Seminar: Life at the Single Molecule Level

Date: 14 December 2017 (Thursday)
Time: 11:00 am to 12:00 noon
Venue: Room 301, 3/F, Li Ka Shing Medical Sciences Building, Prince of Wales Hospital, Shatin, New Territories
Speaker: Professor Sunney XIE Xiaoliang
Mallinckrodt Professor of Chemistry and Chemical Biology, Department of Chemistry and Chemical Biology, Harvard University

Abstract:

DNA exists as single molecules in individual cells. Consequently, gene expression is stochastic. Single molecule gene expression experiments in live single cells have allowed quantitative description and mechanistic interpretations. The fact that there are 46 different individual DNA molecules (chromosomes) in a human cell dictates that genomic variations occur stochastically and cannot be synchronized among individual cells. Probing such genomic variations requires single cell and single molecules measurements, which have been made possible recently, opening opportunities to investigate and to diagnose cancer, and to avoid genetic disorders in newborns.

All are welcome.
For enquiries, please contact Mr. Kim Wong on 3505 2563 or Mr. Jonathan Lee at 3763 6005.