HILLARY SCHWARB, PH.D.

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EDUCATION

PhD	Georgia Institute of Technology, Atlanta, GA	2012 Psychology
MS	Georgia Institute of Technology, Atlanta, GA	2008 Psychology
BA	University of Notre Dame, Notre Dame, IN	2005 Psychology
BA	University of Notre Dame, Notre Dame, IN	2005 French Literature

PROFESSIONAL EXPERIENCE

2023-Present	Assistant Professor, Department of Psychology, Center for Brain, Biology and Behavior, University of Nebraska
2019-2023	Research Scientist, Beckman Institute for Advanced Science and Technology (Biomedical Imaging Center), Interdisciplinary Health Sciences Institute, University of Illinois
2017-2019	Visiting Research Scientist, Beckman Institute for Advanced Science and Technology (Biomedical Imaging Center), Interdisciplinary Health Sciences Institute, University of Illinois
2014-Present	Instructor, Department of Psychology, University of Illinois
2012-2017	Post-doctoral research associate, Advisor: Dr. Neal J. Cohen, University of Illinois
2005-2012	Graduate Student, Advisor: Dr. Eric H. Schumacher, Georgia Institute of Technology
2004-2005 2004-2005	Undergraduate Research Assistant, Advisor: Dr. Robert L. West, University of Notre Dame Undergraduate Research Assistant, Advisor: Dr. Bradley S. Gibson, University of Notre Dame
2014-Present 2012-2017 2005-2012 2004-2005	Visiting Research Scientist, Beckman Institute for Advanced Science and Technology (Biomedical Imaging Center), Interdisciplinary Health Sciences Institute, University of Illinois Instructor, Department of Psychology, University of Illinois Post-doctoral research associate, Advisor: Dr. Neal J. Cohen, University of Illinois Graduate Student, Advisor: Dr. Eric H. Schumacher, Georgia Institute of Technology Undergraduate Research Assistant, Advisor: Dr. Robert L. West, University of Notre Dame

GRANTS

Awarded

2P20GMXXXX

National Institutes of Health (NIMGH)

Hippocampal Alterations in Methamphetamine Misuse

This project investigates structural changes in memory-related brain structures and associated behavioral changes among individuals with a history of methamphetamine misuse. 8/1/2024-2/28/2027 \$179,472 (direct/year) Role: PI

1R21EB031337

National Institutes of Health (NIMH)

Changes in hippocampal microstructure and hippocampal-dependent memory accompanying hormonal fluctuation in naturally cycling women

This project investigates microstructural changes in the human hippocampus across the menstrual cycle and the relationship between hippocampal microstructure and memory performance with changes in estradiol. 8/1/2022-7/31/2024

\$275,000 (direct) Role: PI

1R01NS110661

National Institutes of Health (NINDS) **Relational memory as a model of behavioral (dys)function in adults with traumatic brain injury** This project seeks to characterize the role of the hippocampus in traumatic brain injury. 3/15/2020-2/28/2025 \$482,295 (direct/year) Role: co-PI (PI: Duff)

1R01AG058853

National Institutes of Health (NIA) **Mechanical integrity of memory systems in mild cognitive impairment** The major goals of this project are to measure the mechanical properties of the brain in older adults, determine the relationships of these properties with memory function, and investigate how both structure and function are modified by fitness and exercise. 04/01/2018 - 03/31/2024 \$325,392 (direct/year) Role: Co-I (PI: Johnson)

Completed

1R03AG065894-01A1

National Institutes of Health (NIA)

Viscoelastic and volumetric contributions to age-related cognitive decline

This project investigates differential contributions of regional volume and viscoelasticity to cognitive abilities and structural brain health in older adults. 9/30/2020 - 5/31/2023 \$100,000 (direct) Role: PI

National Multiple Sclerosis Society, IL-1503-03395

Evaluating Subcortical Degeneration with MR Elastography and its Relation to Cognition and Aerobic

Fitness in Multiple Sclerosis

This project used magnetic resonance elastography to evaluate the degeneration of subcortical structures in multiple sclerosis, how this degeneration affects cognitive function and is modulated by aerobic fitness. 10/1/2015 - 9/30/2016 Role: Co-I (PI: Johnson)

MANUSCRIPTS UNDER REVIEW

- 1. Schwarb, H., Dulas, M.R., Patel, N, Bouton, N. A., Cohen, N. J., & Duff, M. C. Disrupted contextdependent relational memory in adults following moderate-severe traumatic brain injury.
- 2. Schwarb, H., Dulas, M.R., & Cohen, N. J. The influence of categorical stimuli on relational memory binding.
- 3. Lara-Cinisomo, S., Nutlis, M.M., Ramirez, A., & **Schwarb, H.** The feasibility of using fMRI to measure pain responses in women with and without postpartum depression.
- 4. Dulas, M.R., Schwarb, H., & Cohen, N. J. Aging impacts context boundaries and memory organization.

