## Department of Biomedical Sciences presents



## Symposium on Regeneration Medicine

**Date: 27 April 2018** 

Time: 10:00am to 12:30pm

Venue: Meeting Room 2-130, 1/F, Block 2, To Yuen Building

## "Endothelial cell dysfunction and vascular-metabolic diseases"

ProfYu Huang
Institute of Vascular Medicine and School of Biomedical Sciences
Chinese University of Hong Kong

(10:00am - 11:00am)

# "Cell intrinsic mechanisms for axon growth and regeneration"

Dr Zhen-Ge Luo Institute of Neuroscience, Chinese Academyof Sciences, Shanghai, China

(11:00am - 12:30pm)

Enquiry:

Prof Jufang He (3442-7042, jufanghe@cityu.edu.hk)
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All are welcome!

## "Endothelial cell dysfunction and vascular-metabolic diseases"

# Prof Yu Huang Institute of Vascular Medicine and School of Biomedical Sciences Chinese University of Hong Kong

#### **Abstract**

The primary goal of our research programs is to elucidate cellular and molecular events involved in the initiation and progression of endothelial dysfunction in hypertension, diabetes and dyslipidemia, to uncover novel relevant biomarkers for vascular dysfunction, and develop venues to reverse vascular function and aging in animal models of cardio-metabolic diseases, as well as to train top-quality research students. Our main research focuses on endothelial dysfunction and functional communication between endothelium and other organs such as adipose tissue and bone. Our multidisciplinary research platform has provided increasing opportunities for closer collaboration with clinicians and basic scientists in nanomaterials, omics, and mechanobiology in Hong Kong and around the world aiming at deeper understanding of pathophysiological mechanisms, exploring new therapeutic strategies, and developing useful disease predictors.

### **Biography**

Prof HUANG Yu received his BSc degree from Fudan University Shanghai Medical College and PhD degree from University of Cambridge. He is the Professor of Biomedical Sciences, Associate Director (Research) of School of Biomedical Sciences, and the founding Director (Basic Sciences) of Institute of Vascular Medicine, CUHK. Huang Yu is currently the President of Asian Society for Vascular Biology and the Vice-President for both Chinese Society for Vascular Medicine and the Chinese Section, the International Society for Heart Research. He has co-authored 401 publications in SCI-indexed journals including Cell Metabolism, Nature, and Science with over 19700 Google scholar citations and H-index of 72. He has so far served as the editor, guest editor, associate editor, and editorial board member for 17 SCI-indexed journals. He also serves as the panel member in three granting agencies. He received Croucher Senior Research Fellow Award in 2014 and the second-class Award, State Natural Science Award, China in 2015.

## "Cell intrinsic mechanisms for axon growth and regeneration"

Dr Zhen-Ge Luo Institute of Neuroscience, Chinese Academyof Sciences, Shanghai, China

#### **Abstract**

Axon development and growth need the coordinated actions of cytoskeleton reorganization and intracellular membrane trafficking. These processes are common for various cellular polarization contexts. In this lecture, I will introduce our findings on molecular mechanisms regulating neuronal microtubule stability and membrane trafficking of plasmalemmal precursor vesicles during axon initiation and elongation. Based on these cell-intrinsic programs for axonal elongation, we have been trying to modulate re-growth capacity of injured axons. Recently, we found a role of autophagy induction in promoting neuronal microtubule assembly and axon regeneration after injury. This speech will also discuss the potential combinatorial treatment strategies needed for enhancing intrinsic axon regenerative ability.

### **Biography**

Dr. Zhen-Ge Luo graduated from Nankai University, Tianjin in 1988 and received his Ph. D. from Chinese Academy of Military Medical Sciences (AMMS), Beijing in 1995. He was appointed as associate investigator at AMMS in 1998 and served as a post-doctoral fellow in the department of neurobiology, University of Alabama at Birmingham, USA during 2000-2003. He joined ION in 2003 as Principal Investigator and the Head of the Laboratory of synaptic signaling. His major Research Interests are the molecular mechanisms underlying neurite differentiation and synapse formation.