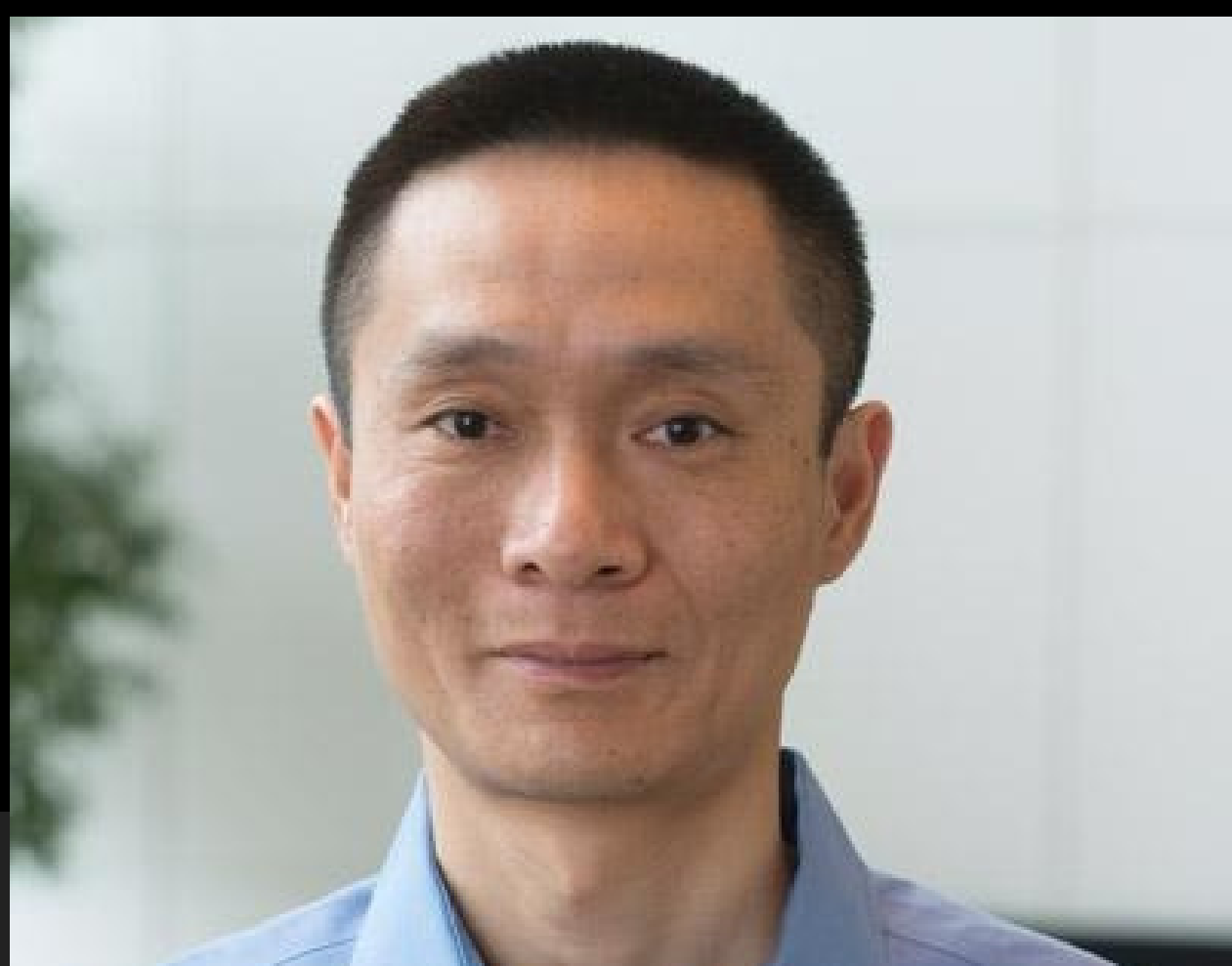


## SINGAPORE RNA SEMINAR SERIES

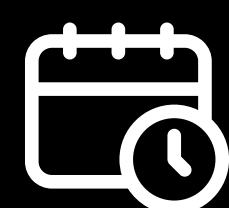
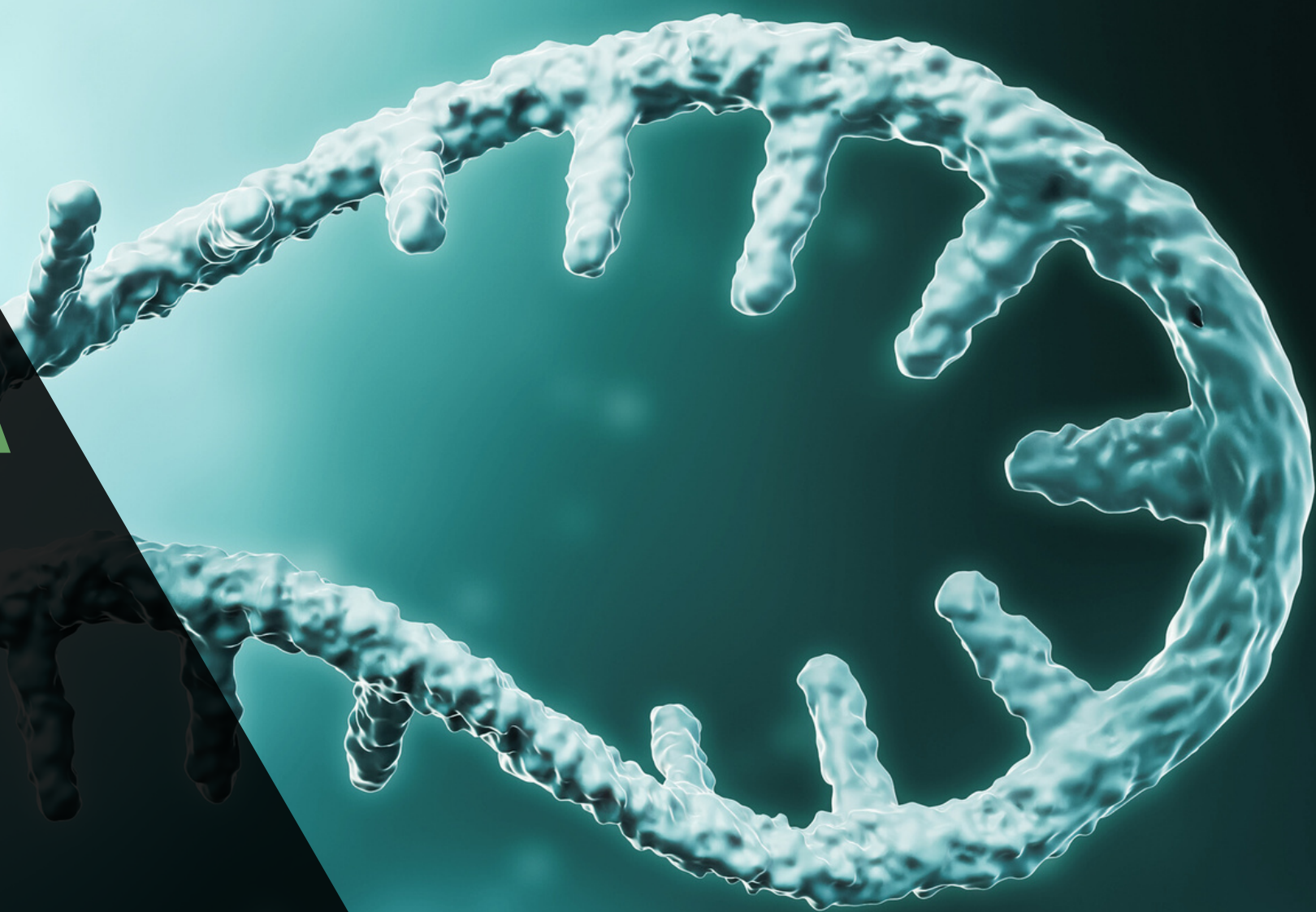
# REVERSIBLE RNA METHYLATION IN GENE EXPRESSION REGULATION

### About Speaker

Chuan He currently serves as the John T. Wilson Distinguished Service Professor at the University of Chicago, and an Investigator of the Howard Hughes Medical Institute. Chuan is also the chief editor of ACS Chemical Biology and a recent recipient of the Wolf prize in chemistry. Chuan is well known for his work in discovering and deciphering reversible RNA methylation in post-transcriptional gene expression regulation.



**Chuan He**  
John T. Wilson  
Distinguished Service Professor,  
University of Chicago



17 July 2023 (Monday)  
9 am (SGT, GMT+8)



Via Zoom



### About Seminar

Over 150 types of post-transcriptional RNA modifications have been identified in all kingdoms of life. We have discovered two RNA demethylases, FTO and ALKBH5, which catalyze oxidative demethylation of the most prevalent modifications of mammalian messenger RNA (mRNA) and other nuclear RNA, N6-methyladenosine (m6A). These findings suggest that reversible RNA modification could impact biological regulation analogous to the well-known reversible DNA and histone chemical modifications. We have also characterized proteins that selectively recognize m6A-modified mRNA and affect the translation status and lifetime of the target RNA. I will present most recent work on elucidating transcriptional regulation through m6A methylation and demethylation, and impacts on mammalian early development as well as plant growth.

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