



*Celebrating the 45<sup>th</sup> Anniversary of the University of Macau:*  
**5<sup>th</sup> INTERNATIONAL CONFERENCE OF  
GUANGDONG-HONG KONG-MACAU GREATER BAY  
ON REGENERATIVE MEDICINE**

慶祝澳門大學 45 周年校慶  
第五屆粵港澳大灣區再生醫學國際會議

18 - 19 April 2026

CONFERENCE BOOKLET  
會議場刊

Organisers:



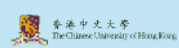
澳門大學  
UNIVERSIDADE DE MACAU  
UNIVERSITY OF MACAU



健康科學學院  
Faculdade de Ciências da Saúde  
Faculty of Health Sciences

橫琴澳門大學高等研究院  
University of Macau Advanced Research Institute in Hengqin

Consortium Partners:



Supporting Partner:

ICBC 中国工商银行 橫琴分行



# Conference Theme: Decoding Pluripotency & Reshaping Therapy

## O Organisers

The Faculty of Health Sciences, University of Macau  
University of Macau Advanced Research Institute in Hengqin

## C Consortium Partners

Macau Society for Stem Cell Research  
Macau University of Science and Technology  
The Islands Healthcare Complex – Macao Medical Center of Peking Union Medical College Hospital  
Guangzhou Institutes of Biomedicine and Health, Chinese Academy of Sciences  
Shenzhen Institutes of Advanced Technology, Chinese Academy of Sciences  
Shenzhen University of Advanced Technology  
The Chinese University of Hong Kong  
The University of Hong Kong

## S Supporting Partner

Industrial and Commercial Bank of China Limited Hengqin Branch

## L Location



### Hengqin, Zhuhai

SUMJOY HENGQIN TIANMU HOTEL,  
Hengqin

中國·珠海橫琴粵澳深度合作區  
星享·橫琴天沐酒店



### Macao

University of Macau,  
Faculty of Health Sciences, E12-G005

中國·澳門特別行政區  
澳門大學健康科學學院, E12-G005

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# Programme Rundown

**18 April 2026 (SAT) – PM**

Venue: SUMJOY HENGQIN TIANMU HOTEL, Hengqin

🕒 14:00 – 18:00

14:00 – 14:20

OPENING CEREMONY/CONSORTIUM CEREMONY/GROUP PHOTO

14:20 – 15:30

**Session 1. Moderator: Ren-He XU, Guokai CHEN**

**Dissecting Post-implantation Development using Cultured Human Embryos and Embryo Models**

Weizhi JI, Kunming University of Science and Technology (Keynote)

**Advancing Mouse and Human Embryo Models through Signalling Reprogramming**

Jose Carlos REBELO DA SILVA, Guangzhou Laboratory

**Modeling Immune Development, Aging, and Diseases Using Thymus Organoids**

Jonathan Yui-Han LOH, A\*STAR Institute of Molecular and Cell Biology

15:30 – 16:50

Coffee Break and Poster Session

# Programme Rundown

**18 April 2026 (SAT) – PM**

Venue: SUMJOY HENGQIN TIANMU HOTEL, Hengqin

🕒 14:00 – 18:00

16:50 – 17:50

Session 2. Moderator: Qi ZHAO, Zhenghai TANG

**Complex Regulation of Chromatin State in 2-cell Like State and Zygotic Genome Activation (ZGA)**

Lin LIU, Nankai University

**Artificial Embryos and 3D Embryo Reconstruction:  
Deciphering Early Human Embryonic Development**

Leqian YU, Institute of Zoology, Chinese Academy of Sciences

**Stagewise Induction of Retinal Pigment Epithelium from Human Pluripotent Stem Cells in Chemically Defined Conditions**

Guokai CHEN, University of Macau

18:00

Day 1 - End

# Programme Rundown

**19 April 2026 (SUN) – AM**

Venue: University of Macau, Faculty of Health Sciences, E12-G005

08:30 – 09:20

Transit from Hengqin to UM

 09:30 – 12:30

09:30 – 10:30

**Session 3. Moderator: Xiaomei LENG, Chen MING**

**AAV-based Gene Therapy revolution:  
how did we get here and what is next?**

Leszek LISOWSKI, Children's Medical Research Institute

**Multipotent Neural Stem Cells Originating from Neuroepithelium  
Exist Outside the Mouse Central Nervous System**

Dong HAN, the University of Hong Kong

**Development of hiPSC-derived Dopaminergic Progenitors  
for the treatment of Parkinson's Disease**

Junying YU, Nuwacell Biotech Co., Ltd.

