Final Program

September 24-26, 2010
Newport, Rhode Island

Program Chairs
Sanjeev Saksena, MD, FACC, FESC, FHRS
Thorsten Lewalter, MD, FESC, FHRS

Co-Directors
N. Mark Estes III, MD, FACC, FHRS
Andrea Natale, MD, FACC, FHRS
Jasbir Sra, MD, FACC, FHRS

Organized by
Electrophysiology Research Foundation

Endorsed by
Heart Rhythm Society
European Cardiac Arrhythmia Society
Sixth International Symposium on Interventional Electrophysiology in the Management of Cardiac Arrhythmias

Newport, Rhode Island
September 24-26, 2010

Organized by
The Electrophysiology Research Foundation
Warren, New Jersey

Co-Sponsored by
University of Bonn
Bonn, Germany

UMDNJ-Robert Wood Johnson Medical School,
New Brunswick, NJ

St. Marien Heart & Vascular Center
Bonn, Germany

Eastern Heart Institute
Passaic, NJ
## Interventional Cardiac Electrophysiology 2010

**An International Symposium**

**Course Directors:**
Sanjeev Saksena & Thorsten Lewalter

**Co-Directors:**
N. Mark Estes III, Andrea Natale, Jasbir Sra

### US Faculty

<table>
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<tr>
<th>Name</th>
<th>Title and Institution</th>
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<tbody>
<tr>
<td>Masood Akhtar, MD</td>
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<td>Sana Al-Khatib, MD</td>
<td>Assistant Professor of Medicine, Duke University, Durham, NC</td>
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<td>Penelope Boyden, PhD</td>
<td>Professor of Pharmacology, Columbia University Medical School, New York, NY</td>
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<tr>
<td>Hugh Calkins, MD</td>
<td>Professor of Medicine, Johns Hopkins School of Medicine, Baltimore, MD</td>
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<tr>
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<td>Associate Professor of Medicine, Columbia University Medical School, New York, NY</td>
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<td>Robert J. Myerburg, MD</td>
<td>Professor of Medicine, University of Miami School of Medicine, Miami, FL</td>
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<td>April Slee, MS</td>
<td>Project Director, Electrophysiology Research Foundation, Warren, NJ &amp; Axio Research Corporation, Seattle, WA</td>
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<td>Albert Waldo, MD</td>
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<td>David Wilber, MD</td>
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<td>Bruce Wilkoff, MD</td>
<td>Professor of Medicine, Cleveland Clinic, Cleveland, OH</td>
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### European Faculty

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<tr>
<th>Name</th>
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<tr>
<td>Johannes Brachmann, MD</td>
<td>Professor of Medicine, Klinikum Coburg, Coburg, Germany</td>
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<td>A. John Camm, MD</td>
<td>Professor of Medicine, St. George’s Hospital Medical School, London, United Kingdom</td>
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<td>Riccardo Cappato, MD</td>
<td>Associate Professor of Medicine, San Donato Hospital, Milan, Italy</td>
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<td>Gerhard Hindricks, MD</td>
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<td>Ellen Hoffmann, MD</td>
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<td>David Keane, MD</td>
<td>Professor of Medicine, St. Vincent’s University Hospital, Dublin, Ireland</td>
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<td>Emeritus Professor of Cardiology, University of Marseille, Marseille, France</td>
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<td>Professor of Medicine, University of Bonn, Bonn, Germany</td>
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<td>Berndt Luderitz, MD</td>
<td>Emeritus Professor, University of Bonn, Bonn, Germany</td>
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<tr>
<td>Ernst Vester, MD</td>
<td>Professor of Medicine, University of Duesseldorf, Duesseldorf, Germany</td>
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FRIDAY, SEPTEMBER 24

7:00 A.M. - 8:00 A.M.  Breakfast in Brenton Hall

Workshop 1: Imaging and Mapping in the EP Lab – New Techniques and How to Apply Them
Location: Rose Island II