PUBLICATIONS

- McIlvain, G., Magoon, E.M., Clements, R.G., Merritt, A., Hiscox, L.V., Schwarb, H., & Johnson, C.L. (2024). Acute effects of high-intensity exercise brain mechanical properties and cognitive function. *Brain Imaging and Behavior.*
- 2. Bogdan, P.C., Dolcos, S., Federmeier, K.D., Lleras, A., **Schwarb, H.**, & Dolcos, F. (2023). Emotional dissociations in temporal associations: opposing effects of arousal on memory for details surrounding unpleasant events. *Cognition & Emotion*, 1-15.
- 3. Tinney, E.M., Loui, P., Raine, L.B., Hiscox, L.V., Delgorio, P.L., Kramer, M.K., **Schwarb, H.**, Martens, C.R., Kramer, A.F., Hillman, C.H., & Johnson, C.L. (2023). White matter integrity, health behaviors, and mild cognitive impairment. *Psychophysiology, e14306.*
- Delgorio, P. L., Hiscox, L. V., McIlvain, G., Kramer, M. K., Diano, A. M., Twohy, K. E., Merritt, A. A., McGarry, M. D. J., Schwarb, H., Daugherty, A. M., Ellison, J. M., Lanzi, A. M., Cohen, M. L., Martens, C. R., & Johnson, C. L. (2023). Hippocampal subfield viscoelasticity in amnestic mild cognitive impairment evaluated with MR elastography. *NeuroImage: Clinical, 37,* 103327.
- Vauzour, D., Scholey, A., White, D., Cohen, N. J., Cassidy, A., ... Schwarb, H., & Minihanel, A-M. (2023). A combined DHA-rich fish oil and cocoa flavanols intervention does not improve cognition or brain structure in older adults with memory complaints: Results from the CANN randomized, controlled paralleldesign study. *The American Journal of Clinical Nutrition*, 118, 369-381.
- Delgorio, P. L., Hiscox, L. V., Daugherty, A. M., Sanjana, F., McIlvain, G., ... Schwarb, H., & Johnson, C. L. (2022). Structure-function dissociations of hippocampal subfield stiffness and memory performance. *Journal of Neuroscience*, 42(42), 7957-7968.
- 7. Dulas, M. R., Morrow, E., **Schwarb, H.**, Cohen, N. J., & Duff, M. C. (2022). Temporal order memory impairments in individuals with moderate-severe traumatic brain injury. *Journal of Clinical and Experimental Neuropsychology*, *1-16*.
- 8. Dulas, M. R., **Schwarb, H.**, Cannavale, C. N., & Cohen, N. J. (2021). Should context hold a special place in hippocampal memory? *Psychology of Learning & Motivation, 75,* 1-35.
- Delgorio, P. L., Hiscox, L. V., Daugherty, A. M., Sanjana, F., Pohlig, R. T., Ellison, J. M., Martens, C.R., Schwarb, H., McGarry, M.D.J., & Johnson, C. L. (2021). Effect of aging on the viscoelastic properties of hippocampal subfields assessed with high-resolution MR elastography. *Cerebral Cortex*, *31*(6), 2799-2811.
- Steinert, S.W., Daugherty, A.M., Shankar, S., Schwarb, H., Cerjanic, A., Sutton, B.P., & Arble, E.P. (2021). A performance-based measure of emotion response control: A preliminary MRI study, *Scandanavian Journal of Psychology*, *62(3)*, 321-327.
- 11. Hiscox, L.V., **Schwarb, H.**, McGarry, M.D.J., & Johnson, C.L. (2021). Aging brain mechanics: Progress and promise of magnetic resonance elastography. *NeuroImage*, *232*, 117889.
- Hiscox, L. V., McGarry, M. D., Schwarb, H., Van Houten, E. E., Pohlig, R. T., Roberts, N., ... & Johnson, C. L. (2020). Standard-space atlas of the viscoelastic properties of the human brain. *Human brain mapping*, *41*(18), 5282-5300.
- 13. Pindus, D.M., Zwilling, C.E., Jarrett, J.S., Talukdar, T., **Schwarb, H.**, Cohen, N.J., Barbey, A.K., Kramer, A.F., & Hillman, C.H. (2020). Opposing associations between sedentary time and decision-making

competence in young adults revealed by functional connectivity in the dorsal attention network. *Scientific reports, 10*(1), 1-15.

- Hiscox, L. V., Johnson, C. L., McGarry, M. D., Schwarb, H., van Beek, E. J., Roberts, N., & Starr, J. M. (2020). Hippocampal viscoelasticity and episodic memory performance in healthy older adults examined with magnetic resonance elastography. *Brain imaging and behavior*, 14(1), 175-185.
- 15. Huesmann, G. R., **Schwarb, H.**, Smith, D. R., Pohlig, R. T., Anderson, A. T., McGarry, M. D., ... & Johnson, C. L. (2020). Hippocampal stiffness in mesial temporal lobe epilepsy measured with MR elastography: Preliminary comparison with healthy participants. *NeuroImage: Clinical*, 102313.
- Daugherty, A. M., Schwarb, H., McGarry, M. D., Johnson, C. L., & Cohen, N. J. (2020). Magnetic Resonance Elastography of Human Hippocampal Subfields: CA3-Dentate Gyrus Viscoelasticity Predicts Relational Memory Accuracy. *Journal of Cognitive Neuroscience*, 32(9), 1704-1713..
- Rigon, A., Schwarb, H., Klooster, N., Cohen, N. J., & Duff, M. C. (2020). Spatial relational memory in individuals with traumatic brain injury. Journal of Clinical and Experimental Neuropsychology, 42(1), 14-27.
- Schwarb, H., Johnson, C. L., Dulas, M. R., McGarry, M. D., Holtrop, J. L., Watson, P. D., ... & Cohen, N. J. (2019). Structural and functional MRI evidence for distinct medial temporal and prefrontal roles in context-dependent relational memory. *Journal of cognitive neuroscience*, *31*(12), 1857-1872.
- 19. McIlvain, G., **Schwarb, H.**, Cohen, N.J., Telzer, E.H., Johnson, C.L. (2018). Mechanical properties of the in vivo adolescent human brain. *Developmental Cognitive Neuroscience*, 34, 27-33.
- 20. Horecka, K. M., Dulas, M. R., **Schwarb, H.** Lucas, H. D., Duff, M., & Cohen, N. J. (2018). Reconstructing relational information. *Hippocampus*, 28(2), 164-177.
- Johnson, C. L.*, Schwarb, H.*, Horecka, K.M., McGarry, M.D.J., Hillman, C.H., Kramer, A.F., Cohen, N.J., & Barbey, A.K. (2018). Double dissociation of structure-function relationships in memory and fluid intelligence observed with magnetic resonance elastography. *NeuroImage*, 171, 99-106. *denotes equal contribution
- 22. Rubin, R.D., **Schwarb, H.**, Lucas, H.D., Dulas, M.R., Cohen, N.J. (2017). Dynamic hippocampal and prefrontal contributions to memory processes and representations blur the boundaries of traditional cognitive domains. *Brain Sciences*, *7*(*7*), 82.
- 23. **Schwarb, H.**, Johnson, C.L., Daugherty, A.M., Hillman, C.H., Kramer, A.F., Cohen, N.J., & Barbey, A.K. (2017). Aerobic fitness, hippocampal viscoelasticity, and relational memory. *Neuroimage*, 153, 179-188.
- Johnson, C.J., Schwarb, H., McGarry, M.D.J., Anderson, A.T., Huesmann, G.R., Sutton, B.P., & Cohen, N.J. (2016). Viscoelasticity of subcortical gray matter structures. *Human Brain Mapping*, 37(12), 4221-4233.
- 25. **Schwarb, H.***, Johnson, C.J.*, McGarry, M.D.J., & Cohen, N.J. (2016). Medial temporal lobe viscoelasticity and relational memory performance. *Neuroimage, 132,* 534-541. *denotes equal contribution
- 26. **Schwarb, H.**, Watson, P.D., Campbell, K., Shander, C.L., Monti, J.M., Cooke, G.E., Wang, J.X., Kramer, A.F., Cohen, N.J., (2015). Competition and cooperation among relational memory representations. *PLoS ONE, 10(11),* e0143832.
- 27. Schwarb, H., Nail, J., & Schumacher, E.H. (2015). Working memory training improves visual short-term memory capacity. *Psychological Research*, *80(1)*, 128-148.

