

NATHAN S. ROSE

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EMPLOYMENT, TRAINING, & EDUCATION

- 2016-present: Assistant Professor, Cognition Brain & Behavior, Department of Psychology, University of Notre Dame, USA
- 2015-2016: Research Fellow, Cognition & Emotion Research Centre, School of Psychology, Australian Catholic University, Melbourne, Australia
- 2013-2015: Research Associate, Postle Lab, Department of Psychiatry, University of Wisconsin-Madison, USA
- 2010-2013: Postdoctoral Fellow, Craik & Buchsbaum Labs, Rotman Research Institute of Baycrest Centre for Geriatric Care and the Department of Psychology, University of Toronto, Canada
- 2010: Ph.D., Psychology, Behavior Brain & Cognition Program, Washington University in St. Louis, USA
- 2007: M.A., Psychology, Behavior Brain & Cognition Program, Washington University in St. Louis, USA
- 2003: B. S., Cum Laude, Psychology, Aquinas College, Grand Rapids, USA

RESEARCH INTERESTS

- Cognitive Psychology/Neuropsychology/Neuroscience of memory and aging
- Working memory, episodic memory, prospective memory in young adults, older adults, Alzheimer's disease, Parkinson's disease, amnesia, stroke
- ERP/EEG, fMRI, TMS, tDCS, fNIRS
- Ecological validity of cognitive assessments and cognitive training

PUBLICATIONS

H-Index = 16/13, Citations = 919/550 (Google Scholar/Scopus);

1. **Rose, N.S.**, LaRocque, J., Riggall, A., Gosseries, O., Starrett, M.J., Meyering, E.E., & Postle, B.R. (2016). Reactivation of latent working memories with transcranial magnetic stimulation. *Science*, 354, 6316, 1136-1139, DOI:10.1126/science.aah7011.
2. Rogasch, N.C., Sullivan, C., Thomson, R.H., **Rose, N.S.**, Bailey, N.W., Fitzgerald, P.B., Farzan, F., Hernandez-Pavon, J.C. (2017). Analysing concurrent transcranial magnetic stimulation and electroencephalographic data: a review and introduction to the open-source TESA software. *NeuroImage*, 47, 934-951, DOI:10.1016/j.neuroimage.2016.10.031.
3. Agarwal, P.K., Finley, J.R., **Rose, N.S.**, & Roediger, H.L., (2017). Benefits from retrieval practice are greater for students with low working memory than for students with high working memory. *Memory*, 25, 6, 1-8, DOI:https://doi.org/10.1080/09658211.2016.1220579.
4. **Rose, N.S.**, Rendell, P.G., Hering, A., Bidelman, G.M., Kliegel, M & Craik, F.I.M. (2015). Cognitive and Neural Plasticity in Older Adults' Prospective Memory Following Training on the Virtual Week Computer Game. *Frontiers in Human Neuroscience*, 9. DOI:http://dx.doi.org/10.3389/fnhum.2015.00592.
5. Shelton, J.T., Lee, J.H., Scullin, M.K., **Rose, N.S.**, Rendell, P.G., McDaniel, M.A. (2016). Improving prospective memory in healthy older adults and very mild Alzheimer's disease patients. *Journal of the American Geriatric Society*, 64(6), 1307-1312, DOI:10.1111/jgs.14134.
6. **Rose, N.S.**, Craik, F.I.M. & Buchsbaum, B. (2015). Levels of processing in working memory: Differential involvement of frontotemporal networks. *Journal of Cognitive Neuroscience*, 27, 3, 522-532. DOI:10.1162/jocn_a_00738.
7. Craik, F.I.M., **Rose, N.S.**, & Gopie, N. (2015). Recognition without awareness: Encoding and retrieval factors. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 41(5), 1271-1281, DOI:10.1037/xlm0000137.
8. Meltzer, J.A., **Rose, N.S.**, Deschamps, T., Leigh, R.C., Panamsky, L., Silberberg, A., Madani, N., Links, K.A. (2015). Semantic and phonological contributions to immediate and delayed cued sentence recall. *Memory & Cognition*, 44(2), 307-329, DOI:10.3758/s13421-015-0554-y.
9. LaRocque, J.J., Eichenbaum, N.S., Starrett, M.J., **Rose, N.S.**, Emrich, S.M., & Postle, B.R. (2015). The short- and long-term fate of memory items retained

