Curriculum Vitae JEROME CARSON SMITH II

NOTARIZATION: I have read the following and certify that this *curriculum vitae* is a current and accurate statement of my professional record.

Signature:

Date: 23 November 2020

PERSONAL INFORMATION

Office:

Department of Kinesiology | School of Public Health | University of Maryland 2351 SPH Building | College Park | MD | 20742-2611 | USA E: <u>carson@umd.edu</u> | P: 301.405.0344 | F: 301.405.5578 | W: <u>www.E4BH.com</u> |

Current Rank: Professor; tenth academic year of University appointment

EDUCATION

- 2000- Postdoctoral Research Fellow
- 2005 NIH F32 NRSA Affective Neuroscience and Psychophysiology University of Florida, Gainesville, FL Department of Clinical and Health Psychology NIMH Center for the Study of Emotion and Attention Co-Advisors: Peter J. Lang, Ph.D., Margaret M. Bradley, Ph.D.
- 1994- Doctor of Philosophy in Exercise Science
- 2000 Concentration: Exercise Psychology University of Georgia, Athens, GA Advisor: Patrick J. O'Connor, Ph.D.
- 1989- Bachelor of Science in Exercise Science
- 1993 Bachelor of Science in Psychology Arizona State University, Tempe, AZ Summa Cum Laude, Double Major

CURRENT APPOINTMENTS

2020- Professor

Department of Kinesiology School of Public Health Director, Exercise for Brain Health Laboratory Director, Cognitive Motor Neuroscience Laboratories Full Member, Neuroscience and Cognitive Science Program Full Member, Maryland Neuroimaging Center Full Member, Brain and Behavior Initiative University of Maryland College Park, MD

WORK EXPERIENCE

- 2014- Associate Professor
- 2020 Department of Kinesiology School of Public Health Director, Exercise for Brain Health Laboratory Director, Cognitive Motor Neuroscience Laboratories Full Member, Neuroscience and Cognitive Science Program Full Member, Maryland Neuroimaging Center Full Member, Brain and Behavior Initiative University of Maryland College Park, MD
- 2011- Assistant Professor
- 2014 Department of Kinesiology School of Public Health Neuroscience and Cognitive Science Program Maryland Neuroimaging Center University of Maryland College Park, MD
- 2010- Assistant Professor
- 2011 Department of Health Sciences, Biomedical Sciences Program College of Health Sciences University of Wisconsin-Milwaukee Milwaukee, WI
- 2005- Assistant Professor
- 2010 Department of Human Movement Sciences College of Health Sciences University of Wisconsin-Milwaukee Milwaukee, WI
- 2000- Post-Doctoral Fellow
- 2005 NIMH Center for the Study of Emotion and Attention Department of Clinical and Health Psychology University of Florida Gainesville, FL
- 1994- Graduate Research and Teaching Assistant
- 2000 Exercise Psychology Laboratory (RA) Exercise Physiology Laboratory (TA) Department of Exercise Science University of Georgia Athens, GA

RESEARCH, SCHOLARLY AND CREATIVE ACTIVITIES

⁺ denotes senior or lead author; [§] denotes student/mentee of Dr. Smith All publications starting 2012 are with University of Maryland affiliation.

Publication Impact: From Google Scholar (Feb 21, 2020): Authorship "h-index" = 26 (26 publications cited 26 or more times; see *Nature* 436:900, 2005) based on 55 publications that appear in Google Scholar. Total Citations = 2,053.

My Bibliography (NCBI): <u>https://www.ncbi.nlm.nih.gov/myncbi/jerome.smith.1/bibliography/public/</u>

ARTICLES IN REFEREED JOURNALS

- 1. Dahal E, Ghammraoui B, Ye M, **Smith JC**, and Badano A (in press). Label-free x-ray estimation of brain amyloid burden. *Scientific Reports*.
- Won J[§], Callow DD[§], Nielson KA, Faroqi-Shah Y, and Smith JC[†] (in press). Cerebellar functional connectivity is associated with verbal fluency improvement after exercise training in older adults. *The Cerebellum*.
- Alfini AJ[§], Weiss LR[§], Won J[§], Michelson CS[§], Simon C[§], Callow DD[§], and Smith JC[†] (in press). Impact
 of exercise on older adults' mood is moderated by sleep and mediated by altered brain connectivity.
 Social, Cognitive, and Affective Neuroscience.
- 4. Won J[§], Alfini AJ[§], Weiss LR[§], Hagberg JM, and **Smith JC**⁺ (in press). Greater semantic memory activation after exercise training cessation in older endurance trained athletes. *Journal of Aging and Physical Activity*.
- Stillman CM, Jakicic J, Rogers R, Alfini AJ, Smith JC, Watt J, Kang C, and Erickson KI (in press). Changes in cerebral perfusion following a 12-month exercise and diet intervention. *Psychophysiology*. <u>https://doi.org/10.1111/psyp.13589</u>
- Callow DD[§], Arnold-Nedimala NA[§], Jordan LS[§], Pena G[§], Won J[§], Woodard JL, and Smith JC⁺ (2020). The mental health benefits of physical activity in older adults survives the COVID-19 pandemic. *American Journal of Geriatric Psychiatry*, 28, 1046-1057. <u>https://doi.org/10.1016/j.jagp.2020.06.024</u>
- Abraham M, Seidenberg M, Woodard JL, Nielson KA, Smith JC, Durgerian S, and Rao SM (2020). Episodic memory and hippocampal volume predict 5-year MCI conversion in healthy APOE ε4 carriers. *Journal of the International Neuropsychological Society, 26*, 733-738. <u>https://doi.org/10.1017/S1355617720000181</u>
- 8. Won J[§], Alfini AJ[§], Weiss LR[§], Nyhuis CC, Spira AP, Callow DD[§], and **Smith JC**[†] (2019). Caudate volume mediates the interaction between total sleep time and executive function after acute exercise in healthy older adults. *Brain Plasticity*, *5*, 69-82. https://doi.org/10.3233/BPL-190087
- Won J[§], Alfini AJ[§], Weiss LR[§], Callow DD[§], and Smith JC⁺ (2019). Brain activation during executive control after acute exercise in older adults. *International Journal of Psychophysiology, 146,* 240-248. https://doi.org/10.1016/j.ijpsycho.2019.10.002
- Weiss LR[§], Venezia AC, and Smith JC⁺ (2019). A Single Bout of Hard RPE-Based Cycling Exercise Increases Salivary Alpha-Amylase. *Physiology & Behavior, 208, 112555.* <u>https://doi.org/10.1016/j.physbeh.2019.05.016</u>
- Won J[§], Alfini AJ[§], Weiss LR[§], Michelson CS[§], Callow DD[§], Ranadive SM, Gentili RJ, and Smith JC⁺ (2019). Semantic memory activation after acute exercise in healthy older adults. *Journal of the International Neuropsychological Society*, 25, 557-568. <u>https://doi.org/10.1017/S1355617719000171</u>
- 12. Ritland BM, Simonelli G, Gentili RJ, **Smith JC**, He X, Balkin TJ, and Hatfield BD (2019). Sleep health and its association with performance and motivation in tactical athletes enrolled in the Reserve Officers' Training Corps. *Sleep Health, 5, 309-314*. <u>https://doi.org/10.1016/j.sleh.2019.01.004</u>
- Ritland BM, Simonelli G, Gentili RJ, Smith JC, He X, Mantua J, Balkin TJ, and Hatfield BD (2019). Effects of sleep extension on cognitive/motor performance and motivation in military tactical athletes. Sleep Medicine, 58, 48-55. <u>https://doi.org/10.1016/j.sleep.2019.03.013</u>
- Alfini AJ[§], Weiss LR[§], Nielson KA, Verber MD, and Smith JC⁺ (2019). Resting cerebral blood flow after exercise training in mild cognitive impairment. *Journal of Alzheimer's Disease*, 67, 671-684. <u>https://doi.org/10.3233/JAD-180728</u>

- Kelly D, Seidenberg M, Durgerian S, Nielson KA, Woodard JL, Smith JC, and Rao SM (2018). Differential 5-Year brain atrophy rates in cognitively declining and stable *APOE*-ε4 elders. *Neuropsychology*, 32(6):647-653. doi: 10.1037/neu0000444
- Progovac AM, Chang Y-F, Chang C-C, Matthews KA, Donohue JM, Scheier MF, Habermann EB, Kuller L, Goveas JS, Chapman BP, Duberstein PR, Messina CR, Weaver KE, Saquib N, Wallace RB, Kaplan RC, Calhoun D, Smith JC, and Tindle HA (2017). Are optimism and cynical hostility associated with smoking cessation in older women? *Annals of Behavioral Medicine*, *51*, 500-510. doi: 10.1007/s12160-016-9873-x
- Kay CD, Seidenberg M, Durgerian S, Woodard JL, Nielson KA, Smith JC, Hazlett KE, Figueroa CM, and Rao SM⁺ (2017). Motor timing intraindividual variability in amnestic mild cognitive impairment and cognitively intact elders at genetic risk for Alzheimer's disease. *Journal of Clinical and Experimental Neuropsychology*, 39, 866-875. doi:<u>10.1080/13803395.2016.1273321</u>
- Chirles TJ[§], Reiter K, Weiss LR[§], Alfini AJ[§], Nielson KA, and Smith JC⁺ (2017). Exercise training and functional connectivity changes in MCI and healthy elders. *Journal of Alzheimer's Disease*, 57, 845-856. doi: 10.3233/JAD-161151, PMID: 28304298
- 19. Won J[§], Wu S, Ji H, **Smith JC**, Park JJ (2017). Executive function and the P300 after treadmill exercise and futsal in college soccer players. *Sports*, 5, 73; doi:10.3390/sports5040073
- Reiter K, Nielson KA, Durgerian S, Woodard JL, Smith JC, Seidenberg M, Kelly DA, and Rao SM (2017). Five-year longitudinal brain volume change in healthy elders at genetic risk for Alzheimer's disease. *Journal of Alzheimer's Disease*, 55, 1363-1377.
- 21. Lancaster MA, Seidenberg M, **Smith JC**, Nielson KA, Woodard JL, Durgerian S, and Rao SM (2016). Diffusion tensor imaging predictors of cognitive decline in healthy older adults. *Journal of the International Neuropsychological Society*, 22, 1005-1015. DOI:10.1017/S1355617716000904
- Alfini AJ[§], Weiss LR[§], Leitner BP[§], Smith TJ[§], Hagberg JM, and Smith JC⁺ (2016). Hippocampal and cerebral blood flow after exercise cessation in master athletes. *Frontiers in Aging Neuroscience, 8*, 184. DOI: 10.3389/fnagi.2016.00184; PMID: <u>27547184</u>; PMCID: <u>PMC4974847</u>
- Smith JC, Lancaster MA, Nielson KA, Woodard JL, Seidenberg M, Durgerian S, Sakaie K, and Rao SM⁺ (2016). Interactive effects of physical activity and *APOE-ε4* on white matter tract diffusivity in healthy elders. *NeuroImage*, 131, 102-112. Special Issue on Neuroplasticity. DOI:10.1016/j.neuroimage.2015.08.007
- Goveas JS, Driscoll I, Espeland MA, Hogan PE, Kesler SR, Manson JE, Rossom RC, Rapp S, Resnick SM, Smith JC, Tindle HA, Yaffe K, Zaslavsky O (2016). Predictors of optimal cognitive aging in 80+ women: The Women's Health Initiative Memory Study. *Journals of Gerontology Series A: Biological Sciences and Medical Sciences, 71*, S62-S71. DOI:10.1093/gerona/glv055
- 25. Smith JC, Erickson KI, and Rao SM (2015). Introduction to the JINS Special Issue: Physical Activity and Brain Plasticity. *Journal of the International Neuropsychological Society, 21*, 743-744. Invited Editorial for the Special Issue: Physical Activity and Brain Plasticity. DOI:10.1017/S1355617715001149
- 26. Reiter K, Nielson KA, Smith TJ[§], Weiss LR[§], Alfini AJ[§], and Smith JC⁺ (2015). Increased cardiorespiratory fitness is associated with increased cortical thickness in MCI. *Journal of the International Neuropsychological Society, 21,* 757-767. Special Issue: Physical Activity and Brain Plasticity. DOI: 10.1017/S135561771500079X
- Rao SM[†], Bonner-Jackson A, Nielson KA, Seidenberg M, Smith JC, Woodard JL, and Durgerian S (2015). Genetic risk for Alzheimer's disease alters the five-year trajectory of semantic memory activation in cognitively intact elders. *NeuroImage*, *111*, 136-146.
 <u>DOI:10.1016/j.neuroimage.2015.02.011</u>
- Kauffman DC[§], Clark JF, and Smith JC[†] (2015). The influence of sport goggles on visual target detection in female intercollegiate athletes. *Journal of Sports Sciences*, 33, 1117-1123. DOI: 10.1080/02640414.2014.987156
- Vaughn L, Erickson KI, Espeland MA, Smith JC, Tindle H, and Rapp SR⁺ (2014). Concurrent and longitudinal relationships between cognitive activity, cognitive performance, and brain volume in older women. *Journals of Gerontology: Psychological Sciences, 69(6)*, 826-836. DOI:10.1093/geronb/gbu109
- 30. **Smith JC**, Nielson KA, Woodard JL, Seidenberg M, Durgerian S, Hazlett KE, Figueroa CM, Kandah CC, Kay CD, Matthews MA, and Rao SM⁺ (2014). Physical activity reduces hippocampal atrophy in

elders at genetic risk for Alzheimer's disease. *Frontiers in Aging Neuroscience, 6 (61), 1-7.* DOI:10.3389/fnagi.2014.00061

