Kylie H. Alm

kalm3@jhmi.edu
Johns Hopkins University School of Medicine
600 North Wolfe Street
Baltimore, MD 21287

Education

2017 ***Ph.D. in Psychology***
Temple University, Philadelphia, Pennsylvania
Concentration in Brain and Cognitive Sciences
Advisor: Ingrid R. Olson, Ph.D.

2010 ***B.A. in Psychology, magna cum laude***
Vanderbilt University, Nashville, Tennessee

Professional Appointments

2017 – present **Postdoctoral Fellow**
Johns Hopkins University School of Medicine
Department of Psychiatry and Behavioral Sciences
Division of Psychiatric Neuroimaging
Advisor: Arnold Bakker, Ph.D.

Publications

Manuscripts Published

2017 Metoki, A., **Alm, K. H.**, Wang, Y., Ngo, C. T., & Olson, I. R. (in press). Never forget a face: white matter connectivity predicts person memory. *Brain Structure and Function.*

Hampton, W. H., **Alm, K. H.**, Venkatraman, V., Nugiel, T., & Olson, I. R. (2017). Dissociable frontostriatal white matter connectivity underlies reward and motor impulsivity. *NeuroImage, 150*, 336-343.

2016 Nugiel, T., **Alm, K. H.**, & Olson, I.R. (2016). Individual differences in white matter microstructure predict semantic control. *Cognitive, Affective, & Behavioral Neuroscience, 16,* 1003-1016.

Alm, K. H., Rolheiser, T., & Olson, I. R. (2016). Inter-individual variation in fronto-temporal connectivity predicts the ability to learn different types of associations. *NeuroImage, 132*, 213-224.

Cooper, S., **Alm, K. H.**, Olson, I. R., & Ellman, L. M. (2016). White matter integrity in individuals experiencing attenuated positive psychotic symptoms. *Early Intervention in Psychiatry.*

Unger, A., **Alm, K. H.**, Collins, J. A., O'Leary, J. M., & Olson, I. R. (2016). Variation in white matter connectivity predicts the ability to remember faces and discriminate their emotions. *Journal of the International Neuropsychological Society, 22,* 180-190.

2015 Olson, I. R., Von Der Heide, R. J., **Alm, K. H.**, & Vyas, G. (2015). Development of the uncinate fasciculus: implications for theory and developmental disorders. *Developmental Cognitive Neuroscience, 14,* 50-61.

Alm, K. H., Rolheiser, T., Mohamed, F. B., & Olson, I. R. (2015). Fronto-temporal white matter connectivity predicts reversal learning errors. *Frontiers in Human Neuroscience, 9*, 343.

2014 **Hower, K. H.**, Wixted, J., Berryhill, M. E., & Olson, I. R. (2014). Impaired perception of mnemonic oldness, but not mnemonic newness, after parietal lobe damage. *Neuropsychologia, 56*, 409-417.

Manuscripts Submitted

Ngo, C. T., **Alm, K. H.**, Metoki, A., Hampton, W. H., Riggins, T., Newcombe, N. S., & Olson, I. R. (submitted). White matter structural connectivity and episodic memory in early childhood.

Alm, K. H., Ngo, C. T., & Olson, I. R. (submitted). Biasing the content of awake memory replay.

Manuscripts in Preparation

Wang, Y., Metoki, A., **Alm, K. H.**, & Olson, I. R. (in preparation). White matter and social cognition.

Ngo, C. T., **Alm, K. H.**, Metoki, A., Newcombe, N. S., & Olson, I. R. (in preparation). Normal variation in relational memory and pattern separation can be predicted by white matter connectivity.

Alm, K. H. & Olson, I. R. (in preparation). Smoking, reinforcement learning, and reversal learning.

Research Experience

2012 – 2017 **Graduate Student Researcher**
Cognitive Neuroscience Laboratory, Temple University
Principal Investigator: Dr. Ingrid Olson

2010 – 2012 **Research Coordinator**
Computational Memory Laboratory, University of Pennsylvania
Principal Investigator: Dr. Michael Kahana

2009 – 2010 **Undergraduate Research Assistant**
Perception, Attention, Control Laboratory, Vanderbilt University
Principal Investigator: Dr. Adriane Seiffert

Teaching & Mentorship

2016	Teaching Assistant *NSCI 1051 'Fundamentals of Neuroscience'* Temple University
2014	Primary Instructor *PSY 817 'Brain Matters'* Temple University
2012 – 2013	Teaching Assistant *NSCI 817 'Brain Matters'* Temple University

Undergraduate and post-baccalaureate students mentored:
Hyden Zhang, Molly Split, Lauren Harris, Sarah Levine, Linda Hoffman

Conference Presentations

Invited Symposia

2017 Ngo, C. T., **Alm, K. H.**, Metoki, A., Olson, I. R., Newcombe, N. S., & Riggins, T. (2017). *White matter connectivity and memory development in early childhood*. Part of symposium: Neural Bases of Memory Development. Presented at the biennial meeting of the Society for Research in Child Development in Austin, TX.

Poster Presentations

*** Denotes student mentee poster**

2017 **Alm, K. H.**, Ngo, C. T., & Olson, I. R. (2017). *Improving memory by biasing awake memory reactivation.* Presented at the annual meeting of the Cognitive Neuroscience Society in San Francisco, CA.

Ngo, C. T., **Alm, K. H.**, Metoki, A., Newcombe, N. S., & Olson, I. R. (2017). *Normal variation in relational memory and pattern separation can be predicted by white matter connectivity.* Presented at the annual meeting of the Cognitive Neuroscience Society in San Francisco, CA.