- Magnuson, M.E., Thompson, G.J., Schwarb, H., Pan, W-J., McKinley, R.A., Schumacher, E.H., & Keilholz, S. (2015). Errors on interrupter tasks presented during spatial and verbal working memory performance are linearly linked to large-scale functional network connectivity in high temporal resolution resting state fMRI. *Brain Imaging and Behavior.*
- 29. Thompson, G.J., Magnuson, M.E., Merritt, M.D., **Schwarb, H.**, Pan, W-J, McKinley, R.A., Tripp, L.D., Schumacher, E.H., & Keilholz, S.D. (2013). Short time windows of correlation between large scale functional brain networks predict vigilance intra-individually and inter-individually. *Human Brain Mapping*, *34*(*12*), 3280-3298.
- 30. Schwarb, H. & Schumacher, E.H. (2012). Generalized lessons about sequence learning from the study of the serial reaction time task. *Advances in Cognitive Psychology*, *8*(2), 165-178.
- 31. Schumacher, E.H., **Schwarb, H.**, Lightman, E., & Hazeltine, E. (2011). Investigating the modality specificity of response selection using a temporal flanker task. *Psychological Research*, *75(6)*, 1898-1914.
- 32. Hazeltine, E., Lightman, E., **Schwarb, H.**, & Schumacher, E.H. (2011). The boundaries of sequential modulations: Evidence for set-level control. *Journal of Experimental Psychology: Human Perception and Performance*, *37(6)*, 1898-1914.
- Majeed, W., Magnuson, M., Schwarb, H., Hasenkamp, W., Schumacher, E.H., Barsalou, L. & Keilholz, S.D. (2011). Spatiotemporal dynamics of low frequency BOLD fluctuations in rats and humans. *NeuroImage*, *54*(2), 1140-1150.
- 34. Schwarb, H. & Schumacher, E.H. (2010). Implicit spatial sequence learning is represented by stimulusresponse rules. *Memory & Cognition, 38(6),* 677-688.
- 35. Schumacher, E.H., Seymour, T.L., & Schwarb, H. (2010). Brain activation evidence for response conflict in the exclude recognition task. *Brain Research*, *1329*, 113-123.
- 36. West, R., **Schwarb, H.**, & Johnson, B.N. (2010). The influence of age and individual differences in executive function and psychological well being on the neural correlates of target processing. *Cortex*, *46*, 550-563.
- 37. Schumacher, E.H. & Schwarb, H. (2009). Parallel response selection disrupts sequence learning under dual-task conditions. *Journal of Experimental Psychology: General, 138,* 270-290.
- 38. Schwarb, H. & Schumacher, E.H. (2009). Neural evidence of a role for spatial response selection in the learning of spatial sequences. *Brain Research*, 1247, 114-125.
- 39. West, R. & **Schwarb, H.** (2006). The influence of aging and frontal status on the neural correlates of regulative and evaluative aspects of cognitive control. Neuropsychology, 20(4), 468-481.

POSTER PRESENTATIONS

- 1. Levitan, Z., Anderson, A. T., Sutton, B. P., Juraska, J., Cohen, N. J., Huesmann, G. R., & **Schwarb, H.** (April, 2023). Hormone fluctuation and microstructural brain changes in the hippocampus. Poster presented at the Undergraduate Research Symposium, Urbana, IL.
- Akindulureni, J., Anderson, A. T., Bouton*, N. A., Sutton, B. P., Cohen, N. J., & Schwarb, H. (April, 2023). Magnetic resonance elastography explains more variance when characterizing the relationship between relational memory and hippocampal structure. Poster presented at the Undergraduate Research Symposium, Urbana, IL.

- 3. Nam, Y., Dulas, M. R., Patel, N.N., Cohen, N.J., Duff, M.C., & **Schwarb, H.** (April, 2023). Determining the effects of traumatic brain injury on hippocampal-mediated relational memory. Poster presented at the Undergraduate Research Symposium, Urbana, IL.
- 4. Pan, Y., Anderson, A. T., Sutton, B. P., Cohen, N. J., & **Schwarb, H.** (April, 2023). Microstructural integrity in the striatum is related to learning abilities in older adults. Poster presented at the Undergraduate Research Symposium, Urbana, IL.
- 5. Schwarb, H., Dulas, M.R., Bouton, N.A., Patel, N.N., Cohen, N.J., & Duff, M.C. (April, 2023). Impaired relational memory, but not contextual rule learning in adults with moderate-severe TBI. Poster presented at the International Brain Injury Association World Congress on Brain Injury, Dublin, Ireland.
- Dulas, M.R., Schwarb, H., Morrow, E.L., Patel, N., Bouton, N.A., Cohen, N.J., & Duff, M.C. (April, 2023). *Traumatic brain injury impairs relational memory across domains*. Poster presented at the International Brain Injury Association World Congress on Brain Injury, Dublin, Ireland.
- 7. Morrow, E.L., Dulas, M.R., **Schwarb, H.,** Cohen, N.J., & Duff, M.C. (April, 2023). Social updating of character judgements in adults with moderate-severe traumatic brain injury. Poster presented at the International Brain Injury Association World Congress on Brain Injury, Dublin, Ireland.
- McIlvain, G., Magoon, E.M., Clements, R., Merritt, A., Hiscox, L.V., Schwarb, H., & Johnson, C.L. (May, 2022). Acute effects of high-intensity exercise on brain mechanical properties and cognitive function. Poster presented at the International Society for Magnetic Resonance in Medicine annual meeting, London, England.
- Schwarb, H., Anderson, A.T., Cerjanic, A.M., Bouton, N., Clements, G.M., McGarry, M.D.J, Wszalek, T.M., Fabiani, M., Gratton, G., Johnson, C.L., Sutton, B.P., & Cohen, N.J., (April, 2022). Additive value of magnetic resonance elastography for characterizing structure-function relationships in memory. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- 10. Delgorio, P.L., Hiscox, L.V., Daugherty, A.M., Sanjana, F., McGarry, M.D.J, Martens, C., **Schwarb, H.,** & Johnson, C.L. (June, 2021). *Structure-function dissociations of hippocampal subfield viscoelasticity and memory performance*. Poster presented at the Human Brain Mapping annual meeting, Seoul, Korea.
- 11. Camacho, P.B., Anderson, E.D., Anderson, A.T., **Schwarb, H.,** Wszalek, T.M., & Sutton, B.P. (May, 2021). *Automating reproducible connectivity processing pipelines on high performance computing machines.* Poster presented at the International Society for Magnetic Resonance in Medicine annual meeting, held virtually.
- 12. Delgorio, P.L., Hiscox, L.V., **Schwarb, H.,** & Johnson, C.L. (October, 2020). *Mechanical properties of the human hippocampus: Sexual dimorphism in normal aging.* Poster presented at the annual meeting of the Biomedical Engineering Society, held virtually.
- 13. **Schwarb, H.**, Delgorio, P.L., Daugherty, A.M., McGarry, M.D.J, Cohen, N.J., & Johnson, C.L. (May, 2020). *MR elastography measures of hippocampal subfield viscoelasticity are related to relational memory outcomes across the lifespan.* Poster presented at the annual meeting of the Cognitive Neuroscience Society, held virtually.
- 14. Dulas, M.R., **Schwarb, H.**, & Cohen, N.J. (October, 2019). *Memory guided preferential viewing behavior spans context changes.* Poster presented at the annual meeting of the Society for Neuroscience, Chicago, IL.
- 15. Pindus, D.M., Zwilling, C.E., Jarrett, J.S., Talukdar, T., **Schwarb, H.**, Hillman, C.H., Cohen, N.J., Kramer, A.F., & Barbey, A.K. (October, 2019). *Accelerometer-measured physical activity is positively related to*