- Sugarman M, Woodard JL, Nielson KA, Seidenberg M, Smith JC, Durgerian S, Norman AL, Matthews MA, Lancaster MA, Hazlett KE, Figueroa CM, Kay CD, Kandah CC, and Rao SM⁺ (2014). Performance variability during a multitrial list-learning task as a predictor of future cognitive decline in healthy elders. *Journal of Clinical and Experimental Neuropsychology, 36,* 236-243. DOI: 10.1080/13803395.2013.877875
- Smith JC⁺, Nielson KA, Antuono P, Lyons J-A, Hanson RJ[§], Butts AM, Hantke N, and Verber MD (2013). Semantic memory fMRI and cognitive function after exercise intervention in mild cognitive impairment. *Journal of Alzheimer's Disease*, *37*, 197-215. DOI: 10.3233/JAD-130467; PMC4643948.
- Smith JC⁺ (2013). Effects of emotional exposure on state anxiety after acute exercise. Medicine and Science in Sports and Exercise, 45, 372-378. DOI: 10.1249/MSS.0b013e31826d5ce5
- Smith JC⁺, Nielson KA, Woodard JL, Seidenberg M, and Rao SM (2013). Physical activity and brain function in older adults at increased risk for Alzheimer's disease. *Brain Sciences*, *3*, 54-83. DOI: 10.3390/brainsci3010054. Invited review, special issue: Exercise and Brain Function.
- Hantke N, Nielson KA, Woodard JL, Guidotti L, Butts AM, Seidenberg M, Smith JC, Durgerian S, Lancaster M, Matthews M, Sugarman MA, and Rao SM⁺ (2013). Comparison of semantic and episodic memory BOLD fMRI activation in predicting cognitive decline in older adults. *Journal of the International Neuropsychological Society, 19,* 11-22. DOI:10.1017/S1355617712000951. PMCID: PMC3584558
- Seidenberg M, Guidotti L, Woodard JL, Nielson KA, Smith JC, Lancaster MA, Matthews M, Hantke NC, Butts AM, and Rao SM⁺ (2013). Recognition of famous names predicts cognitive decline in healthy elders. *Neuropsychology*, 27, 333-342. DOI: 10.1037/a0032226
- 37. Woodard JL, Nielson KA, Sugarman M, Smith JC, Seidenberg M, Durgerian S, Butts AM, Hantke NC, Lancaster MA, and Rao SM⁺ (2012). Lifestyle and genetic contributions to cognitive decline and hippocampal integrity in healthy aging. *Current Alzheimer Research*, *9*, 436-446. PMCID:PMC3584642
- Sugarman M, Woodard JL, Nielson KA, Seidenberg M, Smith JC, Durgerian S, and Rao SM⁺ (2012). Functional magnetic resonance imaging of semantic memory as a presymptomatic biomarker of Alzheimer's disease risk. *Biochimica et Biophysica Acta - Molecular Basis of Disease, 1822*, 442-456. Invited review, special issue: Imaging Brain Aging and Neurodegenerative Disease. DOI:10.1016/j.bbadis.2011.09.016
- Keil A, Costa V, Smith JC, Sabatinelli D, McGinnins EM, Bradley MM, and Lang PJ⁺ (2012). Tagging cortical networks in emotion: a topographical analysis. *Human Brain Mapping*, *33(12)*, 2920-2931. DOI: 10.1002/hbm.21413.
- Smith JC, Nielson KA, Woodard JL, Antuono P, Seidenberg M, Durgerian S, Verber MD, Butts AM, Hantke NC, Lancaster MA, and Rao SM[†] (2011). Does physical activity influence semantic memory activation in amnestic mild cognitive impairment? *Psychiatry Research: Neuroimaging, 193,* 60-62. DOI: 10.1016/j.pscychresns.2011.04.001. PMCID: <u>PMC3105157</u>
- 41. Smith JC, Nielson KA, Woodard JL, Seidenberg M, Durgerian S, Antuono P, Butts A, Hantke N, Lancaster MA, and Rao SM⁺ (2011). Interactive effects of physical activity and APOE-ε4 on BOLD semantic memory activation in healthy elderly. *NeuroImage*, *54*, 635-644. Doi: 10.1016/j.neuroimage.2010.07.070
- 42. Shields MR[§], Larson CL, Swartz AM, and **Smith JC**⁺ (2011). Visual threat detection during moderate and high intensity exercise. *Emotion, 11*, 572-581. DOI: 10.1037/a0021251
- Tian Q[§] and Smith JC⁺ (2011). Attentional bias to emotional stimuli is altered during moderate but not high intensity exercise. *Emotion*, *11*, 1415-1424. DOI: <u>10.1037/a0023568</u>.
- 44. Woodard JL, Seidenberg M, Nielson KA, **Smith JC**, Antuono P, Durgerian S, Guidotti L, Zhang Q, Butts A, Hantke N, Lancaster M, and Rao SM⁺ (2010). Prediction of cognitive decline in healthy older adults using fMRI. *Journal of Alzheimer's Disease, 21,* 871-885. DOI:10.3233/JAD-2010-091693.
- 45. Smith JC⁺, Paulson ES, Cook DB, Verber M, and Tian Q[§] (2010). Detecting changes in human cerebral blood flow after acute exercise using arterial spin labeling: Implications for fMRI. *Journal of Neuroscience Methods*, 191, 258-262. DOI:10.1016/j.jneumeth.2010.06.028
- 46. Smith JC⁺, Zalewski KR, Motl RW, Van Hart M, Malzahn JT (2010). The contributions of self-efficacy, trait anxiety, and fear of falling to physical activity behavior among residents of continuing care retirement communities. *Ageing Research, 2,* e3. DOI:10.4081/ar.2010.e4.

- Zalewski KR⁺, Smith JC, Malzahn J, VanHart M, and O'Connell D (2009). Measures of physical ability are unrelated to objectively measured physical activity behavior in older adults residing in continuing care retirement communities. *Archives of Physical Medicine and Rehabilitation*, 90, 982-986. DOI: 10.1016/j.apmr.2008.12.013
- 48. Löw A, Lang PJ⁺, **Smith JC**, and Bradley MM (2008). Both predator and prey: Emotional arousal in threat and reward. *Psychological Science*, *19*, 865-873. DOI: 10.1111/j.1467-9280.2008.02170.x
- 49. Keil A, **Smith JC**, Wangelin B, Bradley MM, Sabatinelli D, and Lang PJ⁺ (2008). Electrocortical and electrodermal responses co-vary as a function of emotional arousal: A single-trial analysis. *Psychophysiology*, *45*, 516-523. DOI: 10.1111/j.1469-8986.2008.00667.x
- Crabbe JB, Smith JC, and Dishman RK⁺ (2007). Emotional & electroencephalographic responses during affective picture viewing after exercise. *Physiology and Behavior, 90,* 394-404. DOI: 10.1016/j.physbeh.2006.10.001
- 51. **Smith JC**, Löw A, Bradley MM, and Lang PJ⁺ (2006). Rapid picture presentation and affective engagement. *Emotion, 6,* 208-214. DOI: 10.1037/1528-3542.6.2.208
- Smith JC, Bradley MM and Lang PJ⁺ (2005). State anxiety and affective physiology: Effects of sustained exposure to affective pictures. *Biological Psychology*, 69, 247-260. DOI: 10.1016/j.biopsycho.2004.09.001
- 53. Smith JC⁺ and Cook DB (2005). Methodology in psychophysiological studies of physical activity. International Journal of Sport and Exercise Psychology, 3, 534-553. Invited review for special issue, "Five Decades of Sport and Exercise Psychology: A Festschrift for William P. Morgan".
- 54. **Smith JC**⁺ and Motl RW (2005). Electromyographic indices of neuromuscular reflexes. *International Journal of Sport and Exercise Psychology, 3*, 322-337. Invited review.
- 55. Smith JC⁺ and O'Connor PJ (2003). Physical activity does not disturb the measurement of startle and corrugator responses during affective picture viewing. *Biological Psychology*, 63(3), 293-310. DOI: 10.1016/S0301-0511(03)00072-3
- Smith JC⁺, O'Connor PJ, Crabbe JB, and Dishman, RK (2002). Emotional responsiveness after lowand moderate-intensity exercise and seated rest. *Medicine and Science in Sports and Exercise*, 34(7), 1158-1167.
- Homa D⁺, Smith C, Macak C, Johovich J, and Osorio D (2001). Recognition of facial prototypes: The importance of categorical structure and degree of learning. *Journal of Memory and Language, 44*, 443-474. DOI: 10.1006/jmla.2000.2723
- 58. **Smith JC**⁺ and Crabbe JB (2000). Emotion and exercise. *International Journal of Sport Psychology*, *31*, 156-174. Invited review.
- O'Connor PJ⁺, Smith JC, and Morgan WP (2000). Physical activity does not provoke panic attacks in patients with panic disorder: A review of the evidence. *Anxiety, Stress, and Coping, 13*, 333-353. Review. DOI: 10.1080/10615800008248340
- 60. O'Connor PJ⁺ and **Smith JC** (1999). Using mood to optimize endurance training and prevent staleness. *Vlaams tijdschrift voor Sportgeneeskunde and Sportwetenschappen (Flemish Journal of Sportsmedicine and Sportscience)*, 80(3), 14-19. Invited review.
- 61. Cook DB, O'Connor PJ⁺, Eubanks S, **Smith JC**, and Lee M (1997). Naturally occurring muscle pain during exercise: Assessment and experimental evidence. *Medicine and Science in Sports and Exercise*, 29, 999-1012. DOI: 10.1097/00005768-199708000-00004
- Homa D⁺, Goldhardt B, Burruel-Homa L, and Smith JC (1993). The influence of manipulated category knowledge on prototype classification and recognition. *Memory and Cognition, 21*, 529-538. DOI: 10.3758/BF03197184

BOOK CHAPTERS (peer reviewed)

- 63. Smith JC⁺, Alfini AJ[§], Smith TM[§], and Weiss LR[§] (2015). The role of physical activity for brain health through Alzheimer's disease progression. In L Li (Ed.), *Therapeutic Physical Activities*, Nova Science Publishers, Inc., New York.
- 64. **Smith JC**⁺ (2014). Affective Disorders. In RC Eklund and G Tenenbaum (Eds), *Encyclopedia of Sport and Exercise Psychology*, pp. 18-19, Los Angeles: SAGE.
- 65. **Smith JC**⁺ (2014). Neuroscience, Exercise, and Cognitive Function. In RC Eklund and G Tenenbaum (Eds), *Encyclopedia of Sport and Exercise Psychology*, pp. 501-504, Los Angeles: SAGE.

66. O'Connor PJ⁺ and **Smith JC** (1999). Physical activity and eating disorders. In JM Rippe (Ed.), *Lifestyle Medicine*. Blackwell Scientific Publications, Boston, 1005-1115.

INVITED PRESENTATIONS

- 1. **Smith JC** (2020). Acute Exercise Promotes Engagement of Executive Control and Memory Networks. Invited symposium presentation, Exercise and Cognitive Aging: Key Mechanisms and Moderators. The Cognitive Aging Conference, Atlanta, GA.
- 2. **Smith JC** (2019). Acute Exercise and Brain Health. Invited symposium presentation. Leo and Anne Albert Scientific Symposium: Understanding the Acute Effects of Exercise on the Brain. Scottsdale, AZ.
- 3. Smith JC (2019). Acute exercise, sleep, and cognition in older adults. Invited symposium presentation at the Annual Meeting of the American College of Sports Medicine and the World Congress on Exercise and Sleep, Orlando, FL. *Medicine and Science in Sports and Exercise, 51 (5, Suppl).*
- 4. **Smith JC** (2018). Physical activity and exercise training for Alzheimer's disease prevention. Invited Keynote Address, University of Wyoming College of Health Sciences Research Day, April 5, 2018, Laramie WY.
- Smith JC (2017). Physical activity and brain plasticity with increased risk for Alzheimer's disease. Invited symposium presentation at the Annual Meeting of the American College of Sports Medicine and the World Congress on Exercise and the Brain, Denver, CO. *Medicine and Science in Sports and Exercise, 49 (5, Suppl).*
- 6. **Smith JC** (2016). The Neuroprotective Effects of Exercise with Increased Risk for Alzheimer's Disease. Invited symposium presentation at the Annual Meeting of the Society for Psychophysiological Research, Minneapolis, MN.
- Smith JC (2015). Physical Activity, Neural Plasticity, and Risk for Alzheimer's Disease. Invited symposium presentation at the Annual Meeting of the American College or Sports Medicine, San Diego, CA.
- Smith JC (2015). Exercise and Physical Activity Along the Alzheimer's Risk Continuum. Invited symposium presentation at the International Neuropsychological Society 43rd Annual Meeting, Denver, CO.
- Smith JC and Nielson KA (2013). Exercise and brain function with increased risk for AD. Gerontologist, 53, 539. Invited symposium presentation, "VA GRECC Symposium: Ischemia and Exercise in the Pathogenesis and Treatment of Cognitive Decline". Annual Meeting of the Gerontological Society of America, New Orleans, LA.
- 10. **Smith JC** (2013). Exercise and brain function with increased risk for Alzheimer's Disease. *Medicine and Science in Sports and Exercise, 44 (5, Suppl)*. Invited symposium presentation at the Annual Meeting of the American College or Sports Medicine, Indianaopilis, IN.
- Smith JC (2013). The neuro-protective effects of exercise in older adults at increased risk for Alzheimer's disease. Invited symposium presentation at the Annual Meeting of the Society for Brain Mapping and Therapeutics, Baltimore, MD.
- 12. Smith JC, Nielson KA, Woodard JL, Seidenberg M, Durgerian S, Hantke N, Lancaster MA, Matthews MA, Sugarman M, Figueroa C, Hazlett K, Kay C, Norman A, Kandah C, and Rao S.M. (2013). Longitudinal associations between physical activity, cognitive decline, and hippocampal volume in healthy APOE-e4 carriers. *Journal of the International Neuropsychological Society*, *19*, Suppl 1, 64. Invited presentation at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa HI.
- Smith JC, Verber MD, Nielson KA, Antuono P, Hanson RJ, Mattes, AJ, Butts AM and Hantke NC (2011). Effects of walking exercise on white matter integrity in amnestic mild cognitive impairment. *Journal of the International Neuropsychological Society, 17*, Suppl 1, 30. Invited presentation at the 39th Annual Meeting of the International Neuropsychological Society, Boston, MA.
- Smith JC (2011). Multi-Modal MR Imaging. Invited Symposium Presentation, Exercise and the Brain -Current Approaches in Human Neurophysiology. The 58th Annual Meeting of the American College of Sports Medicine in Denver, CO.
- 15. **Smith JC** (2010). Exercise and brain health. Invited presentation at the Center for BrainHealth, Department of Psychological Sciences, University of Texas, Dallas, TX.
- 16. Smith JC (2007). Exercise and the emotional brain. Invited presentation at the Department of

Kinesiology Seminar, University of Illinois at Urbana-Champaign.

- 17. Smith JC (2006). Physical activity, negative affect, and the reflex physiology of emotion. Medicine and Science in Sports and Exercise, 38 (5, Suppl 1), S62. Featured Science Session presentation at the 53st Annual Meeting of the American College of Sports Medicine, Denver, CO.
- Smith JC, Bradley MM, and Lang PJ (2004). Sustained exposure to emotional pictures: effects of mood state. Invited Symposium presentation at the 38th Annual Meeting of the Association for the Advancement of Behavior Therapy in New Orleans, LA.
- Smith JC (2004). Invited Discussant for Invited Symposium, Psychophysiology of Emotional Processing: The Influence of Individual Differences, The 38th Annual Meeting of the Association for the Advancement of Behavioral Therapy, New Orleans, LA.

INVITED LOCAL PRESENTATIONS

- 1. **Smith JC** (2019). Exercise Interventions for Alzheimer's Disease. Invited presentation at Johns' Hopkins University, Alzheimer's Disease Research Center.
- 2. **Smith JC** (2019). Exercise and brain health. Invited presentation at the University of Maryland School of Medicine, Baltimore, MD.
- 3. **Smith JC** (2019). Exercise and brain health. Invited presentation at the Howard County Health Department, Columbia, MD.
- 4. **Smith JC** (2015). The Profits of Exercise with Increased Risk for AD. Invited presentation at the Johns Hopkins University Dementia Consortium, Baltimore, MD.
- 5. **Smith JC** (2015). The Role of Exercise in the Fight Against Alzheimer's Disease. Invited presentation at the Alzheimer's Association, Greater Iowa Chapter Annual Meeting, Altoona, IA.
- 6. **Smith JC** (2014). Exercise and Healthy Brain Aging. Panel presentation at the Public Health Research@Maryland Day, College, Park, MD.
- 7. **Smith JC** (2014). Exercise and Alzheimer's Disease. Presentation at the UMD Counseling Center, College Park, MD.
- 8. **Smith JC** (2011). Exercise and brain health. Invited presentation at the University of Maryland School of Medicine and the Baltimore Veterans Administration, Baltimore, MD.
- 9. **Smith JC** (2010). The role of physical activity in the prevention and treatment of age-related cognitive decline. Invited presentation for the Division of Geriatrics and Gerontology Faculty Seminar Series, Medical College of Wisconsin, Milwaukee, WI.
- 10. **Smith JC** (2010). Physical activity and the prevention and treatment of memory loss. Invited presentation for the Department of Physical Medicine and Rehabilitation, Resident Didactic Series in Geriatric Rehabilitation, Medical College of Wisconsin and the Milwaukee Veterans Administration.
- 11. **Smith JC** (2010). Effects of exercise on brain function in older adults at risk for Alzheimer's disease. Invited presentation at the Imaging Research Center Seminar, Medical College of Wisconsin, Milwaukee, WI.
- 12. **Smith JC** (2010). Effects of exercise on brain function in older adults at risk for Alzheimer's disease. Invited presentation at the Wisconsin Alzheimer's Disease Research Center Seminar Series, University of Wisconsin-Madison.
- Smith JC (2009). Does exercise improve brain function in people at risk for Alzheimer's disease? Invited presentation at the Medical College of Wisconsin Epidemiology Graduate Seminar, Milwaukee, WI.
- 14. **Smith JC** (2007). Exercise, negative affect, and emotion. Invited presentation at the Integrative Neuroscience Program Seminar, Marquette University, Milwaukee, WI.

