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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. (in press). Analysing concurrent transcranial magnetic stimulation and electroencephalographic data: a review and introduction to the open-source TESA software. *NeuroImage*, DOI:10.1016/j.neuroimage.2016.10.031.
3. Agarwal, P.K., Finley, J.R., **Rose, N.S.**, & Roediger, H.L., (in press). 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.ob013e31825a28f2.
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.ob013e3182234cf6.
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.** (submitted). 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”
- 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

- 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., 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 6<sup>th</sup> 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 23<sup>rd</sup> 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 56<sup>th</sup> 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 56<sup>th</sup> 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 22<sup>nd</sup> 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 55<sup>th</sup> 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 21<sup>st</sup> 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 20<sup>th</sup> 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 53<sup>rd</sup> Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Rose, NS, 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 53<sup>rd</sup> 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 53<sup>rd</sup> Annual Meeting of the Psychonomic Society, Minneapolis, MN.
- Rose, NS, 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 52<sup>nd</sup> 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 52<sup>nd</sup> 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, 51<sup>st</sup> 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, 51<sup>st</sup> 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, 51<sup>st</sup> 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., 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 21<sup>st</sup> 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 19<sup>th</sup> 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 49<sup>th</sup> 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, 49<sup>th</sup> 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 20<sup>th</sup> 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, 48<sup>th</sup> 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*

*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