functional connectivity of the dorsal attention network in young adults. Poster presented at the annual meeting of the Society for Neuroscience, Chicago, IL.

- Delgorio, P.L., Hiscox, L.V., Sanjana, F., Daugherty, A.M., McGarry, M.D.J., Schwarb, H., Martens, C.R., & Johnson, C.L. (October, 2019). *Healthy aging and stiffness of the brain, hippocampus, and hippocampal subfields*. Poster presented at the annual meeting of the Society for Neuroscience, Chicago, IL.
- Pindus, D. M., Zwilling, C., Jarret, J., Schwarb, H., Hillman, C. H., Cohen, N. J., ... & Barbey, A. K. (May, 2019). Accelerometer-measured sustained MVPA is related to higher decision-making competence among young adults. Poster presented at the annual meeting of Medicine & Science in Sports & Exercise, 51(6), 474-475.
- 18. Delgorio, P.L., Hiscox, L., Faria, S., Villermaux, G., McGarry M.D.J., **Schwarb, H.**, Martens, C.R., & Johnson, C.L. (October, 2019). *Viscoelastic properties of the hippocampal subfields in the aging brain.* Poster presented at the annual meeting of the Biomedical Engineering Society, Philadelphia, PA.
- 19. Kramer, M., Anderson, A.T., Cerjanic, A., **Schwarb, H.**, & Sutton, B.P. (October, 2019). *Evaluating dependence of mechanical properties of human brain tissue on vasodilation using magnetic resonance elastography.* Poster presented at the annual meeting of the Biomedical Engineering Society, Philadelphia, PA.
- Magoon, E., McIlvain, G., Delgorio, P.L., Schwarb, H., Johnson, C.L. (October, 2019). Evidence of specialization of hippocampal subfield viscoelasticity and domains of memory performance. Poster presented at the annual meeting of the Biomedical Engineering Society, Philadelphia, PA.
- 21. Schwarb, H., Johnson, C.L., Dulas, M.R., Sutton, B.P., Voss, J.L., & Cohen, N.J. (March, 2019). Structural and functional MRI evidence for distinct medial temporal and prefrontal roles in context-dependent relational memory. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- 22. Lara-Cinisomo, S., Akinbode, T., Larsen, R., Sutton, B.P., & **Schwarb, H.** (March, 2019). *The feasibility of assessing pain perception in women with and without postpartum depression using fMRI.* Poster presented at the annual meeting of the Internatioanl Association for Women's mental Health, Paris, France.
- 23. Rigon, A., **Schwarb, H.**, Klooster, N., Cohen, N.J., & Duff, M.C. (March, 2019). *Spatial relational memory in individuals with traumatic brain injury.* Poster presented at the International Brain Injury Association annual meeting, Toronto, ON.
- 24. Dulas, M.R., **Schwarb, H.**, Covington, N.V., Cohen, N.J., & Duff, M.C. (March, 2019). *Traumatic brain injury impairs both spatial and temporal relational memory*. Poster presented at the International Brain Injury Association annual meeting, Toronto, ON.
- 25. Hiscox, L.V., Sharma, S., **Schwarb, H.**, McGarry, M.D.J., Johnons, C.L. (June, 2019). *Mechanical properties of the human brain: Development of an MR elastography template.* Poster presented at the Human Brain Mapping annual meeting, Rome, Italy.
- Hiscox, L.V., Johnson, C.L., McGarry, M.D.J., Schwarb, H., van Beek, E.J.R., Roberts, N., & Starr, J.M. (June, 2018). *Hemispheric specialization of hippocampal viscoelasticity for memory performance in healthy older adults.* Poster presented at the International Society for Magnetic Resonance in Medicine annual meeting, Paris, France.
- 27. Schwarb, H., Johnson, C.J., Sutton, B.P., Wszalek, T.M., Huesmann, G.R. (March, 2018). *Mesial temporal lobe epilepsy is characterized by hippocampal stiffness alterations and relational memory deficits.* Poster presented at the annual meeting of the Cognitive Neuroscience Society, Boston, MA.

