

**Analysis of Directed Information Flow During Episodic Memory Retrieval at Theta Frequency**  
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Episodic memory retrieval is a process by which humans use an extensive network of brain regions to recall details of situational memories. Little is known, however, about the effective connectivity in the brain during this episodic memory retrieval. Previous research conducted by Professor Erika Nyhus has shown the importance of theta oscillations, or brain activity occurring at 4-8 Hz, during episodic memory retrieval.