

August 16, 2020

Cindy Lustig

Curriculum Vitae

Business Address

4016 East Hall, Psychology
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Education

Bachelor of Arts (1996): Psychology, Case Western Reserve University

Master of Arts (1996): Psychology, Case Western Reserve University

Thesis: Effects of Stimulus Luminance on Span of Apprehension in Young and Elderly Adults.

Advisor: Grover C. Gilmore

Doctorate of Philosophy (2001): Psychology, Duke University

Dissertation: Interference in implicit memory. Advisor: Lynn Hasher

Postdoctoral fellow (2001-2004): Psychology, Washington University.

Primary advisor: Randy L. Buckner

Academic Positions

Assistant Professor, Psychology, University of Michigan (2004-2010)

Associate Professor, Psychology, University of Michigan (2010 –2016)

Professor, Psychology, University of Michigan (2016-present)

Associate Chair for Student Academic Affairs, Psychology (2017-2018)

Chair, Cognition & Cognitive Neuroscience Area of Psychology (2019-2020)

Director, Honors, Advanced Master's Degree, and STAR Scholars programs (2020-current)

Honors and Awards

Phi Beta Kappa, 1995

James Dysart Magee Award in Psychology, 1995-1996

J.B. Duke Fellow

National Science Foundation Graduate Fellow

National Research Service Award Predoctoral Fellow

Richard and Mildred Poletsky Education Award, 2002

National Institute on Aging Summer Institute on Aging Research, 2003

Research Career Development Award, University of Michigan Claude M. Pepper Institute, 2006-2008

APA Division 20 Springer Early Career Achievement Award, 2007

Election to Memory Disorders Research Society, 2007

Chronicle of Higher Education "Scholar to Watch", 2009

Henry Russel Award, University of Michigan, 2010

Elected to APS Fellow status, 2011

APA Distinguished Scientific Award for Early Career Contribution to Psychology, 2011

Editorial Service

Aging, Neuropsychology & Cognition: 2010-2012 Co-Editor in Chief

NeuroImage:

2010-2011 Handling Editor, Cognitive Neuroscience

2011 – current Senior Editor, Cognitive Neuroscience

Psychology & Aging: 2012-current, Associate Editor

Current Opinion in Behavioral Sciences: 2014-current Co-founding editor (with Trevor Robbins)

Editorial Boards (past): *Journal of Experimental Psychology: General*; *Psychology & Aging*; *European Journal of Neuroscience*

National Committees

Cognitive Neuroscience Society Young Investigator Award Committee, member: 2015

Cognitive Neuroscience Society Young Investigator Award, Chair: current

Grant Reviews

Alzheimer's Association; American Federation of Aging Research; National Science Foundation; University of Michigan Office of the Vice President of Research Faculty Grants; National Institute of Health

FUNDING

The Thalamus in Parkinson's Disease: Parkinson's Foundation Research Center for Excellence. 07/19-06/23 (co-I). Parkinson's Foundation

Cholinergic genetic effects on health and cognition in older adults: Longitudinal analysis. 6/30-2016 – 6/30-2017. (PI) Michigan Center for Demography on Aging (sub of NIH F036616). Direct costs \$13, 586.

[18F]flubatine: a Novel Biomarker of Cholinergic $\alpha\beta 2$ Nicotinic Receptors and Cognition in Parkinson's Disease 12/20/2013 – 12/31/2016. (Co-I). Total direct costs \$304477. Michael J. Fox Foundation.

Choline Transporter Capacity Limits Motivated Behavior In Mice, Rats, & Humans. 5/1/2010-7/29/2016 (Co-PI). Total direct costs \$1,952,132; subcontract direct costs \$45,486. National Institutes of Health.

A Theory-Informed Intervention to Reduce Hip Fracture. 09/1/09 – 8/31/2011. Total direct costs \$50,000. Pilot Grant (PI: Lustig) through Michigan Geriatrics Center.
\$20,000 MICH-R
\$30, 000 University of Michigan Geriatrics Center (PI: Jeffrey Halter)

Acetylcholine, cortex, and control. 9/01/07 – 02/28/11. Direct costs \$249, 993. National Science Foundation. (PI: Lustig)

Memory training: Strategies underlying success and transfer. 09/15/07 – 08/31/09. Direct costs \$41,000. National Institute on Aging. (PI: Lustig)

Memory training: Can it be improved for adults of greater age and lower education? 5/1/07 – 10/31/07. Total \$5,725 from UM Office of Vice President of Research. (PI: Lustig)

Research Career Development Award 10/06 – 10/07. (Renewed for 2008). University of Michigan Claude M. Pepper Institute. 25% of PI salary to support time to devote to aging research. (PI on Development Award: Lustig; PI on Center Grant: Alexander)

Brain mechanisms of compensation in older adults. University of Michigan. 10/04 – 10/05. (PI: Lustig). Total \$15,000. This combined award provides funding for a research assistant to coordinate the recruitment and testing of older adult participants for fmri studies.
\$10,000 UM Office of Vice President for Research
\$2,500 College of Literature, Science, & Arts
\$2,500 Department of Psychology

Implicit memory, interference, and aging. 02/08/01 – 04/23/01. NIH 1F31MH012946-01. Total \$11,260. National Research Service Award pre-doctoral fellowship.

PUBLICATIONS

Journal Articles

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

Lustig, C., & Hasher, L. (2001). Implicit memory is vulnerable to proactive interference. *Psychological Science*, 12 408-412.

Lustig, C., Hasher, L., & Tonev, S.T. (2001). Inhibitory control over the present and the past. *European Journal of Cognitive Psychology*, 13, 107-122.

Lustig, C., May, C.P., & Hasher, L. (2001). Working memory span and the role of proactive interference. *Journal of Experimental Psychology: General*, 130, 199-207.

Lustig, C., & Meck, W.H. (2001). Paying attention to time as one gets older. *Psychological Science*, 12, 478-484.

Lustig, C., & Hasher, L. (2002). Working memory span: The effect of prior learning. *American Journal of Psychology*, 115, 89-101.