- outside the focus of attention. *Memory & Cognition*, 43(3): 453-468, DOI:10.3758/s13421-014-0486-y.
10. Terrett, G., **Rose, N.S.**, Henry, J.D., Bailey, P.E., Altgassen, M., Phillips, L.H., Kliegel, M., & Rendell, P.G. (2015). The relationship between prospective memory and episodic future thinking in younger and older adulthood. *Quarterly Journal of Experimental Psychology*, 69(2), 310-323, DOI:10.1080/17470218.2015.1054294.
 11. Cameron, J., Rendell, P.G., Ski, C.F., Kure, C.E., McLennan, S.S., **Rose, N.S.**, Prior, D.L., & Thompson, D.R. (2015). PROspective MEMory Training to improve HEart failUre Self-care (PROMETHEUS): study protocol for a randomised controlled trial. *Trials*, 16(1), 196, DOI:10.1186/s13063-015-0721-2.
 12. **Rose, N.S.**, Luo, L., Bialystok, E., Hering, A., Lau, K., & Craik, F.I.M. (2015). Cognitive processes in the breakfast task: Planning and Monitoring. *Canadian Journal of Experimental Psychology*, 69(3), 252-263, DOI:10.1037/cep0000054.
 13. Lilienthal, L., **Rose, N.S.**, Tamez, E., Myerson, J., & Hale, S. (2015). Individuals with low working memory spans show greater interference from irrelevant information because of poor source monitoring, not greater activation. *Memory & Cognition*, 43(3), 357-366. DOI:10.3758/s13421-014-0465-3.
 14. **Rose, N.S.**, Buchsbaum, B.R., & Craik, F.I.M. (2014). Short-term retention of a single word relies on retrieval from long-term memory when both rehearsal and refreshing are disrupted. *Memory & Cognition*, 42, 689-700, DOI:10.3758/s13421-014-0398-x.
 15. Hering, A. Rendell, P., **Rose, N.S.**, Schnitzspahn, K. & Kliegel, M. (2014). Prospective memory training in older adults and its relevance for successful aging. *Psychological Research*, 6, 892-904, DOI:10.1007/s00426-014-0566-4.
 16. **Rose, N.S.** (2014). Individual differences in working memory, secondary memory, and fluid intelligence: Evidence from the levels-of-processing span task. *Canadian Journal of Experimental Psychology*, 67, 260-270, DOI:10.1037/a0034351.
 17. Foster, E., **Rose, N.S.**, Rendell, P., & McDaniel, M. (2013). Prospective memory in Parkinson disease during a Virtual Week: Effects of both prospective and retrospective demands. *Neuropsychology*, 27, 2, 170-181, DOI:http://dx.doi.org/10.1037/a0031946.
 18. Zinke, K., Zeintl, M., **Rose, N.S.**, Putzmann, J., Pydde, A., & Kliegel, M. (2013). Working memory training and transfer in older adults: Effects of age, baseline performance, and training gains. *Developmental Psychology*, 50, 304-315, DOI:http://dx.doi.org/10.1037/a0032982.

19. **Rose, N.S.** & Craik, F.I.M. (2012). A processing approach to the working memory/long-term memory distinction: Evidence from a levels-of-processing span task. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 38, 4, 1019-1029, DOI:<http://dx.doi.org/10.1037/a0026976>.
20. **Rose, N.S.**, Olsen, R.K., Craik, F.I.M., & Rosenbaum, R.S. (2012). Working memory and amnesia: The role of stimulus novelty. *Neuropsychologia*, 50, 1, 11-18, DOI:10.1016/j.neuropsychologia.2011.10.016.
21. Craik, F.I.M. & **Rose, N.S.** (2012). Memory encoding and aging: A neurocognitive perspective. *Neuroscience & Biobehavioral Reviews*, 36, 1729–1739, DOI:10.1016/j.neubiorev.2011.11.007.
22. Craik, F.I.M. & **Rose, N.S.** (2012). Training cognition: Parallels with physical fitness? *Journal of Applied Research in Memory and Cognition*, 1, 1, 51-52. DOI:10.1016/j.jarmac.2011.12.001.
23. Reichman, W. & **Rose, N.S.** (2012). History and experience: The direction of Alzheimer's disease. *Menopause*, 19, 7, 724-734, DOI:10.1097/gme.obo13e31825a28f2.
24. Kliegel, M., Altgassen, M., Hering, A., & **Rose, N.S.** (2011). A process-model based approach to prospective memory impairment in Parkinson's disease. *Neuropsychologia*, 49, 8, 2166-77, DOI:10.1016/j.neuropsychologia.2011.01.024.
25. Loaiza, V., McCabe, D., Youngblood, J., **Rose, N.S.**, & Myerson, J. (2011). The influence of levels of processing on recall from working memory and delayed recall tasks. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 37, 5, 1258-63, DOI:10.1037/a0023923.
26. Hale, S., **Rose, N.S.**, Myerson, J., Strube, M. J., Sommers, M., Tye-Murray, N., & Spehar, B. (2011). The structure of working memory abilities across the adult lifespan. *Psychology and Aging*, 26, 1, 92-110. doi:10.1037/a0021483.
27. Sommers, M., Hale, S., Myerson, J., **Rose, N.S.**, Tye-Murray, N., & Spehar, B. (2011). Spoken discourse comprehension across the adult lifespan. *Ear and Hearing*, 32, 6, 775-81, DOI:10.1097/AUD.obo13e3182234cf6.
28. Aberle, I., Rendell, P., **Rose, N.S.**, McDaniel, M., & Kliegel, M. (2010). The age-prospective memory paradox: Young adults may not give their best outside of the lab. *Developmental Psychology*, 46, 6, 1444–1453, DOI:<http://dx.doi.org/10.1037/a0020718>.
29. **Rose, N.S.**, Myerson, J., Roediger, III., H.L., & Hale, S. (2010). Similarities and differences between working memory and long-term memory: Evidence from the

