

159th WPI-IIIS Seminar

Evolutionarily conserved regulation of sleep

Sleep is observed throughout the animal kingdom, but it remains unclear to what extent sleep evolved independently in vertebrates and invertebrates, and it is largely unknown whether mechanisms identified using model systems are relevant to humans. We use the zebrafish, a diurnal vertebrate that combines advantages of mammalian and invertebrate models, to explore genetic and neuronal mechanisms that regulate sleep. I will describe experiments showing that a well-conserved genetic pathway regulates sleep in both invertebrates and vertebrates, including humans, suggesting that it plays a central and ancient role in sleep. I will also describe studies using zebrafish and rodents that address a longstanding controversy over the role of the serotonergic raphe in sleep.



Dr. David Prober

Division of Biology and Biological Engineering,

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Date: **Monday, October 7, 2019**

Time: **12:00 – 13:00**

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



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