

CSCB Seminar Series

Title:

“Deciphering the epithelial cell heterogeneity in normal liver and cellular origins in liver cancer”

Abstract:

Primary liver cancer mainly arises from normal liver epithelial cells. Emerging evidence suggests that epithelial cells in the liver are heterogeneous, but the molecular features of distinct liver epithelial cell subsets and their contributions in liver homeostasis and regeneration need to be further defined. Moreover, it remains to be elucidated whether distinct liver cancer subtypes may originate from different epithelial cells. In this study, cutting-edge genetically engineered mouse models are developed to specifically label, trace and target different subsets of liver epithelial cells. Gene signatures of different defined epithelial cell subsets isolated from our mouse models are generated and used as a platform to delineate the cells of origin in human liver cancer at the molecular level. The newly generated mouse models are also utilized to explore the role of different epithelial cell subsets in liver homeostasis and repair, and to identify the critical target cell populations in different liver cancer models. We wish our study would facilitate the development of novel strategies for the early detection, effective treatment and preventative therapy of liver cancer.

Date:

**19 March 2018
(Monday)**

Time:

12pm – 1pm

Venue:

**Amphitheatre, Level 2
Duke-NUS Medical School
8 College Road, S169857**

(Opposite Singapore General Hospital,
Block 6/7)

Host:

Patrick TAN, M.D., Ph.D
Professor
Programme in Cancer & Stem Cell
Biology
Duke-NUS Medical School

“No registration is required”
Any enquiry, please contact:
Beatrice Tan (Tel: 6516 7923)

Speaker:



Nai Yang FU, PhD

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

Biography:

Dr. Nai Yang FU obtained his PhD from IMCB in 2009. He subsequently had his postdoc training in stem cell and cancer biology at the Walter and Eliza Hall Institute of Medical Research (WEHI, Australia). He returned back to Singapore and has been appointed as Assistant Professor at Duke-NUS since June 2016. His laboratory focuses on addressing the physiological function and in-depth molecular regulation of epithelial stem cells in normal development and tumorigenesis.