

MDG March Forum

Advances in Human-Robotic Interaction: Present and Future Impact on the Medical Field

Wednesday, March 5, 2014 • 5:30 – 8 p.m. Constant Contact, Waltham, Mass.

■ Program Description

The increasing use and adoption of robots is one of the most exciting developments in the medical field for the last 100 years. Whether it is the Da Vinci Surgical System conducting a hysterectomy or prostatectomy, the use of Baxter Robots in R&D laboratories or leveraging medical resources with the RP–Vita during hospital rounds, robots have clearly stepped out from the pages of science fiction. The initial concern that robots could create disruptions in the medical setting or, even worse, harm a patient, have been assuaged by advancements in technology, design and manufacturing techniques that have improved reliability, robustness and capabilities while reducing costs. Today, autonomous intelligent medical platforms are increasingly interacting with people in a safe, non-threatening manner.

Our March Forum features a panel of experts in surgical procedures, design and development, and robot manufacturing and customer focus. They will share why and how robots are becoming crucial in all aspects of health care, what advances and improvements are predicted for robotic health care and some of the key challenges that remain in bringing more of these devices to the delivery of medical care.

Panelists

Scott Stropkay, *Partner*, Essential Design **Jerry Jennings**, *Vice President of R&D*, Corindus Vascular Robotics **Ingolf Tuerk**, **M.D.**, *Chief of Urology*, *St. Elizabeth's Medical Center*

■ Moderator

Dustin Burke, Senior Software Engineer, Aptima

■ March Event Co-champions

Mario Castañeda, *Principal*, Blue Sail Marketing **Paul White**, *Sales and Business Development Manager*

Agenda

5:30 Registration, informal networking, buffet dinner

6:15 MDG announcements

6:20 Moderator introduction of panelists

6:30 Panelist presentations

7:30 Audience Q&A

8:00 Continued networking

About MDG

MDG's mission is to contribute to the continuing development of medical devices and other medical technologies by enhancing the professional development of its members, fostering and supporting entrepreneurial thinking, serving as a forum for exploration of new business opportunities and promoting best practices in enterprise management.

■ Speaker Biographies



Scott Stropkay

As a lateral-thinking designer and strategist, **Scott Stropkay** is building answers to some of the most compelling questions of our day. Founding partner of the design consulting firm Essential, Mr. Stropkay helps businesses create physical products, digital products, and services in the consumer, healthcare, and commercial markets. He leads teams of researchers, designers, and engineers to build better discovery processes, define opportunities, and leverage design-thinking skills. His work informs strategies and development for clients including Mayo Clinic, iRobot, WellDoc, Healthways, P&G, Becton Dickinson and Philips Healthcare. He has worked in both corporate and consulting design capacities for over 25 years. He speaks at design and innovation conferences as well as academic institutions. Prior to Essential, Mr. Stropkay led an integrated design, human factors and interaction design team at IDEO. He was also a director of design at both Gillette and Fitch. He holds a bachelor of fine arts in industrial design from the Cleveland Institute of Art. He serves on the board of advisors of the Design Management Institute and writes for *Innovation*, the journal of the Industrial Designers Society of America.



Jerry Jennings

Jerry Jennings is vice president of R&D at Corindus Vascular Robotics where he leads a team in the conceptualization and development of new vascular robotic capabilities and products for percutaneous coronary interventions and other vascular applications. He joined Corindus in 2010, bringing over 25 years of cumulative experience in engineering and medical product development. Prior to Corindus Mr. Jennings was vice president of R&D for Medica Corp., a developer and manufacturer of in-vitro diagnostic analyzers. He also led R&D groups for Philips Medical Systems in its advanced life support monitor/defibrillator business and worked at Analogic's medical imaging division where he was instrumental in developing cardiac ultrasound technologies from concept through commercialization. He holds a B.S. in electrical engineering from Merrimack College.



Ingolf Tuerk

Ingolf Tuerk, M.D., is chief of urology at St. Elizabeth's Medical Center and professor of urology at Tufts University School of Medicine. A world-renowned laparoscopic and robotic urologic surgeon, Dr. Tuerk has performed 1,500 laparoscopic radical prostatectomies since 1999 and 2,500 robotic radical prostatectomies since 2006. He is responsible for pioneering several laparoscopic as well as robotic surgery techniques, including radical and partial nephrectomy, radical prostatectomy, right side donor nephrectomy and radical cystectomy with urinary diversion. In 2002 Dr. Tuerk joined the Institute of Urology at Lahey Clinic and as director for minimal invasive laparoscopic/robotic surgery and vice chairman he helped develop robust laparoscopic and robotic surgery programs. Since he joined St. Elizabeth's in 2008, the hospital established one of New England's premier robotic surgery programs with 700 - 800 robotic procedures performed annually. Dr. Tuerk received his medical degree from the medical school at Humboldt University in Berlin in 1989, after which he trained at the city's Charite Hospital.



Dustin Burke

Dustin Burke, senior software engineer and lead for technology stacks at Aptima, is responsible for defining Aptima's technology strategies, enterprise architecture and common technology stacks that span R&D capability areas and oversees the robotics & autonomous systems R&D portfolio, leading business development activities in this area and architecting technology solutions. He is the lead developer for Aptima's Multimodal Interaction Middleware and has developed machine learning algorithms for gesture recognition, utilizing open source.

Upcoming Events

March 25 Networking

How to Effectively Network in the 21st Century and Beyond

(At Constant Contact, Waltham)

Join the MDG "Networking Nexus" and MDG will help you tie in the aspects of networking effectively in the digital age of social media, provide tips, tools and tactics for strategic networking and a safe environment to try out your newly acquired skills. Whether you have been in your industry for 20 years, are a recent graduate or somewhere in between, networking is the key essential to furthering your career, growing your business, getting that next big account or job.

April 2 Forum

Cardiac Disease: From Algorithm to Product

(At Constant Contact, Waltham)

Marching to its own rhythm when left alone, heart muscle is a complex organ that responds to neural control and local drummers. Our panel of experts will help us understand the warnings provided by devices that rely on algorithms that analyze a wealth of electrical data that can identify when the local drummers are about to send the entire cardiac muscle into quivering fibrillation. These devices can restore the heart's normal rhythm or alert care givers of an imminent issue.

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News You Can Use

New Members

MDG/Boston welcomes new members who have joined in the past two months:

Brian Butler Richard Hart Steven akitin

Bradford Fanger Daniel John Healey Thomas Root
Alok Gupta John Krowchun Keith Wheeler

Eric Poole

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

John CadiganBetsy GoodrichLarry RothPaul WhiteKevin CotterPhil LockwoodKim StephensMaria Shepherd

Stay Connected with MDG



Andrea Desrosiers

- Medical Development Group
- MDG Product Development & Manufacturing Outsource SIG
- ▶ MDG Marketing & Sales Special Interest Group



Charles Sweet

twitter.com/MedDevGroup

Medical Development Group 2013-2014 Program Calendar

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

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)

Dentistry: The Rodney Dangerfield of Medical Devices Nov 6

New Product Launch in Asia-Pacific: How to Attack an Unmet Need Dec 4

Jan 8 Challenges Within Internal Culture, Communication & Collaboration Processes

Mar 5 Advances in Human-Robotic Interaction: Present and Future Impact on the Medical Field

Cardiac Disease: From Algorithms to Products Apr 2

Medical Device Innovation Under the Affordable Care Act: Where are the Biggest Opportunities for Growth? May 7

June 4 Tissue Regeneration: Regenerative Medicine & Materials

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