

Registration: Free

COME & JOIN US

Crossing boundaries for intellectual integration...



Organizer: NAMASIVAYAM Ganesh Pandian Institute for Integrated Cell Material Sciences, **Kyoto University, Japan** Venue: KUIAS/iCeMS Main Building, 2F Seminar Room



Day 1 (February 27)

08:30 - 09:00: Registration

09:00 - 09:10: Opening Remarks (Namasivayam Ganesh Pandian)

Session 1: Advanced materials for cell control

09:10 - 09:35: Shuhei Furukawa (iCeMS, Kyoto University)

Responsive metal-organic frameworks for cell control

09:35 - 10:00: **Ken-ichiro Kamei** (iCeMS, Kyoto University)

Solving the environmental issues for cells: Towards precise regulation of stem cell functions

10:00 -10:30: **Jeong-Woo Choi** (Sogang University, South Korea)

Cell chip to detect and control cellular metabolic state based on nanostructured biohybrid materia

Session 2: Probing key targets for cell control

10:45 - 11:10: Hirohide Saito (CiRA, Kyoto University)

Synthetic RNA switch technologies to program cells

11:10 - 11:30: Masayuki Endo (iCeMS, Kyoto University)

Effect of a confined nanospace on the physical property of biomolecules

11:30 - 11:50: **Reiko Sakaguchi** (iCeMS, Kyoto University)

TRPC5 channel-Caveolin-1-eNOS signalplexes coordinate interplay between Ca2+ and NO signals

11:50 - 12:10: **Soyoung Park** (Graduate School of Science, Kyoto University)

Synthesis and Application of Highly Emissive Nucleic Acid Analogues

12:10 – 14:25: Lunch and Poster Session

Session 3: Signalling proteins and cell control

14:25 - 14:50: **Jun Suzuki (i**CeMS, Kyoto University) Phospholipid Scrambling on the Plasma Membranes

14:50 - 15:20: Li Cai (Rutgers University, USA)

Control of neural stem cells via Notch signalling during spinal cord development and after injury

15:20 - 15:45: Daniel Packwood (iCeMS, Kyoto University)

2D Nanostructure Prediction using Machine Learning

Session 4: Disease modelling

16:00 - 16:25: Fuyuhiko Tamanoi (iCeMS, Kyoto University)

Use of the chicken egg tumor model to identify novel anticancer drugs against ovarian cancer

16:25 - 16:55: **Angela Armiento** (AO Research Institute, Switzerland)

Nature-inspired biomaterials to deliver small molecules targeting MSCs osteochondral differentiation

16:55 - 17:25: **Sudhakar Sivasubramaniam** (MS University, India)

Searching for the master key of regeneration using earthworm as a model

Day 2 (February 28)

Session 5: Genetic Switches for cell control

09:00 - 09:30: **Hiroshi Sugiyama** (Graduate School of Science, Kyoto University)

Rational Design of Artificial Genetic Switches

09:30 - 10:00: KiBum Lee (Rutgers University, USA)

Bio-Inspired Nanomaterials and Nanotechnology to Control Cellular Reprogramming

10:00 - 10:25: Masahiro Kumeta (Graduate School of Biostudies, Kyoto University) Cellular Responses to Audible Sound Stimulations

Session 6: Stem cells and organogenesis

10:40 - 11:05: Kouichi Hasegawa (iCeMS, Kyoto University) Chemical Control of Human Pluripotent Stem Cell Self-Renewal

11:05 - 11:30: Minoru Takasato (RIKEN CDB, Kobe, Japan) Generation of kidney tissue from iPS

1:35 - 11:55: **Martin Stoddart** (AO Research Institute, Switzerland)

Ex vivo systems for biomaterial and small molecule assessment 11:55 – 12:20: CONCLUDING REMARKS

VENUE QR