8:00 A.M. - 10:00 A.M.  Co-Chairs: Jasbir Sra & Hugh Calkins

8:00 A.M. - 8:20 A.M.  Intracardiac Echocardiography: How to perform a comprehensive anatomic and physiologic study: Sanjeev Saksena

8:20 A.M. - 8:40 A.M.  Cardiac MRI and Cardiac CT: Anatomic fundamentals: Jasbir Sra

8:40 A.M. - 9:00 A.M.  3D Echo – Applications in EP Laboratory Procedures: Ellen Hoffman

9:00 A.M. - 10:00 A.M.  Panel Discussion & Case Demonstrations

9:00 A.M. - 9:15 A.M.  Case Demonstration: MRI/CT Images and Interpretation: Jasbir Sra & Johannes Brachmann

9:15 A.M. - 9:30 A.M.  Case Demonstration: 3D & Catheter Mapping Fusion Techniques Hugh Calkins

9:30 A.M. - 10:00 A.M.  Panel Discussion

10:00 A.M. - 10:30 A.M.  Coffee Break
Visit Exhibits

10:30 A.M. - 12:30 P.M.  Co-Chairs: David Keane & John Fisher

10:30 A.M. - 10:50 A.M.  Fusion of Imaging Technologies: How, When & For Whom: Hugh Calkins


11:10 A.M. - 11:30 A.M.  Mapping and Ablation of VF: How and For Whom: David Wilber

11:30 A.M. - 12:30 P.M.  Panel Discussion & Case Demonstrations

11:30 A.M. - 11:45 A.M.  Case Demonstration: VF Ablation: Ernst Vester

11:45 A.M. - 12:00 P.M.  Case Demonstration: The “Mediguide” Mapping & Ablation Experience – Gerhard Hindricks

12:00 P.M. - 12:15 P.M.  Panel Discussion
Workshop 2: New Drug and Device Therapy in Atrial Fibrillation
Location: Rose Island I

8:00 A.M. - 10:00 A.M.  Co-Chairs: Michael Rosen & Albert Waldo
New Concepts in Understanding and Modulating Cardiac Repolarization

8:00 A.M. - 8:20 A.M.  New Targets for Antiarrhythmic Drug Therapy: Atrial specific agents and substrate modifiers: James Coromilas

8:20 A.M. - 8:40 A.M.  Methods Used in Studying Arrhythmias Today: Penelope Boyden

8:40 A.M. - 9:00 A.M.  Principles of Stem Cell Therapy: A primer for clinicians: Michael Rosen

9:00 A.M. - 9:30 A.M.  Delivering a Stem Cell Line with Three Dimensional Navigation: Warren Sherman

9:30 A.M. - 10:00 A.M.  PANEL DISCUSSION

10:00 A.M. - 10:30 A.M.  Coffee Break
Visit Exhibits

10:30 A.M. - 12:30 P.M.  Co-Chairs: Michael Ezekowitz & Warren Sherman

10:30 A.M. - 10:50 A.M.  Dabigtran: Pharmacology and Clinical Trials: Michael Ezekowitz


11:10 A.M. - 11:30 A.M.  How and When to Use Device Therapy: Thorsten Lewalter


11:45 A.M. - 12:15 P.M.  PANEL DISCUSSION: How to Manage Dabigtran in Clinical Practice

12:15 P.M. - 1:15 P.M.  LUNCH- Brenton Hall

Workshop 3: New Antiarrhythmic Drug Therapy: Clinical Practice and Changing Guidelines
Location: Rose Island I

1:30 P.M. - 3:15 P.M.  Co-Chairs: Gerald Naccarelli & Ernst Vester

1:30 P.M. - 1:50 P.M.  Dronedarone: Clinical Pharmacology & Efficacy – Safety: Albert Waldo

1:50 P.M. - 2:10 P.M.  Dronedarone: Interpreting the Clinical Trials Data: Gerald Naccarelli
2:10 P.M. - 2:30 P.M. Dronedarone: Applications to New and Existing Patients and the ESC Practice Guidelines: Samuel Levy

