Tuesday, September 8 (Day 1)

09:00-10:00 Registration

10:00-10:10 Opening remarks by Mototsugu Eiraku

Session 1-A: Observations of morphological dynamics
Chair: Keishi Kishimoto

10:10-10:40 S1-1
Epithelial origami: cell polarity, adhesion mechanics, and the folding of epithelial tissues
Yu-Chiun Wang (RIKEN Center for Developmental Biology, Japan)

10:40-11:00 S1-2*
Feedback between plasma membrane tension and membrane-bending proteins in cell migration
Kazuya Tsujita (Kobe University, Japan)

11:00-11:20 S1-3
Planar cell polarity pathway regulates three-dimensional epithelial pattern formation in mouse oviduct
Dongbo Shi (National Institute for Basic Biology, Japan)

11:20-11:50 *Coffee Break*

Keynote Lecture 1
Chair: Ken-ichi Hironaka

11:50-12:40 K1
Mechanics of cell contacts during tissue morphogenesis
Pierre-François Lenne (Institute for Developmental Biology of Marseille, France)

12:40-14:00 *Group Photo and Lunch*

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* Selected Talk

Session 2: Quantitative measurements of active and passive cell behaviors
Chair: Hiromi Miyoshi

14:00-14:20 S2-1
Genetic screen for mitotic cell mechanics identifies the Parkinson's disease-related glyoxalase DJ-1
Yusuke Toyoda (Kurume University, Japan)

14:20-14:40 S2-2*
Quantification of calcium ion response of single animal cells revealed by femtosecond laser-induced impulsive force
Yoichiroh Hosokawa (Nara Institute of Science and Technology, Japan)

14:40-15:10 S2-3
Microrheology towards the characterization of forces and mechanics in living cells
Daisuke Mizuno (Kyushu University, Japan)

15:10-15:40 *Coffee Break*

Session 3: In vitro reconstructions and controls of multicellular structures
Chair: Mitsuhiro Matsuda

15:40-16:10 S3-1
Self-driven morphogenesis in stem cell culture
Mototsugu Eiraku (RIKEN Center for Developmental Biology, Japan)

16:10-16:30 S3-2*
Active topological defects in the collective motion of neural stem cells
Kyogo Kawaguchi (Harvard Medical School, USA)

16:30-17:00 S3-3
***De novo* generation of diverse organ buds from stem cells**
Takanori Takebe (Yokohama City University, Japan)

* Selected Talk

17:00-17:10 *Short Break*

Keynote Lecture 2
Chair: Daiki Umetsu

17:10-18:00 K2
Shaping a fly wing
Frank Julicher (Max Planck Institute for the Physics of Complex Systems, Germany)

18:00-20:30 Poster Session & Banquet
18:00-19:00 Banquet
19:00-19:30 Odd numbered posters
19:30-20:00 Even numbered posters
20:00-20:30 Free discussion

* Selected Talk

Wednesday, September 9 (Day 2)

Session 1-B: Observations of morphological dynamics
Chair: Takefumi Kondo

9:30-9:50 S1-4*
Cell boundary elongation by non-autonomous contractility in non-ratchet-like cell oscillation
Yusuke Hara (National University of Singapore, Singapore)

9:50-10:10 S1-5*
Synergistic action of nectins and cadherins establish the mosaic cellular pattern of the olfactory epithelium
Sayaka Katsunuma (Kobe University, Japan)

10:10-10:30 *Coffee Break*

Session 4: Computational simulations of multicellular systems
Chair: Fu-Lai Wen

10:30-10:50 S4-1
Versatile modeling of three-dimensional multicellular morphogenesis: application to apically-convex invagination during optic-cup formation
Satoru Okuda (RIKEN Center for Developmental Biology, Japan)

10:50-11:10 S4-2*
A mathematical approach to analyze cancellous bone remodeling regulated by coupling cellular activities
Yoshitaka Kameo (Kyoto University, Japan)

11:10-11:40 S4-3
Homeostatic cell shaping against heterogeneous proliferation in epithelium
Koichi Fujimoto (Osaka University, Japan)

11:40-12:00 *Coffee Break*

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* Selected Talk

Keynote Lecture 3
Chair: Masafumi Noguchi

12:00-12:50 K3
How do node cilia generate and sense the uni-directional flow?
Hiroshi Hamada (Osaka University and RIKEN Center for Developmental Biology, Japan)

12:50-13:00 Closing Remarks by Hiroshi Hamada

* Selected Talk