

DBS Core Facilities Workshop Series



Enabling Your Research
by Providing:



Research
Infrastructure



Expertise

3 Aug 2021, 9:30am – 11:30am



Cryo Electron Microscopy, visualizing biological molecules at (near)-native states

Speaker:

Shi Jian

Facility Manager,
CryoEM

Zoom meeting details:

<https://nus-sg.zoom.us/j/81111542600?pwd=MzljdTQxdHVlQ2E1Mkh5VDhzc3poUT09>

Meeting ID: 811 1154 2600
Passcode: 345448

Structural information of a biological macro-molecule provide mechanistic insights of how it works and why it fails. CryoEM emerges as a revolutionary method recently in structural biology field. CryoEM facility are equipped with high-end tools and instruments for CryoEM studies. This talk will cover CryoEM samples preparation and workflow to obtain the structural information. Limitation and bottleneck of CryoEM methods will be discussed, plus some upcoming methods for addressing the problems.

4 Aug 2021, 9:30am – 11:30am



Introduction to CBIS/DBS Light Microscopy Core Facility

Speaker:

Tong Yan

Facility Manager,
LM Core

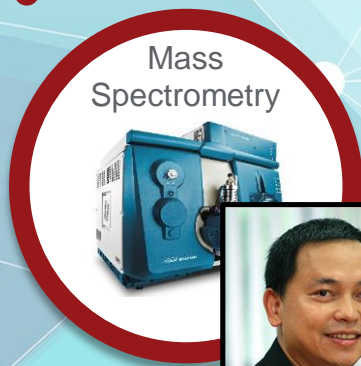
Zoom meeting details:

<https://nus-sg.zoom.us/j/89128511117?pwd=OUtFdE9LNlVZRWJnNUtPbjY0VNGZz09>

Meeting ID: 891 2851 1117
Passcode: 830449

Fluorescence microscopy is a powerful tool that allows researchers to visualize the dynamics of tissue, cells, individual organelles, and macromolecular assemblies inside the cell, providing information about their function in biological processes. During this introduction workshop, you will learn the principle of fluorescence microscopy, the different types of fluorescence microscopy, as well as the bioimaging capability of CBIS/DBS Light Microscopy core facility etc.

5 Aug 2021, 9:30am – 11:30am



Protein and Proteomics Centre (PPC) - Mass Spectrometry-centric analysis of protein and other biomolecules

Speaker:

Lin Qingsong

Director
SingMass Lead PI

Zoom meeting details:

<https://nus-sg.zoom.us/j/83593622001?pwd=WGZlV28zZmG1U5Smw1a3ZqdihXY3FvQT09>

Meeting ID: 835 9362 2001
Passcode: 670917

PPC focuses on advanced research in proteins with an emphasis on mass spectrometry. Areas of expertise include proteomics (quantitative proteomics, protein-protein interaction, post-translational modifications and intact protein characterization) and structural mass spectrometry (Amide Hydrogen/Deuterium Exchange MS and Ion Mobility MS). Other capabilities include mass spectrometry-based analysis of nucleosides and metabolites, analytical ultracentrifugation (AUC) analysis of protein complexes, and the production of secondary antibodies.