- 28. Smith, D.R., **Schwarb, H.**, Pohlig, R.T., Olivero, W.C., Sutton, B.P., Wszalek, T.M., Huesmann, G.R., & Johnson, C.L., (April, 2017). *Hippocampal stiffness in mesial temporal sclerosis epilepsy measured by MR elastography: Initial results.* Poster presented at the International Society for Magnetic Resonance in Medicine annual meeting, Honolulu, HI.
- 29. Johnson, C.L., Thompson, C.A., Sandroff, B.M., Edwards, T.A., Hubbard, E.A., Klaren, R.E., **Schwarb, H.**, Sutton, B.P., Pilutti, L.A., & Motl, R.W. (April, 2017). *Multiple sclerosis lesions are softer than surrounding white matter: An MR elastography study*. Poster presented at the International Society for Magnetic Resonance in Medicine annual meeting, Honolulu, HI, April 22-27, 2017.
- 30. **Schwarb, H.**, Johnson, C.L., Hilman, C.H., Kramer, A.F., Cohen, N.J., & Barbey, A.K. (March, 2017). *Double dissociation of structure-function relationship between memory and fluid intelligence using magnetic resonance elastography*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- 31. Schwarb, H., Johnson, C.L., Daugherty, A.M., Hillman, C.H., Kramer, A.F., Cohen, N.J., & Barbey, A.K. (November, 2016). *Hippocampal viscoelasticity mediates the benefits of aerobic fitness on memory in healthy young adults.* Poster presented at the annual meeting of the Society for Neuroscience, San Diego, CA.
- 32. Johnson, C.L., **Schwarb, H.**, Olivero, W.C., Wszalek, T.M., & Huesmann, G.R., (April, 2016). *Magnetic resonance elastography of the hippocampus in mesial temporal sclerosis: Initial Results*. Poster presented at the American Academy of Neurology annual Meeting, Vancouver, British Columbia.
- 33. Schwarb, H., Johnson, C.L., Holtrop, J.L., Wang, J.X., Watson, P.D., Voss, J.L., & Cohen, N.J (Novmeber, 2015). *Structural and functional contributions to context-dependent relational memory*. Poster presented at the annual meeting of the Society for Neuroscience, Chicago, IL.
- 34. Johnson, C.L., **Schwarb, H.**, Yambert, R.R., & Olivero, W.C. (September, 2015). *Evidence of thalamic degeneration associated with chronic back pain prior to spinal fusion surgery*. Poster presented at the Annual Meeting of the Congress of Neurological Surgeons, New Orleans, LA.
- 35. Johnson, C.L., **Schwarb, H.**, McGarry, M.D.J., & Cohen, N.J. (June, 2015). *Viscoelasticity of hippocampal tissue in healthy young adults relates to memory task performance*. Poster presented at the Human Brain Mapping annual meeting, Honolulu, HI.
- 36. Johnson, C.L., **Schwarb, H.**, McGarry, M.D.J., Sutton, B.P., Cohen, N.J (May, 2015). *Viscoelasticity of subcortical gray matter structures*. Poster presented at the International Society for Magnetic Resonance in Medicine annual meeting, Toronto, ON. [summa cum laude award]
- 37. Schwarb, H., Johnson, C.L., McGarry, M.D.J., & Cohen, N.J (March, 2015). *The relationship between hippocampal viscoelasticity and relational memory performance in healthy young adults: A magnetic resonance elastography study*. Poster presented at the Cognitive Neuroscience Society annual meeting, San Francisco, CA.
- 38. Johnson, C.L., **Schwarb, H.**, McGarry, M.D.J., & Cohen, N.J. (November, 2014). *High-resolution elastography of the hippocampus relates to memory performance*. Poster presented at the Brain Grand Challenges Conference, Washington, DC. **[young investigator award]**
- Schwarb, H., Watson, P.M., Shander, C., Monti, J.M., Cooke, G.E., Kramer, A.F., & Cohen, N.J (April, 2014). *Hippocampal integrity influences relational, but not rule-driven memory in older adults*. Poster accepted to the annual meeting of the Cognitive Neuroscience Society, Boston, MA.
- 40. Watson, P.M., **Schwarb, H.**, Shander, C., Monti, J.M., Cooke, G.E., Kramer, A.F., & Cohen, N.J (April, 2014). *Striatal integrity influences rule-driven, but not relational memory in older adults*. Poster accepted to

the annual meeting of the Cognitive Neuroscience Society, Boston, MA.

- 41. **Schwarb, H.**, Watson, P.M., Campbell, K., Wang, J.X., Voss, J.L., & Cohen, N.J (November, 2013). *Competing representations in context-guided relational memory: An eye tracking study*. Poster presented at the annual meeting of the Society for Neuroscience, San Diego, CA.
- 42. Gross, E. Z., **Schwarb, H.**, Ryals, A. J., Rogers, L.M., Dokucu, M., Cohen, N.J, Voss, J.L. (November, 2013). *Distinct prefrontal contributions to context-dependent association learning identified using theta-burst repetitive TMS*. Poster presented at the annual meeting of the Society for Neuroscience, San Diego, CA.
- 43. Watson, P.M., Wang, J. X., **Schwarb, H.**, & Cohen, N.J (April, 2013). *Event reconstruction reveals relational representations that do not overlap with the semantic information present in the experiment*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- 44. **Schwarb, H.**, Keilholz, S.D., McKinley, R.A., Tripp, L., & Schumacher, E.H. (October, 2012). *Distinct neural correlates of visual working memory and resolution: An fMRI investigation*. Poster presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.
- 45. Cookson, S.L., Nail, J., **Schwarb, H.**, Sultan, Z., McKinley, R.A., Tripp, L., Keilholz, S.D., & Schumacher, E.H. (October, 2012). *Effects of prolonged vigilance on frontal-parietal brain activity*. Poster presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.
- 46. Roberts, B.M., Shin, J., Thompson, G., **Schwarb, H.**, Keilholz, S.D., & Schumacher, E.H. (October, 2012). *Putting names to faces: Dynamic fronto-temporal network modulations during rest support subsequent memory performance*. Poster presented at the annual meeting of the Society for Neuroscience, New Orleans, LA.
- 47. Grooms, J., Thompson, G.J., **Schwarb, H.**, Schumacher, E.H., Schmidt, R., Epstein, C., & Keilholz, S.D. (October, 2012). *Low frequency EEG correlates of fMRI in resting state.* Poster presented at the annual meeting of the Biomedical Engineering Society, Atlanta, GA.
- 48. Merritt, M.D., Thompson, G.J., Mangunson, M.E., **Schwarb, H.**, Pan, W-J, Tripp, L. D., McKinley, R.A., Schumacher, E.H., & Keilholz, S.D. (October, 2012). *BOLD signal changes in resting state networks are related to performance on a vigilance task.* Poster presented at the annual meeting of the Biomedical Engineering Society, Atlanta, GA.
- 49. Thompson, G.J., Magnuson, M.E., Merritt, M.D., **Schwarb, H.**, Pan, W-J, McKinley, R.A., Tripp, L. D., Schumacher, E.H., & Keilholz, S.D. (June, 2012). *Resting state networks generated from twelve second segments of fMRI scans are behaviorally relevant.* Poster presented at the annual meeting of the Organization for Human Brain Mapping, Beijing, China.
- 50. Pan, W-J, Magnuson, M.E., Thompson, G.J., **Schwarb, H.**, Schumacher, E.H., & Keilholz, S.D. (June, 2012). *Brain structures associated with working memory performance: A voxel based morphometric study.* Poster presented at the annual meeting of the Organization for Human Brain Mapping, Beijing, China.
- 51. Schwarb, H., Keilholz, S.D., McKinley, R.A., Tripp, L. & Schumacher, E.H. (March, 2012). Number/resolution vs. stimulus complexity: A unifying account of the neural correlates of visual working memory capacity. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Chicago, IL.
- 52. Nail. J., **Schwarb, H.**, Sultan, Z., McKinley, A., Tripp, L. Kielholz, S.D., & Schumacher, E.H. (March, 2012). *Cortical activation changes with performance fluctuations on a sustained attention task.* Poster presented at the annual meeting of the Cognitive Neuroscience Society, Chicago, IL.

