, MD, FHRS and Pugazhendhi Vijayraman, MD, FHRS. Geisinger Heart Institute, Wilkes Barre, PA, Geisinger Heart Institute, Wilkes-Barre, PA, Geisinger Health System, Geisinger Wyoming Medical Center, Wilkes-Barre, PA

2:15 p.m. AB21-04: RYR2 Gene: De Novo Variant Frequency, Sudden Cardiac Arrest, & Implications for Genetic Counseling

Tara B. Hart, MS, Christian Antolik, PhD and Daniela Macaya, PhD. GeneDx, Gaithersburg, MD

2:30 p.m. AB21-05: PREVeEntion and regReSeive Effect of weight loss and risk factor modification on Atrial Fibrillation (REVERSE-AF)

Melissa E. Middeldorp, No Degree, Rajeev K. Pathak, MBBS, Abhinav Mehta, MA, Megan Meredith, No Degree, Rajiv Mahajan, MD, Adrian Elliott, PhD, Dennis H. Lau, MBBS and Prashanthan Sanders, MBBS, PhD. University of Adelaide, Royal Adelaide Hospital, Adelaide, Australia, Centre for Heart Rhythm Disorders, University Of Adelaide and Royal Adelaide Hospital, Adelaide, Australia, Research School of Finance, Actuarial Studies and Applied Statistics. Australian National University, Canberra, Australia, Centre for Heart Rhythm Disorders, Adelaide, Australia, Centre for Heart Rhythm Disorders, Adelaide, Australia, University of Adelaide, Royal Adelaide Hospital, Adelaide, Australia, Royal Adelaide Hospital, Adelaide, Australia, University of Adelaide and Royal Adelaide Hospital, Adelaide, Australia, University of Adelaide and Royal Adelaide Hospital, Adelaide, Australia

2:45 p.m. AB21-06: “As Needed” Short-Term Novel Oral Anticoagulants for Infrequent Atrial Fibrillation Episodes Guided by Diligent Pulse Monitoring

Monica Pammery, PA, Tara Parham, CRNP, Amanda Every, PAC, MPH, Erica Zado, PA and Francis E. Marchlinski, MD, FHRS. University of Pennsylvania, Philadelphia, PA

Session AB22. MOLECULAR REGULATION OF ION CHANNELS

Basic Translational Science

Room 303, Moscone South 1:30 - 3 p.m.

Abstract F

CME/CE Hours: 1.5

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Session Description: The session will cover the latest advances on ion channel regulation in health and disease states.

Chairs: Geoffrey S. Pitt, MD, PhD. Duke University Medical Center, Durham, NC
       Samuel C. Dudley, MD, PhD. Brown University, Providence, RI

1:30 p.m. AB22-01: Adrenergic-Related Bi-Directional Ventricular Tachycardia in a cardiac-specific R67Q-KCNJ2 mutant mouse
Louise Reilly, PhD, Ravi Vaidyanathan, PhD, Sara Abozeid, BS, Cordell Spellman, No Degree, Hanora Van Ert, RN, BSN, Samuel Esch, No Degree, Di Lang, PhD, Alexey Glukhov, PhD, Jonathan Makekuli, MD and Lee L. Eckhardt, MD. University of Wisconsin-Madison, Madison, WI

1:45 p.m. AB22-02: The two-pore K+ channel TREK-1 regulates sinoatrial node membrane excitability
Sathya Dev Unudurthi, PhD, Xianggiong Wu, MD, Lan Qian, MS, Foud Amari, MS, Sirce Onal, BS, Vadim V. Fedorov, PhD, Vincenzo Coppola, PhD, Mark E. Anderson, MD, PhD, Peter J. Mohler, PhD and Thomas Hund, MD. The Ohio State University, Columbus, OH, Ohio State University, Columbus, OH, Carver College of Medicine, Iowa City, IA, Ohio State University Medical Center, Columbus, OH

2 p.m. AB22-03: PKCδ Phosphorylation and Mitochondrial ROS are Required for Metabolic Downregulation of Cardiac Na+ Channel
Man Liu, PhD, Guangbin Shi, MD, MSc, Kai-Chien Yang, MD, PhD, Lianzhi Gu, MD, PhD and Samuel C. Dudley, MD, PhD. Brown University and Rhode Island Hospital, Providence, RI, National Taiwan University Medical School, Taipei, Taiwan, University of Illinois at Chicago, Chicago, IL

2:15 p.m. AB22-04: Molecular Interaction Sites Between Kv4.3 and DPP6: The Biochemical Anatomy of Idiopathic Ventricular Fibrillation
Nazlee Sharmin, PhD, Peter J. Mohler, PhD and Stanley Nattel, MD, FHRH. Montreal Heart Institute, Université de Montréal, Montreal, QC, Canada, Ohio State University Wexner Medical Center, Columbus, OH

2:30 p.m. AB22-05: The Elucidation of the Correct Mechanism of Kv7.1 Perturbation Underlying a Case of R195fs/40- and D202N-KCNQ1-Mediated Jervell and Lange-Nielsen Syndrome
Johan M. Bos, BA, Anuj Chokshi, No Degree, Michael J. Ackerman, MD, PhD and James D. Kappberger, BA. Mayo Clinic, Rochester, MN, University of Illinois Urbana-Champaign, Champaign, IL

2:45 p.m. AB22-06: Tbx3 controls the pacemaker function of the adult sinoatrial node
Joseph F. Yanni, MBBS, PhD, Xue Cai, PhD, Elizabeth Cartwright, PhD, Halina Dobrzynski, PhD, George Hart, MBBS, PhD and Mark R. Boyett, PhD. University of Manchester, Manchester, United Kingdom, University of Manchester, School of Medicine, Manchester, United Kingdom

Session AB23. GENETICS OF ARRHYTHMIAS
Basic Translational Science

Session Description: Reports of advances in understanding the genetic determinants of arrhythmias and sudden death using contemporary high-throughput technologies.

Chairs: Michael J. Ackerman, MD, PhD. Mayo Clinic, Rochester, MN
       Alfred L. George, MD. Northwestern University, Chicago, IL

1:30 p.m. AB23-01: Meta-analysis identifies twelve novel genetic loci associated with atrial fibrillation
Ingrid E. Christophersen, MD, PhD, Xiaoyan Yin, PhD, Emelia J. Benjamin, MD, Steven A. Lubitz, MD, MPH, Patrick T. Ellinor, MD, PhD, on behalf of the AFGen Consortium. The Cardiovascular Research Center, Massachusetts General Hospital, Charlestown, MA, NHLBI and Boston University's Framingham Heart Study, Department of biostatistics, Boston University School of Public Health, Boston, MA, Framingham, MA, Boston University School of Medicine, Framingham, MA

1:45 p.m. AB23-02: Post-mortem Genetic Testing in Young Victims of Sudden Arrhythmic Death Syndrome
Najim Lahrouchi, MD, Hanharan Raju, MD, Elisabeth M. Lodder, PhD, James S. Ware, MD, Rafik Tadros, MD, PhD, Jonathan R. Skinner, MD, Jacob Tfelt-Hansen, MD, Christian van der Werf, MD, PhD, Marta Cohen, MD, PhD, Michael Christiansen, MD, Stuart Cook, MD, PhD, Mary N. Sheppard, MD, PhD, Sanjay Sharma, MD, Arthur A. Wilde, MD, PhD, Connie R. Bezzina, PhD and Elijah R. Behr, MD, PhD. Academic Medical Center, Amsterdam, Netherlands, St. George's University of London, London, United Kingdom, Imperial College London, London, United Kingdom, Starsheid Hospital, Auckland, New Zealand, Copenhagen Heart Arrhythmia Research Center, Copenhagen, Denmark, Sheffield Children's Hospital NHS FT, Sheffield, United Kingdom, Statens Serum Institute, Copenhagen, Denmark

2 p.m. AB23-03: Whole Exome Sequencing in Sudden Infant Death Syndrome
Leonie Wong, MD, David Tester, BS, Amie Jaye, MSc, David FitzPatrick, MD, FRCP, Margaret Evans, MBChB, Peter Fleming, PhD, Iona Jeffrey, MBChB, Marta Cohen, MD, Michael Simpson, PhD, Elijah R. Behr, MD and Michael J. Ackerman, MD, PhD. St George's University of London, London, United Kingdom, Mayo Clinic, Rochester, MN, King's College London, London, United Kingdom, University of Edinburgh, Edinburgh, United Kingdom, Royal Infirmary of Edinburgh, Edinburgh, United Kingdom, University of Bristol, Bristol, United Kingdom, St George's Hospital, London, United Kingdom, Sheffield Children's Hospital, Sheffield, United Kingdom, St. George's University of London, London, United Kingdom

2:15 p.m. AB23-04: Investigating the Genetic Causes of Sudden Unexpected Death in Children
Laura J. Dewar, MSc, Miguel Alcaide, PhD, Daniel Fornika, MSc, Ryan Morin, PhD, Shubhayan Sanatani, MD, FHRH and Glen Tibbits, PhD. Simon Fraser
2:30 p.m. AB23-05: Next-generation Sequencing of Patients with AV Nodal Reentry Tachycardia Identifies High Prevalence of Functional Mutations in SCN5A and SCN10A

Gustav Ahlborg, MSc, Laura Andreassen, BSc, Chui Tang, MSc, Charlotte Andreassen, MD, Jacob P. Hartmann, BSc, Jacob Tietj-Hansen, MD, DMSc, Elijah R. Behr, MD, PhD, Steen Pedersen, MD, DMSc, Stig Haunøe, MD, DMSc, Peter E. Weeke, MD, PhD, Thomas Jespersen, PhD, Morten S. Olesen, PhD and Jesper H. Svendsen, MD, DMSc. Rigshospitalet, Heart Center, University of Copenhagen, Copenhagen, Denmark, Copenhagen University Hospital, Copenhagen Ø, Denmark, Danish National Research Foundation Centre for Cardiac Arrhythmia, Copenhagen, Denmark, Rigshospitalet, Heart Center, University of Copenhagen, Copenhagen, Denmark, Cardiology Clinical Academic Group, St George’s University of London, London, United Kingdom

2:45 p.m. Abstract Commentator

Gregory E. Morley, PhD. New York University, New York, NY

Session AB24. ADVANCES IN ATRIAL FIBRILLATION

Basic Translational Science

Room 307, Moscone South 1:30 - 3 p.m. Abstract Plus F PM

CME/CE Hours: 1.5

Session Description: This session will highlight advances in understanding the pathogenesis of atrial fibrillation through development and analysis of new experimental models.

Chairs: Jose Jalife, MD, FHRSA. University of Michigan, Ann Arbor, MI
Mario Delmar, MD, PhD, FHRSA. New York University, New York City, NY

1:30 p.m. AB24-01: Nerve Sprouting, Sympathetic Hyperinnervation and Increased Vulnerability to Atrial Fibrillation in a Porcine Model of Metabolic Syndrome

Yen Bin Liu, MD, PhD, Ching-Yi Chen, PhD, Chi-Ming Lee, MD, PhD and Hui-Chun Huang, MD. National Taiwan University Hospital, Taipei, Taiwan, National Taiwan University Hospital, Taipei, Taiwan

1:45 p.m. AB24-02: A Novel Human Atrial Model Based on a High Resolution Functionally and Structurally Mapped Intact Human Heart to Resolve Structural Substrate of Atrial Fibrillation Drivers

Jichao Zhao, PhD, Thomas A. Csepe, BSc, Brian J. Hansen, BSc, Yufeng Wang, BSc, Alan Tang, No Degree, Ning Li, MD, PhD, Ahmet Kilic, MD, Peter J. Möller, PhD, Paul ML. Janssen, PhD, Orlando P. Simonetti, PhD, John D. Hummel, MD and Vadim V. Fedorov, PhD. Auckland Bioengineering Institute, University of Auckland, Auckland, New Zealand, The Ohio State University, Columbus, OH, Ohio State University, Columbus, OH, Ohio State University Medical Center, Columbus, OH

2 p.m. AB24-03: Angiotensin IV is a proarrhythmogenic factor in Atrial Fibrillation

Sebastian Clauss, MD, Ling Xiao, PhD, Alan Hanley, MD, Philipp Tomits, No Degree, David J. Milan, MD and Patrick T. Ellinor, MD, PhD. Cardiovascular Research Center, Massachusetts General Hospital, Boston, MA, Department of Medicine I, University Hospital Munich (LMU), Munich, Germany

2:15 p.m. AB24-04: Low-level but not high-level baroreceptor stimulation inhibits atrial fibrillation in a pig model of obstructive sleep apnea

Dominik K. Linz, MD, PhD, Mathias Hohl, PhD, Felix Mahfoud, MD, Christian Ukena, MD, Klaus Wirth, MD and Michael Böhm, MD. Universitätsklinikum des Saarlandes Klinik für Innere Medizin III, Homburg/Saar, Germany

2:30 p.m. AB24-05: TREC-1 (Kv2.1) K+ Channel Gene Therapy Provides Rhythm Control in Atrial Fibrillation

Patrick Lugsembil, MD, Fabian Wenz, No Degree, Katharina Govorov, No Degree, Claudia Seyler, PhD, Patrick A. Schweizer, MD, Jennifer Franke, MD, L. Tanja Weis, PhD, Bastian Schmack, MD, Arjan Ruhparwar, MD, Matthias Karck, MD, Hugo Katus, MD and Dierk Thomas, MD. Department of Cardiology, University Hospital Heidelberg, Heidelberg, Germany, University of Heidelberg, Heidelberg, Germany, Department of Cardiac Surgery, University Hospital Heidelberg, Heidelberg, Germany, Heidelberg University, Heidelberg, Germany

2:45 p.m. Abstract Commentator

Vadim V. Fedorov, PhD. The Ohio State University, Columbus, OH

Session AB25. LESSONS LEARNED FOR ONGOING ICD REGISTRIES

Cardiovascular Implantable Electronic Devices - Implantable Monitors, ICD REGISTRIES

Room 2011, Moscone West 1:30 - 3 p.m. Abstract F PM

CME/CE Hours: 1.5

Session Description: The aim of this session is to review the lessons being learned from various ongoing registries of patients with an ICD or CRT device

Chairs: Michael E. Cain, MD, FHRSA. University at Buffalo, Buffalo, NY
Roger Freedman, MD, FHRSA, CCDS. University of Utah, Salt Lake City, UT

