



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

*Seminar Notice*

**“High resolution cryoEM: viruses, protein complexes and beyond”**

by

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**Abstract**

Virus assembly is a precisely programmed, complex process involving hundreds of protein molecules as well as nucleic acids. Many DNA viruses such as herpesviruses and tailed dsDNA bacteriophages share great similarities in virus assembly, which begins with a preformed, metastable capsid precursor called procapsid, followed by insertion of viral genome and maturation into the infectious virion via massive structural rearrangements. Recent advances in electron cryo-microscopy (cryoEM) have offered tremendous opportunities to push our understanding of virus assembly into a new phase with unprecedented, atomic details (Jiang & Tang, 2017, Curr Opin Struct Biol. 46:122-129). I will briefly overview works in my lab in past years on assembly of large DNA viruses by cryoEM, focusing on mechanisms of capsid maturation, and will present several long-standing, fundamental questions in virus assembly and illustrate how high resolution cryoEM has made it possible to tackle those questions.

**Date : 15 January 2018 (Monday)**

**Time : 3:30 p.m.**

**Venue : Room 2503 (Lifts 25-26)**

**The Hong Kong University of Science & Technology**  
**Clear Water Bay, Kowloon**

*(Host faculty: Prof. Mingjie Zhang)*

***ALL ARE WELCOME!!***