- Petrella, J.F., Lustig, C., Bucher, L., Jha, A.P., & Doraiswamy, P.M. (2002). Prefrontal activation patterns in subjects at risk for Alzheimer's disease. *American Journal of Geriatric Psychiatry, 10*, 112-113.
- 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., & Buckner, R.L. (2004). Preserved neural correlates of priming in old age and dementia. *Neuron, 42*, 865-875.
- 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., Matell, M.S., & Meck, W.H. (2005). Not "just" a coincidence: Frontal-striatal interactions in working memory and interval timing. *Memory, 13*, 441-448.
- Lustig, C., & Meck, W.H. (2005). Chronic treatment with haloperidol induces working memory deficits in feedback effects of interval timing. *Brain and Cognition, 58*, 9-16.
- Petrella, J., Townsend, B.A., Jha, A.P., Ziajko, L.A., Slavin, M.J., Lustig, C., Hart, S.J., Doraiswamy, P.M. (2005). Increasing memory load modulates regional brain activity in older adults as measured by fMRI. *Journal of Neuropsychiatry and Clinical Neurosciences, 17*, 75-83.
- Reuter-Lorenz, P.A., & Lustig, C. (2005). Brain aging: Reorganizing discoveries about the aging mind. *Current Opinion in Neurobiology, 15*, 245-251.
- Lustig, C., Hasher, L., & Tonev, S.T. (2006). Distraction as a determinant of processing speed. *Psychonomic Bulletin and Review, 13*, 619-625.
- Velanova, K., Lustig, C., Jacoby, L.L., & Buckner, R.L. (2007). Evidence for frontally-mediated controlled processing differences in older adults. *Cerebral Cortex, 17*, 1033-1046. (KV and CL share lead authorship on this paper.)
- Bissig, D., & Lustig, C. (2007). Who benefits from memory training? *Psychological Science, 18*, 720-726.
- Persson, J., Lustig, C., Nelson, J.K., & Reuter-Lorenz, P.A. (2007). Age differences in deactivation: A link to cognitive control? *Journal of Cognitive Neuroscience, 19*, 1021-1032.
- Andrews-Hanna, Snyder, A.Z., Vincent, J.L., Lustig, C., Head, D., & Buckner, R.L. (2007). Disruption of large-scale brain systems in advanced aging. *Neuron, 56*, 924-935.
- Jonides, J., Lewis, R.L., Nee, D., Lustig, C., Berman, M.G., & Moore, K.S. (2008). The mind and brain of short-term memory. *Annual Review of Psychology, 59*, 193-224.

- Demeter, E., Sarter, M., & Lustig, C. (2008). Rats and humans paying attention: Cross-species task development for translational research. *Neuropsychology*, *22*, 787-799. NIHMSID #73822
- Lustig, C., & Flegal, K. (2008). Targeting latent function: Encouraging effective encoding for successful memory training and transfer. *Psychology & Aging*, *23*, 754-764. PMID: PMC2785716
- Nuechterlein, K.H., Luck, S.J., Lustig, C., & Sarter, M. (2009). CNTRICS final task selection: control of attention. *Schizophrenia Bulletin*, *35*, 182-196. NIHMSID#81907
- Hirst, W., Phelps, E.A., Buckner, R.L., Budson, A.E., Gabrieli, J.D.E., Johnson, M.K., Lustig, C., Lyle, K.B., Mather, M., Mitchell, K.J., Meksin, R., Ochsner, K.N., Schacter, D., Simons, J.S., & Vaidya, C.J. (2009). The long-term retention of the terrorist attack of September 11: Flashbulb memories, memories for flashbulb events, and the factors that influence their retention. *Journal of Experimental Psychology: General*, *138*, 161-176.
- Lustig, C., Shah, P., Seidler, R., & Reuter-Lorenz, P.A.. (2009). Aging, training, and the brain: A review and future directions. *Neuropsychology Review*, *19*, 504-522.
- Demeter, E., Hernandez-Garcia, L., Sarter, M., & Lustig, C. (2011). Challenges to attention: A continuous arterial spin labeling (ASL) study of the effects of distraction on sustained attention. *NeuroImage*, *54*, 1518-1529.
- St. Peters, M., Demeter, E., Lustig, C., Bruno, J.P., & Sarter, M. (2011). Enhanced control of attention by stimulating mesolimbic-corticothalamic cholinergic circuitry. *Journal of Neuroscience*, *31*, 9760-9771.
- Lustig, C., & Meck, W.H. (2011). Modality differences in timing and temporal memory throughout the lifespan. *Brain & Cognition*, *77*, 298-303.
- Luck, S., Ford, J.M., Sarter, M., & Lustig, C. (2012). CNTRICS final biomarker selection: control of attention. *Schizophrenia Bulletin*, *38*, 53-61.
- Sarter, M., Lustig, C., & Taylor, S.F. (2012). Cholinergic contributions to the cognitive symptoms of schizophrenia and the viability of cholinergic treatments. *Neuropharmacology*, *62*, 1544-1553.
- Lustig, C., Kozak, R., Sarter, M., Young, J.W., Robbins, T.W. (2013). CNTRICS final animal model task selection: Control of attention. *Neuroscience and Biobehavioral Reviews*, *37*, 2099-2110. DOI: 10.1016/j.neubiorev.2012.05.009
- Ossher, L., Flegal, K.E., & Lustig, C. (2013). Everyday memory errors in older adults. *Aging, Neuropsychology, and Cognition*, *20*, 220-242. <http://dx.doi.org/10.1080/13825585.2012.690365>

- Craig, K., Berman, M., Jonides, J., & Lustig, C. (2013). Escaping the recent past: Which stimulus dimensions influence proactive interference? *Memory & Cognition*. doi 10.3758/s13421-012-0287-0.
- Demeter, E., Guthrie, S.K., Taylor, S.F., Sarter, M., & Lustig, C. (2013). Increased distractor vulnerability but preserved vigilance in patients with schizophrenia: Evidence from a translational sustained attention task. *Schizophrenia Research*, 144, 135-141.
- Howe, W.M. Berry, A.S., Francois, J., Gilmour, G., Carp, J.M., Lustig, C., & Sarter, M. (2013). Prefrontal cholinergic mechanisms instigating shifts from monitoring for cues to cue-guided performance: Converging electrochemical and fMRI evidence from rats and humans. *The Journal of Neuroscience*, 33, 8742-8752.
- Berry, A.S. Li, Xu, Lin, Z. & Lustig, C. (2014) Shared and distinct factors driving attention and temporal processing across modalities. *Acta Psychologica*, 147, 42-50.
<http://dx.doi.org/10.1016/j.actpsy.2013.07.020>
- Berry, A.S., Demeter, E., Sabhapathy, S., English, B.A., Blakely, R.D., Sarter, M., & Lustig, C. (2014). Disposed to distraction: Genetic variation in the cholinergic system influences distractibility but not time-on-task effects. *Journal of Cognitive Neuroscience*, 9, 1981-1991. DOI: 10.1162/jocn_a_00607
- Sarter, M., Lustig, C., Howe, W.M., Gritton, H., & Berry, A.S. (2014). Deterministic functions of cortical acetylcholine. *European Journal of Neuroscience*, 39, 1912-1920. DOI: 10.1111/ejn.12515
- Sarter, M., Albin, R.L., Kucinski, A., & Lustig, C. (2014). Where attention falls: Increased risk of falls from the converging impact of cortical cholinergic and midbrain dopamine loss on striatal function. *Experimental Neurology*. 257, 120-129. DOI: 10.1016/j.expneurol.2014.04.032
- Berry, A.S., Blakely, R.D., Sarter, M., & Lustig, C. (2015). Cholinergic capacity mediates prefrontal engagement during challenges to attention: Evidence from imaging genetics. *NeuroImage*, 108, 386-395. doi:10.1016/j.neuroimage.2014.12.036
- Hirst, W., Phelps, E.A., Meksin, R., Vaidya, C., Johnson, M.K., Mitchell, K.J., Buckner, R.L., Budson, A., Gabrieli, J.D.E., Lustig, C., Mather, M., Ochsner, K.M., Schacter, D., Simons, J.S., Lyle, K.B., & Olsson, A. (2015). A ten-year followup of a study of memory for the attack of September 11, 2001: Flashbulb memories and memories for flashbulb events. *Journal of Experimental Psychology: General*, 144, 604-623.
- Kucinski, A., Albin, R.L., Lustig, C., Sarter, M. (2015). Modeling fall propensity in Parkinson's disease: extensive striatal dopamine loss-associated freezing of gait. *Behavioural Brain Research*, 282, 155-164. doi:10.1016/j.bbr.2015.01.012
- Lustig, C., & Jantz, T. (2015). Questions of age differences in interference control: When and how, not if? *Brain Research*, 1612, 59-69. DOI: 10.1016/j.brainres.2014.10.024
- Flegal, K., & Lustig, C. (2016). You can go your own way: Effectiveness of participant-driven versus