10:30 – 11:00

Coffee Break

# Programme Rundown

**19 April 2026 (SUN) – AM**

Venue: University of Macau, Faculty of Health Sciences, E12-G005

🕒 09:30 – 12:30

11:00 – 12:00

**Session 4. Moderator: Ruiyu XIE, Qiang WU**

**Toward Clinical Translation of iPSC-Derived Neural Cell Therapy for Huntington's Disease**

Jihwan SONG, CHA University

**Harnessing Synthetic Biology Enabling Technologies to Enhance Safety and Efficacy of Cell and Gene Therapies**

Qizhou LIAN, Shenzhen University of Advanced Technology

**A Novel Cell Death Pathway Downstream of TNF Receptor**

Vinay TERGAONKAR, University of Macau

12:10 – 14:20

**Lunch Break**

# Programme Rundown

**19 April 2026 (SUN) – PM**

Venue: University of Macau, Faculty of Health Sciences, E12-G005

🕒 14:00 – 18:30

14:30 – 15:30

**Session 5. Moderator: He SONG, Wakam CHANG**

**Understanding the Novel Regulatory Mechanisms of Mitophagy by focusing on PINK1**

Hanming SHEN, University of Macau

**Long-Read Profiling of CRISPR Editing Complexity Guides Precise In Vivo hF9 Insertion for Hemophilia B Correction in Mice**

Bo FENG, the Chinese University of Hong Kong

**Single-Nucleus Sequencing Facilitated by Machine Learning Identifies the Oncogenic Landscape and Ferroptosis-Resistant Stem-Like Cells in HCC**

Xinghua PAN, Macau University of Science and Technology

15:30 – 16:30

**Session 6. Moderator: Ningyi SHAO, Jack LEI**

**Human Induced Pluripotent Stem Cells Derived Innate Immune Cells for Therapy**

Guangjin PAN, Guangzhou Institutes of Biomedicine and Health

**Cranial Bone Maneuver: A Novel Surgical Approach for the Management of Alzheimer's Disease?**

Gang LI, Shenzhen Institutes of Advanced Technology

**Dual Domains, One Goal: KDM3A Coordinates Histone Demethylation and Wnt/ $\beta$ -catenin Signaling in the Developing Hippocampus**

Xiaohua JIANG, the Chinese University of Hong Kong

## Programme Rundown

**19 April 2026 (SUN) – PM**

Venue: University of Macau, Faculty of Health Sciences, E12-G005

🕒 14:00 – 18:30

16:30 – 17:00

Coffee Break

17:30 – 18:00

**Session 7. Moderator: Ivy Aifang CHENG, Shaoyi ZHANG**

**FMRP Regulation of STAT3-MYC Signaling is Critical for Adult Hippocampal Neurogenesis and Cognitive Flexibility**

Yue LI, University of Macau

**Advances in Innovative Stem Cell Therapies Enabled by Standardized Stem Cell Resource**

Jie HAO, Institute of Zoology, Chinese Academy of Sciences

**Niche-based Long-Term Expansion of Human Retinal Stem Cells for Treating Photoreceptor Degeneration**

Ting XIE, Hong Kong University of Science and Technology (Keynote)

18:00 – 18:30

**Presentation of Selected Posters. Moderator: Bei LI, Qihan CHEN  
BEST POSTER AWARD  
CLOSING CEREMONY**

## Speakers' Biography



Prof.  
**Weizhi Ji**

State Key Laboratory of Primate Biomedical Research,  
Institute of Primate Translational Medicine,  
Kunming University of Science and Technology

**Talk Title:**  
Dissecting Post-implantation Development using Cultured  
Human Embryos and Embryo Models

### Biography

Prof. Weizhi Ji, a Member of Chinese Academy of Sciences (CAS), and a member of Academia Europaea, and Professor and Director of the State Key Laboratory of Primate Biomedical Research at the Institute of Primate Translational Medicine at Kunming University of Science and Technology, was selected as one of the Cell Press 50 Scientists that Inspire for his leadership in primate reproductive biology and developmental biology research.

Over the last three decades, Prof. Ji has focused on developing non-human primate disease models and on advancing regenerative and developmental biology with the overarching aim of improving human health. His research looks at the mechanisms of early embryo development regulation, stem cell pluripotency, and nonhuman primate models for human neurodevelopmental and neurodegenerative diseases.

Prof. Ji's research has been published in internationally recognized journals, including *Cell*, *Science*, *Nature*, *Cell Stem Cell*, *PNAS* and others. Notably, his lab developed the first gene-modified rhesus and cynomolgus monkeys via Cas9/RNA-mediated gene targeting in 2014, first proved the feasibility to generate chimeric monkeys using ESCs in 2015 and succeeded in extending in vitro culture for monkey in 2019 and for human early embryos in 2020. In 2021, leveraging the embryo in vitro culture system, his lab generated the first human-monkey chimeras. And in 2023, the team developed an embedded 3D culture system that allows for the extended ex utero culture of cynomolgus monkey embryos for up to 25 days post-fertilization. In 2024, Prof. Ji's team revealed that profound cellular defects attribute to muscular pathogenesis in the rhesus monkey model of Duchenne muscular dystrophy(DMD), which provides therapeutic targets for antifibrotic drugs and muscle regeneration therapies, as well as a reliable platform for advancing gene and cell therapies and new drug development.

