

KEY Forum in Developmental Biology and Regenerative Medicine
-Supported by
Global COE and IMEG, Kumamoto University

Venue : 100th Anniversary Memorial Hall, Kumamoto University

September 8 (Thursday), 2011

Registration 8:00~

9:00-9:05 **Opening Remarks**

Shinji Harada, The Trustee and Vice President

Session I Organogenesis (Chairperson: Gen Yamada, Hiroshi Sasaki)

9:05-9:30 Hideaki Tanaka (Kumamoto University)

“Chemorepulsive axon guidance cue, draxin, and its receptors”

9:30-9:55 Ryuichi Nishinakamura (Kumamoto University)

“Nephron progenitors in the embryonic kidney”

9:55-10:20 Jordan Kreidberg (Harvard Medical School)

“The maintenance of kidney progenitor cells”

Break

(Chairperson: Toshio Suda, Hideaki Tanaka)

10:40-11:05 Nicholas Barker (Institute of Medical Biology (IMB))

“Lgr5 Stem Cells in Self-Renewal and Cancer”

11:05-11:30 Shoen Kume (Kumamoto University)

“Signals involved in guiding ES cells to differentiate into pancreatic beta cells”

11:30-11:55 Taro Toyoda (Kyoto University)

“Generation of pancreatic beta cells from human ES/iPS cells:
Towards regenerative therapy for diabetes”

Poster & Lunch

12:00-14:00 (with Sandwich)

Session II Tissue Stem Cells (Chairperson: Kenji Shimamura, Yuichi Oike)

14:00-14:25 Hideki Enomoto (RIKEN)

“Neurovascular congruency is required for the development of the enteric nervous system”

14:25-14:50 Tetsuya Taga (Tokyo Medical and Dental University)

“External cues and intrinsic properties regulating neural stem cell fate”

14:50-15:15 Takashi Nagasawa (Kyoto University)

“Bone Marrow Niches for Hematopoietic Stem and Progenitor Cells”

15:15-15:40 Toshio Suda (Keio University)

“Glycolytic Metabolism of Hematopoietic Stem Cells”

Break

(Chairperson: Shoen Kume, Tetsuya Taga)

16:00-16:25 Takatsune Shimizu (Keio University)

“Establishment and characterization of mouse osteosarcoma stem cells”

16:25-16:45 Chia-Ning Shen (Academia Sinica)

“Pancreatic cell plasticity and its role in islet repairing and carcinogenesis”

16:45-17:05 Keiko Muguruma (RIKEN)

“Neural induction and self-organization in three-dimensional ES cell culture”

September 9 (Friday), 2011

Registration 8:30~

Session III Development / Epigenetics

(Chairperson: Takashi Nagasawa, Takumi Era)

- 9:00-9:25 Atsuko Sehara-Fujisawa (Kyoto University)
“A Role of ADAM8 in the Onset of Blood Circulation”
- 9:25-9:50 Taiji Adachi (Kyoto University)
“Multiscale Biomechanics of Actin Cytoskeleton in Migrating Cells: From Cells to Molecules”
- 9:50-10:10 Satoru Mochida (Kumamoto University)
“Reciprocal Inhibition System between PP2A and CDK”
- 10:10-10:35 John Yu (Academia Sinica)
“Stem cells and cancer, from the perspective of glycomics analysis”

Break

(Chairperson: Hitoshi Niwa, Hideyuki Okano)

- 10:55-11:20 Hiroyuki Sasaki (Kyushu University)
“Role of small RNAs in shaping the epigenome of germ cells for genome defense and imprinting”
- 11:20-11:45 Mitsuyoshi Nakao (Kumamoto University)
“Epigenetic cell regulation and deregulation by chromatin factors”
- 11:45-12:10 Alice L. Yu (Academia Sinica)
“Phosphoproteomic and glycomic analysis of breast cancer stem cell”

Poster & Lunch

12:10-14:10 (with Sandwich)

Session IV Pluripotent Stem Cells & Regenerative Medicine

(Chairperson: Minetaro Ogawa, Mitsuyoshi Nakao)

14:10-14:35 Hitoshi Niwa (RIKEN)

“Pluripotency-associated transcription factor network”

14:35-15:00 Hiroshi Sasaki (Kumamoto University)

“Mechanisms of position-dependent cell fate specification in preimplantation mouse embryos”

15:00-15:35 Minoru S. H. Ko (National Institute on Aging (NIH))

“Network analysis of pluripotency and immortality”

Break

(Chairperson: Ryuichi Nishinakamura, John Yu)

15:55-16:30 Shinya Yamanaka (Kyoto University)

“Induction of Pluripotency by Defined Factors”

16:30-16:55 Yutaka Hanazono (Jichi Medical University)

“The Generation of Naive Porcine Induced Pluripotent Stem Cells”

16:55-17:20 Hideyuki Okano (Keio University)

“Regeneration of the damaged CNS using reprogrammed fibroblasts”

17:20-17:25 **Concluding Remarks**

Shoen Kume, Global COE Program Director

Reception (FORICO)