experimenter-driven processing strategies in memory training and transfer, *Aging, Neuropsychology, and Cognition*, 4, 389-417. DOI: 10.1080/13825585.2015.1108386

Lustig, C., & Sarter, M. (2016). Attention and the cholinergic system: Relevance to schizophrenia. *Current Topics in Behavioral Neurosciences*, 28, 327-362..

Sarter, M., Lustig, C., Berry, A.S., Gritton, H., Howe, W.H., & Parikh, V. (2016). What do phasic cholinergic signals do? *Neurobiology of Learning and Memory*, 130, 135-141. DOI: 10.1016/j.nlm.2016.02.008

Turgeon, M., Lustig, C., & Meck, W.H. (2016). Cognitive aging and time perception: Roles of Bayesian optimization and degeneracy. *Frontiers in Aging Neuroscience*, 6. <http://dx.doi.org/10.3389/fnagi.2016.00102>

Sarter, M., Lustig, C., Blakely, R.D., & Cherian, A. (2016). Cholinergic genetics of visual attention: human and mouse choline transporter capacity variants influence distractibility. *Journal of Physiology: Paris*. doi: 10.1016/j.jphysparis.2016.07.001

Kim, K., Mueller, M., Bohnen, N., Sarter, M., & Lustig, C. (2017). Thalamic cholinergic innervation makes a specific bottom-up contribution to signal detection: Evidence from patients with Parkinson's Disease with defined cholinergic losses. *NeuroImage*. 149, 295-304. <http://dx.doi.org/10.1016/j.neuroimage.2017.02.006>

Berry, A.S., Sarter, M., & Lustig, C. (2017). Distinct frontoparietal networks underlying attentional effort and cognitive control. *Journal of Cognitive Neuroscience*, 29, 1212-1225. DOI: 10.1162/jocn_a_01112

Xie, B., Larson, J.L., Gonzalez, R., Pressler, S.J., Lustig, C., & Arslanian-Engoren, C. (2017). Components and indicators of frailty measures: A literature review. *The Journal of Frailty & Aging*, 6, 76-82.

Kim, K., Mueller, M., Bohnen, N., Sarter, M., & Lustig, C. (2019). Cortical cholinergic integrity predicts the ability to resist distraction: Evidence from patients with Parkinson's disease. *NeuroImage*. 190, 107-117.

Kim, K., Mueller, M., Bohnen, N., Sarter, M., & Lustig, C. (2019). Compensatory dopaminergic-cholinergic interactions in conflict processing: Evidence from patients with Parkinson's Disease. *NeuroImage*, 190, 94-106.

Kucinski, A., Lustig, C., & Sarter, M. (2018). Addiction vulnerability trait impacts complex movement control: Evidence from sign-trackers. *Behavioral Brain Research*, 350, 139-148. DOI: 10.1016/j.bbr.2018.04.045

Sarter, M., & Lustig, C. (2019). Cholinergic double duty: Cue detection and attentional control. *Current Opinion in Psychology*, 29, 102-107.

- Xie, W., Berry, A., Lustig, C., Deldin, P., & Zhang, W. (2019). Poor sleep quality and compromised visual working memory capacity. *Journal of the International Neuropsychological Society*, 25, 583-594.
- Sarter, M., & Lustig, C. (2020). Forebrain cholinergic signaling: Wired and phasic, not tonic, and causing behavior. *Journal of Neuroscience*, 40, 712-719.
- Jang, H, Lin, Z., & Berry, A.S. (2020). Losing money and motivation: Effects of loss incentive on motivation and metacognition in younger and older adults. *Frontiers in Psychology*, 11, 1489.

Reviews, commentaries, and special issue editorial overviews

- Lustig, C. (2008). Making mirrors: sensorimotor experience directs activation of the mirror system (Commentary on Catmur et al.) *European Journal of Neuroscience*, 28, 1207.
- Lustig, C., & Meck, W.H. (2009). Review of “The overflowing brain: Information load and the limits of working memory”. *New England Journal of Medicine*, 306, 1469.
- Lustig, C., (2011). The neuroscience of time and number: Untying the Gordian knot. *Frontiers in Integrative Neuroscience*, 5:47. doi: 10.3389/fnint.2011.00047
- Raz, N., & Lustig, C. (2014). Genetic variants and cognitive aging: Destiny or a nudge? (Introduction to special issue on cognitive genetics). *Psychology & Aging*, 29, 359-362. DOI: 10.1037/a0036893
- Eichenbaum, H., & Lustig, C. (2015). Cognitive control: Diversity of domains, parallels in mechanism. *Current Opinion in Behavioral Sciences*, 1, iv-vii. doi:10.1016/j.cobeha.2014.12.004
- Lustig, C., & Droit-Volet, S. (2017). The times of our lives. (Introduction to Volume 1 of the special issue of Timing and Development Across the Lifespan). *Timing and Time Perception*, 5, 1-4. DOI: 10.1163/22134468-00002084
- Droit-Volet, S., & Lustig, C. (2017). Time as a window on development ((Introduction to Volume 2 of the special issue of Timing and Development Across the Lifespan). *Timing and Time Perception*, 5, 123-127.
- Campbell, K., Lustig, C., & Hasher, L. (2020). Aging and inhibition: Introduction to the special issue. *Psychology & Aging* 35, 605-613.