CHAIRED SYMPOSIA

- 1. **Smith JC** (2017). Physical activity Induced Neuroplasticity. Invited symposium chair at the Annual Meeting of the American College of Sports Medicine, Denver, CO.
- 2. **Smith JC** (2015). Invited Featured Science Session at the Annual Meeting of the American College or Sports Medicine, San Diego, CA. Giving your Brain a Workout: The Impact of Physical Activity on Cognitive Function Across the Lifespan. *Medicine and Science in Sports and Exercise, 45 (5, Suppl).*
- 3. Smith JC (2015). Invited Symposium Session, The International Neuropsychological Society 43rd

Annual Meeting, Denver, CO, USA. Exercise as Brain Medicine: State of the Science.

- 4. **Smith JC** (2013). Invited Symposium Session at the Annual Meeting of the American College or Sports Medicine, Indianapolis, IN. Is Exercise Medicine for Alzheimer's Disease? *Medicine and Science in Sports and Exercise, 44 (5, Suppl).*
- Smith JC (2006). Invited Featured Science Session at the 53rd Annual Meeting of the American College of Sports Medicine, Denver, CO. Physical activity and emotion. *Medicine and Science in* Sports and Exercise, 38 (Suppl 1), S91.

RESEARCH PRESENTATIONS

- Kadey KR, Woodard JL, Smith JC, Nielson KA, Seidenberg M, Durgerian S, and Rao SM (Feb, 2021). Five-Year Change in Body Mass Index Predicts Conversion to Mild Cognitive Impairment or Dementia only in APOE e4 allele Carriers. *Journal of the International Neuropsychological Society*, 26 Suppl 1. Poster presentation at the Annual Meeting of the International Neuropsychological Society, San Diego, CA.
- Jordan LS[§], Woodard JL, Pena G[§], Arnold-Nedimala NA[§], Won J[§], Callow DD[§], and Smith JC⁺ (Nov, 2020). Forward-Focused Coping Predicts Better Mental Health Outcomes in Older Adults During COVID-19 Pandemic. Poster presentation at the Annual Meeting of the Gerontological Society of America.
- Dahal E, Ghammraoui B, Smith JC, and Badano A (Nov, 2020). X-ray estimation of brain amyloid burden in preclinical animal studies. Poster presentation at the Radiological Society of North America, Chicago, IL.
- Montressor-López JA, Reading SR, Yanosky JD, Mittleman MA, Bell RA, Crume TL, Dabelea D, Dolan LM, D'Agostino RB, Marcovina SM, Pihoker C, Reynolds K, Urbina E, Liese AD, Quirós-Alcalá L, Smith JC, and Puett RC (Aug, 2020). The relationship between traffic-related air pollution exposures and allostatic load among youth with type 1 diabetes in the SEARCH cohort. Poster presentation at the International Society for Environmental Epidemiology, Washington DC.
- Callow DD[§], Won J[§], Alfini AJ[§], Purcell JJ, Weiss LR[§], Zhan W, and Smith JC⁺ (May, 2020). Hippocampal Plasticity After Acute Exercise in Older Adults: A Diffusion Tensor Imaging Study. *Medicine and Science in Sports and Exercise, 52 (5, Suppl).* Poster presentation at the Annual Meeting of the American College of Sports Medicine, San Francisco, CA.
- Won J[§], Alfini AJ[§], Weiss LR[§], Hagberg JM, and Smith JC⁺ (May, 2020). Semantic Memory Activation After Training Cessation In Master Athletes. *Medicine and Science in Sports and Exercise, 52 (5, Suppl).* Poster presentation at the Annual Meeting of the American College of Sports Medicine, San Francisco, CA.
- Callow DD[§], Won J[§], Alfini AJ[§], Purcell JJ, Weiss LR[§], Zhan W, and Smith JC[†] (Feb, 2020). Microstructural Plasticity in the Hippocampus of Healthy Older Adults Following Acute Exercise. *Journal of the International Neuropsychological Society*, 25 Suppl 1. Annual Meeting of the International Neuropsychological Society, Denver, CO.
- Katschke JL, Sober JD, Woodard JL, Nielson KA, Seidenberg M, Smith JC, Durgerian S, and Rao SM (August, 2019). Latent learning slope of the Rey Auditory Verbal Learning Test (RAVLT) as an indicator of cognitive decline in older adults. Poster presentation at the American Psychological Association Conference, Chicago, IL.
- 9. Smith JC⁺, Weiss LR[§], Alfini AJ[§], Won J[§], Nyhuis C, Michelson CS[§], Simon C[§], Callow DD[§], and Spira AP (July, 2019). Moderating effects of sleep on exercise-induced changes in default mode network connectivity in healthy older adults. Poster presentation at the Alzheimer's Association International Conference, Los Angeles, CA. (poster withdrawn to due to injury and inability to travel)
- Alfini AJ[§], Weiss LR[§], Won J[§], Nyhuis C, Michelson CS[§], Simon C[§], Callow DD[§], Spira AP, and Smith JC[†](July, 2019). Sleep, aerobic fitness, and regional brain volume among older adults. Poster presentation at the Alzheimer's Association International Conference, Los Angeles, CA.
- 11. Rao SM, Woodard JL, **Smith JC**, Nielson KA, Abraham M, Seidenberg M, Durgerian S (July, 2019). Body mass index predicts conversion to MCI in cognitively intact APOE ε4 carriers. Poster presentation at the Alzheimer's Association International Conference, Los Angeles, CA.
- 12. Won J[§], Alfini AJ[§], Weiss LR[§], Michelson CS[§], Callow DD[§], and **Smith JC**[†] (May, 2019). Semantic memory fMRI in healthy older adults after acute exercise and rest. *Medicine and Science in Sports and*

Exercise, 51 (5, Suppl). Poster presentation at the Annual Meeting of the American College of Sports Medicine, Orlando, FL.

- Weiss LR[§], Alfini AJ[§], Won J[§], Nyhuis C, Michelson CS[§], Simon C[§], Callow DD[§], Spira AP, and Smith JC[†](May, 2019). Association of sleep duration with exercise induced reductions in default mode network connectivity in healthy older adults. *Medicine and Science in Sports and Exercise, 51 (5, Suppl)*. Poster presentation at the Annual Meeting of the American College of Sports Medicine, Orlando, FL.
- 14. Alfini AJ[§], Spira AP, Weiss LR[§], Won J[§], Nyhuis C, Michelson CS[§], Simon C[§], Callow DD[§], and Smith JC[†](May, 2019). Acute exercise alters brain activation in older adults: What is the role of sleep? *Medicine and Science in Sports and Exercise, 51 (5, Suppl).* Poster presentation at the Annual Meeting of the American College of Sports Medicine, Orlando, FL.
- 15. Ritland BM, Simonelli G, Gentili R, Smith JC, He X, Mantua J, Balkin TD, Hatfield BD (May, 2019) Immediate and Residual Effects of Sleep Extension on Performance and Motivation in Tactical Athletes. *Medicine and Science in Sports and Exercise, 51 (5, Suppl).* Poster presentation at the Annual Meeting of the American College of Sports Medicine and the World Congress on the Basic Science of Exercise, Circadian Rhythms and Sleep, Orlando, FL.
- 16. Won J[§], Alfini AJ[§], Weiss LR[§], Michelson CS[§], Callow DD[§], and Smith JC[†] (February, 2019). Impact of acute exercise on semantic memory activation in healthy older adults. *Journal of the International Neuropsychological Society*, 24, Suppl 1. Annual Meeting of the International Neuropsychological Society, New York, NY.
- 17. Woodard JL, Nielson KA, **Smith JC**, Seidenberg M, Durgerian S, and Rao SM (February, 2019). Early Reduction of Auditory Verbal Learning Test Learning Slope in Apolipoprotein E ε4 Carriers with Preclinical Mild Cognitive Impairment. *Journal of the International Neuropsychological Society*, 24, Suppl 1. Annual Meeting of the International Neuropsychological Society, New York, NY.
- 18. Kelly DA, Abraham M, Seidenberg M, Woodard JL, Nielson KA, Smith JC, Durgerian S, and Rao SM (February, 2019). Effect of APOE ε4 Allele and Family History on Five Year Longitudinal MRI Volumes in Cognitively Intact Elders. Journal of the International Neuropsychological Society, 24, Suppl 1. Annual Meeting of the International Neuropsychological Society, New York, NY.
- Abraham M, Seidenberg M, Kelly DA, Woodard JL, Nielson KA, Smith JC, Durgerian S, and Rao SM (February, 2019). Characterizing Cognitively Intact APOE ε4 Carriers Who Subsequently Convert to MCI: A 5-Year Follow-up Study. *Journal of the International Neuropsychological Society*, 24, Suppl 1. Annual Meeting of the International Neuropsychological Society, New York, NY.
- 20. Abraham M, Seidenberg M, Kelly DA, Woodard JL, Nielson KA, Smith JC, Durgerian S, and Rao SM (February, 2019). Category Fluency Performance in Mild Cognitive Impairment and Cognitively Intact ε4 Carriers and Non-Carriers. *Journal of the International Neuropsychological Society*, 24, Suppl 1. Annual Meeting of the International Neuropsychological Society, New York, NY.
- 21. Durgerian S, Nielson KA, Woodard JL, Smith JC, Seidenberg M, and Rao SM (September, 2018). Functional network differences between APOE e4 carriers and non –carriers. Resting State Connectivity Conference, Montreal, Canada.
- 22. Alfini AJ[§], Spira AP, Weiss LR[§], Won J[§], Michelson C[§], Smith JC[†] (June, 2018). Joint impact of sleep duration and acute exercise on executive function in older adults. Presentation at the Annual Meeting of the Associated Professional Sleep Societies, Baltimore, MD.
- 23. Alfini AJ[§], Weiss LR[§], Won J[§], Michelson CS[§], Simon C[§], Callow DD[§], and Smith JC[†] (May, 2018). Decreased Salience Network Functional Connectivity Accompanies Improved Mood After Exercise in Healthy Older Adults. *Medicine and Science in Sports and Exercise, 50 (5, Suppl)*. Oral presentation at the Annual Meeting of the American College of Sports Medicine, Minneapolis, MN.
- 24. Williams AP[§], Ozturk Z, Mirzazadeh T, Faroqi-Shah Y, Nielson KA, and Smith JC[†] (2018). Exercise Training Related Changes in Verbal Fluency in Healthy Older Adults and Mild Cognitive Impairment. *Medicine and Science in Sports and Exercise, 50 (5, Suppl).* Poster presentation at the Annual Meeting of the American College of Sports Medicine, Minneapolis, MN.
- 25. Won J[§], Alfini AJ[§], Weiss LR[§], Michelson CS[§], and Smith JC⁺ (May, 2018). Lasting Effects of Acute Exercise on Working Memory Performance in Older Adults with Good and Poor Sleep. *Medicine and Science in Sports and Exercise, 50 (5, Suppl)*. Poster presentation at the Annual Meeting of the American College of Sports Medicine, Minneapolis, MN.
- 26. Williams AP[§], Ozturk Z, Mirzazadeh T, Faroqi-Shah Y, Nielson KA, and **Smith JC⁺** (May, 2018).

Exercise Training Related Changes in Verbal Fluency in Healthy Older Adults and Mild Cognitive Impairment. Poster presentation at the Cognitive Aging Conference, Atlanta, GA.

- 27. Alfini AJ[§], Weiss LR[§], Won J[§], Michelson CS[§], Simon C[§], Callow DD[§], and Smith JC[†] (February, 2018). Effects of acute exercise on conflict-dependent functional activation in the aging brain. Accepted for presentation at the Annual Meeting of the International Neuropsychological Society, Washington, D.C.
- 28. Chirles TJ[§] and Smith JC⁺ (2018). Functional connectivity patterns associated with aging, physical activity, and genetic risk for Alzheimer's disease. *Journal of the International Neuropsychological Society*, 23, Suppl 1. Poster presentation at the 46th Annual Meeting of the International Neuropsychological Society, Washington, D.C.
- Kalscheur EJ, Abraham M, Seidenberg M, Kandah CC, Woodard JL, Nielson KA, Smith JC, Durgerian S, and Rao SM (2018). *Journal of the International Neuropsychological Society*, 23, Suppl 1. Poster presentation at the 46th Annual Meeting of the International Neuropsychological Society, Washington, D.C.
- 30. Kelly DA, Abraham M, Seidenberg M, Woodard JL, Nielson KA, Smith JC, Durgerian S, and Rao SM (2018). Influence of family history and APOE e4 allele on five year longitudinal memory performance in cognitively intact elders. *Journal of the International Neuropsychological Society*, 23, Suppl 1. Poster presentation at the 46th Annual Meeting of the International Neuropsychological Society, Washington, D.C.
- 31. Weiss LR[§] and Smith JC⁺ (2017). Time-Dependent Effects of Acute Cycling Exercise on Long-Term Emotional Memory and Salivary Alpha-Amylase. *Medicine and Science in Sports and Exercise, 49 (5, Suppl)*. Poster presentation at the annual meeting of the American College of Sports Medicine, Denver, CO.
- 32. Won J[§], Wu S, Kye H, **Smith JC**, and Park J[†] (2017). Different influences of aerobic exercise types on cognitive control of athletes. Poster presentation at the Annual Meeting of the American College of Sports Medicine and the World Congress on Exercise and the Brain, Denver, CO. *Medicine and Science in Sports and Exercise, 49 (5, Suppl).*
- 33. Kay CD, Seidenberg M, Durgerian S, Smith JC, Woodard JL, Nielson KA, Lancaster MA, Matthews MA, Kandah CC, Butts AM, Hantke NC, Hazlett KE, Figueroa CM, Sugarman MA, Norman AL, and Rao SM⁺ (2017). Are measures of intraindividual variability sensitive to the preclinical stage of Alzheimer's disease in elders at genetic risk? *Journal of the International Neuropsychological Society*, 22, Suppl 1. Poster presentation at the 45th Annual Meeting of the International Neuropsychological Society, New Orleans, LA.
- 34. Weiss LR[§] and **Smith JC**⁺ (2016). Time-Dependent Effects of Acute Cycling Exercise on Long-Term Emotional Memory and Salivary α-Amylase. *International Journal of Exercise Science: Conference Proceedings*. Poster presentation at the annual meeting of the Mid-Atlantic Chapter of the American College of Sports Medicine, Harrisburg, PA.
- 35. Weiss LR[§], Alfini AJ[§], Smith TJ[§], and Smith JC[†] (2016). Changes in Blood Oxygen Level-Dependent (BOLD) Response to Affective Picture Viewing After Acute Exercise. *Psychophysiology, 53 (Suppl 1)*. Poster presentation at the Annual Meeting of the Society for Psychophysiological Research, Minneapolis, MN.
- 36. Alfini AJ[§], Weiss LR[§], Reiter K, Smith TJ[§], Nielson KA, and Smith JC⁺ (2016). Exercise Training Alters Resting Cerebral Blood Flow: Implications for MCI and Healthy Older Adults. *Medicine and Science in Sports and Exercise, 48 (5, Suppl)*. Free communication slide presentation at the Annual Meeting of the American College of Sports Medicine, Boston, MA.
- 37. Smith TJ[§], Weiss LR[§], Alfini AJ[§], Reiter K, Nielson KA, and **Smith JC**⁺ (2016). Individuals with MCI exhibit stronger posterior functional connectivity than healthy elders after a 12-week walking intervention. *Medicine and Science in Sports and Exercise, 48 (5, Suppl).* Poster presentation at the Annual Meeting of the American College of Sports Medicine, Boston, MA.
- 38. Smith JC⁺, Leitner B[§], Alfini AJ[§], Weiss LR[§], Smith TJ[§] (2016). Exercise-induced changes in brain activation during a simple motor task: An fMRI study. *Medicine and Science in Sports and Exercise, 48 (5, Suppl)*. Poster presentation at the Annual Meeting of the American College of Sports Medicine, Boston, MA.
- 39. Hoida E, Kelly DA, Song W, Pliskin N, Kandah C, Kay C, Lancaster M, Rao SM, Woodard J L, Nielson KA, **Smith JC**, Durgerian S, Reiter K, Norman A, Sugarman MA, & Seidenberg M (2016). *Semantic Knowledge of Famous Names in AD and Individuals at Genetic Risk for AD.* Poster presented at the

44rd annual meeting of the International Neuropsychological Society, Boston, MA.

