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David E. Warren

Curriculum Vitæ

Education and Employment

present **Assistant Professor**, *University of Nebraska Medical Center*, Omaha, NE.

2014-2015 **Associate**, *University of Iowa*, Iowa City, IA.

2009-2014 **Postdoctoral Research Scholar**, *University of Iowa*, Iowa City, IA.

2009 **PhD**, *University of Illinois at Urbana-Champaign*, Urbana, IL.

1999 **BA**, *University of California, Berkeley*, Berkeley, CA.

Research Funding

2017 **Great Plains IDeA-CTR CTR Superstar**, *Targeted transcranial magnetic stimulation to improve hippocampal-dependent declarative memory abilities in older adults.*

PI: David E. Warren

Co-PIs: Daniel L. Murman

2016 **Nebraska EPSCoR Major Research Instrumentation**, *Transcranial magnetic stimulation (TMS) to support novel neuroscience research in Nebraska.*

PI: David E. Warren

Co-PIs: Tony W. Wilson & Max J. Kurz

2016 **Fremont Area Alzheimer's Fund Award**, *Using neuroimaging and neurostimulation to understand and improve cognition in Alzheimer's disease.*

PI: David E. Warren

2015-2019 **NSF Research Project Grant**, *Developmental chronnecto-genomics (Dev-CoG): a next generation framework for quantifying brain dynamics and related genetic factors in childhood*, RII Track-2 FEC.

PI: Vince D. Calhoun; Julia M. Stephen; Tony W. Wilson; Yu-Ping Wang

Role: Co-investigator

2014-2017 **McDonnell Foundation**, *Vulnerable hubs in human brain networks: A new approach to neurological disease*, UHC-Collab.

PI: Daniel Tranel & Steven Petersen

Role: Postdoctoral researcher

2012-2016 **NIH Research Project Grant**, *Language processing and the hippocampal declarative memory system*, R01-DC011755.

PI: Melissa C. Duff & Sarah Brown-Schmidt

Role: Postdoctoral researcher

2011-2016 **NIH Research Project Grant**, *The hippocampal system and relational (declarative) memory processes*, R01-MH062500.

PI: Neal J. Cohen

Role: Postdoctoral researcher

2012-2013 **Delta Center Interdisciplinary Research Grant**, *Modeling word learning in adults with memory impairments after brain damage.*

PI: David E. Warren

2009-2012 **NIH Research Project Grant**, *Anatomical basis of memory and language*, P50-NS019632.

PI: Daniel Tranel

Role: Postdoctoral researcher

Pending Research Funding

2017 **NIH Mentored Research Scientist Development Award**, *Measuring neurodevelopmental effects of genetic risk factors for Alzheimer's disease through longitudinal analysis of children's brain structure, brain function, and cognition.*, K01-AG057816.

Role: PI

Program Officer: Dallas Anderson

Status: Scored

Publications

Hanley, J., **Warren, D. E.**, Glass, N., Tranel, D., Karam, M., & Buckwalter, J. (2017). Visual interpretation of plain radiographs in orthopaedics using eye-tracking technology. *The Iowa Orthopaedic Journal*, *37*, 225–231. Citations: 0/0.

Hannula, D. E., Ryan, J. D., & **Warren, D. E.** (2017). Beyond long-term declarative memory: Evaluating hippocampal contributions to unconscious memory expression, perception, and short-term retention. In D. E. Hannula, & M. C. Duff (Eds.) *The Hippocampus from Cells to Systems*, (pp. 281–336). Cham: Springer International Publishing. Citations: 0/0.

Warren, D. E., Kurczek, J., & Duff, M. C. (2016). What relates newspaper, definite, and clothing? An article describing deficits in convergent problem solving and creativity following hippocampal damage. *Hippocampus*. Citations: 4/1.

Warren, D. E., Power, J. D., Bruss, J., Denburg, N. L., Waldron, E. J., Sun, H., Petersen, S. E., & Tranel, D. (2016). Brain network theory can predict whether neuropsychological outcomes will differ from clinical expectations. *Archives of Clinical Neuropsychology*, (pp. 14247–14252). Citations: 2/2.

Guzman-Velez, E., **Warren, D. E.**, Feinstein, J. S., Bruss, J., & Tranel, D. (2015). Dissociable contributions of amygdala and hippocampus to emotion and memory in patients with Alzheimer's disease. *Hippocampus*. Citations: 1/0.

