



Dr Shuyi Ma

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Infectious

ID LABS

Diseases Labs

Thursday 26 October 2023 9:00am to 10:00am (SGT)

Registration required: Please click <u>here</u> or scan QR code to register

BACTERIAL

ULTRA

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Dissecting the Consequences of Kinase Regulation in Tuberculosis Infection

Mycobacterium tuberculosis (Mtb) infection is a complex and dynamic process whose outcomes are influenced by molecular network changes in both the host and the pathogen. Deciphering the functional and fitness consequences of these network changes and the kinase perturbations that regulate them should uncover novel biology and reveal novel druggable therapeutic intervention targets. We are developing and applying network-centric approaches to investigate systematically the impact of host and *Mtb* kinase perturbations on bacterial survival and infection outcomes.

Dr Ma completed her undergraduate education in chemical engineering at the California Institute of Technology, doing undergraduate research with Dr. Frances Arnold. She completed her PhD at the University of Illinois Urbana-Champaign and the Institute for Systems Biology in Dr. Nathan Price's lab, where she learned about computational systems biology and network biology. Her postdoctoral training in Dr. David Sherman's lab (now at the University of Washington), where she learnt about tuberculosis microbiology and drug response. Her research interests lie in harnessing mathematical tools to study the interactions between organisms and to develop interventions that control infection and treatment fates.

Hosted by : Dr Stefan Oehlers







Singapore's Bacterial Pathogenesis Community #SGBUG

Questions? Contact us at seminars@idlabs.a-star.edu.sg

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