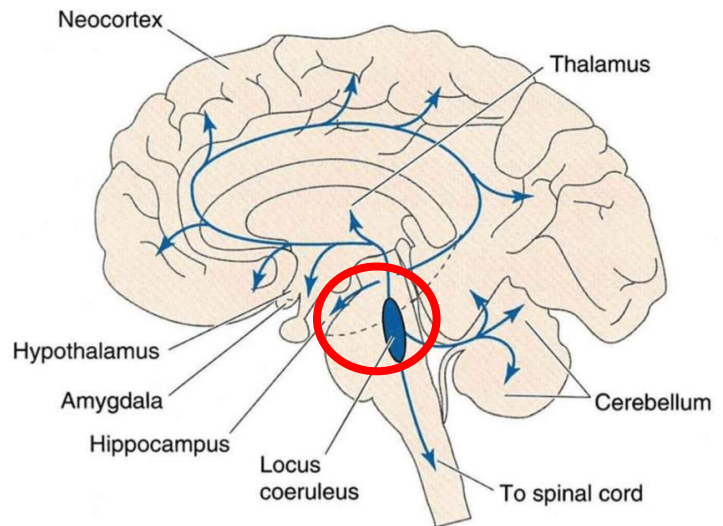


The Adrenergic Nervous System and Long-Term Memory Consolidation

Recent Studies (Takeuchi et al) have indicated the importance of the signaling pathway outlined in the red circle to the right: the LC to hippocampus signaling pathway. Dominated by the adrenergic nervous system, these projections contain cells that overwhelmingly utilize dopamine and norepinephrine to transmit information. Our study aimed to replicate the core of Takeuchi's 2016 experiment to assess the validity of their claims.



Adapted from Lin et al



In order to investigate this, we are utilizing the "Event Arena" memory paradigm shown as a way to simulate everyday memory by Nonaka et al. Studies are ongoing, but the lab hopes to either support or refute Takeuchi's findings regarding the adrenergic nervous system's role in everyday memory consolidation and retrieval.

Taken from Takeuchi et al, "Locus coeruleus and dopaminergic consolidation of everyday memory," Nature 2018