

Keystone Symposia: Stem Cell Differentiation and Dedifferentiation

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Scientific Organizers: Shinya Yamanaka and Fiona M. Watt

PROGRAM FACULTY & TALKS

- Anthony Atala**, Wake Forest University, USA
Amniotic and Placental Fluid-Derived Stem Cells
- E. Edward Baetge**, Novocell, Inc., USA
Beta Cells from Embryonic Stem Cells
- Helen M. Blau**, Stanford University, USA
Stem Cells in Bioengineered Niche
- Gabriela Cezar**, University of Wisconsin, USA
Human ES Cells in Predictive Toxicology
- Chad A. Cowan**, Harvard Stem Cell Institute, USA
Modeling Diseases by Reprogramming
- Kevin Carl Eggan**, Harvard University, USA
The Mechanisms and Applications of Nuclear Reprogramming
- Amanda G. Fisher**, Imperial College London, UK
Pluripotency and Reprogramming
- Fred H. Gage**, The Salk Institute for Biological Studies, USA
Neural Stem Cells and Their Fates
- Juan Carlos Izpisua-Belmonte**, The Salk Institute, USA
Reprogramming by Episomal and BAC Recombineering Approaches
- Rudolf Jaenisch**, Whitehead Institute for Biomedical Research, USA
Nuclear Reprogramming and Pluripotency
- Ihor R. Lemischka**, Mount Sinai School of Medicine, USA
Genome-Wide Analyses of Molecular Mechanisms Underlying Pluripotency
- Ronald D. McKay**, National Institutes of Health, USA
Neural Differentiation of Stem Cells
- Shin-Ichi Nishikawa**, RIKEN Center for Developmental Biology, Japan
Embryonic Development of Hematopoietic Stem Cells Explained
- Hideyuki Okano**, Keio University School of Medicine, Japan
Regeneration of the Damaged CNS with iPS Cells
- Rita R. Perlingeiro**, University of Minnesota, USA
From ES Cells to Skeletal Muscle Precursors
- Kathrin Plath**, University of California, Los Angeles, USA
Regulation of Transcription Factor-Induced Reprogramming
- Hans R. Schöler**, Max Planck Institute for Molecular Biomedicine, Germany
Induction of Pluripotency in Somatic and Germline Cells
- Takashi Shinohara**, Kyoto University, Japan
Pluripotent Stem Cells from Testis
- Amy Sinor**, Harvard Stem Cell Institute, USA
ES Cell-Derived Cells for Disease Mechanism and Drug Discovery
- Austin G. Smith**, University of Cambridge, UK
Pluripotency and the Ground State
- Deepak Srivastava**, Gladstone Institute of Cardiovascular Disease, USA
Role of miRNA in Stem Cell Differentiation
- Toshio Suda**, Graduate School of Medicine, Keio University, Japan
Hematopoietic Stem Cells and Niche
- M. Azim Surani**, University of Cambridge, UK
Germ Cells and Nuclear Reprogramming
- James A. Thomson***, Morgridge Institute for Research, USA
Human ES Cells and iPS Cells
- Nobuko Uchida**, StemCells Inc., USA
Differentiation and Transplantation of Human Neural Stem Cells
- Amy J. Wagers**, Joslin Diabetes Center, USA
Regenerative Potential of Skeletal Muscle Stem Cells
- Fiona M. Watt**, Cambridge Research Institute, UK
Defining the Epidermal Stem Cell Niche
- Shinya Yamanaka**, Center for iPS Cell Research and Application / Frontier Medical Science, Kyoto University, Japan
Induction of Pluripotency by Defined Factors
- Jingwu Zhang Zang**, GlaxoSmithKline, China
Drug Discovery Targeting Neural Stem Cells

*Keynote speaker. Program subject to change. Current as of September 15, 2009



Recent progress in induced pluripotent stem (iPS) cells has shown that stem cells can be generated from differentiated progenies by introducing just a few defined factors. In addition, various stem cells have been isolated from human tissues. Stem cells from patients will provide various tools in understanding disease mechanisms, searching for effective drugs and evaluating toxicity of drug candidates. Furthermore, human iPS cells and other stem cells may provide various types of cells for regenerative medicine. In this meeting, we will discuss how stem cells, including iPS cells, are isolated, generated and maintained. We will also provide an update on induction of differentiated cells from stem cells. We then will discuss progress in application of pluripotent stem cells and other stem cells in basic research, drug discovery, toxicology and regenerative medicine.

PROGRAM PLENARY SESSIONS:

- iPS Cells
- Pluripotency
- Reprogramming
- Other Pluripotent Stem Cells
- Somatic Stem Cells
- Differentiation of Stem Cells I & II
- Application of Stem Cells

DEADLINES:

Abstract & Scholarship: October 15, 2009
Late-Breaking Abstract: November 16, 2009
Early Registration: December 15, 2009

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