
The 128th iCeMS SEMINAR

Fri 30 Nov 2012
15:00-16:00

Ultrafast Optical Imaging & its Biomedical Applications

Lecturer: **Prof. Keisuke Goda**

Professor of Physical Chemistry, University of Tokyo
Director of Todai-UCLA Joint Research Institute

Venue: **2nd Floor Seminar Room (#A207)**
iCeMS Main Building (#71), Kyoto University

Optical imaging is a ubiquitous tool used in a diverse range of biomedical fields from basic research to clinical practice. Unfortunately, conventional cameras such as CCD and CMOS image sensors cannot capture fast dynamical processes with high sensitivity at high speed. This is due in part to the technological limitation that it takes time to read out data from the sensor array. Also, there is the fundamental trade-off between sensitivity and speed. In this talk, I will introduce a new type of optical imaging technology that overcomes these limitations and offers at least 1,000 times higher shutter speed and frame rate than CCD and CMOS cameras. I will discuss the principle of this imaging technology and its utility to biomedical applications such as cancer detection and flow cytometry.

Contact: iCeMS Chen Lab at chen-g@icems.kyoto-u.ac.jp

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

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