## Speakers' Biography



Prof.

**José Carlos  
REBELO DA SILVA**

**Principal Investigator**  
Guangzhou National Laboratory



**Talk Title:**  
Advancing Mouse and Human Embryo Models through  
Signalling Reprogramming

### Biography

Prof. José Carlos REBELO DA SILVA is a full-time Principal Investigator in the Department of Fundamental Research at the Guangzhou National Laboratory, China, since June 2021. Prior to this, he was a Wellcome Trust Senior Research Fellow at the Wellcome Stem Cell Institute, University of Cambridge, where he led his research group for 13 years. José's earlier work focused on uncovering the mechanisms underlying the reprogramming of differentiated cells into induced pluripotent stem cells (iPSCs). Since moving to China, his research has shifted toward using iPSCs to develop advanced mouse and human embryo models that closely replicate in vivo embryonic development. His long-term vision is to translate iPSCs, via embryo modelling, into clinical applications by generating high-quality cell products for regenerative medicine.

## Speakers' Biography



Prof.  
**Yuin Han LOH**

Deputy Executive Director and Research Director  
A\*STAR Institute of Molecular and Cell Biology (IMCB)

Talk Title:  
**Modeling Immune Development, Aging, and Diseases  
Using Thymus Organoids**

### Biography

Prof. Yuin-Han Jonathan LOH is the Deputy Executive Director and Research Director at the A\*STAR Institute of Molecular and Cell Biology (IMCB). In addition, he is a Professor (Adjunct) at the National University of Singapore (NUS) Yong Loo Lin School of Medicine and a faculty member of the NUS Graduate School of Integrative Sciences and Engineering. Jonathan graduated with First Class Honours in Molecular Biology from NUS and completed his PhD in Integrative Sciences and Engineering at the NUS Graduate School, supported by the A\*STAR Scholarship, where he earned the Philip Yeo Prize for the best paper. He furthered his training with a Postdoctoral Fellowship in Hematology and Oncology at Harvard Medical School and Boston Children's Hospital. His current research focuses on understanding the mechanisms that regulate cell fate changes, particularly how: 1) epigenetic factors interact with regulatory elements to coordinate gene expression; 2) transcription factors drive transdifferentiation and somatic cell reprogramming; and 3) epitranscriptomic regulation influences cell states. He is ranked by ScholarGPS among the top 0.07% of scientists globally in the field of stem cell research, based on quality metrics, with his publications cited over 24,550 times (Google Scholar) by peers worldwide. Jonathan's contributions have been recognized with several prestigious accolades, including the MIT TR35 Asia Pacific Award, Singapore Young Scientist Award, World Technology Network Fellowship, the Stem Cell Society Singapore Outstanding Investigator Award, Entrepreneurship World Cup and the ISSCR Public Service Award. He served as the President of the Stem Cell Society Singapore (SCSS), International Committee of the ISSCR and as an executive council member of the Singapore Association for the Advancement of Science (SAAS). Additionally, Jonathan founded two biotech start-ups, InnoCellular and Genovn, and is a board member of Nasdaq-listed Cytomed Therapeutics (GDTC).

## Speakers' Biography



Prof.  
**Lin LIU**

**Professor**

College of Life Sciences, Nankai University



**Talk Title:**

**Complex Regulation of Chromatin State in 2-cell Like State and Zygotic Genome Activation (ZGA)**

### Biography

Prof. Lin LIU is a Professor at the College of Life Sciences, Nankai University, a Professor at the State Key Laboratory of Medicinal Chemical Biology, and a Professor at the Institute of Translational Medicine, Nankai University People's Hospital. He obtained his Doctorate Degree from Beijing Agricultural University. He has previously served as a visiting scholar and postdoctoral researcher at the Babraham Institute in Cambridge, UK, Cornell University, and the University of Connecticut in the United States. He has also worked as a Research Fellow and Assistant Professor in the Department of Obstetrics and Gynecology at Medical School of Brown University and Women & Children's Hospital of Rhode Island. He has been appointed as a Distinguished Professor at Sun Yat-sen University and a Distinguished Professor at Nankai University. He was honored as a Distinguished Professor under the Ministry of Education's "Changjiang Scholar" Award Program, received funding from the National Science Fund for Distinguished Young Scholars, and was recognized as an "Outstanding Contribution Expert" under the National Hundred, Thousand, and Ten Thousand Talents Project). His current research focuses on: 1) Novel pathways and mechanisms of telomere regulation in stem cell aging and regeneration; 2) New strategies for ovarian aging mechanisms and interventions. He serves as the principal investigator for key projects under the National Key R&D Program, the National Basic Research Program of China (973 Program), and the National Natural Science Foundation of China, and is the leader of the Tianjin "Stem Cells and Regenerative Medicine" Innovation Team. He is an active member of several academic organizations, including serving as a committee member of the Stem Cell Biology Branch and the Aging Biology Branch of the Chinese Society for Cell Biology, and as an editorial board member for several scientific journals. He has published over 180 SCI-indexed papers.