2:30 P.M. - 3:15 P.M. **Panel Discussion & Case Studies**

**Case Studies:** Gerald Naccarelli
- Lone AF
- AF with CAD and Hypertension
- AF with Heart Failure

3:15 P.M. - 3:45 P.M. **Coffee Break**
Visit Exhibits

**Workshop 4: Advanced Catheter Ablation - New Technologies and Intervention Targets**

**Location:** Rose Island II

1:30 P.M. - 2:30 P.M. Co-Chairs: Andrea Natale & Ralph Damiano

1:30 P.M. - 1:45 P.M. Surgical Advances in AF Ablation: Ralph Damiano

1:45 P.M. - 2:00 P.M. Using a Toolbox Approach to AF Ablation: Linear, Focal, Septal and Biatrial Lesions: David Keane

2:00 P.M. - 2:15 P.M. Pulmonary Vein Electrophysiology During Cryo-Balloon-Ablation as a Predictor for Procedural Success: Ellen Hoffman

2:15 P.M. - 3:15 P.M. **Panel Discussion & Case Demonstrations**

2:15 P.M. - 2:30 P.M. **Case Demonstration:** Multi-electrode Catheter Technology for AF Ablation: David Keane

2:30 P.M. - 2:45 P.M. **Case Demonstration:** Biatrial Mapping of Human AF Rotors: Randy Nagarakanti

2:45 P.M. - 3:00 P.M. **Case Demonstration:** Mapping CFAE Sites: David Wilber

3:00 P.M. - 3:15 P.M. **Panel Discussion**

3:15 P.M. - 3:45 P.M. **Coffee Break**
Visit Exhibits

3:45 P.M. - 5:30 P.M. Co-Chairs: Raj Kaushik & John Fisher

3:45 P.M. - 4:05 P.M. Advanced Mapping and Navigation Techniques in AF: Bruce Lindsay

4:05 P.M. - 4:25 P.M. Epicardial and Substrate Ablation Techniques in Ventricular Tachycardia: Bruce Lindsay

4:30 P.M. - 5:30 P.M. **Panel Discussion & Case Demonstrations**

4:30 P.M. - 4:45 P.M. **Case Demonstration:** Surgical AF Ablation: Ralph Damiano

4:45 P.M. - 5:00 P.M. **Case Demonstration:** Linear and Focal Biatrial Ablation in Persistent AF: Jasbir Sra
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<tr>
<td>5:00 p.m. - 5:15 p.m.</td>
<td><strong>CASE DEMONSTRATION:</strong> Interventional Pericardial Technique in Ablation Procedures: <em>Bruce Lindsay</em></td>
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<td>5:15 p.m. - 5:30 p.m.</td>
<td><strong>PANEL DISCUSSION</strong></td>
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**Workshop 5: New Techniques for Device System Implantation, Monitoring and Implementing Hybrid Therapy**  
**Location:** Vanderbilt Room