- 40. Seidenberg M, Hoida E, Kelly DA, Kandah C, Abraham M, Neale A, Kay C, Lancaster M, Woodard JL, Nielson KA, **Smith JC**, Durgerian S, Sugarman MA, & Rao SM (2016). *Demographic Variables and Performance on a Newly Developed Remote Memory Test of Famous Name Discrimination.* Poster presented at the 44rd annual meeting of the International Neuropsychological Society, Boston, MA.
- 41. Sugarman MA, Seidenberg M, Nielson KA, **Smith JC**, Durgerian S, Rao SM, Gross EZ, Norman AL, & Woodard JL (2016). *The semantic memory imaging in late-life pilot study.* Poster presented at the 44rd annual meeting of the International Neuropsychological Society, Boston, MA.
- 42. Reiter K, Nielson KA, Smith TJ[§], Weiss LR[§], Alfini AJ[§], and **Smith JC**⁺ (2015). Aerobic fitnessassociated increases in cortical thickness in Mild Cognitive Impairment. Poster presentation at the Alzheimer's Association International Conference, Washington, DC.
- 43. Smith TJ[§], Weiss LR[§], Alfini AJ[§], Reiter K, Nielson KA, and Smith JC⁺ (2015). Effects of a 12-week exercise intervention on resting state brain networks in Mild Cognitive Impairment and Healthy Elders. Poster presentation at the Alzheimer's Association International Conference, Washington, DC.
- 44. Alfini AJ[§], Oh H, Weiss LR[§], Smith TJ[§], Leitner BP[§], Toledo R[§], Saheb S[§], Guth LM, Landers-Ramos RQ, Corrigan K, Spangenburg EE, Hagberg JM, and **Smith JC**⁺ (2015). Use it or Lose it: The Effect of Detraining on Cerebral Blood Flow. *Medicine and Science in Sports and Exercise, 47 (5, Suppl).* Feature Science Session Symposium presentation at the Annual Meeting of the American College of Sports Medicine, San Diego, CA.
- 45. Weiss LR[§], Spechler P, Alfini AJ[§], Smith TJ[§], Verber MD and Smith JC[†] (2015). Changes in Blood Oxygen Level-Dependent (BOLD) Response to Affective Picture Viewing After Acute Exercise. *Medicine and Science in Sports and Exercise*, 47 (5, Suppl). Poster presentation at the Annual Meeting of the American College of Sports Medicine, San Diego, CA.
- 46. Alfini AJ[§], Oh H, Weiss LR[§], Smith TJ[§], Leitner BP[§], Toledo R[§], Saheb S[§], Guth LM, Landers-Ramos RQ, Corrigan K, Spangenburg EE, Hagberg JM, and **Smith JC**⁺ (2015). The Effects of Exercise Cessation on Cerebral Blood Flow: An Arterial Spin Labeling Analysis. Poster presentation at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.
- 47. Smith TJ[§], Oh H, Weiss L[§], Alfini A[§], Reiter K, Nielson KA and **Smith JC**⁺ (2015). Effects of a 12-week exercise intervention on Default Mode Network connectivity in MCI and healthy elders. Poster presentation at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.
- 48. Weiss LR[§], Spechler P, Alfini AJ[§], Smith TJ[§], Verber MD and Smith JC⁺ (2015). Changes in Blood Oxygen Level-Dependent (BOLD) Response to Affective Picture Viewing After Acute Exercise. Poster presentation at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.
- 49. Reiter K, Nielson KA, Smith TJ[§], Weiss LR[§], Alfini AJ[§] and Smith JC[†] (2015). Walking intervention increases VO2 peak and cortical thickness in MCI and healthy older adults. Poster presentation at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.
- 50. Gross EZ, Woodard JL, Nielson KA, Seidenberg M, Smith JC, Durgerian S, & Rao SM (2015). Detection of Age- and Alzheimer's Disease Risk-Related Compensatory Strategies Using Ex-Gaussian Response Time Parameter Estimates. Poster presentation at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.
- 51. Kelly D, Hoida E, Kandah C, Kay C, Matthews M, Lancaster MA, Sugarman M, Smith JC, Woodard JL, Nielson KA, Rao SM, Durgerian S, Song W, Pliskin N, Seidenberg M (2015). Semantic Specificity and Memory Age of Famous Names Reflect Progression of Alzheimer's Disease. Paper presented at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.
- 52. Lancaster, MA, Seidenberg M, Durgerian S, Nielson KA, Woodard JL, Smith JC, Stika MM, Butts AM, Hantke NC, Kay CD, Kandah CC Hazlett KE, Figueroa CM, Sugarman MA, Rao SM (2015). *Diffusion Tensor Imaging Predictors of Cognitive Change in Healthy Older Adults.* Poster presentation at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.
- 53. Norman AL, Woodard JL, Nielson KA, Seidenberg M, Smith JC, Durgerian S, Sugarman MA, Rao SM (2015). Baseline Structural MRI Volumes and Five-year Follow-up Neuropsychological Performance in Cognitively-Intact Older Adults. Presented at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.
- 54. Seidenberg M, Kay C, Lancaster MA, Kandah C, Hoida E, Kelly D, Durgerian S, Woodard J, Nielson

KA, **Smith JC**, Rao SM⁺ (2015). *Longitudinal Investigation of Recent and Remote Famous Names in MCI and Healthy.* Presented at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.

- 55. Woodard JL, Sugarman MA, Meyers, K, Gross E, Norman A, Seidenberg M, Nielson KA, **Smith JC**, Reiter K, Rao SM (2015). *A Novel Method for Assessing Behavioral and Neural Correlates of Levels of Semantic Knowledge.* Presented at the International Neuropsychological Society 43rd Annual Meeting, Denver, Colorado, USA.
- 56. Goveas JS, Driscoll I, Espeland MA, Hogan PE, Kesler SR, Manson JE, Rossom RC, Rapp S, Resnick SM, **Smith JC**, Tindle HA, Yaffe K, Zaslavsky O (2014). Predictors of optimal cognitive aging in 80+ women: The Women's Helath Initiative Memory Study. Paper Presentation at the Annual Meeting of the Gerontological Society of America, Washington, DC.
- 57. Stika MA, Seidenberg M, Woodard JL, Nielson KA, **Smith JC**, Durgerian S, Lancaster MA, Kay CD, Kandah C, and Rao SM⁺ (2014). Family History and Genetic Risk Relationships with Episodic Memory and Hippocampal Volume Changes after 18-months in Healthy Older Adults. Poster presentation at the Annual Meeting of the American Academy of Clinical Neuropsychology, New York, NY.
- 58. Smith TJ[§], Keenan TM[§], Ballesteros JL[§], Carey CE[§], Kauffman DC[§], Whitehill EL[§], Leitner BP[§], Alfini AJ[§], Weiss LR[§], and Smith JC[†]. (2014). Changes in attentional bias to emotional faces after varied exercise intensities in women. *Medicine and Science in Sports and Exercise, 46 (5, Suppl)*. Poster presentation at the Annual Meeting of the American College of Sports Medicine, Orlando, FL.
- 59. Weiss LR[§], Smith TJ[§], Hyuk O, Nielson KA, Antuono P, Hanson RJ, Butts AM, Hantke NC, Verber MD, Alfini AJ[§], and Smith JC⁺. (2014). Effects of a 12-week exercise intervention on default mode network connectivity in MCI patients. *Medicine and Science in Sports and Exercise, 46 (5, Suppl)*. Poster presentation at the Annual Meeting of the American College of Sports Medicine, Orlando, FL.
- 60. Alfini AJ[§], Oh H, Weiss LR[§], Leitner BP[§], Smith TJ[§], Eslami K[§], Kauffman DC[§], Saheb S[§], Schiller KH[§], Toledo R[§], and **Smith JC**⁺ (2014). Acute exercise and cerebral blood flow: arterial spin labeling in fMRI analysis. *Medicine and Science in Sport and Exercise, 46 (5,Suppl).* Poster presentation at the Annual Meeting of the American College of Sports Medicine, Orlando, FL.
- 61. Leitner BP[§], Toledo R[§], Weiss L[§], Smith TJ[§], Alfini AJ[§], Eslami K[§], Kauffman D[§], Saheb S[§], Schiller K[§], Smith JC⁺ (2014). Changes in Heart Rate Variability and Affect in Response to Low and Moderate Intensity Exercise. *Medicine and Science in Sports and Exercise, 46 (5, Suppl)*. Poster presentation at the Annual Meeting of the American College of Sports Medicine, Orlando, FL.
- 62. Smith JC, Nielson KA, Woodard JL, Seidenberg M, Kandah CC, Durgerian S, Hantke NC, Lancaster MA, Matthews MA, Sugarman MA, Figueroa CM, Hazlett KE, Kay CD, Norman AL, and Rao SM⁺ (2014). Interactions between physical activity and APOE-e4 risk for Alzheimer's disease on longitudinal hippocampal volume change. *Medicine and Science in Sports and Exercise, 45 (5, Suppl).* Slide presentation at the Annual Meeting of the American College or Sports Medicine, Orlando, FL.
- 63. Kauffman DC[§], Clark JF, and **Smith JC**[†] (2014). The influence of sport goggles on visual target detection in elite athletes. *Medicine and Science in Sports and Exercise, 45 (5, Suppl)*. Poster presentation at the Annual Meeting of the American College or Sports Medicine, Orlando, FL.
- 64. Smith JC, Nielson KA, Woodard JL, Seidenberg M, Kandah CC, Durgerian S, Hantke NC, Lancaster MA, Matthews MA, Sugarman MA, Figueroa CM, Hazlett KE, Kay CD, Norman AL, and Rao SM⁺ (2014). Longitudinal changes in hippocampal volume: Interactive effects between physical activity and genetic risk for Alzheimer's disease. Poster presentation at the Cognitive Aging Conference, Atlanta, GA.
- 65. Kay CD, Seidenberg M, Durgerian S, Smith JC, Woodard JL, Nielson KA, Lancaster MA, Matthews MA, Kandah CC, Butts AM, Hantke NC, Hazlett KE, Figueroa CM, Sugarman MA, Norman AL, and Rao SM⁺ (2014). Motor timing intraindividual varilability and structural volumes in health aging and mild cognitive impairment. *Journal of the International Neuropsychological Society*, 20, Suppl 1. Poster presentation at the 42st Annual Meeting of the International Neuropsychological Society, Seattle, WA.
- 66. Hantke NC, Nielson KA, Durgerian S, Woodard JL, Seidenberg M, Smith JC, Rao SM⁺ (2014). Multivoxel pattern analysis of famous and non-famous names in older adults. *Journal of the International Neuropsychological Society*, 20, Suppl 1. Poster presentation at the 42st Annual Meeting of the International Neuropsychological Society, Seattle, WA.
- 67. Kandah CC, Seidenberg M, Matthews MA, Srnka K, Rosado D, Woodard JL, Nielson KA, **Smith JC**, Durgerian S, Rao SM⁺ (2014). Longitudinal performance on the Mini-Mental State Exam (MMSE) and

the Mattis Dementia Rating Scale-2 (DRS). *Journal of the International Neuropsychological Society*, 20, Suppl 1. Poster presentation at the 42st Annual Meeting of the International Neuropsychological Society, Seattle, WA.

- 68. Matthews MA, Seidenberg M, Woodard JL, Nielson KA, Smith JC, Durgerian S, Lancaster MA, Kandah CC, Kay CD, Butts AM, Hantke NC, Figueroa CM, Hazlett KE, Norman AL, Sugarman MA, and Rao SM⁺ (2014). Different contributions of family history and genetic risk on 5-year cognitive changes in healthy older adults. *Journal of the International Neuropsychological Society, 20*, Suppl 1. Poster presentation at the 42st Annual Meeting of the International Neuropsychological Society, Seattle, WA.
- 69. Lancaster MA, Seidenberg M, Durgerian S, Nielson KA, Woodard JL, Smith JC, Matthews MA, Butts AM, Hantke NC, Kay CD, Kandah CC, Hazlett KE, Figueroa CM, Sugarman MA, Norman AL, and Rao SM⁺ (2014). Longitudinal white matter changes across the Alzheimer's disease risk continuum: A diffusion tensor imaging study. *Journal of the International Neuropsychological Society, 20*, Suppl 1. Poster presentation at the 42st Annual Meeting of the International Neuropsychological Society, Seattle, WA.
- 70. Smith JC⁺, Nielson KA, Antuono P, Zhan W, Lyons J-A, Verber MD, Hantke NC, Butts AM, and Hanson RJ[§] (2013). Evidence of massive neural plasticity induced by exercise in MCI patients. Poster presentation at the Alzheimer's Association International Conference, Boston, MA.
- 71. Macko R⁺, Smith JC^{*}, Dux M, Hafer-Macko C, and Ivey F. (2013). Exercise and Brain Health after Stroke. *Gerontologist*, 53, 539. Invited symposium presentation, "VA GRECC Symposium: Ischemia and Exercise in the Pathogenesis and Treatment of Cognitive Decline". Annual Meeting of the Gerontological Society of America, New Orleans, LA.
- 72. Woodard JL, Nielson KA, Seidenberg M, Smith JC, Durgerian S, Sugarman MA, Norman AL, Lancaster MA, Matthews MA, Kandah CC, Kay CD, Figueroa CM, Hazlett KE, and Rao SM⁺ (2013). Use of automated hippocampal subfield segmentation for predicting probability of cognitive decline in healthy older adults. *Journal of the International Neuropsychological Society*, *19*, Suppl 1, 221. Poster presentation at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa, HI.
- 73. Sugarman MA, Woodard JL, Nielson KA, Smith JC, Seidenberg M, Durgerian S, and Rao SM⁺ (2013). Rapid forgetting in the prediction of future cognitive decline in healthy older adults. *Journal of the International Neuropsychological Society*, 19, Suppl 1, 74. Poster presentation at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa, HI.
- 74. Norman AL, Woodard JL, Nielson KA, Seidenberg M, Smith JC, Durgerian S, Sugerman, MA, Figueroa CM, Hantke NC, Hazlett KE, Kandah CC, Kay CD, Lancaster MA, Matthews MA, and Rao SM⁺ (2013). Changes in verbal learning across trial and time: predicting cognitive decline in older adults over five years. *Journal of the International Neuropsychological Society*, *19*, Suppl 1, 72. Poster presentation at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa, HI.
- 75. Nielson KA, Woodard JL, Hazlett KE, Figueroa CM, Seidenberg M, Smith JC, Durgerian S, Hantke NC, Sugarman MA, Kay CD, Kandah CC, Norman AL, Lancaster MA, Matthews MA, and Rao SM⁺ (2013). Episodic memory, hippocampal activation during encoding, and eventual cognitive decline in elders: the importance of correct rejections. *Journal of the International Neuropsychological Society*, *19*, Suppl 1, 219. Poster presentation at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa, HI.
- 76. Kay CD, Seidenberg M, Kandah CC, Matthews MA, Lancaster MA, Durgerian S, Nielson KA, Woodard JL, Smith JC, Figueroa CM, Hazlett KE, Hantke NC, Sugarman M, Norman AL, and Rao SM (2013). Fine motor variability, APOE-ε4, and longitudinal memory outcome in healthy elders. *Journal of the International Neuropsychological Society*, *19*, Suppl 1, 134. Poster presentation at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa, HI.
- 77. Hazlett KE, Figueroa CM, Nielson KA, Durgerian S, Woodard JL, Smith JC, Seidenberg M, Hantke NC, Sugarman MA, Kay CD, Kandah CC, Norman AL, Lancaster MA, Matthews MA, and Rao SM⁺ (2013). Longitudinal change in parahippocampal cortical thickness as a function of cognitive decline and gene risk for Alzheimer's disease. *Journal of the International Neuropsychological Society*, *19*, Suppl 1, 215. Poster presentation at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa, HI.
- 78. Figueroa CM, Hazlett KE, Nielson KA, Woodard JL, Smith JC, Seidenberg M, Durgerian S, Hantke NC, Sugarman MA, Kay CD, Kandah CC, Norman AL, Lancaster MA, Matthews MA, and Rao SM⁺ (2013). Predictive ability of intraindividual variability in healthy elders at risk for Alzheimer's disease.

