

**Michelle W. Voss**  
**Department of Psychological and Brain Sciences**  
Curriculum Vitae as of August 2025

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## **EDUCATION AND PROFESSIONAL HISTORY**

### **Post Graduate Education**

2008-2011      **Ph.D.** in Psychology, Brain & Cognition University of Illinois at Urbana-Champaign  
  
2005-2008      **M.A.** in Psychology, Brain & Cognition University of Illinois at Urbana-Champaign

### **Higher Education**

1999-2004      **B.S.** with Honors, Summa cum Laude Psychology University of Illinois at Urbana-Champaign

### **Professional and Academic Positions**

2025- present      **Professor, Ronnie Ketchel Faculty Fellow**, Department of Psychological and Brain Sciences, University of Iowa  
  
2023-present      **Associate Professor, Ronnie Ketchel Faculty Fellow**, Department of Psychological and Brain Sciences, University of Iowa  
  
2020-present      **Associate Professor**, Department of Psychological and Brain Sciences, University of Iowa  
  
2012-2020      **Assistant Professor**, Department of Psychological and Brain Sciences, University of Iowa  
  
2011      **Postdoctoral Research Associate**, The Beckman Institute for Advanced Science and Technology, University of Illinois at Urbana-Champaign  
  
2005-2011      **Research Assistant**, Department of Psychology, University of Illinois at Urbana-Champaign  
  
2004-2005      **Lab Coordinator**, Lifelong Brain and Cognition Laboratory, University of Illinois at Urbana-Champaign

### **Honors and Awards**

2025      Selected as **National Academy of Medicine Emerging Leader**  
2022      **Mid-Career Faculty Scholar Award**, The University of Iowa  
2022      **Williams-Cannon Fellowship**, Iowa Neuroscience Institute  
2022      **Election to the Academy of Behavioral Medicine Research**  
2021      **Election to the Memory Disorders Research Society**  
2020      **Dean's Scholar**, College of Liberal Arts and Sciences, University of Iowa  
2020      **Early Career Scholar of the Year**, Office of the Vice President for Research, University of Iowa  
2019      **Summer Research Opportunities Program (SROP) Mentoring Award**, Graduate College, University of Iowa  
2010      **Philips Travel Award**, Second Biennial International Conference on Resting-State Functional Brain Connectivity held in Milwaukee, WI (\$500)  
2010      **Quinn Memorial Exchange Fellowship**, Scholarship from the Department of Psychology at

	the University of British Columbia for proposed research project
2009	<b>Beckman Institute Graduate Fellowship</b> , One year of support for graduate fellowship
2009	<b>Paul D. Doolen Scholarship for the Study of Aging</b> , \$5000 scholarship for excellence in aging research
2007-2009	<b>NIMH Cognitive Psychophysiology Training Grant Fellowship</b>
2006	<b>NCAA Graduate Student Research Grant</b> , \$5000 grant for proposed research project
2004	<b>Janet Tritsch Memorial Award in Psychology, for Honors Thesis</b> , Awarded annually to the undergraduate student in psychology with the best research paper
2004	<b>Bronze Tablet Recipient</b> , Awarded to those in the top 3% of their college graduating class
2003	<b>Big Ten Medal of Honor</b> , Awarded annually at each Big Ten conference school to one male and one female senior student-athlete who have demonstrated proficiency in scholarship, community service, and athletics
2003	<b>Outstanding Scholar-Athlete Award</b> , Awarded to the varsity athlete with the highest grade point average in each class of school
1999-2004	<b>Dean's List</b> , University of Illinois at Urbana-Champaign

## SCHOLARSHIP

### Publications

CLAS \* System \* = Senior Author, Major Contribution, \*\* = Secondary Contribution, \*\*\* = Equal Contribution, \*\*\*\* = Minor Contribution, underline = student or trainee author

### Refereed Articles

142. \*Chappell, H., Gilliam, Z., Madero, B., Springer, J., Pipoly, M.A., Baller, K., Oehler, C., Long, J., Pierce, G., Voss, M. (in review). Non-Exercise Equations for Cardiorespiratory Fitness Prediction in Older Adults using Body Roundness Index and Waist Circumference.
141. \*Cardenas, A.R., Ramirez-Villegas, J.F., Kovach, C.K., Gander, P.E., Cole, R.C., Grossbach, A.J., Kawasaki, H., Greenlee, J.D.W., Howard III, M.A., Nourski, K.V., Banks, M.I., Voss, M.W. (in review) Exercise effects on human hippocampal-cortical ripple interactions.
140. \*Jung, M., Pipoly, M., Madero, B., Oehler, C., Baller, K., Magnotta, V.A., Long, J.D., Pierce, G.L., Voss, M.W. (in review) Effects of Aerobic Exercise Intervention on the Association Between Brain Functional Connectivity and Cognition Among Older Adults.
139. \*Madero, B., Sodoma, M., Oehler, C., Magnotta, V.A., Long, J.D., Hazeltine, E., Voss, M.W. (in review). Global functional connectivity of cognitive control network predicts task-switching performance in older adults.
138. \*\*\*\*Balbim, G. M., Boa Sorte Silva, N. C., Falck, R. S., Kramer, A., Voss, M. W., Liu-Ambrose, T. (*In press*). 24-hour activity cycle behaviors and gray matter volume in mild cognitive impairment. *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*.
137. \*\*\*\*Aghjayan, S. L., Polk, S. E., Ripperger, H. S., Huang, H., Wan, L., Kamarck, T., Marsland, A. L., Kang, C., Voss, M. W., Sutton, B. P., Oberlin, L. E., Burns, J. M., Vidoni, E. D., McAuley, E., Hillman, C. H., Kramer, A. F., & Erickson, K. I. (2025). Associations Between Episodic Memory and Hippocampal Volume in Late Adulthood. *Hippocampus*, 35(2), e70010. <https://doi.org/10.1002/hipo.70010>
136. \*\*\*\*Deng, L.R., Harmata, G.I., Barsotti, E.J., Williams, A.J., Christensen, G.E., Voss, M.W., Saleem, A., Rivera-Dompenciel, A.M., Richards, J.G., Sathyaputri, L. Mani, M., Abdolmotalleby, H., Fiedorowicz, J.G., Xu, J., Shaffer, J.J., Wemmie, J.A., Magnotta, V.A. (2025). Machine learning with multiple modalities of brain magnetic resonance imaging data to identify the presence of bipolar disorder. *Journal of affective disorders*, 368, pp.448-460.
135. \*Voss, M.W., Oehler, C., Daniels, W., Sodoma, M., Madero, B., Kent, J., Jain, S., Jung, M., Nuckols, V.R., Dubose, L.E., Davis, K., O'Deen, A., Hamilton, C., Baller, K., Springer, J., Rivera-Dompenciel, A., Pipoly, M., Muellerleile, M., Nagarajan, N., Bjarnason, T., Harb, N., Lin, L., Magnotta, V.A., Hazeltine,

