

# EMERGING FUNGAL INFECTIONS SYMPOSIUM

Understanding and Confronting Fungal Infections - an Underappreciated Public Health Threat

Monday, 7 October 2024

9:00 AM - 9:30 AM

Registration

9:30 AM - 9:35 AM

Opening

Prof Yue Wang

9:30 AM - 9:45 AM

Welcome address

Prof Lisa Ng

**Session 1: Chair, Prof Yue Wang**

9:45 AM - 10:20 AM

**Keynote Speech-I**

Structure of fungal cell wall immune epitopes and the origins of immunity

Prof Neil Gow

10:20 AM - 10:45 AM

Genetic mutations underpin host-Induced Morphological transitions in *Candida auris*

Prof Guanghua Huang

10:45AM - 11:10 AM

Applying chemical biology tools to elucidate peptidoglycan fragments (PGNs)-induced *C. albicans* invasive growth.

Asst Prof Yuan Qiao

11:10 AM - 11:20 AM

Engaged in community to enable change: A key morphological change induced by a novel protein during inter-species interaction

Dr Rajesh Patkat

11:20 AM - 11:30 AM

Deciphering key regulators of extracellular vesicle production in *Cryptococcus neoformans*

Dr Alicia Corbellini Piffer

11:30 AM - 1:30 PM

Lunch and poster session 1

Co-organisers:

Monday, 7 October 2024

**Session 2: Chair, Dr Thomas Dawson**

1:30 PM - 1:55 PM

Metabolic drivers of host-pathogen interactions in fungal infections

Prof Ana Traven

1:55 PM - 2:20 PM

Novel fluorescent probes illuminate the pathway of host heme capture and transport

Prof Daniel Kornitzer

2:20 PM - 2:45 PM

Lipid signaling in fungal pathogenesis

Dr Naweed Naqvi

2:45 PM - 2:55 PM

Polysome collapse and RNA condensation fluidize the cytoplasm: a possible stress adaptation strategy adopted by fungi pathogen *Candida glabrata*

Dr Ying Xie

2:55 PM - 3:05 PM

Biology and genetic diversity of *Candida krusei* isolates from fermented vegetables and clinical samples in China

Dr Lingyu Ji

3:05 PM - 3:35 PM

Teabreak

**Session 3: Chair, Dr Clement Tsui**

3:35 PM - 4:00 PM

The importance of fungal inhabitants on the skin – both good and bad

Dr Thomas Dawson

4:00 PM - 4:25 PM

Fungal keratitis: current clinical management and unmet needs

Prof Darren Ting

4:25 PM - 4:50 PM

Cell selective antifungal polymers for the management of fungal keratitis

Dr Lakshminarayanan Rajamani

4:50 PM - 5:00 PM

Membrane targeted antimicrobial peptides as alternative therapeutics for corneal infections

Dr Sanhita Roy

5:00 PM - 5:10 PM

Prolonged in vitro azole exposure drives cross-resistance in commensal *Malassezia*

Dr Cheryl Leong

5:10 PM - 5:20 PM

Antifungal strategies against drug-resistant fungi: new targets, new mechanisms and novel compounds

Dr Dazhi Zhang

Co-organisers:

Tuesday, 8 October 2024

**Session 4: Chair, Prof Christophe d'Enfert**

8:50 AM - 9:25AM

**Keynote Speech-II**

Role of candidalysin in pathogenicity

**Prof Julian Naglik**

9:25 AM - 9:50 AM

Fungal drug response and Phenotypic resistance

**Dr Linqi Wang**

9:50 AM - 10:15 AM

Genome-wide search for drug resistance mechanisms

**Prof Yue Wang**

10:15 AM - 10:25 AM

Secreted metabolites profile of *Candida albicans* yeast to hyphae transition

**Dr Leovigildo Rey Alaban**

10:25 AM - 10:55 AM

Teabreak

**Session 5: Chair, Prof Neil Gow**

10:55 AM - 11:20 AM

Functional genomics by overexpression in the fungal pathogen *Candida albicans*

**Prof Christophe d'Enfert**

11:20 AM - 11:45 AM

Systemic functional analysis of essential transcription factors in the global meningitis pathogen *Cryptococcus neoformans*

**Prof Yong-Sun Bahn**

11:45 AM - 12:10 PM

Harnessing innate immune memory against fungal infections

**Dr Jessics Quintin**

12:10 PM - 12:20 PM

Systematic elucidation of host-derived cues for the regulation of pathogenicity-linked transcription factors in fungal pathogen *Cryptococcus neoformans*

**Dr Seong-Ryong Yu**

12:20 PM - 1:30 PM

Lunch and poster session 2

Co-organisers:

**Tuesday, 8 October 2024**

**Session 5: Chair, Dr Lakshminarayanan Rajamani**

1:30 PM - 1:55 PM	Correlating bench versus bedside in determining novel susceptibility to invasive fungal infections	Dr Louis Chai
1:55 PM - 2:20 PM	Molecular epidemiology and antifungal resistance of <i>Candida</i> pathogens	Dr Clement Tsui
2:20 PM - 2:30 PM	Antifungal heteroresistance causes prophylaxis failure and facilitates breakthrough <i>Candida parapsilosis</i> infections	Dr Bing Zhai
2:30 PM - 3:00 PM	Teabreak	
3:30 PM - 3:55 PM	Medically important fungal pathogens in Singapore	Dr Yen Ee Tan
3:55 PM - 4:20 PM	Antifungal stewardship – the overlooked child in the family?	Dr Winnie Lee
4:20 PM - 4:30 PM	Exploring the gut mycobiome in ulcerative colitis patients using culturomics analysis	Dr Won Hee Jung
4:30 PM - 4:35 PM	Award ceremony	
4:35 PM - 4:40 PM	Closing speech, Prof Christophe D'enfert	Prof Christophe D'enfert
4:45 PM - 5:50 PM	Invited speakers visit to A*STAR IDL Introduction and tour of A*STAR IDL	
6:00 PM	Invited speakers dinner	

**Co-organisers:**