Journal of the International Neuropsychological Society, *19*, Suppl 1, 213. Poster presentation at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa, HI.

- 79. Smith JC⁺, Nielson KA, Antuono P, Lyons J-A, Verber MD, Hantke NC, Butts AM, Hanson RJ[§], and Browning E[§] (2013). Effects of an exercise intervention on semantic memory fMRI activation in mild cognitive impairment. *Journal of the International Neuropsychological Society*, *19*, Suppl 1, 141. Poster presentation at the 41st Annual Meeting of the International Neuropsychological Society, Waikoloa, HI.
- 80. Vaughan L, Erickson KI, Espeland MA, **Smith JC**, Tindle H, and Rapp SR⁺ (2013). Models of activity engagement and cognition in older adult women. Poster presentation at the Annual Meeting of the Society for Behavioral Medicine, San Francisco, CA.
- 81. Zhan W, Nielson KA, Antuono P, Lyons J-A, and Smith JC⁺ (2013). Imaging for white matter alterations after an exercise intervention: A DTI study in MCI and normal controls. Poster presentation at the Annual Meeting of the International Society for Magnetic Resonance in Medicine, Salt Lake City, UT.
- 82. So C, Matthews K, Espeland, M, Hogan P, Goveas J, Kuller L, Resnick S, Scheier M, Smith JC, and Tindle HA⁺ (2013). Psychological attitudes and neuroanatomy: results from the Women's Health Initiative Memory Study - Magnetic Resonance Imaging Study (WHIMS-MRI). Poster presentation at the Women's Health Initiative Annual Investigators Meeting, Seattle, WA.
- Progovac AM[†], Chang Y-F, Matthews K, Scheier M, Kuller L, Tindle H, Chapman B, Duberstein P, Messina C, Weaver K, Saquib N, Wallace R, Kaplan R, Goveas J, Hyland A, Calhoun D, and Smith JC (2013). Psychological attitudes predict smoking cessation over time in the Women's Health Initiative (WHI). Poster presentation at the Third World Congress on Positive Psychology, Los Angeles, CA.
- 84. Durgerian S, Woodard JL, Nielson KA, Seidenberg M, Smith JC, Butts AM, Lancaster MA, Matthews MA, Sugarman MA, Kay CD, Kandah CC, Hantke NC, Norman AL, Hazlett KE, Figueroa CM, and Rao SM⁺ (2013). Alzheimer's disease risk factors modulate longitudinal changes in semantic memory fMRI activation. Poster presentation at the Annual Meeting of the Organization for Human Brain Mapping, Seattle, WA.
- 85. Kay CD, Forde IE, Walker DR, Seidenberg M⁺, Woodard JL, Nielson KA, Smith JC^{*}, Durgerian S, and Rao SM⁺ (2013). Impact of Cardiovascular Disease Risk Factors and Apolipoprotein E-epsilon 4 Status on Cognitive Functioning of Healthy Elders. Poster presentation at the Annual Meeting of the American Academy of Clinical Neuropsychology, Chicago, IL.
- Kandah CC, Snrka K, Seidenberg M⁺, Matthews MA, Woodard JL, Nielson KA, Smith JC, Durgerian S, and Rao SM (2013). Five-year longitudinal performance on the Mattis Dementia Rating Scale (mDRS-2) in cognitively intact elderly. Poster presentation at the Annual Meeting of the American Academy of Clinical Neuropsychology, Chicago, IL.
- 87. Smith JC*, Nielson KA, Woodard JL, Seidenberg M, and Rao SM⁺ (2013). Longitudinal Associations Between Physical Activity, Cognitive Decline, and Hippocampal Volume in Healthy APOE-e4 Carriers. Poster presentation at the ApoE, ApoE Receptors and Neurodegeneration Symposium, Georgetown University, Washington, D.C.
- 88. Woodard JL, Seidenberg M, Nielson KA, Sugarman MA, Smith JC, Durgerian S, Butts AM, Lancaster MA, Foster MK, Hantke NC, Matthews MA, and Rao SM⁺ (2012). Measures of Episodic Forgetting Complement Structural and Functional MRI for Detection of Cognitive Decline in Apolipoprotein E e4 Carriers. *Journal of the International Neuropsychological Society, 18*, Suppl 1, 269. Poster presentation at the 40th Annual Meeting of the International Neuropsychological Society, *18*, Suppl 1, 269. Montreal, Canada.
- 89. Lancaster MA, Durgerian S, Seidenberg M, Woodard JL, Nielson KA, Smith JC, Matthews MA, Butts AM, Hantke NC, and Rao SM⁺ (2012). Longitudinal White Matter Changes and Cognitive Decline in Healthy Elderly. *Journal of the International Neuropsychological Society, 18*, Suppl 1, 224. Poster presentation at the 40th Annual Meeting of the International Neuropsychological Society, Montreal, Canada.
- 90. Foster MK, Seidenberg M, Woodard JL, Nielson KA, Smith JC, Lancaster MA, Matthews MA, Hantke NC, Butts AM, and Rao SM⁺ (2012). Risk factors for Alzheimer's disease and longitudinal memory performance. *Journal of the International Neuropsychological Society*, *18*, Suppl 1, 263. Poster presentation at the 40th Annual Meeting of the International Neuropsychological Society, Montreal, Canada.
- 91. Butts AM, Nielson KA, Hantke N, Lancaster M, Seidenberg M, Woodard JL, Smith JC, Matthews M,

Durgerian S, and Rao SM⁺ (2012). FreeSurfer vs. manual tracing: Distinguishing stable from cognitively declining elders using prospectively measured hippocampal volume. *Journal of the International Neuropsychological Society, 18*, Suppl 1, 197. Outstanding student research symposium presentation at the 40th Annual Meeting of the International Neuropsychological Society, Montreal, Canada.

- 92. Matthews MA, Seidenberg M, Woodard JL, Durgerian S, Nielson KA, Smith JC, Lancaster MA, Butts AM, Hantke NC, and Rao SM⁺ (2012). Person-Identity Semantics Predicts Cognitive Decline in Cognitively Intact Older Participants. *Journal of the International Neuropsychological Society, 18*, Suppl 1, 13. Poster presentation at the 40th Annual Meeting of the International Neuropsychological Society, Society, Montreal, Canada.
- 93. Butts AM, Nielson KA, Hantke NC, Lancaster MA, Seidenberg M, Woodard JL, Smith JC, Matthews MA, Sugarman MA, Durgerian S, and Rao SM⁺ (2012). Distinguishing future cognitive decline in healthy elders using two methods for measuring hippocampal volumes. Poster presentation at the Annual Meeting of the Cognitive Neuroscience Society, March 31-April 3, 2012, Chicago, IL.
- 94. Lancaster MA, Durgerian S, Seidenberg M, Woodard JL, Nielson KA, Smith JC, Matthews MA, Butts AM, Hantke NC, and Rao SM⁺ (2012). Prediction of Longitudinal White Matter Change in Healthy Elderly Individuals. Poster presentation at the Annual Meeting of the Cognitive Neuroscience Society, March 31-April 3, 2012, Chicago, IL.
- 95. Nielson KA, Sugarman MA, Woodard JL, Seidenberg M, **Smith JC**, Durgerian S, and Rao SM (2012). The contribution of blood serum biomarkers to the prediction of cognitive decline by fMRI and apolipoprotein-E in healthy older adults. Poster presentation at the Annual Meeting of the Cognitive Neuroscience Society, March 31-April 3, 2012, Chicago, IL.
- 96. Matthews MA, Seidenberg M, Woodard JL, Durgerian S, Nielson KA, Smith JC, Lancaster MA, Butts AM, Hantke NC, Rao SM⁺ (2012). Five-Year Changes in Brain Volume and Episodic Memory in Cognitively Intact Elders With and Without an Apolipoprotein ε4 Allele. Poster presentation at the Annual Meeting of the Cognitive Neuroscience Society, March 31-April 3, 2012, Chicago, IL.
- 97. Woodard JL, Seidenberg M, Nielson KA, Sugarman MA, Smith JC, Durgerian S, Butts AM, Lancaster MA, Foster MK, Hantke NC, Matthews MA, and Rao SM (2012). Episodic Memory Measures Complement Structural and Functional MRI for Predicting Cognitive Decline in Apolipoprotein E ε4 Carriers. Poster presentation at the Annual Meeting of the Cognitive Neuroscience Society, March 31-April 3, 2012, Chicago, IL.
- 98. Smith JC*, Durgerian S, Woodard JL, Nielson KA, Butts AM, Hantke NC, Seidenberg M, Lancaster MA, Matthews MA, Sugarman MA, and Rao SM⁺ (2012). Longitudinal associations between physical activity, cognitive status, and brain function in older adults at genetic risk for Alzheimer's disease. Poster presentation at the Annual Meeting of the Cognitive Neuroscience Society, March 31-April 3, 2012, Chicago, IL.
- 99. Smith JC, Durgerian S, Woodard JL, Nielson KA, Butts AM, Hantke NC, Seidenberg M Lancaster MA, Matthews MA, Sugarman MA, and Rao SM⁺ (2012). Physical activity and brain function in older adults at genetic risk for Alzheimer's disease. *Medicine and Science in Sports and Exercise, 44 (5, Suppl), S104.* Poster presentation at the 59th Annual Meeting of the American College of Sports Medicine, San Francisco, CA.
- 100. Lancaster MA, Durgerian S, Seidenberg M, Nielson KA, Woodard JL, Smith JC, Matthews MA, Butts AM, Hantke N and Rao SM⁺ (2011). White matter disruption in asymptomatic individuals at risk for Alzheimer's disease. *Journal of the International Neuropsychological Society, 17*, Suppl 1, 53. Poster presentation at the 39th Annual Meeting of the International Neuropsychological Society, Boston, MA.
- 101. Sugarman MA, Woodard JL, Nielson KA, Smith JC*, Seidenberg M, Durgerian S, Butts A, Hantke N, Lancaster M, Matthews MA, and Rao SM⁺ (2011). Prediction of future cognitive decline using brief measures of physical and cognitive activity in healthy older adults. *Journal of the International Neuropsychological Society, 17*, Suppl 1, 69. Poster presentation at the 39th Annual Meeting of the International Neuropsychological Society, Boston, MA.
- 102. Matthews MA, Durgerian S, Seidenberg M, Nielson KA, Woodard JL, Smith JC, Lancaster MA, Butts AM, Hantke NC and Rao SM⁺ (2011). Cortical and subcortical volumetric differences between cognitively stable and declining older adults. *Journal of the International Neuropsychological Society,* 17, Suppl 1, 67. Poster presentation at the 39th Annual Meeting of the International

Neuropsychological Society, Boston, MA.

- 103. Butts AM, Nielson KA, Hantke N, Lancaster M, Durgerian S, Woodard JL, Seidenberg M, Smith JC, Matthews M and Rao SM⁺ (2011). White matter integrity as predictor of cognitive decline in asymptomatic elders. *Journal of the International Neuropsychological Society, 17*, Suppl 1, 111. Poster presentation at the 39th Annual Meeting of the International Neuropsychological Society, Boston, MA.
- 104. Hantke N, Nielson KA, Woodard JL, Durgerian S, Seidenberg M, Smith JC, Butts A, Lancaster M, Matthews M and Rao SM⁺ (2011). Comparison of semantic and episodic memory activation in predicting cognitive decline in older adults. *Journal of the International Neuropsychological Society, 17*, Suppl 1, 65. Poster presentation at the 39th Annual Meeting of the International Neuropsychological Society, Boston, MA.
- 105. Smith JC*, Nielson KA, Woodard JL, Antuono P, Seidenberg M, Durgerian S, Verber MD, Butts AM, Hantke NC, Lancaster MA and Rao SM⁺ (2011). Physical activity is associated with enhanced BOLD semantic memory activation in amnestic mild cognitive impairment. *Journal of the International Neuropsychological Society*, 17, Suppl 1, 265. Poster presentation at the 39th Annual Meeting of the International Neuropsychological Society, Boston, MA.
- 106. Smith JC⁺, Nielson KA, Antuono P, Verber MD, Cogbill, E, Greene, A, Butts AM, Hantke NC, and Hanson RJ (2011). Effects of exercise training on fMRI activation and hippocampal blood flow in mild cognitive impairment. *Medicine and Science in Sports and Exercise, 43 (5, Suppl)*. Poster presentation at the 58th Annual Meeting of the American College of Sports Medicine in Denver, CO.
- 107. Durgerian S, Lancaster MA, Seidenberg M, Nielson KA, Woodard JL, **Smith JC**, Matthews M, Butts AM, Hantke N and Rao SM⁺ (2011). White matter diffusivity is higher among healthy elders at increased risk for Alzheimer's disease. Poster presentation at the 17th Annual Meeting of the Organization for Human Brain Mapping, Québec City, Canada.
- 108. Browning EL, Shields MR, Tian Q, and **Smith JC**⁺ (2011). Neural correlates of anxiety reduction after exercise. Poster presentation at the Annual Meeting of the Society for Psychophysiological Research, Boston, MA.
- 109. Smith JC[†], Verber MD, Nielson KA, Antuono P, Hanson RJ[§], Mattes, AJ[§], Butts AM and Hantke NC (2011). Walking exercise improves white matter integrity in amnestic mild cognitive impairment. Poster presentation at the Annual Meeting of the Society for Psychophysiological Research, Boston, MA.
- 110. Smith JC⁺, Verber MD, Nielson KA, Antuono P, Hanson RJ[§], Mattes, AJ[§], Butts AM and Hantke NC (2011). Effects of exercise on white matter integrity in amnestic mild cognitive impairment. Poster presentation at the Annual Meeting of the Society for Neuroscience, Washington, D.C.
- 111. Nielson KA, Smith JC*, Woodard JL, Seidenberg M, Hantke N, Butts A, Durgerian S, Guidotti L, Antuono P, and Rao SM⁺ (2010). Contributions of physical activity and risk for Alzheimer's disease to semantic memory networks in healthy elders. Invited podium presentation at the Dallas Aging and Cognition Conference, University of Texas, Dallas, TX.
- 112. Smith JC[†], Paulson ES, Verber M, Tian Q[§], and Cook DB (2010). Human cerebral blood flow increases after acute exercise: Arterial spin labeling MRI. *Medicine and Science in Sports and Exercise, 42 (5, Suppl 1), S34.* Poster presentation at the 57th annual meeting of the American College of Sports Medicine in Baltimore, MD.
- 113. Tian Q[§] and Smith JC⁺ (2010). Moderate intensity exercise enhances positive emotional bias and reduces negative emotional bias. Poster presentation at the Annual Meeting of the Society for Neuroscience in San Diego, CA.
- 114. Smith JC⁺, Nielson KA, Antuono P, Verber MD, Mattes AJ[§], Cogbill E, Greene A, Hantke NC, Butts AM, and Hanson RJ[§] (2010). Effects of a walking exercise intervention on BOLD semantic memory activation and hippocampal blood flow in amnestic mild cognitive impairment. Poster presentation at the Annual Meeting of the Society for Neuroscience in San Diego, CA.
- 115. Collins JD, Smith JC, Ebersole KT, and O'Connor KM⁺ (2009). Effects of a simulated soccer match on cutting knee dynamics and reaction time. Poster presentation at the 33rd Annual Meeting of the American Society of Biomechanics, State College, PA.
- 116. Rao SM⁺, Smith JC^{*}, Nielson KA, Woodard JL, Seidenberg M, Durgerian S, Antuono P, Butts AM, Hantke NC, Lancaster MA, and Schiffer R (2009). Physical activity is associated with enhanced semantic memory activation in older ApoE-e4 carriers. Poster presentation at the 2nd Annual Clinical Trials on Alzheimer's Disease Conference, Las Vegas, NV.

