

The 21st iCeMS International Symposium
“Emerging Science for Unlocking Cell's Secrets”
Friday, June 3rd-Saturday, June 4th
Seminar Room, iCeMS Main Building, Kyoto University

Day 1 (June 3rd)

- 30min** 12:30-13:00 Registration
30min 13:00-13:30 Opening Remarks:
Susumu Kitagawa, Director of iCeMS, Kyoto University
Toshio Kuroki, WPI Program Director, JSPS

Session I: Membrane Dynamics and Signaling

[Chair] Mineko Kengaku, Takahiro Fujiwara

- 25min** 13:30-13:55 Jun Suzuki, IFRc, Osaka University
Phospholipid-scrambling Proteins on the Plasma Membranes
- 5min** 13:55-14:00 Discussion
- 25min** 14:00-14:25 Junichi Ikenouchi, Faculty of Science, Kyushu University
Roles of Lipids in the Formation of Membrane Structures in Epithelial Cells
- 5min** 14:25-14:30 Discussion
- 25min** 14:30-14:55 Yasushi Tamura, Faculty of Science, Yamagata University
Nonvesicular Phospholipid Transport via Mitochondria
- 5min** 14:55-15:00 Discussion
- 30min** 15:00-15:30 ~Coffee Break~

Session II: Observation and Control of Cell Signals

[Chair] Motomu Tanaka, Kouichi Hasegawa

- 25min** 15:30-15:55 Kenichi Suzuki, iCeMS, Kyoto University
Unravelling of Raft Organization and Function by Single-Molecule Imaging of New Ganglioside Probes
- 5min** 15:55-16:00 Discussion
- 25min** 16:00-16:25 Shigeki Kiyonaka, Graduate School of Engineering, Kyoto University
Novel Chemical Approach for Allosteric Activation of Glutamate Receptors on Live Cells
- 5min** 16:25-16:30 Discussion
- 25min** 16:30-16:55 Xiaoguang Lei, College of Chemistry and Molecular Engineering, Peking University
To Die or Not To Die: An Important Question for Cells
- 5min** 16:55-17:00 Discussion
- 30min** 17:00-17:30 ~Coffee Break~

[Chair] Easan Sivaniah, Kaoru Sugimura

- 25min** 17:30-17:25 Shigeyuki Masaoka, Institute for Molecular Science, NINS
Molecular Catalysts Designed for Water Oxidation
- 5min** 17:25-18:00 Discussion
- 25min** 18:00-18:25 Shuhei Furukawa, iCeMS, Kyoto University
Metal-organic Frameworks for Gas Biology and Therapeutic Applications
- 5min** 18:25-18:30 Discussion
- 18:30- Group photo
- 19:00- Dinner

Day 2 (June 4th)

Session III: Visualizing Cellular Dynamics

[Chair] John Heuser, Kazumitsu Ueda

25min 9:30-9:55 Tetsuya Takeda, Graduate School of Medicine, Dentistry and Pharmaceutical Sciences, Okayama University
Crescent and Helix: Membrane Remodelling by BAR Domain Proteins and Dynamin

5min 9:55-10:00 Discussion

25min 10:00-10:25 Yusuke Miyanari, Department of Biosensing Research, Okazaki Institute for Integrative Bioscience
Nuclear Dynamics and Reprogramming

5min 10:25-10:30 Discussion

30min 10:30-11:00 ~Coffee Break~

Session IV: Cell State Control by Light and Chemicals

[Chair] Ryoichiro Kageyama, Ganesh Pandian Namasivayam

25min 11:00-11:25 Xiang David Li, Department of Chemistry, The University of Hong Kong
Chemical Approaches to Decipher Histone Epigenetic Code

5min 11:25-11:30 Discussion

25min 11:30-11:55 Eijiro Miyako, Department of Materials and Chemistry, Nanomaterials Research Institute, AIST
Spatiotemporal Control of Cellular Functions by NIR Light-powered Nanorobots

5min 11:55-12:00 Discussion

25min 12:00-12:25 Itaru Imayoshi, Institute for Virus Research, Kyoto University
Regulatory Mechanism of Neural Stem Cells Revealed by Optical Manipulation of Gene Expressions

5min 12:25-12:30 Discussion

60min 12:30-13:30 Lunch

Session V: New Imaging Tools

[Chair] Mitinori Saitou, Ken-ichiro Kamei

25min 13:30-13:55 Shigehiro Kawashima, Faculty of Pharmaceutical Sciences, The University of Tokyo
Developing Artificial Catalyst Systems for Synthetic Epigenetics

5min 13:55-14:00 Discussion

25min 14:00-14:25 Dan Ohtan Wang, iCeMS, Kyoto University
Synaptic Epitranscriptomics and Dynamic RNA Imaging

5min 14:25-14:30 Discussion

25min 14:30-14:55 Toshiyuki Kowada, School of Medicine, Stanford University
Real-time Intravital Imaging of pH-variation Associated with Osteoclast Activity Using Small-molecule Fluorescent Probe

5min 14:55-15:00 Discussion

15min 15:00-15:15 Closing remarks:
Motonari Uesugi, Deputy Director of iCeMS, Kyoto University.