Symposium Title: Maximizing the Impact of Cognitive Interventions

Overview: What factors maximize the effectiveness of cognitive interventions? Strickland-Hughes will discuss the importance of beliefs in memory strategy training, demonstrating near transfer effects and enhanced self-regulation. Jaeggi will discuss the effects of spacing and consolidation on working memory training (WMT) outcomes and individual differences that moderate the intervention effectiveness. Seitz will discuss the relation between transfer and specificity in WMT and perceptual learning and how perceptual learning may inform WMT approaches that promote greater levels of transfer. Wu will integrate the talks with recommendations to shake-up the status quo of interventions via a lifespan approach.

Speaker list

1. Carla Strickland-Hughes, University of the Pacific, cstricklandhughes@pacific.edu (Co-chair)
2. Aaron Seitz, University of California – Riverside,
3. Susanne Jaeggi, University of California – Irvine, smjaeggi@uci.edu
4. Rachel Wu, University of California – Riverside, rachelw@ucr.edu (Co-chair, Discussant)

Abstract: Decades of evidence suggest that cognitive interventions for older adults may be effective, in that trainees can demonstrate gains in specific abilities targeted in training. However, controversy surrounds the practical impact of these programs, such as the extent to which benefits of training might generalize to other tasks or to everyday life. The objective of this symposium is to highlight factors that may maximize the effectiveness of cognitive interventions. **Carla Strickland-Hughes** will discuss the importance of self-regulatory factors, such as self-efficacy, in increasing the impact of interventions and will present data from a memory strategy training program for middle-aged and older adults that not only enhanced targeted name recall performance, but also demonstrated near transfer and improved self-regulation. **Susanne Jaeggi** will explain the effects of spacing and consolidation on working memory training outcome by focusing on a sample with older adults and will further discuss individual differences that moderate the effectiveness of cognitive interventions. **Aaron Seitz** will discuss the relation between transfer and specificity in working memory training and perceptual learning, as well as how insights from perceptual learning have promise to give rise to working memory training approaches that give rise to greater levels of transfer to untrained conditions. **Rachel Wu** will focus on the need for interventions based on lifespan developmental theory spanning from infancy to older adulthood to understand the emergency of cognitive decline, the need for more integration between basic and clinical researchers to exploit the benefits of both approaches, and the need for more integration between the scientific community and the public for ecological validity and community investment.