

# The 89th iCeMS SEMINAR

CeMI Seminar Series 26

Leica Scientific Forum Kyoto

**Thu 22 Sep 2011**  
**10:30-11:30**

Lecturer: **Karel Svoboda, Ph.D.**

Janelia Farm Research Campus,  
Howard Hughes Medical Institute, U.S.A.

## **Imaging the Neural Circuits Underlying Active Sensation**

Venue: 2nd floor Seminar Room (#A207) Main Building  
iCeMS Complex 1, Kyoto University

Animals sense the world through movements and sensation, which in turn modify their movement. The goal of the Svoboda lab is to understand how movement and sensation are combined in the mammalian brain to guide behavior. They use 2-photon calcium imaging to monitor the flow of information in neuronal circuits in behaving mice. In combination with genetically encoded calcium sensors, calcium imaging can measure neural activity in axons, dendrites, and somata of multiple individual neurons. Imaging thus defines places in the brain where sensorimotor integration occurs and provides hints of the underlying mechanisms. In this talk, Dr. Svoboda will explain recent results obtained in his lab in a broader frame, so that scientists with different backgrounds can understand and enjoy his talk and participate in the discussion.

After the seminar, an informal meet-the-speaker reception will take place at the Lounge, next to the seminar room. Please join us for more discussion with Dr. Svoboda.

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**Hosted by:** Leica Scientific Forum Kyoto

iCeMS (Institute for Integrated Cell-Material Sciences), Kyoto University

**Co-hosted by:** Center for Frontier Medicine, Global COE Program, Kyoto University

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