

Over 100 Experts from Mainland and Overseas Share Cutting-edge Technologies of Stem Cell at the 2nd Macau Stem Cell Symposium

The 2nd Macau Stem Cell Symposium was held on 27 September and attracted more than 100 experts, scholars, researchers and students from Macao, Hong Kong, mainland China, Singapore and United States. Participants discussed the latest development of stem cell and other related topics. Prof. Wei GE, UM Vice Rector (Research), stated that stem cell research held tremendous promise for medical treatments and was definitely one of the most important research areas of UM. This symposium would certainly boost the development of stem cell research in UM and even Macao. Prof. GE also mentioned that UM as the leading comprehensive university on the west bank of the Guangdong-Hong Kong-Macao Greater Bay Area, played an extremely vital role in the regional development, and served as a centre for technological innovation and talent development. With the participation of mainland and overseas experts, this symposium would contribute to the research progress of stem cell. Prof. Chuxia DENG also stated that FHS has gone from strength to strength in research innovation and transfer with a rapid rise in quantity and quality of research publications and the research team of FHS recently obtained fruitful achievements on stem cell.

Many well-known scholars around the world shared their views on the cutting-edge knowledge and advanced technology about stem cell research in the symposium. Prof. Weizhi JI, Academician and Dean of Institute of Primate Translational Medicine of Kunming University of Science and Technology in Yunnan gave a talk about how to use 3D culture system to dissect the global dynamics of monkey and human embryogenesis. Prof. Naihe JING, Researcher of the Shanghai Institute of Biochemistry, Chinese Academy of Sciences, detailed the application of the latest single-cell sequencing technology in mouse embryo development after implantation, especially for cell fate determination and spatial change of the cells. Prof. Yong WANG, Professor of Pennsylvania State University, made use of biomaterial hydrogel to show how to create a stem cell nest for stem cells to facilitate the survival and delivery. In addition, Prof. Renhe XU, Prof. Guokai CHEN and Prof. Chunming WANG, Associate Professor, ICMS of UM also introduced their recent published research achievements.

The 2nd Macau Stem Cell Symposium was organized by FHS, UM and co-organized by Institute of Chinese Medical Sciences (ICMS), UM and State Key Laboratory of Quality Research in Chinese, Macau University of Science and Technology (MUST). Kong On CHAN, Acting Senior Manager of the Macao Science and Technology Development Fund (FDCT) attended the opening ceremony. The symposium included 11 themed talks, which covered a wide range of topics, such as embryonic development and tissue production, translational medicine, mechanistic study of stem cell development and translational application of the discoveries, biomaterials and applications, etc. Participants of the symposium had in-depth discussion and interaction on sharing their views and knowledge. Renhe XU recognized the outputs of the symposium, facilitating interaction and foster collaboration, providing a valuable learning and knowledge exchange platform for the students.

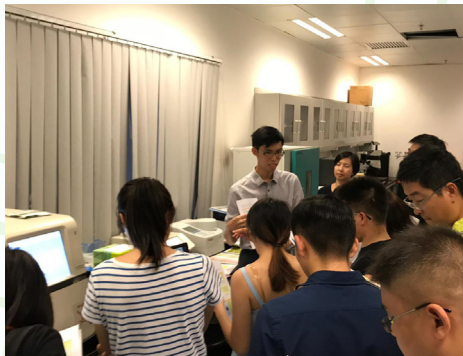


Seminar Series

3-D Cultures / Organoids and its Application - Dr. Ching-HUAN CHEN

Dr. Ching-HUAN CHEN, Field Application Scientist of Bio-Techne Hong Kong & Taiwan presented "3-D Cultures / Organoids and its Application" on 26 September.

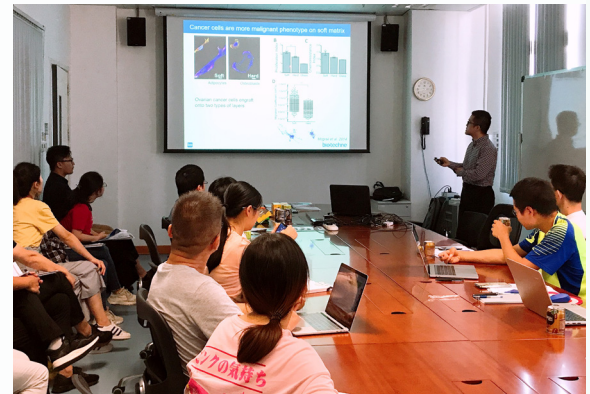
Dr. CHEN introduced the multiple advantages of 3-D cell cultures compared with traditional 2-D cultures. 3-D cell cultures allow cells to grow and assemble in three dimensions, which recapitulates physiologic cellular composition and behaviors more accurately. 3-D cell cultures can mimic in vivo and can reduce experimental complexity. It has been applied widely into basic biology, regenerative medicine, and personalized medicine. Especially, it enables the studies of human developmental processes and diseases that are not easily characterized in animal models. Dr. CHEN also presented the common platforms of 3-D cell culture technology and its applications in development, pathogenesis and translational medicine.



Training Workshop

Achieve Publication Quality Western Blot Data with Confidence - BioRad

Technician from BioRad shared several useful research techniques with FHS researchers on 24 September. He introduced the Multiplex Fluorescent Western Blotting which enables simultaneous detection of multiple proteins on a single blot without the need for stripping and reprobing or cutting of membranes. The participants learnt the workflow of the Western blot, the operation of the ChemiDoc imaging system, the techniques of transferring protein from gel to membrane, running a TGX SDS-PAGE gel and visualizing gel/membrane images by Stain-Free channel.



September				
Mon	Tues	Wed	Thurs	Fri
30	1 National Day of the People's Republic of China	2 The Day following the National Day of the People's Republic of China	3 FHS Postdoc/ Student Seminar Host: Prof. Chuxia DENG and Prof. Edwin CHEUNG Time: 17:00-18:00 Venue: N22-G002	4
7 Chong Yeung Festival	8	9	10	11
14	15	16 Seminar Series Endothelium and Combat Against Vascular Diseases Speaker: Prof. Yu HUANG Host: Prof. Wenhua ZHENG Time: 10:00 - 11:00 Venue: E12-G004 B-CAT Meeting #17 Speaker: Prof. Ruiyu XIE Time: 17:00 Venue: E12-G004	17 FHS Postdoc/ Student Seminar Host: Prof. Chris WONG and Prof. Jun ZHENG Time: 17:00-18:00 Venue: N22-G002	18