levels-of-processing span task. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 36, 2, 471-483, DOI:10.1037/a0026976.

30. **Rose, N.S.**, Rendell, P. G., McDaniel, M. A., Aberle, I., & Kliegel, M. (2010). Age and individual differences in prospective memory during a “Virtual Week”: The role of working memory, vigilance, task-regularity, and cue-focality. *Psychology and Aging*, 25, 3, 595-605, DOI:10.1037/a0019771.
31. Reichman, W., Fiocco, A., & **Rose, N.S.** (2010). Exercising the brain to avoid cognitive decline: Examining the evidence. *Aging Health*, 6, 5, 565-584, DOI:10.2217/ahe.10.54.
32. **Rose, N.S.**, Myerson, J., Sommers, M., & Hale, S. (2009). Are there age differences in the executive component of working memory? Evidence from domain-general interference effects. *Aging, Neuropsychology, and Cognition*, 16, 6, 633-653. DOI: 10.1080/13825580902825238
33. Tye-Murray, N., Sommers, M., Spehar, B., Myerson, J., Hale, S., & **Rose, N.S.** (2008). Auditory-visual discourse comprehension by older and young adults in favorable and unfavorable conditions. *International Journal of Audiology*, 47, S103-S109, DOI:10.1080/14992020802301662.

CHAPTERS

34. Craik, F.I.M. & **Rose, N.S.** (2014). Familiarity and Recollections: Interactions with Larry Jacoby. In (Eds.) D. Stephen Lindsay, Colleen M. Kelley, Andrew P. Yonelinas, Henry L. Roediger, III. *Remembering: Attributions, Processes, and Control in Human Memory*. Psychology Press, pp. 233-251.

MANUSCRIPTS UNDER REVIEW

Yue, Q., Martin, R.C., Hamilton, A.C., **Rose, N.S.** (invited revision). Non-perceptual regions in the left inferior parietal lobe support phonological short-term memory: evidence for a buffer account?

MANUSCRIPTS IN PREPARATION

*Koleits, N., **Rose, N.S.**, Goodin, P., & Rendell, P. (in prep). “Is tDCS even doing anything?”: Effects on working memory performance and brain activity simultaneously recorded with optical neuroimaging.

Riggall, A.C., **Rose, N.S.**, Starrett, M.J., & Postle, B.R. (in prep). Frontoparietal contributions to the short-term retention of motion and color: Evidence from simultaneous TMS-EEG.

Rose, N.S. Szpunar, K.K. Maillet, D. Postle, B.R. & Schacter, D.L. (in prep). Similarities and differences between imagining the future and remembering the past: Evidence from multi-voxel pattern analysis.

*Starrett, M. J., **Rose, N.S.**, Riggall, A. C., & Postle, B. R. (in prep). Behavioral and EEG effects of rTMS on recall of items inside versus outside the focus of attention.

Rose, N.S., *Meyering, E.E., Baker, S., Rosenbaum, R. S., Dang, C., Buchsbaum, B., & Postle, B.R. (in prep). Are items retained outside the focus of attention in working memory stored with long-term memory mechanisms?

*Randall, S., **Rose, N.S.**, Terrett, G., Rendell, P.G. (in prep). “Age Differences in Prospective Memory: Laboratory versus Naturalistic Settings”

*Hering, A., Kliegel, M., Rendell, P.G., Craik, F.I.M., & **Rose, N.S.** (in prep). Ecological validity: The assessment of prospective memory in and outside the lab.