- 117. Ewalt, L, Swartz AM⁺, Strath SJ, Danduran MJ, Moerchen VA, and Smith JC (2009). A comparison of physical activity levels between children with and without a congenital heart defect. *Medicine and Science in Sports and Exercise, 41 (5, Suppl 1),* S326. Poster presentation at the 56th Annual Meeting of the American College of Sports Medicine in Seattle, WA.
- 118. Smith JC*, Nielson KA, Woodard JL, Seidenberg M, Durgerian S, and Rao SM⁺ (2009). Physical activity Is associated with greater brain activation during memory In adults at risk for Alzheimer's disease. *Medicine and Science in Sports and Exercise, 41 (5, Suppl 1), S53.* Poster presentation at the 56th Annual Meeting of the American College of Sports Medicine in Seattle, WA.
- 119. Huddleston WE⁺, Tully RP, and **Smith JC** (2009). Changes in neural oscillations of human parietal cortex during a visuospatial-attention task. Poster presentation at the Annual Meeting of the Society for Neuroscience in Chicago, IL.
- 120. Tian Q[§], Shields MR[§], Payton JB[§], Haacker TR[§], and **Smith JC**[†] (2009). The effect of exercise on the late-positive potential evoked during affective picture viewing. Poster presentation at the Annual Meeting of the Society for Neuroscience in Chicago, IL.
- 121. Shields MR[§], Smith JC⁺, Larson CL, and Swartz AM (2009). The effect of exercise on reaction time during a threat target detection task. Poster presentation at the Annual Meeting of the Society for Neuroscience in Chicago, IL.
- 122. Smith JC⁺, Paulson ES, Verber M, Tian Q[§], and Cook DB (2009). Detecting changes in human cerebral blood flow after acute exercise using arterial spin labeling. Poster presentation at the Annual Meeting of the Society for Neuroscience in Chicago, IL.
- 123. Smith JC⁺, Zalewski KA, Motl RW, O'Connell DL, and Malzahn J (2008). Relationships between self-efficacy and physical activity behavior among elders in an assisted living environment. *Medicine* and Science in Sports and Exercise, 40 (5, Suppl 1), S468. Poster presentation at the 55th Annual Meeting of the American College of Sports Medicine in Indianapolis, IN.
- 124. Shields M, Tian Q, Payton J, and **Smith JC**⁺ (2008). The effect of exercise on the late-positive potential evoked during affective picture viewing. *Psychophysiology, 45 (Suppl 1),* S50. Poster presentation at the 48th Annual Meeting of the Society for Psychophysiological Research in Austin, TX.
- 125. Keil A, Sabatinelli D, Smith JC, Wangelin B, Bradley MM, and Lang PJ⁺ (2008). Multimodal imaging of coherent sources during affective picture viewing. *Psychophysiology, 45 (Suppl 1)*, S94. Poster presentation at the 48th Annual Meeting of the Society for Psychophysiological Research in Austin, TX.
- 126. Smith JC, Bradley MM, and Lang PJ⁺ (2007). Negative affect and the reflex physiology of emotion. *Psychophysiology, 44 (Suppl 1)*, S82. Poster presentation at the 47th Annual Meeting of the Society for Psychophysiological Research in Savannah, GA.
- 127. **Smith JC**, McTeague, LM, Löw A, Laplante MC, Perlman, G, Strauss, C, Bradley MM, and Lang PJ⁺ (2006). Processing rapidly presented affective pictures: Reflex physiology among anxiety disorder patients. *Psychophysiology, 43 (Suppl 1)*, S93. Poster presentation at the 46th Annual Meeting of the Society for Psychophysiological Research in Vancouver, BC, Canada.
- 128. Keil A, **Smith JC**, Wangelin B, Sabatinelli D, Bradley MM, and Lang PJ⁺ (2005). Source space analysis of single EEG epoch in the frequency domain: An application for steady-state potentials. *Psychophysiology, 42 (Suppl 1)*, S116. Poster presentation at the 45th Annual Meeting of the Society for Psychophysiological Research in Lisbon, Portugal.
- 129. Smith JC, Keil A, Wangelin, B, Bradley MM, Sabatinelli, D, and Lang PJ⁺ (2005). Single trial analysis of steady-state visual evoked potentials: Effects of emotional arousal. *Psychophysiology, 42 (Suppl 1)*, S73. Poster presentation at the 45th Annual Meeting of the Society for Psychophysiological Research in Lisbon, Portugal.
- 130. Löw A, Lang PJ⁺, Smith JC, and Bradley MM (2004). The Defense Cascade animal model and human performance. *Psychophysiology, 41 (Suppl 1)*, S56. Poster presentation at the 44th Annual Meeting of the Society for Psychophysiological Research in Santa Fe, NM.
- 131. Smith JC, Löw A, Laplante MC, Perlman G, Strauss C, Bradley MM, and Lang PJ⁺ (2004). Emotional reactivity of anxiety disorder patients during rapid serial presentation of affective pictures. *Psychophysiology, 41 (Suppl 1)*, S56. Poster presentation at the 44th Annual Meeting of the Society for Psychophysiological Research in Santa Fe, NM.
- 132. **Smith JC**, Scott RP, Bradley MM, and Lang PJ⁺ (2003). Physical activity promotes normal emotional reactivity among individuals with high negative affect. Poster presentation at the III

Conferência Internacional "Emoções e Cérebro", Lisbon, Portugal, 2003.

- 133. Smith JC, Löw A, Bradley MM, and Lang PJ⁺ (2003). Rapid serial presentation of affective pictures elicits emotional reactions. Poster presentation at the III Conferência Internacional "Emoções e Cérebro", Lisbon, Portugal, 2003.
- 134. **Smith JC**, Scott RP, Bradley MM, and Lang PJ⁺ (2003). Reflex Physiology of Emotion: Effects of Negative Affect and Physical Activity History. Slide presentation at the 2003 Annual Meeting of the Association for the Advancement of Behavioral Therapy in Boston, MA.
- 135. **Smith JC**, Scott RP[§], Bradley MM, and Lang PJ⁺ (2003). Physical activity promotes normal emotional reactivity among individuals with high negative affect. Poster presentation at The Cooper Institute Conference Series "Physical Activity and Mental Health: A Multidisciplinary Approach", October, 2003 in Dallas, TX.
- 136. **Smith JC**, Löw A, Bradley MM, and Lang PJ⁺ (2003). Rapid serial presentation of affective pictures elicits emotional reactions. *Psychophysiology, 40 (Suppl 1)*, S81. Poster presentation at the 43rd Annual Meeting of the Society for Psychophysiological Research in Chicago, IL.
- 137. Smith JC, Scott RP[§], Bradley MM, and Lang PJ⁺ (2003). The influence of physical activity and negative affect on the startle response during affective picture viewing. *Psychophysiology, 40 (Suppl 1)*, S81. Poster presentation at the 43rd Annual Meeting of the Society for Psychophysiological Research in Chicago, IL.
- 138. Smith JC, Bradley MM, and Lang PJ⁺ (2003). The psychophysiology of emotion: Effects of physical activity history and negative affect. *Medicine and Science in Sports and Exercise, 36*, S91. Poster presentation at the 51st Annual Meeting of the American College of Sports Medicine in Indianapolis, IN.
- 139. **Smith JC**, Scott RP, Bradley MM, and Lang PJ⁺ (2002). One thing after another: The progression and persistence of affect. *Psychophysiology, 39 (Suppl 1)*, S77. Poster presentation at the 2002 Annual Meeting of the Society for Psychophysiological Research in Washington, D.C.
- 140. **Smith JC** and O'Connor PJ⁺ (2001). Exercise and emotion: Startle and corrugator responses during exercise and seated rest. *Psychophysiology, 38 (Suppl 1),* S90. Poster presentation at the 2001 Annual Meeting of the Society for Psychophysiological Research in Montreal, Canada.
- 141. Smith JC, Scott RP, Bradley MM, and Lang PJ⁺ (2001). Affective reflex modulation: Progression and persistence. *Psychophysiology, 38 (Suppl 1)*, S90. Poster presentation at the 2001 Annual Meeting of the Society for Psychophysiological Research in Montreal, Canada.
- 142. Smith JC, O'Connor PJ⁺, and Dishman RK (2000). Exercise and emotion: Corrugator supercilii EMG activity at baseline and in response to emotion-eliciting slides after exercise and seated rest. Poster presentation at the 2000 Annual Meeting of the Society for Psychophysiological Research in San Diego, CA.
- 143. Smith JC, O'Connor PJ⁺, and Dishman RK (2000). Exercise and emotion: Corrugator supercilii EMG activity at baseline and in response to emotion-eliciting slides after exercise and seated rest. *Medicine and Science in Sports and Exercise, 32*, S294. Slide presentation at the 2000 Annual Meeting of the American College of Sports Medicine in Indianapolis, IN.
- 144. Crabbe JB, **Smith JC**, and Dishman RK⁺ (1999). EEG and emotional response after cycling exercise. *Medicine and Science in Sports and Exercise, 31,* S173. Slide presentation at the 1999 Annual Meeting of the American College of Sports Medicine in Seattle, WA.
- 145. **Smith JC**, Crabbe JB, O'Connor PJ⁺, and Dishman RK (1999). Exercise and emotion: Acoustic startle eyeblink response amplitude is attenuated after low and moderate intensity exercise and quiet rest. *Medicine and Science in Sports and Exercise, 31,* S173. Slide presentation at the 1999 Annual Meeting of the American College of Sports Medicine in Seattle, WA.
- 146. O'Connor PJ⁺, **Smith JC**, Cook DB, and Agrawal SK (1998). Circadian rhythms in highly physically active and fit elderly men compared to normal elderly controls. Poster presentation at the 1998 Annual Meeting of the Society for Research on Biological Rhythms on Amelia Island, FL.
- 147. Smith JC, Cook DB Agrawal SK, and O'Connor PJ⁺ (1997). Circadian pacemaker evoked changes in blood pressure and heart rate in fit elderly men. *Medicine and Science in Sports and Exercise, 29,* S141. Poster presentation at the 1997 Annual Meeting of the American College of Sports Medicine in Denver, CO.
- 148. **Smith JC**, Cook DB, and O'Connor PJ⁺ (1996). Pain, perceived exertion and personality during brief maximal forearm contractions in women. *Medicine and Science in Sports and Exercise*, 28, S57.

Slide presentation at the 1996 Annual Meeting of the American College of Sports Medicine in Cincinnati, OH.

- 149. O'Connor PJ⁺, Cook DB, and **Smith JC** (1995). Relationships between pain, personality and performance during maximal cycle ergometry. Slide presentation at the 1995 Annual Meeting of the American Psychological Association in New York, NY.
- 150. Breus M, O'Connor PJ⁺, **Smith JC**, and Crabbe JB (1994). Influence of strenuous nocturnal exercise on sleep. Poster presentation at the Annual Meeting of the American Psychological Association in New York, NY.
- 151. **Smith JC** and Homa D⁺ (1993). Recognition and classification of schematic faces under conditions of zero and substantial category training. Slide presentation at the 1993 Annual Meeting of the Western Psychological Association in Phoenix, AZ.
- 152. **Smith JC** and Homa D⁺ (1991). Recognition and classification in category abstraction. Slide presentation at the 1991 Annual Meeting of the Western Psychological Association in San Francisco, CA.

State & Local Presentations

- Smith JC, Alfini AJ[§], Smith TM[§], Nielson KA, Woodard JL, Seidenberg M, and Rao SM[†] (2013). Longitudinal Associations Between Physical Activity, Cognitive Decline, and Hippocampal Volume in Healthy APOE-e4 Carriers. Poster presentation at NACS-Fest, University of Maryland, College Park, MD.
- Smith JC, Alfini AJ[§], Smith TM[§], Nielson KA, Woodard JL, Seidenberg M, and Rao SM⁺ (2013). Longitudinal Associations Between Physical Activity, Cognitive Decline, and Hippocampal Volume in Healthy APOE-e4 Carriers. Poster presentation at the Public Health Research Day, University of Maryland, College Park, MD.
- Smith JC, Alfini AJ[§], Smith TM[§], Nielson KA, Woodard JL, Seidenberg M, and Rao SM⁺ (2013). Longitudinal Associations Between Physical Activity, Cognitive Decline, and Hippocampal Volume in Healthy APOE-e4 Carriers. Poster presentation at the Bioscience Research Day, University of Maryland, College Park, MD.
- 4. **Smith JC** (2012). Physical activity and brain health for public health. Slide presentation at the School of Public Health Research Interaction Day, University of Maryland, College Park, MD.
- Smith JC, Alfini AJ[§], Smith TM[§], Nielson KA, Woodard JL, Seidenberg M, and Rao SM[†] (2012). Longitudinal Associations Between Physical Activity, Cognitive Decline, and Hippocampal Volume in Healthy APOE-e4 Carriers. Poster presentation at the School of Public Health Research Interaction Day, University of Maryland, College Park, MD.
- 6. **Smith JC** (2011). Exercise and brain function in mild cognitive impairment. Poster presentation at NACS-Fest, University of Maryland, College Park, MD.
- 7. **Smith JC** (2011). Exercise and brain function in mild cognitive impairment. Poster presentation at the School of Public Health Research Interaction Day, University of Maryland, College Park, MD.
- 8. **Smith JC** (2011). Effects of exercise on white matter integrity in patients diagnosed with mild cognitive impairment. Slide presentation at the School of Public Health Research Interaction Day, University of Maryland, College Park, MD.
- 9. **Smith JC** (2011). Is there any hope for exercise in the fight against early memory loss? Invited presentation at the Early Memory Loss Summit, Wisconsin Alzheimer's Institute, Milwaukee, WI.
- 10. **Smith JC** (2011). Is there any hope for exercise in the fight against Alzheimer's disease? Invited presentation at the Alzheimer's Disease Annual Update Continuing Medical Education Program, Wisconsin Alzheimer's Disease Research Center, University of Wisconsin-Madison.
- 11. **Smith JC** (2011). The potential role of physical activity in the prevention and treatment of Alzheimer's disease. Invited presentation at the 24th Annual State Conference of Alzheimer's Disease and Related Disorders, Wisconsin Dells, WI.
- 12. **Smith JC** (2009). The potential role of physical activity in the prevention and treatment of Alzheimer's disease. Invited presentation at the 23rd Annual State Conference of Alzheimer's Disease and Related Disorders, Stevens Point, WI.
- 13. **Smith JC** (2008). Physical activity and dementia care: Current knowledge and knowledge gaps. Invited presentation at the Advanced Dementia Care Workshop in collaboration with the Alzheimer's

Association Southeastern Wisconsin Chapter, Waukesha County Technical College, Waukesha, WI.

