

ANA MARIE DAUGHERTY, Ph.D.

Curriculum vitae

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EDUCATION

- 2014 Ph.D., Psychology (Behavioral and Cognitive Neuroscience)
Wayne State University, Detroit, MI
- 2011 M.A., Psychology (Behavioral and Cognitive Neuroscience)
Wayne State University, Detroit, MI
- 2007 B.S., Neuroscience and Experimental Psychology
Westmont College, Santa Barbara, CA

PROFESSIONAL EXPERIENCE

- 2018-Present Assistant Professor, Wayne State University
Department of Psychology, Department of Psychiatry and Behavioral Neurosciences,
Institute of Gerontology, Integrative Biosciences (IBio) Initiative
- 2015-2018 Beckman Postdoctorate Research Fellow (Competitive Fellowship)
Beckman Institute for Advanced Science and Technology
University of Illinois Urbana-Champaign
Faculty Mentors: Arthur Kramer, Ph.D.; Neal Cohen, Ph.D.
- 2014-2015 Postdoctorate Research Fellow
Cognitive Neuroscience of Aging Laboratory, Institute of Gerontology
Wayne State University
PI: Naftali Raz, Ph.D.

GRANTS AND FELLOWSHIPS

External Research Grants

- 2018-23 "Community-Based Approach to Early Identification of Transitions to Mild Cognitive Impairment (MCI) and Alzheimer's Disease (AD) in African Americans" / R01AG054484
Institution: Wayne State University
PI: V. Kavcic, Ph.D.
Role: Co-I
Agency: NIH (NIA)
Total Award: \$3,301,912

- 2016-17 “Harmonized Hippocampal Subfield Segmentation Working Group”
 Institution: Rotman Research Institute, University of Toronto
 PI: R. Olsen, Ph.D.
 Role: Co-I
 Agency: Joint Programme—Neurodegenerative Disease Research
 Total Award: 50,000 €
- 2012-14 “The Role of Iron Accumulation in Brain and Cognitive Decline”
 Institution: Wayne State University
 Role: PI
 Agency: Blue Cross Blue Shield of Michigan Awards Program; 1893.SAP
 Total Award: \$3000

Internal Research Grants

- 2015-18 Beckman Institute Postdoctoral Independent Research Award
 Institution: University of Illinois at Urbana-Champaign
 Role: PI
 Agency: Arnold and Mabel Beckman Foundation
 Total Award: \$25,000
- 2016-17 “Neural and Cognitive Correlates of Age-Related Decline in Decision Making”
 Institution: University of Illinois at Urbana-Champaign
 Role: PI
 Agency: Beckman Institution
 Total Award: \$25,000
- “Microstructural Biomarkers of Neurodegeneration in Mild Traumatic Brain Injury”
 Institution: University of Illinois at Urbana-Champaign
 PI: A. Barbey, Ph.D.
 Role: Research team
 Agency: Carle Foundation Hospital
 Total Award: \$50,000

Significant Contributor to Funded Research

- 2018-20 “Developmental Variations in Corticostriatal Thalamocortical Circuits and their Relationship to Psychopathology”
 Institution: Child Mind Institute (NY)
 PI: A. Nikolaidis, Ph.D.
 Role: Other significant contributor
 Agency: NIH (NIMH) R21MH118556
 Total Award: \$418,853

Fellowship Stipend Awards

- 2015-18 Beckman Institute Postdoctoral Fellowship
 Agency: Arnold and Mabel Beckman Foundation
 Total Award: \$165,000
- 2013-14 Competitive Rumble Fellowship
 Agency: Wayne State University
 Total Award: \$45,600
- 2012-14 Pre-doctorate Trainee Fellowship
 Agency: Institute of Gerontology, Wayne State University
 Total Award: \$6000

- 2012-13 Graduate Research Assistant
Agency: Wayne State University
Total Award: \$60,000
- 2009-12 Predoctoral Research Fellowship
Agency: NIH awarded to Institute of Gerontology, T32-HS-013819
Total Award: \$110,000

External Funding for Events

- 2012 “Careers in Aging Seminar”
Institution: Wayne State University
Agency: Association for Gerontology in Higher Education
Total Award: \$200