Craik, F. I. M., **Rose, N.S.**, & Bialystok, E. (in prep). The role of specific abilities in working memory performance.

Rendell, P.G., Henry, J.D., Bailey, P.E., Bugge, M., Ryrie, C., Phillips, L.H. Altgassen, M., **Rose, N.S.**, Terrett, G. & Kliegel, M. (in prep). An implementation intentions encoding strategy eliminates age-related deficits in naturalistic event-based prospective memory.

*Denotes supervised student project

GRANTS & AWARDS

- 2017-present – Digital Learning Initiatives, Notre Dame Provost’s Office, Principal Investigator (Co-Investigators: Mike Villano, Jeffrey Bain-Conkin, Paul Turner, GA Radvansky)
“Creation of a Virtual Reality Lab for Experiential Learning and Software Development”, USD\$28,000
- 2017-present - FRSP Initiation Grant Program, Notre Dame Research Principal Investigator (Co-Investigator Prof GA Radvansky)

“Using Interactive Virtual Environments to Explore Memory and Cognition”,
USD\$9,640.

- 2015-2018 - Australian Research Council Linkage Grant, LP150100140,
Co-Investigator (CI: Prof Peter Rendell)
Acting with the Future in Mind
AUD\$360,900 (Total Project with Catholic Homes contribution), \$242,000
(ARC funding).
- 2016 - Research Project Funding, ACU Research Office,
Chief Investigator (CI Prof Gill Terrett)
Can Neuroimaging be Used for Mind Reading in Younger and Older Adults?
AUD\$50,000
- 2015 - Early Career Researcher Award, ACU Faculty of Health Sciences,
Chief Investigator
Neural Evidence for Prospective Memory Monitoring in Younger and Older
Adults, AUD\$10,000
- 2012-2013 - Canadian Heart and Stroke Foundation, Centre for Stroke
Recovery
Chief Investigator (CIs: Prof Fergus Craik, Prof Gordon Winocur, Prof Brian
Levine)
Prospective Memory Functioning in Stroke Survivors
CAD\$45,000 (\$25,000 CSR, with matching funds from NSERC, CI Craik)
- 2011 - Kick Start Grant, Centre for Brain Fitness, Baycrest Centre for
Geriatric Care
Co-Investigator (CI: Prof Fergus Craik)
Training Prospective Memory with the Virtual Week Video Game
CAD\$10,000
- 2012 - Canadian Institutes of Health Research – Institute of Aging, Travel
Award for the Cognitive Aging Conference, CAD\$1,000
- 2011 - Jack and Rita Catherall Funds for Aging Research, CAD\$400
- 2011 - Age+Prize Award Recognizing Excellence in Aging Research, Canadian
Institutes of Health Research – Institute of Aging, CAD\$500
- 2009-2010 - Washington University Graduate Fellowship Award, School of
Arts & Sciences, Department of Psychology, USD\$22,000
- 2008-2009 - Ruth L. Kirschstein National Research Service Fellowship
Award, NIH grant T32 AG 00030-30, USD\$22,000

- 2007 - Early Career Researcher Award, Cognitive Aging Conference – Down Under, Adelaide, Australia, AUD\$500
- 2006-2007 - Ruth L. Kirschstein National Research Service Fellowship Award, NIH grant T32 AG 00030-30, USD\$22,000
- 2004-2005 - Washington University Graduate Fellowship Award, School of Arts & Sciences, Department of Psychology, USD\$22,000
- 2003 - Outstanding Student Award, Department of Psychology, Aquinas College
- 2001-2003 - Academic All-American, Men's Varsity Soccer, Aquinas College

INVITED TALKS

- University of Illinois, Chicago, Department of Psychology, 2017, "The dynamic processing model of working memory"
- Michigan State University, East Lansing, Michigan, Department of Psychology, 2017, "A dynamic processing model of working memory"
- University of Wyoming, Laramie, Wyoming, Neuroscience Center, 2017, "Reactivation of working memories with transcranial magnetic stimulation"
- Purdue University, Indiana, Department of Psychological Sciences, 2016, "Reactivation of working memories with transcranial magnetic stimulation"
- University of Geneva, Switzerland, Keynote Address at the 2016 Workshop on Prospective Memory, "Decoding the Content of Thought in Younger and Older Adults during Remembering and Future Thinking"
- Georgia Tech University, Atlanta, Georgia, Department of Psychology, Engle Lab Meeting, 2016, "Reactivation of working memories with transcranial magnetic stimulation"
- University of North Carolina, Greensboro, Department of Psychology Colloquium, 2016, "Reactivation of working memories with transcranial magnetic stimulation"
- University of Notre Dame, Department of Psychology Colloquium, 2015: "Reactivation of working memories with transcranial magnetic stimulation"
- Monash University, Biomedical Imaging and Neuroscience Centre, Melbourne, Australia, 2015: "Reactivation of working memories with transcranial magnetic stimulation"
- Baycrest Hospital Research Rounds, Toronto, Canada, 2013: "How is short-term memory different from long-term memory?"