Kumaran, D., **Warren, D. E.**, & Tranel, D. (2015). Damage to the ventromedial prefrontal cortex impairs learning from observed outcomes. *Cerebral Cortex*, *25*(11), 4504–4518. Citations: 6/3.

Spalding, K. N., Jones, S. H., Duff, M. C., Tranel, D., & **Warren, D. E.** (2015). Investigating the neural correlates of schemas: Ventromedial prefrontal cortex is necessary for normal schematic influence on memory. *Journal of Neuroscience*, *35*(47), 15746–15751. Citations: 14/8.

Monti, J. M., Balota, D. A., **Warren, D. E.**, & Cohen, N. J. (2014). Very mild Alzheimer's disease is characterized by increased sensitivity to mnemonic interference. *Neuropsychologia*, *59*, 47–56. Citations: 2/2.

Warren, D. E., & Duff, M. C. (2014). Not so fast: Hippocampal amnesia slows word learning despite successful fast mapping. *Hippocampus*, *24*(8), 920–933. Citations: 25/16.

Warren, D. E., Duff, M. C., Cohen, N. J., & Tranel, D. (2014). Hippocampus contributes to the maintenance but not the quality of visual information over time. *Learning & Memory*, *22*(1), 6–10. Citations: 5/4.

Warren, D. E., Jones, S. H., Duff, M. C., & Tranel, D. (2014). False recall is reduced by damage to the ventromedial prefrontal cortex: Implications for understanding the neural correlates of schematic memory. *Journal of Neuroscience*, *34*(22), 7677–82. Citations: 40/28.

Warren, D. E., Power, J. D., Bruss, J., Denburg, N. L., Waldron, E. J., Sun, H., Petersen, S. E., & Tranel, D. (2014). Network measures predict neuropsychological outcome after brain injury. *Proceedings of the National Academy of Sciences of the United States of America*, *111*(39), 14247–14252. Citations: 64/45.

Yee, L. T. S., **Warren, D. E.**, Voss, J. L., Duff, M. C., Tranel, D., & Cohen, N. J. (2014). The hippocampus uses information just encountered to guide efficient ongoing behavior. *Hippocampus*, *24*(2), 154–64. Citations: 21/18.

Warren, D. E., Thurtell, M. J., Carroll, J. N., & Wall, M. (2013). Perimetric evaluation of saccadic latency, saccadic accuracy, and visual threshold for peripheral visual stimuli in young compared with older adults. *Investigative Ophthalmology & Visual Science*, *54*(8), 5778–87. Citations: 10/8.

Watson, P. D., Voss, J. L., **Warren, D. E.**, Tranel, D., & Cohen, N. J. (2013). Spatial reconstruction by patients with hippocampal damage is dominated by relational memory errors. *Hippocampus*, *23*(7), 570–580. Citations: 58/46.

Coronel, J. C., Duff, M. C., **Warren, D. E.**, Federmeier, K. D., Gonsalves, B. D., Tranel, D., & Cohen, N. J. (2012). Remembering and voting: Theory and evidence from amnesic patients. *American journal of political science*, *56*(4), 837–848. Citations: 18/8.

Duff, M. C., **Warren, D. E.**, Gupta, R., Vidal, J. P. B., Tranel, D., & Cohen, N. J. (2012). Teasing apart tangrams: Testing hippocampal pattern separation with a collaborative referencing paradigm. *Hippocampus*, *22*(5), 1087–1091. Citations: 14/7.

Hannula, D. E., Baym, C. L., **Warren, D. E.**, & Cohen, N. J. (2012). The eyes know: Eye movements as a veridical index of memory. *Psychological Science*, *23*(3), 278–87. Citations: 44/25.

Warren, D. E., Duff, M. C., Jensen, U., Tranel, D., & Cohen, N. J. (2012). Hiding in plain view: Lesions of the medial temporal lobe impair online representation. *Hippocampus*, *22*(7), 1577–1588. Citations: 41/30.

Warren, D. E., Duff, M. C., Magnotta, V., Capizzano, A. A., Cassell, M. D., & Tranel, D. (2012). Long-term neuropsychological, neuroanatomical, and life outcome in hippocampal amnesia. *The Clinical Neuropsychologist*, *26*(2), 335–69. Citations: 20/16.

