

SCIENTIFIC PROGRAM

SESSION LECTURE

No.13

Cell Fate Determination
Room: Peacock Room 3

Co-Chairs:
Jinsong Li



Jianlong Wang



Day 2 October 20th (Sunday) 14:00 – 17:30

Time	Speaker	Title
14:00-14:30	Jianlong Wang Columbia University Irving Medical Center, USA	ZFP281: Zigzagging the Frontier of Potency, 2-8-1 Codes in Cell Fate Determination
14:30-15:00	Jinsong Li CAS Center for Excellence in Molecular Cell Science, China	Sperm-like stem cell-mediated semi-cloning technology: establishment and applications
15:00-15:30	Qilong Ying University of Southern California, USA	Deciphering Conserved Pluripotency Signaling Pathways Across Diverse Species
15:30-16:00	Tea Break	
16:00-16:30	Man Zhang Guangzhou National Laboratory, China	Epigenetic regulation of early embryonic cell fate determination
16:30-17:00	José Silva Guangzhou National Laboratory, China	Generation of novel mouse and human embryo models
17:00-17:30	Dong Gao CAS Center for Excellence in Molecular Cell Science, China	Intermediate cell population depends on JAK/STAT signaling in prostate basal cell fates determination



Jinsong Li

jsli@sibcb.ac.cn

CAS Academician and Professor of CAS Center for Excellence in Molecular Cell Science, Chinese Academy of Science. His research mainly focuses on stem cells and embryonic development. He has made fundamental contributions to the establishment of androgenetic haploid embryonic stem cells. Li has made great efforts to promote the applications of SC technology and shown that it can be used for complex genetic analyses in mice. Recently, Li initiated a project to tag every protein in mice based on SC technology which may enable the precise description of protein atlas in mice.



Jianlong Wang

jw3925@cumc.columbia.edu

Tenured Professor in the Department of Medicine at Columbia University Irving Medical Center (CUIMC). Dr. Wang leads pioneering research focused on the molecular mechanisms of stemness control in pluripotent and cancer cells, as well as during early development. His work primarily explores transcriptional, posttranscriptional, and epigenetic regulatory mechanisms, underscoring his significant contributions to the understanding of cell fate determination and the molecular underpinnings of stem cell pluripotency and early mammalian development.



Dong Gao

dong_gao@sibcb.ac.cn

Principal Investigator at Institute of Biochemistry and Cell Biology, Chinese Academy of Sciences. The aims of his research are to integrate patient-derived organoids biobanks, precise genetic lineage tracing technologies and multi-omics data profiling, to investigate the mechanism of cell lineage plasticity, a critical mechanism for cell survive in response to tissue damage, disease progression and therapy resistance.



Qilong Ying

qying@usc.edu

Professor Ying's research at the University of Southern California primarily focuses on the derivation, expansion, and application of embryonic and adult stem cells across a wide spectrum of species, including mouse, rat, rabbit, bovine, human, and various avian species.



Man Zhang

zhang_man@gzlab.ac.cn

Principal Investigator of Guangzhou National Laboratory. Member of national overseas talent project (youth). He is one of the major co-authors found that transcription factor OTX2 plays a critical role in mouse germ cell segregation. With the interest in totipotency and in vivo imaging, his lab aims to explore the function of transcription factors, epigenetic modifiers and their binding cis-regulatory elements in the cell fate decision in early embryo development and lung regeneration.



José Silva

jose_silva@gzlab.ac.cn

Principal Investigator, Guangzhou National Laboratory. After devoting a significant portion of his professional life to studying the process of reprogramming cells into earlier developmental stages, José's group is now seeking to complete the circle by employing these cells to construct novel in vitro embryo models for mice and humans. His lab's ultimate goal with such systems is to develop cell products/tissues of the required quality to enable applications in medicine. In 2022, José was the recipient of the National Major Talent Award (China).