1:30 p.m. AB25-01: The ICD Sports Registry: Long-term Follow-up

Rachel Lampert, MD, FHRSA, Brian Olshansky, MD, Hein Heidbuchel, MD, PhD, Elizabeth V. Saarel, MD, Christine E. Lawless, MD, Michael J. Ackerman, MD, PhD, Hugh Calkins, MD, N. A. Mark Estes, MD, Mark S. Link, MD, FHRSA, Barry J. Maron, MD, Frank I. Marcus, MD, Melvin M. Scheinman, MD, FHRSA, Bruce L. Wilkoff, MD, Douglas P. Zipes, MD, FHRSA, Charles I. Berul, MD, Alan Cheng, MD, FHRSA, Ian H. Law, MD, FHRSA, Lisa R. Salberg, No Degree, Alice Lara, RN, BSN, Cheryl Barth, BS, Cynthia Brandt, MD, James Dziura, PhD, Fangyong Li, MS, Laura Simone, MS and David S. Cannom, MD, FHRSA. Yale University School of Medicine, New Haven, CT, Mercy Hospital, Madonna
City, IA, University Hospital Leuven and Hasselt University, Belgium, Leuven, Belgium, Cleveland Clinic, Cleveland, UT, University of Chicago Medical Center, Chicago, IL, Mayo Clinic, Rochester, MN, Johns Hopkins Hospital, Baltimore, MD, Tufts Medical Center, Boston, MA, Minneapolis Heart Institute Foundation, Minneapolis, MN, University of Arizona Health Science Center, Tucson, AZ, University of California San Francisco, San Francisco, CA, Cleveland Clinic, Cleveland, OH, Kranerr Institute of Cardiology, Indianapolis, MD, Children's National Medical Center, Washington, DC, University of Iowa Hospital and Clinics, Iowa City, IA, Hypertrophic Cardiomyopathy Association, Hibernia, NJ, SADS Foundation, Salt Lake City, UT, Good Samaritan Hospital, Los Angeles, CA

1:45 p.m.  
AB25-02: ELECTRa (European Lead Extraction ContRolled) Registry: Long-term Outcomes on Transvenous Lead Extraction
Maria Grazia Bongiorni, MD, Charles Kennergren, MD, PHD, FHRS, Christian Butter, MD, Jean-Claude Dehario, MD, Andrej Kutarski, MD, PhD, Christopher A. Rinaldi, MD, Simone Lorenzo Romano, MD, Aldo P. Maggioni, MD, Carina B. Blomstrom Lundqvist, MD, PhD, Angelo Auricchio, MD, PhD and Karl-Heinz Kuck, MD, FHRS. University Hospital of Pisa, Pisa, Italy, Sahlgrenska University Hospital, Gothenburg, Sweden, Herzzentrum Brandenburg in Bernau/Berlin, Bernau / Germany, Hôpital La Timone, Marseille, France, Medical University of Lublin, Lublin, Poland, St. Thomas' Hospital, London, United Kingdom, ESC, EORP Department, Sophie Antipolis, France, Uppsala University - Uppsala University Hospital, S-75185 Uppsala, Sweden, Fondazione Cardiocentro Ticino, Lugano, Switzerland, Asklepios Klinik St. Georg, Hamburg, Germany

2:15 p.m.  
AB25-04: Seattle Heart Failure Model Risk is Strongly Associated with Survival After ICD and CRT-D Implantation in the NCDR ICD Registry
Kenneth C. Bilchick, MD, FHRS, Alan Cheng, MD, FHRS, Yongfei Wang, MS, Kumar Dharmarajan, MD, Jeptha Curtis, MD and Wayne Levy, MD. University of Virginia Health System, Charlottesville, VA, Johns Hopkins Hospital, Baltimore, MD, Yale University, New Haven, CT, University of Washington, Seattle, WA

2:30 p.m.  
AB25-05: Downgrading from CRT-D to CRT-P at the time of battery depletion: preliminary results from DECODE Registry Trial
Maria Lucia Narducci, MD, Matteo Santamaria, MD, Domenico Potenza, MD, Francesco Zanon, MD, FHRS, Michele Manzo, MD, Giuseppe Stabile, MD, Matteo Iori, MD, Ernesto Ammendola, MD, Valerio Zacà, MD, Massimo Zoni Berisso, MD, Attilio Pierantozzi, MD, Ernesto Ammendola, MD, Leonardo Calò, MD, Paolo Sabbatani, MD, Mauro Zennaro, MD, Maria Selina Argnani, MD, Maurizio Malacrida, MS and Mauro Biffi, MD. Catholic University of the Sacred Heart - Institute of Cardiology, Rome, Italy, Catholic Univ of the Sacred Hea Cardiovascular Dept, Campobasso, Italy, Casa Sollievo della Sofferenza, San Giovanni Rotondo (FG), Italy, Ospedale S. Maria Della Misericordia, Rovigo, Italy, A.O. Ruggi D’Aragona, Salerno, Italy, Clinica Mediterranea, Napoli, Italy, Hospital S. Maria Nuova, Reggio Emilia, Italy, Second University of Naples, A.O. Monaldi, Napoli, Italy, Hospital S. Maria alle Scotte, Siena, Italy, Hospital Padre Miconi, Sestri Ponente (GE), Italy, Ospedale San Donato Pescara, Italy, Ospedale Morgagni Pierantoni, Forlì, Italy, Policlinico Casilino, Roma, Italy, Cardiology Department, Bufalini Hospital, Cesena, Italy, Hospital S. Agostino, Baggiovara (MO), Italy, Hospital S. Maria delle Croci, Ravenna, Italy, Boston Scientific Italia, Milano, Italy, Institute of Cardiology, University of Bologna, Policlinico S.Orsola-Malpighi, Bologna, Italy

2:45 p.m.  
AB25-06: Contrasting profiles of USA versus outside of USA CRT recipients: Insights from the International ADVANCE CRT Registry
Niraj Varma, MD, PhD, John P. Boehmer, MD, Maria Rosa Costanzo, MD, Michael R. Gold, MD, PHD, FHRS, Jagmeet P. Singh, MD, PhD, Leo Polosajian, MD, Kartikeya Bhargava, MD, Taraneh G. Farazi, PhD, Jong Gill, PhD and Angelo Auricchio, MD, PHD. Cleveland Clinic, Cleveland, OH, Penn State College of Medicine & Surgery, Hershey, PA, Midwest Heart Specialists - Advocate Medical Group, Naperville, IL, Medical University of South Carolina, Charleston, SC, Massachusetts General Hospital, Boston, MA, Cardiac Rhythm Specialist, Northridge, CA, Medanta, Guragon, India, St. Jude Medical, Sunnyvale, CA, St. Jude Medical, Sylmar, CA, Fondazione Cardiocentro Ticino, Lugano, Switzerland
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Aziz, No Degree, Davendra Mehta, MD, PhD and Emad Aziz, DO. Mount Sinai St Luke's Roosevelt Hospital, New York, NY

2:45 p.m.  
AB27-06: Dramatic Rise in Cardiac Implantable Electrical Devices: Who is at Greater Risk?  
Parijat S. Joy, MD, MPH, Gagan Kumar, MD, Jeanne Poole, MD and Brian Oshansky, MD. University of Iowa, Iowa City, IA, Phoebe Putney Memorial Hospital, Albany, GA, University of Washington, Seattle, WA, University of Iowa Hospital and Clinics, Iowa City, IA

Session AB28. NEW CONCEPTS IN LEAD EXTRACTION  
Cardiovascular Implantable Electronic Devices - Device and Lead Management Considerations, including Lead Extraction  
Room 3002, Moscone West  
1:30 - 3 p.m.  
Abstract Plus F  
CME/CE Hours: 1.5  
Session Description: The abstracts in this session present new concepts in lead extraction  

Chairs: Roger G. Carrillo, MD, FHRS, CCDS. University of Miami, Miami, FL  
Sandeep Goyal, MD, Vanderbilt University, Nashville, TN

1:30 p.m.  
AB28-01: Utility of Intracardiac Echocardiography During Implantable Cardiac Device Percutaneous Extraction: A Single Center Experience from a Tertiary Medical Center  
Aswin Mathew, MD, Ashwani Gupta, MBBS, Faiz A. Subzposh, MD, Andrew R. Kohut, MD, Steven P. Kutalek, MD and Heath E. Saltzman, MD. Drexel University College of Medicine, Philadelphia, PA, Stony Brook University, Stony Brook, NY, Drexel University College of Medicine - Hahnemann University Hospital, Philadelphia, PA

1:45 p.m.  
AB28-02: Comparison of trans-esophageal echocardiography and FDG PET/CT in the diagnosis of implanted device lead endocarditis  
Sana Amaoussi, MD, Ghoufrane Tili, MD, Ghassen Cheniti, MD, Nathaniel Thompson, MD, Manav Sohal, MBBS, Philippe Ritter, MD, Sylvain Ploux, MD, Michel Haissaguerre, MD, PhD, Laurence Bordenave, MD, PhD and Pierre Bordachar, MD, PhD. University Hospital / LIRYC Institute, Bordeaux, France, CHU de Bordeaux, Service de Médecine Nucléaire, Bordeaux, France, King's College London, London, United Kingdom, Bordeaux University Hospital / LIRYC Institute, Bordeaux, France, Bordeaux University Hospital / LIRYC Institute, Pessac, France, Hospital Du Haut-Leveque, Pessac, France

2 p.m.  
AB28-03: Endovascular management of SVC injury with novel occlusion balloon in a porcine model  
Jude Clancy, MD, Roger G. Carrillo, MD, Ryan Sotak, BS, Rashmi Ram, PhD and Charles Kennengren, MD. Yale University School of Medicine, New Haven, CT, University of Miami Hospital, Miami, FL, Spectranetics Corporation, Colorado Springs, CO, Sahlgrenska University Hospital, Gothenburg, Sweden

2:15 p.m.  
AB28-04: Percutaneous Vacuum-Assisted Thrombectomy Device Used for Removal of Large Vegetations on Infected Pacemaker and Defibrillator Leads as an Adjunct to Lead Extraction  
Raymond H. Schaerf, MD. Providence St. Joseph Medical Center, Burbank, CA

2:30 p.m.  
AB28-05: Outcomes of Transvenous Lead Extraction for Cardiovascular Implantable Electronic Device Infections in Patients with Prosthetic Heart Valves  
Gang Wu, MD, Xin-miao Huang, MD, Hai-xia Fu, MD, Samuel J. Asirvatham, MD, FHRS, Larry M. Baddour, MD, Paul A. Friedman, MD, FHRS and Yong-Mei Cha, MD, FHRS, Renmin Hospital of Wuhan University, Wuhan, China, Changhai Hospital, Second Military Medical University, Shanghai, China, Henan Provincial People’s Hospital, Wuhan, China, Mayo Clinic, Rochester, MN, Mayo Clinic College of Medicine, Rochester, MN

2:45 p.m.  
Abstract Commentator  
Peter H. Belott, MD, FHRS. Sharp Grossmont Hospital, La Mesa, CA

Session AB29. NEW ABLATION TECHNOLOGIES  
Catheter Ablation  
Room 2002, Moscone West  
1:30 - 3 p.m.  
Abstract F  
CME/CE Hours: 1.5  
Session Description: This session will discuss recently developed ablation technologies and their applications  

Chairs: Alexander Romanov, MD PhD. State Research Institute of Circulation Pathology, Novosibirsk, Russian Federation  
J. Paul Mounsey, MD, PhD. University of North Carolina, Chapel Hill, NC

1:30 p.m.  
AB29-01: Iron Nanoparticles Encased within Heat Sensitive Liposomes Can Be Magnetically Guided and Will Enhance Radiofrequency Ablation  
Duy T. Nguyen, MD, FHRS, Wendy S. Tsou, MD, FHRS, Lijun Zheng, MS, Matthew M. Zipse, MD, Joseph L. Schuller, MD and William H. Sauer, MD, FHRS. University of Colorado, Aurora, CO, University of Colorado Hospital, Denver, CO, University of Colorado Denver, Aurora, CO

1:45 p.m.  
AB29-02: First-in-man treatment of atrial fibrillation using cardiac radiosurgery  
Paul C. Zel, MD, PhD, FHRS, Jose Azpiri, MD, Jose Assad Morrell, MD, Edward Gardner, PhD, Douglas Wong, MD, Patrick Maguire, MD, Miguel Hinojosa, PhD, Erick Cardona, PhD, Cuathemoc de la Pena, MD and Thomas Fogarty, MD. Stanford University, Cardiac Electrophysiology, Stanford, CA, Christus Hospital, Monterrey, Mexico, Cyberheart, Inc., Mountain View, CA

2 p.m.  
AB29-03: Impact of Mechanical Vibration RF Ablation Compared with Conventional RF Ablations  
Kazuo Matsumoto, MD, Makoto Ohta, PhD, Kainhong Yu, BA and Testui Yamashita, BA. Saitama Medical University International Medical Center, Hidaka-Shi, Saitama, Japan, Intelligent Fluid Systems Div. Tohoku University, Sendai, Miyagi, Japan, Institute of Fluid Science, Tohoku University, Sendai, Miyagi, Japan, Japan Medical Supply Co., Shinagawa, Tokyo, Japan
Session AB30. DETERMINANTS OF RECURRENCE AFTER AF ABLATION
Catheter Ablation
Room 2003, Moscone West 1:30 - 3 p.m.

