

Cardiac Disease: from Algorithm to Product

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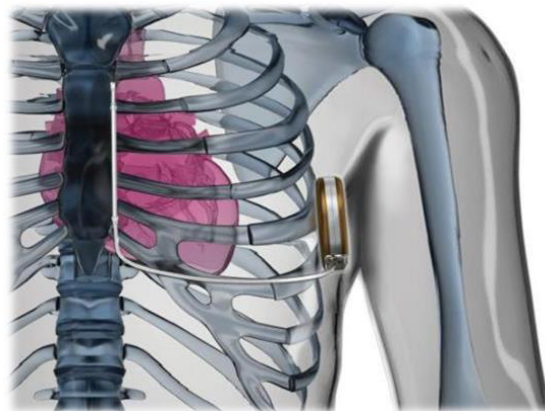
Foley Hoag LLP recently advised Living Proof, Inc., the innovative, technology-based beauty company, in its entering into a global venture with Valeant Pharmaceuticals International, Inc. to develop, distribute and commercialize products for aesthetic dermatology which will be sold exclusively through Valeant's powerful direct-to-physician channel.

Program Description

Marching to its own rhythm when left alone, heart muscle is a complex organ which responds to neural control and local drummers. When viewed from outside it produces a dynamic 3D electric field whose magnitude and direction, the cardiac vector, can reveal much about its health and disease.

Mathematical algorithms for analyzing this wealth of electrical data can identify when the local drummers are about to send the entire cardiac muscle into quivering fibrillation, either imminently or within the next few weeks, and are the basis for devices to prevent this by depolarizing the heart muscle to restore its normal rhythm or alerting care givers of an imminent issue.

The Director of Pediatric Electrophysiology at Tufts University Medical Center will educate us on her area of expertise to help us understand the warning provided by Infobionic's MoMe device and the shocking results of Boston Scientific's leadless subcutaneous defibrillator.



Boston Scientific's leadless subcutaneous defibrillator.

The MoMe™ System



One Device. One Solution.

MoMe™ offers a comprehensive remote monitoring solution including an extensive cloud-based architecture for analysis, a patient device, and a physician user interface for remote management.

Upcoming Events

Wed May 7, 2014 Forum, 5:30 – 8:00 PM

Medical Device Innovation Under the Affordable Care Act: Where are the Biggest Opportunities for Growth?

What is the intent of the ACA?

What are the results to date of the ACA and expectations for the future?

How will the ACA impact the medical device and life sciences areas going forward?

How will the ACA impact opportunities for future medical product development?

(At Constant Contact, Waltham)

Wed June 11, 2014, 3:30 – 8:00 PM

MDG Special Event

The Year of the Brain: Advances in Imaging, Diagnostics and Therapeutic Delivery

Innovative research + Entrepreneurs =
New Treatments for Neurologic Disease

(Foley Hoag LLP, 155 Seaport Blvd., Boston)

Moderator



Richard Cohen, M.D., Ph.D., Whitaker Professor in Biomedical Engineering, MIT

Dr. Cohen received his MD degree from Harvard Medical School in 1976 and his PhD in Physics in the same year from MIT. He pursued clinical training at the Brigham and Women's Hospital in Boston in Internal Medicine and Cardiology. Since 1979 he has been on the MIT faculty where he is currently the Whitaker Professor in Biomedical Engineering within the Institute of Medical Engineering and Science.

For 25 years he served as an Associate Physician at the Brigham and Women's Hospital, for ten years he directed the Center for Biomedical Engineering of the Harvard-MIT Division of Health Sciences and Technology (HST), and for eight years he was Team Leader of the Cardiovascular Alterations Team of the National Space Biomedical

Research Institute. For eight years Dr. Cohen co-directed the Biomedical Enterprise Program of HST and the MIT Sloan School of Management. Students in this program obtained an MBA degree and an SM degree in Health Sciences and Technology preparing them for leadership positions in the biomedical industry.

Dr. Cohen's research involves the application of physics and engineering to solving problems in biology and medicine, particularly in the cardiovascular area. His work ranges from computer simulations to animal studies to clinical investigations. Dr. Cohen has published over 250 scientific papers and has had over 30 US patents issued. One of the technologies developed in Dr. Cohen's laboratory is the measurement of microvolt T-wave alternans to identify patients at risk of sudden cardiac death. This technology has been commercialized, cleared by the FDA, and is reimbursed under Medicare.

Panelists



Ravi Kuppuraj, Ph.D., Chief Technology Officer InfoBionic, Inc.