- Rotman Research Institute, fMRI Rounds, Toronto, Canada, 2013: "Multivoxel pattern analysis reveals similarities and differences in the neurocognitive processes that support working memory and long-term memory."
- Lumos Labs, Inc., San Francisco, USA, 2013: "Cognitive training: A theory, a review, and the future."
- University of California – Davis, USA, Yonelinas/Ranganath Memory Meeting, 2011: "Recognition without awareness: Effects of context, age, and amnesia."
- Royal Canadian Legion, Toronto, Canada, 2011: "Memory and Aging"
- University of Toronto, Canada, Ebbinghaus Lecture Series, 2010: "A processing approach to the working memory/long-term memory distinction: Evidence from a levels-of-processing span task."
- University of British Columbia, International Conference on Prospective Memory, Vancouver, Canada, 2010: "Prospective memory in young adults, healthy older adults and individuals with Parkinson's disease during a Virtual Week."
- University of Michigan, USA, Psychology Department Forum, 2009: "Similarities and Differences between Working Memory and Long-Term Memory: Evidence from the Levels-of-Processing Span Task."

PRESENTATIONS AT NATIONAL & INTERNATIONAL MEETINGS

- Rose, N.S. Szpunar, K.K. Maillet, D. Postle, B.R. & Schacter, D.L. (2015). Multi-Voxel Pattern Analysis Reveals both Similarities and Differences Between Imagining the Future and Remembering the Past. Paper presented at the Pattern Recognition in Neuroimaging Conference, Toronto, ON.
- Rose, N.S., Szpunar, K.K., Goodin, P., Rendell, P.G., & Schacter, D.L. (2016). "Decoding the content of thought in younger and older Adults during remembering and imagining". Paper presented at the 6th International Conference on Memory, Budapest, Hungary.
- Rose, N.S. (2016). How to Help Older Adults Remember to Remember Better? Paper presented at the Cognitive Aging Conference, Atlanta, GA.
- Rose, N.S., LaRocque, J., Riggall, A., Gosseries, O., Starrett, M. & Postle, B.R. (2016) "Can transcranial magnetic stimulation bring passively retained items in short-term memory back into focal attention?" Poster presented at the 23rd Annual Meeting of the Cognitive Neuroscience Society, New York, NY.

- Rose, N.S., Szpunar, K.K., Maillet, D., Postle, B.R. & Schacter, D.L. (2015). Similarities and Differences Between Imagining the Future and Remembering the Past: Evidence From Multi-voxel Pattern Analysis. Paper presented at the 56th Annual Meeting Psychonomic Society, Chicago, IL.
- Rose, N.S., Meyering, E.E., Baker, S., Rosenbaum, R. S., Dang, C., Buchsbaum, B., & Postle, B.R. (2015). Neuroimaging and Neuropsychological Evidence for Different States of Representation in Working Memory. Poster presented at the 56th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Rose, N.S., Meyering, E.E., Baker, S., Rosenbaum, R. S., Dang, C., Buchsbaum, B., & Postle, B.R. (2015). Are items in working memory stored with long-term memory mechanisms? Poster presented at the 22nd Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- Rose, N.S., LaRocque, J., Riggall, A., Gosseries, O., & Postle, B.R. (2014) Evidence for a synaptic theory of working memory: An fMRI/EEG/TMS study. Paper presented at the 55th Annual Meeting Psychonomic Society, Long Beach, CA.
- Rose, N.S., LaRocque, J., Riggall, A., Gosseries, O., & Postle, B.R. (2014) Evidence for a synaptic theory of working memory: An fMRI/EEG/TMS study. Paper presented at the Annual Meeting of the Society for Neuroscience, Washington D. C.
- Rose, N.S., LaRocque, J., Riggall, A., Gosseries, O., & Postle, B.R. (2014) How are attended and unattended items in short term memory represented? A fMRI/EEG/TMS study. Poster presented at the 21st Annual Meeting of the Cognitive Neuroscience Society, Boston, MA.
- Rose, N.S., Craik, F. I. M. & Buchsbaum, B. (2013). Levels of Representations in Working Memory. Paper presentation at the Annual Meeting of the Society for Neuroscience, San Diego, CA.
- Rose, N.S., Craik, F. I. M. & Buchsbaum, B. (2013). Similarities and Differences in the Cognitive Processes and Neural Substrates that Support Working Memory and Long-Term Memory. Poster presented at the 20th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- Rose, N.S., Craik, F. I. M. & Buchsbaum, B. (2012). Similarities and Differences in the Cognitive Processes and Neural Substrates that Support Working Memory and Long-Term Memory. Paper presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Rose, N.S., Craik, FIM, Hering, A, Rendell, PG, Moreno, S, Bidelman, GM, & Kliegel, M (2012). Cognitive and Neural Plasticity in Older Adults' Prospective Memory Following Training on the Virtual Week Computer Game. Abstract for poster presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.