Abstract  F

CME/CE Hours: 1.5

Session Description: This session will present some of the factors associated with recurrence of AF with various techniques, technology and risk factors

Chairs: Thomas Rostock, MD. Johannes Gutenberg-University Mainz University Hospital, Mainz, Germany
Rajiv Mahajan, MD. Centre for Heart Rhythm Disorders, University of Adelaide and Royal Adelaide Hospital, Adelaide, Australia

1:30 p.m.  AB30-01: Determinants of acute and late pulmonary vein reconnection in contact force-guided pulmonary vein isolation
Philippe Tagghi, MD, Milad El Haddad, PhD, Sébastien Knecht, MD, PhD, Rajin Choudhury, MD, Yves Vandekerckhove, MD, René Tavernier, MD, PhD and Mattias Duytschaever, MD, PhD. Sint-Jan Hospital, Bruges, Belgium

2:45 p.m.  AB30-02: Mechanisms of recurrence and long-term outcomes in patients with non-paroxysmal atrial fibrillation undergoing limited ablation with a strategy comprising pulmonary vein antral isolation and non-pulmonary vein trigger ablation
Jackson J. Liang, DO, Melissa A. Elafros, PhD, Rajeev K. Pathak, MBBS, Erica S. Zado, PA, Sanjana Dixit, No Degree, Pasquale Santangeli, MD, Robert D. Schaller, DO, Gregory E. Supple, MD, FFRS, David S. Frankel, MD, FFRS, Rajat Deo, MD, Michael P. Riley, MD, PhD, FFRS, Rupko Beukema, MD, FFRS, G. Joseph Gallighouse, MD, Amin Al-Ahmad, MD, FHRS, Rodney P. Horton, MD, Richard H. Hongo, MD, Salwa Beheiry, RN, Luigi Di Biase, MD, PhD, FFRS and Andrea Natale, MD, FFRS. St. David's Medical Center, Austin, TX, Texas Cardiac Arrhythmia Institute at St. David's Medical Center, Austin, TX, Texas Cardiac Arrhythmia Research, Austin, TX, Northern California Heart Care, San Francisco, CA, California Pacific Medical Center, San Francisco, CA, Texas Cardiac Arrhythmia Institute at St. David's Medical Center and Albert Einstein College of Medicine at Montefiore Hospital, Austin, TX

AB30-06: Stroke Risk during Long-term Follow up in Patients with Successful Catheter Ablation for Atrial Fibrillation
Dong-Hyeok Kim, MD, Young-Hoon Kim, PhD, Jong-II Choi, PhD, Jaemin Shim, PhD, Dae In Lee, MD, Seung-Young Roh, MD, Jinhee Ahn, MD, Kwang No Lee, MD and Sang-Weon Park, PhD. Korea University Medical Center, Seoul, Korea, Republic of
Session AB31. NOVEL MAPPING AND ABLATION TECHNOLOGY: IMPROVING SAFETY AND EFFICACY
Catheter Ablation
Room 2006, Moscone West 1:30 - 3 p.m.
Abstract Plus F PM
CME/CE Hours: 1.5

Session Description: This session will review novel non-invasive and invasive ablation and mapping technology of both atrial and ventricular complex arrhythmias.

Novel Mapping and Ablation Technology: Improving Safety and Efficacy:
Mélissa H. Kong, MD, FHRS. Sequoia Hospital, Redwood City, CA
Brian G. Crandall, MD. Intermountain Medical Center, Salt Lake City, UT

1:30 p.m. AB31-01: Cavitary Potential Mapping: Implications to Signal Processing in Multi-Electrode Array Technology
Andreu Porta-Sanchez, MD, Stéphane Massé, MD, Eng, Marjan Kusha, MD, Eng and Kumaraswamy Nanthakumar, MD, iS Di.Vision of Cardiology, University Health Network, Toronto, ON, Canada, University Health Network, Toronto, ON, Canada

2 p.m. AB31-02: Noninvasive Epicardial and Endocardial Mapping of Premature Ventricular Contractions
Alexey Tsyanovan, MD, Erik Wissner, MD, PhD, FHRS, Amirn Rezvihvili, MD, PhD, Andreas Metzner, MD, PhD, Christine Lemes, MD, Vitaly Kalmin, MD, PhD, Oleg Sopov, MD, PhD, Michail Chmelevsky, MD and Karl-Heinz Kuck, MD, PhD, FHRS. Petrovsky National Research Centre of Surgery, Moscow, Russian Federation, Asklepios Klinik St. Georg, Hamburg, Germany, Bakoulev Scientific Centre for Cardiovascular Surgery, Moscow, Russian Federation, EP Solutions SA, Yverdon-les-Bains, Switzerland, Federal Almazov North-West Medical Research Centre, Saint Petersburg, Russian Federation

2:15 p.m. AB31-03: Cross Mapping Can Identify the Mechanisms of Atrial Tachycardia Post Atrial Fibrillation Ablation
Yu-Chuan Wang, MD, Li-Bin Shi, MD, Alessandro DeBortoli, MD, PhD, Li-Zhi Sun, MD, PhD, Hoff Per.Ivar, MD, Evind Solheim, MD, PhD, Peter Moritz Schuster, MD, PhD, Ole-Jørgen Ohm, MD, PhD and Jian Chen, MD, PhD. Haukeland University Hospital, Bergen, Norway

2:30 p.m. AB31-04: Accurate pop occurrence prediction during RF ablation using OCT
Pierre Jais, MD, Ruksheen Weerasooriya, MBBS, Peter Fratten, MBBS, Valentina Tiportini, PhD, Paul JAIS, No Degree and Kamal Alameh, PhD, Hôpital Haut-Lévêque, Universite de Bordeaux, IHU LIRYC, Bordeaux, France, Edith Cowan University, Perth, Australia

2:45 p.m. AB31-05: High-Resolution mapping of Complex Left Atrial Tachycardia: initial experience with the Rhythmia mapping system
Nicolas Derval, MD, Masateru Takigawa, MD, Arnaud Denis, MD, Antonio Frontera, MD, Seigo Yamashita, MD, Nora Al-Jefairi, MD, Ghassen Chniti, MD, Elvis Fernandes, MD, Nathaniel Thompson, MD, Arnaud Chaumel, MD, Sylvain Ploux, MD, PhD, Sana Amraoui, MD, Gregoire Massouille, MD, Pierre Bordachar, MD, Philippe Ritter, MD, Frederic Sacher, MD, Meleze Hocini, MD, Pierre Jais, MD and Michel Haissaguerre, PhD. CHU Bordeaux, Hôpital Haut-Lévêque, LIRYC, Pessac, France, CHU Bordeaux, LIRYC, Pessac, France, CHU Bordeaux, LIRYC, Bordeaux, France, CHU Bordeaux, Hôpital du Haut-Lévêque, LIRYC, Bordeaux, France, Hospital Haut Leveque, LIRYC, Pessac, France, Hospital Haut Du Leveque, Pessac, France, University Hôpital de Bordeaux - Hopital Du Haut Lévêque, Pessac, France, Bordeaux University Hospital / LIRYC Institute, Bordeaux, France, LIRYC Institute, University Hospital of Bordeaux, Bordeaux-Pessac, France, CHU Bordeaux - Bordeaux University, Bordeaux, France, Hopital Cardiologique Haut Leveque - Université Bordeaux - LIRYC, Pessac, France

Session AB32. VT ABLATION: TIMING OF INTERVENTION AND IMPACT OF RECURRENCE
Catheter Ablation
Room 2007, Moscone West 1:30 - 3 p.m.
Abstract F PM
CME/CE Hours: 1.5

Session Description: This session address the factors which influence outcome of index VT ablation procedures and the relevance of arrhythmia recurrences on prognosis. Attention is paid to management of challenging patients with Chagas disease, Lamm

VT Ablation: Timing of Intervention and Impact of Recurrence:
Jan Steffel, MD. University Hospital Zurich, Zurich, Switzerland
Jason T. Jacobson, MD, FHRS, New York Medical College - Westchester Medical Center, Valhalla, NY

1:30 p.m. AB32-01: Prevalence and Predictors of Early Mortality Following Catheter Ablation of Ventricular Tachycardia in Patients with Structural Heart Disease: Results from the International VT Ablation Center Collaborative Group
Pasquale Santangeli, MD, David S. Frankel, MD, FHRS, Doderick Tung, MD, FHRS, Marmar Vaseghi, MD, William H. Sauer, MD, FHRS, Wendy S. Tzou, MD, FHRS, Niles Mathurin, MD, Shiro Nakahara, MD, Timm-Michael Dickfeld, MD, PhD, Dhunjuaya R. Lakikreddy, MD, FHRS, T. Jared Bunch, MD, Luigi Di Biase, MD, Andrea Natale, MD, FHRS, Venkatakrishna N. Tholakanahalli, MD, Usha B. Tedrow, MD, William G. Stevenson, MD, FHRS, Paolo Della Bella, MD, Kalyanam Shivkumar, MD, PhD, Francis E. Marchlinski, MD, FHRS and David J. Callans, MD. Hospital of the University of Pennsylvania, Philadelphia, PA, University of California at Los Angeles School of Medicine, Los Angeles, CA, UCLA Cardiac Arrhythmia Center, Los Angeles, CA, University of Colorado, Aurora, CO, University of Colorado Hospital, Denver, CO, St. Luke’s Episcopal Hospital/Texas Heart Institute, Houston, TX, Department of Cardiology, Dokkyo University Koshigaya Hospital, Koshigaya, Japan, University of Maryland, Baltimore, MD, University of Kansas Medical
2:30 p.m. AB32-05: Safety, Long-Term Outcomes and Predictors of Recurrence after First-Line Combined Endoepicardial Ventricular Tachycardia Substrate Ablation in Arrhythmogenic Cardiomyopathy. Impact of Arrhythmic Substrate Distribution Pattern. A Prospective Multicenter Study
Juan Acosta, MD, Juan Fernández-Armenta, PhD, Alonso Pedrote, PhD, Alberto Barrera, PhD, Diego Penella, MD, Andrés I. Bodegas, PhD, Luis Tercero, PhD, David Andreu, MSC, J. Lluis Mont, MD, PhD and Antonio Berruezo, MD, PhD. Hospital Clinic, Barcelona, Spain, Thorax Institute - Hospital Clinic, University of Barcelona, Barcelona, Spain, Virgen del Rocío University Hospital, Sevilla, Spain, Arrhythmia Section, Cardiology Department, Hospital Clínico Universitario Virgen de la Victoria, Málaga, Spain, Arrhythmia Section, Cardiology Department, Thorax Institute. Hospital Clinic, Universitat de Barcelo, Barcelona, Spain, Cardiology Department, Hospital de Cruces, Vizkaya, Spain, Arrhythmia Unit, Hospital Universitario Virgen de las Nieves, Granada, Spain, Hospital Clinic Barcelona, Barcelona, Spain, Cardiovascular Institute Hospital Clinic, Arrhythmia Section, Barcelona, Spain

1:45 p.m. AB33-02: Prognostic Impact of the Timing of Recurrence of Infarct-Related Ventricular Tachycardia After Ablation
Konstantinos Siontis, MD, Hyungjin Myra Kim, ScD, Miki Yokokawa, MD, William G. Stevenson, MD, FHRS, Paolo Della Bella, MD, Pasquale Vergara, MD, PhD, Gerhard Hindricks, MD, PhD, Arash Arya, MD, Katja Zeppenfeld, MD, PhD, Marta de Riva Silva, MD, Emile G. Daoud, MD, FHRS, Karl-Heinz Kuck, MD, FHRS, Shibu Mathew, MD, Hamid Ghanbazi, MD, Rakesh Latchamsetty, MD, Fred Morady, MD and Frank M. Bogun, MD. University of Michigan, Ann Arbor, MI, Brigham and Women's Hospital, Boston, MA, Ospedale San Raffaele, Milano, Italy, San Raffaele Hospital, Milano, Italy, University Leipzig Heart Center, Leipzig, Germany, Heart Center University of Leipzig, Leipzig, Germany, Leiden University Medical Center, Leiden, Netherlands, Ohio State University, Columbus, OH, Asklepios Klinik St. Georg, Hamburg, Germany, University Hospital Mannheim, Mannheim, Germany, University of Michigan, Department of Internal Medicine, Division of Cardiovascular Medicine, Ann Arbor, MI, University of Michigan Hospital, Ann Arbor, MI

2:45 p.m. AB32-06: Cardiac sympathetic denervation for intractable ventricular arrhythmias in Chagas disease: Autonomic intervention for an autonomic disorder
Jason Bradford, MD, FHRS, Luis C. Saenz, MD, Federico Malavassi Corrales, MD, William Bautista, MD, Sheba Meymandi, MD, Mahmoud Traina, MD, Duc Do, MD, Diego Rodriguez, MD, Luis Tellez, MD, Marmar Vaseghi, MD, Fermin C. Garcia, MD and Kalyanam Shivkumar, MD, PhD. University of California - Los Angeles, Los Angeles, CA, Fundación Cardioinstituto - Instituto de Cardiología, Bogota, Colombia, Olive View Medical Center, Sylmar, CA, UCLA Cardiac Arrhythmia Center, Los Angeles, CA, Hospital of the University of Pennsylvania, Philadelphia, PA
Pulmonary Vein Increases Vulnerability to Paroxysmal Atrial Fibrillation
Masahide Harada, MD, PhD, Yuji Motoike, MD, Asami Fujiwara, No Degree, Taro Makino, MD, Masayuki Koshikawa, MD, Tomohide Ichikawa, MD, PhD, Mayumi Kawai, MD, PhD, Kohei Sasaki, MD, Masahiro Muto, MD, Toyoaki Murohara, MD, PhD, Eiichi Watanabe, MD, PhD and Yukio Ozaki, MD, PhD, Department of Cardiology, Fujita Health University School of Medicine, Toyoake, Japan, Department of Cardiology, Hamamatsu Medical Center, Hamamatsu, Japan, Department of Cardiology, Nagoya University School of Medicine, Nagoya, Japan

2 p.m.  AB33-03: First-in-man correlation of non-invasive and invasive phase mapping of atrial fibrillation
Andreas Metzner, MD, Christine Lemeses, MD, Erik Wissner, MD, FHRS, Shibu Mathew, MD, Christian Sohns, MD, Tilman Maurer, MD, Christian H. Heeger, MD, Roland R. Tiltz, MD, Bruno Reissmann, MD, Thomas Fink, MD, Ardan M. Saguner, MD, Johannes Riedl, MD, Kentaro Hayashi, MD, Francesco Santoro, MD, Michal Chmeleovsky, MD, Maria Chaykovskaya, MD, Alexey Tsyganov, MD, Feifan O. Ouyang, MD and Karl-Heinz Kuck, MD, FHRS, Asklepios-Klinik St. Georg, Hamburg, Germany, Asklepios-Klinik St. Georg, Hamburg, Germany, University Hospital Mannheim, Mannheim, Germany, AK St. Georg, Hamburg, Germany, Almazov Federal Heart, Blood and Endocrinology Centre, Saint-Petersburg, Russian Federation, Bakulev-Center, Moscow, Russian Federation, Na Homolce Hospital, Prague, Czech Republic, Asklepios Klinik St. Georg, II Med Abteilung, Hamburg, Germany

2 p.m.  AB33-04: Further Characterization of Foci During Persistent and Long-Existing Persistent Atrial Fibrillation in Patients - Studies Using High Density (510-512 Electrodes) Bi-Atrial Epicardial Mapping
Seungyup Lee, PhD, Jayakumar Sahadevan, MD, Celen Kelemtay, BS and Albert L. Waldo, MD, PhD, FHRS. Case Western Reserve University - University Hospitals Case Medical Center, Cleveland, OH, Case Western Reserve Univ, Univ Hospital of Cleveland, Beachwood, OH

2:30 p.m.  AB33-05: Identification morphological repetitiveness of waveforms patterns in fractionated electrograms during persistent atrial fibrillation
Che An Liu, MS, Men-Tzung Lo, PhD, Chen Lin, PhD, Yenn-Jiang Lin, MD, Shih-Lin Chang, MD, Shih-Ann Chen, MD and Li-Wei Lo, MD. Taipei Veterans General Hospital, Taipei, Taiwan, Research Center for Adaptive Data Analysis, National Central University, Jhongli City, Taiwan, National Central University, Chung-Li, Taiwan, Taipei Veterans General Hospital/National Yang-Ming University, Taipei, Taiwan

2:45 p.m.  Abstract Commentator
Jose Jalife, MD, FHRS. University of Michigan, Ann Arbor, MI

Session AB34. NOVEL MAPPING APPROACHES FOR VENTRICULAR ARRHYTHMIA
Clinical Electrophysiology - Ventricular Tachycardia & Ventricular Fibrillation: Management, Mechanisms, Diagnosis, and Ablation

Room 3014, Moscone West
1:30 - 3 p.m.
Abstract
CME/CE Hours: 1.5

Session Description: An abstract session featuring the novel mapping approaches to tackle ventricular arrhythmia.

