

## School of Biological Sciences College of Science

## **Seminar Announcement**

## Centromere-type transition in closely-related human fungal pathogens

Date: 12 March 2021, Friday

Time: 4pm

Venue: Classroom 1, SBS

Centromeres are rapidly evolving across eukaryotes despite performing a conserved function to form the kinetochore and ensure high-fidelity chromosome segregation. In several fungal species, the centromere forms in a DNA sequence-dependent manner, whereas in other fungi, factors other than the DNA sequence, also determine the centromere location.

In this talk, I will discuss our work on two closely-related human fungal pathogens of CUG-Ser1 clade, Candida tropicalis and Candida albicans. In this work, we constructed a chromosome-level genome assembly of C. tropicalis. Based on comparative genome analysis and chromosome conformation capture sequencing data, we propose that spatial inter-centromeric interactions facilitated karyotype evolution and rapid centromere-type transition in the members of the CUG-Ser1 clade.



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