Voss, J. L., **Warren, D. E.**, Gonsalves, B. D., Federmeier, K. D., Tranel, D., & Cohen, N. J. (2011). Spontaneous revisitation during visual exploration as a link among strategic behavior, learning, and the hippocampus. *Proceedings of the National Academy of Sciences of the United States of America*, *108*(31), E402–409. Citations: 59/43.

Warren, D. E., Duff, M. C., Tranel, D., & Cohen, N. J. (2011). Observing degradation of visual representations over short intervals when medial temporal lobe is damaged. *Journal of Cognitive Neuroscience*, *23*(12), 3862–73. Citations: 46/34.

Hannula, D. E., Althoff, R. R., **Warren, D. E.**, Riggs, L., Cohen, N. J., & Ryan, J. D. (2010). Worth a glance: Using eye movements to investigate the cognitive neuroscience of memory. *Frontiers in Human Neuroscience*, *4*, 52–67. Citations: 130/82.

Warren, D. E., Duff, M. C., Tranel, D., & Cohen, N. J. (2010). Medial temporal lobe damage impairs representation of simple stimuli. *Frontiers in Human Neuroscience*, *4*, 1–9. Citations: 41/26.

Konkel, A., **Warren, D. E.**, Duff, M. C., Tranel, D. N., & Cohen, N. J. (2008). Hippocampal amnesia impairs all manner of relational memory. *Frontiers in Human Neuroscience*, *2*, 1–15. Citations: 150/99.

Simons, D. J., Hannula, D. E., **Warren, D. E.**, & Day, S. W. (2007). Behavioral, neuroimaging, and neuropsychological approaches to implicit perception. In P. Zelano, M. Moscovitch, & E. Thompson (Eds.) *Cambridge Handbook of Consciousness*, (pp. 207–250). New York, NY: Cambridge University Press. Citations: 19/0.

Note: citation counts are from Google Scholar/Scopus as of October 24, 2017.

Manuscripts Under Review

Warren, D. E., Sutterer, M. J., Bruss, J., Jones, A., Abel, T., Kawasaki, H., Voss, M. W., Howard, M. A., & Tranel, D. (under review). Functional connectivity of the surgically disconnected temporal pole.

Capizzano, A. A., Moritani, T., Jacob, M., & **Warren, D. E.** (under revision). Normal aging: Brain morphologic, chemical and physiologic changes detected with *in vivo* MRI. In M. Rizzo, S. W. Anderson, & B. Fritzsch (Eds.) *Wiley Handbook of the Aging Mind and Brain*.

Spalding, K. N., Schlichting, M. L., Zeithamova, D., Preston, A. R., Tranel, D., Duff, M. C., & **Warren, D. E.** (under revision). Ventromedial prefrontal cortex is necessary for normal associative inference and memory integration.

Warren, D. E., Rubin, R. D., Shune, S., & Duff, M. C. (under revision). Memory and language in aging: How their shared cognitive processes, neural correlates, and supporting mechanisms change

with age. In M. Rizzo, S. W. Anderson, & B. Fritzsch (Eds.) *Wiley Handbook of the Aging Mind and Brain*.

Manuscripts in Preparation

Brozinsky, C. J., Yee, L. T. S., **Warren, D. E.**, Cohen, N. J., & D'Esposito, M. (in preparation). Hippocampus-dependent recollection processes contribute to short-delay, single-item recognition.

Voss, J. L., **Warren, D. E.**, Tranel, D., & Cohen, N. J. (in preparation). An unintentional learning strategy involving hippocampal-prefrontal interactivity.

Warren, D. E., Thurtell, M. J., & Wall, M. (in preparation). Visual threshold estimates derived from eye-movement perimetry are similar to estimates from manual perimetry.

Previous Conference Presentations

Beadle, J. N., Heller, A. M., **Warren, D. E.**, Calhoun, V. D., Stephen, J. M., Wang, Y.-P., & Wilson, T. W. (2017). Brain networks associated with adolescent loneliness. OHBM.

Christopher-Hayes, N., Rangel, A., Stephen, J. M., Calhoun, V. D., Wang, Y.-P., Wilson, T. W., & **Warren, D. E.** (2017). Adolescent changes in hippocampal volume and functional connectivity affect memory performance. OHBM.

Hanley, J., Buckwalter, J., **Warren, D. E.**, Glass, N., Tranel, D., & Karam, M. (2017). Visual interpretation of plain radiographs in orthopaedics using eye tracking technology. AAOS.

