



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

SBS PI Seminar Series 2023-2024

Prof. CHEUNG Hoi Hung Albert

Assistant Professor

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Faculty of Medicine, The Chinese University of Hong Kong

will present a seminar entitled

“Multiple functions of RNA helicases in stem cells and antiviral defence”

RNA helicases are unzippers, resolvers and sensors of complex RNA structures or RNA-protein complexes. They catalyse the unwinding of structured RNA to permit normal RNA metabolism such as RNA splicing, transcription, translation and RNA modification. In my lab, we study the function of DEAD-box RNA helicases in stem cell functions. DEAD-box helicases are highly conserved enzymes and their biological roles, especially in stem cells, remain elusive. Deletion of RH II/Gu helicase in embryonic stem cell, neural stem cell and hematopoietic stem cell resulted in defects in neurogenesis and hematopoiesis respectively. Some members of the DEAD-box helicases function as “viral sensors”, as they are able to sense and interact with viral RNA. In this seminar, I will discuss our recent findings in studying these helicases in stem cells and antiviral defence.

30 May 2024, Thursday, 4:00 pm– 5:00 pm

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