



Neuroscience Lecture Series Spring 2012



Jog Your Memory: How Physical and Mental Activity Modulate Subsequent Cognition

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Abstract: Regular physical activity can improve brain and cognitive health, particularly with advancing age. Like physical activity, it is thought that regular mental activity can also preserve neural function with age, leading to the well known “Use it or Lose it” theory of brain health. We have recent evidence suggesting that both physical and cognitive activity improve subsequent learning and memory. In some cases, prior activity has different effects on different tasks, likely reflecting the brain structures engaged during learning. Moreover, both physical and mental activity may modulate cognition through a common cellular pathway, namely signaling through brain-derived neurotrophic factor and its cognate tyrosine kinase B receptor. Our results have implications for understanding the neural mechanisms of memory modulation and developing healthy interventions for brain and cognitive aging.

Monday, February 13th at 3 p.m.

Morris Library Auditorium

(videoconferenced to Dirksen Conf. Room, SIU Springfield)

**Refreshments served following the lecture
Open to the Public**