**Morgan Widhalm |** Curriculum Vitae

573-999-3363 – [mwidhalm@nd.edu](mailto:mwidhalm@nd.edu)

**EDUCATION**

**University of Notre Dame Notre Dame, IN**

Department of Psychology, Cognition Brain and Behavior August 2017-present

Advisor: Nathan Rose, PhD

**University of Notre Dame Notre Dame, IN**

BS in Neuroscience and Behavior May 2017

GPA: 3.893

Undergraduate Honors Thesis: “Music, event boundaries, and narrative comprehension and memory”

Advisor: Gabriel Radvansky, PhD

**RESEARCH EXPERIENCE**

**University of Notre Dame** **Notre Dame, IN**

*Department of Psychology – Dr. Nathan Rose* August 2016 – present

Undergraduate Research Assistant

* Aided in the development of a new research lab from the ground up – read and discussed articles to gain direction for new experiments, mentored underclassmen on IRB submission and research methods and decided on lab standards for communication, organization and delegation
* Debugged working memory task in PsychToolbox for Matlab in preparation for TMS demo

*Department of Psychology – Dr. Gabriel Radvansky* August 2014 – present

Undergraduate Research Assistant

* Ran participants, scored data, and collaborated on experiments involving:
  + Prospective memory, directed forgetting, long term memory, synesthesia and memory, false memory, Von Restorff effect, self-reference effect, the fan effect, the testing effect, situation models and other phenomena related to memory

**University of Wisconsin-Madison Madison, Wisconsin**

*Department of Educational Psychology – Dr. Edward Hubbard* Summer 2016

Undergraduate Research Assistant

* Performed a literature search on synesthesia, memory for music, and brain imaging studies of iconic memory to gain an understanding of the field and the context of current research
* Designed and coded an EEG paradigm in PsychToolbox for Matlab to measure iconic memory
* Designed a behavioral paradigm to test the effect of synesthesia on memory for music

**Stowers Institute for Medical Research Kansas City, Missouri**

*Stowers Summer Scholar Program – Dr. Ron Yu* Summer 2015

Summer Scholar/Research Assistant

* Investigated the potential mouse pheromone candidate, Tauro-β-muricholate
* Performed a time-lapse image analysis of vomeronasal organ tissue and utilized confocal microscopy to analyze mouse brain slices after stimulation with Tauro-β-muricholate

**PRESENTATIONS**

**Widhalm, M.,** Samaha, J., Rose, N. *Stimulus-Specific Information can be Decoded from the TMS-ER in Early Visual Cortex*. Presentation to occur at a nanosymposium at The Annual Meeting of the Society for Neuroscience; 2018 November 5; San Diego, CA.

**Widhalm, M.** and Rose, N. *Can TMS to Visual Cortex Reactivate Activity-Silent Representations in Visual Working Memory?* Poster presented at the Annual Meeting of the Cognitive Neuroscience Society; 2018 March 27; Boston, MA.

**Widhalm, M.**, Pettijohn, K., and Radvansky, G.A. *Music, event boundaries, and narrative comprehension and memory.* Poster presented at Undergraduate Scholars Conference; 2017 May 5; Notre Dame, Indiana.

Widhalm, M. and Rose, N.

**Widhalm, M.**, Ma, L., Freedman, D., and Yu, R*. Tauro-β-muricholate: Mouse Pheromone Candidate*. Poster presented at The Graduate School of the Stowers Institute for Medical Research; 2015 August 7; Kansas City, MO.

**MANUSCRIPTS**

**Widhalm, M. L.,** & Rose, N. S. (2018). How can transcranial magnetic stimulation be used to causally manipulate memory representations in the human brain?. *Wiley Interdisciplinary Reviews: Cognitive Science*, e1469.

**RESEARCH SKILLS**

**Programming Skills:** MATLAB; PsychToolbox 3; EEGLab; TESA; ERPLab; SPM12;

**Neuroscience Methods:** TMS; EEG;

**Data Analysis Skills**: R; SPSS; inverted encoding models; ERP analysis;

**HONORS AND AWARDS**

* Graduate School Professional Development Award ($577) – Notre Dame **Spring 2018**
* Graduate Student Union Conference Presentation Grant ($300) – Notre Dame **Spring 2018,Fall 2018**
* Richard and Peggy Notebaert Premier Fellowship – University of Notre Dame **2017 - present**
* Notre Dame Scholars Program Award ($100,000) – University of Notre Dame **2013-2017**
* Glynn Family Honors Program - University of Notre Dame **2013-2017**
* Outstanding Undergraduate Research Award – University of Notre Dame **Spring 2017**

Summer Research Grant - Glynn Family Honors Program – Notre Dame **Summer 2016**

Stowers Summer Scholars Program – Stowers Institute for Medical Research **Summer 2015**

* Dean’s List - University of Notre Dame, College of Science **All semesters**

**PROFESSIONAL SERVICE**

“Grad Rep” for The University of Notre Dame Graduate School **Fall 2018-present**

STEMentorship Program (mentor for undergraduate women in STEM fields) **Fall 2018-present**

Area Rep on the Psychology Department Diversity/Inclusion Committee **Fall 2018-present**

Cognitive Neuroscience Society Trainee Association Department Representative **Fall 2018-present**

Graduate Orientation Ambassador **Summer 2018**

Reviewer for the Journal of Memory and Language **Spring 2018**

Volunteer Judge at the Northern Indiana Regional Science and Engineering Fair **March 2018**

**TEACHING AND MENTORING**

Guest Lecture – “Cognitive Control”, Intro to Cognitive Neuroscience, ND **November 7, 2018**

Guest Lecture – “Skeletomotor Control”, Intro to Cognitive Neuroscience, ND **September 24, 2018**

Mentored a team of 5 undergraduate students on TMS-EEG project **Spring 2017-present**

**PROFESSIONAL AFFILIATIONS**

Women in Cognitive Science (WiCS) **Fall 2018 – present**

Society for Neuroscience (SfN) **Spring 2018-present**

Association for Women in Science (AWIS) **Fall 2017 – present**

Cognitive Neuroscience Society (CNS) **Fall 2017 – present**

Association for Psychological Science (APS) **Fall 2017 – present**

* Phi Beta Kappa Honor Society **Spring 2017-present**