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# The 27th iCeMS SEMINAR

Leica Scientific Forum Kyoto: Series 2

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**Wed 16 Sep 2009**  
**17:00-18:00**

Lecturer: **Dr. Gero Miesenböck**  
Waynflete Professor of Physiology  
Dept. of Physiology, Anatomy and Genetics  
Oxford University

## Lighting up the Brain

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

Dr. Gero Miesenböck is the creator of the emerging field of "OPTOGENETICS", which combines genetic engineering with light to observe and control groups of neurons. This new approach allows researchers to scrutinize into individual neural circuits, revolutionizing the study of brain functions. The traditional method of study, stimulating and recording the activity of single nerve cells with electrodes, is extremely cumbersome and may not be very useful for studying the functions of individual neural circuits, let alone their interactive and integrated activities. In this seminar, Dr. Miesenböck will present his pioneering studies using optogenetics.

A party for Dr. Miesenböck will be held in the lounge next to the seminar room from 18:15 (free of charge). Please join and enjoy.

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MICROSYSTEMS

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**Hosted by:** iCeMS (Institute for Integrated Cell-Material Sciences), Kyoto University  
The Institute for Frontier Medical Sciences, Kyoto University  
Membrane Mechanisms Project, ICOPR-JST

