The DOLCOS Lab for
Affective, Cognitive, and Clinical Neuroscience
at The University of Illinois

I. The Impact of Emotion on Cognition
1. The Memory-Enhancing Effect of Emotion

2. The Memory-Impairing Effect of Emotion

II. The Impact of Cognition on Emotion

III. The Role of Individual Differences
1. Age-Related Differences

Neural Correlates of the Memory of Emotion and Memory of Cognition

Neural Correlates of Emotional Evaluation and Memory

Neural Correlates of Promotion Regulatory Focus

Neural and Genetic Substrate of Trauma-Related Response in PTSD

The Journal of Neuroscience

St Jacques, Dolcos, & Cabeza (2009), Neurobiol. Aging

Dolcos et al. (2008), Neuroimage

Dolcos, LaBar, & Cabeza (2004a), Neuron

Dolcos, LaBar, & Cabeza (2004b), Neuroimage

Dolcos & Cabeza (2002), CABIV

Dolcos et al. (2005), Proceedings of the National Academy of Sciences

Dolcos et al. (2008), Neuropsychologia

Dolcos et al. (2008), Neuroreport

Eddington, Dolcos, et al. (2007), Journal of Cognitive Neuroscience

Money, Dolcos, et al., (2009), Journal of Psychiatry Research

Neural Mechanisms Underlying Emotion-Cognition Interactions in Healthy and Clinical Groups

1. The Memory-Enhancing Effect of Emotion

- Amygdala-MTL Interactions
- Emotional Pictures
- Neutral Pictures

- Role of the Prefrontal Cortex

- fMRI of Emotional Memory Encoding
- Amygdala-MTL Interactions

- ERP of Emotional Memory Encoding

- fMRI of Emotional Memory Retrieval
- Amygdala-MTL Interactions

Neural Correlates of the Response to Emotional Distraction

Memoranda + Scrambled Distractor + Neutral Distractor + Probe + Neutral + Scrambled

1.5s + 3s + 3s + 1.5s + 3s

Neural Correlates of the Response to Emotional Distraction

Promotion > Prevention

Neural Correlates of Promotion Regulatory Focus

Amygdala Response to Individual Variation in Emotional Reactivity

Neural and Genetic Substrate of Trauma-Related Response in PTSD