- 53. Roberts, B., Thompson, G., Shin, J., **Schwarb, H.**, Keilholz, S.D., & Schumacher, E.H. (March, 2012). *Functional connectivity and subsequent memory: increased neural co-activation during post-task resting states is related to later memory performance*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Chicago, IL.
- 54. Magnuson, M., Thompson, G., **Schwarb, H.**, Roberts, B., Pan, W-J., McKinley, A., Tripp, L., Schumacher, E.H., & Keilholz, S.D. (March, 2012). *Strength of correlation in and between resting state functional networks is linearly related to performance on a variety of cognitive tasks*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Chicago, IL.
- 55. **Schwarb, H.**, McKinley, R.A., Nail, J., Sultan, Z., & Schumacher, E.H. (November, 2011). *Moderate amounts of attentional control training can improve performance on a variety of untrained working memory tasks.* Poster presented at the annual meeting of the Psychonomic Society, Seattle, WA.
- 56. Thompson, G., Magnuson, M., Merritt, M.D., **Schwarb, H.**, Pan, W., Schumacher, E.H., & Keilholz, S.D. (June, 2011). *Changes in default mode relative to task positive mode in short time intervals predict vigilance.* Poster presented at the Human Brain Mapping annual meeting, Quebec City, QC.
- 57. **Schwarb, H.**, Thompson, G., Majeed, W., McKinley, R.A., Merritt, M.D., Schumacher, E.H., & Keilholz, S.D. (April, 2011). *Spatiotemporal dynamics of low frequency BOLD fluctuations in the default network may predict psychomotor vigilance task performance.* Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- 58. Redick, T. S., Ahrens, A.N., **Schwarb, H.**, Dulas, M.R., Schumacher, E.H., & Engle, R.W. (April, 2011). *Functional MRI investigation of variation in working memory capacity: Looking forward or looking backward?* Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- 59. **Schwarb, H.**, Seymour, T.L. & Schumacher, E.H. (April, 2010). *EMG and fMRI evidence for response conflict in the exclude-recognition task*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Montreal, QC.
- 60. **Schwarb, H.**, & Schumacher, E.H. (November, 2009). *Implicit sequence learning is represented by stimulus-response rules*. Poster presented at the annual meeting of the Psychonomic Society, Boston, MA.
- 61. **Schwarb, H.**, Patel, N., Burris, C.J., & Schumacher, E.H. (March, 2009). *Neural evidence of a role for spatial response selection in the learning of spatial sequences.* Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- 62. Adelore, T.A., **Schwarb, H.**, & Schumacher, E.H. (March, 2009). *Effective connectivity evidence for a relationship between spatial response selection and spatial sequence learning.* Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- 63. Lightman, E.J., **Schwarb, H.**, Hazeltine, E., Patel, N., & Schumacher, E.H. (March, 2009). *Investigating control mechanisms with and between modality with a temporal flanker task.* Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.
- 64. **Schwarb, H.**, Hazeltine, E., Schumacher, E.H., & Seymour, T.L. (November, 2008). *Investigating modality-specific control mechanisms with a temporal flanker task.* Poster presented at the annual meeting of the Psychonomic Society, Chicago, IL.
- 65. **Schwarb, H.**, Hazeltine, E., & Schumacher, E.H. (May, 2008). *Effects of stimulus-response congruency on temporal flanker task performance: Evidence for modality-specific control mechanisms*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Francisco, CA.

- 66. West, R., Travers, S., **& Schwarb, H.** (April, 2008). *Why the shift?: Effects of aging on the target P3.* Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 67. **Schwarb, H.**, & Schumacher, E.H. (November, 2007). *Behavioral and brain activation evidence that spatial response selection mediates spatial sequence learning.* Poster presented at the annual meeting of the Society for Neuroscience, San Diego, CA.
- 68. **Schwarb, H.**, & Schumacher, E.H. (May, 2007). *Dissociating the neural mechanisms for procedural skill and sequence learning using functional neuroimaging*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, New York, NY.
- 69. **Schwarb, H.**, & Schumacher, E.H. (November, 2006). *The effect of dual-task processing overlap on sequence learning.* Poster presented at the annual meeting of the Psychonomic Society, Houston, TX.
- 70. West, R., & **Schwarb, H.** (April, 2006). *Effects of aging on the neural correlates of regulative and evaluative control.* Poster presented at the Cognitive Aging Conference, Atlanta, GA.
- 71. West, R., Agganis, B., Bowry, R., & **Schwarb, H**. (April, 2005). *ERP correlates of cognitive control that are insensitive to response conflict.* Poster presented at the Cognitive Neuroscience Society, New York, NY.

INVITED TALKS

- 1. Schwarb, H. (March, 2022). *Relational memory and the hippocampal memory system.* Cognition and Biopsych Seminar Series, University of Nebraska, Lincoln, NE.
- 2. Schwarb, H. (November, 2021). *The Impact of Brain Mechanics on Memory.* Carle Illinois Advanced Imaging Center Fall Seminar, Carle Foundation Hospital, Urbana, IL.
- 3. Schwarb, H. (March, 2021). *Competition and cooperation in the relational memory network.* Psychology Speakers Series, DePauw University.
- 4. Schwarb, H. (December, 2020). Brain Elasticity and Cognitive Outcomes: The Impact of Brain Mechanics on Memory. Beckman Director's Seminar Public Series, University of Illinois at Urbana-Champaign, Urbana, IL.
- 5. **Schwarb, H.** (January, 2018). *Magnetic resonance elastography: A new tool for cognitive neuroscience.* Presented at the Center for Advanced Brain Imaging, Georgia Institute of Technology, Atlanta, GA.
- 6. **Schwarb, H.** (April, 2017). *Memory and the elastic brain*. Presented at TedX UIUC, Urbana, IL. https://www.youtube.com/watch?v=uDvxasgHn6A
- 7. **Schwarb, H.** (November, 2016). *Investigative tools and techniques in cognitive neuroscience research*. Presented to the Carle Hospital Neuroscience Research Unit, Urbana, IL.
- 8. **Schwarb, H.** (April, 2016). *Magnetic resonance elastography: Technique and application.* Presented at the annual Neuroscience Program Undergraduate Research Symposium, University of Illinois, Urbana, IL.
- 9. Schwarb, H. (February, 2015). *Hippocampal integrity and relational memory performance: Neural elasticity and behavior.* Presented to the Purdue Applied Cognition group, Purdue University, West Lafayette, IN.
- 10. **Schwarb, H.** (September, 2014). *Magnetic resonance elastography and normal memory function*. Presented to the Research in Cognitive Neuroscience course, Psychology Department, Agnes Scott College, Decatur, GA.

