**Cognitive Neuroscience in Sport and Exercise Sciences: Research and Practical Application**

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Cognitive neuroscience has been an important and promising approach to understanding how sport and exercise behavior shapes our minds and brain. In this talk, I will share our primary research findings and their practical applications in real-world settings.

First, in the sport-related issue, I will discuss the effect of sports expertise on individual differences in cognitive performance and neural oscillations, which may reflect a sport-specific training experience on neural plasticity. Secondly, I will present studies investigating the effectiveness of a combination of physical and cognitive training on neurocognitive functioning, which provides evidence for the development of more effective exercise programs. Finally, I will share some ideas and possible directions for how to incorporate cognitive and physical training in exercise training, which is aimed to enable wide or even more robust cognitive improvements.