Chairs: Deepak Bhakta, MD, FHIRS, CCDS. Indiana University School of Medicine, Indianapolis, IN
John Kassotis, MD, 450 Clarkson Avenue, Brooklyn, NY

1:30 p.m.  AB34-01: Confluence Abnormal Electrogroms and Heterogeneous Planar Activity Propagation in the Epicardium of Anterior Free Wall of Right Ventricular Outflow Tract in Brugada Syndrome
Fa-Po Chung, MD, Yenn-Jiang Lin, MD, Shih-Lin Chang, MD, Li-Wei Lo, MD, Yu-feng Hu, MD, Ta-Chuan Chia, MD, Li-Ching-Chao, MD, To-Chung, MD, Chin-Yu Lin, MD and Shih-Ann Chen, MD. Taipei Veterans General Hospital, Taipei, Taiwan, Taipei Veterans General Hospital/National Yang-Ming University, Taipei, Taiwan

1:45 p.m.  AB34-02: Noninvasive High-Resolution EP Mapping in Post-MI Patients: the Electrophysiological Substrate in Relation to Ventricular Tachycardia and Ventricular Fibrillation
Junjie Zhang, BS, Daniel H. Cooper, MD, Kavit A. Desouza, MD, Phillip Cuculich, MD, Pamela K. Woodard, MD, Timothy W. Smith, MD, DPHIL, FHRS and Yoram Rudy, PhD, FHRS. Cardiac Bioelectricity and Arrhythmia Center, Washington University St. Louis, Saint Louis, MO, Washington University St. Louis, St. Louis, MO, Mount Sinai Medical Center, Miami Beach, FL, Washington University in Saint Louis, Saint Louis, MO, Washington University, School of Medicine, Saint Louis, MO, Washington Univ School of Medicine, Cardiovascular Division, St. Louis, MO, Washington University, St. Louis, MO

2 p.m.  AB34-03: High-Density Pacemap-Guided Ablation of Ventricular Tachycardia in the Setting of Nonischemic Cardiomyopathy
Fa-Po Chung, MD, Yenn-Jiang Lin, MD, Shih-Lin Chang, MD, Li-Wei Lo, MD, Yu-feng Hu, MD, Ta-Chuan Chia, MD, Li-Ching-Chao, MD, To-Chung, MD, Chin-Yu Lin, MD and Shih-Ann Chen, MD. Taipei Veterans General Hospital, Taipei, Taiwan, Taipei Veterans General Hospital/National Yang-Ming University, Taipei, Taiwan

2:15 p.m.  AB34-04: Anomalous Synchrony Suggests Human Ventricular Fibrillation is Source-Driven Rather than Disorganized
Wouter-Jan Rappel, PhD, David Vidmar, MSc, Amir A. Schrickler, MD, Gordon Ho, MD, Christopher Villongco, PhD, Junaid Zaman, MD, Sanjiv Narayan, MD, PhD and David E. Krummen, MD. University of California, San Diego, La Jolla, CA, UC San Diego Medical Center, San Diego, CA, Stanford University, Stanford, CA, University of California, San Diego, CA, and University of California, San Diego, CA

2:30 p.m.  AB34-05: Ripple Mapping the diastolic pathway of post infarct Ventricular Tachycardia reveals complex activation within the scar substrate
Vishal Luther, MRCP, Nick Linton, MBBS, PhD, Shahnaz Jamil-Copley, MBBS, PhD, Michael Koawing, MBBS, PhD, Phang Boon Lim, MBBS, PhD, Norman A. Qureshi, MRCP, Fu Siong Ng, MD, PhD, Sajad A. Hayat, MBChB, Zachary I. Whinnett, MBBS,
Session AB35. ATRIAL FIBRILLATION, THROMBOEMBOLISM, AND THE LEFT ATRIAL APPENDAGE

Clinical Electrophysiology
Room 3018, Moscone West
1:30 - 3 p.m.
Abstract F PM
CME/CE Hours: 1.5

Session Description: This session will describe embolic risk in different atrial fibrillation populations. Mechanisms underlying embolic risk and efficacy of treatment approaches will be addressed.

Chairs: Michael D. Ezekowitz, MD, PhD. Jefferson Medical College, Villanova, PA
Marcos Daccarett, MD, MSc, FHRS. St. Luke's Medical Center, Boise, ID

1:30 p.m. AB35-01: Is Oral Anticoagulation Necessary in Young Atrial Fibrillation Patients (20-49 years) with a CHA²DS²-VASc Score of 1 (males) or 2 (females)?
Yuan Hung, MD, Tze-Fan Chao, MD and Shih-Ann Chen, MD. Tri-service General Hospital, Taipei City, Taiwan, Taipei Veterans General Hospital, Taipei, Taiwan, Taipei Veterans General Hospital/National Yang-Ming University, Taipei, Taiwan

1:45 p.m. AB35-02: Advanced electroanatomical remodeling of the left atrium and contractile dysfunction of left atrial appendage are the predominant mechanisms of stroke in women atrial fibrillation
Hee Tae Yu, MD, PhD, Jihee Sara Lee, BSc, Chi Young Shim, MD, PhD, Tae-Hoon Kim, MD, Jae-Sun Uhm, MD, PhD, Jong-Youn Kim, MD, PhD, Boyoung Joung, MD, PhD, Geu-Ru Hong, MD, PhD, Moon-Hyoong Lee, MD, PhD and Hui-Nam Pak, MD, PhD, FHRS. Yonsei University College of Medicine, Seoul, Korea, Republic of Korea

2 p.m. AB35-03: Risk of Stroke and Bleeding in Patients with Hypertrophic Cardiomyopathy and Atrial Fibrillation Treated With Non-Vitamin K Antagonist Oral Anticoagulants or Warfarin
Peter A. Noseworthy, MD, Xiaoxi Yao, PhD, Nilay D. Shah, PhD and Bernard J. Gersh, MBChB. Mayo Clinic, Rochester, MN

2:15 p.m. AB35-04: Computational Three-Dimensional Left Atrial Appendage Wall Thickness Maps and Histological Analysis to Guide Left Atrial Appendage Electrical Isolation
Sandep Panikker, MBBS, John Whitaker, MBChB, Renu Virmani, PhD, Robert Kutsy, MS, Julian W. E. Jarman, MBBS, Thomas Fastl, BSc, Shouvik Haldar, MD, Charles Butcher, MBBS, Habib Khan, MBBS, Lilian Mantziari, PhD, Mark O’Neill, DPhil, MD, FHRS, Cesare Corrado, PhD, Ed Nicol, MD, FRCP, John P. Foran, MD, FRCP, Vias Markides, MD, FRCP, Steven Niederer, PhD and Tom Wong, MD, FRCP. Royal Brompton & Harefield Hospital NHS Foundation Trust, London, United Kingdom, Division of Imaging Sciences and Biomedical Engineering, King’s College London, London, United Kingdom, CV Path, Gaithersburg, MD, Royal Brompton & Harefield NHS Foundation Trust, London, United Kingdom

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1:45 p.m.  **AB36-02:** Incidence and Predictors of Phrenic Nerve Stimulation Following Cardiac Resynchronization Therapy System Implantation of a Quadrupolar Lead Devi G. Nair, MD, FHRSA, Eric F. Hammill, BS and Suneet Mittal, MD, FHRSA, St. Bernard's Medical Center, Jonesboro, AR, Boston Scientific Corp., St. Paul, MN, The Valley Hospital, Ridgewood, NJ

2 p.m.  **AB36-03:** The Use of Velocity Vector Imaging and LV Circumferential Strain Analysis in Multipoint \( \text{[Smith]^{10}} \)

Quadrupolar Pacing
Gery F. Tomassoni, MD, FHRSA, Melody Muir, RN, Keri Turner, No Degree, Sandee Duggal, DO, Aaron Hesselson, MD, FHRSA and Michael Rukavina, MD, Baptist Health Lexington, Lexington, KY

2:15 p.m.  **AB36-04:** Acute Optimization of Left Ventricular Pacing Site Plus Multipoint Pacing Improves Remodeling And Clinical Response of CRT at One Year Follow UP

Francesco Zaron, MD, FHRSA, Enrico Baricca, MD, Gianni Pastore, MD, Lina Marcantoni, MD, Loris Roncon, MD, Franco Noventa, MD and Frits W. Prinzen, PhD. Ospedale S. Maria Della Misericordia, Rovigo, Italy, University of Padua, Padova, Italy, Maastricht University, Maastricht, Netherlands

2:30 p.m.  **AB36-05:** Late local activation predicts response to resynchronization therapy in spite of presence of electrophysiologic markers suggestive of scar

Seth J. Rials, MD, PhD, FHRSA, Justin B. Weiner, MD, FHRSA, Timothy Meyer, PhD, Michael R. Gold, MD, PhD, FHRSA and Kenneth A. Ellenbogen, MD, FHRSA, Grant Medical Center, OhioHealth, Columbus, OH, Boston Scientific, St. Paul, MN, Medical University of South Carolina, Charleston, SC, Medical College of Virginia, Richmond, VA

2:45 p.m.  **AB36-06:** Comparative strategies for optimal LV lead placement in CRT

Sylvain Ploux, MD, PhD, Marc Strik, MD, PhD, Romain Eschaler, MD, PhD, Peter Huntrjens, MSc, Hubert Cochet, MD, PhD, Michel Haissaguerre, PhD, Carole Pomier, PhD, Remi Dubois, PhD, Philippe Ritter, MD and Pierre Bordachar, MD, Haut Leveque Hospital, CHU Bordeaux; LIRYC Institute, Pessac, France, University of Maastricht, Maastricht, Netherlands, Clermont-Ferrand University Hospital, Clermont-Ferrand, France

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**Session AB37. WHAT'S NEW IN CRT?**

**Heart Failure - Sudden Death Risk Assessment and Treatment**

Room 3022, Moscone West

**Abstract Plus**

1:30 - 3 p.m.  

CME/CE Hours: 1.5

**Session Description:** New work regarding CRT with outcomes, techniques, and prognosis addressed.

**Chairs:** Andrew E. Epstein, MD, FHRSA, University of Pennsylvania, Philadelphia, PA

Firat Duru, MD, University Hospital, Zurich, Switzerland

1:30 p.m.  **AB37-01:** The Probability of Response to Cardiac Resynchronization Therapy as a Function of QRS Duration, Left Ventricular Mass, and Gender in Patients with Non-ischemic Cardiomyopathy and Left Bundle Branch Block

Jason Lappe, MD, Nanda Pullela, MD, Mahesh Manne, MD, Jayan He, ScD, Patrick Tchou, MD and Niraj Varma, MD, PhD. Cleveland Clinic, Cleveland, OH

1:45 p.m.  **AB37-02:** Body Mass Index and Long-Term Survival in Cardiac Resynchronization Therapy

Faraj Kargoli, MD, MPH, David Briceno, MD, Anand Jagannath, MD, Carlos Manrique, MD, Pedro Villalbanca, MD, Florentino Lupercio, MD, Alejandra Londono, MD, Eric H. Shulman, MD, John D. Fisher, MD, Kevin J. Ferrick, MD, Soo G. Kim, MD, Jay Gross, MD, Andrea Lechmaner, MD, Eugen Palma, MD, Nils Guttenplan, MD, Mario J. Garcia, MD, Andrea Natale, MD, FHRSA and Luigi Di Biase, MD, PhD, FHRSA, Montefiore Medical Center / Albert Einstein College of Medicine, Bronx, NY, Montefiore Medical Center, Bronx, NY, Texas Cardiac Arrhythmia Institute, Austin, TX, Texas Cardiac Arrhythmia Institute at St. David's Medical Center and Albert Einstein College of Medicine at Montefiore Hospital, Austin, TX

2 p.m.  **AB37-03:** Cardiac vein accessibility according to heart diseases and sex: implications for cardiac resynchronization therapy

Jae-Sun Uh, MD, Young-Ah Park, MD, Dong Geum Shin, MD, Yong-Soo Baek, MD, Hancheol Lee, MD, Tae-Hoon Kim, MD, Nam Kyun Kim, MD, Boyoung Jong, MD, Hui-Nam Pak, MD, PhD, FHRSA and Moon-Hyong Lee, MD, FHRSA, Severance Hospital, Seoul, Korea, Republic of, Severance Cardiovascular Hospital, Seoul, Korea, Republic of, Yonsei University Health System, Seoul, Korea, Republic of, Division of Cardiology, Yonsei University College of Medicine, Seoul, Korea, Republic of, Yonsei Cardiovascular Center and Cardiovascular Research Institute, Seoul, Korea, Republic of

2:15 p.m.  **AB37-04:** 'Wave front fusion during biventricular pacing and consequences for acute hemodynamic benefit'

Iris ter Horst, MD, Margot D. Bogaard, MD, PhD, Anton Tuienburg, MD, PhD, Pieter A. Doevendans, Prof, Emer. and Mathias Meine, MD, PhD. University Medical Center Utrecht, Utrecht, Netherlands

2:30 p.m.  **AB37-05:** Changes in Electrical Heterogeneity of Body Surface Maps: Application for CRT Optimization

Alan J. Bank, MD, Ryan M. Gage, MS, Antonio E. Curtin, MS, Kevin V. Bums, PhD, Jeffrey Gillberg, MS and Subham Ghosh, PhD. United Heart & Vascular Clinic, St. Paul, MN, University of Minnesota, Minneapolis, MN, Medtronic, Inc., Mounds View, MN, Medtronic, Mounds View, MN

2:45 p.m.  **Abstract Commentator**

Lynne W. Stevenson, MD, Brigham and Women's Hospital, Boston, MA

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**Session AB38. NEW PROGNOSTIC DATA IN HEART FAILURE**

**Heart Failure - Sudden Death Risk Assessment and Treatment**

Room 132, Moscone North

**Abstract**

1:30 - 3 p.m.  