 Schwarb, H., Nail, J., Sultan, Z., & Schumacher, E.H. (December, 2011). Sustained attentional control: Cortical activation changes across time. Presented at Magnetic Resonance at Georgia Tech Workshop, Wallace Coulter Department of Biomedical Engineering and Parker H. Petit Institute for Bioengineering and Bioscience, Georgia Institute of Technology, Atlanta, GA.

PRESENTATIONS

- 1. Schwarb, H. (February, 2023). Changes in Relational Memory and Hippocampus: Translational Cognition in Health Science. Presented at the Cognition Seminar, Urbana, IL
- 2. **Schwarb, H.** (February, 2021). *Investigating the relational memory network across neuroimaging techniques and patient populations.* Presented at the Brain and Cognition Seminar, Urbana, IL.
- 3. Delgorio, P.L., Hiscox, L.V., Pohlig, R.T., Sanjana, F., Daugherty, A.M., **Schwarb, H.**, Martens, C.R., McGarry, M.D.J., & Johnson, C.L. (August, 2020). *Reliable high-resolution MR elastography protocol to assess hippocampal subfield viscoelasticity in aging.* Presented at the annual meeting of the International Society of Magnetic Resonance in Medicine, held virtually.
- 4. Schwarb, H. (November, 2019). *The organization of relational memory representations influences behavioral outcomes.* Presented at the Cognition Seminar, Urbana, IL.
- 5. Anderson, A.T., **Schwarb, H.** Huesmann, G. R. (April, 2018). *Human brain stiffness: From cognitive neuroscience to the clinic.* Presented at the Beckman Institute Tech Talk Series, University of Illinois, Urbana, IL.
- 6. Schwarb, H. (November, 2017). *Magnetic resonance elastography and relational memory: A new tool for cognitive neuroscience*. Presented at the Brain and Cognition Seminar, Urbana, IL.
- 7. Schwarb, H., Johnson, C.L., McGarry, M. D. J., & Cohen, N.J. (February, 2016). *Hippocampal viscoelasticity and relational memory performance: A magnetic resonance elastography study.* Presented at the Postoctoral Research Symposium, University of Illinois at Urbana-Champaign, Urbana, IL. [Grand prize winner]
- 8. Schwarb, H., Johnson, C.L., McGarry, M. D. J., & Cohen, N.J (March, 2015). *The relationship between hippocampal viscoelasticity and relational memory performance in healthy young adults: A magnetic resonance elastography study.* Data-blitz presentation at the Cognitive Neuroscience Society annual meeting, San Francisco, CA.
- 9. Schwarb, H., Campbell, C., Watson, P. D., & Cohen, N.J (October, 2013). *Competition among contextual and relational memory representations*. Presented at the Memory Disorders Research Society annual meeting, Toronto, ON.
- 10. Schwarb, H. (April, 2013). Context guided relational memory: understanding medial temporal lobe and prefrontal cortex interactions using eye tracking. Presented at the Brain and Cognition Seminar, Urbana, IL.
- 11. **Schwarb, H.** (September, 2011). *Project #3-3: Optimization of transcranial stimulation (e.g., TMS and tDCS) intervention parameters for attentional control training.* Presented at Air Force Center of Excellence on Bio-nano-enabled Inorganic/Organic Nanostrucutres and Improved Cognition, Atlanta, GA.
- 12. Schwarb, H. (August, 2011). Understanding the limits of visual working memory capacity. Presented to the Air Force Research Laboratory's Human Effectiveness Directorate, Wright Patterson Air Force Base, OH.

- Schwarb, H. (September, 2010). Project #3-1: Moderate amounts of attentional control and working memory training to increase war-fighter real-time reasoning and decision making. Presented at Air Force Center of Excellence on Bio-nano-enabled Inorganic/Organic Nanostrucutres and Improved Cognition, Atlanta, GA.
- 14. **Schwarb, H.** (September, 2010). *Moderate amounts of attentional control training to improve real-time decision making skills.* Presented at Cognitive Science Seminar, Georgia Institute of Technology, Atlanta, GA.
- 15. Schumacher, E.H., Hazeltine, E., **Schwarb, H.,** Adelore, T., & Lightman, E. J. (September, 2010). *Investigating the modality specificity of cognitive control using a temporal flanker task.* Presented at Crossmodal Action Workshop, Aachen, Germany.
- 16. **Schwarb, H.** (April, 2010). *EMG and fMRI evidence for response conflict in the exclude-recognition task.* Presented at Cognitive Science Seminar, Georgia Institute of Technology, Atlanta, GA.
- 17. **Schwarb, H.** (September, 2009). *The role of stimulus-response rules in implicit sequence learning.* Presented at Cognitive Science Seminar, Georgia Institute of Technology, Atlanta, GA.
- 18. Hazeltine, E., Schumacher, E.H., **& Schwarb, H.** (2008). *Sequential effects in a temporal flanker task.* Presented at Neuroscience and Cognitive Control, Ghent, Belgium
- 19. Schumacher, E.H. & **Schwarb, H.** (November, 2008). *The effect of central processing interference on dual-task sequence learning.* Paper presented at the 49th annual meeting of the Psychonomic Society, Chicago, IL.
- 20. **Schwarb, H.** (November, 2008). *Investigating modality-specific control mechanisms with a temporal flanker task.* Presented at Cognitive Science Seminar, Georgia Institute of Technology, Atlanta, GA.
- 21. **Schwarb, H.** (March, 2008). *What does executive control control?* Presented at Cognitive Science Seminar, Georgia Institute of Technology, Atlanta, GA.
- 22. **Schwarb, H**. (February, 2007). *Dual-task processing overlap impairs sequence learning*. Presented at Cognitive Science Seminar, Georgia Institute of Technology, Atlanta, GA.
- 23. **Schwarb, H.** (February, 2006). *Implicit sequence learning: A cognitive processing perspective*. Presented at Cognitive Science Seminar, Georgia Institute of Technology, Atlanta, GA.