PUBLICATIONS

Peer-Reviewed Journal Articles

- 2020 **Daugherty AM**, Schwarb HD, McGarry MDJ, Johnson CL, Cohen NJ. In press. MR elastography of human hippocampal subfields: CA3-dentate gyrus viscoelasticity predicts relational memory accuracy. *J Cog Neuro*.
- Rvuolo Grasser L, Burghardt P, **Daugherty AM**, Amisadri A, Javanbakht A. 2020. Inflammation and trauma-related psychopathology in Syrian and Iraqi refugees. *Behav Sci*. 10: 75. doi: 10.3390/jbs10040075. [Epub 2020 Apr 7].
- Rajesh A, **Daugherty AM**, Jain S, Henry D, Barbey AK, Rubin RD. In press. Comorbid conditions differentiate rehabilitation profiles in traumatic versus non-traumatic brain injury: A retrospective analysis using a medical database. *J Head Trauma Rehabilitation*.
- Rodrigue KM, **Daugherty AM**, Foster CM, Kennedy KM. 2020. Striatal iron accumulation is linked to reduced fronto-striatal brain function under working memory load. *NeuroImage*. 210: 116544. doi: 10.1016/j.neuroimage.2020.116544. [Epub 2020 Jan 20].
- Arble E, Steinert SW, **Daugherty AM**. In press. The application of the Rorschach inkblot test in the study of neural and cognitive aging. *Rorschachania*.
- 2019 **Daugherty AM**, Sutton BP, Hillman CH, Kramer AF, Cohen NJ, Barbey AK. 2019. Individual differences in the neurobiology of fluid intelligence predict responsiveness to training: Evidence from a comprehensive cognitive, mindfulness meditation, and aerobic exercise intervention. *Trends Neurosci. Educ*. 18: 100123. [Epub 2019 Nov 5]. doi: 10.1016/j.tine.2019.100123
- Zwilling CE, **Daugherty AM**, Hillman CH, Kramer AF, Cohen NJ, Barbey AK. 2019. Enhanced decision-making through multimodal training. *NPJ Science of Learning*. 4: 11. [Epub 2019 Aug 5.] doi: 10.1038/s41539-019-0049-x.
- Olsen R, Carr VA, **Daugherty AM**, La Joie R, Amaral RSC, Amunts K, ... Wisse LEM. 2019. Progress update from the Hippocampal Subfields Group. *Alzheimer's and Dementia: Diagnosis, Assessment, and Disease Monitoring*. 11: 439-449. [Epub 2019 Jun 13]. doi: 10.1016/j.dadm.2019.04.001
- Arble E, * **Daugherty AM**, Arnetz B. (* equal contribution to first author) 2019. Differential effects of physiological arousal following acute stress on police officer performance in a simulated critical incident. *Frontiers in Psychology, Psychology for Clinical Settings*. 10: 759. [Epub 2019 Apr 9]. doi: 10.3389/fpsyg.2019.00759.
- 2018 **Daugherty AM**, Hoagey DA, Kennedy KM, Rodrigue KM. 2018. Genetic predisposition for inflammation exacerbates effects of striatal iron content on cognitive switching ability in healthy