Book chapters and encyclopedia articles

- Hasher, L., Tonev, S.T., Lustig, C., & Zacks, R. (2001). Inhibitory control, environmental support, and self initiated processing in aging. In M. Naveh-Benjamin, M. Moscovitch, and R.L. Roediger, III, (Eds.), *Perspectives on Human Memory and Cognitive Aging: Essays in Honour of Fergus Craik*. (pp. 286-297). East Sussex, UK: Psychology Press.
- Lustig, C., & Hasher, L. (2001). Interference. In G. Maddox (Ed.), *Encyclopedia of Aging, 3rd edition* (pp. 533-535). New York: Springer-Verlag.
- Lustig, C. (2003). Grandfather's clock: Attention and interval timing in older adults. In W.H. Meck (Ed.). *Functional and neural mechanisms of interval timing*. Boca Raton, FL: CRC Press.
- Buckner, R.L., Head D., & Lustig, C. (2006). Brain aging. In F.I.M. Craik and E. Bialystock (Eds.). *Lifespan cognition: Mechanisms of change*. (pp. 27 – 42). New York: Oxford University Press.
- Hasher, L., Lustig, C., & Zacks, R. (2006). Inhibitory mechanisms and the control of attention. In A. Conway, C. Jarrold, M. Kane, A. Miyake, & J. Towse (Eds.) *Variation in Working Memory*. New York: Oxford University Press.
- Lustig, C., & Hasher, L. (2006). Interference. In G. Maddox (Ed.), *Encyclopedia of Aging, 4th edition*. New York: Springer-Verlag.
- Lustig, C., Hasher, L., & Zacks, R. (2007). Inhibitory deficit theory: Recent developments in a “new view”. In D. S. Gorfein and C. M. MacLeod (Eds.), *The place of inhibition in cognition*. Washington, DC: American Psychological Association.
- Sarter, M., & Lustig, C. (2007). Attention and learning and memory. In L. Squire, (Ed.) *New Encyclopedia of Neuroscience*. Elsevier, Oxford, UK.
- Lustig, C., & Flegal, K. (2008). Age differences in memory: Demands on control and association. In A.S. Benjamin, B. Etnyre, and T.A. Polk (Eds.), *Human Learning*. (pp. 137-152). Elsevier, Oxford, UK.
- Lustig, C., Berman, M., Nee, D.E., Lewis, R.L., Moore, K.S. & Jonides, J. (2009). Psychological and neural mechanisms of short-term memory. In G.G. Bernston and J.T. Caccioppo (Eds). *Handbook of Neuroscience for the Behavioral Sciences*. (pp. 567-585). John Wiley & Sons, Hoboken, NJ.
- Lustig, C., & Reuter-Lorenz, P.A. (2012). Training working memory: Insights from neuroimaging. In R.G. Alloway and T. Alloway (Eds.) *Working memory: The Connected Intelligence*. (pp 287-298). Psychology Press.
- Lustig, C., & Lin Z. (2015). Memory: Behavioral and neural bases. In K.L. Schaie and S.L. Willis (Eds). *Handbook of Psychology of Aging* (pp. 147-165). Academic Press.

Reuter-Lorenz, P.A., & Lustig, C. (in press). Working memory and executive functions in the aging brain. In R. Cabeza, L. Nyberg, and D.C. Park (Eds.). *Cognitive Neuroscience of Aging: Linking Cognitive and Cerebral Aging, 2nd Edition*.

Lustig, C., & Sarter, M. (2016). Attention and the cholinergic system: Relevance to schizophrenia. In T.W. Robbins and B.J. Sahakian (Eds.) *Current Topics in Behavioral Neurosciences: Translational Neuropharmacology*.

Lustig, C., & Jang, H. (in press). From perception to action: Bottom-up and top-down influences on age differences in attention. In (A. Gutchess and A. Thomas, Eds.) *Handbook of Cognitive Aging*.

INVITED TALKS

Ups and downs of neural recruitment in healthy aging and early dementia. (April, 2003). Symposium on Neuroscience, Aging, and Cognition. Cognitive Neuroscience Society, New York.

Event-related fMRI correlates of recognition memory in old age and early dementia. (April, 2004). Cognitive Aging Conference. Atlanta, GA.

fMRI of memory in aging and dementia. (October, 2004). Michigan State University. Lansing, Michigan.

fMRI of controlled memory processing (and compensation?) in older adults. (February, 2005). University of Michigan, University of Toronto.

Rising to the challenge: fMRI of young and old adults' response to demands for controlled processing. (September, 2005). University of Michigan.

When the going gets tough, older adult brains get going...a little late? (October, 2005). University of Michigan.

Rising to the Challenge: Successful brain activation and memory training in older adults. (March, 2006). Michigan Difference Seminars, Naples & Fort Lauderdale, Florida.

Frontal-parietal activations (and deactivations) in old age and dementia. (March, 2006). Eighth Conference on the Neurobiology of Learning and Memory, Irvine, California.

Codgers, control, and compensation: Insights from functional brain imaging. (May, 2006). Invited talk at the Seventy-Eighth Annual Meeting of the Midwestern Psychological Association, Chicago, Illinois.

Aging and the back end. (November, 2006). University of Illinois.

Aging brains: A shift to the back end? (January, 2007). Claude M. Pepper Center, University of Michigan.

When the going gets tough, older brains get going...but they might be a little late. (April, 2007).
Geriatrics Research Symposium, University of Michigan.

Shifting the balance: Brain and behavioral responses to cognitive control demands from age 9 to 97.
(March, 2008). Biopsychology Forum, University of Michigan.

Neuroimaging-guided training in aging and Alzheimer's disease: Building on remaining function.
(March, 2008). 18th Annual Rotman Research Institute Conference: Neuroimaging in Dementia,
Toronto, Canada.

The rise and fall of cognitive control: Lifespan development. (April, 2008). Co-organizer (with Denise
Head) of this symposium at the Cognitive Neuroscience Society Meeting, San Francisco, CA.

Not all training programs work as well as Martha's. (May, 2008). 50th Year Aging and Development
Training Grant Celebration. Washington University, St. Louis, MO.

Age-related changes in the biology of learning and memory. (May, 2008). Co-organizer (with Geoff
Murphy) of this workshop at the Nathan Shock Center, Ann Arbor, MI.

Goals in the golden ages: Lifespan changes in cognitive control. (June, 2008). TENNET: Annual
Meeting of Theoretical and Experimental Neuropsychology. Waterloo, Canada.

Strategies matter (and ability does, too). Individual differences in memory training and transfer.
(September, 2008). Memory Disorders Research Society. St. Louis, MO.