CME/CE Hours: 1.5

**Session Description:** Come see new data surrounding prognosis in heart failure!

**Chairs:**

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Session AB39. ARRHYTHMIAS IN CONGENITAL HEART DISEASE

**Pediatrics and Adult Congenital Heart Disease**

Room 102, Moscone South  
1:30 - 3 p.m.  
Abstract  
CME/CE Hours: 1.5

**Session Description:** This session deals with the arrhythmias seen in patients with congenital heart disease and functional heart disease. The unique aspect of this population are explored.

**Chairs:**  
Andreas Pflaumer, MD, Royal Children's Hospital, Melbourne, Australia  
Mark E. Alexander, MD, FHRS, CEPS. Boston Children's Hospital, Boston, MA

1:30 p.m.  
**AB39-01:** Lead Extraction in Adults with Congenital Heart Disease  
Jean-Baptiste Gourraud, MD, PhD, Marie-Alexandre Chaux, MD, Pierre Page, MD, Marc Dubuc, MD, Bernard Thibault, MD, FHRS, Benjamin Casteigt, MD, Nancy Poire, MD, Dr. Anne-Dore, MD, Francois Marcotte, MD, Francois Pierre Mongeon, MD, Anita Asgar, MD, Reda Ibrahim, MD, Paul Kairay, MD, PhD and Blandine Mondéret, MD. Institut de Cardiologie de Montreal, Montreal, QC, Canada, Universite De Montreal, Hopital Du Sacre-Coeur De Montreal, Montreal, QC, Canada, Montreal Heart Institute, Montreal, QC, Canada

1:45 p.m.  
**AB39-02:** Transcatheter Pulmonary Valve Implant Alters Electrophysiologic Substrate  
Hoang Nguyen, MD, Shabana Shahanavaz, MBBS, George F. Van Hare, MD, FHRS, Balzer T. David, MD, Joshua J. Murphy, MD, Ramzi T. Nicolas, MD and Jennifer N.A. Silva, MD. Washington University in St. Louis, St. Louis, MO, Washington University, Saint Louis, MO, Washington University St. Louis, St. Louis, MO

2 p.m.  
**AB39-03:** Atrioventricular Nodal Reentrant Tachycardia in Patients with Congenital Heart Disease: Outcome after Catheter Ablation  
John Papagiannis, MD, FHRS, Ulrich Krause, MD, Michel Cabrera, MD, Marta Telishevska, MD, Stephen P. Seslar, MD, PhD, Christopher L. Johnsrude, MD, Charles C. Anderson, MD, Daniel Beissel, MD, Svjetlana Tisma-Dupanovic, MD, Diana Connelly, RRT, Dimosthenis Avramidis, MD, Christopher D. Carter, MD, Laszlo Komyei, MD, Ian H. Law, MD, FHRS, Nicholas H. Von Bergen, MD, Jan Janousek, MD, PhD, Jennifer N.A. Silva, MD, Eric Rosenthal, MD, Mark Wilcox, MD, Peter Kubuš, MD, Gabriele Hessling, MD and Thomas Paul, MD, FHRS, Children's Mercy Hospital, Kansas City, MO, Pediatric Cardiology And Intensive Care Medicine, University Medical Centre, Goettingen, Germany, Cardiocentro Pediatrico William Soler, Havana, Cuba, Deutsches Herzzentrum, Munich, Germany, Seattle Children's Hospital, Seattle, WA, Univ of Louisville, Pediatric Cardiology, Louisville, KY, Sacred Heart Children's Hospital, Spokane, WA, The Children's Mercy Hospital and Clinics, Pediatric Cardiology, Kansas City, MO, Mitera Children's Hospital, Maroussi, Greece, The Childrens Hospital of Philadelphia, Philadelphia, PA, Hungarian Institute of Cardiology, Budapest, Hungary, University of Iowa

**Chair:**  
Mark E. Alexander, MD, FHRS, CEPS. Boston Children's Hospital, Boston, MA
Session AB40. GENETICS AND ARRHYTHMIAS IN CHILDREN

Pediatrics and Adult Congenital Heart Disease

Room 104, Moscone South

1:30 - 3 p.m.

Abstract

CME/CE Hours: 1.5

Session Description: This session deals with cutting edge basic, clinical and translational science concerning the genetics of arrhythmias

Chairs:
Andrew D. Blaufox, MD, FHRSA, CEPS, Cohen Children’s Medical Center of New York, New Hyde Park, NY
Jane E. Crosson, MD, Johns Hopkins University, Baltimore, MD

1:30 p.m. AB40-01: Genotype Phenotype correlations in pediatric SCNSA mutation carriers
Alban-Elouen Baruteau, MD, PhD, Florence Kyndt, PharmD, PhD, Arthur A. Wilde, MD, PhD, Minoru Horie, MD, PhD, Nico A. Blom, MD, PhD, Isabelle Denjoy, MD, Takeshi Alba, MD, PhD, Wataru Shimizu, MD, PhD, Lia Crotti, MD, Johan M. Bos, MD, PhD, Jonathan R. Skinner, MD, Andrew M. Davis, MD, Dominic J. Abrams, MD, Elizabeth A. Stephenson, MD, Elijah R. Behr, MD, Anne M. Dubin, MD, FHRS, Shubhayan Sanatani, MD, Leonardo Liberman, MD, George F. Van Hare, MD, Juan-Pablo Kaski, MD, Tak-Cheung Yung, MD, Jacob Tfelt-Hansen, MD, PhD, Michael J. Ackerman, MD, PhD, Peter J. Schwartz, MD and Vincent Probst, MD, PhD. l’Institut du Thorax, INSERM 1087, CNRS 6291, Nantes University, Nantes, France, University of Amsterdam, Amsterdam, Netherlands, Shiga University of Medical Sciences, Department of Cardiology, Otsu, Japan, Leiden University Medical Center, Leiden, Netherlands, Hospital Lariboisiere, Paris, France, National Cardiovascular Center, Suita, Japan, Nippon Medical School, Tokyo, Japan, University of Pavia and IRCVS Policlinico S. Matteo, Pavia, Italy, Mayo Clinic, Rochester, MN, Starship Hospital, Auckland, New Zealand, Royal Children’s Hospital, Melbourne, Australia, Children’s Hospital, Boston, MA, The Hospital for Sick Children, Toronto, ON, Canada, St. George’s University of London, London, United Kingdom, Stanford University Pediatric Cardiology, Palo Alto, CA, Children’s Heart Centre, Vancouver, BC, Canada, New York Presbyterian Hospital, New York, NY, Washington University, Saint Louis, MO, Great Ormond Street Hospital for Children, University College London, London, United Kingdom, Queen Mary Hospital, The University of Hong Kong, Hong Kong, China, The Heart Centre, Copenhagen University Hospital-Rigshospitalet, Copenhagen, Denmark, University of Pavia/Fondazione IRCCS Policlinico San Matteo, Pavia, Italy, l’Institut du Thorax, Nantes, France

2:15 p.m. AB40-02: Incidentally identified variants in genes associated with catecholaminergic polymorphic ventricular tachycardia in a large cohort of referrals for clinical whole exome genetic testing
Andrew P. Landstrom, MD, PhD, Andrew Dailey-Schwartz, MD, Jill R. Mokry, MS, Yaping Yang, PhD, Hugh D. Allen, MD, Daniel J. Penny, MD, PhD, Christina Y. Miyake, MD, Santiago O. Valdes, MD and Jeffrey J. Kim, MD. Baylor College of Medicine, Houston, TX

2:45 p.m. AB40-03: Risk Factors in Young Patients with Brugada Syndrome
M Cecilia Gonzalez, MD, Carlo De Asmundis, MD, Gian-Battista Chierchia, MD and Pedro Brugada, MD, PhD. Cliniques Universitaires St Luc, Brussels, Belgium, UZ, Brussels, Belgium

2:15 p.m. AB40-04: Refining Genetic Test Interpretation for Ryanodine Receptor-Mediated Catecholaminergic Polymorphic Ventricular Tachycardia
Jamie D. Kaplunger, BA, Krishna Pundi, BS, Thomas E. Callis, PhD, David Tester, BS, Hennie Bikker, PhD, Arthur A. Wilde, MD, PhD and Michael J. Ackerman, MD, PhD. Mayo Clinic, Rochester, MN, Transgenomic Labs, Raleigh, NC, University of Amsterdam, Amsterdam, Netherlands

2:45 p.m. AB40-05: Contemporary Outcomes in Long QT Syndrome: a Single Center Experience
Ram K. Rohatgi, MD, Alan M. Sugrue, MBBS, Johan M. Bos, MD, PhD and Michael J. Ackerman, MD, PhD. Mayo Clinic, Rochester, MN

2:45 p.m. AB40-06: NOS1AP variants affecting QTc in the long QT syndrome- mainly a male affair?
Annika Winbo, MD, PhD, Eva-Lena Stattin, MD, PhD, Ida Maria Westin, BSc, Anna Norberg, PhD, Johan Persson, No Degree, Steen Jensen, MD and Annika Rydberg, MD, PhD. Pediatrics, Clinical Sciences,
Session AB41. PROVOCATIVE ABLATION & INTERVENTIONAL CASES: POTENTIAL CUTTING EDGE DEVELOPMENTS

Special Session
Room 134, Moscone North 1:30 - 3 p.m.
Abstract F
CME/CE Hours: 1.5

Session Description: This session will allow participants to understand innovative ablation & procedural advances for dealing with multiple arrhythmic issues.

Chairs: Etienne M. Aliot, MD, FHRS. University of Nancy, Vandœuvres Les Nancy, France
Hasan Garan, MD. Columbia University Medical Center, New York, NY

1:30 p.m. AB41-01: Disappearance of Idiopathic Outflow Tract Premature Ventricular Contractions after Catheter Ablation of Pre-Excitation: A Case Series
Lennart J. de Vries, MD, Tamas Szili-Torok, MD, PhD, Sing-Chien Yap, MD, PhD, Zszuzsanna Kis, MD, Attila Kardos, MD, PhD, Tamas Geczy, MD, PhD, Erik Oosterwerff, MD, Astrid Hendriks, MD, Muchtir Khan, MD, Istvan Kovacs, MD, I. Benedek, MD, PhD, Emin Evren, Ozcan, MD and Can Hasdemir, MD, PhD.

Erasmus MC, Rotterdam, Netherlands, Gottsegen Gyorgy Hungarian Institute of Cardiology, Budapest, Hungary, OLVG, Amsterdam, Netherlands, Onze Lieve Vrouwe Gasthuis, Amsterdam, Netherlands, University of Medicine and Pharmacy of Tîrgu Mures, Tîrgu Mures, Romania, Sifa University, Izmir, Turkey, Ege Univ School of Medicine, Bornova, Izmir, Turkey

1:45 p.m. AB41-02: Elimination of Brugada syndrome phenotype by endocardial ablation using novel multipolar RF ablation catheter
Mélèze Hocini, MD, Arnaud Denis, MD, Ashok Shah, MD, Yukki Komatsu, MD, Frederic Sacher, MD, Nicolas Derval, MD, Pierre Jais, MD, Olivier Bernus, PhD, Rémi Dubois, PhD, Hubert Cochet, MD and Michel Haissaguerre, MD. Hôpital Haut-Lévêque, Liryc Institute, University of Bordeaux, Bordeaux-Pessac, France, Hopital Haut Leveque, Liryc Institute, University of Bordeaux, Bordeaux-Pessac, France, Hopital Haut Lévêque, Liryc Institute, University of Bordeaux, Bordeaux-Pessac, France

2:15 p.m. AB41-04: Elimination of Ventricular Arrhythmia in Catecholaminergic Polymorphic Ventricular Tachycardia by Targetting "Catecholamine-sensitive area": A case report
Yasuhiro Shirai, MD, Masahiko Goya, MD, Shinya Shiohira, MD, Takakatsu Yoshitake, MD, Takuro Nishimura, MD, Shingo Maeda, MD, Takeshi Sasaki, MD, Mihoko Kawabata, MD, Tetsuo Sasano, MD and Kenzo Hirao, MD. Heart Rhythm Center, Tokyo Medical and Dental University, Tokyo, Japan

2:30 p.m. AB41-05: Concomitant epicardial and endocardial electroanatomic voltage mapping of AF during hybrid ablation
Kevin J. Makati, MD and Andrew Sherman, MD. Saint Joseph's Hospital, Tampa, FL

2:45 p.m. AB41-06: Sinus nodal dysfunction caused by circumferential pulmonary vein ablation: Lessons from late gadolinium enhancement cardiovascular magnetic resonance imaging
Christian Sohns, MD, Wieland Staab, MD, Mark O'Neill, MD, Karl-Heinz Kuck, MD, FHRS and Dirk Vollmann, MD. Asklepion Klinik St. Georg. Dept. of Cardiology, Hamburg, Germany, Division of Imaging Sciences and Biomedical Engineering, King’s College London, London, United Kingdom, Asklepion Klinik St. Georg, Hamburg, Germany, Heart and Vessel Center, Göttingen, Germany

Session LBCT02. LATE-BREAKING CLINICAL TRIALS II
Special Session
Room 135, Moscone North 1:30 - 3 p.m.
Late-Breaking Clinical Trials F
CME/CE Hours: 1.5