- E., Long, J.D., Pierce, G.P. (2024). Exercise Effects on Brain Health and Learning from Minutes to Months: the Brain EXTEND trial. Contemporary Clin Trials: 107647. Supplemental materials, papers, and associated shared data and code will be available in the project's OSF repository (<https://osf.io/ywcq5/>).
134. \*\*\*\*Balbim, G.M., Falck, R.S., Silva, N., Kramer, A., Voss, M.W., Liu-Ambrose, T. (2024). The association of the 24-hour activity cycle profiles with cognition in older adults with mild cognitive impairment: A cross-sectional study. *The Journals of Gerontology: Series A* 79, no. 7
  133. \*Lee, H.K., Basak, C., Grant, S., Ray, N., Skolasinska, P., Oehler, C., Qin, S., Sun, A., Smith, E., Sherard, H., †Rivera-Dompenciel, A., Merzenich, M., Voss, M.W. (2024). The effects of computerized cognitive training in older adults' cognitive performance and biomarkers of structural brain aging. *Journal of Gerontology Series B: Psychological Sciences*. 79(7)
  132. \*Pipoly, M.A., Lee., H.K., Hazeltine, E., Voss, M.W. (2024). Educational Attainment Moderates Task-state Control Network Connectivity Relations to Response Conflict Among Healthy Older Adults. *Journal of Gerontology Series B: Psychological Sciences*. 79(7)
  131. \*\*Jung, M., Pontifex, M.B., Hillman, C.H., Kang, M., Voss, M.W., Erickson, K.I. and Loprinzi, P.D. (2024). A mechanistic understanding of cognitive performance deficits concurrent with vigorous intensity exercise. *Brain and cognition*, 180, p.106208.
  130. \*\*Skolasinska, P., Qin, S., Voss, M.W., Lee, H.K., Basak, C. (2024). Brain activations elicited during task-switching generalize beyond the task: A partial least squares correlation approach to combine fMRI signals and cognition. *Human Brain Mapping*. 45(11), p.e26804.
  129. \*Armstrong, M.K., Jain, S., Nuckols, V., Pewowaruk, R., Zhang, X., DuBose, L., Sodoma, M., Madero, B., Voss, M.W. and Pierce, G.L. (2024). The association of structural versus load-dependent large artery stiffness mechanisms with cerebrovascular damage and cortical atrophy in humans. *GeroScience*, pp.1-11
  128. \*\*\*\*Armstrong, M.K., Nuckols, V.R., Gimblet, C.J., Holwerda, S.W., DuBose, L.E., Luehrs, R.E., Lane, A.D., Chirinos, J.A., Voss, M.W. and Pierce, G.L. (2023). Relation of forward and backward traveling pressure waves with subclinical carotid artery wall remodeling and central pulse pressure. *Journal of Applied Physiology*. 135, no. 4 (2023): 943-949.
  127. \*\*Saleem, A., Harmata, G., †Jain, S., Voss, M.W., Fiedorowicz, J.G., Williams, A., Shaffer, J.J., Richards, J.G., Barsotti, E.J., Sathyaputri, L., Schmitz, S.L., Christensen, G.E., Long, J.D., Xu, J., Wemmie, J.A., Magnotta, V.A. (2023). Functional connectivity of the cerebellar vermis in bipolar disorder and associations with mood. *Frontiers in Psychiatry*, 14, p755.
  126. \*\*Gimblet, C.J., Armstrong, M.K., Nuckols, V.R., DuBose, L.E., Holwerda, S.W., Luehrs, R.E., Lane, A.D., Voss, M.W., Pierce, G.L. (2023). Sex-specific associations of reservoir-excess pressure parameters with age and subclinical vascular remodeling. *Journal of Hypertension*, 41 (4), 624-631.
  125. \*\*Morris, T.P., Burzynska, A., Voss, M., Fanning, J., Salerno, E.A., Prakash, R., Gothe, N.P., Whitfield-Gabrieli, S., Hillman, C.H., McAuley, E. and Kramer, A.F. (2022). Brain structure and function predict adherence to an exercise intervention in older adults. *Medicine and science in sports and exercise*, 54(9), p.1483.
  124. \*\*\*\*Barha, C.K., Falck, R.S., Best, J.R., Nagamatsu, L.S., Hsiung, G.Y.R., Sheel, A.W., Hsu, C.L., Kramer, A.F., Voss, M.W., Erickson, K.I., Davis, J.C., Shoemaker, J.K., Boyd, L., Crockett, R.A., ten Brinke, L., Bherer, L., Singer, J., Galea, L.A.M., Jacova, C., Bullock, A., Grant, S., Liu-Ambrose, T. (2022). Reshaping the path of mild cognitive impairment by refining exercise prescription: a study protocol of a randomized controlled trial to understand the “what,” “for whom,” and “how” of exercise to promote cognitive function. *Trials* 23.1, 1-16
  123. \*DuBose, L.E., †Weng, T.B., Pierce, G.L., Wharff, C., Reist, L., Hamilton, C., O'Deen, A., Dubishar, K., Lane-Cordova, A. and Voss, M.W. (2022). Association between cardiorespiratory fitness and cerebrovascular reactivity to a breath-hold stimulus in older adults: influence of aerobic exercise training. *Journal of Applied Physiology*, 132(6), pp.1468-1479.
  122. \*\*Aghjayan, S.L., Bournias, T., Kang, C., Zhou, X., Stillman, C.M., Donofry, S.D., Kamarck, T.W., Marsland, A.L., Voss, M.W., Fraundorf, S.H. and Erickson, K.I. (2022). Aerobic exercise improves episodic memory in late adulthood: a systematic review and meta-analysis. *Communications Medicine*, 2(1), pp.1-11.
  121. \*Voss, M.W., Jain, S.J. (2022). Getting fit to counteract cognitive aging: evidence and future directions. *Physiology*, 37(4), 197-206.
  120. \*Sodoma, M., Cole, R., Sloan, T.J., Kent, J., Magnotta, V.A., Voss, M.W. (2021). Hippocampal Acidity

