

Departmental Seminar

Unraveling the Effects of Memory Reactivation on Emotional Memory

11:00a.m. – 12:00noon | May 28, 2025 (Wednesday)

Rm 814, 8/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong



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Abstract

Emotional memory is a fundamental form of memory and serves as a crucial adaptive mechanism. It enables human beings to avoid potentially threatening or harmful experiences. However, the over-consolidation of emotional memories may contribute to mental health issues such as anxiety disorders and post-traumatic stress disorder. I will first introduce the consolidation and reconsolidation of emotional memory, and how the emotional memory could be potentially attenuated by memory reactivation. Consolidated emotional memories can be manipulated by reconsolidation-based approaches during wakefulness and targeted memory reactivation during sleep (Study 1). Next, I will present behavioral experiments investigating whether memory reactivation combined with different speeds of eye movement reduces fear responses in a 3-day fear conditioning paradigm (Study 2). The paradigm incorporates psychophysiological measures (i.e., skin conductance response and pupillary response) as assessments of fear reduction. Finally, I will discuss the key findings and potential implications of memory reactivation in modulating emotional memories. These insights may inform novel interventions for treating anxiety and other fear-related disorders.

About the Speaker

Minrui Zhu is an MPhil candidate under the supervision of Professor Charlene L.M. Lam. He obtained his BSocSc in Psychology from the University of Hong Kong. His research interests include anxiety, fear conditioning, memory consolidation, and reconsolidation.

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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