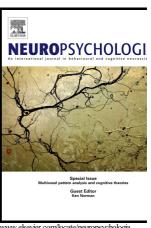
# Author's Accepted Manuscript

Hippocampal activity mediates the relationship between circadian activity rhythms and memory in older adults

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## ACCEPTED MANUSCRIPT

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#### **Abstract**

Older adults experience parallel changes in sleep, circadian rhythms, and episodic memory. These processes appear to be linked such that disruptions in sleep contribute to deficits in memory. Although more variability in circadian patterns is a common feature of aging and predicts pathology, little is known about how alterations in circadian activity rhythms within older adults influence new episodic learning. Following 10 days of recording sleep-wake patterns using actigraphy, healthy older adults underwent fMRI while performing an associative memory task. The results revealed better associative memory was related to more consistent circadian

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