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

## Dopaminergic memory modulation by two distinct novelty systems

Most everyday memories may form automatically in the hippocampus. The key role of this memory system is to filter our unnecessary information, but keep the important memories by a mechanism that involves novelty-associated dopamine release in the hippocampus. Our recent studies revealed that projections from neurons in the locus coeruleus to the hippocampus can drive the environmental novelty-associated enhancement of memory retention through non-canonical release of dopamine in the hippocampus. These studies also raise a possibility that the impact of environmental novelty may differ from that of rewardassociated novelty, and projections from neurons in the ventral tegmental area to the hippocampus might mediate rewardassociated novelty which modulates the memory retention with a narrow time window.



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Date: Wednesday, July 26, 2017 Time: 12:00 – 13:00 Venue: 1F Auditorium, IIIS Building







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