

## **Departmental Seminar**

# Making memories last: Factors during wake and sleep that promote memory persistence

11:00a.m. – 12:00noon | September 4, 2025 (Thursday)

Chamber, 11/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong



**Dr. James Antony** 

Assistant Professor Department of Psychology & Child Development California Polytechnic State University

### **Abstract**

How do memories persist? In this talk, I will investigate various factors that promote long-term memory. First, I will demonstrate how relationships among stimuli at encoding -- including temporal, semantic, and causal relationships -- allow one to create well-fortified, integrated memories that last. Additionally, using a naturalistic stimulus, I will show that this involves switching neural states between unrelated events and re-stitching (reactivating) neural states of related events to help understand and remember narratives. Next, I will discuss studies showing how memories become reactivated during sleep, with a strong emphasis on the role of physiological bursts of activity called sleep spindles. I will wrap up by bridging the two topics of complex interrelationships among memories and the importance of sleep. Cumulatively, these findings significantly contribute to understanding memory persistence, and they could aid in developing methods for improving learning in educational settings and in populations suffering from memory deficits.

#### **About the Speaker**

Dr. James Antony is an Assistant Professor in the Department of Psychology & Child Development at California Polytechnic State University, San Luis Obispo (Cal Poly, SLO). His research centers around what makes memories persist by examining factors such as sleep, emotions like surprise, causality within narrative structures, and ideal study strategies. He received his PhD from Northwestern University in 2015 and completed postdoctoral fellowships at both Princeton University and the University of California, Davis. For this research, he's been recognized as the Cermak/Corkin postdoc award winner by the Memory Disorders Research Society (and later became an elected member), a fellow in the Psychonomic Society, and a Rising Star by the Association for Psychological Science.

#### **Zoom Meeting (For participants who couldn't attend the Seminar in person)**

https://hku.zoom.us/j/6985555998?pwd=V05yTGJWNTlzazd2OFZ0Q3FReHVkdz09 Meeting ID: 698 555 5998 | Password: Psyc

~All are Welcome~

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