Eighth meeting: *Frontal contributions to episodic memory*

Thursday, December 3, 2009

MIT McGovern Institute for Brain Research: 46-3002

Special note: The anniversary of H.M.’s death is tomorrow; the cutting of his brain is in progress in San Diego and can be watched via live streaming video at http://thebrainobservatory.ucsd.edu/hm_live.php

1pm  Welcome & Introduction (Brad Dickerson)

1:15  Keynote lecture
    Earl Miller, MIT
    *The prefrontal cortex: Categories, concepts, and cognition*

2:00  Keynote lecture
    David Badre, Brown
    *Ventrolateral prefrontal contributions to the cognitive control of memory*

2:45  Open discussion

3:00  Break

3:15  Poster session & refreshments (see back for poster listing)

5pm  Adjournment

Thanks to Cindy Gibbs and John Gabrieli for organizing and sponsoring this meeting.
Posters

Ventral hippocampus encodes spatial context (Garcia, Komorowski, Hattori, Eichenbaum)

Modulation of hippocampal neurons by theta and gamma rhythms during investigation of items in context (Komorowski, Tort, Kopell, Eichenbaum)

Exposure to variable images of unfamiliar faces improves subsequent face-recognition and is associated with image-invariant neural priming across distributed brain regions (Stevens, Gaesser, Spreng, Schacter)

The neural basis of autobiographical and visuospatial priming (Spreng, Chamberlain, Gilmore, Stevens, Schacter)

Alcoholism and gender effects on BOLD activation during working memory for emotional faces (Mosher, Marinkovic, Oscar-Berman, Sawyer, Zondervan, Urban, Harris)

The cortical thinning pattern of posterior cortical atrophy - What can the parietal lobes teach us about working and episodic memory? (Negreira, Bakkour, Sapolsky, Dickerson)

A high-resolution fMRI study of working memory in the medial temporal lobe (Schon, Newmark, Ross, Quiroz, Benner, Stern)

Neuroimaging overgeneral autobiographical memory (Holland, Addis, Kensinger)

Are spatial attention and spatial encoding identical cognitive processes? (Thakral, Slotnick)

The Effective Connectivity of the Emotional Memory Network Depends on Valence and Arousal (Mickley Steinmetz, Addis, Kensinger)

Distinct contributions of the medial temporal lobe and the left ventrolateral prefrontal cortex to memory retrieval (Oztekin, Badre)

An fMRI investigation of the neural mechanisms that support free recall (Long, Oztekin, Badre)

Effects of fixed and varied repetition on associative recognition in amnesia (Greenberg, Verfaellie)

Clinico-functional-anatomic relationships in Alzheimer’s disease: fMRI tracks clinical trial memory measures (Sreenivasan, Crehan, Dodd, Diamond, O’Brien, Laviolette, Rentz, Sperling, Atri)

Candidate prognostic models using fMRI measures to predict future memory performance in Alzheimer’s disease (Dodd, Crehan, Sreenivasan, Vannini, O’Brien, Laviolette, Locascio, Sperling, Atri)

Biographies of speakers

Earl Miller, PhD
Dr. Miller is the Picower Professor of Neuroscience at the Massachusetts Institute of Technology and Associate Director of MIT’s Picower Institute for Learning and Memory. He received his Ph.D. in Psychology and Neuroscience from Princeton University. He uses experimental and theoretical approaches to study the neural basis of the high-level cognitive functions that underlie complex goal-directed behavior.

David Badre, PhD
Dr. Badre is an Assistant Professor in the Department of Cognitive and Linguistic Sciences and the Department of Psychology at Brown University. He received his PhD from MIT Department of Brain and Cognitive Sciences and did a post-doc at Berkeley with Mark D’Esposito. David has published widely on control processes within the prefrontal cortex.