



THE HONG KONG UNIVERSITY OF SCIENCE & TECHNOLOGY
Division of Life Science

Seminar

**Lipids Go Viral: Deciphering the Function of
Lipids and Lipid Droplets in HCV Infection**

by

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Hepatitis C Virus (HCV) replication is closely tied to the host cell lipid metabolism. Lipid droplets have emerged as key organelles for HCV replication, and it has been proposed that they serve as virion assembly platforms. The viral capsid protein core localizes to lipid droplets, recruits viral RNA replication complexes, and initiates the assembly of progeny virions at lipid droplet-associated membranes of the endoplasmic reticulum. We previously showed that a host protein involved in lipid droplet biogenesis serves as a key regulator of viral replication. The fact that HCV selectively targets a subset of lipid droplets points to an hitherto unrecognized specificity. However, why the virus targets lipid droplets and the mechanistic details of the late stages of HCV replication are still ill defined. Here we utilize proteomic and lipidomic approaches to elucidate in molecular detail the role of lipids and lipid droplets in HCV replication.

Date : 15 May 2017 (Monday)

Time : 1:30 pm

Venue : Room 4504 (Lift No. 25-26)

Host : Prof Ho Yi MAK

All Are Welcome!