Ravi is a medical industry veteran, with over 20 years of experience in cardiology patient monitoring and technology development. Prior to InfoBionic, Ravi served as the VP of Research and Development at Draeger Medical, a global powerhouse in patient monitoring, anesthesia delivery, and respiration technology. Before Draeger Medical, Ravi headed R&D efforts at SpaceLabs

Medical, in Seattle. He was instrumental in driving the development of key technologies and products in patient monitoring solutions, as well as managing SpaceLabs India R&D operations.

Ravi holds an MBA from the UNC at Chapel Hill, a PhD and MS in biomedical engineering from Louisiana Tech University and University of Miami respectively, and a BSEE from Bangalore University.



Dr. Alisa Nicksch, Director of Pediatric Electrophysiology and the Pediatric Cardiopulmonary Exercise Lab at Tufts University Medical Center

Dr. Nicksch provides her pediatric cardiology expertise to 7 regional hospitals in Massachusetts. Her training in pediatric cardiology was completed at Morgan Stanley Children's Hospital of New York at Columbia University Medical Center, and she continued her electrophysiology training at Stanford University and UCSF Medical Cen-

ters. She is an active researcher in the fields of pediatric medical devices and the digital health space, conducting research as a primary investigator with startup companies developing innovative technologies for pediatric care. She has served as a fellow at Doximity, where she provided leadership in engaging physicians to integrate mobile health into their practices. She is also currently an active advisor to several medical device and mobile health technology startups.



Richard Sanders, VP of Scientific Affairs for CRM

Rich joined Boston Scientific in 1980 (formerly Intermedics and then Guidant) and has held a variety of leadership roles in R&D and Marketing. His entire career has been focused on bringing new technology to the CRM industry beginning in the early 80's with the development of the Cosmos pacing system.

He has influenced the design of numerous pacing, ICD and HF products in his various industry roles including VP of Clinical Engineering and Research 1986-1997, VP of the Tachycardia Business Unit 1997-1999, VP of Research

1999-2002, VP of Global Marketing 2002-2005 and VP of Sales and Marketing(Cameron Heath) 2005-2011. His current role is VP of Scientific Affairs where he is focused on the strategies/tactics for broadening the role of the SICD and key opinion leader engagement.

He has numerous patents and co-authored publications and book chapters in the field of CRM. Rich has been a member of HRS since 1991 and received his TESTAMUR NASPEX/AP/Pacing in its very first offering in 1989. He has worked with many of the world's EP opinion leaders. Rich earned a BS in Chemical Engineering from Cornell '72 and an MS in Biomedical Engineering '74.

Co-Champions for this Forum

Peter N. Madras, M.D., Senior Staff, Department of Urology, Lahey Health and Hospitals

Jerrold M. Shapiro, Ph.D., President, Floelle Inc.; President and CEO, Fem-Medical LLC

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MDG Boston

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MDG Boston 2013-2014 Program Calendar

Forum Panels

(Location: Constant Contact Headquarters, Waltham, unless noted otherwise)

- Sep 11 Boston's Emergency Medicine Response to the Marathon Attacks:
The Inside Story of Saving Lives by Advance Planning & Rapid Deployment
- Oct 9 Developing Medical Devices For Children:
Opportunities & Challenges (At Children's Hospital, Boston)
- Nov 6 Dentistry:
The Rodney Dangerfield of Medical Devices
- Dec 4 New Product Launch in Asia-Pacific:
How to Attack an Unmet Need
- Jan 8 Challenges Within Internal Culture, Communication & Collaboration Processes
- Feb 5 Advances in Human-Robotic Interaction:
Present and Future Impact on the Medical Field
- Mar 5 Commercialization of Implantable and Innovative Devices:
Development of Testing Standards to Minimize Risk and Maximize Safety
- Apr 2 Cardiac Disease:
From Algorithms to Products
- May 7 Medical Device Innovation Under the Affordable Care Act:
Where are the Biggest Opportunities for Growth?
- June 4 Tissue Regeneration: Regenerative Medicine & Materials

Member News

MDG welcomes these new members
who joined last month:

Paul Hayre
Muhammad Khan
Lynn Kibblehouse
Scot MacGillivray
Ian Mrcury
Aaron Whipple

In addition, we welcome back those who
have renewed their MDG membership:

Juergen Blume
Roy Coleman
Paul Danis
Gerald Jennings
Michael Manzo
Peter Nalbandian
Barry Sands
Adrian Timmers
J.S. Wiley

About MDG Boston

MDG is the professional association for career building, knowledge acquisition and mutual support for New England medical technology professionals.

MDG sponsors Forums, Networking, SIGs (Special Interest Groups), Workshops and Special Events where diverse industry leaders can share their experience and knowledge as presenters and one-on-one.