

# 206<sup>th</sup> WPI-IIIS Seminar

## Dissecting monoamine dynamics across sleep-wake cycle using genetically-encoded fluorescent sensors

Monoamines, including histamine, serotonin, dopamine and norepinephrine, are pivotal regulators of sleep-wake cycle. However, their dynamics during sleep-wake cycle remains poorly understood, primarily hindered by the technical constraints in measuring extracellular monoamines with high spatiotemporal resolution. Leveraging the G-protein-coupled receptor-activation-based (GRAB) strategy, we and others have developed a series of genetically encoded sensors for detecting monoamines with high sensitivity and specificity, sub-second kinetics, and exceptional spatiotemporal resolution. In this talk, I will introduce monoamine dynamics profile across sleep-wake cycles by using genetically-encoded fluorescent sensors.



### Dr. Hui Dong

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Date: **Friday, October 18, 2024**

Time: **14:30 – 15:15**

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

*\* On-site participation only*



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