Goals in the golden ages: Lifespan changes in cognitive control. (October, 2008). Developmental
Brown Bag, University of Michigan.

Memory training in older adults: Building on remaining function. (October, 2008). LIFE Program.
Berlin, Germany.

Targeting latent function: Individual differences in memory training and transfer. (May, 2009).
Association for Psychological Science. San Francisco, CA.

Memory training: Encoding and individual differences. (January, 2010). Dallas Aging & Cognition
Conference. Dallas, TX.

Aging & Alzheimer's disease. (January, 2010). University of Michigan School of Social work. Ann
Arbor, MI.

Making a course your own: Applying learning & memory research in the classroom. LSA Teaching
Panel, University of Michigan, Ann Arbor, MI.

Control of attention. Sarter, M., & Lustig, C. (April, 2011). CNTRICS II Fourth Meeting: Selecting
Translational Animal Model Paradigms. Dulles, VA.

- When seniors know better than scientists: Individual differences in memory training and transfer.* (October, 2011). Margret M. and Paul B. Baltes International Conference on Aging, Detroit, MI.
- Integrative neuroscience of attention: Acetylcholine, cortex, and control.* (2012). National University of Singapore (separate talks for Psychology Department and Duke-NUS Graduate Medical School), February 2012; University of Chicago, March 2012; University of Michigan LIFE program March 2012; McLean Hospital June 2012; Washington University in St. Louis November 2012.
- A random walk through college and cognition.* (February, 2012). Part of “Random Walks through Science” talk series; National University of Singapore University Town Residential College.
- Getting your paper published...or at least giving it a fighting chance.* (February, 2012). National University of Singapore.
- Remembering and predicting emotional responses to 9/11.* (September, 2012). Developmental brownbag, University of Michigan; Memory Disorders Research Society Meeting, Davis, California.
- Timing within and across modality, age, and area of inquiry.* (October, 2012). TIMELY Workshop Temporal Processing Within and Across Senses. University of Tübingen, Germany.
- Integrative neuroscience of attention: Using multiple species and imaging methods to understand how the brain controls attention.* (October 2012). Invited keynote at CIMAT XIV Reunion de Neuroimagen. Guanajuato, Mexico.
- Timing across the lifespan: Influences of attention, memory, and motivation.* (October, 2013). TIMELY Workshop: Development of timing and time perception: A lifespan perspective. Granada, Spain.
- The nature of memory.* (January, 2014). Seattle Study Club. Phoenix, Arizona.
- Keeping distraction out and moving focus in: Rodent, patient, and genetic studies of attention.* (April, 2014). Center for Vital Longevity, Dallas, TX.
- More than a modulator: Translational evidence for regionally- and temporally-specific cholinergic contributions to attentional control.* (April, 2015). University of Texas, Austin, TX.
- Attention and acetylcholine: Integrating research across methods and species.* (May, 2015). LIFE Academy, University of Michigan, Ann Arbor, MI.
- Connecting the (cholinergic) dots: Translational studies of acetylcholine, attention, and cognitive control.* (November, 2015). Clinical Brownbag, University of Michigan, Ann Arbor, MI.

- Cross-species studies of attention: Connecting the cholinergic dots.* (November, 2015). Duke University, Durham, NC.
- Cholinergic-cognitive pathways: Differential contributions to fall risk?* (September, 2016). Udall Research Symposium, University of Michigan.
- Exercise and your brain.* (October, 2016). Presented at both Exercise & Recreational Sports staff development meeting and for the Exercise as Medicine speaker series, University of Michigan.
- Attention's ups and downs: Cross-species evidence for the role of acetylcholine.* (October, 2016). Michigan State University.
- Cognitive training in older adults: Time for a personalized medicine approach?* (January 29, 2017). Dallas Aging & Cognition Conference, Center for Vital Longevity, Dallas, TX.
- Pushing beyond the PPI: Regional Homogeneity and dynamic functional connectivity analyses.* (March 3, 2017). BrainHack Global – A2. Ann Arbor, MI.
- Getting your paper published...or at least giving it a fighting chance.* (March 8, 2017). The Life Course: Evolutionary and Ontogenetic Dynamics. University of Michigan.
- Time management for graduate students.* (May, 2017) University of Michigan.
- Attention and effort: Not just for Lynn's mentees!* (November, 2017). Symposium in honor of Lynn Hasher. Toronto, Canada.
- The neural correlates of attentional effort: What happens in the CRUNCH?* (November, 2017). Washington University in St. Louis, St. Louis, MO..
- Writing goals and realities.* (May, 2018). Diversity summer writing workshop, University of Michigan
- Attentional effort: Connected to the CRUNCH?* (February, 2018). Biopsychology Colloquium, University of Michigan.
- Walking and turning in the scanner...and in one's mind.* (February, 2018). Udall Parkinson's Disease Research Update, University of Michigan
- From top-down to "bottoms-up": Converging approaches to understand the neural systems involved in attention and cognitive control.* (March, 2018). Cognitive Neuroscience Society Meeting, Boston, MA. (Part of invited symposium *From cage to clinic: Integrative neuroscience to understand and improve cognition and emotional function in healthy and clinical populations* that I organized: Other presenters were Liz Phelps, Damien Fair, and Tim Bussey)/
- Cognitive Neuroscience.* (May, 2018). Mini Med School, University of Michigan.

Aging and episodic memory: What do we know and where do we go? (May, 2018) Cognitive Aging Conference, Atlanta, GA.

Attention and motivation: Interactions in brain and behavior. (October, 2018). San Diego State University.

Should we pay attention? Interactions between control, motivation, and task constraints. (March, 2020). Northeastern University.

Publishing and promoting your work: An editor's perspective. (July, 2020). Duke-National University of Singapore (virtual talk).