1:30 p.m. LBCT02-01: Impact of rotor ablation in non-paroxysmal AF patients: results from a randomized trial (OASIS)
Andrea Natale, MD, FHRS, Sanghamitra Mohanty, MD, FHRS, Carola Gianni, MD, Philipp Halbfass, MD, Prasant Mohanty, MD, MPH, Tamara Metz, RN, BSN, Chintan Trivedi, MD, MPH, Thomas Denek, MD, PhD, Gery F. Tomassoni, MD, FHRS, Rong Bai, MD, Amin Al-Ahmad, MD, FHRS, Shane Bailey, MD, John D. Burkhart, MD, FHRS, G. Joseph Gallaghhouse, MD, Rodney P. Horton, MD, Patrick Hranitzky, MD, FHRS, Javier E. Sanchez, MD and Luigi Di Biase. Texas Cardiac Arrhythmia Institute, Austin, TX, St. David's Medical Center, Austin, TX, TX, David's Medical Center, Austin, TX, Dipartimento di Scienze Cliniche e di Comunità, Milano, Italy, Texas Cardiac Arrhythmia Institute at St. David's Medical Center, Austin, TX, Heartcenter Bad Neustadt, Bad Neustadt, Germany, Lexington Cardiology Consultants, Lexington, KY, Beijing Anzhen Hospital, Beijing, China, Texas Cardiac Arrhythmia Research, Austin, TX, Texas Cardiac Arrhythmia Institute at St. David's Medical Center and Albert Einstein College of Medicine at Montefiore Hospital, Austin, TX
1:45 p.m. LBCT02-02: Performance and Outcomes in Patients with the Subcutaneous Implantable Defibrillator Through Mid Term Follow-Up: The EFFORTLESS Study
Lucas V. A. Boersma, MD, PhD, Craig S. Barr, MD, Reinoud E. Knops, MD, Dominic A. Theuns, PhD, Lars Eckardt, MD, Petr Neuzil, MD, PhD, Marcoen F. Scholten, MD, Margaret A. Hood, MBChB, Juergen Kuschyk, MD, Paul W. Jones, MS, Elizabeth C. Duffy, MS, Michael P. Husby, MPH, Kenneth M. Stein, MD, FFRS and Pier D. Lambiase, MD, PhD, FFRS. St. Antonius Ziekenhuis, Nieuwegein, Netherlands, Russells Hall Hospital, Dudley, United Kingdom, Academy Medical Center, Amsterdam, Netherlands, Erasmus MC, Rotterdam, Netherlands, University Hospital, Muenster, Germany, Na Homolce Hospital, Prague 5, Czech Republic, Medisch Spectrum Twente, Rotterdam, Netherlands, Aurora Cardiovascular Hospital, Cardioplegia Dept, Auckland, New Zealand, 1st Dept. of Medicine, University of Mannheim, Mannheim, Germany, Boston Scientific, St. Paul, MN, Boston Scientific, St Paul, MN, Heart Hospital, London, United Kingdom

2 p.m. LBCT02-03: Randomized Trial Comparing Pulmonary Vein Isolation Using the SmartTouch Catheter With or Without Real-Time Contact Force Data
Waqs Ullah, PhD, Ailsa McLean, RN, Muzahir Tayebjee, MD, Dhiraj Gupta, MD, Matthew R. Ginks, MD, Guy Haywood, MD, Mark O'Neill, PhD, Pier D. Lambiase, PhD, Mark J. Earley, MD, Richard J. Schilling, MD and .. UK Multicentre Trials Group. St Bartholomew's Hospital, London, United Kingdom, Leeds General Infirmary, Leeds, United Kingdom, Liverpool Heart and Chest Hospital, Liverpool, United Kingdom, John Radcliffe Hospital, Oxford, United Kingdom, Derriford Hospital NHS Trust, Plymouth, United Kingdom, St Thomas' Hospital, London, United Kingdom, Heart Hospital, London, United Kingdom, St. Bartholomew's Hospital, London, United Kingdom, SMART AF Trial Group UK, UK, United Kingdom

2:15 p.m. LBCT02-04: A Comparative Study of Acute and Mid-Term Complications of Leadless vs Transvenous Pacingmers
Vivek Y. Reddy, MD, Daniel J. Cantillon, MD, John Ip, MD, Derek V. Exner, MD, MPH, FFRS, Rajesh Banker, MD, Mayer Raashtian, MD, Imran Niazi, MD, FFRS, James E. Ip, MD, Kenneth Plunkitt, MD, Gery F. Tomassoni, MD, FFRS, James G. Porterfield, Matthew T. Bennett, MD, Rahul N. Doshi, MD, FFRS, Judith A. Mackall, MD, Steven L. Higgins, MD, T. Jared Bunch, MD, Paul A. Friedman, MD, FFRS, Yelena Nabutovsky, MS, Ashish L. Oza and N. A. Mark Estes. Mount Sinai School of Medicine, New York, NY, Cleveland Clinic, Cleveland, OH, Thoracic Cardiovascular Institute, Lansing, MI, Libin Cardiovascular Institute of Alberta, Calgary, AB, Canada, Premier Cardiology, Newport Beach, CA, Huntington Memorial Hospital, Pasadena, CA, Aurora Cardiovascular Services, Milwaukee, WI, Cornell University Medical Center, New York, NY, Naples Community Hospital, Naples, FL, Lexington Cardiology Consultants, Lexington, KY, Arrhythmia Consultants, PC, Memphis, TN, University of British Columbia, Vancouver, BC, Canada, University of California Irvine, Orange, CA, University Hospitals Case Medical Center, Cleveland, OH, Cardiovascular Associates, La Jolla, CA, Intermountain Medical Center - Intermountain Heart Rhythm Specialists, Murray, UT, Mayo Clinic, Rochester, MN, St. Jude Medical, Sunnyvale, CA, St. Jude Medical Cardiovascular, Sylmar, CA, Tufts Medical Center, Boston, MA

3 p.m. LBCT02-05: Effect of left atrial appendage excision on procedure outcome in patients with persistent atrial fibrillation undergoing surgical ablation
Alexander Romanov, MD, PhD, FFRS, Evgeny Pokushalov, MD, PhD, FFRS, Dmitry Elesin, MD, Alexander Bogachev-Prokopiev, MD, Dmitry Ponomarev, MD, Denis Losik, MD, Sevda Bayramova, MD, Oleg Pidanov, MD, Eduard Ivantsky, MD, PhD, Alexander Karaskov, MD, PhD and Jonathan S. Steinberg, MD, FFRS. State Research Institute of Circulation Pathology, Novosibirsk, Russian Federation, Clinical Hospital of the Presidential Administration, Moscow, Russian Federation, Center of Cardiovascular Surgery, Krasnoyarsk, Russian Federation, Valley Health System, New York, NY

3:15 p.m. LBCT02-06: Results of the Pulmonary vein re-isolation as a routine Strategy: a SUccess Rate Evaluation (PRESSURE) randomised controlled trial
Dhiraj Gupta, MD, Gareth J. Wynn, MD, Yawer Saeed, MD, Sean Gomes, MD, Maureen Mogan, BSc, Christina Ronayne, BSc, Johan E.P. Waktare, MD, Derick M. Todd, MD, Mark C.S. Hall, MD, Richard L. Snowden, MD, Simon Modi, MBBS and Moloy Das, MBBS. Institute of Cardiovascular Medicine and Science, Liverpool, United Kingdom, Freeman Hospital, Newcastle upon Tyne, United Kingdom

Session SP46. VETERAN AFFAIRS (VA) COMMUNITY OF PRACTICE INFORMATION MEETING
Special Session Room 308, Moscone South 1:30 - 3 p.m. Special Session
Session Description: Join Kim Selzman, MD,FRRS Paul Varosy, MD, FFRS and other federal electrophysiology colleagues leaders to discuss the launch and set the agenda for the newly formed Veteran Affairs (VA) Community of Practice. The goal of this

1:30 p.m. Presenters
Kimberly Selzman, MD, MPH, FFRS. Salt Lake City VA Hospital, Salt Lake City, UT
Mintu P. Turakhia, MD, MS. Stanford University, Palo Alto, CA
Sanjay Dixit, MD, FFRS. Hospital of the University of Pennsylvania, Philadelphia, PA

Session P005. POSTER SESSION V
Special Session EPicenter, Hall D 2 - 5 p.m. Poster
F
Session MP04. MAGNETIC RESONANCE IMAGING (MRI) IN PATIENTS WITH CARDIAC IMPLANTABLE ELECTRONIC DEVICES (CIEDS)

**Session Description:** Visit the EPicenter to experience the latest science and innovation.

**Chair:** J. Rod Gimbel, MD. Parkwest Hospital, Knoxville, TN

**3:15 p.m.**

**MP04-01:** Ventricular Arrhythmia Events Before and After Magnetic Resonance Imaging in Patients with the Iforia Implantable Cardioverter-Defibrillator: A ProMRI Substudy

Neal A. Chatterjee, MD, Guy Rozen, MD, PhD, Justin Michalski, MS, Phil Moll, BS, Khaled Awad, MD, Leon Ptaszek, MD, PhD and Theofanie Mela, MD. Massachusetts General Hospital, Boston, MA, Biotronik, Inc., Lake Oswego, OR, University of Virginia Health System, Charlottesville, VA

**3:25 p.m.**

**MP04-02:** Prospective Study of the Safety of a Protocol for Magnetic Resonance Imaging of Patients with Implanted Cardiac Devices

Saman Nazarian, MD, PhD, FHRS, Rozann Hansford, RN, Amir Ali Rahsepar, MD, Menekhem Zviman, PhD, Valeria Sena-Weltin, MS, Diana McVeigh, BS, Ihab Kamel, MD, PhD, Stefan Zimmermann, MD and Henry R. Halperin, MD, FHRS. Johns Hopkins University, Baltimore, MD, Johns Hopkins Hospital, Baltimore, MD

**3:35 p.m.**

**MP04-03:** Comprehensive cardiac magnetic resonance for coronary artery disease in patients with MRI-conditional pacemaker

Thananya Boonyasirinant, MD and Satchana Pumprueg, MD. Siriraj Hospital, Bangkok, Thailand, Siriraj Hospital Mahidol Unive, Bangkok, Thailand

**3:45 p.m.**

**MP04-04:** Is there an increased complication rate with MRI-compatible pacemakers in comparison to conventional pacemakers? A meta-analysis

Mohammed Shurrab, MD, MSc, Saleem Haj-Yahia, MD, Theepana Singarajah, RN, Ching Lau, BS, Anna Kaoutskaia, BSc, David Newman, MD and Eugene Crystal, MD. An-Najah National University Hospital, An-Najah National University, Nablus, Palestinian Territory, Sunnybrook Health Sciences Centre, University of Toronto, Toronto, ON, Canada

**3:55 p.m.**

**MP04-05:** Direct Measurement of Mechanical Activation with Magnetic Resonance Imaging for Targeting Late-Activated Pacing Sites in Cardiac Resynchronization Therapy is Superior to Standard Methods Using Time to Peak Contraction

Jorge A. Gonzalez, MD, Pelbretcon C. Balfour, MD, Peter W. Shaw, MD, Daniel Auger-Comenjo, PhD, Frederick Epstein, PhD, John P. DiMarco, MD, PhD, FHRS, J. Michael Mangrum, MD, Andrew E. Darby, MD, FHRS, Rohit Malhotra, MD, Pamela K. Mason, MD, FHRS, John D. Ferguson, MD, FHRS and Kenneth C. Blichik, MD, FHRS. University of Virginia, Charlottesville, VA, University of Virginia Health Sciences Center, Charlottesville, VA, University of Virginia Health Systems - Cardiology, Charlottesville, VA, University of Virginia, Internal Medicine, Charlottesville, VA, University of Virginia Health System, Charlottesville, VA

**Session 098. SHOULD THE WEARABLE DEFIBRILLATION BE USED IN ALL PATIENTS IN THE ICD WAITING PERIOD**

**Session Description:** This debate will explore the use of wearable defibrillators in all patients in the ICD waiting period

**Chair:** Michael C. Delaughter, MD, PhD, FHRS. HeartPlace PA, Bedford, TX

**4:35 p.m.**

**The Wearable Defibrillation Should be Used in all Patients in the ICD Waiting Period**

Ilan Goldenberg, MD, Levie Heart Center, Tel Hashomer, Israel

**4:50 p.m.**

**The Wearable Defibrillation Should Not be Used in all Patients in the ICD Waiting Period**

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

**5:05 p.m.**

**Rebuttal**

Ilan Goldenberg, MD, Levie Heart Center, Tel Hashomer, Israel

**5:10 p.m.**

**Rebuttal**

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

**Session 099. AGGRESSIVE VS. PALLIATIVE HEART RHYTHM CARE - HOW DO WE DISCUSS THE OPTIONS?**

**Session Description:** This session will review important topics in heart rhythm care such as goals of care, patient shared decision making, and patient/ family engagement. Discussions regarding decisions at generator change time, aggressive care vs palliative care are encouraged.

**Chair:** Douglas S. Beinborn, MA, BSN. Mayo Clinic, Rochester, MN

**4:30 p.m.**

**Converting Devices - Considerations at Generator Change Time**

John Mandrola, MD. Baptist Medical Associates, Louisville, KY
5 p.m.  Deactivating Pacemakers and ICDs - End of Life Options  
Debra Wiegand, PhD, MBE, RN, CCRN, CHPN.  
University of Maryland, Baltimore, MD

5:30 p.m.  VT Ablation in the Severely Ill Patient - Who Should Be Ablated and Who Should be Referred for Advanced Heart Failure Therapies?  
Mathew D. Hutchinson, MD, FHRS.  
University of Pennsylvania, Philadelphia, PA

Session 100. EP DIAGNOSTICS AND THERAPEUTICS - WHAT’S NEW IN 2016?  
Allied Professionals - SVT/AVNRT/WPI/AT Management, Mechanisms, Diagnosis, and Ablation
Room 132, Moscone North  4:30 - 6 p.m.
Core Curriculum  
CME/CE Hours: 1.5  
ASRT/ARRT: DCD0056103

Session Description: This session will discuss new and/or developing diagnostic and therapeutic technologies in electrophysiology. Speakers will address the relevance and potential impact these devices may have when utilized in clinical practice.

