Opportunities and Challenges in Surgical Robotics
Saturday April 21, 2012, 7:30 AM - 4 PM
Roberta and Stephen R. Weiner Department of Surgery
Carl J. Shapiro Simulation and Skills Center at
Beth Israel Deaconess Medical Center, Boston, Mass.

7:30–8:15 AM
Breakfast

8:15–8:30 AM
Introduction (Henrik Christensen, PhD, and Elliot Chaikof, MD, PhD)

8:30-9 AM
KEYNOTE SPEAKER: Henrik Christensen, PhD (Georgia Tech); Robotics, Science, and Society: Views from Washington

9–10:30 AM
SESSION 1: Emerging Technologies in Surgical Robotics
Katherine Kuchenbecker, PhD (University of Penn)* Haptic Systems in Surgical Robotics
Howard Choset, PhD (Carnegie Mellon University)* Merging Laparoscopic and Robotic Surgery
George Whitesides, PhD (Harvard University) * Soft Robotics

10–10:30 AM
Roundtable discussion

10:30–10:45 AM
Break

10:45 AM–12:45 PM
SESSION 2: Human-Machine Systems
Gregory Dumanian, MD (Northwestern)* The Myoelectric Prosthetic Interface
Richard F. Weir, PhD (University of Colorado)* Biomechatronics
Neville Hogan, PhD (MIT)* Human Performance-Enhancement Technologies

12:15–12:45 PM
Roundtable discussion

12:45–1:30 PM
Buffet Lunch

1:30–3:30 PM
SESSION 3: Robotics in Practice: Realizing Clinically Meaningful Advances
Gregory Hager, PhD (Johns Hopkins)* The Language of Surgical Robotics
Herbert Zeh, MD (University of Pittsburgh)* Advanced Techniques in GI Robotic Surgery
Li-Ming Su, MD (University of Florida, Gainesville)* Image-Guided Robotic Urologic Surgery

3–3:30 PM
Roundtable discussion

3:30-4 PM
Discussion on Possible Future Opportunities/Avenues

REGISTRATION: There is no charge for this symposium. To register, please email: mnfrank@bidmc.harvard.edu. We will send a confirmation and directions.