- and Volume Are Differentially Associated with Spatial Navigation in Older Adults. *NeuroImage*, 245:118682
119. \*Loprinzi, P.D, Roig, M., Etnier, J.L., Tomporowski, P.D., Voss, M.W. (2021). Acute and Chronic Exercise Effects on Human Memory: What We Know and Where to Go From Here. *Journal of Clinical Medicine*. 10.21, 4812.
  118. \*\*Colmenares, A.M., Voss, M.W., Fanning, J., Salerno, E.A., Gothe, N.P., Thomas, M.L., McAuley, E., Kramer, A.F. and Burzynska, A.Z. (2021). White matter plasticity in healthy older adults: the effects of aerobic exercise. *Neuroimage*, 239, p.118305.
  117. \*\*Aldine, A.S., Ogilvie, A., Wemmie, J., Kent, J., Schulz, J., Long, J.D., Kamholz, J., Sajjad, H., Kline, J., Shaw, E., Voss, M.W., Paulsen, J.S., Magnotta, V.A. (2021). Moderate Intensity Exercise in Pre-manifest Huntington's Disease: Results of a 6 months Trial. *SVOA Neurology*, 2(1), 06-36.
  116. \*\*\*\*Burzynska, A.Z., Voss, M.W., Fanning, J., Salerno, E.A., Gothe, N.P., McAuley, E., Kramer, A.F. (2020). Sensor-measured sedentariness and physical activity are differentially related to fluid and crystallized abilities in aging. *Psychology and Aging*. Sep 24.
  115. \*\*\*\*Burzynska, A.Z., Ganster, D.C., Fanning, J., Salerno, E.A., Gothe, N.P., Voss, M.W., McAuley, E., Kramer, A.F. Occupational physical stress is negatively associated with hippocampal volume and memory in older adults. (2020). *Frontiers in human neuroscience*. Jul 15;14:266.
  114. \*Cole, R.C., Hazeltine, E., †Weng, T.B., Wharff, C., DuBose, L.E., Schmid, P., Sigurdsson, G., Magnotta, V.A., Pierce, G.L., Voss, M.W. (2020). Cardiorespiratory fitness and hippocampal volume predict faster episodic associative learning in older adults. *Hippocampus*. Feb;30(2):143-55.
  113. \*Voss, M.W., Weng, T.B., Narayana-Kumanan, K., Cole, R.C., Wharff, C., Reist, L., DuBose, L., Sigurdsson, G., Mills, J.A., Long, J.D., Magnotta, V.A., Pierce, G.L. (2020). Acute exercise effects predict training change in cognition and connectivity. *Medicine and science in sports and exercise*. Jan;52(1):131.
  112. \*Lee, H.K., Kent, J., Wendel, C., Wolinsky, F., Foster, E., Merzenich, M.M., Voss, M.W. (2019). Home-Based, Adaptive Cognitive Training for Healthy Older Adults: Initial Efficacy Trial. *The Journals of Gerontology: Series B*. epub ahead of print.
  111. \*Voss, M.W., Soto, C., Yoo, S., Sodoma, M., Vivar, C., van Praag, H. (2019). Exercise and hippocampal memory systems. *Trends in Cognitive Sciences*, 23(4), 318-333.
  110. \*Rigon, A., Voss, M. W., Turkstra, L. S., Mutlu, B., & Duff, M. C. (2019). White matter correlates of different aspects of facial affect recognition impairment following traumatic brain injury. *Social neuroscience*, 14(4), 434-448.
  109. \*Voss, M.W., Sutterer, M., Weng, T.B., Burzynska, A.Z., Fanning, J., Salerno, E., Gothe, N.P., Ehlers, D.K., McAuley, E. and Kramer, A.F. (2019). Nutritional supplementation boosts aerobic exercise effects on functional brain systems. *Journal of applied physiology*, 126(1), 77-87.
  108. \*VanVleet, T., Voss, M.W., Dabit, S., Mitko, A., & DeGutis, J. (2018). Randomized control trial of computer-based training targeting alertness in older adults: the ALERT trial protocol. *BMC psychology*, 6(1), 22.
  107. \*Pontifex, M. B., Gwizdala, K., Weng, T. B., Zhu, D. C., & Voss, M. W. (2018). Cerebral blood flow is not modulated following acute aerobic exercise in preadolescent children. *International Journal of Psychophysiology*, 134, 44-51.
  106. \*\*\*\*Baniqued, P. L., Gallen, C. L., Voss, M. W., Burzynska, A. Z., Wong, C. N., Cooke, G. E., Duffy, K., Fanning, J., Ehlers, D.K., Salerno, E.A., Aguiñaga, S., McAuley, E., Kramer, A.F., D'Esposito, M. (2018). Brain Network Modularity Predicts Exercise-Related Executive Function Gains in Older Adults. *Frontiers in aging neuroscience*, 9, 426.
  105. \*\*Kranz, M. B., Voss, M. W., Cooke, G. E., Banducci, S. E., Burzynska, A. Z., & Kramer, A. F. (2018). The cortical structure of functional networks associated with age-related cognitive abilities in older adults. *PloS one*, 13(9), e0204280.
  104. \*Rigon, A., Voss, M.W., Turkstra, L.S., Mutlu, B., Duff, M.C. (2019). Functional neural correlates of facial affect recognition impairment following TBI. *Brain Imaging and Behavior*, 13(2), 526-540.
  103. \*Rigon, A., Voss, M.W., Turkstra, L.S., Mutlu, B., Duff, M.C. (2018). Different aspects of facial affect recognition impairment following traumatic brain injury: The role of perceptual and interpretative abilities. *Journal of clinical and experimental neuropsychology*, 40(8):805-819.
  102. \*\*\*\*Hsu, C.L., Best, J.R., Voss, M.W., Handy, T.C., Beauchet, O., Lim, C., Liu-Ambrose, T. (2018). Functional neural correlates of slower gait among older adults with mild cognitive impairment. *The*

