NANYANG TECHNOLOGICAL UNIVERSITY SINGAPORE

School of Physical and Mathematical Sciences
College of Science

ORAL DEFENCE ANNOUNCEMENT

CHEONG HAOLUN

DEVELOPMENT OF SMALL-MOLECULE REPORTERS FOR FLUORESCENCE IMAGING OF ENZYMES FUNCTION AND APPLICATION

Much attention has been placed in understanding the various enzymes activities due to their vital roles in cellular signaling and protein activation, which is closely associated with the progression of many pathological conditions such as tumor proliferation, bacterial infection and neurological disorder. Furthermore, some enzymes such as β-lactamases even reduce the efficacy of drug treatment, which posed as a serious medical concern. Thus, developing a selective and sensitive platform to detect and monitor enzyme activities is essential in elucidating the biological functions and crucial for early diagnostics and treatments of diseases. Therefore, my research focused on the development of FRET-based fluorescent reporters to conduct real-time visualization of endogenous furin and class C β-lactamases enzyme in the living cell, which can aid in the understanding of their biological functions.

Date: 30 Jan 2020
Time: 3.00 PM
Venue: Conference Room, Research & Graduate Studies Office, Level 2, SPMS
Supervisor: Prof Xing Bengang