- aging. *NeuroImage*. 185: 471-78. [Epub 2018 Oct 25]. doi: 10.1016/j.neuroimage.2018.10.064.
- Hect J, **Daugherty AM**, Hermex KM, Marusak HA, Thomason ME. 2018. Developmental variation in regional brain iron and its relation to cognitive functions in childhood. *Dev Cog Neuro*. 34: 18-26. [Epub 2018 May 22]. doi: 10.1016/j.dcn.2018.05.004
- Arble E, **Daugherty AM**, Arnetz B. 2018. Models of first responder coping: Police officers as a unique population. *J Stress Health*. 34(5): 612-621. [Epub 2018 Jun 8]. doi: 10.1002/smi.2821
- Daugherty AM**, Zwilling C, Paul EJ, Sherepa N, Allen C, Kramer AF, Hillman CH, Cohen NJ, Barbey AK. 2018. Multi-modal fitness and cognitive training to enhance fluid intelligence. *Intell*. 66: 32-43. [Epub 2017 Nov 20]. doi: 10/10116/j.intell.2017.11.001
- Bender AR, Keresztes A, Bodammer NC, Shing YL, Werkle-Bergner M, **Daugherty AM**, Yu Q, Kühn S, Lindenberger U, Raz N. 2018. Optimization and validation of automated hippocampal subfield segmentation across the lifespan. *Hum Brain Mapp*. 39(2): 916-31. [Epub 2017 Nov 23]. doi: 10.1002/hbm.23891.
- Raz N, **Daugherty AM**. 2018. Pathways to brain aging and their modifiers: free-radical induced energetic and neural decline in senescence (FRIENDS) model. *Gerontology*. 64(1): 49-57. [Epub 2017 Sep 01]. doi: 10.1159/000479508
- 2017 **Daugherty AM**, Raz N. 2017. Incident risk and progression of cerebral microbleeds in healthy adults: A multi-occasion longitudinal study. *Neurobiol Aging*. 59: 22-29. [Epub 2017 Jul 18]. doi: 10.1016/j.neurobiolaging.2017.07.003
- Rajesh A, Cooke G, Monti J, Jahn A, **Daugherty AM**, Cohen NJ, Kramer AF. 2017. Differences in brain architecture over years following mild traumatic brain injury. *J Neurotrauma*. 34(23): 3280-87. [Epub 2017 Oct 27]. doi: 10.1089/neu.2017.5047
- Awick EA, Ehlers DK, Aguinaga S, **Daugherty AM**, Kramer AF, McAuley E. 2017. Effects of a randomized exercise trial on physical activity, psychological distress and quality of life in older adults. *Gen Hosp Psychiatry*. 49:44-50. [Epub 2017 Jun 15]. doi: 10.1016/j.genhosppsy.2017.06.005
- Schwarb H, Johnson CL, **Daugherty AM**, Hillman CH, Kramer AF, Cohen NJ, Barbey AK. 2017. Aerobic fitness effects on hippocampal viscoelasticity and relational memory performance. *NeuroImage*. 153: 179-188. [Epub 2017 Mar 30]. doi: 10.1016/j.neuroimage.2017.03.061
- Ehlers DK, **Daugherty AM**, Fanning J, Awick EA, Burzynska A, Chaddock-Heyman L, Kramer AF, McAuley E. 2017. Regional brain volumes moderate, but do not mediate, the effects of group-based exercise training on reductions in loneliness in older adults. *Front Aging Neurosci*. 9: 110 [Epub 2017 Apr 25]. doi: 10.3389/fnagi.2017.00110
- Banducci SE, **Daugherty AM**, Biggan JR, Cooke GE, Voss M, Noice T, Noice H, Kramer AF. 2017. Active experiencing training improves episodic memory recall in older adults. *Front Aging Neurosci*. 9: 133. [Epub 2017 Apr 20]. doi: 10/3389/fangi.2017.00133.
- Daugherty AM**, Flinn RW, Ofen N. 2017. Age-related differences in CA3-dentate gyrus volume uniquely linked to improvement in associative memory from childhood to adulthood. *NeuroImage*. 153: 75-85. [Epub 2017 Mar 22]. doi: 10.1016/j.neuroimage.2017.03.047
- Ehlers DK, Banducci SE, **Daugherty AM**, Fanning J, Awick EA, Porter GC, Burzynska A, Shen S, Kramer AF, McAuley E. 2017. Effects of gait self-efficacy and lower-extremity physical function on dual-task performance in older adults. *BioMed Res Int*. 2017: 8570960. [Epub 2017 Feb 1]. doi: 10.1155/2017/8570960
- Wisse LEM, * **Daugherty AM**, la Joie R; Hippocampal Subfields Group. (* **equal contribution to first author**). 2017. A roadmap to a harmonized protocol for hippocampal and parahippocampal subregions: why do we need one and what are the key goals? *Hipp* 27(1): 3-11. [Epub 2016 Nov

15]. doi: 10.1002/hipo.22671 *Recognized as one of the highest downloaded and cited articles from Hippocampus 2017-18*

Sethi SK, **Daugherty AM**, Gadda G, Utraiainen DT, Jiang J, Raz N, Haacke EM. 2017. Jugular anomalies in multiple sclerosis are associated with increased collateral venous flow. *AJNR*. (38(8): 1617-1622. [Epub 2017 May 25]. doi:10.3174/ajnr.A5219.

Raz N, **Daugherty AM**, Sethi SK, Arshad M, Haacke EM. 2017. Age differences in arterial and venous cerebral blood flow in healthy adults: Contributions of vascular risk factors and genetic variants. *Brain Struct Funct*. 222(6): 2641-53. [Epub 2017 Jan 24]. doi: 10.1007/s00429-016-1362-2.

Yu Q, **Daugherty AM**, Brush D, Hardwick A, Lacey W, Nishimaura M, Ofen N. 2017. Socioeconomic status and hippocampal volume in children and young adults. *Dev Sci*. [Epub 2017 May 2]. doi: 10.1111/dsec.12561.