- Rose, N.S., Butler, A., Nunes, L. & Roediger, H. L. III (2012). Variability and Testing During Learning: Redundant or Additive Effects? Abstract for poster presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Rose, N.S., Craik, FIM, Hering, A, Rendell, PG, Moreno, S, Bidelman, GM, & Kliegel, M (2012). Training Older Adults' Prospective Memory with the Virtual Week Video Game. Abstract for poster presented at the 2012 Cognitive Aging Conference, Atlanta, GA.
- Hering, A., Rose, N.S., Craik, F.I.M., Rendell, P.G., Moreno, S., Bidelman, G.M., & Kliegel, M. (2012). Differential predictors of prospective memory performance in old age: Laboratory and naturalistic tasks are associated with different cognitive processes. Paper presented at the Cognitive Aging Conference, Atlanta, Georgia.
- Shelton, J., Scullin, M., Lee, J., Rose, N.S., Rendell, P., & McDaniel, M. (2012). Implementation intentions boost prospective memory in healthy and very mildly demented older adults. Paper presented at the Cognitive Aging Conference, Atlanta, Georgia.
- Rose, N.S., Olsen, R. K., Craik, F. I. M., & Rosenbaum, R. S. (2012). Working Memory and Amnesia: The Role of Stimulus Familiarity. Abstract for poster presentation, Cognitive Neuroscience Society Meeting, Chicago, IL.
- Rose, N.S. (2012). "Prospective Memory during a Virtual Week in Healthy Aging, Parkinson's Disease, and Alzheimer's Disease" for National Alzheimer's Awareness Month, Baycrest Hospital, Toronto, ON
- Rose, N.S., Craik, F. I. M. & Buchsbaum, B. (2011). Similarities and Differences between Working Memory and Long-Term Memory: Evidence from Levels-of-Processing Effects on Working Memory. Paper presented at the 52nd Annual Meeting of the Psychonomic Society, Seattle, WA.
- Craik, F. I. M., Rose, N.S., & Gopie, N. (2011). Reducing encoding resources paradoxically boosts memory on an explicit test without awareness. Paper presented at the 52nd Annual Meeting of the Psychonomic Society, Seattle, WA.
- Rose, N.S., Olsen, R. K., Rosenbaum, R. S., & Craik, F. I. M. (2011). Working Memory and Amnesia: The Role of Stimulus Familiarity. Abstract for poster presentation, International Conference on Memory, York, UK.
- Rose, N.S., Olsen, R. K., Rosenbaum, R. S., & Craik, F. I. M. (2011). Amnesia impairs maintenance of a single face for just one second, unless it's Paris Hilton. Abstract for poster presentation, Cognitive Neuroscience Society Meeting, San Francisco, CA.
- Gopie, N., Rose, N.S., & Craik, F. I. M. (2010). Reducing encoding resources paradoxically boosts memory on an explicit test without awareness. Abstract for poster presentation, 51st Annual Meeting of the Psychonomic Society, St. Louis, MO.