Spooner, R. K., Christopher-Hayes, N., Stephen, J. M., Calhoun, V. D., Wang, Y.-P., Wilson, T. W., & **Warren, D. E.** (2017). Childhood development of behavioral and brain network changes related to basal ganglia: resting-state functional connectivity of striatal regions varies with performance on cognitive tasks in children. CNS.

Spooner, R. K., Christopher-Hayes, N., Stephen, J. M., Calhoun, V. D., Wang, Y.-P., Wilson, T. W., & **Warren, D. E.** (2017). Intrinsic functional connectivity of the striatum covaries with cognitive performance in adolescents. OHBM.

Warren, D. E., Spalding, K. N., Olvera, A. G., Selden, K., Duff, M. C., & Tranel, D. (2017). A look at age and relational memory: Explicit and implicit measures show differences in relational memory performance between healthy young and older adults. CNS.

Bruss, J., Sutterer, M. J., **Warren, D. E.**, Heskje, J., & Tranel, D. (2016). LesionWarp: An automated approach to lesion mapping through the use of nonlinear registration techniques from popular neuroimaging pipelines. In *2016 Neuroscience Meeting Planner, Online*. SFN.

Buckwalter, J., Hanley, J., Cemo, L., **Warren, D. E.**, Tranel, D., & Karam, M. (2016). Visual interpretation of plain radiographs in orthopaedics using eye tracking technology. AOA.

Sutterer, M. J., **Warren, D. E.**, Bruss, J., Abel, T., Jones, A., Kawasaki, H., Voss, M. W., Howard, M. A., & Tranel, D. (2016). BOLD is thicker than white matter: Surgically disconnected temporal pole exhibits resting functional connectivity with remote brain regions. In *2016 Neuroscience Meeting Planner, Online*. SFN.

Warren, D. E., Rangel, A., Stephen, J. M., Calhoun, V. D., Wang, Y.-P., & Wilson, T. W. (2016). The influence of adolescent hippocampal volume and functional connectivity on memory performance: a cross-sectional investigation from the Dev-CoG project. In *2016 Neuroscience Meeting Planner, Online*. SFN.

Spalding, K., Jones, S. H., Duff, M. C., Tranel, D., & **Warren, D. E.** (2015). vmPFC damage reduces influence of schematic memory in a recognition memory task. In *Proceedings of 2015 CNS Meeting*. CNS.

Spalding, K. N., Schlichting, M. L., Zeithamova, D., Preston, A. R., Duff, M. C., Tranel, D., & **Warren, D. E.** (2015). Impairments in associative inference following damage to the ventromedial prefrontal cortex. In *2015 Neuroscience Meeting Planner, Online*. SFN.

Sutterer, M. J., **Warren, D. E.**, Bruss, J., Jones, A., Abel, T., Kawasaki, H., Voss, M. W., Howard, M. A., & Tranel, D. (2015). Functional connectivity of the surgically disconnected temporal pole. In *Proceedings of 2015 OHBM Meeting*. OHBM.

Warren, D. E., Bruss, J., & Tranel, D. (2015). Neural correlates of impairment on neuropsychological tests of memory: using sparse principal components analysis and machine learning predictions to address problems in voxelwise lesion-symptom mapping. In *2015 Neuroscience Meeting Planner, Online*. SFN.

Warren, D. E., Duff, M. C., & Tranel, D. (2015). Investigating the architecture of short-term memory in severely amnesic patients with hippocampal damage. In *Proceedings of 2015 CNS Meeting*. CNS.

Warren, D. E., Roembke, T. C., McMurray, B., & Duff, M. C. (2015). Cross-situational statistical learning of new words despite focal bilateral hippocampal damage and severe amnesia. In *Proceedings of 2015 International Conference on Interdisciplinary Advances in Statistical Learning*. Basque Center on Cognition, Brain, and Language.

Power, J. D., **Warren, D. E.**, Bruss, J., Denburg, N. L., Sun, H., Petersen, S. E., & Tranel, D. (2014). Healthy brain network organization predicts cognitive outcomes after brain lesions. In *Proceedings of 2014 CNS Meeting*. CNS.

Thurtell, M. J., **Warren, D. E.**, Xu, A., Papendieck, A., & Wall, M. (2014). Eye movement perimetry for evaluation of visual field loss in patients with glaucoma and recovered optic neuritis. In *Proceedings of 2014 AAN Meeting*. AAN.

