

SIgN SEMINAR

Hosted by Dr Wei WU

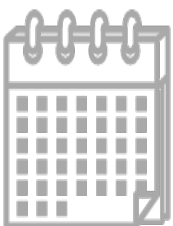


Dr Yi LIN

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Decoding The Role Of Phase Separation In Dynamic Cellular Processes

All cellular processes are dynamic and constantly evolving over time, like the cell cycle and circadian rhythm. Terrestrial organisms have developed circadian rhythms to synchronize with Earth's 24-hour rotation. The alignment of cellular processes, such as translation, with these cycles is of great significance. Our research shows that ATXN2 and ATXN2L are crucial regulators of rhythmic translation in mammals, coordinating phase separation in the suprachiasmatic nucleus. This oscillatory mechanism guarantees the timely transition from mRNA processing to protein synthesis for key genes. Additionally, Dr Lin and her team are further exploring the role of phase separation in regulating circadian rhythm and cell cycle and investigating how the characteristics of protein phase separation affect compartmentalized cellular processes. Their finding emphasizes the role of cellular condensates in adjusting circadian clocks and the cell cycle, opening up opportunities to explore their wider influence on the regulation of these cell processes.



20 January 2025 (Monday)

3 PM – 4 PM (Singapore Time)

SIgN Seminar Room

8A Biomedical Grove, Immunos, #04-06

Singapore 138648

*Seminar is
open for all
to attend.*

*Registration
is not
required.*

