

24th iCeMS International Symposium
Emerging Science for Unlocking Cell's Secrets

3–4 September 2018, Kyoto University iCeMS
(as of 30 August)

Day 1 (3 September)

12:00–12:40 Registration

12:40–13:00 Opening remarks:
Susumu Kitagawa (Director of Kyoto Univ iCeMS)
Toshio Kuroki (Director of WPI Academy)

Session I Microscope Development and Application

(Chair Mineko Kengaku & Takahiro Fujiwara)

13:00–13:30 **Kazuto Fujishima** (Kyoto Univ iCeMS)
Cytoskeletal control of the tree shape of neuronal dendrites in the brain

13:30–14:00 **Hideharu Mikami** (Univ of Tokyo)
High-Speed Fluorescence Microscopy: Generating Big Data in life science

14:00–14:30 **Ryuji Kato** (Nagoya Univ)
Morphology-Based iPS Cell Colony Evaluation for Cell Manufacturing

14:30–14:50 Coffee break

Session II Control Cell Behavior 1

(Chair Ken-ichiro Kamei & Naotaka Nakazawa)

14:50–15:20 **Yuya Morimoto** (Univ of Tokyo)
Biohybrid Device Composed of Cultured Tissue and Artificial Device

15:20–15:50 **Akihiro Isomura** (JST PRESTO / Kyoto Univ)
Optical Manipulation of Cell-Cell Communication in Pene Regulatory Circuits

15:50–16:20 **Satoshi Toda** (Univ of Calif San Francisco)
Synthetic Tissue Formation: Programming Multicellular Self-Organization

16:20–16:40 Coffee break

Session III Tissue Engineering

(Chair Ganesh Pandian Namasivayam & Kazuto Fujishima)

16:40–17:10 **Geoff Richards** (AO Research Inst Davos)
Talk title: TBC

17:10–17:40 **Maruo Alini** (AO Research Inst Davos)
Hyaluronan hydrogel platform for musculoskeletal regeneration

17:40–18:10 **Kouichi Hasegawa** (Kyoto Univ iCeMS)
Chemical Control of Human Pluripotent Stem Cell Self-Renewal

18:10– Group photo

Day 2 (4 September)

Session IV Control Cell Behavior 2

(Chair Dan Ohtan Wang & Masahiro Maruoka)

- 9:00–9:30 **Masahiro Sonoshita** (Hokkaido Univ)
A Whole Animal Platform for Anti-Cancer Drug Discovery
- 9:30–10:00 **Yuichiro Hori** (Osaka Univ)
Design and Development of Fluorogenic Probes for Imaging Endogenous Biomolecules
- 10:00–10:30 **Yulong Li** (Peking Univ)
Spying on Dopamine Modulation by Constructing New Genetically-Encoded Sensors
- 10:30–10:50 Coffee break
- 10:50–11:00 Special topics: **Pep Pamies** (Editor of Nature Biomedical Engineering)
Engineering discovery and technology for improving human health

Session V Bioinformatics

(Chair Kouichi Hasegawa & Daniel M. Packwood)

- 11:00–11:30 **Dan Ohtan Wang** (Kyoto Univ iCeMS)
Chemistry and Biology Connected for the Emergence of Consciousness
- 11:30–12:00 **Huiying Li** (Univ of Calif Los Angeles)
Dissecting the Human Skin Microbiome in Health and Disease
- 12:00–12:30 **Kyogo Kawaguchi** (RIKEN)
Skin Homeostasis and Spatiotemporal Cell Fate Coordination

Session VI Probe Development

(Chair Jun Suzuki & Kaoru Sugimura)

- 13:20–13:50 **Hidekazu Tsutsui** (JAIST)
Visualizing Cellular Electrical Phenomena with Fluorescence Reporters
- 13:50–14:20 **Yuji Furutani** (Inst for Molecular Science)
Infrared Spectroscopy for Investigating Ion-Protein Interactions of Potassium Channels
- 14:20–14:50 **Tomoki Matsuda** (Osaka Univ)
Fluorescent and Bioluminescent Protein Based Probes for Visualization of Biological Events
- 14:50– Closing remarks:
Ken-ichiro Kamei (Kyoto Univ iCeMS/Symposium organizing chair)