Thurtell, M. J., **Warren, D. E.**, Xu, A., Papendieck, A., & Wall, M. (2014). Eye movement perimetry for evaluation of visual field loss in patients with glaucoma and recovered optic neuritis. In *Proceedings of 2014 NANOS Meeting*. NANOS.

Warren, D. E., Bruss, J., Gläscher, J., & Tranel, D. (2014). Brain regions supporting memory processes: using voxelwise lesion-symptom mapping to identify the neural correlates of performance on neuropsychological tests of memory. In *2014 Neuroscience Meeting Planner, Online*. SFN.

Warren, D. E., Duff, M. C., & Tranel, D. (2014). Hippocampal damage impairs the on-line representation of visual information. In *Proceedings of 2014 CNS Meeting*. CNS.

Duff, M. C., Klooster, N., & **Warren, D. E.** (2013). Common but not familiar: hippocampal amnesia reduces subjective familiarity of common words. In *Proceedings of 2013 SNL Meeting*. SNL.

Thurtell, M. J., **Warren, D. E.**, Carroll, J. N., & Wall, M. (2013). Eye movement perimetry: evaluation of saccadic latency, saccadic amplitude, and visual threshold to peripheral visual stimuli in young compared with older adults. In *Proceedings of 2013 AAN Meeting*. AAN.

Thurtell, M. J., **Warren, D. E.**, Carroll, J. N., & Wall, M. (2013). Eye movement perimetry: evaluation of saccadic latency, saccadic amplitude, and visual threshold to peripheral visual stimuli in young compared with older adults. In *Proceedings of 2013 NANOS Meeting*. NANOS.

Warren, D. E., Duff, M. C., & McMurray, B. (2013). A computational model of distinct hippocampal and cortical contributions to word learning under referential ambiguity. In *Proceedings of 2013 SNL Meeting*. SNL.

Warren, D. E., Duff, M. C., & Tranel, D. (2013). Damage to the ventromedial prefrontal cortex reduces a "false memory" effect. In *Proceedings of 2013 CNS Meeting*. CNS.

Warren, D. E., Xu, A., Papendieck, A., Thurtell, M. J., & Wall, M. (2013). Comparing visual thresholds measured with manual perimetry and eye-movement perimetry. In *ARVO E-Abstract C0213*. IOVS.

Xu, A., **Warren, D. E.**, Doyle, C. K., Papendieck, A., Thurtell, M. J., & Wall, M. (2013). Eye movement perimetry in glaucoma patients. In *ARVO E-Abstract D0241*. IOVS.

Klooster, N., Cook, S. W., **Warren, D. E.**, & Duff, M. C. (2012). Gestures make memories, but what kind? The cognitive and neural mechanisms underlying hand gesture. In *Proceedings of 2012 CNS Meeting*. CNS.

Moreno, G. L., Koestner, B., Manzel, K., **Warren, D. E.**, Decorrevont, K., & Denburg, N. L. (2012). Psychophysiological correlates of impaired decision making among older adults. In *Proceedings of 2012 CNS Meeting*. CNS.

Warren, D. E., Carroll, J., Thurtell, M. J., & Wall, M. (2012). Eye movement perimetry in young and older adults. In *ARVO E-Abstract 4842*. IOVS.

Warren, D. E., & Duff, M. C. (2012). Associative recognition without hippocampus: fast mapping can create novel, inflexible mnemonic representations. In *Proceedings of 2012 CNS Meeting*. CNS.

Warren, D. E., Schmitt, K., & Duff, M. C. (2012). Impairments in the acquisition of new object-name associations after unilateral temporal lobectomy despite fast-mapping encoding. In *Proceedings of 2012 SNL Meeting*. SNL.

Kumaran, D., **Warren, D. E.**, & Tranel, D. (2011). Reduced influence of past rewards and choices during value learning in patients with ventromedial prefrontal cortex damage. In *2011 Neuroscience Meeting Planner, Online*. SFN.

Warren, D. E., Denburg, N. L., & Tranel, D. (2011). Longitudinal volumetric changes in the human brain subsequent to anoxia. In *2011 Neuroscience Meeting Planner, Online*. SFN.

Warren, D. E., Duff, M. C., Cassell, M. D., & Tranel, D. (2011). Long-term neuropsychological and neuroanatomical outcomes of amnesia subsequent to status epilepticus and cerebral anoxia. In *Proceedings of 2011 INS Meeting*. INS.

