

## **Non-invasive modulation of motor and parietal cortices during procedural and declarative memory tasks**



Procedural and declarative memory have been extensively studied in psychology and cognitive neuroscience, most famously informed by Scoville and Milner's experiments with Patient H.M. This work, along with experiments investigating memory preservation in neurologically diseased patients and lesion studies, have contributed immensely to our understanding of the distinction between procedural and declarative representations as well as the neural substrates that encode, consolidate, and retrieve them. Until recently, procedural and declarative memory processes have been considered to be modular and rely on two distinct neural systems: the striatum and the medial-temporal lobe, respectively. Recent studies challenge the notion of independence between these two memory systems, and suggest that these systems may interact via memory interference. In this talk I will discuss experimental work which has investigated the intersections between these memory systems using memory interference paradigms, and I will highlight my current experiments which utilize transcranial magnetic stimulation to modulate cortical excitability during the consolidation of two different skills, which in turn may prevent memory interference from occurring.

**Alexandria Pabst**  
**Friday, November 1, 2019**

3:00 – 4:00 PM

Science 2, room 109

For further information: [www.csufresno.edu/biology](http://www.csufresno.edu/biology)

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**Bio:** Alexandria Pabst is an NSF AGEP Fellow and Ph.D. candidate in Cognitive and Information Sciences at UC Merced.

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