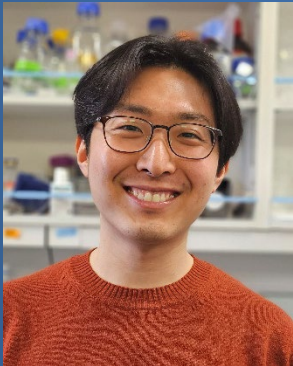


# 262<sup>nd</sup> WPI-IIIS Seminar

## Driving the need to sleep

Whilst the pains of sleep loss are self-evident, less evident are the biological drivers of sleep need. Recently, our lab has demonstrated in fruit flies that the need to sleep is molecularly tracked in sleep-promoting neurons as a function of mitochondrial reactive oxygen species (ROS), the rise of which is then translated to heightened electrical activity that drives sleep. This talk focuses on how we find that this ROS-sleep framework is conserved in the sleep-promoting galaninergic neurons of the rodent hypothalamus and how this mechanistic conservation across such disparate species suggests energetic metabolism as a key driver of the need to sleep.



## Dr. Haram Park

Centre for Neural Circuits and Behaviour,  
University of Oxford

Date: **Monday, August 31, 2026**

Time: **16:30 – 17:30**

Venue: **1F Auditorium, IIIS Building**

**\* On-site participation only**



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