Voss, J. L., **Warren, D. E.**, Tranel, D., & Cohen, N. J. (2010). Disrupted relational behaviors in amnesia: Linking action, memory, and the hippocampus. In *2010 Neuroscience Meeting Planner, Online*. SFN.

Warren, D. E., Magnotta, V., Duff, M., Rudrauf, D., Cassel, M. D., & Tranel, D. (2010). High-resolution in vivo structural imaging and segmentation of lesioned medial temporal lobe tissue. In *2010 Neuroscience Meeting Planner, Online*. SFN.

Watson, P. D. K., Voss, J. L., **Warren, D. E.**, Tranel, D., & Cohen, N. J. (2010). Assessing the multidimensional features of memory uncovers selective impairment for relational information in hippocampal amnesia. In *2010 Neuroscience Meeting Planner, Online*. SFN.

Verma, A., **Warren, D. E.**, Duff, M. C., Tranel, D., & Cohen, N. J. (2009). Hippocampal contributions to on-line processing revealed through identification of fragmented outlines. In *2009 Neuroscience Meeting Planner, Online*. SFN.

Warren, D. E., Jensen, U., Duff, M. C., Tranel, D., & Cohen, N. J. (2009). Hippocampal contributions extend beyond long term memory to include on-line processing. In *Proceedings of 2009 CNS Meeting*. CNS.

Warren, D. E., Jensen, U., Duff, M. C., Tranel, D., & Cohen, N. J. (2009). Hippocampus-dependent relational representations influence performance irrespective of delay. In *2009 Neuroscience Meeting Planner, Online*. SFN.

Yee, L., **Warren, D. E.**, Duff, M. C., Tranel, D., & Cohen, N. J. (2009). Hippocampal contributions to on-line processing of arbitrary relations as revealed by a restricted viewing paradigm. In *2009 Neuroscience Meeting Planner, Online*. SFN.

Konkel, A. G., Ellch, L., **Warren, D. E.**, Duff, M. C., Tranel, D., & Cohen, N. J. (2008). Anything new here? The role of the hippocampus in memory and novelty detection. In *2008 Neuroscience Meeting Planner, Online*. SFN.

Warren, D. E., Duff, M. C., Tranel, D., & Cohen, N. J. (2008). Impairment and sparing of on-line visual processing following medial temporal lobe lesions. In *2008 Neuroscience Meeting Planner, Online*. SFN.

Yee, L., **Warren, D. E.**, Duff, M. C., Tranel, D., & Cohen, N. J. (2008). Memory impairment in hippocampal amnesia during on-line processing in a restricted viewing paradigm. In *2008 Neuroscience Meeting Planner, Online*. SFN.

Konkel, A. G., **Warren, D. E.**, Patterson, T. J., Duff, M. C., Tranel, D., & Cohen, N. J. (2007). A novel look: Hippocampal contributions to the detection of novelty assessed with eye movements and overt responses. In *2007 Neuroscience Meeting Planner, Online*. SFN.

Yee, L., **Warren, D. E.**, Duff, M. C., Tranel, D., & Cohen, N. J. (2007). Role of the hippocampus in constructing relational representations during processing as assessed by a restricted viewing paradigm. In *2007 Neuroscience Meeting Planner, Online*. SFN.

Warren, D. E., Tranel, D., & Cohen, N. J. (2006). Perceptual viewing gradients are attenuated in MTL amnesia even at short delays. In *2006 Neuroscience Meeting Planner, Online*. SFN.

Invited Talks

Warren, D. E. (2016). Memory networks of the brain: Investigating the widespread neural substrates of memory with converging methods. Department of Biology Seminar, University of Nebraska Omaha.

Warren, D. E. (2016). Memory networks of the brain: Investigating the widespread neural substrates of memory with converging methods. Center for Research in Human Movement Variability Seminar, University of Nebraska Omaha.

Warren, D. E. (2016). Memory networks of the brain: investigating the widespread neural substrates of memory with converging methods. UNMC Department of Neurological Sciences Grand Rounds, University of Nebraska Medical Center.

Warren, D. E. (2016). Memory networks of the brain: investigating the widespread neural substrates of memory with converging methods. UNMC Pharmacology and Experimental Neuroscience seminar, University of Nebraska Medical Center.

Warren, D. E. (2016). Memory networks of the brain: investigating the widespread neural substrates of memory with converging methods. CAN-DO Neuroscience Seminar.

