

Title: How The Cognitive Neuroscience of Learning Can Inform Teaching Psychology  
Speaker: Elizabeth Phelps, Harvard University

#### Abstract

Research on memory and teaching have highlighted several strategies to enhance learning and retention of classroom materials. In this talk, I will discuss how insights into the neurobiology of memory inform this goal. I will highlight two topics. The first is relevant to the benefit of testing on memory retention. Although there are several psychological theories to explain how testing may help later memory, neurobiological research on memory reconsolidation provides insights into why and when testing benefits memory retention. The second topic is the influence of emotion on memory. Arousing interest in a topic and excitement in the classroom has several benefits to learning, one being that mild arousal can aid the retention of memory. I will discuss the neurobiological basis of arousal's beneficial impact on memory retention, and also provide insights into situations in which emotion might also impair memory performance.

#### Bio

Elizabeth A. Phelps is the Pershing Square Professor of Human Neuroscience at Harvard University. She received her PhD from Princeton University and served on the faculty of Yale University and New York University. Professor Phelps is the recipient of the 21st Century Scientist Award from the James S. McDonnell Foundation, the Distinguished Scholar Award from the Social and Affective Neuroscience Society, and the William James Award from the Association for Psychological Science. She is a Fellow of the American Association for the Advancement of Science, the Society for Experimental Psychology, and the American Academy of Arts and Sciences. She has served on the Board of Directors of the Association for Psychological Science, the Society for Neuroeconomics, and was a founding board member of the Society for Neuroethics. She has previously served as President of the Society for Neuroeconomics, the Association for Psychological Science, and the Social and Affective Neuroscience Society.