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| 1:30 p.m. - 3:30 p.m. | **Co-Chairs:** Werner Jung & Deepak Saluja  
1:30 p.m. - 1:50 p.m. | Initial Experience with MRI Safe Devices: *Werner Jung*  
1:50 p.m. - 2:10 p.m. | Initial Clinical Experience with Extrathoracic Defibrillation Using Temporary and Implanted Systems: *Riccardo Cappato*  
2:10 p.m. - 2:30 p.m. | Wireless Telemetry and Remote Monitoring of ICDs: Practical implementation and environmental interactions: *Bruce Wilkoff* |
| 2:30 p.m. - 3:15 p.m. | **PANEL DISCUSSION & CASE DEMONSTRATIONS**  
2:30 p.m. - 2:50 p.m. | **CASE DEMONSTRATION:** Extraction of Pacemaker & ICD Leads: *Raj Kaushik & Bharat Kantharia*  
2:50 p.m. - 3:00 p.m. | **CASE DEMONSTRATION:** Intraoperative Optimisation of CRT with ICE: *Sanjeev Saksena*  
3:00 p.m. - 3:15 p.m. | **CASE DEMONSTRATION:** Implantation and Extraction of New Coronary Sinus Leads: *Bruce Wilkoff* |
| 3:15 p.m. - 3:45 p.m. | **Coffee Break**  
Visit Exhibits |
| 3:45 p.m. - 4:45 p.m. | **Co-Chairs:** David Keane & Bruce Wilkoff  
3:45 p.m. - 4:05 p.m. | Optimising Device and Ablation Therapy, How to use Hybrid therapy: Drugs and ablation: *Suneet Mittal*  
4:05 p.m. - 4:25 p.m. | Clinical Trials in Hybrid Therapy: *Nicholas Skadsberg*  
4:25 p.m. - 4:45 p.m. | How to use Implantable Loop Recorders in Clinical Trials & Hybrid Therapy: *Werner Jung* |
| 4:45 p.m. - 5:30 p.m. | **PANEL DISCUSSION & CASE DEMONSTRATIONS**  
4:45 p.m. - 5:00 p.m. | **CASE DEMONSTRATION:** Rhythm Control with an “Ablate and Pace” Strategy: *Sanjeev Saksena*  
5:00 p.m. - 5:15 p.m. | **CASE DEMONSTRATION:** Subcutaneous ICD Implant: *Riccardo Cappato*  
5:15 p.m. - 5:30 p.m. | **PANEL DISCUSSION** |
SATURDAY, SEPTEMBER 25, 2010

7:00 A.M. - 8:00 A.M.    BREAKFAST - Brenton Hall

Opening Plenary Session: Interventional EP: Past, Present and Future
Location: Grand Ballroom

8:00 A.M. - 8:35 A.M.    WELCOME: S. Saksena / Th. Lewalter


Session I: Advances in Basic Science and Regenerative Medicine
Location: Grand Ballroom

8:40 A.M. - 10:30 A.M.    Co-Chairs: Mark Estes & Dan Roden

8:40 A.M. - 9:00 A.M.    Subcellular and Extracellular Targets for Intervention: Jose Jalife

9:00 A.M. - 9:20 A.M.    Genomics and Antiarrhythmic Drugs: Dan Roden


9:50 A.M. - 10:10 A.M.    Personalized Medicine and the Genotype-Phenotype Dilemma: Dan Roden

10:10 A.M. - 10:30 A.M.    PANEL DISCUSSION

10:40 A.M. - 11:00 A.M.    Coffee Break
                        Visit Exhibits

Session II: New Sudden Death Syndromes: Concepts and Clinical Management
Location: Grand Ballroom

11:00 P.M. - 12:00 P.M.    Co-Chairs: R. J. Myerburg & Samuel Levy

Idiopathic Ventricular Fibrillation Revisited: Masood Akhtar

Sudden Death and Repolarization Syndromes: Epidemiology and Clinical Evaluation: R.J. Myerburg

The Short QT Syndrome: New approaches in Management: Mark Estes

Cardiac Inward Rectifier Potassium Channels: A New Antifibrillatory Target: Jose Jalife
12:00 p.m. - 12:30 p.m.  **Keynote Lecture:** ECG Repolarization Abnormalities (J-wave syndromes) and Idiopathic Ventricular Fibrillation: Diagnosis and Management: Sam Levy

12:30 p.m. - 12:45 p.m.  **Panel Discussion**

12:45 p.m. - 1:45 p.m.  **Lunch** - Brenton Hall

**Session III: Taking New Therapies From Bench to Bedside**  
*Location: Grand Ballroom*

2:00 p.m. - 3:00 p.m.  **Co-Chairs:** John Camm & Gerhard Hindricks

2:00 p.m. - 2:15 p.m.  Clinical Outcome Trials with Second Generation Multichannel Antiarrhythmics: Dronedarone beyond ATHENA: Gerald Naccarelli

