

## **Kolloquium „Berner Gespräche zur Sportwissenschaft“**

Montag, 19.10.2020, von 16.15 Uhr bis 17.45 Uhr  
Zoom-Meeting

### **Understanding the impact of physical activity on executive functions: A contextual perspective**

*Prof. Dr. Kimberley Lakes is an Associate Professor and licensed clinical neuropsychologist in the Department of Psychiatry and Neuroscience in the School of Medicine at the University of California in Riverside. Dr. Lakes has received many research awards, including the 2008 Outstanding Recent Graduate Award from the School of Education at the University of Wisconsin, Madison. In 2011, in recognition of the impact of her research examining the impact of physical activity on executive functions and self-regulation, the Aspen Brain Forum and New York Academy of Sciences selected her for the Aspen Brain Forum Prize in Neuro-Education, Young Investigator Award. Dr. Lakes is a well funded researcher who publishes in the clinical and translational sciences on topics including interventions to promote the development of executive functions in youth, particularly those with neurodevelopmental disorders.*



I will present a contextual model for understanding and studying the impact of physically active (PA) interventions on executive functions. The positive effects of PA interventions on psychological outcomes in youth may be in part due to contextual (i.e., non-specific) factors rather than solely due to the exercise or PA protocol (i.e., specific factors). These contextual factors likely contribute to the variability in outcomes observed across different types of interventions in prior meta-analytic reviews. I will begin by addressing contextual factors known to impact executive functions and examining how PA interventions might address these factors. Using examples from studies of PA interventions for children, I will identify relevant contextual factors and outline scientific methods to measure these and other non-specific factors in future research. Embracing a contextual model for the study of PA interventions is an important next step to understand how and why PA interventions are associated with psychological benefits.