Making Medical Technology More Human: Can Future Technologies Make Our Lives Better?

**Program Description**

MDG members will be treated to a series of three presentations about making medical devices more human.

The presenters, who are not medical device developers per se, will talk about the latest developments in their fields/industries, and speculate about the ramifications for how people might interact with future medical technologies in a more humanized manner.

And let’s face it! While the medical device industry is known for technological innovation, it is not necessarily the case when it comes to the user experience. More to the point, and with some exceptions, medical device manufacturers are largely followers. They eventually incorporate user interface design features that have long been proven in consumer, business, and industrial applications, perhaps due to regulatory constraints and conservatism.

This explains why point-and-shoot cameras and cheap printers can be equipped with high resolution color displays when some contemporary medical devices still have monochrome, segmented LCD displays. Or, why smartphones can listen to us and talk back while some medical devices require arcane, time consuming, and error-prone data entry procedures.

Will the medical industry always be a laggard when it comes to delivering a compelling user experience? Or, can the medical industry quicken the pace of development, at least from a user experience perspective, thereby making medical devices more human? Let’s see what our guest speakers will have to say and be ready to support or challenge their prognostications.

**Upcoming Events**

- **Wednesday Jan 7, 2015**
  5:30 – 8:30 PM
  Constant Contact
  Waltham, MA

  **Meeting Agenda:**
  - 5:30 - 6:15: Arrival, Networking & Dinner
  - 6:15 - 6:30: Announcements & Introductions
  - 6:30 - 7:30: Speakers
  - 7:30 - 8:00: Q&A
  - 8:00 - 8:30: More Networking

- **Who Should Attend:**
  Any executive, manager or professional in the medical device industry who wants to better understand:
  - Innovative approaches that are enabling complex medical device technologies to better serve end users; i.e., healthcare practitioners, caregivers and patients.
  - How “bottom-up” and “top-down” initiatives are contributing.
  - Business opportunities that help medical product design and practitioner/patient needs/expectations to become better aligned.

- **New technologies frequently promise improved effectiveness, performance and outcome, but are often burdened with increased complexity, cost and stress.**

**January FORUM**

**Upcoming Events**

- **Wednesday Feb 4 5:30 - 8:00 PM**
  Forum: Devices And Combination Products For Neurodegenerative Disease
  (Constant Contact)

- **Wednesday Mar 4 5:30 - 8:00 PM**
  Forum: Combination Devices: Diversity In Type And Application
  (Constant Contact)

- **Wednesday Apr 4 5:30 – 8:30 PM**
  Forum: The Surgical Suite Responds to the New Business Model of Healthcare
  (Constant Contact)

- **Wednesday April 29 3:30 – 8:00 PM**
  SPECIAL EVENT: Connecting Medical Products to the Internet of Things (IOT)
  (Foley Hoag Law Offices South Boston, MA)
Panelists

**Michael Wiklund - Moderator**
General Manager - Human Factors Engineering, UL-Wiklund R&D, Professor of the Practice, Department of Mechanical Engineering, Tufts University.

As a Certified Human Factors Engineering Professional (CHFP), Mr. Wiklund has had a distinguished career conducting product research and design with a focus on medical technology.

He founded and served as President of Wiklund Research & Design, Inc., a professional consulting firm acquired in 2012 by UL (Underwriters Laboratories), an international firm specializing in safety science. Wiklund R&D offered a variety of human factors-related services and helped developed safe and usable products for major companies such as Baxter, Covidien, GE Healthcare, and Philips Healthcare.

Wiklund has had a 30-year affiliation with the Tufts Human Factors Engineering program and has authored and/or edited several important textbooks in the field of Human Factors Engineering, and published numerous articles related to the design and improvement of medical devices. He has a M.S., Tufts University, Engineering Design (Human Factors) and a B.S., Tufts University, Civil Engineering.

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**Rosalind Picard, Sc.D, FIEEE**
Founder, Professor and Director of the Affective Computing Research Group at the MIT Media Lab and co-director of the Things That Think Consortium.

Picard has co-founded two businesses, Empatica, Inc. and Affectiva, Inc. She started her career at AT&T Bell Labs, then joined the MIT Media Lab faculty in 1991.

She is internationally known for constructing mathematical texture models for content-based retrieval of images and for pioneering methods of automated search and annotation in digital video including the Photobook system.

She has over 200 publications spanning computer vision, pattern recognition, machine learning, human-computer interaction, wearable sensors and affective computing. She holds multiple patents, is a Fellow of the IEEE and has served on numerous international and national science and engineering program committees, editorial boards, and review panels.

She has consulted for Apple, AT&T, BT, HP, i.Robot, Merck, Motorola, and Samsung. She holds a bachelor’s degree in electrical engineering from the Georgia Institute of Technology, and master’s and doctorate degrees in electrical engineering and computer science from MIT.

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**Jeffrey Gerlach**
UX envisioner, Product & Experience team at Zipcar

He has a passion for solving problems and making technical solutions human. Combining deep knowledge in qualitative research, storytelling, and design, there is no part of the member experience he won’t address. As our resident researcher, Jeff is also working towards expanding qualitative research practices through hands-on training.

Before joining Zipcar in 2013, Jeff was an envisioner at the innovation consultancy Continuum where he partnered with Fortune 500 clients to create breakthrough products and services. Utilizing a deeply customer-centric and collaborative approach, he has worked on everything from healthcare to the future of the workplace.

Jeffrey is a graduate of the Industrial and Interaction Design program at Syracuse University and currently lives in Boston.

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Co-Champions

Mike Wiklund
Sean Phillips
Ed Dolan

**MDG Forum Fees** (Includes light dinner)

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<td>MDG Members</td>
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<td>Non-Members</td>
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<td>Students with valid ID</td>
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**Location**

1601 Trapelo Road, Waltham, MA
Located at Route 128/I-95, Exit 28B
Main building “under the clock.”

**Easy Online Registration**

www.mdgboston.org