Daugherty AM, Raz N. 2017. A virtual water maze revisited: Two-year changes in navigation performance and their neural correlates in healthy adults. *NeuroImage* 146: 492-506. [Epub 2016 Sep 19]. doi: 10.1016/j.neuroimage.2016.09.044

2016 **Daugherty AM**, Bender AR, Raz N, Ofen N. 2016. Age differences in hippocampal subfield volumes from childhood to late adulthood. *Hipp* 26(2): 220-8. doi: 10.1002/hipo.22517. [Epub 2015 Sep 4].

Daugherty AM, Raz N. 2016. Accumulation of iron in the putamen predicts its shrinkage in healthy older adults: A multi-occasion longitudinal study. *NeuroImage* 128: 11-20. [Epub 2015 Dec 30]. doi: 10.1016/j.neuroimage.2015.12.045

Persson N, Ghisletta P, Dahle CL, Bender AR, **Daugherty AM**, Yang Y, Yuan P, Raz N. 2016. Regional brain shrinkage and change in cognitive performance over two years: The bidirectional influences of the brain and cognitive reserve factors. *NeuroImage* 126:15-26. [Epub 2015 Nov 14]. doi:10.1016/j.neuroimage.2014.09.042.

Daugherty AM, Bender AR, Yuan P, Raz N. 2016. Changes in search path complexity and length during learning of a virtual water maze: Age differences and differential associations with hippocampal subfield volumes. *Cer Cor* 26(6): 2391-401. [Epub 2015 Apr 1]. doi: 10.1093/cercor/bhv061

2015 **Daugherty AM**, Raz N. 2015. Appraising the role of iron in brain aging and cognition: promises and limitations of MRI. *Neuropsychol Rev* 25(3): 272-87. [Epub 2015 Aug 7]. doi: 10.1007/s11065-015-9292-y

Daugherty AM, Haacke EM, Raz N. 2015. Striatal iron content predicts its shrinkage and changes in working memory after two years in healthy adults. *J Neurosci* 35(17): 6731-6743. doi:10.1523/JNEUROSCI.4717-14.2015.

Daugherty AM, Ofen, N. 2015. That's a good one! The role of metamemory belief in strategy efficacy during memory development. *J Exptl Child Psych* 136: 17-29. [Epub 2015 Apr 5]. doi: 10.1016/j.jecp.2015.02.008

Daugherty AM, Yu Q, Flinn R, Ofen N. 2015. A reliable and valid method for manual demarcation of hippocampus head, body and tail. *Int. J Child Dev* 41: 115-22. [Epub 2015 Feb 7]. doi: 10.1016/j.ijdevneu.2015.02.001

Sethi SK, Utraiainen D, **Daugherty AM**, Feng W, Hewett JJ, Raz N, Haacke EM. 2015. Jugular venous flow abnormalities in multiple sclerosis patients compared to normal controls. *J Neuroimaging* 25(4): 600-7. [Epub 2014 Oct 15]. doi: 10.1111/jon.12183.

- Raz N, **Daugherty AM**, Bender AR, Dahle CL, Land S. 2015. Volume of the hippocampal subfields in healthy adults: Differential associations with age and a pro-inflammatory genetic variant. *Brain Struct Funct* 220(5): 2663-74. [Epub 2014 Jun 20]. doi: 10.1007/s00429-014-0817-6.
- Daugherty AM**, Yuan P, Dahle CL, Bender AR, Yang Y, Raz N. 2015. Path complexity in virtual water maze navigation: Differential associations with age, sex, and regional brain volume. *Cer Cor.*25(9): 3122-31. [Epub 2104 May 23]. doi: 10.1093/cercor/bhu107.
- Yushkevich P, Amaral RS, Augustinack JC, Bender AR, Bernstein JD, Boccardi M, Bocchetta M, Burggren AC, Carr VA, Chakravarty MM, Chetelat G, **Daugherty AM** ... Zenieh MM. 2015. Quantitative comparison of 21 protocols for labeling hippocampal subfields and parahippocampal cortical subregions in in vivo MRI: Towards developing a harmonized segmentation protocol. *NeuroImage* 111: 526-541. [Epub 2015 Jan 14]. doi: 10.1016/j.neuroimage.2015.01.004
- 2014 Persson N, Ghisletta P, Dahle CL, Bender AR, Yang Y, Yuan P, **Daugherty AM**, Raz N. 2014. Regional brain shrinkage over two years: Individual differences and effects of pro-inflammatory genetic polymorphisms. *NeuroImage* 103: 334-48. [Epub 2014 Sep 28]. doi: 10.1016/j.neuroimage.2014.09.042
- Adamo DE, **Daugherty AM**, Raz N. 2014. Grasp force matching and brain iron content estimated in vivo in older women. *Brain Imag Behav.* 8(4): 579-87. doi: 10.1007/s11682-013-9284-6.
- Yuan P, **Daugherty AM**, Raz N. 2014. Turning bias in virtual navigation: Age-related differences and neuroanatomical correlates. *Biol Psychol.* 96C: 8-19. [Epub 2013 Nov 2]. doi: 10.1016/j.biopsycho.2013.10.009
- 2013 Bender AR, **Daugherty AM**, Raz N. 2013. Vascular risk moderates associations between hippocampal subfield volumes and memory. *J Cog Neuro.* 25(1): 1851-1862. [Epub 2013 Jun 14]. doi: 10.1162/jcon_a_00435.
- Daugherty A**, Raz N. 2013. Age-related differences in iron content of subcortical nuclei observed in vivo: A meta-analysis. *NeuroImage.* 70: 113-121. [Epub 2012 Dec 28]. doi:10.1016/j.neuroimage.2012.12.040.
- Rodrigue KM, **Daugherty AM**, Haacke EM, Raz N. 2013. The role of hippocampal iron content and hippocampal volume in age-related differences in memory. *Cer Cor.* 23(7): 1533-41. [Epub 2012 May 29]. doi: 10.1093/cercor/bhs139.