Undergraduate Mentee National and Local Research Presentations

- Leitner BP, Toledo R, Weiss LR, Smith TJ, Alfini AJ, Eslami K, Kauffman D, Saheb S, Schiller KH, and Smith JC⁺ (November 2013). Changes in Heart Rate Variability and Affect in Response to Low and Moderate Intensity Exercise. Presentation at Bioscience Research Day at the University of Maryland, College Park, MD.
- Kauffman D[§], Keenan T[§], Leitner B[§], Prakash S[§], Saheb S[§], Toledo R[§], and Smith JC[†] (2013). Effects of emotional exposure on state anxiety after acute exercise. Poster presentation at the Public Health Research Day, University of Maryland, College Park, MD.
- Browning E[§] and Smith JC⁺ (2011). The Anxiolytic Effects of Exercise are Sustained after an Emotional Challenge. Poster presentation at the National Conference on Undergraduate Research, Ithaca College, Ithaca, NY.
- Logan P[§], Hatt N[§], Balling K[§], and Smith JC⁺ (2011). Exercise Effects on Bias Towards Emotional Stimuli. Poster presentation at the National Conference on Undergraduate Research in Ithaca, NY.
- Browning E[§] and Smith JC⁺ (2011). The Anxiolytic Effects of Exercise are Sustained after an Emotional Challenge. Selected to represent UW-Milwaukee at the 8th Annual Posters in the Rotunda: A Celebration of Undergraduate Research, Wisconsin State Capital, Madison, WI.
- Logan P[§], Hatt N[§], Balling K[§], Browning E[§] and Smith JC⁺ (2011). Exercise Effects on Bias Towards Emotional Stimuli. Selected to represent UW-Milwaukee at the 8th Annual Posters in the Rotunda: A Celebration of Undergraduate Research, Wisconsin State Capital, Madison, WI.
- Browning E[§] and Smith JC⁺ (2011). "The Anxiolytic Effects of Exercise are Sustained after an Emotional Challenge. Poster presentation at the UW-System Symposium at UW-Parkside on April 29, 2011.
- 8. Balling K[§], Logan P[§], Hatt N[§], Browning E[§] and **Smith JC**⁺ (2011). Exercise Neuroscience. Poster presentation at the UW-System Symposium at UW-Parkside, Parkside, WI.
- Jones ND[§] and Smith JC[†] (2009). Effects of exercise and sex on identifying emotion. Poster presentation at the Office of Undergraduate Research Symposium, University of Wisconsin-Milwaukee, Milwaukee, WI.
- Haacker T[§] and Smith JC⁺ (2009). The relation between changes in mood after exercise and eventrelated potentials during affective picture viewing. Poster presentation at the Office of Undergraduate Research Symposium, University of Wisconsin-Milwaukee, Milwaukee, WI.
- 11. Payton J[§] and Smith JC⁺ (2009). Reaction time and event-related potential during affective picture viewing after exercise compared to rest. Poster presentation at the Office of Undergraduate Research Symposium, University of Wisconsin-Milwaukee, Milwaukee, WI.
- Payton J[§] and Smith JC (2009). Reaction Time and Event-Related Potentials During Affective Picture Viewing After Exercise Compared to Rest. Slide presentation at the National Conference on Undergraduate Research, UW-LaCrosse, LaCrosse, WI.
- Haacker T[§] and Smith JC⁺ (2009). The Relation Between Changes in Mood After Exercise and Event-Related Potentials During Affective Picture Viewing. Slide presentation at the National Conference on Undergraduate Research, UW-LaCrosse, LaCrosse, WI.

GRANTS

Current Extramural Funding Received

- 1. **Principal Investigator**. NIH-National Institute on Aging, R01 AG057552-03 Exercise for Brain Health with Increased Genetic Risk for Alzheimer's Disease. 09/15/17-04/30/22. Direct costs \$2,510,719; Total costs \$3,631,024.
 - a. The major goal of this project is to conduct a 6-month exercise intervention as a pilot clinical trial in older adults at genetic risk for Alzheimer's disease, with primary outcomes consisting of MRI

biomarkers and cognitive performance.

- Principal Investigator. NIH-National Institute on Aging, R01 AG057552-01S1 Exercise for Brain Health with Increased Genetic Risk for Alzheimer's Disease. 09/15/17-06/30/19. Direct costs \$378,550; Total costs \$409,423.
 - a. This is an administrative supplement award attached to the parent project to establish a blood draw and biobanking of samples, APOE genotyping, plus an analysis of inflammatory biomarkers, and the NeuroChip platform.
- Principal Investigator. NIH-National Institute on Aging, Competitive Revision to 5R01AG057552-03S1. Exercise for Brain Health with Increased Genetic Risk for Alzheimer's Disease (Revision subtitled: Vascular Mechanisms of Exercise in Older Adults at Increased Genetic Risk for Alzheimer's Disease). 05/01/20-04/30/22. Direct costs \$1,009,250; Total costs \$1,506,408.
 - a. The major goal of this revised application is to add outcomes to our 6-month exercise intervention in older adults at genetic risk for Alzheimer's disease, with primary outcomes consisting of circulating angiogenic cell number and function (with S. Prior, Co-I), and flow mediated dilation of peripheral arteries and microvascular function (with S. Ranadive, Co-I).
- 4. **Co-Investigator** (Rao, Lamb, Co-PIs). NIH-National Institute on Aging, 2 R01 AG022304-11. Immune Mechanisms Underlying the Neuroprotective Effects of Physical Activity in Human and Mouse Models of Genetic Risk for Alzheimer's Disease. 09/01/17-08/31/22. Direct costs \$5,915,303; Total costs \$8,790,789.
 - a. Complementary human and animal studies will be conducted to determine potential mechanisms linking APOE genotype, physical activity behavior, inflammation, Alzheimer's Disease brain pathology, and cognition in healthy older adults at increased risk for Alzheimer's Disease.
- 5. **Co-Investigator** (Chen, PI). NIH-National Institute on Aging, 1 R56 AG062315-01. Effect of Hospital and Community Care Coordination on Health Care Access, Quality and Equity among Individuals with Risk Factors or Diagnosis of ADRD. 09/30/2018-06/30/2020, \$1,302,389.
- 6. **Mentor** (with Hagberg, PI). NIH-National Heart, Lung, and Blood Institute. University of Maryland Summer Training and Research (STAR) Program. 06/01/2013-05/31/2018, \$535,730.
- 7. **Mentor** (with Hagberg, PI). NIH-National Institute on Aging. University of Maryland Aging, Diversity, and Professional Training (ADAPT) Program. 09/01/13-08/31/18, \$1,241,195.

Previous Extramural Funding Received

- 8. **Co-Investigator** (with Rao, PI). NIH- National Institute on Aging, ARRA Challenge Grant, RC1 AG035775. Neural Effects Of Exercise, Cognitive, Or Combined Training In AD At-Risk Elders. 09/2009-08/2012, \$996,865.
- Principal Investigator (with P. Lang, mentor). NIH-National Institute of Mental Health, Ruth L Kirschstein Individual National Research Service Award, F32 MH-066601. Physiological Responses to Pictures and Exercise in Dysphoria. 02/2003-01/2005, \$96,898.

Pending Extramural Funding

- Co-Investigator (S. Rao, PI). NIH-National Institute on Aging (subcontract with Cleveland Clinic). CYCLE-AD: Randomized Controlled Trial to Assess the Efficacy of Indoor Cycling in Slowing Disease Progression in Healthy Older Persons at Genetic Risk for Alzheimer's Disease. 10/01/20-09/30/25. Direct costs: \$4,401,020; Total costs: \$6,713,132.
 - a. This project will determine the disease altering properties of high intensity exercise by randomizing 150 cognitively intact, sedentary elders (ages 65-80 years) at genetic risk for Alzheimer's disease into two groups: one engaged in a high-intensity home-based cycling program and the other engaged in their habitual level of physical activity.
- Co-Investigator (Clyne, PI). NIH-National Heart, Lung, and Blood Institute. R01 HL140239. Supplement title: Differences in brain microvascular endothelial cell glucose metabolism in Alzheimer's disease. 07/01/20-08/31/21; Total costs: \$379,623
 - a. This supplement project aims to differentiate induced pluripotent stem cells (iPSCs) from subjects of increasing age into brain microvascular endothelial cells (BMvEC), expose the cells

to high blood flow for short time periods, and measure endothelial GLUT1 expression, glucose uptake, and metabolism. Secondarily, iPSC-derived BMvEC from subjects of increasing age will be exposed to human serum from sedentary and exercise trained older adults and measure endothelial GLUT1 expression, glucose uptake, and metabolism. Parent project title: *The effect of laminar and disturbed flow on endothelial glucose metabolism.*

- 3. **Principal Investigator**. TEDCO: Maryland Innovation Initiative. Developing a small-animal scanner for estimating brain amyloid burden in preclinical studies of Alzheimer's disease. Total costs: \$115,000.
 - a. Our x-ray based technology will provide reliable measurements of amyloid burden, for the first time, on live animals within minutes and without using radioactive tracers. During the funding period, we will design, develop, and commercialize a small-animal scanner to address the market need for fast, practical, and cost-effective in vivo measurement platform. Our specialized platform will be introduced as a breakthrough research tool in AD research.
- Primary Mentor. (Purcell, PI). NIH-National Institute on Aging. K01 . Indexing Hippocampal Functional Integrity in Older Adults at Risk for Alzheimer's Disease. 07/01/2021-06/30/2026; Total costs: \$631,175.
 - a. The goal of this proposal is to validate and investigate a functional neuroimaging biomarker, heterogeneity regression (Hreg), that predicts AD linked memory decline in cognitively intact older adults, and to examine the moderating role of genetic risk and physical activity.
- 5. **Primary Mentor.** (Won, PI). NIH-National Institute on Aging. F99/K00 . *Exercise and Basal Forebrain Cholinergic Networks in Older Adults*. 07/01/2021-06/30/2027; Total costs: \$452,698.
 - a. These two projects will investigate the effects of acute exercise and exercise training on basal forebrain functional connectivity to gain insight into one mechanism, cholinergic network integrity, by which exercise protects against age-related cognitive decline.

Intramural Funding Received (* Current)

- * Co-Investigator (Clyne, PI). Brain Behavior Institute Seed Grant. Title: Differences in brain microvascular endothelial cell glucose metabolism in Alzheimer's disease. 07/01/20-08/31/21; Total costs: \$100,000. This project aims to differentiate induced pluripotent stem cells (iPSCs) from subjects of increasing age into brain microvascular endothelial cells (BMvEC), expose the cells to high blood flow for short time periods, and measure endothelial GLUT1 expression, glucose uptake, and metabolism.
- * Co-Principal Investigator (with Prior, Ranadive, Co-PIs). University of Maryland, Office of the Vice President for Research, the School of Public Health, and the Department of Kinesiology. Vascular Mechanisms of Exercise in Older Adults at Risk for Alzheimer's Disease. 11/2018 – 10/2019, \$10,000.
- Co-Principal Investigator (with Macko, Co-PI). University of Maryland System, UMD-UMB Innovation Seed Grant Program. Translational Neuroimaging Of Brain Function And Memory After An Exercise Intervention In Older Adults. 07/2012 – 04/2015, \$75,000.
- 4. Principal Investigator. Maryland Neuroimaging Center, Seed Grant Program. Using Arterial Spin Labeling to Measure Exercise-Induced Cerebral Perfusion in Healthy Younger and Older Adults. 03/2012 – 08/2013, \$12,000 (dedicated to MRI scanner usage costs).
- Principal Investigator. University of Maryland Graduate School, Research and Scholarship Award (RASA). Assessing The Neuroprotective Effects Of Exercise In Humans By MRI Arterial Spin Labeling. 06/2012-5/2013, \$9000.
- Principal Investigator. University of Wisconsin-Milwaukee, Graduate School Research Growth Initiative. Effects Of Exercise On Brain Function In Older Adults At Risk For Alzheimer's Disease. 07/2010 – 06/2012, \$386,460.
- Principal Investigator. The Medical College of Wisconsin CTSI, Small Pilot Project Grant. The Effects Of Exercise On Brain Function And Metabolic Profile In Dementia: A Collaborative Pilot Clinical. 07/2009 – 06/2010, \$45,000.
- Co-Principal Investigator (with Keenan K). University of Wisconsin-Milwaukee, Graduate School Research Growth Initiative. Cortico-Muscular Control Of Hand Function In Older Adults. 07/2009-06/2010, \$141,782.
- 9. Principal Investigator. The Medical College of Wisconsin CTSI and Center for Imaging Research, Small Pilot Project Grant. Functional Brain Imaging And Mood After Exercise. 09/2007 09/2012, \$19,270

(dedicated to MRI scanner usage costs).

- Co-Principal Investigator (with Huddleston W). University of Wisconsin-Milwaukee, College of Health Sciences SEED Award. Changes In Neural Oscillations Of Human Parietal Cortex Related To Performance On a Spatial-Attention Task. 07/2008-06/2009, \$2,320.
- 11. Principal Investigator. Predictors of physical activity behavior in clinically depressed adults. UW-Milwaukee College of Health Sciences SEED Grant, 07/2006-06/2007, \$4,998.
- Principal Investigator. University of Wisconsin-Milwaukee, Graduate School Research Committee Award. Exercise As A Treatment For Depression In Older Adults: Effects On Emotional Reactivity And Brain Function. 07/2006 – 06/2007, \$9,700.

OTHER AWARDS AND HONORS

- 1. Recognized as Most Valuable Professor (MVP) by University of Maryland Men's Wresting team, 2020
- 2. Recognized as Most Valuable Professor (MVP) by University of Maryland Women's Gymnastics and Women's Lacrosse teams, 2019
- 3. NIH Loan Repayment Program Award Clinical Research, 2009-2011, 2012-2013, 2013-2014
- 4. Fellow, American College of Sports Medicine, 2011
- 5. Investigator of the Year, Alzheimer's Association Southeastern Wisconsin Chapter, 2009
- 6. Clinical Research Scholar, NIH-K30 Program, Medical College of Wisconsin, Class of 2009-2011
- 7. Student Poster Award, Society for Psychophysiological Research, 2000
- 8. Outstanding Teaching Assistant Award, University of Georgia, 2000
- 9. Travel Award University of Wisconsin HealthEmotions Research Institute Symposium on Emotion, 1999

MEDIA COVERAGE OF RESEARCH FINDINGS

- 1. AARP, February 19, 2020.
 - a. <u>https://www.aarp.org/health/brain-health/info-2020/avoiding-cognitive-decline.html</u>
- 2. New York Times, Dec 30, 2019
 - a. <u>https://www.nytimes.com/2019/12/30/well/move/move-your-body-bolster-your-brain.html</u>
- 3. New York Times, May 1, 2019
 - a. https://www.nytimes.com/2019/05/01/well/move/how-exercise-affects-our-memory.html
- 4. O Magazine, July 2017.
 - a. http://www.oprah.com/health_wellness/Steps-to-Take-Now-to-Prevent-Dementia
- 5. https://frontiers.altmetric.com/details/10282275
- 6. New York Times, Sep 28, 2016
 - a. http://www.nytimes.com/2016/09/28/well/move/after-just-10-days-of-rest-brain-benefits-of-exercise-diminish.html
- 7. BYU Radio Matt Townsend Show
 - a. <u>https://www.byuradio.org/episode/da2d03f6-edf8-443e-92b0-33cdcc76ad0e/the-matt-townsend-show-economic-value-of-religion-value-of-exercise-thrive-life?playhead=4251&autoplay=true</u>
- 8. Press Release, University of Maryland, Aug 29, 2016
 - a. EurekAlert: http://www.eurekalert.org/pub_releases/2016-08/uom-uio082916.php
 - b. Article Impact: https://frontiers.altmetric.com/details/10282275
- 9. MSN Health & Fitness article Dec 15, 2015.
 - a. <u>http://www.msn.com/en-us/health/fitness/here%E2%80%99s-how-much-you-need-to-exercise-to-prevent-alzheimer%E2%80%99s/ar-BBnCJyX</u>
- 10. Press Release, University of Maryland, Nov 19, 2015. a. http://www.eurekalert.org/pub_releases/2015-11/uom-ifm111915.php
- 11. NIH Director's Blog, Dr. Francis Collins
 - a. http://directorsblog.nih.gov/2014/09/23/creative-minds-the-muscle-brain-connection/
- 12. Press Release, University of Maryland, July 30, 2013

