**Wednesday, May 8, 2019**

**Basic/Translational Science Forum (BSF)**

**Theme: Omics and population sciences:**

**Big data analysis to study heart rhythm diseases**

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<th>BSF Session 1: Population sciences/informatics and arrhythmia disorders</th>
<th>BSF Session 2: Omics and heart rhythm</th>
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| **10:00-10:45** Zipes lecture (40 min + 5 min Q&A)  
*Sumeet Chugh, MD, Cedars-Sinai, Los Angeles, CA* | **11:10-11:35** Omics, arrhythmias and the metabolism of the heart.  
*Brian O’Rourke, PhD, Johns Hopkins, Baltimore, MD* |
| **10:45-11:10** Electronic medical records, phenotype risk scores and the genetic causes of common rhythm disorders.  
*Dan Roden, MD, Vanderbilt University, Nashville, TN* | **11:35-12:00** A proteomics approach to the study of ion channel complexes.  
*Alicia Lundby, PhD, University of Copenhagen, Copenhagen, Denmark* |

**CES Poster Viewing and Judging in adjacent room**

**12:00 – 2:20** Poster Viewing  
**12:00 – 1:15** Poster Judging

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<th>BSF Session 3: Big data and artificial intelligence in the study of heart rhythm</th>
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| 1:15-1:40 Cardiac arrhythmia detection and deep machine learning.  
*Andrew Ng, Stanford University, Stanford, CA* |
| 1:40 -2:05 Towards a fully automated MRI-based reconstruction of the left atrial cavity.  
*Jichao Zhao, PhD, University of Auckland, Auckland, New Zealand* |

2:05-2:20 Break

**CARDIAC ELECTROPHYSIOLOGY SOCIETY ANNUAL MEETING**

**Room 22-23 North Moscone**

**Predicting and treating atrial fibrillation:**

**The impact of big data analysis**

| 2:20-2:30 | **Annual Business Meeting**  
Mario Delmar, MD, PhD, President  
Sumeet Chugh, MD, Vice President  
Charles Antzelevitch, PhD, Secretary-Treasurer |
| 2:30-2:55 | Atrial fibrillation: lessons learned from the Framingham study  
*Emelia Benjamin, MD, ScM, Boston University School of Medicine, Boston, MA* |
| 3:05-3:20 | Introduction of G.K. Moe Speaker – Mario Delmar, MD, PhD, NY University, New York, NY |
| 2:55-3:20 | Monitoring devices to detect early stage AF  
*Gregory Marcus, University of California @San Francisco, San Francisco, CA* |
| 3:50-4:35 | G. K. Moe lecture. Atrial fibrillation - From genetics to mechanisms and therapeutic targets  
*Patrick Ellinor, MD, PhD, Massachusetts General, Boston, MA* |
| 3:20-3:45 | Present and future of AF ablation and other invasive approaches  
*Hugh Calkins, MD, Johns Hopkins, Baltimore, MD* |
| 4:35-4:45 | Announcement of winners of CES YIA Awards - Sumeet Chugh |

4:45-6:15 **Wine and cheese CES Reception in Adjacent Room – CES MEMBERS ONLY**