Submitted Manuscripts

- Daugherty AM**, Rubin RD, Sutton BP, Cohen NJ, Barbey AK. Characterizing cerebral microbleed severity from MRI in mild and moderate traumatic brain injury. Under review.
- Foster CM, Kennedy KM, **Daugherty AM**, Rodrigue KM. Influence of iron and beta-amyloid deposition on entorhinal cortex and hippocampal subfield volumes morphometry in the aging brain. In revision.
- Wisse LEM, Chetelat G, **Daugherty AM**, De Flores R, LaJoie R, Mueller S, Shinohara R, Stark C, Wang L, Yushkevich P, Olsen R, Carr V. Best practices for hippocampal subfields research using structural MRI. In revision.
- Tang L, Pruitt PJ, Yu Q, Homayouni R, **Daugherty AM**, Damoiseaux JS, Ofen N. Differential Functional Connectivity in Anterior and Posterior Hippocampus Supporting Memory Development. In revision.
- Golja K, **Daugherty AM**, Kavcic V. Cognitive reserve and depression predict subjective reports of successful aging. In revision.

PROFESSIONAL RESEARCH PRESENTATION

Invited Talks

- Daugherty AM.** 11/2018. Hippocampal Subfield Segmentation: Updates from the Harmonization Effort. Chair and speaker, pre-meeting Society for Neuroscience.
- Daugherty AM,** Burzynska AZ, Ehlers D, Awick E, Fanning J, Voss M, McAuley E, Kramer AF. 06/2018. Neural correlates of aerobic exercise benefits to episodic memory function: A randomized control intervention study in older adults. Invited talk, International Society for Behavioral Neuroscience Annual Meeting.
- Daugherty AM.** 10/2018. Promises and limitations of brain iron as a biomarker of neural cognitive decline. Invited talk, Neurology Grand Rounds, Wayne State University.
- Daugherty AM.** 04/2017. Neural cognitive health risk and protection: Insights from the study of aging and traumatic brain injury. Invited talk, Oklahoma University.
- Daugherty AM,** Burzynska AZ, Ehlers D, Awick E, Fanning J, Voss M, McAuley E, Kramer AF. 01/2017. Neural correlates of aerobic exercise benefits to episodic memory function: A randomized control intervention study in older adults. Invited talk, Dallas Aging and Cognition Conference.
- Daugherty AM,** invited nanosymposium co-chair. 11/2016. “Medial Temporal Lobe Subregion Imaging in Normal and Pathological Memory”, Society for Neuroscience annual meeting.
- Daugherty AM,** Bender AR, Yu Q, Shafer AT, Arshad M, Ofen N, Raz N. 11/2016. Advanced age, vascular risk and inflammation exacerbate differential shrinkage of hippocampal subfields in healthy adults: a two-year longitudinal study. Selected nanosymposium oral presentation at Society for Neuroscience annual meeting.
- Daugherty AM.** 11/2016. Subfields within the hippocampal body: Inner boundary definitions update. Invited talk, Hippocampal Subfield Segmentation Retreat, HS4.
- Daugherty AM,** invited moderator. 11/2016. A harmonized protocol for hippocampal subfield segmentation on MRI: What we’ve accomplished and next steps.
- Daugherty AM.** 09/2016. Brain iron accumulation as a biomarker of impending neural and cognitive decline in aging. Invited talk, Cognitive Neuroscience Lecture Series, University of Illinois at Urbana-Champaign.
- Daugherty AM.** 09.2016. Health factors and behaviors that shape neural and cognitive aging. Invited talk, Beckman Postdoctoral Fellows lunch, University of Illinois at Urbana-Champaign.
- Daugherty AM.** 05/2016. Hippocampal subfields: Measurement and cognitive correlates. Invited talk, Neuroimaging of Aging and Cognition Laboratory, UT Dallas.
- Daugherty AM.** 10/2015. Hippocampal body ranging on high-resolution images: Definitions and reliability. Invited talk, Hippocampal Subfield Boundary Retreat.
- Daugherty AM,** Raz N. 11/2014. Longitudinal iron accumulation is associated with regional brain shrinkage. Selected nanosymposium oral presentation at Society for Neuroscience Annual Conference.

