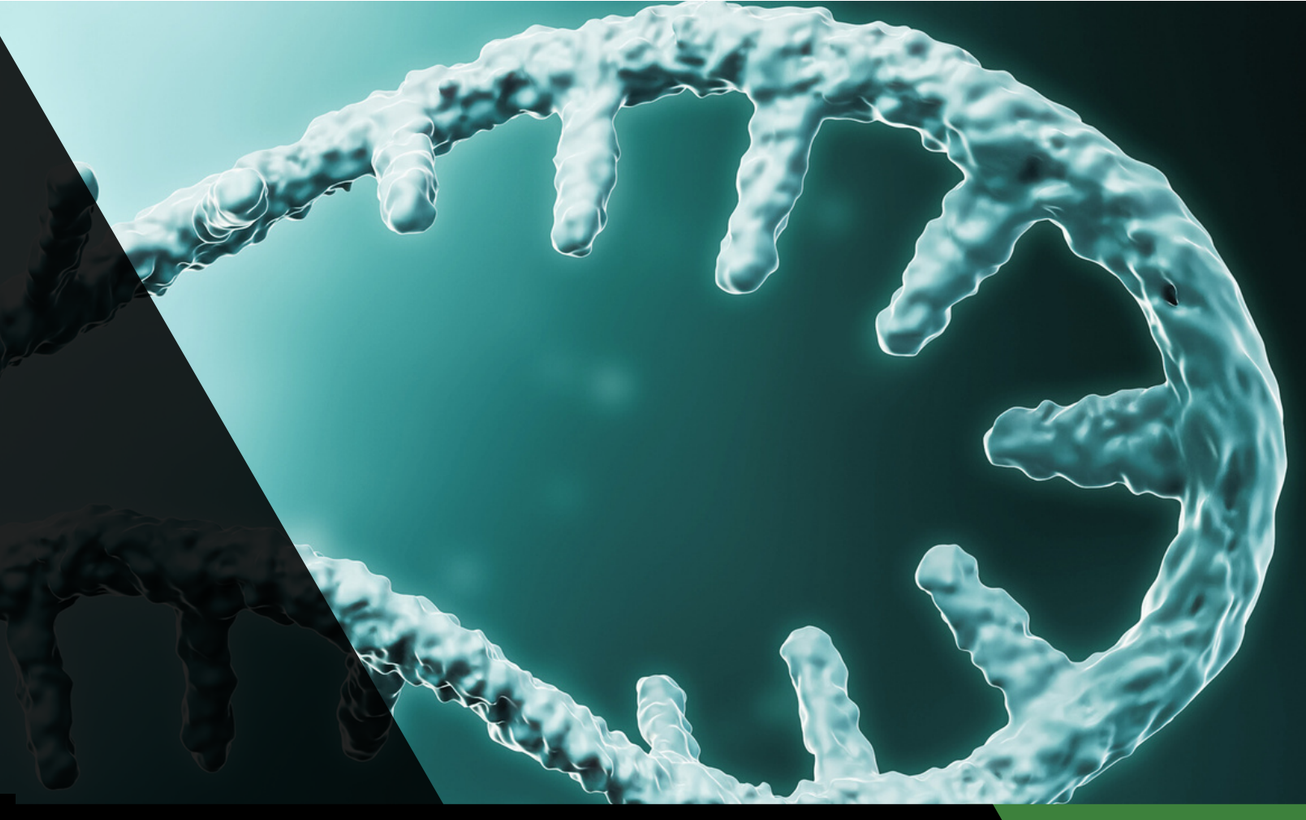
SINGAPORE RNA SEMINAR SERIES

RNA METABOLISM IN C9ORF72-LINKED NEURODEGENERATIVE DISEASES ALS AND FTD



About the speaker

Dr. Shuying Sun is an Associate Professor in Department of Physiology and Brain Science Institute at Johns Hopkins University School of Medicine. Her research focuses on deciphering disease mechanisms and developing RNA-targeting therapeutic strategies for neurodegenerative diseases amyotrophic lateral sclerosis (ALS) and frontotemporal dementia (FTD).

Dr. Sun received her PhD training on the basic mechanisms of RNA processing, especially the regulation of alternative splicing. She then expanded her research repertoire to neurodegenerative disease mechanism and therapy development during the postdoctoral training. Dr. Sun's lab is interested in applying RNA Biology knowledge and techniques to decipher molecular mechanism of pathogenesis, identify novel biomarkers and promising drug targets for therapy development by combining innovative techniques and interdisciplinary approaches.

Dr Shuying Sun
Associate Professor
Johns Hopkins University School of Medicine

Tuesday 21 May 2024
9am (SGT , GMT+8)

Via Zoom

About the seminar

We have a long-standing interest in RNA metabolism dysfunction and RNA-targeting therapy in neurodegenerative diseases, particularly amyotrophic lateral sclerosis (ALS) and frontotemporal dementia (FTD). The hexanucleotide GGGGCC repeat expansion in C9ORF72 is the most frequent genetic cause of both ALS and FTD. RNA-mediated gain of toxicity is critical for the pathogenesis. We employ multiple molecular approaches to understand the regulation of the repeat RNA processing, uncover genetic modifiers, and elucidate the influence on global RNA metabolism. We aim to understand the disease mechanisms and identify potential therapeutic targets for C9ORF72-ALS/FTD.

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