## Speakers' Biography



Prof.  
**Leqian YU**

**Professor**

Institute of Zoology, Chinese Academy of Sciences

**Talk Title:**  
**Artificial Embryos and 3D Embryo Reconstruction:  
Deciphering Early Human Embryonic Development**

### Biography

Prof. Leqian YU is a Principal Investigator at the Institute of Zoology, Chinese Academy of Sciences, and Deputy Director of the Key Laboratory of Organ Regeneration and Reconstruction. He received his Ph.D. from Kyoto University in 2017 and completed postdoctoral training at UT Southwestern Medical Center before joining the Institute of Zoology in 2022.

His research focuses on human early embryonic development using stem cells and in vitro embryo models. By integrating in vitro and in vivo approaches, his group aims to decode the 3D spatiotemporal architecture of early embryogenesis, construct complete artificial embryo models, and explore mechanisms underlying development and disease. His team developed the world's first complete human artificial embryo and a 3D digital embryo model, providing new platforms for studying early human development.

Prof. Yu has published over 20 papers as corresponding or first author in journals including *Cell*, *Nature*, *Cell Stem Cell*, and *Nature Cell Biology*, with over 2,200 citations. He holds three international patents and currently leads a National Science Fund for Distinguished Young Scholars and a CAS Type B Strategic Priority Program. His honors include the MIT Technology Review Innovators Under 35 China (2021) and the Stem Cell Outstanding Young Investigator Award (2024), and the 2025 CAS Young Scientist Award.

## Speakers' Biography



Prof.  
**Guokai CHEN**

### Professor

Faculty of Health Sciences, University of Macau

### Executive Deputy Director

University of Macau Advanced Research Institute in Hengqin



#### Talk Title:

**Stagewise Induction of Retinal Pigment Epithelium from Human Pluripotent Stem Cells in Chemically Defined Conditions**

### Biography

Prof. Guokai CHEN is a Professor in the Faculty of Health Sciences at University of Macau, and he also serves as the executive vice director of the University of Macau Advanced Research Institute in Hengqin. Prof. CHEN's group focus on technology development for human pluripotent stem cells (hPSC) and their clinical applications. He has developed the next generation of hPSC culture condition and differentiation methods to produce functional cells for potential cell therapy. Prof. CHEN's inventions have been widely used in stem cell field, including E8 cell culture system. Prof. CHEN's group currently studies the molecular mechanisms associated with the fate determination of retina, heart and skin. They hope to enhance the induction methods for large scale production, which would facilitate cell therapies in the near future.

## Speakers' Biography



Prof.

**Leszek LISOWSKI**

**Professor and Unit Head**

Children's Medical Research Institute (CMRI)



**Talk Title:**

**AAV-based Gene Therapy revolution: how did we get here and what is next?**

### Biography

Prof. Leszek LISOWSKI is a vectorology expert with over 20 years of experience in the development, manufacturing, and translation of viral vector-based technologies. Following his PhD at Cornell University and postdoctoral training at Stanford University, he was recruited to the Salk Institute for Biological Studies in La Jolla, CA, where he led the Gene Transfer, Targeting and Therapeutics Facility. During this time, he also completed an MBA at the UC San Diego Rady School of Management.

In 2015, he was recruited to Children's Medical Research Institute and The University of Sydney, where he established his independent research program, the Translational Vectorology Research Unit. His laboratory is internationally recognized for groundbreaking work in AAV biology, AAV bioengineering, and disease modelling.

Building on his dual PhD/MBA training, Prof. Lisowski is also an active entrepreneur. Since moving to Australia ten years ago, he has co-founded five startup companies based on his academic research outputs. He also serves on several advisory boards in Australia and internationally, including as Gene Therapy Advisor to 4BIO Capital, a UK-based venture capital firm.

Prof. Lisowski is also highly active in the non-profit sector. Since relocating to Australia, he has worked to establish the Australian Gene Therapy Centre, a non-profit organisation dedicated to developing and translating AAV-based gene therapies for rare and ultra-rare paediatric genetic disorders. Recognising the critical importance of advanced manufacturing for the translation of experimental advanced therapies, he was instrumental in establishing Australia's first clinical-grade Viral Vector Manufacturing Facility (VVMF), where he serves as Chief Technical Officer (CTO). He also co-founded and serves as President of the Gene2Cure Foundation, a non-profit organisation dedicated to the development and translation of gene therapies for rare and ultra-rare paediatric genetic conditions.