- Rose, N.S., Roediger, H. L. III, & Myerson, J. (2010). A processing approach to the working memory/long-term memory distinction: Evidence from a levels-of-processing span task. Abstract for poster presentation, 51st Annual Meeting of the Psychonomic Society, St. Louis, MO.
- Agarwal, P., Rose, N.S., & Roediger, H. L. III. (2010). Testing levels the playing field for students with lower working memory capacity. Abstract for poster presentation, 51st Annual Meeting of the Psychonomic Society, St. Louis, MO.
- Rose, N.S., Foster, E. T., McDaniel, M. A., & Rendell, P. G. (2010). Prospective memory in Parkinson disease and healthy aging during a Virtual Week. Abstract for poster presentation, Cognitive Aging Conference, Atlanta, GA.
- Tamez, E., Hale, S. Myerson, J., Rose, N.S., Sommers, M., Tye-Murray, N., & Spehar, B. (2010). Predicting fluid intelligence and listening comprehension across the adult lifespan. Abstract for poster presentation, Cognitive Aging Conference, Atlanta, GA.
- Rose, N.S., Foster, E. T., McDaniel, M. A., & Rendell, P. G. (2010). Prospective memory in Parkinson disease and healthy aging during a Virtual Week. *Frontiers in Human Neuroscience*. Conference Abstract: The 20th Annual Rotman Research Institute Conference, The Frontal Lobes.
- Rose, N.S., McDaniel, M.A., Rendell, P. (2009). Age and individual differences in prospective memory during a “Virtual Week”. Abstract for poster presentation, The 21st Annual Convention of the Association for Psychological Science, San Francisco, California.
- Rose, N.S., Hale, S. Myerson, J., Sommers, M., Tye-Murray, N., & Spehar, B. (2009). The structure of working memory abilities in younger and older adults: Age invariance regardless of scoring method. Abstract for poster presentation, The 19th Annual Rotman Research Institute Conference, Toronto, Ontario.
- Rose, N.S., Myerson, J., Roediger, H.L., III., & Hale, S. (2008). Working memory, secondary memory, and long-term memory: Insights from the levels-of-processing span task. Paper presented at the 49th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Hale, S. Myerson, J., Sommers, M., Tye-Murray, N., Spehar, B. & Rose, N.S. (2008). Modeling Spoken Discourse Comprehension across the Adult Lifespan. Abstract for poster presentation, 49th Annual Meeting of the Psychonomic Society, Chicago, IL.
- Rose, N.S., Myerson, J., Roediger, H.L., III., & Hale, S. (2008). Working memory, secondary memory, and long-term memory: Insights from the levels-of-processing span task. Paper presented at the Show-Me Mental State Conference. University of Missouri.
- Rose, N.S., Myerson, J., Roediger, H.L., III., & Hale, S. (2008). Does Depth of Processing Affect Memory for Items From Working Memory Tasks? Paper

- presented at the 20th Annual Convention of the Association for Psychological Science, Chicago, Illinois.
- Rose, N.S., McDaniel, M.A., Rendell, P. (2008). Age and Individual Differences in Prospective Memory During a “Virtual Week”: The Role Working Memory, Vigilance, Task-Habituation, and Cue-Focality. Abstract for poster presentation, Cognitive Aging Conference, Atlanta, Georgia.
- Rose, N.S., Hale, S. Myerson, J., Sommers, M., Tye-Murray, N., & Spehar, B. (2008). Working Memory Ability across the Adult Life-Span. Abstract for poster presentation, Cognitive Aging Conference, Atlanta, Georgia.
- Hale, S. Myerson, J., Sommers, M., Tye-Murray, N., Spehar, B. & Rose, N.S., (2008). Spoken Discourse Comprehension across the Adult Lifespan. Abstract for poster presentation, Cognitive Aging Conference, Atlanta, Georgia.
- Rose, N.S., McDaniel, M.A., Rendell, P. (2007). Prospective Memory in a Virtual Week. Paper presented at the Cognitive Aging Conference, Adelaide, South Australia.
- Rose, N.S., Myerson, J., Roediger, H.L., III., & Hale, S. (2007). Depth of Processing Differentially Affects Working Memory and Long-Term Memory. Abstract for poster presentation, 48th Annual Meeting of the Psychonomic Society, Long Beach, California.
- Rose, N.S., Hale, S. Myerson, J., Sommers, M., Tye-Murray, N., & Spehar, B. (2006). Development of the LISN Test for Assessing Spoken Discourse Comprehension across the Adult Life-Span. Paper presented at the Auditory Perception and Cognition for Action Meeting, Houston, Texas.
- Rose, N.S., Myerson, J., Sommers, M., & Hale, S. (2006). Interference effects in working memory: Differences due to age and task complexity. Abstract for poster presentation, Cognitive Aging Conference, Atlanta, Georgia.
- Rose, N.S., Myerson, J., Sommers, M., & Hale, S. (2005). The effects of domain specific rehearsal suppression on working memory. Paper presented at the Show-Me Conference, University of Missouri.

