

SSMB 52nd AGM :

Bridging Data and Decision-Making: Web Tools for Pathogen Genomic Surveillance

Dr Sandy Tze-Minn Mak
Senior Scientist,
Bioinformatics Institute (BII), A*STAR



Biography

Previously, at the National Public Health Laboratory, she led the integration of next-generation sequencing workflows for virological surveillance and outbreak investigations. During the COVID-19 pandemic, she played a key role in developing early diagnostic tools and incorporating genomics into epidemiological investigations in Singapore. She also contributed to the World Health Organization's technical guide on genomic sequencing of SARS-CoV-2.

At BII, Sandy focuses on tracking viral phylogenies and curating genomic surveillance reports for the ASEAN region. She is also involved in evaluating web tools developed by BII, ensuring their practicality and real-world utility. Additionally, she actively contributes to regional capacity-building through collaborations with GISAID, the Asia Pathogen Genomics Initiative as well as NUS Centre for Infectious Disease Emergency Response.

SSMB 52nd AGM :

Electron Microscopy in Microbiology and Emerging Infectious Diseases- its relevance today

Dr Ng Yi Kai

Senior Medical Laboratory Scientist

Central Tuberculosis Laboratory,

Singapore General Hospital.

Clinical Assistant Professor, Duke-NUS

Medical School



Biography

Yi Kai is a Senior Medical Laboratory Scientist at the Central Tuberculosis Laboratory in Singapore and a Clinical Assistant Professor at Duke-NUS Medical School. He obtained his PhD in Microbiology from The University of Queensland, focusing on rifamycin produced by marine sponges. After completing his post-doctoral training at NUS, he joined the National Public Health Laboratory in 2016, contributing to measles elimination efforts and confirming Singapore's first imported monkeypox case. Currently, he works on molecular diagnostics for Mycobacteria Tuberculosis and manages a biosafety level 3 laboratory, while also engaging in public health mentorship.

SSMB 52nd AGM :

Advancing Infectious Disease Research with Nanoluc® Technology

Dr Jade Ye-Yu Chun
Scientist,
Promega Corporation (Singapore)



Biography

Jade Chun received her Ph.D. from the Yong Loo Lin School of Medicine, National University of Singapore, where she utilized bacterial genetic engineering, next-generation sequencing and mouse models to study the host-pathogen interactions that occur when the host encounters many different *Streptococcus pneumoniae* serotypes. Jade joined Promega as a Technical Services Scientist in September 2024 and is dedicated to supporting the scientific community with Promega's advanced technologies across a range of applications, such as infectious disease research and applied sciences.