## Speakers' Biography



Dr.  
**Dong HAN**

**Research Assistant Professor**  
The University of Hong Kong

**Talk Title:**  
Multipotent Neural Stem Cells Originating from Neuroepithelium  
Exist Outside the Mouse Central Nervous System

### Biography

Dr. Dong HAN is a Research Assistant Professor at the School of Biomedical Sciences, Li Ka Shing Faculty of Medicine, The University of Hong Kong. After completing his PhD at Shandong Agricultural University, he conducted postdoctoral research at the Max Planck Institute for Molecular Biomedicine in Germany, working in Hans Schöler's laboratory. There, he focused on the role of the transcription factor Oct4 in early embryonic development and induced pluripotent stem cell (iPSC) reprogramming. In 2023, he joined the University of Hong Kong and became a Research Assistant Professor. His research investigates stem cells, embryonic lineages, and the molecular mechanisms underlying early embryo development, as well as tissue repair and regeneration for therapeutic applications. Utilizing a range of approaches from molecular biology, developmental biology, and multi-omics, he aims to generate new insights into mammalian development and advance regenerative medicine. His current work centers on neural stem cell development and the induction of totipotent like stem cells. One of his groundbreaking studies is the discovery of a new type of NSCs, called peripheral NSCs (pNSCs), outside the central nervous system. The discovery of pNSCs opens up new avenues of research in the field and enormous possibilities for the development of therapies for neurological diseases and injuries.

## Speakers' Biography



Dr.  
**Junying YU**

**CSO**

Nuwacell Biotechnologies Co., Ltd



**Talk Title:**

**Development of hiPSC-derived Dopaminergic Progenitors  
for the treatment of Parkinson's Disease**

### **Biography**

Dr. Junying YU earned her Ph.D in cell and molecular biology from University of Pennsylvania, US in 2002, and did her postdoctoral training with Dr. James Thomson at University of Wisconsin, Madison (2003-2009). Her main interest is in human pluripotent stem cells, focusing on their reprogramming, self-renewal, and differentiation. She was the lead and co-corresponding author on one of the first two papers published on hiPSC research in November 2007, and published a second major milestone paper on the derivation of hiPSCs free of exogenous DNA in March 2009, both in the top journal Science. Dr. Yu moved into industry in 2009 with work focusing on the translation of the hiPSC technology. In 2016, she came back to China and set up NuwaCell Ltd with the goal to move the hiPSC technology into clinics in China. To date, five hiPSC-derived cell products have entered clinical trials, with three already in Phase II clinical trials.

## Speakers' Biography



Prof.  
**Jihwan SONG**

### Professor and Chair

Department of Biomedical Sciences, CHA University



#### Talk Title:

Toward Clinical Translation of iPSC-Derived Neural Cell Therapy for Huntington's Disease

### Biography

Prof. Jihwan SONG, D.Phil., is Professor and Chair of the Department of Biomedical Sciences at CHA University in the Republic of Korea and Founder and CTO of iPS Bio, Inc., a biotechnology company developing induced pluripotent stem cell (iPSC)-based therapeutics. He received his B.Sc. and M.Sc. degrees from Yonsei University and earned his D.Phil. in Developmental Biology from the University of Oxford. He subsequently completed postdoctoral training at the Whitehead Institute for Biomedical Research (MIT), Massachusetts General Hospital/Harvard Medical School, the University of California, Irvine, and McLean Hospital.

Prof. Song has been actively engaged in international stem cell research initiatives. He is a founding director and Vice Chair of the Asian Alliance for Stem Cells and Regenerative Medicine (AASCRM) and served as a Director of the Global Alliance for iPSC Therapies (GAIiT) for the past ten years. He previously served as President and subsequently Chair of the Board Committee of the Korean Society for Stem Cell Research (KSSCR).

He is also actively involved in the International Society for Stem Cell Research (ISSCR), contributing to the Manufacturing, Clinical Translation, and Regulatory (MCTR) Committee and the Membership and International Outreach Committee (MIOC), and participated in the ISSCR Working Group that developed the ISSCR Standards for Human Stem Cell Use in Research. He is also an active member of the International Stem Cell Biobanking Initiative (ISCBI) and the International Stem Cell Forum (ISCF).

His research focuses on developing clinical-grade HLA-homozygous iPSC-derived neural cells for regenerative therapies targeting neurological disorders, particularly Huntington's disease. His group also utilizes patient-derived iPSC models and brain organoids to facilitate drug discovery for neurodegenerative diseases.

## Speakers' Biography



Prof.  
**Qizhou LIAN**

**Distinguished Professor**

Shenzhen University of Advanced Technology

**Talk Title:**  
**Harnessing Synthetic Biology Enabling Technologies to  
Enhance Safety and Efficacy of Cell and Gene Therapies**

### Biography

Prof. Qizhou LIAN is a Distinguished Professor in the Faculty of Synthetic Biology at the Shenzhen University of Advanced Technology (SUAT) and the Shenzhen Institutes of Advanced Technology (SIAT), Chinese Academy of Sciences (CAS). Before joining SIAT/SUAT in 2023, he was a Principal Investigator and Scientific Officer at the University of Hong Kong, where he helped establish a GMP-compliant Cell and Gene Therapy Manufacturing Center. His research focuses on cell and gene therapy (CGT) for genetic and metabolic disorders. In 2014, he led Asia's first hematopoietic stem cell-based gene therapy for metachromatic leukodystrophy (MLD), a rare lysosomal storage disorder that causes lipid accumulation in the brain. More recently, he has developed a synthetic biology-enabled platform for precision medicine, including next-generation CAR-T cell therapy, Mesenchymal stromal cell (MSC) therapy and antisense oligonucleotide therapies. Prof. Lian also actively serves as a scientific grant reviewer for international funding agencies such as ANR, ISF, MRC, UKRI, and NSFC. He has published over 190 research articles in scientific journals including *Circulation*, *Cell Stem Cell*, and *Nature Metabolism*, etc.

