31st WPI SIHS Seminar

"Prior knowledge and peri-learning events aid learning efficiency and memory persistence"

The majority of animal learning and memory research is built on studies using experimentally naïve animals. This approach allows us to understand mechanisms for an isolated learning event. However, caution has to be taken when applying this understanding to human. This is because we are experientially rich and our learning is rarely an isolated occurrence. Hence, it is important to examine how prior experiences change subsequent learning. In this seminar, I will first describe that a prior knowledge framework can facilitate the rate of learning and the speed of memory consolidation at the brain systems level. Second part of the talk will concentrate on simple conditioning in changing the hippocampal network involvement and NMDA receptor sensitivity in the subsequent learning. Finally, I will discuss peri-learning events in aiding memory persistence and its relevance to the synaptic tagging and capture hypothesis derived from electrophysiology findings.



Speaker: Dr. Szu-Han Wang

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Date: Thursday, June 19, 2014

Time: 12:00-13:00

Venue: Room #402, 4F, Health and Medical Science Innovation

Laboratory, University of Tsukuba

★Light refreshments will be served.