Conference Posters (Selected Abstracts)

- Daugherty AM,** Raz N. 10/2015. Iron accumulation over 7 years in the striatum predicts its shrinkage in healthy adults. Poster presentation, Society for Neuroscience annual meeting.
- Wisse LEM, **Daugherty AM,** La Joie R, Insausti R, Yassa MA, Carr VA, Kerchner GA, Mueller SG, Stark CE,

Wang PA, Yushkevich, Hippocampal Subfields Group. 07/2015. Towards a harmonized protocol for hippocampal subfield segmentation: an update. Poster presentation, Alzheimer's Association International Conference.

Daugherty AM, Bender AR, Tang L, Raz N, Ofen N. 06/2014. Differential age-related decrease in hippocampal subfield volume from childhood to late adulthood. Poster presentation, Organization for Human Brain Mapping annual meeting.

Daugherty AM, Raz N. 04/2014. Longitudinal changes in spatial navigation performance across the adult lifespan. Poster presentation, Cognitive Aging Conference biennial meeting.

Daugherty AM, Yuan P, Dahle C, Bender AR, Yang Y, Raz N. 04/2014. Path complexity in virtual water maze navigation: differential associations with age, sex, and regional brain volume. Poster presentation, Cognitive Neuroscience Society annual meeting.

Daugherty AM, Ofen N. 11/2013. Developmental differences in hippocampal dentate gyrus account for improvement in associative memory. Poster presentation, Society for Neuroscience annual meeting.

Raz N, **Daugherty AM**, Bender AR. 11/2013. Hippocampal volume in healthy adults: Age differences and the effects of genetic and physiological pro-inflammatory markers. Poster presentation, Society for Neuroscience annual meeting.

Adamo DE, **Daugherty AM**, Raz N. 07/2013. Increased iron content in the basal ganglia is associated with grasp-force matching. Poster presentation, Progress in Motor Control IX.

Bender AR, **Daugherty AM**, Raz N. 04/2013. Magnitude of practice effects in associative memory is related to the volume of CA3/4-Dentate gyrus in healthy middle-aged and older adults. Poster presentation, Cognitive Neuroscience Society annual meeting.

AWARDS AND HONORS

Paper Recognition and Honors

2018 Top 20 Most Cited Article in *Hippocampus* in 2018
 Top 20 Most Downloaded Article in *Hippocampus* in 2018
 "A harmonized segmentation protocol for hippocampal and parahippocampal subregions: Why do we need one and what are the key goals?"

Monetary Paper and Poster Presentation Awards

2014 Julie A. Thomas Memorial Research Award
 2013 Elizabeth Olson Memorial Paper Award
 Julie A Thomas Memorial Research Award
 2012 Steven A. Lewis Memorial Research Award

Travel Awards

2014 Gwen Hussa Shafer Memorial Travel Award

TEACHING EXPERIENCE

Instructor of Record Student evaluation reports available upon request

- 2018- Applied Multivariate Methods in Psychology (graduate seminar)
Instructor, Independent Lecture with Laboratory
Department of Psychology, Wayne State University, Detroit, MI
- 2015 Socio-Emotional Changes in Aging (undergraduate seminar)
Instructor, Independent Lecture
Family Life Services Department, Concordia University, Ann Arbor MI
- 2010 Brain and Behavior (undergraduate, upper division)
Instructor, Independent Lecture
Psychology Department, Wayne State University, Detroit MI
- 2008-09 Introductory Psychology, Laboratory Section (undergraduate)
Instructor, Lecture and Laboratory
Psychology Department, Wayne State University, Detroit MI