- journals of gerontology. Series A, Biological sciences and medical sciences, gly027.
101. \*\*\*\*Chaddock-Heyman, L., Weng, T.B., Kienzler, C., Erickson, K.I., Voss, M.W., Drollette, E.S., Raine, L.B., Kao, S.C., Hillman, C.H., Kramer, A.F. (2018). Scholastic performance and functional connectivity of brain networks in children. *PLoS One*, 13(1), e0190073.
  100. \*Clark, R., Hazeltine, E., Freedberg, M., Voss, M.W. (2018). Age differences in episodic associative learning. *Psychology and Aging*, 33(1), 144-157.
  99. \*Voss, M. W., Clark, R., Freedberg, M., Weng, T., & Hazeltine, E. (2017). Striking a chord with healthy aging: memory system cooperation is related to preserved configural response learning in older adults. *Neurobiology of aging*, 63, 44-53.
  98. \*Clark, R., Tahan, A.C., Watson, P.D., Severson, J., Cohen, N.J., Voss, M.W. (2017). Aging affects spatial reconstruction more than spatial pattern separation performance even after extended practice. *Hippocampus*, 27(6), 716-725.
  97. \*\*\*\*Baniqued, P.L., Gallen, C.L., Voss, M.W., Burzynska, A.Z., Wong, C.N., Cooke, G.E., Duffy, K., Fanning, J., Ehlers, D.K., Awick, E.A. and Aguiñaga, S., McAuley, E., Kramer, A.F., D'Esposito, M.D. (2017). Brain network modularity predicts exercise-related executive function gains in older adults. *Frontiers in Aging Neuroscience*, 9, 426.
  96. \*\*\*\*Hsu, C.L., Best, J.R., Wang, S., Voss, M.W., Hsiung, R.G., Munkacsy, M., Cheung, W., Handy, T.C., Liu-Ambrose, T. (2017). The Impact of Aerobic Exercise on Fronto-Parietal Network Connectivity and Its Relation to Mobility: An Exploratory Analysis of a 6-Month Randomized Controlled Trial. *Frontiers in human neuroscience*, 11, 344.
  95. \*\*\*\*Hsu, C.L., Best, J.R., Davis, J.C., Nagamatsu, L.S., Wang, S., Boyd, L.A., Hsiung, G.R., Voss, M.W., Eng, J.J., Liu-Ambrose, T. (2017). Aerobic exercise promotes executive functions and impacts functional neural activity among older adults with vascular cognitive impairment. *British Journal of Sports Medicine*, bjsports-2016-096846.
  94. \*\*\*\*Burzynska, A.Z., Jiao, Y., Knecht, A.M., Fanning, J., Awick, E.A., Chen, T., Gothe, N., Voss, M.W., McAuley, E. and Kramer, A.F. (2017). White matter integrity declined over 6-months, but dance intervention improved integrity of the fornix of older adults. *Frontiers in aging neuroscience*, 9, 59.
  93. \*\*\*\*Banducci, S.E., Daugherty, A.M., Biggan, J.R., Cooke, G.E., Voss, M., Noice, T., Noice, H. and Kramer, A.F. (2017). Active Experiencing Training Improves Episodic Memory Recall in Older Adults. *Frontiers in Aging Neuroscience*, 9, 133.
  92. \*\*\*\*Kranz, M. B., Baniqued, P. L., Voss, M. W., Lee, H., & Kramer, A. F. (2017). Examining the Roles of Reasoning and Working Memory in Predicting Casual Game Performance across Extended Gameplay. *Frontiers in Psychology*, 8.
  91. \*\*DuBose, L., Voss, M.W., †Weng, T.B., †Kent, J., Dubishar, K., Lane-Cordova, A., Sigurdsson, G., Schmid, P., Barlow, P., Pierce, G. (2017). Carotid  $\beta$ -stiffness index is associated with slower processing speed but not working memory or white matter integrity in healthy middle-aged/older adults. *Journal of Applied Physiology*, 122(4), 868-876.
  90. \*Rigon, A., Voss, M.W., Turkstra, L.S., Mutlu, B., Duff, M.C. (2017). Relationship between individual differences in functional connectivity and facial emotion recognition abilities in adults with traumatic brain injury. *NeuroImage: Clinical*, 13, 370-377.
  89. \*Weng, T.B., Pierce, G.L., Darling, W.G., Falk, D., Magnotta, V.A., Voss, M.W. (2017). The acute effects of exercise on the synchrony of functional networks of the aging human brain. *Brain Plasticity*, 2(2), 171-190.
  88. \*\*\*\*Fanning, J., Porter, G., Awick, E.A., Ehlers, D.K., Roberts, S.A., Cooke, G., Burzynska, A.Z., Voss, M.W., Kramer, A.F., McAuley, E. (2017). Replacing sedentary time with sleep, light, or moderate-to-vigorous physical activity: effects on self-regulation and executive functioning. *Journal of Behavioral Medicine*, 40(2), 332-342.
  87. \*Rigon, A., Voss, M.W., Turkstra, L.S., Mutlu, B., Duff, M.C. (2016). Frontal and temporal structural connectivity is associated with social communication impairment following traumatic brain injury. *Journal of the International Neuropsychological Society*, 22(7), 705-716.
  86. \*Rigon, A., Duff, M.C., Voss, M.W. (2016). Structural and functional neural correlates of self-reported attachment in healthy adults: evidence for an amygdalar involvement. *Brain Imaging and Behavior*, 10(4), 941-952.
  85. \*\*Sutterer, M.J., Bruss, J., Boes, A.D., Voss, M.W., Bechara, A., Tranel, D. (2016). Canceled

