

Department of Biomedical Sciences
presents a seminar series in Cancer Biology,
Biotherapy and Nanomedicine



“Stem Cell Therapy: from Laboratory to Clinic”

Professor Ren-He Xu
Professor
Faculty of Health Sciences
University of Macau

Date : 20 January 2017

Time: 2:30 pm to 4:00 pm

**Venue: Meeting Room 2-130, 1/F, Block 2, To Yuen Building,
City University of Hong Kong**

Abstract

Pluripotent stem cells, including embryonic stem (ES) cells and induced pluripotent stem (iPS) cells, can differentiate into any cell type in the body and have been widely used in the study of genetic repair, cellular therapy, disease modeling, drug screening and toxicity, etc. We identified key growth factors that maintain the prolonged culture of human pluripotent stem cells and regulate the pluripotency gene *NANOG*. We also revealed recurrent copy number variations in the genome of the pluripotent cells during their derivation and culture, which is essential for the quality control and assurance of the cells. To promote stem cell therapy, we used mesenchymal stem cells (MSC) differentiated from human ES cells to treat autoimmune diseases including multiple sclerosis and inflammatory bowel disease, and observed remarkable effects in mouse and monkey models. Currently we are advancing MSC from this source towards clinical application.

About the speaker

The current research interests of Prof. Xu's laboratory include optimised generation and maintenance of human embryonic stem cell-derived mesenchymal stem cells (hES-MSCs), therapeutic application of hES-MSCs and Marfan syndrome modelled with induced pluripotent stem (iPS) cells.

After he finished his Bachelor Degree at the South China University and finished his Master Degree at the Central South University, he got a Ph.D at the University of Tokyo. He was a research fellow at the NCI-FCRDC, NIH, Frederick, MD, USA in 1994. In 1999, he was a senior scientist at the WiCell Research Institute, Madison, WI, USA. In 2006, he was an associate professor at the University of Connecticut Health Center. In 2014, he has been a professor at the University of Macau.

All are welcome!

Enquiry:

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