# Annual Graduate **Research Day**

**Distinguished Lecture:** Neurotechnology for Interfacing with the Brain: Current Advances and a Look Into the Future

## Daryl R. Kipke, PhD

Professor, Department of Biomedical Engineering Director, Center for Neural Communication Technology University of Michigan



Presented by: **Department of Biomedical Engineering** Wallace H. Coulter Foundation BME Distinguished Lecture Series

September 30, 2011 Florida International University, Miami, FL

## **Reception:**

Annual Graduate Research Day and NanoFlorida<sup>™</sup> 2011 SYMPOSIUM

Posters : Lecture : Awards : Reception:

12:30 pm 4:00 pm 5:30 pm 7:00 pm

Engineering Center (2<sup>nd</sup> floor-Panther Pit) Florida International University 10555 W Flagler St , Miami, FL 33174 Map: http://campusmaps.fiu.edu/#/loc/EngineeringCenter





## Wallace H. Coulter Biomedical Engineering Distinguished Lecture Series

Daryl R. Kipke, PhD

SAVE THE DATE FRIDAY SEPT. 30, 2011 12:30-9:00pm

Location: 10555 W Flagler St Engineering Center Miami, FL-33174 A professor in the Department of Biomedical Engineering in the College of Engineering at the University of Michigan, Dr. Kipke is the principal investigator of the Neural Engineering Laboratory. He directs the Center for Neural Communication Technology and heads an internationally recognized research program that is focused on neural engineering, neural implants, neuroprostheses, and neural biomaterials. He is also the cofounder and President/CEO of NeuroNexus Technologies, Inc. (Ann Arbor, Michigan), a growing neurotechnology company providing advanced brain interface devices for neurological and scientific applications. Previously he co-founded and directed Neural Intervention Technologies Inc. which was acquired by W.L. Gore in 2006. Dr. Kipke is a Fellow of the American Institute of Medical and Biological Engineering.

## Annual Graduate Research Day

Workshop for BME Graduate Students
Meet the Speaker (Speaker-Students)
Poster session
Distinguished Lecture (Prof. Kipke)
Best Poster Awards (Provost Wartzok)
NanoFlorida'11 SYMPOSIUM
Opening Remarks (Provost Wartzok)
Reception

#### LECTURE: Neurotechnology for Interfacing with the Brain -

#### **Current Advances and a Look into the Future**

Technological advances in implantable neural interfaces are providing increasingly more powerful 'toolkits' of designs, materials, components, and integrated devices for establishing high-fidelity chronic neural interfaces for recording, stimulation, neurochemical sensing, and targeted drug delivery. Beyond progressive improvements in neural probe technologies, our group is developing new types of implantable microelectrodes using advanced nanostructured materials to create increasingly more 'stealthy' neural implants. These advanced technologies are extending the capabilities for high-fidelity neural interfacing in the brain and are laying the groundwork for exciting new applications. This research receives support from the U.S. National Institutes for Health, National Science Foundation, and DARPA.

## For more information visit: http//bme.fiu.edu

### Contact: bmeinfo@fiu.edu; 305-348-6717