

162nd WPI-IIIS Seminar

No need to sleep if you should drink and eat

Why we sleep is still a mystery. Hunger and thirst are potent stimuli that suppress sleep. Indeed, terrestrial animals like elephants and giraffes that extensively need to forage for water/food sleep very little without negative consequences. Food/water seeking is a complex physiological response to metabolic demands that requires an increased state of wakefulness, arousal and locomotory activity. We have identified a neuronal network in mice that is sufficient to elicit and maintain food/water foraging for days without sleep. In contrast, deletion of the genetic components encoding this innate behavior lets mice fall asleep upon food deprivation. Our findings suggest that the amount of sleep depends on the balance between metabolic demand and water/food availability and is set for each species individually according to its habitat.



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Date: **Monday, October 28, 2019**

Time: **12:00 – 13:00**

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



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