## Speakers' Biography



Prof.  
**Vinay TERGAONKAR**

### Chair Professor

Faculty of Health Sciences, University of Macau



#### Talk Title:

A Novel Cell Death Pathway Downstream of TNF Receptor

### Biography

Prof. Vinay TERGAONKAR obtained his PhD in 2001 via an international cancer society (UICC) fellowship for collaborative research at Tufts University, Boston, USA. He has been a Fellow (2001-2004) and a Special Fellow (2004-present) of the Leukemia and Lymphoma Society of America and conducted his postdoctoral studies at the Salk Institute for Biological Studies, La Jolla, California. Vinay's research interests are in inflammatory signalling & biology and novel anti-cancer strategies. He serves on Editorial Boards of 1) *Science Advances* (AAAS), 2) *Molecular and Cellular Biology* (American Society for Molecular Biology), 3) *Biochemical Journal* (Portland Press). Work from his lab has received international recognition including the British council development award (2014), the Premiers' fellowship from Government of South Australia (2015) and University of Macau Distinguished Professorship (2019). His future research aims to create novel methods of targeting TNF (tumor necrosis factor), which is a key driver of virtually all human ailments.

## Speakers' Biography



Prof.  
**Han-Ming SHEN**

**Chair Professor**  
University of Macau

**Talk Title:**  
Understanding the Novel Regulatory Mechanisms of  
Mitophagy by Focusing on PINK1

### Biography

Prof. Han-Ming SHEN is currently a Chair Professor and Associate Dean (Teaching), Faculty of Health Sciences, University of Macau. He received his Bachelor of Medicine, Master of Medicine and PhD from Zhejiang Medical University and National University of Singapore (NUS), respectively. He received his postdoc training at both NUS and National Cancer Institute (NCI), NIH, USA. Prior to his current appointment, he worked in NUS School of Medicine, from Assistant Professor to Full Professor. His research is focused on the autophagy-lysosome pathway, mitophagy, as well as on glucose metabolism in cancer cell biology. Currently, he serves as the Associate Editor for Autophagy, and as member of editorial board for several other journals such as *Life Metabolism*, *Burns & Trauma*, and *Aging Cell*.

## Speakers' Biography



Prof.  
**Bo FENG**

**Associate Professor**

The Chinese University of Hong Kong



**Talk Title:**

**Long-Read Profiling of CRISPR Editing Complexity Guides**

**Precise In Vivo hF9 Insertion for Hemophilia B Correction in Mice**

### **Biography**

Prof. Bo FENG is an Associate Professor in the School Biomedical Sciences, Faculty of Medicine, The Chinese University of Hong Kong (CUHK). Prof. Feng obtained her BSc and MSc degrees from Nankai University and received her PhD (2006) from National University of Singapore (NUS). After graduation, Prof. Feng joined Prof. Ng Huck Hui's lab in Genome Institute of Singapore (GIS) for postdoc training and published her works on stem cells and reprogramming in *Nature Cell Biology*, *Cell Stem Cell* and *Nature*. In Nov 2010, Prof. Feng set up her own lab in CUHK and now she is an active member in the Developmental and Regenerative Biology Thematic Research Program, Institute for Tissue Engineering and Regenerative Medicine, and CUHK-GIBH Joint Laboratory. Her current research interest lies within the molecular mechanism that controls differentiation of ESCs/iPSCs, as well as development of new strategies based on stem cell and CRISPR technology for gene and cell therapy.

## Speakers' Biography



Prof.  
**Xinghua PAN**

**Professor**

Macau University of Science and Technology



**Talk Title:**

**Single-Nucleus Sequencing Facilitated by Machine Learning Identifies the Oncogenic Landscape and Ferroptosis-Resistant Stem-Like Cells in HCC**

### Biography

Prof. Xinghua PAN, PhD, is a Professor of the Precision Regenerative Medicine Research Centre. Former Chairman and Distinguished Professor at Southern Medical University, Guangzhou, and former Research Scientist/Principal Investigator at Yale University School of Medicine, where he was also affiliated with its Centers for Genomics, Cancer, and Stem Cells.

He earned his MD and MS from Southern Medical University, a PhD from Fudan University, and completed 2 sessions of postdoctoral training: at both the Chinese Academy of Medical Sciences and Yale University, under Profs Jiazhen Tan, Min Wu, and Sherman Weissman.