Warren, D. E. (2015). Memory networks of the brain: Investigating the widespread neural substrates of memory with converging methods. Mind and Brain Health Seminar Series, University of Nebraska Medical Center.

Warren, D. E. (2015). Memory networks of the brain: Investigating the widespread neural substrates of memory with converging methods. Department of Psychology Colloquium, Florida Atlantic University.

Warren, D. E. (2015). Memory networks of the brain: Investigating the widespread neural substrates of memory with converging methods. Department of Speech & Hearing Sciences Colloquium, University of Illinois at Urbana-Champaign.

Warren, D. E. (2014). Memory networks of the brain: Investigating the widespread neural substrates of memory with converging methods. Department of Psychology Colloquium, Wright State University.

Warren, D. E. (2014). Memory networks of the brain: Investigating the widespread neural substrates of memory with converging methods. Department of Psychology Colloquium, University of Iowa.

Warren, D. E. (2014). Memory networks of the brain: Investigating the widespread neural substrates of memory with converging methods. Department of Psychology, Brain & Cognition Division Colloquium, University of Illinois at Urbana-Champaign.

Warren, D. E. (2012). Assessing changes in the functional connectivity of brain networks after lesion: preliminary findings. Department of Psychiatry Neuroimaging Meeting, University of Iowa.

Warren, D. E. (2011). Hippocampal influence on behavioral performance over brief intervals. Department of Psychology Colloquium, University of Iowa.

Dissertation

title	*Medial temporal lobe structures contribute to on-line processing*
supervisors	Neal J. Cohen, PhD

description Medial temporal lobe structures including the hippocampus play a necessary role in the encoding, storage, and retrieval of declarative/relational memory, but the projects described in my dissertation suggest that the same structures also make ongoing contributions to cognition that affect moment-to-moment processing.

Professional Memberships

2006-present Society for Neuroscience

2009-present Cognitive Neuroscience Society

2011 International Neuropsychological Society

2012-present Society for the Neurobiology of Language

2012-present Association for Research in Vision and Ophthalmology

2016-present Organization for Human Brain Mapping

Professional Activities

2017 **Neurohackweek**, *Hosted by the University of Washington eScience Center.*

2017 **fMRI Acquisition and Analyses Course**, *Hosted by the Mind Research Network at the University of New Mexico.*

2016 **AFNI Bootcamp**, *Hosted by the Center for Brain, Biology, and Behavior at the University of Nebraska-Lincoln.*

Journal Reviewing

Neuron

Human Brain Mapping

Neuropsychologia

Cortex

Neuropsychology

J Neuro Methods

Neurocase

Brain Structure & Function

Quarterly Journal of Experimental Psychology

Cerebral Cortex

PLOS One

Hippocampus

Emotion

JCEN

Memory & Language

Developmental Cognitive Neuroscience

Psych Research and Behavior Management

Grant Reviewing

Austrian Science Fund

American Psychological Foundation

Awards

2013 Association for Research in Vision and Ophthalmology post-doctoral travel award

2012 Society for the Neurobiology of Language post-doctoral travel award

Teaching Experience

2017 **NSC 932: Systems Neuroscience**, *Graduate seminar*, Co-instructor.

Co-instructor of a team-taught graduate-level seminar in systems neuroscience offered in the UNMC IGPBS program. Duties included: curriculum design; lecture preparation and delivery; design and grading of assessments.

2015 **Neuroscience 6240: Topics in Cognitive Neuroscience**, *Graduate seminar*, Co-instructor.

Co-instructor (with Prof. Melissa Duff and Prof. Steven Anderson) of a seminar on topics in cognitive neuroscience. The topic for this edition was neuroethics. Duties included: curriculum design; lecture preparation and delivery; design and grading of assignments.

2014 **BISC 5265: Biosciences Critical Thinking and Communication**, *Graduate seminar*, Editor.

Editor for a required graduate seminar in the University of Iowa Biosciences curriculum designed to help students develop skill in presentation, critical thinking, and scientific writing. Duties included helping students to refine and improve their written assignments including scientific abstracts for conferences or journal articles and specific aims for grant applications.

2013 **Neuroscience 6240: Topics in Cognitive Neuroscience**, *Graduate seminar*, Co-instructor.

Co-instructor (with Prof. Melissa Duff and Prof. Steven Anderson) of a seminar on topics in cognitive neuroscience, specifically updates to theories addressing cognitive neuroscience of memory. Duties included: curriculum design; lecture preparation and delivery; design and grading of assignments.

