CSCB Seminar Series

Title:

The Biology and Mechanism of Lipid Storage

Abstract:

Neutral lipids are major energy source stored under energy excess condition and released in the form of FAs under starvation condition. Excessive lipid storage leads to the development of obesity and fatty liver disease. Lipid droplets (LDs) are dynamic subcellular organelles responsible for lipid storage and intracellular lipid homeostasis. We have shown that CIDE family proteins are LD and ER-associated proteins and are important regulatory factors for lipid storage in adipocytes, hepatocytes, mammary epithelial cells and skin sebocytes. CIDE family proteins are highly enriched at LD-LD contact sites (LDCS) and promote atypical form of LD fusion by initiating a directional lipid transfer from smaller to larger LDs. We have identified several other factors that control LD fusion and elucidated their detail biochemical and biophysical mechanism. General implication of lipid metabolism in the development of metabolic diseases will also be discussed.

Date:

7 February 2017, Tuesday

Time:

3:00PM to 4.00PM

Light refreshments will be served at 2:30 PM

Venue:

Amphitheatre, Level 2

Duke-NUS Medical School

8 College Road, S169857

(Opposite Singapore General Hospital, Block 6/7)

Host:

Dr. FU Naiyang, PhD

Assistant Professor,
Programme in Cancer & Stem Cell Biology,
Duke-NUS Medical School

Speaker:



LI Peng, Ph.D
Professor, School of Life Sciences
Tsinghua University

Biography:

Professor Peng Li finished her B.Sc. at Beijing Normal University in 1987, and obtained her Ph.D. from the University of California at San Diego in 1995. She then received her postdoctoral training at IMCB, Singapore and UT Southwestern Medical Center at Dallas. She was a principal investigator at IMCB from 1997-2002 and an assistant/associate professor in Hong Kong University of Science and Technology from 2003-2005. She is currently a professor at the School of Life Sciences, Tsinghua University and director of the division of life sciences, National Natural Science Foundation of China. She was elected Academician of the Chinese Academy of Sciences in 2015 and elected Fellow of TWAS in 2016. Her major scientific achievement is the elucidation of molecular mechanism and physiological relevance of LD fusion.

No registration is required. All are welcome

Any enquiry, please contact: Amanda Chan (Tel: 6601 5700)