Brown Bag Lunchtime Seminar
(Theme: Cognition and Neuroscience)

Neurofeedback for Attention Training: Myths, Facts and Future

12:30 p.m. – 1:30 p.m. | December 8, 2023 (Friday)
Rm 813, 8/F, The Jockey Club Tower | Centennial Campus | The University of Hong Kong

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Abstract
The technique of EEG-based neurofeedback has been evolving for the past three decades. Despite its development, the effectiveness of neurofeedback in enhancing attention remains a contentious topic, and the underlying mechanisms are still not well understood. Proponents of neurofeedback assert that it enables brain regulation, treats various disorders, and promotes mental health. Although decades of research and thousands of peer-reviewed publications support the use of neurofeedback with electroencephalography, few studies have isolated the specific act of receiving feedback from a particular brain signal as a necessary precursor to obtaining the alleged benefits.

A critical review of the literature reveals support for the nonspecific effects of neurofeedback, but there is a lack of evidence demonstrating a specific effect of brain wave modulation on attention improvement. Nevertheless, it may be premature to attribute all observed treatment benefits solely to psychosocial influences (i.e., the placebo effect).

In this presentation, I will discuss the current empirical evidence available on the effectiveness of neurofeedback and explore the potential mechanisms underlying this technique. Furthermore, I will introduce a randomized controlled trial (RCT) proposal that examines the effectiveness of neurofeedback using an individualized approach and outline future directions for neurofeedback studies.

About the speaker
Yuliang Wang (Lorne) is a second year PhD Student supervised by Professor Tatia Lee.

Zoom (For participants who couldn’t attend the Seminar in person)
https://hku.zoom.us/j/3951550048?pwd=SncvL3RYakEycUtpL29vdDJEdlEwdz09
Meeting ID: 395 155 0048 | Password: psyc

~All are Welcome~

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