2005 **Psychology 403: Memory and Amnesia**, *Lecture course*, Teaching assistant.

Acted as a teaching assistant for Prof. Neal J. Cohen for a lecture course examining the nature of amnesia and what it teaches us about the organization of normal human memory. Duties included collaborative design of curriculum and assignments, consultation with undergraduate students, grading exams, and guest-lecturing.

2000-2001 **Psychology 100: Introduction to Psychology**, *Lecture course*, Instructor.

Instructed students on a wide range of psychology topics. Duties included: lecture preparation and delivery; test creation, both solo and collaborative; design and grading of assignments; and mentoring students wishing to pursue honors attached to their course grade via independent reading and research.

Mentorship Experience

2016 **UNMC Medical Student Summer Research Rotation**.

Supervised an independent medical student (rising M2) research project intended to investigate developmental changes in hippocampal volume, hippocampal functional connectivity, and relational memory performance of participants in the Dev-CoG sample.

2016 **Research Experience for Undergraduates**.

Supervised an independent undergraduate research project intended to investigate developmental changes in hippocampal volume, hippocampal functional connectivity, and relational memory performance of participants in the Dev-CoG sample.

2015 **Summer Research Opportunities Program**.

Supervised an independent undergraduate research project intended to changes in relational memory due to age using eye-movement monitoring.

2014-2015 **First-Year Project, Clinical Psychology Program**.

Co-supervising (with Prof. Daniel Tranel) a first-year student's research project designed to investigate the effects of healthy aging on memory for contextually congruent and incongruent information.

2014 **Interdisciplinary Summer Undergraduate Research Program**.

Supervised an independent undergraduate research project intended to investigate changes in the resting state functional connectivity of the temporal pole after surgical disconnection.

2013 **Summer Undergraduate Medical Scientist Research Program**.

Supervised an independent undergraduate research project intended to investigate the role of the ventromedial prefrontal cortex in memory for contextually congruent and incongruent information.

2013 **Master's Thesis Committee Member**.

Co-supervised (with Prof. Melissa Duff) an independent master's thesis project in the Department of Communication Sciences and Disorders by Kendra M. Schmitt entitled "Impairments in the acquisition of new object-name associations after unilateral temporal lobectomy despite fast-mapping encoding."

2012 **Interdisciplinary Summer Undergraduate Research Program**.

Supervised an independent undergraduate research project intended to investigate the contributions of the ventromedial prefrontal cortex to the organization of newly-learned information.

2011 **Iowa Neuroscience Undergraduate Summer Research Program**.

Co-supervised (with Prof. Melissa Duff) an independent undergraduate research project investigating the ability of severely amnesic patients to acquire novel word-image associative memories using different study manipulations. Overall, amnesic patients were unable to learn novel associations irrespective of study conditions.

2010 **Summer Research Opportunities Program**.

Co-supervised (with Prof. Melissa Duff) an independent undergraduate research project investigating the contributions of the medial temporal lobe to pattern separation in memory representations. MTL patients were selectively impaired relative to comparisons when learning about sets of items with greater, but not lesser, intra-set visual similarity.

2008-2009 **Psychology 411: Laboratory in Biological Psychology**, *Undergraduate honors program.*

Supervised an independent undergraduate research project intended to investigate medial temporal lobe contributions to on-line representations. The project involved testing healthy comparison participants and MTL-lesion patients with visually degraded outline images of common objects. Despite the lack of a memory demand, MTL patients were impaired at identifying the objects.

2003-2004 **Psychology 311: Laboratory in Biological Psychology**, *Undergraduate honors program.*

Supervised an independent undergraduate research project intended to investigate the function of perirhinal cortex in humans; the eye movements of neurologically normal subjects during simple and complex discrimination tasks were compared to those of patients whose hippocampus or hippocampal region had been damaged.

Work Experience

1997-1999 **Summer Internships in Human Factors**, *Ameritech*, Hoffman Estates, IL.

Participated in a selective summer internship program in human factors at Ameritech (the Midwestern telephone company resulting from AT&T's breakup which is part of AT&T again). Worked with senior human factors team members on unique human factors and usability projects each summer.

- 1999 – Characterized customer service calls, suggested changes for efficiency.
- 1998 – Evaluated usability of WebTV technology and VoiceCrypt software.
- 1997 – Behavioral testing of voicemail interactive voice response systems.

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