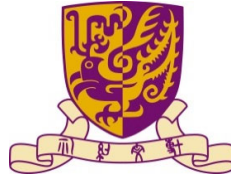


For Favour of Posting



**THE CHINESE UNIVERSITY OF HONG KONG
FACULTY OF MEDICINE
SCHOOL OF BIOMEDICAL SCIENCES**

Program in Neural, Vascular, and Metabolic Biology

will present a seminar entitled

**“Application of New Lineage Tracing
Techniques in Tissue Regeneration”**

by

Prof. Bin ZHOU

Professor

New Cornerstone Investigator

Shanghai Institutes for Biological Sciences

Chinese Academy of Sciences

Summary: Recent studies of lineage tracing methodologies have revolutionized our understanding of cellular origins, fates, plasticity, and heterogeneity in organ development, regeneration, and diseases. This presentation will introduce two recently developed genetic lineage tracing approaches and research advances, giving examples of their novel applications in the study of cell origins and fate plasticity. Specifically, the dual recombinase-mediated genetic lineage tracing approach has been used to unravel regional hepatocyte proliferation in liver lobules, and also to elucidate transient hepatic progenitor cells in liver repair and regeneration. Intercellular genetic lineage tracing technology is generated to monitor cell-cell communication and contact histories in vivo, the application of which identifies the role of stem cell-contacting niche stromal cells in tissue homeostasis and diseases. This presentation will also analyze and discuss the major considerations, potential solutions, and future research directions for applying these new technologies.

7 March 2024, Thursday, 4:00 – 5:00 pm

Room G02, Lo Kwee-Seong Integrated Biomedical Sciences Building,
Area 39, The Chinese University of Hong Kong

***** ALL INTERESTED ARE WELCOME *****