Contributing Lecturer

- 2019- Fundamentals of Neuropsychiatric Disorders (graduate seminar)
Contributing Instructor, topics in cognitive assessment and dementia
Department of Psychiatry, Wayne State University, Detroit, MI
- 2018- Fundamentals of Neuroimaging (graduate seminar)
Contributing Instructor, topics in aging
Department of Psychiatry, Wayne State University, Detroit, MI

Seminar / Workshop

- 2019 Topics in SEM: Applications to Cognitive Neuroscience in Development and Aging
Lead Instructor; 5-part series for graduate students, post-doctoral fellows and faculty
Research Design and Analysis Consulting, Wayne State University, Detroit, MI
- 2016-17 Latent Modeling Seminar (advanced graduate, weekly meetings)
Instructor, topics in structural equation modeling and longitudinal methods
Beckman Institute, University of Illinois Urbana-Champaign, Urbana, IL

Invited Guest Lectures

- 2018 Neural Correlates of Personality (graduate seminar)
Psychology Department, Eastern Michigan University, Ypsilanti MI
- 2017 Metals in Your Head: Iron in Brain Aging (undergraduate seminar)
Psychology Department, Oklahoma University, Norman OK
- 2016 Neural Correlates of Personality (graduate seminar)
Psychology Department, Eastern Michigan University, Ypsilanti MI
- 2015 Neuropsychology: Past and Current Perspectives (undergraduate)
Psychology Department, St. Benedict's College St. John's University, Saint Cloud MN
- 2014 Spatial Navigation Processes and Neural Correlates (graduate seminar)
Psychology Department, Wayne State University, Detroit MI
- Cognitive Aging and Dementia (graduate seminar)
Physical Therapy, Eugene Applebaum College of Pharmacy & Health Services, Detroit MI

- 2013 Multiple Regression; Mediation Analyses; Statistics for Small Samples
Cognitive and Brain Development Laboratory, Wayne State University, Detroit MI
Cognitive Aging and Dementia (graduate seminar)
Physical Therapy, Eugene Applebaum College of Pharmacy & Health Services, Detroit MI
- 2012 The Two Phases of Iron across the Lifespan
Social Cognitive Affective Neuroscience Laboratory, Wayne State University, Detroit MI
Cognitive Aging and Dementia (graduate seminar)
Physical Therapy, Eugene Applebaum College of Pharmacy & Health Services, Detroit MI

Lectures Certified for Continuing Education Units

- 2020 Lifestyle Interventions for Cognitive Decline
1.5 hours Certified CE, National Nursing and Michigan Social Work Associations
- 2015 Cognitive Function as We Age
1.5 hours Certified CE, National Nursing and Michigan Social Work Associations
- 2013 Memory Function as We Age
1.5 hours Certified CE, National Nursing and Michigan Social Work Associations
- 2012 Biological and Lifestyle Factors that Affect Cognition
1.5 hours Certified CE, National Nursing and Michigan Social Work Associations

Community Education Talks

- 2015 I Can't Remember, Can You? (Waltonwood Retirement Community, Novi, MI)
- 2014 Healthy Habits for Memory (Healthy Black Elders, Detroit, MI)
I Can't Remember, Can You? (Senior Outreach Center, Grosse Pointe Farms, MI)
- 2013 Keeping the Memories Golden (St. Fabien's Catholic Parish Elders, Farmington Hills, MI)
Thanks for the Memories (Art of Aging Conference)
- 2012 Learn How Your Memory Works and Healthy Habits to Maintain It (Retired School Admin, MI)
Why Can't I Remember Like I Used To? (MI Association Retired School Personnel)
Antioxidants, Brain Health and Cognitive Function (City of Bloomfield Hills, MI)
Cognitive Abilities as We Age (Brighthouse, Grosse Pointe Memorial, MI)
I Can't Remember...Can You? (Waltonwood Retirement Community, Novi, MI)
Promoting Healthy Cognition in the Golden Years (Henry Ford Hospital, Detroit, MI)

MENTORING STUDENTS

Doctoral Thesis Chair

- 2019 Qijing Yu, Psychology (Co-chair)

Graduate Student Mentoring Committees

- 2018-present Qijing Yu, Psychology, Inst. of Gerontology, Wayne State Univ.
Roya Homayouni, Psychology, Inst. of Gerontology, Wayne State Univ.
Erika Squires, Comm. Sci. Disord., Inst. of Gerontology, Wayne State Univ.
- 2016-present Aishwarya Balasubramaniyan, Psychology, Univ. of Illinois Urbana-Champaign
- 2016-2017 Sarah Banducci, Psychology, Univ. of Illinois Urbana-Champaign
- 2013-2015 Dana Anderson, Clinical Psychology, Wayne State Univ.