PAPER AND POSTER PRESENTATIONS

- Lustig, C. (April, 1995). Sex and age ideals. Paper presented at the Ninth Annual Ohio Undergraduate Psychology Conference, John Carroll University, Cleveland, OH.
- Gilmore, G.C., & Lustig, C. (November, 1995). **Prizewinner talk in Behavioral and Social Sciences.** Given at the Spectrum of Research on Aging & the Aged Research Day 1995, Claude D. Pepper Older Americans Independence Center, Cleveland, OH.
- Lustig, C., Gilmore, G.C., Koss, E., Thomas, C.W., Ripich, D., Townsend, L., & Stuve, T. (November, 1995). Boston Naming Test performance is affected by simulated Alzheimer-type visual deficit. Poster presented at the Spectrum of Research on Aging & the Aged Research Day 1995, Claude D. Pepper Older Americans Independence Center, Cleveland, OH.
- Townsend, L., Gilmore, G.C., Lustig, C., & Morrison, S. (November, 1995). Oral reading speed in Alzheimer's Disease. Paper presented at the Spectrum of Research on Aging & the Aged Research Day 1995, Claude D. Pepper Older Americans Independence Center, Cleveland, OH.
- Gilmore, G.C., Turner, J.B., Thomas, C.W., Koss, E., Ripich, D., Townsend, L., Greene, R., Stuve, T., Morrison, S., & Lustig, C. (April, 1996). Picture recognition in Alzheimer's disease: Impact of contrast sensitivity deficit. Paper presented at the Cognitive Aging Conference, Atlanta, Georgia.
- Lustig, C., Tonev, S., Hasher, L., Rahhal, T., & May, C.P. (March, 1998). The contribution of proactive interference to measures of working memory span. Poster presented at the North Carolina Cognition Group Meeting. Durham, North Carolina.
- Gilmore, G.C., Townsend, L., Lustig, C., & Morrison, S. (April, 1998). Oral reading speed in Alzheimer's Disease. Poster presented at the Cognitive Aging Conference. Atlanta, Georgia.
- Lustig, C., & Meck, W.H. (April, 1998). Attention mediated temporal processing deficits as a function of age, signal modality, and time of day. Poster presented at the Cognitive Neuroscience Society Meeting. San Francisco, California.
- Lustig, C., Hasher, L., Tonev, S.T., & May, C.P. (November, 1998). The role of proactive interference in measures of working memory span. Poster presented at the 39th Annual Meeting of the Psychonomic Society. Dallas, Texas.
- Lustig, C., Hasher, L., Tonev, S.T., & May, C.P. Sources of proactive interference in working memory span measures. (February, 1999). Paper presented at the North Carolina Cognition Group Meeting. Raleigh, North Carolina.
- Kim, S., Lustig, C., May, C.P., & Hasher, L. (February, 2000). The impact of distraction and time of day on an implicit memory test. Poster presented at the North Carolina Cognition Group Meeting. Winston-Salem, North Carolina.

- Lustig, C., & Hasher, L. (February, 2000). Interference on indirect memory tests. Poster presented at the North Carolina Cognition Group Meeting. Winston-Salem, North Carolina.
- Tonev, S.T., Lustig, C., Hasher, L., & Brown, S.C. (February, 2000). Directed forgetting and directed ignoring. Poster presented at the North Carolina Cognition Group Meeting. Winston-Salem, North Carolina.
- Lustig, C., Tonev, S.T., & Hasher, L. (April, 2000). Visual distraction and processing speed I. Poster presented at the Cognitive Aging Conference, Atlanta, Georgia.
- Tonev, S.T., Lustig, C., & Hasher, L. (April, 2000). Visual distraction and processing speed II. Poster presented at the Cognitive Aging Conference, Atlanta, Georgia.
- Lustig, C., & Meck, W.H. (March, 2001). Chronic treatment with haloperidol induces working memory deficits in feedback effects of interval timing. Poster presented at the Cognitive Neuroscience Society Meeting, New York, New York.
- Petrella, J.F., Lustig, C., Bucher, L., Jha, A.P., McCarthy, G., & Doraiswamy, M.P. (April, 2001). Reproducibility of event-related fMRI during a working memory task. Poster presented at the American Society for Neuroradiology Annual Meeting, Boston, Massachusetts.
- Lustig, C., & Meck, W.H. (November, 2001). Signal modality interactions reveal developmental/aging changes in interval timing. Paper presented at the 42nd Annual Meeting of the Psychonomic Society. Boca Raton, Florida.
- Lustig, C., Petrella, J., Bucher, L.A., Jha, A.P., & Doraiswamy, P.M. (February, 2002). Variations in task difficulty reveal prefrontal activation differences in healthy adults at genetic risk for Alzheimer's Disease: A pilot study using fMRI. Poster presented at the Third Leonard Berg Symposium. **Awarded 2nd place prize for conference.** St. Louis, MO.
- Lustig, C., & Hasher, L. (April, 2002). (When) are there age differences in interference in implicit memory? Poster presented at the Cognitive Aging Conference. Atlanta, GA.
- Lustig, C., & Meck, W.H. (April, 2002). Age deficits and sparing in simultaneous temporal processing. Poster presented at the Cognitive Neuroscience Meeting. San Francisco, CA.
- Townsend, B.A., Jha, A.P., Lustig, C., Petrella, J., Doraiswamy, M., & McCarthy, G. (April, 2002). Working memory load dissociates transient and delay activity in normal aging. Poster presented at the Cognitive Neuroscience Meeting. San Francisco, CA.
- Lustig, C., & Meck, W.H. (July, 2002). Interactions between frontal cortex and basal ganglia in working memory and interval timing. Paper presented at the Quebec '02 Conference on Short-Term/Working Memory. Quebec, Canada.
- Lustig, C., Snyder, A.Z., O'Brien, K., Williams, L., McAvoy, M., Morris, J.C., & Buckner, R.L. (July, 2002). Functional MRI of memory: Effects of aging and dementia status. Poster presented at

the 8th International Conference on Alzheimer's Disease and Related Disorders and the Alzheimer's Imaging Consortium. Stockholm, Sweden.

Buckner, R.L., Lustig, C., Snyder, A.Z., O'Brien, K.O., Williams, L., & Morris, J.C. (November, 2002). Spared priming and repetition-related activity reductions in aging and dementia of the Alzheimer type. Paper presented at the Society for Neuroscience Meeting. Orlando, FL.

Lustig, C., Snyder, A.Z., O'Brien, K.O., Williams, L., McAvoy, M., Morris, J.C., & Buckner, R.L. (November, 2002). Non-selective frontal recruitment onsets with advanced aging but is not accelerated by dementia of the Alzheimer type. Paper presented at the Society for Neuroscience Meeting. Orlando, FL.

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. Paper presented at the Society for Neuroscience Meeting. New Orleans, LA.

Velanova, K., Lustig, C., Jacoby, L.L., & Buckner, R.L. (2004). Age-associated increases in frontal activity observed during controlled retrieval. Poster presented at the Society for Neuroscience Meeting, San Diego, CA.

Lustig, C., Head, D., Janes, W.E., & Buckner, R.L. (2005). Frontal-parietal responses to increasing control demands in young and old adults: Evidence from task switching. Paper presented at the Society for Neuroscience Meeting. Washington, D.C.

Persson, J., Lustig, C., Nelson, J.K., Sylvester, C.Y., & Reuter-Lorenz, P.A. (2005). Task-induced deactivations: Effects of age and selection demand. Poster presented at the Society for Neuroscience Meeting. Washington, D.C.

Askren, M.K., Reinink, A., Nelson, L.D., & Lustig, C. (2006). Frontal activation during controlled memory processing in young and old adults: Comparing study and retrieval. Poster presented at the Cognitive Neuroscience Society Meeting. San Francisco, CA.

