

School of Biological Sciences College of Science

Seminar Announcement

Regulation of protein degradation at stalled ribosomes

Date:	26 February 2021, Friday
Time:	4pm
Venue:	Classroom 1, SBS

Faulty mRNAs arise in eukaryotic cells due to erroneous processing, genetic mutations or chemical modifications. These aberrant mRNAs can cause ribosomal stalling during translation, resulting in nascent protein degradation and integrated stress response (ISR) that represses global translation. I will discuss molecular events that follow ribosomal stalling.

Importantly, compromised degradation of incomplete proteins at stalled ribosomes causes neuromuscular disorders in human. I will present our work attempting to understand mechanisms underlying toxicity of stalled proteins.

We also discovered that Gcn1-Gcn20 complex, crucial in eliciting ISR, hampers degradation of stalled proteins. I will discuss how the protein degradation pathway and the ISR signaling pathway are coordinated at stalled ribosomes.



Speaker:

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