2:15 p.m. - 2:30 p.m.  Clinical Trials with Atrial Specific Agents: Ranolazine and Vernakalant: John Camm

2:30 p.m. - 2:45 p.m.  Device Based Monitoring for Efficacy of Interventions and Cryptogenic Stroke: Gerhard Hindricks

2:45 p.m. - 3:00 p.m.  An update on Pivotal AF trials – CASTLE – AF, RAAFT – 2, Cryo-balloon Ablation, CABANA: David Wilber

3:00 p.m. - 3:20 p.m.  **Panel Discussion**

3:20 p.m. - 3:40 p.m.  **Coffee Break**  
Visiting Exhibits

**Session IV: New Technologies and Therapies**  
*Location: Grand Ballroom*

3:45 p.m. - 5:45 p.m.  **Co-Chairs:** John Fisher and James Coromilas

3:45 p.m. - 4:05 p.m.  Advances in Syncope: John Fisher

4:05 p.m. - 4:25 p.m.  New Approaches to Left Ventricular Pacing: The endocardial route: Johannes Brachmann

4:25 p.m. - 4:45 p.m.  Wireless and Leadless Defibrillation: Riccardo Cappato

4:45 p.m. - 5:05 p.m.  Remote Patient Management Using Implantable Devices: Suneet Mittal

5:05 p.m. - 5:30 p.m.  **Panel Discussion**

6:30 p.m. - 8:30 p.m.  **Symposium Reception & Museum Tour** -  
Tennis Hall of Fame, Bellevue Avenue, Newport
SUNDAY, SEPTEMBER 26, 2010

7:00-8:00 Breakfast (Ballroom C/D)

Session V: New Standards and Novel Directions in Cardiac Arrhythmia
Research Assessment and Program Development
Location: Grand Ballroom

8:00 A.M. - 9:45 A.M. Co-Chairs: Ralph Damiano & Mark Estes

8:00 A.M. - 8:30 A.M. KEYNOTE LECTURE: Design and Execution of Clinical Outcome Trials in Atrial Fibrillation: Albert Waldo

8:30 A.M. - 8:50 A.M. New Directions in Clinical Outcomes Assessment: Sana M. Al-Khatib

8:50 A.M. - 9:05 A.M. New Clinical Outcomes from Revisiting AFFIRM: April Slee


Session VI: Advances in AF Therapy: A critical reassessment
Location: Grand Ballroom

9:45 A.M. - 11:00 A.M. Co-Chairs: Ellen Hoffman & Sana Al-Khatib

9:45 A.M. - 10:05 A.M. Catheter Ablation of Paroxysmal AF: Ernst Vester

10:05 A.M. - 10:25 A.M. Catheter Ablation of Persistent and Permanent AF: Thorsten Lewalter

10:25 A.M. - 10:45 A.M. Hybrid AF Strategies in An Evidence-Based Milieu: How can we design and execute hybrid clinical trials: Sanjeev Sakena

10:45 A.M. - 11:00 A.M. PANEL DISCUSSION

11:00 A.M. - 11:15 A.M. Coffee Break
Visit Exhibits
**Session VII: Clinical Trials**

**Location: Grand Ballroom**

**11:15 A.M. - 1:00 P.M.  Co-Chairs: Thorsten Lewalter & Andrea Natale**


**11:55 A.M. - 12:15 P.M.  Pivotal CRT Trials in Heart Failure: MADIT-CRT, REVERSE: Bruce Wilkoff**

**12:15 P.M. - 12:35 P.M.  Cellular Replacement Therapy for Arrhythmia Treatment: Thorsten Lewalter**

**12:35 P.M. - 12:55 P.M.  Randomized Controlled Trials and Registries for AF: A look back and the view forward: Andrea Natale**

**12:55 P.M. - 1:00 P.M.  CLOSING REMARKS: Germany 2014: Thorsten Lewalter**
Platinum

Gold

Silver

Friends

Exhibits