Lustig, C., Head, D., Janes, W.E., Wang, T., & Buckner, R.L. (2006). Frontal-parietal responses to increasing control demands in young and old adults: Evidence from task switching. Poster presented at the Cognitive Neuroscience Society Meeting. San Francisco, CA.

Bissig, D., Walsh, M., Reinink, A., & Lustig, C. (2006). Who benefits from memory training? Impact of individual differences in strategy use. Poster presented at the Cognitive Aging Conference. Atlanta, GA.

Lustig, C., Head, D., Janes, W., & Buckner, R. L. (2006). Frontal-parietal responses to increased demand across the lifespan: Evidence from task-switching. Paper presented at the Cognitive Aging Conference. Atlanta, GA.

Andrews, J.R., Snyder, A.Z., Vincent, J.L., Lustig, C., Head, D., Fox, M.D., Raichle, M.E., & Buckner, R.L. (2006). Evidence for large-scale network disruption in advanced aging. Poster presented at the Society for Neuroscience Meeting. Atlanta, GA.

- Buckner, R.L., Head, D., Lustig, C., James, W.E., Grimes, A., Wang, T., Laciny, E., Coalson, R., Schlaggar, B., & Peterson, S. (2006). Functional-anatomic study of the human lifespan ages 9-92. Poster presented at the Society for Neuroscience Meeting. Atlanta, GA.
- Head, D., Lustig, C., Isom, M., & Buckner, R.L. (2006). Age differences in frontal recruitment between encoding and retrieval. Poster presented at the Society for Neuroscience Meeting. Atlanta, GA.
- Lustig, C., Demeter (nee Dagenbach), E., & Sarter, M. (2006). Rats and humans paying attention: Cross-species task development for translational research on the neurobiology of attention. Poster presented at the Society for Neuroscience Meeting. Atlanta, GA.
- Askren, M., Bissig, D., & Lustig, D. (2007). Do age differences in interhemispheric processing contribute to age differences in emotion recognition? Poster presented at the Cognitive Neuroscience Meeting. New York, NY.
- Lustig, C., Head, D., Janes, W.E., & Buckner, R.L. (2007). Age differences in demand-related activation and deactivation: Evidence from task-switching in young, middle-aged, and old adults. Poster presented at the Cognitive Neuroscience Meeting. New York, NY.
- Demeter, E., Hernandez, L., Sarter, M., & Lustig, C. (2007). The brain's response to attentional challenge: A study of sustained attention and distractor challenge using continuous arterial spin labeling perfusion fMRI. Poster presented at the Society for Neuroscience Meeting. San Diego, CA.
- Askren, M.K. & Lustig, C. (2007). Goal maintenance or inhibition? Disentangling forms of top-down control. Poster presented at the Psychonomic Society Meeting, Long Beach, CA.
- Askren, M.K. & Lustig, C. (2008). Overcoming conflict: Is goal activation sufficient? Poster presented at the Cognitive Neuroscience Society Meeting, San Francisco, CA.
- Lustig, C. (2008). Age in the balance: Interactions between lifespan development and cognitive control demand on frontal activations and default-network deactivations. Symposium paper presented at the Cognitive Neuroscience Society Meeting. San Francisco, CA.
- Stern, G.M., Bissig, D., Askren, M.K., & Lustig, C. (2008). Age differences in recognizing facial emotion: Not just a positivity bias. Poster presented at the Michigan Society for Neuroscience Conference. Lansing, MI. **Winner of Undergraduate Poster Prize.**
- Kumar, M., Askren, M.K., & Lustig, C. Absent-minded aging? Poster presented at the Michigan Undergraduate Psychology Research Conference. Albion, MI.
- Winters, M., Askren, M.K., Demeter, E., & Lustig, C. Acetylcholine: Making it easier for the brain to change its mind? Michigan Undergraduate Psychology Research Conference. Albion, MI.

- Buckner, R.L., Gatewood, L.M., Lustig, C., Andrews-Hanna, J.R. (2008). Loss of competition between default and attention systems in advanced aging. Poster presented at the Society for Neuroscience Meeting. Washington, D.C.
- Demeter, E.M., Hernandez-Garcia, L., Sarter, M., & Lustig, C. (2008). Cognitive control of attention: Neural correlates of performing the distractor condition Sustained Attention Task (dSAT) and implications for translational cognitive neuroscience research on schizophrenia. Poster presented at the Society for Neuroscience Meeting. Washington, D.C.
- Askren, M.K., Demeter, E.M., Taylor, S.F., Sarter, M., & Lustig, C. (2008). Acetylcholine, cortex, and control: Evidence from a task-switching procedure. Poster presented at the Society for Neuroscience Meeting. Washington, D.C.
- Askren, M.K., Demeter, E.M., Taylor, S.F., Sarter, M., & Lustig, C. (2009). Acetylcholine and cognitive control: Donepezil modulates prefrontal and default-mode regions in a task-switching procedure. Slide presentation at the Cognitive Neuroscience Society Meeting. San Francisco, CA.
- Demeter, E.M., Hernandez-Garcia, L., Guthrie, S.K., Engelmann, R., Taylor, S.F., Sarter, M., & Lustig, C. (2009). Cognitive control of attention: Neuroimaging evidence supporting use of the distractor condition sustained attention task in translational research. Poster presented at the Cognitive Neuroscience Society Meeting. San Francisco, CA.
- Craig, K.S., Askren, M.K., & Lustig, C. (2009). Shifting control: Prefrontal activation in young and old adults at encoding and retrieval. Poster presented at the Society for Neuroscience Meeting. Chicago, IL.
- Demeter, E.M., Englemann, R., Guthrie, S.K., Taylor, S.F., Sarter, M., & Lustig, C. (2009). Control of attention in schizophrenia: Validation of the distractor condition sustained attention task (dSAT) and demonstration of impaired attentional control in patients. Poster presented at the Society for Neuroscience Meeting. Chicago, IL.
- Askren, M.K., & Lustig, C. (2010). You can't have it both ways: Resolving between-task competition in a task-switching paradigm. Poster presented at the Dallas Aging and Cognition Conference. Dallas, TX.
- Flegal, K., Lustig, C., & Reuter-Lorenz, P.A. (2010). The effects of associative processing and encoding training on veridical and false memories. Poster presented at the Dallas Aging and Cognition Conference. Dallas, TX.
- Albeiruti, R., Askren, M.K., & Lustig, C. (2010). You can't have it both ways: Resolving between-task competition in a task-switching paradigm. Poster presented at the Cognitive Aging Conference. Atlanta, GA.