Graduate Student Thesis and Qualifying Exam Committees

- 2019- Youjin Jung, Psychology, Wayne State Univ.
Jessica Hayes, Psychology, Wayne State Univ.
- 2018- Roya Homayouni, Psychology, Wayne State Univ.
Raymond Viviano, Psychology, Wayne State Univ.
Erin Edwards, Translational Neurosci. Program, Wayne State Univ.
Nicole Zabik, Translational Neurosci. Program, Wayne State Univ.
Jonathan Lynn, Translational Neurosci. Program, Wayne State Univ.

Undergraduate Research * indicates undergraduate presenter

- * Saifullah S, Sutton BP, Daugherty AM. 07/2019. Age-related differences in hippocampal subfield volumes from MRI. Poster presentation at Wayne Med-Direct Summer Research Session.
- * Hect J, Hermez K, Thomason M, Daugherty A. 04/2015. Susceptibility weighted imaging (SWI) study of non-heme iron and brain development in children and adolescents. Poster presentation at Rodney Clark Undergraduate Poster Day. First place poster award.
- Anderson D, * Sam P, Brush D, Daugherty AM, Ofen N. 11/ 2014. Developmental effects in clustering strategies during free recall. Poster presentation at Rodney Clark Undergraduate Poster Day. First place poster award.
- * Flinn RW, Daugherty AM, Ofen N. Nov 2013. Regional differences in hippocampal volumetry are associated with variability in subfields. Poster presentation at Wayne State University Undergraduate Research conference. Second place poster award.
- * Hardwick A, Daugherty AM, Lacey W, Serota R, Stoltman J, Ofen N. May 2013. Use of deep encoding strategies correlates with the development of associative memory. MI Chapter of Society for Neuroscience Annual Meeting.

PROFESSIONAL SERVICE

Ad Hoc Reviewer (since 2014)

Addiction Biology; Behavioral Neuroscience (APA); BMC Neurology; Human Brain Mapping; Frontiers (Editorial board); Hippocampus; J Alzheimer's Disease; J Clin Exp Neuropsych; J Neuroscience; Magnetic Resonance Materials in Physics, Biology and Medicine; Mind, Brain and Education; Neurobiology of Aging; NeuroImage; Neuropsychologia; PLoSOne; Trends Neurosci Educ

International

2019-present Co-Chair, Steering Committee, Hippocampal Subfield Segmentation Group
Elected 2-year term; <http://www.hippocampalsubfields.com/>

2015-2019 Member, Steering Committee, Hippocampal Subfield Segmentation Group

2009-2013 Institutional Representative for Association for Gerontology in Higher Education

University

2018-present Member, Magnetic Resonance Research Facility (MRRF) Pilot Project Review Committee
Faculty, Research Design and Analysis Consulting (RDA)

Department

- 2019-present Member, Translational Neuroscience Program Steering Committee
Co-director, Behavioral and Cognitive Neuroscience Brown Bag Series
- 2018-present Member, Measurement Committee, Psychology Department
- 2019 Judge, Lifespan Alliance Research Day, Institute of Gerontology
Judge, Translational Neuroscience Research Day, School of Medicine
Member, Translational Neuroscience Program Graduate Admissions Committee
- 2015 Judge, Elizabeth Olson Memorial Paper Award Competition
- 2011-2012 Chair, Lifespan Development Brown Bag
Chair, Lifespan Alliance Forum for Statistical Methods
Member, Cognitive Neuroscience Faculty search committee

Local

- 2018-present Virtual Science Classroom Visits, 4th and 5th grade classrooms in under-served communities
- 2016 Guest speaker, Women in Science, University of Illinois Urbana-Champaign
- 2014 Science in the Classroom, University of Liggett (High School)
- 2013 Michigan Brain Day
- 2012 Chair, Careers in Aging event committee
Organization of seasonal Meals-on-Wheels fundraiser with The Senior Alliance
- 2011 Chair, Careers in Aging event committee
Organization of seasonal Meals-on-Wheels fundraiser with The Senior Alliance
- 2010 Michigan Brain Day
Organization of seasonal Meals-on-Wheels fundraiser with The Senior Alliance

PROFESSIONAL MEMBERSHIPS

- International Society of Behavioral Neuroscience, since 2018
Cognitive Neuroscience Society, since 2013
Society for Neuroscience, since 2010