Metoki, A., **Alm, K. H.**, Wang, Y., & Olson, I. R. (2017). *Predicting individual differences in learning and memory by measuring limbic white matter.* Presented at the annual meeting of the Cognitive Neuroscience Society in San Francisco, CA.

2016 Levine, S. B. M.*, **Alm, K. H.**, & Olson, I. R. (2016). *To smoke or not to smoke? That is the delay.* Presented at the Temple Undergraduate Research Forum in Philadelphia, PA.

Alm, K. H., Unger, A., Nugiel, T., Zhang, H. R.*, & Olson, I. R. (2016). *Retrieving the right memory in a reversal learning task is predicted by structural connectivity between the orbitofrontal cortex and medial temporal lobe.* Presented at the annual meeting of the Cognitive Neuroscience Society in New York, NY.

2015 Nugiel, T., Unger, A., **Alm, K. H.**, Olson, I. R. (2015). *White matter microstructure predicts controlled semantic retrieval.* Presented at the annual meeting of the Society for the Neurobiology of Language in Chicago, IL.

Alm, K. H., Unger, A., Nugiel, T. Zhang, H. R.*, Rolheiser, T. M., Troiani, V. & Olson, I. R. (2015). *Frontal white matter connectivity predicts variability in associative learning and delayed retrieval.* Presented at the annual meeting of the Context and Episodic Memory Symposium in Philadelphia, PA.

Unger, A., **Alm, K. H.**, Collins, J., O'Leary, J., Nugiel, T., & Olson, I. R. (2015). *Long-range white matter connectivity predicts facial emotion perception.* Presented at the annual meeting of the Social and Affective Neuroscience Society in Boston, MA.

Olson, I. R., **Alm, K. H.**, Nugiel, T., Unger, A., Zhang, H. R.*, Rolheiser, T. M., & Troiani, V. (2015). *Filling or kicking the bucket: controlled semantic retrieval is related to microstructural changes in long-range fiber pathways.* Presented at the annual meeting of the Cognitive Neuroscience Society in San Francisco, CA.

Alm, K. H., Unger, A., Nugiel, T., Zhang, H. R*., Rolheiser, T. M., Troiani, V., & Olson, I. R. (2015). *Individual differences in associative learning and delayed retrieval predicted by white matter connectivity.* Presented at the annual meeting of the Cognitive Neuroscience Society in San Francisco, CA.

Zhang, H. R.*, Troiani, V., **Alm, K. H.**, & Olson, I. R. (2015). *The relationship between language and social processing: an examination of story narratives and autistic trait load in a normal population.* Presented at the annual meeting of the Eastern Psychological Association in Philadelphia, PA.

Nugiel, T., Split, M. E.*, **Alm, K. H.**, & Olson, I. R. (2015). *Fronto-temporal connectivity and semantic control.* Presented at the annual meeting of the Eastern Psychological Association in Philadelphia, PA.

2014 Cooper, S., Olson, I. R., **Alm, K. H.**, Maxwell, S. D., & Ellman, L. M. (2014). *White matter integrity in individuals experiencing attenuated positive psychotic symptoms.* Presented at the annual meeting of the Society for Research in Psychopathology in Evanston, IL.

Hower, K. H. & Olson, I. R. (2014). *Fronto-temporal white matter connectivity predicts reversal learning deficits.* Presented at the annual meeting of the Context and Episodic Memory Symposium in Philadelphia, PA.

Hower, K. H., Rolheiser, T. M., & Olson, I. R. (2014). *Fronto-temporal white matter connectivity predicts learning from rewards and punishments.* Presented at the annual meeting of the Cognitive Neuroscience Society in Boston, MA.

Berryhill, M. E., **Hower, K. H.**, Wixted, J., & Olson, I. R. (2014). *Impaired perception of mnemonic oldness, but not mnemonic newness, after parietal lobe damage.* Presented at the annual meeting of the Cognitive Neuroscience Society in Boston, MA.

Awards & Fellowships

2017 – present	T32 Fellowship – Research Training in Age-Related Cognitive Disorders *National Institute on Aging and Johns Hopkins University School of Medicine*
2017	Dissertation Completion Grant ($10,000 plus tuition scholarship) *The Graduate School, Temple University*
2017	Graduate Student Travel Award ($350) *College of Liberal Arts, Temple University*
2016	Graduate Student Travel Award ($350) *College of Liberal Arts, Temple University*
2015	Philip J. Bersh Memorial Student Award ($500) *Department of Psychology, Temple University*
2015	Training Course in Structural and Functional Connectivity *Martinos Center for Biomedical Imaging, Massachusetts General Hospital*
2015	Graduate Student Travel Award ($350) *College of Liberal Arts, Temple University*
2014	Student Travel Award ($150) *Context and Episodic Memory Symposium, University of Pennsylvania*
2014	Graduate Student Travel Award ($350) *Department of Psychology, Temple University*
2013	Training Course in fMRI *University of Michigan*
2013	fMRI Visiting Fellowship *Martinos Center for Biomedical Imaging, Massachusetts General Hospital*

Technical Skills

Neuroimaging Methods
EEG, ERP, MRI, fMRI, DTI, MVPA
Neuroimaging Software
FSL, SPM, Diffusion Toolkit, TrackVis
Computing
SPSS, MATLAB, Python, Unix
Experiment Software
EGI Net Station, E-Prime
Certifications
Research with human participants, research with an older adult population, administration of standardized measures of adult working memory

Professional & Departmental Service

2014, 2015 Graduate Student Interview Planning Committee
Temple University

2013, 2014, 2016 Brain Awareness Week Volunteer
Society for Neuroscience, The Franklin Institute

Ad-hoc manuscript review:
NeuroImage

Professional Affiliations

Cognitive Neuroscience Society
Philadelphia Chapter of the Society for Neuroscience