Frontiers in Periimplantation Biology

Beijing Friendship Hotel • Beijing, China

May 8-12, 2010

cutting-edge science • cross-disciplinary interactions • networking opportunities

Organizers: Enkui Duan, Haibin Wang, Sudhansu K. Dey and Bruce Murphy

Embryo implantation involves an intricate communication between the embryo and uterus, failure at any critical stages leads to early pregnancy loss. It is also a major limiting factor in assisted reproduction. Periimplantation events include early embryo development, the crosstalk between the embryo and uterus and the development of the deciduum and placenta. A better understanding of the molecular mechanisms concerning periimplantation biology will not only improve our general cognition of life sciences, but also help in developing clinical strategies to combat reproductive disorders. With the economic development in China, the Chinese government has been paying more and more attention to the research concerning human health. The State Key Laboratory of Reproductive Biology (SKLRB) is the only national center for basic research in reproductive biology in China. By serving as the Chinese Center for WHO/Rockefeller Foundation Initiative on Implantation from 1999 to 2004, SKLRB has been a pioneer in China in promoting basic research, national and international collaborations, as well as pre- and post-doctoral training in the field of reproductive biology, with an aim to improving nationally and globally human health. This symposia entitled "SKLRB Symposia on Frontiers in Periimplantation Biology" sponsored by SKLRB is aimed at bringing in distinguished scientists in the field to exchange and discuss cutting edge basic and translational investigations pertaining to periimplantation biology in various model systems. The meeting is intended to provide a forum for extensive exchange and sharing of new information and development in the area, and to develop better communication among scientists across the world.

SATURDAY, MAY 8

Keynote Address

Janet Rossant, Hospital for Sick Children, Canada
Making the Placenta- the Role of Trophoblast Stem Cells

SUNDAY, MAY 9

Preimplantation Biology

Yumiko Saga, National Institute of Genetics, Japan
Functions of NANOS2 in the Maintenance of Embryonic Germ Cells and Spermatogonial Stem Cells in Mice
Shaorong Gao, National Institute of Biological Sciences, China
Reprogramming of Somatic Cells to Pluripotency by SCNT and iPS
Andras Nagy, Mount Sinai Hospital, Canada
Transposon-mediated Reprogramming Provides a Powerful Tool for Understanding Stem Cell Induction
Qi Zhou, SKLRB, Institute of Zoology, China
Reprogramming and Stem Cell Research Progresses
Guoliang Xia, China Agricultural University, China
Potential Mechanisms Governing Primordial Follicle Formation in Mice
Qingyuan Sun, SKLRB, Institute of Zoology, China
Regulation of Accurate Chromosome Separation during Mammalian Oocyte Meiosis
Magdalena Zernicka-Goetz, University of Cambridge, UK
Setting aside Pluripotent Cells from the First Two Extra-embryonic Lineages in the Mouse Embryo
Toshihiko Fujimori, National Institute for Basic Biology, Japan
Behaviors of Cell and Gene Expression during the Preimplantation Mouse Embryo
Lei Li, SKLRB, Institute of Zoology, China
Maternal Control of Mouse Early Embryo Development
Hiroshi Sasaki, Riken CDB, Japan
Role of Hippo Signaling in Specification of the Trophectoderm Fate

Monday, MAY10

Uterine Development and Implantation Biology

Hyunjung (Jade) Lim, Konkuk University, Korea
Molecular and Cellular Aspects of the Embryonic Diapause in Mice
Bruce Murphy, University of Montreal, Canada
Embryo-Uterine Interactions in Delayed Implantation
Helen Mardon,University of Oxford, UK
Models for Dissecting the Molecular Basis of Implantation of the Human Embryo

Monday, MAY10 (Cont)

Zeng-ming Yang, Xiamen University, China
Global Analysis of Uterine mRNAs and microRNAs during Embryo Implantation
Francesco DeMayo, Baylor College of Medicine, USA
Molecular Regulators of Postnatal Uterine Development and Function
Sanjoy Das, Cincinnati Children's Hospital Medical Center, USA
Cell Cycle Signaling in Decidualization
Hefeng Huang, Zhejiang University, China
Calcium-activated Potassium Channels are expressed in the human endometrium and mediate embryo implantation
Carlos Simon, University of Valencia, Spain
Human Endometrial CD98 Is Essential for Blastocyst Adhesion
Thomas E. Spencer, Texas A & M University, USA
Comparative Aspects of Conceptus-Endometrial Interactions and Implantation
SK Dey, Cincinnati Children's Hospital Medical Center, USA
Msx Genes are Critical for Epithelial-Mesenchymal Interactions during Implantation

TUESDAY, MAY 11

Placental Biology and Reproductive Diseases

Satoshi Tanaka, The University of Tokyo, Japan
Normalcy of Trophoblast Stem Cells Derived from Cloned Mouse Embryos
David R Armant, Wayne State University, USA
The EGF Signaling System in Trophoblast Development and Obstetric Pathology
Hongmei Wang, SKLRB, Institute of Zoology, China
E3 ligase and Trophoblast EMT
Anthony M Carter, University of Southern Denmark, Denmark
Comparative Aspects of Trophoblast Invasion in Primates
Jay C Cross, University of Calgary, Canada
Signals that Drive Alternative Pathways of Trophoblast Differentiation
Stephen Lye, Toronto University, Canada
Mechanisms Underlying Decidual-Trophoblast Remodelling of the Uterine Vasculature
Chun Peng, York University, Canada
Regulation of Placental Functions by microRNAs
S. Ananth Karumanchi, Harvard Medical University, USA
Angiogenic Factors in Preeclampsia
Yan-ling Wang, SKLRB, Institute of Zoology, China
The Vitamin D Signaling System in Placentation and Preeclampsia
Susan J Fisher, University of California, San Francisco, USA
Tentative title

SKL SYMPOSIA

on Reproductive Biology

Program coordinators: Drs. Haibin Wang, Yan-ling Wang and Hongmei Wang (sklrb@ioz.ac.cn)
For registration please go directly to the meeting website(http://www.ipm.ioz.ac.cn/fpb/index.asp.)
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