TEACHING EXPERIENCE

2016-2017, Professor, Cognitive Psychology, University of Notre Dame

2014, Lecturer, Cognitive Psychology, University of Wisconsin-Madison

2009, Adjunct Professor, Psychological Statistics, Washington University in St. Louis

2009, Lecturer, Psychology of Aging, Washington University in St. Louis

2008, Teaching Assistant, Experimental Psychology, Washington University in St. Louis

2008, Lecturer, Psychology of Aging, Washington University in St. Louis

2007, Teaching Assistant, Social Gerontology, Washington University in St. Louis

SUPERVISION

2015-present, Australian Catholic University, Nick Koleits, Post-baccalaureate Research Project, *“Is tDCS even doing anything?”: Effects on working memory performance and brain activity simultaneously recorded with optical neuroimaging.*

2015-present, Australian Catholic University, Susan Randall, PhD Dissertation, *“Age Differences in Prospective Memory: Laboratory versus Naturalistic Settings”*

2015-present, Sarah Gatt, Masters Thesis, Australian Catholic University

2015-present, Australian Catholic University, James Shadrach, Renee Vella, Honours Theses

2013-2014, University of Wisconsin-Madison, Emma Meyering, Biology 152 Independent Research Project, *“Are items in working memory, but outside focal attention, stored via long-term memory mechanisms?”*

2013-2014, University of Wisconsin-Madison, Michael Starrett, Post-baccalaureate Research Project, *“Behavioral and EEG effects of rTMS on recall of items inside versus outside the focus of attention”*

2011-2012, visiting Ph.D. student project, Alexandra Hering, University of Geneva, Switzerland, *“Ecological validity: The Assessment of Prospective Memory In and Outside the Lab”*

2011-2013, Buchsbaum Lab Research Assistants: Sabrina Lemire-Rodger, Ashley Bondad

2010 – 2013, Craik Lab Research Assistants: Karen Lau, Jenna Ware, Julia Czyzo, Darya Gaydukevych

2006 – 2010, Hale/Myerson Lab Research Assistants: Kalin Guebert, Danielle Alvarez, Denise Rose, Matt Robbins

2005 – 2007, Sommers Lab Research Assistants: Linden Weiswerda, Molly Ruben, Diana Smith

RESEARCH EXPERIENCE

2016-present: Director of the Cognitive Neuroscience of Memory & Aging Lab, University of Notre Dame

2015-2016: Associate Investigator, Australian Research Council Centre of Excellence in Cognition and Its Disorders, Macquarie University, Australia

2013-2015, Research Associate, Postle Lab, Department of Psychiatry, University of Wisconsin-Madison

2013, ERP Bootcamp with Dr. Steven Luck, University of California–Davis

2010-2013, Postdoctoral Fellow, Craik Lab and Buchsbaum Lab, Rotman Research Institute of Baycrest Centre for Geriatric Care and University of Toronto, Toronto, Ontario

2005-2010, Research Assistant, Sommers Lab, Hale/Myerson Lab, McDaniel Lab, Roedier Lab

2005-2006, Project Director, NIA grant AG022448, Principal Investigator: Sandra Hale, “*Listening Comprehension across the Adult Lifespan*”

2003-2004, Research Assistant, Sommers Speech and Hearing Lab, Psychology Department, Washington University in St. Louis

2003-2004, Research Assistant, Balota, Cognitive Lab, Psychology Department, Washington University in St. Louis

2003-2004, Research Assistant, Stern, Psychophysiology Lab, Psychology Department, Washington University in St. Louis

REVIEWERSHIP

Acta Psychologica

Advances in Cognitive Psychology

Aging, Neuropsychology and Cognition

Applied Memory Research

Australian Research Council

British Journal of Clinical Psychology

Canadian Journal of Experimental Psychology

Cerebral Cortex

Child Neuropsychology

Cognition

Cognitive Psychology

Cortex

Frontiers in Human Neuroscience

Gerontology

International Journal of Psychophysiology

Journal of Clinical and Experimental Neuropsychology

Journal of Cognitive Neuroscience

Journal of Cognitive Psychology

Journal of Experimental Child Psychology

Journal of Experimental Psychology: Human Perception and Performance

Journal of Experimental Psychology: Learning, Memory, and Cognition

Journal of Gerontology: Psychological Sciences

Journal of International Neuropsychological Society

Journal of Memory and Language

Memory

Memory & Cognition

National Science Foundation, USA

Neurobiology of Aging

Neuropsychologia

Neuropsychological Rehabilitation

PLoS One

Psychology and Aging

Psychonomic Bulletin and Review

Psychophysiology

Quarterly Journal of Experimental Psychology

Science

The European Journal of Cognitive Psychology

PROFESSIONAL MEMBERSHIPS

Psychonomic Society, 2006-2011 (Student Member), 2011-2013 (Associate member), 2013-present (Full Member)

Cognitive Neuroscience Society, 2009-present

Society for Neuroscience, 2013-present

Association for Psychological Science, 2009-2011