

# IEM SEMINAR SERIES

Tuesday  
October 6<sup>th</sup>, 2015

## Opportunities and Challenges of Chronically Implantable Sensor Technologies



Institute for  
Engineering in Medicine

UNIVERSITY OF MINNESOTA  
**Driven to Discover<sup>SM</sup>**

### DR. JONATHAN KUHN

Senior Principal Biomedical Engineer  
Medtronic



FREE event, no registration required.

Pizza and drinks will be provided.

**12:00PM - 1:00PM**

**Nils Hasselmo Hall**

**Room 4-101**

For additional information  
on Dr. Kuhn's presentation,  
please contact:  
**scot0353@umn.edu**

The Institute for Engineering in Medicine (IEM) is pleased to announce the IEM Special Seminar by Dr. Jonathan Kuhn, "Opportunities and Challenges of Chronically Implantable Sensor Technologies."

The demand for lower total cost health care is high. Continuous monitoring in the chronically implantable space offers a significant opportunity. Yet, it's been difficult to move chronically implantable sensors beyond electrical based, with some exceptions. In this talk, I will review the landscape, discuss opportunities, and frame the question of how to overcome technical and cost-benefit challenges driving barriers to entry and expansion of chronically implantable sensors.

Jonathan Kuhn is a Senior Principal Biomedical Engineer in the Cardiac Rhythm Heart Failure (CRHF) Technology group at Medtronic, PLC. Prior to joining Medtronic, he was an Aerospace Engineer at the NASA/Goddard Space Flight Center. Jonathan's primary expertise spans biomedical sensors, computational programming, and both experimental and theoretical multi-disciplinary mechanics. He received a Ph.D. in Engineering Mechanics at the University of Maryland, Baltimore County. Jonathan has 30 United States patents, primarily in the area of chronically implantable sensors.

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