Chairs:  
Tara Parham, MSN, CRNP. Hospital of the University of Pennsylvania, Philadelphia, PA  
Lynn Mattingly, BSN, RN. Baptist Health Lexington, Lexington, KY

4:30 p.m.  Novel Pacing and Implantable Devices  
Salwa Beheiry, RN, BSN, CCRN. California Pacific Medical Center, San Francisco, CA

5 p.m.  Novel Mapping and Ablation Technologies  
Cory M. Tschabrunn, CEPS. Beth Israel Deaconess Medical Center, Boston, MA

5:30 p.m.  Novel Phone Applications, Portable Devices, and Telemedicine Updates  
Heather M. Ross, DNP, ANP-BC, FHRS, CCDS, CEPS. Arizona Arrhythmia Consultants, Scottsdale, AZ

Session 101. PROTEIN TRAFFICKING IN CARDIAC ELECTROPHYSIOLOGY  
Basic Translational Science - Ventricular Tachycardia & Ventricular Fibrillation: Management, Mechanisms, Diagnosis, and Ablation
Room 304, Moscone South  4:30 - 6 p.m.
Core Curriculum  
CME/CE Hours: 1.5

Session Description: This session will review advances in understanding the role of protein trafficking in cardiac myocytes in the normal and diseased heart

Chairs:  
Robin M. Shaw, MD, PhD. Cedars-Sinai Medical Center, Los Angeles, CA  
Peter J. Mohler, PhD. The Ohio State University, Columbus, OH

4:35 p.m.  Mechanisms of Cx43 Trafficking in Cardiac Myocytes and Role in Disease  
Robin M. Shaw, MD, PhD. Cedars-Sinai Medical Center, Los Angeles, CA

4:55 p.m.  Regulation of Ion Channel Protein Trafficking in Cardiac Myocytes  
Peter J. Mohler, PhD. The Ohio State University, Columbus, OH

5:15 p.m.  Coordinated Trafficking of Na and Inward Rectifying K Channel Proteins  
Jose Jalife, MD, FHRS. University of Michigan, Ann Arbor, MI

5:35 p.m.  BIN1 and L-Type Ca Channel Trafficking in the Heart  
Ting-Ting Hong. Cedars-Sinai, Los Angeles, CA

Session 102. PHENOTYPE AND THE "NOT SO OBVIOUS" GENOTYPE  
Basic Translational Science - Genetics of Cardiac Arrhythmias: AF Mechanisms and Prevention
Room 307, Moscone South  4:30 - 6 p.m.
Translational Electrophysiology  
CME/CE Hours: 1.5

Session Description: This session will provide an update of the rapidly moving phenotypes presented in this topic.

Translator:  
Alfred L. George, Jr, MD. Northwestern University, Chicago, IL

4:30 p.m.  Inherited Arrhythmias: Does AF Count?  
Patrick T. Ellinor, MD, PhD. Massachusetts General Hospital, Boston, MA

4:50 p.m.  Brugada Syndrome as an Oligogenic Disease  
Connie R. Bezzina, PhD. Academic Medical Center, Amsterdam, Netherlands

5:10 p.m.  Primary Electric Disorders Associated with Structural Genes  
Marina Cerrone, MD. New York University Langone Medical Center, New York, NY

5:30 p.m.  Cardiomyopathies Linked to SCN5A Mutations  
Daniel P. Judge, MD. Johns Hopkins University, Baltimore, MD

Session 103. ADVANCED TECHNIQUES FOR CIED IMPLANTATION  
Cardiovascular Implantable Electronic Devices - ICDs: Implantation, Programming and Follow-up Considerations
Room 2006, Moscone West  4:30 - 6 p.m.
How-To  
CME/CE Hours: 1.5

Session Description: This session will address advanced ICD implant techniques.

Chairs:  
Peter H. Belott, MD, FHRS. Sharp Grossmont Hospital, La Mesa, CA  
Gery F. Tomassoni, MD, FHRS. Lexington Cardiology Consultants, Lexington, KY

4:35 p.m.  How to Cross a Subclavian Vein Occlusion for Venous Access  
Seth J. Worley, MD, FHRS. The Heart and Vascular Institute of Lancaster General Hospital, Lancaster, PA

4:55 p.m.  How to Perform Venoplasty of a Coronary Vein  
Michael Glikson, MD. Sheba Medical Center, Ramat Gan, Israel
5:35 p.m. Managing Venoplasty Complications
Paul A. Friedman, MD, FHRS. Mayo Clinic, Rochester, MN

Session 104. CATHETER ABLATION OF HIS-PURKINJE RELATED TACHYCARDIAS
Catheter Ablation - SVT/AVNRT/WPW/AT Management, Mechanisms, Diagnosis, and Ablation
Room 2014, Moscone West 4:30 - 6 p.m.
Case Based Tutorial ARS F CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: This session will explain how tachycardias that depend on the His-Purkinje system can be challenging to diagnose and ablate. Atrio- fascicular accessory pathway, bundle branch reentrant VT, fascicular VT and upper septal VT will be discussed.

Chair: Patrick J. Tchou, MD. Cleveland Clinic, Cleveland, OH

4:35 p.m. Atrio-Fascicular Accessory Pathway (Mahaim)
Sunny S. Po, MD, PhD. University of Oklahoma, Oklahoma City, OK

5:15 p.m. Bundle-Branch Reentrant VT and Inter-Fascicular VT
J. David Burkhardt, MD, FHRS. Texas Cardiac Arrhythmia Institute, Austin, TX

5:35 p.m. Upper Septal VT
Akihiko Nogami, MD, PhD. Tsukuba University Hospital, Tsukuba, Japan

Session 105. COMPLICATIONS OF ABLATION OF SVT OR AF
Catheter Ablation - SVT/AVNRT/WPW/AT Management, Mechanisms, Diagnosis, and Ablation
Room 2010, Moscone West 4:30 - 6 p.m.
Complication Theatre F CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: This session will review the leading electrophysiologists from high-volume centers will present complications resulting from SVT or AF ablations.

Chair: Jonathan M. Kalman, MBBS, PhD, FHRS. Royal Melbourne Hospital, Melbourne, Australia

4:35 p.m. My Worst Nightmare Case
Minglong Chen, MD, PhD. The First Affiliated Hospital of Nanjing Medical University, Nanjing, China

4:55 p.m. Amazing Views of AF Ablation Only Seen by Surgeons
Mark La Meir, MD, PhD. UZ Brussel, Belgium

5:15 p.m. Bronchial Complications from Cryoballoon Ablation
Roland R. Tilz, MD. Asklepios Klinik St. Georg, Hamburg, Germany

5:35 p.m. My Most Interesting Case
Young Hoon Kim, MD, PhD. Korea University Medical Center, Seoul, Korea, Republic of Korea

Session 106. CORONARY ARTERY INJURY: CAUSED BY RADIOFREQUENCY ABLATION
Catheter Ablation - SVT/AVNRT/WPW/AT Management, Mechanisms, Diagnosis, and Ablation
Room 2003, Moscone West 4:30 - 6 p.m.
Core Curriculum F PM
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: This session will explore the anatomy of the coronary arteries and identification and management of coronary artery injury caused by Radiofrequency ablations.

Chair: Jonathan M. Kalman, MBBS, PhD, FHRS. Royal Adelaide Hospital and Adelaide University, Adelaide, Australia

4:35 p.m. The Disappearing Entity of "Lone AF." Advocating an Updated AF Classification with Relevance to AF Management
Michiel Rienstra, MD, PhD. University Medical Center Groningen, Groningen, Netherlands

5:15 p.m. Obstructive Sleep Apnea and AF: Pathophysiology and Impact of Treatment on Outcomes
Sanghamitra Mohanty, MD. St. David’s Medical Center, Austin, TX

5:35 p.m. The Relationship Between Physical Activity and Atrial Fibrillation. Beneficial or Detrimental?
Saman Nazarian, MD, PhD, FHRS. Johns Hopkins University, Baltimore, MD
Session 108. NEW INSIGHTS INTO ARRHYTHMIA MECHANISMS FROM ADVANCED PROCESSING OF SURFACE ECG AND INTRACARDIAC SIGNALS
Clinical Electrophysiology - Ablation of AF and Atrial Flutter (including surgical ablation)
Room 3002, Moscone West 4:30 - 6 p.m.
Core Curriculum F
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: Come learn about the science behind the most promising new mapping techniques, and how they are changing our approaches to ablating common arrhythmias.

Chairs: Chu-Pak Lau, MD, FHRS, CCDS. University of Hong Kong Medicine, Central, Hong Kong
Omer Berenfeld, PhD, FHRS. University of Michigan, Ann Arbor, MI

4:35 p.m. What is the Dominant Frequency and What Does it Mean?
Edward P. Gerstenfeld, MD, FHRS. University of California - San Francisco, San Francisco, CA

4:55 p.m. What is Phase Mapping and How is it Different from Activation Mapping?
Omer Berenfeld, PhD, FHRS. University of Michigan, Ann Arbor, MI

5:15 p.m. What is Shannon Entropy and How is it Measured?
Anand N. Ganesan, MBBS, PhD. University of Adelaide, Adelaide, Australia

5:35 p.m. The Inverse Solution - How is it Measured, Limitations, and Spatial Resolution
Yoram Rudy, PhD, FHRS. Washington University, St. Louis, MO

Session 109. HOW TO DIAGNOSE AND MANAGE OVERLAP CONDITIONS CAUSED BY SCN5A MUTATIONS
Clinical Electrophysiology - Genetics of Cardiac Arrhythmias: AF Mechanisms and Prevention
Room 3003, Moscone West 4:30 - 6 p.m.
How-To  F PM
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Biosense Webster, Inc.

Session Description: This session will discuss the range of phenotypic expression of SCN5A mutations. In addition, provide examples to illustrate diagnosis and management of these conditions

Chairs: Laura Andreasen, BSc. Copenhagen University Hospital, Copenhagen, Denmark
Naomasa Makita, MD, PhD. Nagasaki University, Nagasaki, Japan

4:35 p.m. Overlap SCN5A Syndromes: Does Mutation Type Matter?
Carol Ann Remme, MD, PhD. Academic Medical Center, Amsterdam, Netherlands

4:55 p.m. Dilated Cardiomyopathy and SCN5A
Ahmad S. Amin. Academic Medical Center, Amsterdam, Netherlands

5:15 p.m. Early Onset Atrial Fibrillation, LQT3 and SCN5A
Morten S. Olesen, MSc, PhD. Rigshospitalet, Copenhagen, Denmark

5:35 p.m. Sick Sinus Syndrome, Conduction Disturbances, Atrial Silence and SCN5A
Minoru Horie, MD, PhD. Shiga University of Medical Sciences, Ohtsu, Japan

Session 110. IT'S TIME FOR A GENERATOR CHANGE - WHAT DO I DO?
Heart Failure - Heart Failure: Etiology, Diagnosis, and Management
Room 2020, Moscone West 4:30 - 6 p.m.
Case Based Tutorial ARS F PM
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Amgen

Session Description: This session regarding generator replacement represents an opportunity to examine current indications for ongoing therapy. Often, a change of device therapy may be indicated. This session will examine issues around generator

Chair: Jack Kron, MD. Oregon Health and Science University, Portland, OR

4:35 p.m. A Primary Prevention Patient with a Normalized Ejection Fraction
Rupa Bala, MD. University of Pennsylvania, Portland, PA

4:55 p.m. A Pacemaker Patient with 100% RV Pacing and an EF of 50%
Anastasios Saliaris, MB, BCh, BAO. University of Maryland, Baltimore, MD

5:15 p.m. A Patient with a Functioning Advisory Lead
Christine Tompkins, MD. University of Colorado, Aurora, CO

5:35 p.m. A CRT-D Patient with a Normalized Ejection Fraction
Matthew T. Bennett, MD, FHRS. University of British Columbia, Vancouver, BC, Canada

Session 111. ARRHYTHMIAS AND SUDDEN CARDIAC DEATH IN UNCOMMON CARDIOMYOPATHIES
Heart Failure - Heart Failure: Etiology, Diagnosis, and Management
Room 3022, Moscone West 4:30 - 6 p.m.
Case Based Tutorial ARS F PM
CME/CE Hours: 1.5
Supported by an unrestricted educational grant provided by Amgen

Session Description: This session will review these issues in infiltrative cardiomyopathies and acute cardiomyopathies.

Chair: John H. McAnulty, MD. Oregon Health and Science University, Portland, OR

4:30 p.m. Infiltrative Cardiomyopathies
Wendy S. Tzou, MD, FHRS. University of Colorado, Denver, CO

5 p.m. Acute Myocarditis
Jeffrey A. Towbin, MD. Cincinnati Children's Hospital, Cincinnati, OH

5:30 p.m. Peripartum Cardiomyopathy
uri Elkayam, MD. University of Southern California, Los Angeles, CA
Session 112. HOW TO MANAGE HF PATIENTS USING HEMODYNAMIC MONITORING
Heart Failure - Heart Failure: Etiology, Diagnosis, and Management
Room 2002, Moscone West
How-To
CME/CE Hours: 1.5

Session Description: This session will available technology, impact on hospitalization and implementation in practice.

Chairs: Daniel P. Morin, MD, MPH, FHRS. Ochsner Medical Center, New Orleans, LA
William T. Abraham, MD. The Ohio State University, Columbus, OH

4:35 p.m. Does Lung Impedance Monitoring Really Work to Prevent HF?
Richard J. Schilling, MD. St. Bartholomew's Hospital, London, United Kingdom

4:55 p.m. How to Prevent HF Hospitalizations Through Pulmonary Artery Pressure Monitoring
J. Thomas Heywood, MD. Scripps Clinic, La Jolla, CA

5:15 p.m. Technology and Implantation Techniques of PAP Monitors
Lynne W. Stevenson, MD. Brigham and Women's Hospital, Boston, MA

5:35 p.m. How to Successfully Implement Hemodynamic Monitoring in Clinical Practice
Kimberly Parks. Massachusetts General Hospital, Boston, MA

Session 113. CHALLENGING CRT CASES
Heart Failure - Heart Failure: Etiology, Diagnosis, and Management
Room 3014, Moscone West
Rapid Fire Cases
Supported by an unrestricted educational grant provided by Boston Scientific.

Session Description: This session will cover six clinical CRT related cases. Experts will rapidly discuss each case and review treatment options.