- a. http://www.eurekalert.org/pub_releases/2013-07/uom-emb073013.php
- b. http://www.umdrightnow.umd.edu/news/exercise-may-be-best-medicine-alzheimers
- 13. Press Release, University of Maryland, September 13, 2012
 - a. http://www.newsdesk.umd.edu/scitech/release.cfm?ArticleID=2777
 - Resulted in interviews for articles appearing in magazines including Weight Watchers, SHAPE, Marie Claire, Women's Health, Men's Health, HEALTH, Better Homes & Gardens, Muscle & Performance, Chatelaine, Capital News Service Television, among others.
- 14. WBAL Radio interview with Mary Beth Marsden, September 13, 2012.
- 15. Runner's World magazine. November, 2011 issue, p. 50.
- 16. Press release, UW-Milwaukee, http://www.eurekalert.org/pub_releases/2010-11/uow--ssi111810.php
- 17. FOX6NEWS Morning Wake-Up, invited live television interview September 10, 2010, along with Olympic gold medalist Bonnie Blair, to promote the Alzheimer's Association Memory Walk and the effects of exercise on brain health. See at: http://www.fox6now.com/videobeta/68f3e12b-f072-4c09-a1d1a7c12876539c/Community/Alzheimers-Memory-Walk
- 18. WUWM Radio, interview with Mitch Tiech on "Lake Effect", aired August 16, 2010. "Exercise and Memory Loss". Listen at: http://www.wuwm.com/programs/lake_effect/view_le.php?articleid=1042
- 19. WUWM Radio, interview with Dr. Tom Luljak, aired February 25, 2010, "Exercise in relation to Alzheimer's". Listen at: http://www.wuwm.com/programs/uwm_today/view_uwmt.php?articleid=223

PROFESSIONAL SERVICE

Grant Reviewing

- 1. NIH Office of the Director Early Independence Award (DP5), 2011
- 2. Agence Nationale de la Recherche, France, 2011
- 3. Alzheimer's Association, 2011, 2013, 2014
- 4. Kansas University Medical Center, 2012
- 5. University of Michigan, 2013
- 6. Health Research Council of New Zealand, 2016, 2017
- 7. Riksbankens Jubileumsfond (RJ), Sweden, 2017
- 8. NIH CSR Study Section Ad Hoc Reviewer, NAME, 2020
- 9. NIH CSR Study Section Ad Hoc Reviewer, NIA SEP, 2020

Editorial Board Service

- 1. Guest Co-Editor Journal of the International Neuropsychological Society, 2020-21, Special Issue "Truly Cross Fit – Exercise and Benefits on Cognition"
- 2. Consulting Editor Journal of the International Neuropsychological Society, 2014-
- 3. Guest Co-Editor Journal of the International Neuropsychological Society, 2014-15, Special Issue "Physical Activity and Brain Plasticity"
- 4. Consulting Editor Neuropsychology, 2013-2014
- 5. Associate Editor Journal of Alzheimer's Disease, 2014, 2018, 2019, 2020

Professional Memberships (year joined, * maintain current membership)

1995 American College of Sports Medicine, Fellow 2010 *

- 2000 Society for Psychophysiological Research
- 2008 Society for Neuroscience
- 2011 International Society to Advance Alzheimer's Research and Treatment *
- 2013 International Neuropsychological Society *

GRADUATE RESEARCH ADVISING

<u>Former</u>

Committee Chair and Primary Advisor (UW-Milwaukee)

- 1. 2009, Morgan Shields, M.S. Kinesiology, UW-Milwaukee, Threat Detection During Exercise
 - a. Master's thesis published, see publication number 16
 - b. Student Research Award, 2008-2009, College of Health Sciences
 - c. First Place (podium presentation), College of Health Sciences Research Symposium (judged by an independent panel), 2008
 - d. Current position: doctoral student in Department of Kinesiology, UW-Madison.
- 2. 2010, Qu Tian, M.S. Kinesiology, UW-Milwaukee, Effects of Acute Exercise on Attentional Bias in Healthy Individuals
 - a. Master's thesis published, see publication number 19
 - b. Student research grant award, College of Health Sciences, 2008-2009 & 2009-2010
 - c. Current position: post-doctoral fellow, NIH-National Institute on Aging (Ferrucci L, advisor)

Committee Chair and Primary Advisor (University of Maryland)

- 3. Alfonso Alfini, PhD, Department of Kinesiology Doctoral Program
 - a. Dissertation Title: The Impact Of Acute Exercise And Sleep Quality On Executive Function: The Potential Mediating Effects Of Functional Connectivity In Older Adults
 - b. Graduate Teaching Assistant, Department of Kinesiology
 - c. GRIP Award, 2015, \$2,500.
 - d. Whitlark Travel Award, 2015
 - e. Sally Phillips Dissertation Fellowship Award, 2016
 - f. SPH Dean's Scholar Award, 2017
 - g. First Place, 2017 ACSM Psychobiology Interest Group Student Poster Award
 - h. Currently: NIH-funded Post-doctoral Fellowship, Johns Hopkins University Alzheimer's Disease Research Center, Bloomberg School of Public Health.
- 4. Theresa Smith Chirles, Department of Kinesiology Doctoral Program
 - a. Dissertation Title: Functional Connectivity Patterns Associated with Aging, Physical Activity, and Genetic Risk for Alzheimer's Disease in Healthy Human Brain Networks.
 - b. Graduate Teaching Assistant, Department of Kinesiology
 - c. Distinguished Teaching Assistant Award, 2012-2013, Center for Teaching Excellence
 - d. F. Daniel Wagner Teaching Award, 2012-2013, Department of Kinesiology
 - e. Universitas 21 Fellowship, 2014
 - f. First Place, 3-Minute Thesis Competition, UMD, 2016
 - g. Currently: NIH funded post-doctoral fellowship, Johns Hopkins University School of Medicine and the Center for Neurodevelopment and Imaging Research (CNIR) at Kennedy Krieger Institute, the Johns Hopkins Bloomberg School of Public Health.
- 5. Lauren Weiss, Department of Kinesiology Master's Program, and the Neuroscience and Cognitive Science Doctoral Program
 - a. Graduate Teaching Assistant, Department of Kinesiology, 2013-2015
 - b. Graduate Research Assistant, Neuroscience and Cognitive Science Program, 2015-
 - c. GRIP Award, 2015, \$2,500
 - d. Master's Thesis, The Effect of Acute Exercise-Induced Arousal on Long Term Memory for Emotional and Neutral Stimuli
 - e. Dissertation Title: Associations of Cardiorespiratory Fitness and Physical Activity with Brain Structure and Large-Scale Functional Networks: Examining the Influence of Depression
 - f. Fellow, Computational Biology of Neural Networks (COMBINE) program (NSF)
 - g. Graduate School ALL-S.T.A.R. Fellowship, 2018-2019
 - h. UMD Graduate School Research Assistant of the Year, 2018-2019
 - i. First Place, 2019 ACSM Psychobiology Interest Group Student Poster Award

- j. UMD Graduate School Wylie Dissertation Fellowship, 2019-2020
- k. Laura B. Wilson Leadership Award, 2020
- I. Jeremy C. Rietschel Graduate Mentorship Award, 2020

Committee Member

- 1. 2018, Bradley Ritland, Department of Kinesiology Doctoral Program, 2018
 - a. Dissertation, "The Impact Of Short-Term Sleep Extension On Cognitive And Motor Performance In Young Adults"
- 2. 2019, Darius Singpurwalla, Department of Kinesiology Doctoral Program, 2019
- 3. 2019, Jessica Montressor-Lopez, Department of Behavioral and Community Health Doctoral Program, 2019
- 4. 2016, Andrew Venezia, Neuroscience and Cognitive Science Doctoral Program, University of Maryland
- 5. 2015, Kenneth White, Neuroscience and Cognitive Science Doctoral Program, University of Maryland
- 6. 2015, Li-Chuan Lo, Kinesiology Doctoral Program, University of Maryland
- 7. 2015, Melissa Lancaster, Clinical Psychology Doctoral Program, Rosalind Franklin University
- 8. 2013, Alissa Butts, Ph.D. Clinical Psychology, Marquette University, Thesis
- 9. 2013, Bartlett Anne Russell, Neuroscience and Cognitive Science Doctoral Program, University of Maryland
- 10. 2013, Christina Kay, M.A. Clinical Psychology, Rosalind Franklin University, Thesis
- 11. 2013, Monica Matthews, M.A. Clinical Psychology, Rosalind Franklin University, Thesis
- 12. 2010, Karlee Sweere, M.S. Kinesiology, Written Comprehensive Exam
- 13. 2009, Lauren Taubitz, M.A. Clinical Psychology, Thesis
- 14. 2009, Joseph Collins, M.S. Kinesiology, Thesis
- 15. 2008, Katrina Serwe, M.S. Kinesiology, Thesis
- 16. 2008, Lauren Ewalt, M.S. Kinesiology, Thesis

Current Graduate Students

Committee Chair and Primary Advisor

- 1. Junyeon Won, Department of Kinesiology, 2016
 - a. Graduate Teaching Assistant, Department of Kinesiology, 2016-
 - b. Goldhaber Travel Award, 2017
 - c. Master's Thesis, "The Impact of Acute Aerobic Exercise on Semantic Memory Activation in Healthy Older Adults", 2018.
 - d. Graduate Teaching Assistant of the Year, Dept of KNES, 2017-2018
 - e. GRIP Award, 2018
 - f. Third Place, 2018 ACSM Aging Interest Group/Strategic Health Initiative on Aging Student Research Award.
 - g. Honorable Mention, 2019 ACSM Aging Interest Group/Strategic Health Initiative on Aging Student Research Award
- 2. Daniel Callow, Neuroscience and Cognitive Science Doctoral Program, 2018
 - a. First Year Project: Acute Exercise and Microstructural Plasticity in Older Adults
- 3. Gabriel Pena, KNES Doctoral Program, 2019-
- 4. Leslie Jordan, Neuroscience and Cognitive Science Doctoral Program, 2019
 - a. First Year Project: Cortical Connectivity and Heart Rate Variability After Acute Exercise in Older Adults
- 5. Yash Kommula, Neuroscience and Cognitive Science Doctoral Program, 2020-
- 6. Kirsten Peterman, KNES Master's Program, 2019-2021

7. Naomi Arnold, KNES Master's Program, 2020-

Current Dissertation/Thesis Committee Member

- 1. Eshan Dahal, Fischell Department of Bioengineering Doctoral Program
- 2. Kelsey Canada, Department of Psychology Doctoral Program
- 3. Michael Hamberger, Department of Kinesiology Doctoral Program
- 4. Claire Crossman, Department of Speech & Language Pathology Masters Program

COMMUNITY OUTREACH AND EDUCATIONAL SEMINARS – "Exercise and Brain Health" (2008-2010, 2013)

- 1. St Josephs Center School Sisters of St Francis
- 2. Luther Manor Retirement Community (twice)
- 3. Religious Intercommunity Committee
- 4. Alzheimer's Association Memory Walk
- 5. Wisconsin Province of the Society of Jesus
- 6. Clement Manor Retirement Community
- 7. Waukesha Memorial Hospital
- 8. St. Camillus Retirement Community
- 9. Alexian Brother's Village Retirement Community
- 10. Dr. Wesley Scott Senior Living Community
- 11. Luther Haven Retirement Community
- 12. Salvatorian Sisters Convent
- 13. United Community Center Senior Center and Latino Geriatric Center (in Spanish and English)
- 14. East Castle Retirement Community Wellness Breakfast
- 15. New Castle Retirement Community
- 16. Merrill Hills Manor Retirement Community
- 17. St. John's on the Lake
- 18. Alzheimer's Association Memory Walk (2009 and 2010)
- 19. Riderwood Village, Silver Spring, MD, 2013
- 20. Annapolis Café Scientifique, Annapolis, MD, 2014
- 21. Collington Retirement Community, Mitchellville, MD, 2014

SERVICE

<u>University Service</u> (UW-Milwaukee)

- Member, Black & Gold Committee, College of Health Sciences, 2005-2006
- Member, Graduate Faculty Committee, Department of Human Movement Sciences, 2005-2010
- Member, Facilities Committee, Department of Human Movement Sciences, 2006-2008
- Member, Transitional DPT Admissions Committee, Department of Human Movement Sciences, 2006-2007
- Member, Search and Screen Committee, Doctor of Physical Therapy Program position, 2006-2007
- Member, Course and Curriculum Committee, Department of Human Movement Sciences, 2006-2007
- Chair, Ad Hoc Committee on Exercise Physiology Laboratory Space, Department of Human Movement Sciences, 2007-2008
- Member, Search and Screen Committee, Clinical Associate Professor (I) in HMS, 2007-2008
- Member, Search and Screen Committee, Clinical Associate Professor (II) in HMS, 2007-2008
- Member, Travel Committee, Department of Human Movement Sciences, 2008-2009
- Member, Research and Graduate Program Committee, College of Health Sciences, 2008-2010
- Chair, Travel Committee, Department of Human Movement Sciences, 2009-2010
- Member, Doctoral Faculty Committee, College of Health Sciences, 2009-2011
- Elected Member, UW-Milwaukee Faculty Senate, 2010-2011

<u>University Service</u> (University of Maryland)

Departmental Service

- Director, Undergraduate Honors Program, 2015-2018
- Director, Cognitive Motor Neuroscience Laboratory, 2012-present
- IRB Liaison for KNES, 2014-present
- Chair, Undergraduate Awards and Scholarships Committee, 2016-present
- Member, Graduate Committee, 2011-present
- Member, GRIP Committee, 2011-present
- Member, Graduate Fellowships & Awards Committee, 2011-present
- Member, Clinical Services Committee, 2011-present
- Member, Web & Computer Committee, 2011-present
- Member, Exercise Physiology Search Committee, 2015-2016
- Member, Executive Committee, 2012-2015
- Member, Human Motor Neuroscience Search Committee, 2013-2014
- Member, Movement Science Search Committee, 2012-2013
- Member, Student Appeals Committee, 2013-2014

School of Public Health Service

- Member, Research Committee, 2015-present
- Member, School of Public Health Faculty Senate, 2011-present
- Member, SPH VPAC/PCC, 2016-present

University Service

- Elected Member, University Senate, 2019-2022
- Elected Member, Executive Committee, Neuroscience and Cognitive Science Doctoral Program, 2015-2018
- Member, Strategic Planning Committee, Neuroscience and Cognitive Science Doctoral Program, 2016-2017
- Member, Safety Committee, Maryland Neuroimaging Center, 2012-present
- UMD Office of the Vice President for Research, Ad Hoc Review Committee, 2016
- Member, Banneker-Key Scholarship Committee, 2012

Professional Service

Committees

• American College of Sports Medicine, Strategic Health Initiative on Aging Committee, 2011-present, Chair of Conference Scientific Sessions

- Chair, Free Communication (Slide) Session, "Physical Activity and Mental Health", at the 53st Annual Meeting of the American College of Sports Medicine in Denver, CO, 2006.
- Chair, Free Communication (Slide) Session, "Neuromuscular Disorders", at the 57th Annual Meeting of the American College of Sports Medicine in Baltimore, MD, 2010.
- Chair, Free Communication (Slide) Session, "Neuroscience", at the 57th Annual Meeting of the American College of Sports Medicine in Boston, MA, 2016.
- Chair, Thematic Poster Session, "Exercise Psychology Cognition and Emotion", at the 58th Annual Meeting of the American College of Sports Medicine in Denver, CO, 2017.
- Chair, Free Communication (Slide) Session, "Neuroscience", at the 59th Annual Meeting of the American College of Sports Medicine in Minneapolis, MN, 2018.