- Askren, M.K., Demeter, E., Winters, M., Taylor, S., Sarter, M., & Lustig, C. (2010). Acetylcholine modulates frontoparietal responses to demands for cognitive control. Poster presented at the Cognitive Neuroscience Society Meeting. Montreal, Canada.
- Flegal, K.E., & Lustig, C. (2010). Training associative encoding in older adults: Costs as well as benefits? Poster presented at the Cognitive Neuroscience Society Meeting. Montreal, Canada.
- Ossher, L., Flegal, K.E., & Lustig, C. (2010). Everyday memory errors in older adults: Frequency and association with cognitive measures. Poster presented at the Cognitive Neuroscience Society Meeting. Montreal, Canada.
- Demeter, E.M., St. Peters, M., Mash, B., Williams, S., Lustig, C., & Sarter, M. (2010). The distractor condition sustained attention task: A translational tool for assessing attentional control in mice, rats, health humans, and schizophrenic patients. Poster presented at the Society or Neuroscience Meeting, San Diego, CA.
- Berry, A.S., Demeter, E., Askren, M.K., Sarter, M., & Lustig, C. (April, 2011). Distraction versus detection: Evidence for differentially lateralized frontoparietal control processes from the distractor condition sustained attention task. Poster presented at the Cognitive Neuroscience Society Meeting, San Francisco, CA.
- Lustig, C., Berry, A.S., Howe, W.M., & Sarter, M. (2011). Attention processing-mode switches: Cross-species research linking cholinergic transients and BOLD activations in the switch from endogenous to exogenous attention. Nanosymposium presentation at the Society for Neuroscience Meeting, Washington, D.C.
- Berry, A.S., Howe, W.M., Francois, J., Loomis, G., Gilmour, G., Lustig, C., Sarter, M. (October, 2012) Not all cues are equal: neurochemical and functional-imaging measures reveal neuronal mechanism connecting cues to internal representations. Poster presented at the Society for Neuroscience Meeting, New Orleans, LA.
- Craig, K.S., Berman, M.G., Jonides, J., & Lustig, C. (May, 2012). Is it about time? The of similarity along task-relevant dimensions in proactive interference. Poster presented at the Association for Psychological Science Meeting. Chicago, IL.
- Berry, A.S., Torres, J.J., Seals, U., Carrasco, M., Sarter, M., Gehring, W.J., Lustig, C. (April, 2012) Shifts from endogenous to exogenous attention are associated with modulation of the P300 component. Poster presented at the Cognitive Neuroscience Society Meeting, Chicago, IL.
- Berry, A.S., Isaacs, Y., Demeter, E., Blakely, R.D., Sarter, M., Lustig, C. (April, 2013) Selective vulnerability to distraction associated with choline transporter gene. Poster presented at the Cognitive Neuroscience Society Meeting, San Francisco, CA.
- Kim, K., Wu, T., Syed, N., Müller, M., Bohnen, N., Sarter, M., Lustig, C. (2013). Spared and impaired aspects of attention in Parkinson's disease: Distractor vulnerability correlates with lower cortical

cholinergic innervation. Poster presented at the Society for Neuroscience Meeting, San Diego, CA.

- Lustig, C., Kim, K., Wu, T., Syed, N., Müller, M., Sarter, M., Bohnen, N. (2013). Cholinergic control of attention and resistance to distractors: evidence from Parkinson's disease patients with reduced cortical cholinergic innervation. Poster presented at the Society for Neuroscience Meeting, San Diego, CA.
- Craig, K., Rana, S., Lustig, C. (2014). Ignorance is bliss: The effect of task-relevance on proactive interference. Poster presented at the Cognitive Neuroscience Society Meeting, Boston, MA.
- Kim, K., Müller, M., Bohnen, N., Sarter, M., Lustig, C. (2014). Vulnerability to distraction in patients with Parkinson's disease is linked to low cortical cholinergic function. Poster presented at the Cognitive Neuroscience Society Meeting, Boston, MA.
- Lin, Z., Lasecki, L., Lustig, C. (2014). Paying (for) attention: Effects of distraction, time-on-task, and monetary incentive in younger and older adults. Poster presented at the Cognitive Neuroscience Society Meeting, Boston, MA and at the International Max Planck Research School on the Life course (LIFE) meeting, Berlin, Germany.
- Berry, A.S., Sarter, M., Hanna, G.L., Gehring, W.J., & Lustig, C. (2014). Breaking away from perceptual attention: Electrophysiological signatures of shifts from monitoring to signal-associated response in typically developing children and those with obsessive-compulsive disorder. Poster presented at the Society for Neuroscience meeting, Washington, D.C.
- Kim, K., Mueller, M., Bohnen, N., Sarter, M., & Lustig, C. (2014). Regionally-specific correlations between the integrity of the cortical cholinergic input system and vulnerability to attentional distraction in Parkinson's disease. Poster presented at the Society for Neuroscience meeting, Washington, D.C.
- Lin, Z., & Lustig, C. (2014). Paying (for) attention: Effects of distraction, time-on-task, and monetary incentive in younger and older adults. Poster presented at the Society for Neuroscience meeting, Washington, D.C.
- Sarter, M., Berry, A.S., Blakely, R.D., & Lustig, C. Humans expressing a subcapacity choline transport variant: Attenuated right prefrontal activation during challenges to attention. (2014). Poster presented at the Society for Neuroscience meeting, Washington, D.C.
- Xie, B., Larson, J., Pressler, S., Lustig, C., & Arslanian-Engoren (2015). The impact of multidimensional frailty on disability and quality of life in heart failure patients: A secondary data analysis. Poster presented at Midwest Nursing Regional Society meeting, Indianapolis, IN.
- Caple, A., *Lin, Z., (Berry, A.S., Sarter, M., Blakely, R.D., & Lustig, C. (2016) When the going gets tough, do the low cholinergic stop going? Cholinergic genetic variation and right prefrontal activation. Poster presented at the Society for Neuroscience meeting, San Diego, CA.

- Kim, Y., Rivet, C.R., Lustig, C., & Sarter, M. Poor attentional control as a trait in sign-tracking rats: Cortical cholinergic-GABAergic mechanisms. (2016). Poster presented at the Society for Neuroscience meeting, San Diego, CA. Poster presented at the Society for Neuroscience meeting, San Diego, CA.
- Nicosia, J., & Lustig, C. Smoking effects on attentional control: More than just withdrawal? (2016). Poster presented at the Society for Neuroscience meeting, San Diego, CA.
- Jantz, T.K., & Lustig, C. (2017). History of incarceration predicts psychological and cognitive differences in the elderly. Psychological Study of Social Issues Conference, Albuquerque, NM.
- Jantz, T., Zhou, L., & Lustig, C. (2017). Genetic variance in cholinergic efficiency interacts with depression to impact cognition in later life. Poster presented at the Psychonomic Society Annual Meeting. Vancouver, British Columbia, Canada