Chair: Judith A. Mackall, MD, FHRS. Case Western Reserve University, Cleveland, OH

4:30 p.m. My Patient has an LVAD and Recurrent ICD Shocks for VT. Should I Ablate?
Sherry Saxonhouse, MD, FHRS. Sanger Heart and Vascular Institute, Charlotte, NC

4:45 p.m. My Patient has Pacing Induced CM. Should I Implant a CRT-D or CRT-P?
Soori Sivakumaran, MD. Mazankowski Alberta Heart Institute - University of Alberta, Edmonton, AB, Canada

5 p.m. My Patient has AF and an EF of 30%. Should I do an AVN Ablation?
Jonathan S. Steinberg, MD, FHRS. The Valley Health System of New York and New Jersey, New York, NY

5:15 p.m. My Patient has an Infected LV Lead and an EF of 28%. How do I go About the Replacement?
Byron K. Lee, MD. University of California - San Francisco, San Francisco, CA

5:30 p.m. My Patient has a Wide RBBB and CRT Indications. What Device Should I Implant?

Karin K. M. Chia, MBBS, PhD, CEPS. Royal Brisbane and Women's Hospital - The University of Queensland, Brisbane, Australia

4:55 p.m. My Patient has a Dual Chamber Pacemaker and Needs CRT-D. Should I Extract or Add Leads?
Charles A. Henrikson, MD, FHRS. Oregon Health and Science University, Portland, OR

Session JS13. CLINICAL CHALLENGES IN HEART FAILURE AND ELECTROPHYSIOLOGY
Heart Failure
Room 308, Moscone South
Joint Session
Heart Failure Society of America

Session Description: This session will explore the pathophysiology which interconnects heart failure and heart rhythm disorders. It will describe in detail the current state of our clinical knowledge and highlight knowledge gaps. This session offer

Chairs: Teresa De Marco, MD. Univ of California, San Francisco, San Francisco, CA
Sean Pinney. Mount Sinai Medical Center, New York, NY

4:30 p.m. Atrial Fibrillation and Heart Failure: Rate Control, Rhythm Control or Ablation?
Paul J. Wang, MD, FHRS, CCDS. Stanford University School of Medicine, Stanford, CA

4:50 p.m. Cardiac Resynchronization Therapy: A Pre-Requisite Before MCS?
Jagmeet P. Singh, MD, PhD, FHRS. Massachusetts General Hospital, Boston, MA

5:10 p.m. Catheter Ablation of PVC's: Can it Really Improve LV Function?
Francis E. Marchlinski, MD, FHRS. University of Pennsylvania, Philadelphia, PA

5:30 p.m. Ventricular Tachycardia and the Low EF Patient: Ablation, MCS or Hospice?
Srinivas Dukkipati, MD. Mount Sinai School of Medicine, New York, NY

Session 114. CATHETER ABLATION: TECHNIQUES FOR SAFE SUCCESS IN PEDIATRICS
Pediatrics and Adult Congenital Heart Disease - SVT/AVNRT/WPW/AT Management, Mechanisms, Diagnosis, and Ablation
Room 102, Moscone South
CME/CE Hours: 1.5

Session Description: This session will explain utilization of varying ablation techniques and technologies to maximize safety and efficacy in pediatric ablation
Chair: John K. Triedman, MD, FHRS, CCDS, CEPS. Boston Children's Hospital, Boston, MA

4:35 p.m. Biophysics of Catheter Ablation
Thomas A. Pilcher, MD, FHRS. University of Utah, Salt Lake City, UT

4:55 p.m. Techniques in Cryoablation to Improve Long Term Success
Richard J. Czosek, MD, CCDS. Cincinnati Children's Hospital, Cincinnati, OH

5:15 p.m. New Technologies in Ablation: Contact Force and Advanced Mapping: What is the Role in Pediatrics?
Douglas Mah, MD. Boston Children's Hospital, Boston, MA

5:35 p.m. Radiofrequency Ablation: Risks and Benefits of Larger Tips and Irrigated Catheters
Frank Cecchin, MD, CEPS. New York University Langone Medical Center, New York, NY

Session 115. RAPID FIRE CASES IN PEDIATRICS AND CONGENITAL HEART DISEASE
Pediatrics and Adult Congenital Heart Disease
Room 104, Moscone South 4:30 - 6 p.m.
CME/CE Hours: 1.5

Session Description: This session will present a series of short presentations of challenging cases, structured to evoke open discussion of critical decision points and alternate management strategies.

Chair: Dominic J. Abrams, MD, MRCP. Children's Hospital Boston, Boston, MA

4:30 p.m. Challenging Case in Pacing
Anthony C. McCanta, MD. Children's Hospital Orange County, Orange, CA

4:45 p.m. Challenging Case in SVT Ablation
Robin L. Cleagg, MD. Alberta Children's Hospital, Calgary, AB, Canada

5 p.m. Challenging Case in Inherited Arrhythmias
Jeffrey M. Vinocur, MD. University of Rochester Medical Center, Rochester, NY

5:15 p.m. Challenging Case in Inherited Arrhythmias
Danna A. Spears, MD. University of Toronto, Toronto, ON, Canada

5:30 p.m. Challenging Case in VT Ablation
Natasja De Groot, MD, PhD. Erasmus Medical Center, Rotterdam, Netherlands

5:45 p.m. Challenging Case in ICD Management
Vincent C. Thomas, MD, CEPS. Children's Heart Center Nevada - University of Nevada School of Medicine, Henderson, NV

4:30 p.m. Panelists
David J. Bradley, MD. University of Michigan, Ann Arbor, MI
Bryan C. Cannon, MD, CCDS, CEPS. Mayo Clinic, Rochester, MN
Joseph Atallah, MD, CM. University of Alberta, Edmonton, AB, Canada

Session JS14. IMPROVING THE QUALITY AND COST-EFFECTIVENESS OF CRM PROCEDURES
Policy, Payment, and Practice
Room 303, Moscone South 4:30 - 6 p.m.
Joint Session
CME/CE Hours: 1.5
British Heart Rhythm Society

Session Description: This session will review how to improve audit, quality and cost-effectiveness of device and EP services in a modern health service.

Chairs: Nicholas J. Linker, MD, FHRS. James Cook University Hospital, Middlesbrough, United Kingdom
Richard I. Fogel, MD, FHRS, CCDS. St. Vincent Medical Group, Indianapolis, IN

4:30 p.m. Challenges to Change in a Health System: New Technology Vs Financial Constraints
Edward Rowland, MD. University College Hospital, London, United Kingdom

4:50 p.m. What are the Drivers for Efficiency in CRM Procedures? Douglass Packer, MD, FHRS. Mayo Clinic, Rochester, MN

5:10 p.m. Does Remote Monitoring Improve Cost-Effectiveness of OIEDs?
David J. Wright. Liverpool Heart and Chest Hospital, Liverpool, United Kingdom

5:30 p.m. How Practical is a National Audit of CRM Procedures & What Outcomes Can be Truly Measured?
Francis D. Murgatroyd, MD, FHRS. King's College Hospital, London, United Kingdom

5:45 p.m. The Role of Nice in a National Health Service
Christopher J. Plummer. Freeman Hospital, Newcastle, United Kingdom

Session SP30. THE NEW NORMAL: TRANSPARENCY IN MEDICINE
Policy, Payment, and Practice - ICDs: Implantation, Programming and Follow-up Considerations
Room 2001, Moscone West 4:30 - 6 p.m.
Special Session 4:30 p.m.  F PM
CME/CE Hours: 1.5

Session Description: This session will address the legal and regulatory background and implications of the "new normal" health care environment.

Chairs: Mark H. Schoenfeld, MD, FHRS, CCDS. Yale University School of Medicine, New Haven, CT
Steven C. Hao, MD, FHRS. Sutter Pacific Medical Foundation, San Francisco, CA

4:30 p.m. Federal Laws and Regulations to Increase Transparency and Improve Performance
David J. Slotwiner, MD. Weill Cornell Medical College, NY Presbyterian Queens, New York, NY

4:50 p.m. Implications of Public Reporting of Patient Outcomes at the Physician Level
Ruth A. Madden, RN, MPH. Cleveland Clinic, Cleveland, OH
5:10 p.m.  Public Information on Physicians’ Financial Relationship with Industry
N. A. Mark Estes, MD, FHRS, CCDS. Tufts Medical Center, Boston, MA

Session JS18. CARDIAC AUTONOMIC CONTROL AND HEART RHYTHM DISEASES
Special Session
Room 121, Moscone North  4:30 - 6 p.m.
Joint Session
CME/CE Hours: 1.5
Joint Session presented by International Society of Autonomic Neuroscience (ISAN)

Session Description: The session will demonstrate to attendees the importance of cardiac autonomic control and specifically to provide a framework to interpret ongoing studies and important research directions in the field. The session will be of

Chairs:  Kalyanam Shivkumar, MD, PhD, FHRS. University of California - Los Angeles, Los Angeles, CA
Douglas P. Zipes, MD, FHRS. Krannert Institute of Cardiology, Indianapolis, IN

4:30 p.m.  Introduction: Overview and Roadmap
Kalyanam Shivkumar, MD, PhD, FHRS. University of California - Los Angeles, Los Angeles, CA

4:35 p.m.  Molecular Control of the Cardiac Pacemaker
Mark E. Anderson, MD, PhD, FHRS. Johns Hopkins University, Baltimore, MD

4:50 p.m.  Molecular Insights into Cardiac Autonomic Control
David Paterson, PhD, Dsc. University of Oxford, Oxford, United Kingdom

5:05 p.m.  Cardiac Neural Remodeling & Sudden Death
Beth Habecker, PhD. Oregon Health and Science University, Portland, OR

5:20 p.m.  Cardiorespiratory Interactions
Virend Somers, MD, PHD. Mayo Clinic College of Medicine, Rochester, MN

5:35 p.m.  Structure/Function Basis for Autonomic Regulatory Therapy
Jeffrey L. Ardell, Ph.D. East Tennessee State University, Johnson City, TN

5:50 p.m.  Expert Commentator/ Q & A
Douglas P. Zipes, MD, FHRS. Krannert Institute of Cardiology, Indianapolis, IN

Session SP38. THE EVOLVING ROLE OF ELECTROPHYSIOLOGY AND THE ATHLETE: THE REVOLUTION OF BIOMETRIC MONITORING
Special Session
Room 134, Moscone North  4:30 - 6 p.m.
Special Session

Session Description: Body-worn biometric monitoring and other player tracking tools continue to proliferate in elite athletics where enormous fragmentation and variety of solutions is standing in the way of the ability to provide real benefit to th

4:30 p.m.  Presenters
Leslie A. Saxon, MD, FHRS. University of Southern California, Los Angeles, CA
Isaiah Kacyvenski. MC10, Inc., Lexington, ME
Glenn Fox, PhD. USC Brain & Creativity Fellow, Los Angeles, CA

Session SP43. GROWING INTO AN EP LEADER
Special Session
Room 2011, Moscone West  4:30 - 6 p.m.
Special Session
CME/CE Hours: 1.5

Session Description: The session will demonstrate to attendees the various paths and strategies involved in growing into an EP leader from clinical practice, academic medicine, HRS leadership, and industry.

Chairs:  Omair Yousuf, MD. John Hopkins, Baltimore, MD
Ayman A. Hussein, MD. Cleveland Clinic Foundation, Cleveland, OH

4:30 p.m.  Connecting with Referring Providers and the Public
Rob A. Patrawala, MD, FHRS. Silicon Valley Cardiology, Palo Alto, CA

4:45 p.m.  Collaborations with Industry
Vivek Y. Reddy, MD. Mount Sinai School of Medicine, New York, NY

5 p.m.  An Electrophysiologist in Industry, Making the Leap
David M. Steinhaus, MD, FHRS, CCDS. Medtronic, Inc., Boston, MA

5:15 p.m.  How and Why to get Involved with Professional Societies
Oussama M. Wazni, MD. Cleveland Clinic, Cleveland, OH

5:30 p.m.  Expert Commentator
Dhanujaya R. Lakkireddy, MD, FHRS. University of Kansas Medical Center, Kansas City, KS

Session SP47. HOT FINDINGS IN ATRIAL FIBRILLATION RESEARCH
Special Session
Room 135, Moscone North  4:30 - 6 p.m.
Special Session

Session Description: The session will showcase important new findings in atrial fibrillation research made by promising junior faculty.

Chairs:  Patrick T. Ellinor, MD, PhD. Massachusetts General Hospital, Boston, MA
Jeffrey E. Olgin, MD, FHRS. University of California - San Francisco, San Francisco, CA

4:30 p.m.  Role of Inflammasome in AF
Na Li, PHD. Baylor College of Medicine, Houston, TX

4:45 p.m.  Role of Melanocytes in AF
Mark Levin, MD. Washington University St. Louis, St. Louis, MO

5 p.m.  Calcium Handling Deficits in Patients with AF
Jordi Heijman, PhD. Institute of Pharmacology, University of Duisburg-Essen, Essen, Germany

5:15 p.m.  New Genetic Risk Factors for AF
FRI

Steven A. Lubitz, MD. Massachusetts General Hospital, Boston, MA
5:30 p.m. Population-based Predictors of Atrial Fibrillation
Thomas A. Dewland, MD. Oregon Health & Science University, Portland, OR
5:45 p.m. Mechanism-based Ablation of Persistent AF
Tina Baykaner, MD MPH. UCSD, La Jolla, CA
4:30 p.m. Panelists
Gregory M. Marcus, MD, FHRS. University of California - San Francisco, San Francisco, CA
Dobromir Dobrev, MD, PhD. University of Duisburg-Essen, Essen, Germany

Session 116. WHAT IS THE OPTIMAL SINGLE CHAMBER ICD SYSTEM: TRANSVENOUS OR SUBCUTANEOUS?
Cardiovascular Implantable Electronic Devices - ICDs: Implantation, Programming and Follow-up Considerations
Room 3018, Moscone West 5:30 - 6:15 p.m.
Debate F
CME/CE Hours: 0.75
Supported by an unrestricted educational grant provided by Boston Scientific.

Session Description: This debate will explore whether a transvenous or subcutaneous ICD is the optimal choice for a single chamber system.

Chair: David B. DeLurgio, MD, FHRS. Emory University School of Medicine, Atlanta, GA
5:35 p.m. The Subcutaneous ICD is the Optimal Single Chamber ICD System
Reinoud E. Knops, MD, CCDS. Academic Medical Center, Amsterdam, Netherlands
5:50 p.m. The Transvenous ICD is the Optimal Single Chamber ICD System
Ronald D. Berger, MD, PhD, FHRS. Johns Hopkins University, Baltimore, MD
6:05 p.m. Rebuttal
Reinoud E. Knops, MD, CCDS. Academic Medical Center, Amsterdam, Netherlands
6:10 p.m. Rebuttal
Ronald D. Berger, MD, PhD, FHRS. Johns Hopkins University, Baltimore, MD