- connections: Lesion-derived network mapping helps explain differences in performance on a complex decision-making task. *Cortex*, 78, 31-43.
84. \*\*Band, G.P.H., Basak, C., Slagter, H.A., Voss, M.W. (2016). Towards a mechanistic view on game-guided learning. Editorial summary on research topic "Effects of game and game-like training on neurocognitive plasticity," *Frontiers in Human Neuroscience*, 10, 123.
  83. \*Voss, M.W., Weng, T.B., Burzynska, A.Z., Wong, C.N., Cooke, G.E., Clark, R., Fanning, J., Awick, E., Gothe, N.P., Olson, E.A., McAuley, E., Kramer, A.F. (2016). Fitness, but not physical activity, is related to functional integrity of brain networks associated with aging. *NeuroImage*, 131, 113-125.
  82. \*\*Oberlin, L.E., Verstynen, T.D., Burzynska, A.Z., Voss, M.W., Prakash, R.S., Chaddock-Heyman, L., Wong, C., Fanning, J., Awick, E., Gothe, N., Phillips, S.M., Mailey, E., Ehlers, D., Olson, E., Wojcicki, T., McAuley, E., Kramer, A.F., Erickson, K.I. (2016). White matter microstructure mediates the relationship between cardiorespiratory fitness and spatial working memory in older adults. *NeuroImage*, 131, 91-101.
  81. \*Rigon, A., Duff, M.C., McAuley, E., Kramer, A.F., Voss, M.W. (2016). Is traumatic brain injury associated with reduced inter-hemispheric functional connectivity? A study of large-scale resting state networks following traumatic brain injury. *Journal of Neurotrauma*, 33(11), 977-989.
  80. \*\*\*\*Hsu, C.L., Best, J.R., Chiu, B.K., Nagamatsu, L.S., Voss, M.W., Handy, T.C., Bolandzadeh, N., Liu-Ambrose, T. (2016). Structural neural correlates of impaired mobility and subsequent decline in executive functions: a 12-month prospective study. *Experimental Gerontology*, 80, 27-35.
  79. \*\*\*\*Nagamatsu, L.S., Hsu, C.L., Voss, M.W., Chan, A., Bolandzadeh, N., Handy, T.C., Graf, P., Beattie, B.L., Liu-Ambrose, T. (2016). The neurocognitive basis for impaired dual-task performance in senior fallers. *Frontiers in Aging Neuroscience*, 8, 20.
  78. \*\*\*\*Burzynska, A.Z., Wong, C.N., Chaddock-Heyman, L., Olson, E.A., Gothe, N.P., Knecht, A., Voss, M.W., McAuley, E., Kramer, A.F. (2016). White matter integrity, hippocampal volume, and cognitive performance of a world-famous nonagenarian track-and-field athlete. *Neurocase*, 22(2), 135-144.
  77. \*Clark, R.C., Freedberg, M., Hazeltine, E., Voss, M.W. (2015). Are there age-related differences in the ability to learn configural responses? *PLoS ONE*, 10(8), e0137260.
  76. \*\*\*\*Hsu, C.L., Voss, M.W., Best, J.R., Handy, T.C., Madden, K., Bolandzadeh, N., Liu-Ambrose, T. (2015). Elevated Body Mass Index and Maintenance of Cognitive Function in Late Life: Exploring Underlying Neural Mechanisms. *Frontiers in Aging Neuroscience*, 7, 155.
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### ***Non-refereed Articles***

