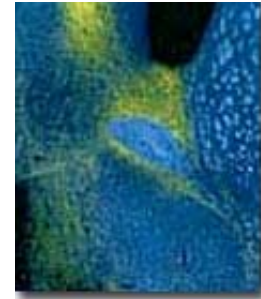




Cindy Lustig Ph.D.

Assistant Professor
Psychology
4016 East Hall (mailing address; office is 4443 East Hall)
Ann Arbor, MI 48109
734 647 6925
clustig@umich.edu
[My website](#)



 [Download](#) this page

Research Interests

I am generally interested in how demands for controlled attention affect performance and brain activations, especially in the domains of memory and interval timing. Many of my studies use both young and old adults to understand how responses to these demands might change as a result of aging and dementia.

We use both behavioral and fmri methods to investigate these questions. For example, we have found that some forms of automatic memory that make minimal demands for controlled attention are the same in young adults, healthy older adults, and early-stage Alzheimers patients, and that related brain activity changes are also the same across these three groups (e.g., Lustig & Buckner, 2004).

However, situations that make higher demands for control often result in older adults showing different patterns of brain activity than do young adults. We are currently working to understand what these different patterns of brain activation might mean. Do they reflect brain mechanisms of compensation for age-related changes in controlled attention, and how can we diagnose compensation versus impairment? (e.g., Reuter-Lorenz & Lustig, in press)

A new line of research focuses on the posterior cingulate and other midline structures. These structures seem to be involved in the "default state" and memory retrieval in young adults, and show reduced metabolism and heavy amyloid deposition in Alzheimers disease. We have found large age- and Alzheimer-related changes in fmri measures of activity within these regions (Lustig et al., 2003). We are now asking how these fmri findings may be related to changes in attention and baseline metabolism.



Selected References

Reuter-Lorenz, P.A., & Lustig, C. (in press). Brain aging: Reorganizing discoveries about the aging mind. *Current Opinion in Neurobiology*.

Lustig, C., & Buckner, R.L. (2004). Preserved neural correlates of priming in old age and dementia. *Neuron*, 42, 865-875.

Lustig, C., Snyder, A.Z., Bhakta, M., O'Brien, K.C., McAvoy, M., Raichle, M.E., Morris, J.C., & Buckner, R.L. (2003). Functional deactivations: Change with age and dementia of the Alzheimer type. *Proceedings of the National Academy of Sciences USA*, 14504-14509.

Lustig, C., Konkel, A., & Jacoby, L.L. (2004). Which route to recovery? Controlled retrieval and accessibility bias in retroactive interference. *Psychological Science*, 15, 729-735.

Lustig, C., & Hasher, L. (2001). Implicit memory is not immune to interference. *Psychological Bulletin*, 127, 618-628.

Lustig, C., Matell, M.S., & Meck, W.H. (in press). Not "just" a coincidence: Frontal-striatal interactions in working memory and interval timing. *Memory*.

Please see lab website for an updated list.

Find more publications by [Dr.Cindy Lustig](#)

Last updated 8/16/2007 [Click here to update](#)

01708