



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

Seminar Notice

“The Folding Landscape of RNA G-Quadruplexes in Cells”

by

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Abstract

RNA structures play crucial roles in regulating gene expression. However, how RNA structures may be actively remodeled in cells is poorly understood. To investigate the folding of a noncanonical RNA structure known as the G-quadruplex, we developed a suite of high-throughput methods to (1) systematically identify endogenous RNA regions that can form G-quadruplex structures in vitro and (2) quantify their folding in living cells. Applying these methods to several species, we observed differences in the folding and evolution of G-quadruplex regions between eukaryotes and bacteria, and begin to understand the molecular basis underlying the pervasive remodeling of G-quadruplex structures in eukaryotic cells. These results provide a framework for further understanding the roles of RNA G-quadruplexes in gene regulation and human diseases.

Date : **6 March 2017 (Monday)**
Time : **3pm**
Venue : **Room 2405 (Lifts 17/18)**
**The HK University of Science &
Technology, Clear Water Bay, Kowloon**

(Host faculty: Prof. Randy Poon/Prof. Bik Tye)

All are Welcome!