3. Voss, MW. (2020). Active Voice: Two Worlds Collide — Bridging Acute and Chronic Exercise Paradigms to Understand How Physical Activity Improves Cognition. Invited highlighted commentary for the American College of Sports Medicine Bulletin.
2. Weng, TB & Voss, MW. (2015). Active Voice: Aerobic exercise targets specific brain systems. Invited highlighted commentary for the American College of Sports Medicine Bulletin.

1. Voss, M.W. Brain. Encyclopedia of Sport and Exercise Psychology. (2014). Editors Drs Robert Charles Eklund and Gershon Tenenbaum. SAGE Publications.

### ***Book Chapters***

5. \*Voss, M.W. (2018). The Benefits of Physical Activity on Brain Structure and Function in Healthy Aging and Age-Related Neurological Disease. The Wiley Handbook on the Aging Mind and Brain (2018): 649-661. Edited by Drs Matthew Rizzo and Steven Anderson.
4. \*Clark, R., Wendel, C., & Voss, M. W. (2017). Physical Activity and Cognitive Training: Impact on Hippocampal Structure and Function. In The Hippocampus from Cells to Systems (pp. 209-243). Springer International Publishing. Chicago. Edited by Drs Debbie Hannula and Melissa Duff.
3. \*Voss, M.W. (2016). The chronic exercise-cognition interaction: fMRI research. Invited book chapter in Exercise-Cognition Interaction: Neuroscience Perspectives. Edited by Dr. Terry McMorris.
2. \*Voss, M.W. & Erickson, K.I. (2013). Exercise effects on brain and cognition in older adults. Chapter in, "Routledge Handbook of Physical Activity and Mental Health." Edited by Drs Jennifer L. Etnier and Panteleimon Ekkekakis.
1. \*\*\*\*Roberts, B. W., Harms, P. D., Smith, J., Wood, D., & Webb, M. (2005). Methods in personality psychology. In Eid, M., & Diener, E. (Eds.). Handbook of Psychological Assessment: A Multimethod Perspective. Washington, D. C.: American Psychological Association.

### ***Software***

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<https://nibetaseries.readthedocs.io/en/latest/>

### ***Electronic Publications***

3. Voss, M.W. (2024). Past, Present, and Future of the HBC Lab. HBC lab blog, January 2024.  
<https://hbc.lab.uiowa.edu/news/2024/01/past-present-and-future-hbc-lab>
2. Voss, M.W. (2015). Why it should always be the season for exercise. Cognitive Neuroscience Society blog in the Huffington Post. [https://www.huffpost.com/entry/why-it-should-always-be-t\\_b\\_6430196](https://www.huffpost.com/entry/why-it-should-always-be-t_b_6430196)
1. Voss, M.W. (2010). Understanding the mind of the elite athlete: Can sports sharpen the body and mind? Scientific American Mind. <https://www.scientificamerican.com/article/understanding-elite-athlete/>

### ***Grants and Contracts***

#### ***Grant Reviewing***

2025 - present	NIA Mentored Career Development Review Panel, ZRG1 AN-G (81), Ad-Hoc
2024 - present	NINDS T32 Institutional National Research Service Award (NRSA), ZNS1 SRB-R Ad-Hoc
2024	Invited review for National Science Foundation, SBIR/STTR
2023	Invited review for National Science Foundation, Science of Learning and Augmented Intelligence
2021 - 2023	National Academies of Science Ford Foundation Fellowship Panelist, Fellowship program to increase diversity in academia
2021 – 2022	NIH Neuroscience of Aging Review Committee – AGCD-1 on Career Development Facilitating the Transition to Independence
2020 – 2021	NIH Neuroscience Aging Review Committee, Standing member on Clinical and Translational Research on Aging (NIA-T)
2018	NIH Special Emphasis Panel, ZRG1 BBBP-Z on Aging, Memory, and Emotion
2018	NIH Special Emphasis Panel, RFA-AG-18-019
2017	NIH Special Emphasis Panel, PAR-16-212 and PAR-16-213
2015-2018	NIH Neuroscience of Aging Review, Council NIA-N, SRO Jeannette Johnson

2018 - present	NIH Neuroscience of Aging Review, Council NIA-N, SRO Greg Bissonette
2015	Invited review for the Innovational Research Incentives Scheme, Netherlands Organisation for Scientific Research
2014	Invited review for the Alzheimer's Society Research Programme
2013	Invited review for the Neurological Foundation of New Zealand
2012	Invited review for Netherlands Organisation for Health Research and Development, TOP programme
2012	Invited review for National Science Foundation Cognitive Neuroscience Program