At the early 2000s, he began his exploration in single-cell sequencing as a member of the international ENCODE consortium. He has innovated a dozen of technologies for single-cell genomics, epigenomics, transcriptomics, and telomere analysis, paving the way for single-cell multi-omics. His research focuses on multiomics of variants of human systems and diseases, particularly involved in stemness and tumor biology. He has authored over 160 publications in leading journals such as *PNAS*, *Adv Sci*, *Cell Disc*, *NAR*, with total impact factors exceeding 1000, over 11,000 citations, and an H-index of 44, i10-index of 74. He holds 15 invention patents in U.S. and China.

He serves on editorial boards for several international journals, including as Associate Editor for *Precision Clinical Medicine* (Oxford University Press), and reviewer for Nature-series journals. He is the Chairman of the International Conference on Single-cell and Spatial Omics (TICSSO), a fellow of the Royal Society of Medicine, and received the CastUSA Single-Cell Genomics Pioneer Award in 2022.

## Speakers' Biography



Prof.  
**Guangjin PAN**

### Professor

Centre for Regenerative Medicine and Health,  
Hong Kong Institute of Science and Innovation



#### Talk Title:

Human Induced Pluripotent Stem Cells Derived Innate Immune  
Cells for Therapy

### Biography

Prof. Guangjin PAN got his Ph.D degree in Tsinghua University and postdoctoral training in Thomson lab, the pioneer for human embryonic stem cells(hESCs). His Research focus on the molecular mechanism underlying the hPSC pluripotency and their early fate choice upon pluripotency exit and to develop robust approaches to generate hPSCs derived cells with therapeutic functions to address big health challenges such as cancer.


## Speakers' Biography



Prof.  
**Gang LI**

### Professor

Center for Locomotor System Regenerative  
Medicine and Technology, Shenzhen Institutes of  
Advanced Technology, Chinese Academy of Sciences

 **Talk Title:**  
Cranial Bone Maneuver: A Novel Surgical Approach for  
the Management of Alzheimer's Disease?

### Biography

Prof. Gang LI received his medical training from the Fourth Military Medical University in Xi'an, China in 1991; and D.Phil. in Orthopedic Surgery from The University of Oxford, UK in 1997. Previously, he was Professor in Orthopedic Surgery at Queen's University Belfast, UK and The Chinese University of Hong Kong, Hong Kong. He is now a Professor and Principle Investigator, Director of Center for Locomotor System Regenerative Medicine and Technology, Institute of Biomedicine and Biotechnology, Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences, Shenzhen, China. His main research interests are musculoskeletal tissue regenerative medicine; innovative applications of distraction histogenesis technologies. He published more than 360 SCI papers with H index of 86 (2026-02). He is currently served as executive deputy editor-in-chief of *Journal of Orthopedic Translation* (IF7.8). He is an elected fellow of the International Joint Orthopedic Research Societies (FIOS); an elected fellow of the American Orthopedic Research Society (FOS) and an elected fellow of International Chinese Musculoskeletal Research Society (FICMRS). Since 2019, he is on Stanford University's list of the world's top 2% scientists. Awards he won recently include: The first prize of the China Ministry of Science and Technology's Science and Technology Progress Award (2021); Outstanding Scientist Award of International Society for Tissue Engineering and Regenerative Medicine (Asia-Pacific Chapter, 2024); Clinical Translation Silver Award of *Journal of Orthopedic Translation* (2024).

## Speakers' Biography



Prof.  
**Xiaohua JIANG**

### Associate Professor

School of Biomedical Sciences,  
the Chinese University of Hong Kong

**Talk Title:**  
**Dual Domains, One Goal: KDM3A Coordinates Histone  
Demethylation and Wnt/ $\beta$ -catenin Signaling in the  
Developing HippocampusA**

### Biography

Prof. Cynthia Xiaohua JIANG received her medical degree from the School of Medicine, Shanghai Jiao Tong University and completed her internship and residency training at Rui Jin Hospital, Shanghai. She subsequently earned her PhD in Biomedical Sciences from the University of Hong Kong.

Following the completion of her doctoral studies, Prof. Jiang undertook postdoctoral training in the Department of Medicine at the University of California, Los Angeles (UCLA), where her research focused on the role of protein kinase signaling cascades in cancer development. She later joined the University of Southern California, where she investigated the cellular origins and genetic mechanisms of pediatric cancers, employing human embryonic stem cells as a novel experimental model. In 2013, Prof. Jiang established her laboratory in the School of Biomedical Sciences at The Chinese University of Hong Kong (CUHK). Her research focuses on stem cell biology and regenerative medicine, with particular emphasis on the molecular regulation of stem cells, stem cell microenvironments, and the development of stem cell-based therapies for neurological diseases. Prof. Jiang has authored over 100 peer-reviewed publications in leading international journals, including *Nature Medicine*, *Cell Research*, *Cell Death & Differentiation*, *Theranostics*, *Neuro-Oncology*, and *Stem Cell Reports*.

