85th WPI SIHS Seminar

Locus coeruleus-mediated, dopaminedependent enhancement of episodic memory

The retention of episodic memory is enhanced, in humans and animals, by something that strongly attracts attention (like novelty for mice) shortly before or after encoding. The neurons mediating this dopamine-dependent novelty effect were previously thought to originate exclusively from the tyrosine hydroxylase-expressing (TH+) neurons in the ventral tegmental area (VTA) acting on the hippocampus. We find, surprisingly, that this long-lasting memory enhancement and associated, long lasting potentiation of CA1 synapses are mediated by LC-TH+ neuronal co-release of dopamine.



Speaker:

Dr. Robert W. Greene

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Date: Thursday 4, August, 2016

Time: 11:00 - 12:00

Venue: 1F Auditorium, IIIS Building

University of Tsukuba