### ***Research Support: Current***

#### ***Mechanisms of Health and Disease at the Behavioral-Biomedical Interface***

T32 Pre-doctoral Training Grant, NIH/NIGMS  
 Role: Co-Principal Investigator (Co-I: Lutgendorf)  
 Grant Period: 07/01/2023-06/30/2029  
 Effort: 10%

#### ***Iowa-Diversifying Research and Mentorship***

R25 Doctoral Readiness Grant, NIH/NINDS  
 Role: Co-Principal Investigator (Co-Is: Hultman, Tranel)  
 Grant Period: 01/01/2023-12/31/2026  
 Effort: 15%

#### ***Plasticity-based Adaptive Cognitive Remediation for Alzheimer's Disease***

SBIR Phase IIB Award (multi-site), NIH/NIA  
 Role: Site Principal Investigator (Co-I: Lee)  
 Grant Period: 02/01/2023 - 01/31/2026  
 Effort: 10%

#### ***Targeting Cognitive Control to Improve Physical Activity Adherence in Midlife for Alzheimer's Risk Reduction***

R61/R33 (multi-site), NIH/NIA  
 Role: Principal Investigator  
 Grant Period (R61): 09/30/2022 - 08/31/2023, R33 08/31/2027)  
 Effort: 20%

#### ***Suicidality in Bipolar and Major Depression Disorders***

R01 Award, NIH/NIMH  
 Role: Co-Investigator (PI: Magnotta, Co-I: Wemmie)  
 Grant Period: 09/01/2022 - 06/30/2027  
 Effort: 5%

#### ***Neurocognitive mechanisms of task representation reorganization during task learning***

R01 Award, NIH/NIMH  
 Role: Co-Investigator (PI: Jiang)  
 Grant Period: 09/16/2022 - 05/31/2027  
 Effort: 5%

### ***Research Support: Completed***

#### ***Deep LOGISMOS: Hippocampal Plasticity in Alzheimer's Disease (Admin Supplement)***

R01 Administrative Supplement, NIH/NIBIB

Role: Co-Investigator (PI: Sonka)  
Grant Period: 08/01/2022-07/31/2024

*Exercise to improve hippocampal connectivity and learning in older adults*

R01 Award, NIH/NIA  
Role: Principal Investigator (Co-Is: Pierce, Magnotta, Hazeltine, Long, Mills)  
Grant Period: 08/01/2017 - 03/31/2024 (NCE)  
Effort: 10%

*Cerebellar Metabolism, Neural Circuits, and Symptoms in Bipolar Disorder*

R01 Award, NIH/NIMH  
Role: Co-Investigator (PI: Magnotta, Co-PI: Wemmie; Co-Is: Fiedorowicz, Christensen, Long)  
Grant Period: 09/20/2017 - 06/30/2023 (NCE)  
Effort: 10%

*Move-ome: mapping 24-hour activity cycles in midlife to promote lifelong cognitive health and resilience*

Jumpstarting Tomorrow pilot project and community building grant, OVPR  
Role: Principal Investigator (Co-Is: Carr, Whitaker, Moon, Jenkins)  
Grant Period: 01/15/2022 - 07/31/2023

*PACR-AD Phase II: Plasticity-based Adaptive Cognitive Remediation for Alzheimer's Disease*

SBIR Phase II Award (multi-site), NIH/NIA  
Role: Site Principal Investigator (Co-I: Kyu Lee)  
Grant Period: 09/01/2017 - 04/31/2021

*Strategic training to optimize neurocognitive functions in older adults*

R56 Award, NIH/NIA  
Role: Consultant (PI: Basak; Co-Investigators: Denise Park, Paul Fishwick)  
Grant Period: 09/30/2018 – 08/31/2021

*Bridging acute and long-term exercise effects on brain function in older adults*

R21 Award, NIH/NIA  
Role: Principal Investigator (Co-Is: Pierce, Magnotta, Darling)  
Grant Period: 06/15/2015 - 02/28/2018

*Exercise Intervention for Slowing HD Progression*

R21 Award, NIH/NINDS  
Role: Co-Investigator (PI: Magnotta; Co-Is: Wemmie, Paulsen, Long)  
Grant Period: 09/30/2015 - 08/31/2018

*Influence of Fitness and Cognitive Training on Brain and Cognition*

Sub-contract Award: University of Illinois at Urbana-Champaign Site  
Role: Principal Investigator  
Period: 07/01/2016 - 05/31/2017

*Plasticity-based Adaptive Cognitive Remediation for Alzheimer's Disease*

SBIR Phase I Award (multi-site), NIH/NIA  
Role: Site Principal Investigator (Site Co-I: Wolinsky; Co-PI: Lee)  
Grant Period: 09/30/2014 - 05/31/2017

*ALERT Trial: Attention Training for Learning Enhancement and Resilience*

SBIR Phase II Award (multi-site), NIH/NIA

Role: Site Principal Investigator (Site Co-I: Wolinsky; Co-PI: Vleet)

Grant Period: 12/01/2014 - 05/31/2017

*Physical-activity Induced Transient Changes in Hemodynamics (PITCH)*

R21 Award, NIH/NICHHD

Role: Site Principal Investigator (PI: Pontifex)

Grant Period: 04/10/2014 - 03/31/2017

*Probing the molecular mechanisms of individual differences in cognitive aging and protective factors with novel quantitative MR imaging*

