

SCIENTIFIC PROGRAM

SESSION LECTURE

No.26

Stem Cell and Regeneration
Room: Phoenix Room 2

Co-Chairs:
Jianwei Jiao



Timothy O'Brien



Day 3 October 21st (Monday) 9:00 – 12:30

Time	Speaker	Title
09:00-09:30	Jianwei Jiao Principal Investigator at Institute of Zoology, Chinese Academy of Sciences	Neural stem cell mechanism study
09:30-09:45	Renjie Chai Chief Professor of Southeast University	Gene Therapy: the approach to cure inherited hearing loss
09:45-10:00	Hongjie Yao State Key Laboratory of respiratory disease	Cell fate determination by chromosome modification
10:00-10:30	Ji Hu Changjiang Distinguished Professor of the Ministry of Education	Reverse-translational study of neuropsychopharmacology
10:30-11:00	Timothy O'Brien Head of the Department of Medicine, director of the Centre for Cell Manufacturing Ireland and the Regenerative Medicine Institute, and dean of the college of Medicine, Nursing and Health Sciences at University of Galway.	Therapeutic potential of mesenchymal stem cells for the treatment of diabetic complications
11:00-11:15	Tea Break	
11:15-11:30	Kai Liu Division of Life Science, Department of Chemical and Biological Engineering, The Hong Kong University of Science and Technology.	Regeneration and Functional Rewiring After Central Nervous System Injury
11:30-12:00	Bo Peng Fudan University	Microglia replacement halts the progression of CSF1R-associated microgliopathy in the mouse model and in human patients
12:00-12:30	Congyan Zhang Postdoctoral fellow at University of California, Berkeley	Title: Intercellular cytoplasmic transfer through open- ended membrane tubular connections



Jianwei Jiao

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Dr. Jianwei Jiao is a Principal Investigator at Institute of Zoology, Chinese Academy of Sciences. His laboratory focuses on studying what mechanisms and signaling pathways control stem cell proliferation and neurogenesis. Identification of neuron-specific genes or miRNAs from neural stem cells is the direction of this study. There are several research directions including what mechanisms involving neural stem cell proliferation and neurogenesis and how to convert fibroblasts to neurons.



Renjie Chai

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Chief Professor of Southeast University, Executive Dean of Advanced Institute for Life and Health in Southeast University, He have long standing research interests in regenerative medicine and biomaterials, and now his research focus on promoting the proliferation and differentiation of neural stem cell/inner ear stem cell to regenerate the functional spiral ganglion neuron/inner ear hair cell with the coregulation of multiple genes and biomaterials. He aim to regenerate the functional spiral ganglion neuron/inner ear hair cell with the gene therapy approach; thus, to reestablish the structure of inner ear and partially recover the hearing loss.



Hongjie Yao

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Dr. Hongjie Yao is a professor at State Key Laboratory of respiratory disease. he focuses on studying epigenetic regulation in stem cell biology. Dr. Yao published more than 20 papers in the high profile journals, including Cell Stem Cell, Nature Genetics, Nature Cell Biology, Genes & Development, Nature Communications, Journal of Biological Chemistry, Cell Death & Disease and so on.



Ji Hu

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Dr. Ji Hu is a Changjiang Distinguished Professor of the Ministry of Education, a Tenured Professor at ShanghaiTech University, and Vice Dean of the School of Life Science. His research focuses on stress neurobiology and anesthesiology, and his findings have been published as a corresponding author in several international academic journals such as Nature, Neuron, Molecular Psychiatry, Current Biology, and Science Advances.



Timothy O'Brien

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Prof Timothy O'Brien is head of the Department of Medicine, director of the Centre for Cell Manufacturing Ireland (CCMI) and the Regenerative Medicine Institute (REMEDI), and dean of the college of Medicine, Nursing and Health Sciences at University of Galway. Prof O'Brien is an endocrinologist whose research is focused on the use of advanced therapy medicinal products, such as cells and genes, for the treatment of diabetic complications. Many of his 256 peer-reviewed publications focus on this issue. Prof O'Brien's current focus is on translational efforts to evaluate the use of mesenchymal stem cells and repaired endothelial progenitor cells in diabetic complications such as critical limb ischemia.



Kai Liu

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Dr. Kai Liu is a Professor, Division of Life Science, Department of Chemical and Biological Engineering, The Hong Kong University of Science and Technology. His research focuses on the intrinsic mechanisms regulating axonal regeneration. His lab uses various animal models to investigate why axons in the adult central nervous system do not regenerate following injury, from upstream signaling pathways and downstream growth machinery.



Bo Peng

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Dr. Bo Peng is a professor of Fudan University, assistant director of Institute for Translational Brain Research, and associate director of MOE Innovative Center for New Drug Development of Immune Inflammatory Diseases. His laboratory is mainly focusing on understanding how microglia turnover in physiological and pathological conditions. In addition, his lab is developing therapeutic approaches for treating CNS disorders. Dr. Bo Peng published a series of last-author papers, including Nature Neuroscience (2018), Nature Aging (2023), Neuron (2021), Cell Reports (2020), Nature Communications (2022) and eLife (2023).



Congyan Zhang

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Dr. Congyan Zhang is a postdoctoral fellow in Randy Schekman Lab at University of California, Berkeley. His research focuses on cell-cell communication through extracellular vesicles and membrane tubular connections. Recently, he discovered a new type of tubular connection between cells, which efficiently mediates the intercellular transfer of cargos including proteins and organelles. His work was published in eLife. His future lab aims to 1) unravel the molecular mechanism by which open-ended tubular connections form and mediate intercellular transfer, and 2) elucidate the roles of tubular connection-mediated intercellular transfer in cell physiology, pathology, as well as cell regeneration.