## Speakers' Biography



Prof.  
**Yue LI**

**Associate Professor**  
University of Macau

**Talk Title:**  
FMRP Regulation of STAT3-MYC Signaling is Critical for  
Adult Hippocampal Neurogenesis and Cognitive Flexibility

### Biography

Prof. Yue LI is currently an Associate Professor at the University of Macau and is committed to exploring the molecular mechanisms of neural stem cell biology and the mechanisms of Chinese herbal medicine and its active ingredients in the treatment of neurodevelopmental disorders by governing neurogenesis and drug development. Prof. LI has published over 50 academic papers, of which 35 were published as the first or corresponding author, including in *Science Translational Medicine*, *Nature Communications*, *PNAS*, *Cell Death & Differentiation*, *eBioMedicine*, and *Journal of Advanced Research*. Prof. Li holds 1 U.S. patent, 6 Chinese patents, and has received the second prize in Tianjin science and technology progress (1st recipient). He has presided over 5 national and provincial projects. Prof. Li is the vice chairman of the First Youth Committee of Pharmacology of Chinese Herbal Medicine and Natural Medicine, a member of the Chinese Herbal Medicine and Natural Medicine of the Chinese Pharmacological Society, and a member of the New Drug Development and Evaluation Branch of the Chinese Stroke Association. Prof. Li serves as the review expert for National Natural Science Foundation of China (NSFC) and external reviewer for some important scientific journals, including *Nature Communications*, *Molecular Psychiatry*, *Biological Psychiatry*, *EMBO Molecular Medicine*, *Research* and *Critical Reviews in Food Science and Nutrition*, etc., and editorial board member of the journals, including *Pharmacological Research: Modern Chinese Medicine*, *Exploration*, *Engineering*, *Research* and *Acupuncture and Herbal Medicine*.

## Speakers' Biography



Prof.  
**Jie HAO**



**Professor**

Institute of Zoology, Chinese Academy of Sciences (CAS)



**Talk Title:**

**Advances in Innovative Stem Cell Therapies Enabled by Standardized Stem Cell Resource**

### Biography

Prof. Jie HAO is the director of the National Stem Cell Resource Center of the Institute of Zoology, Chinese Academy of Sciences. Her research primarily focuses on the development of novel stem cells, industrial core cell lines, and organoid resources, as well as the research and development of stem cell-based therapies. She is dedicated to promoting the standardized management of stem cell and organoid resources to support biosafety frameworks and facilitate the clinical translation and technological innovation of stem cell therapies.

As a corresponding or first author (including co-authorship), she has published over 60 papers in prestigious journals such as *Cell Research*. She has co-authored 6 books, holds more than 20 authorized invention patents, and has spearheaded the formulation of over 10 national and international standards. Her contributions have earned her more than 10 national or provincial/ministerial awards. She has participated in over 10 stem cell clinical research projects registered with the relevant national commissions and 5 Phase I/II Clinical Trial Approvals from the National Medical Products Administration (NMPA), with several of her achievements successfully undergoing industrial transformation. She has also led or participated in numerous high-level research initiatives, including the National Key R&D Program of China and the Strategic Priority Research Program of the Chinese Academy of Sciences. Additionally, she serves as a registered expert for ISO/TC 276 and a committee member of the Stem Cell Biology Branch of the Chinese Society for Cell Biology (CSCB).

## Speakers' Biography



Prof.  
**Ting XIE**

 **Chair Professor and Kerry Holdings Professor of Science**  
Hong Kong University of Science and Technology 

 **Talk Title:**  
**Niche-based Long-Term Expansion of Human  
Retinal Stem Cells for Treating Photoreceptor Degeneration**

### **Biography**

Prof. Ting XIE is Kerry Holdings Professor of Science, Chair Professor, and Hong Kong STEM Professor of the Division of Life Science, Hong Kong University of Science and Technology (HKUST). In addition, he is currently serving as the director of the Center for Tissue Regeneration and Engineering at HKUST, the director of the Institute of Basic Medical Sciences at the Shenzhen Peking University-HKUST Medical Center (SPHMC), and the Associate Director of SPHMC. Previously, he also served as the head of the Division of Life Science at HKUST during 2021-2023. Before moving to Hong Kong, he was an investigator at the Stowers Institute for Medical Research and a professor at the University of Kansas Medical Center. He obtained his Ph.D. in Molecular Biology and Biochemistry from Rutgers University and did his postdoctoral training at Howard Hughes Medical Institute/Carnegie Institution of Science. His main research areas include stem cell biology and eye degenerative diseases. He is one of the leaders and pioneers in studying stem cell niches. Prof. Ting XIE has published over 90 articles in high-profile journals, including *Science*, *Nature*, and *Cell*. He has been serving on the scientific advisory board of The Glaucoma Foundation and the editorial board of *Cell Research*, *Development*, and ten other scientific journals.



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