TEACHING EXPERIENCE

Learning and Memory, Instructor Memory and Amnesia, Instructor Introduction to Cognitive Psychology, Instructor

Cognitive Psychology, Lab Instructor Cognitive Psychology, Teaching Assistant General Psychology, Student Instructor

MENTORING

Research Assistants

Spring, 2023 Spring, 2014-Fall 2022 Spring, 2012 Fall, 2011 Spring, 2008 Spring, 2008 Spring, 2008

Hyeon Jung (Judith) Heselton Nathanial Bouton Rachel Gonzalez Nirav Patel Faizan Khawaja	University of Nebraska-Lincoln University of Illinois University of Illinois University of Illinois University of Illinois	2024- 2020-2023 2013-2015 2013-2015 2012-2015		
Undergraduate Researchers				
Dana Tran Idaly Del Rello Kathleen Johnson Abby Habel James Moeller Maryam Naif Dima Smoqy Yunji Nam Zoe Levitan (supervised thesis) Yutong Pan (supervised thesis) Jason Brooks Joy Akindulureni Nathanial Bouton (supervised thesis) Renya Hickey Erin Sahm Raya Gandhi Man Sze (supervised thesis) Davis Gerew Fatima Eldes Varun Devakonda (supervised thesis) Connor Dyer Ezra Winter-Nelson Maha Anwar Brendan Vastlik Ricky Patel Ryan Kahle (supervised thesis) Chris Shander Emily Young Jayde Nail Brittney Zimmerly Carla Burrus (supervised thesis) Nehal Patel (supervised thesis) Lana Jones	University of Nebraska-Lincoln University of Nebraska-Lincoln University of Nebraska-Lincoln University of Nebraska-Lincoln University of Nebraska-Lincoln University of Nebraska-Lincoln University of Illinois University of Illinois	2024- 2023- 2023- 2023- 2023- 2023- 2022-2023 2022-present 2022-present 2022-present 2022-present 2019-2020 2019-2020 2019-2020 2019-present 2017-2019 2017-2019 2017-2018 2017-2018 2017-2018 2017-2018 2013-2014 2013-2014 2013-2014 2013-2014 2013-2014 2013-2014 2013-2016 2012-2013 2011-2012 2009-2011 2006-2009 2005-2008 2006		
Masters Thesis Committees Sarah Philip	University of Illinois	2023		
Qualifying Exam Committees Rebecca Golden	University of Illinois	2021		
Dissertation Committees Paul Bogdan	University of Illinois	2022		

HONORS AND AWARDS

Joyce R. Jeffries New Faculty Scholar Awards	2024
United Way Emerging Community Leaders at Illinois	2021
University of Illinois at Champaign-Urbana Teachers Ranked as Excellent University of Illinois at Champaign-Urbana	2016-present
Postdoctoral Research Symposium Grand Prize Winner	2016
American Psychological Association (APA) Dissertation Research Award Grant (\$1,000) National Science Foundation (NSF)	2011
Graduate Research Fellowship Honorable Mention	2006
Georgia Institute of Technology President's Fellowship Graduate Student Career Development Grant Graduate Student Research Symposium Grand Prize Winner Outstanding Graduate Student Award School of Psychology Graduate Research Award	2005-2010 2005, 2006 2009 2010 2011
University of Notre Dame Magna Cum Laude Honors in Psychology and French John F. Santos Award for Distinctive Achievement in Psychology President of the Notre Dame Chapter of Psi Chi Psi Chi Honor Society Pi Delta Phi Honor Society Dean's Honors list, University of Notre Dame	2005 2005 2005 2004-2005 2003-2005 2003-2005 2001-2005

SERVICE

- NSF Cognitive Neuroscience Review Panel Participant (FY2024)
- Office for the Protection of Human Subjects Advisory Committee at the University of Illinois (2022-current)
- Vice-chair of the Biomedical Institutional Review Board at the University of Illinois (2022-current)
- Ad hoc student research advisor for the Office of the Vice Chancellor for Diversity, Equity, & Inclusion (current)
- Biomedical Institutional Review Board member at the University of Illinois (2020-2022)
- Search committee member: MRI Technologist, University of Illinois (2022)
- Search committee member: Office for the Protection of Human Subjects Director, University of Illinois (2022)
- Search committee member: Office for the Protection of Human Subjects Research Specialist, University of Illinois (2022)
- Grant Review for the Israeli Science Foundation (2022)
- Grant Review (internal) for University of Illinois faculty (2021)
- Ad hoc reviewer Cerebral Cortex
- Ad hoc reviewer Hippocampus
- Ad hoc reviewer *NeuroImage*
- Ad hoc reviewer Quarterly Journal of Experimental Psychology
- Ad hoc reviewer Brain and Cognition
- Ad hoc reviewer Psychological Research
- Ad hoc reviewer Human Brain Mapping
- Ad hoc reviewer Experimental Psychology
- Ad hoc reviewer Human Brain Mapping
- Ad hoc reviewer Neurobiology of Aging
- Ad hoc reviewer Journal of Experimental Psychology: Human Perception and Performance

- Ad hoc reviewer Royal Society Open Science
- Ad hoc reviewer Journal of Cognitive Psychology
- APA Division 3 Newsletter: Co-author, *Graduate Student Corner* (2009-2011)
- Coordinator of the Cognition and Brain Sciences weekly seminar at Georgia Tech (Fall 2011)
- Search committee member: Center for Advanced Brain Science director at Georgia Tech (2009, 2011)
- Cognitive and Brain Science graduate student representative at Georgia Tech (2008-2009, 2010-2011)

PROFESSIONAL MEMBERSHIPS

2005- Cognitive Neuroscience Society 2005-2014 Center for Behavioral Neuroscience - Atlanta 2006- Society for Neuroscience Intermittent since 2011- American Psychological Association Intermittent since 2011- Association for Psychological Science

REFERENCES

Professor Neal J. Cohen Department of Psychology University of Illinois at Urbana-Champaign 405 North Matthews Avenue Urbana, IL 61801

Professor Eric H. Schumacher School of Psychology Georgia Institute of Technology 654 Cherry Street Atlanta, GA 30332

Professor Curtis L. Johnson College of Engineering University of Delaware 201K STAR Campus Newark, DE 19716

Professor Melissa C. Duff Hearing and Speech Sciences Vanderbilt University Medical School 1215 21st Avenue South Nashville, TN 37232

Professor Bradley P. Sutton College of Engineering University of Illinois at Urbana-Champaign 405 North Matthews Avenue Urbana, IL 61801