

Horizons of Knowledge Lecture

Sponsored by: Speech and Hearing Sciences PhD Organization, Department of Speech and Hearing Sciences, Cognitive Science Program, School of HPER, Speech Research Laboratory, and Cognitive Neuroimaging Laboratory

Dr. Arthur F. Kramer

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Enhancing Cognitive & Brain Function of Older Adults

April 6th, 2009

4:00 pm

Woodburn Hall, Room 120

Biography:

Arthur Kramer received his Ph.D. from the University of Illinois at Urbana-Champaign in 1984. His fields of professional interest are cognitive neuroscience, cognitive and brain plasticity, aging, attention, perception and human factors.

Abstract:

The presentation will provide a brief but critical review of the literature on the relationship of cognitive training, intellectual engagement, and fitness training on cognition and brain function of older adults. In the presentation I will contrast the effects of cognitive and fitness training with regard to the breadth of their effects on cognition and dementia. The presentation will include a description of the results of a recent meta-analysis, which included longitudinal fitness studies conducted over the past thirty-five years that were conducted to examine the methodological and theoretical factors that influence the fitness-cognition relationship. This analysis revealed robust benefits of fitness training on neurocognitive function. I will also describe the results of recent and on-going cross-sectional and longitudinal studies in which we are examining changes in cognition and brain function, as indexed by functional magnetic resonance imaging (fMRI) and event-related brain potentials, with fitness and cognitive training interventions. Finally, I'll conclude by describing issues for future research and potential applications of what we have already learned, as well as what we still need to learn.

If you have a disability or need assistance, arrangements can be made to accommodate most needs. Please call 855-4202.