Pilot Award, AMBI

Role: Principal Investigator (Co-Is: Magnotta, Jacob)

Grant Period: 01/01/2016 - 12/31/2017

*Sparkling the Plastic Brain: Effects of Aerobic Exercise on Brain Function*

Pilot Award, UI Office of the Vice Chancellor for Research

Role: Principal Investigator (Co-Is: Magnotta, Darling, Pierce)

Grant Period: 06/01/2013 - 06/01/2014

***Invited Lectures and Conference Presentations***

- |      |   |
|------|---|
| 2025 | Research ethics for health and behavioral research on interventions for brain and cognitive health, Iowa Biosciences Academy, March 5   |
| 2025 | Linking the Heart and Brain to Support Brain Health in Aging: Investigating the Nonlinear Relationships Between Cardiorespiratory Fitness and Cerebrovascular Reactivity, Clinical Rounds in Department of Psychological and Brain Sciences, March 3  |
| 2024 | Linking the Heart and Brain to Support Brain Health in Aging: Investigating the Nonlinear Relationships Between Cardiorespiratory Fitness and Cerebrovascular Reactivity, Physiology Department Seminar, November 19  |
| 2024 | Connecting the dots: White matter lesions, cognitive aging, heart health. Speaker in symposium session at the annual conference for the Academy of Behavioral Medicine, "Behaviors, Brain Health, and Biology: Impact on Aging and Cognition." June 21.   |
| 2023 | Effects of Physical Activity and Cardiorespiratory Fitness on Hippocampal Connectivity and Episodic Memory in Older Adults. Speaker in symposium session at the International Conference on Learning and Memory, "Effects of Aerobic Exercise on Age-Related Memory Loss and Alzheimer's Risk". April 27. |
| 2023 | Is brain network modularity a biomarker of cognitive plasticity? Symposium talk at the Dallas Aging and Cognition Conference. Feb 27.   |
| 2023 | Can exercise improve brain health in older adults?" University of Iowa Foundation Alumni event in Phoenix, AZ. Feb 15.  |
| 2022 | Can exercise improve brain health in older adults?" University of Iowa Neuroscience Club Faculty Guest. Nov 10.   |
| 2022 | Health, Brain, and Cognition: a virtuous cycle for healthy cognitive aging. Invited speaker for the Aging Center Postdoctoral Research Training Program (T32) at Duke University. May 5.  |

- 2022 Can exercise improve brain health in older adults?" Department of Psychological and Brain Sciences Foundation event in Iowa City IA. April 20.
- 2022 Getting fit to counteract cognitive aging: evidence and future directions. Invited speaker to the University of Texas - Austin, CARE Research Group Colloquia. March 25.
- 2022 Move-Ome Roundtable Series hosted by our Jumpstarting Iowa team, "Current and future directions of physical activity to promote cognitive health in adulthood." Feb 11. First in a series of round tables to engage and build community around measurement of 24-hour activity cycles to understand their role in cognitive aging.
- 2021 Virtual Brain Health Symposium, hosted by the University of British Columbia, "Physical activity to improve cognition in older adults: why intensity matters"
- 2021 Virtual symposium hosted Journal of Clinical Medicine, "The Effects of Exercise on Memory," organized by Paul Loprinzi and including Jennifer Etnier, Marc Roig, Phillip Tomporowski, and Michelle Voss). My talk was on Effects of Physical Activity and Cardiorespiratory Fitness on Episodic Memory Systems in Older Adults
- 2021 Physical activity and fitness to slow brain and cognitive aging. Virtual presentation at UIHC Physical Therapy Grand Rounds
- 2021 First-generation brain research workshop, Health, Brain, and Cognition: a virtuous cycle for healthy aging, Jan Wessel, Iowa City, Iowa, United States
- 2021 Bridging acute and chronic effects of aerobic exercise on the aging brain. Virtual presentation to the San Diego State University Advancing Diversity in Aging Research (ADAR) Program, February 17.
- 2020 Exercise effects on the human brain and cognition across the lifespan. Symposium on "Exercise and the Brain" at the Keystone meeting on Biology of Exercise & Charting New Course for Heart Failure, March 4.
- 2019 Translational exercise neuroscience: a (mostly) human neuroscience approach to uncovering how physical activity protects the aging brain. Department of Kinesiology and Applied Physiology Fall seminar series at the University of Delaware, November 14-15
- 2019 Incorporating the Experimental Medicine Approach in the Development of Primary Prevention Trials for Alzheimer's disease: A Workshop, Mechanistic targets and moderators for cognitive training and exercise: similarities, differences, potential for synergy, National Academies of Science, Engineering, and Medicine, Washington D.C, United States, Oct 11-12.
- 2019 Getting the most out of your brain as you age. First-generation brain research workshop, hosted by Jan Wessel at the University of Iowa. August 23.
- 2019 Can physical exercise protect our memory from aging? Summer Research Opportunities Program research seminar series, hosted by the Graduate College at the University of Iowa. June 21.
- 2019 Bridging acute and chronic effects of aerobic exercise on memory systems. Aging Mind and Brain Initiative: Ten Years After symposium, April 18.
- 2019 Effects of physical activity and fitness on hippocampal memory systems. Neuroscience and Psychology seminar series at the University of Wisconsin Milwaukee, April 12.
- 2019 Bridging acute and chronic effects of aerobic exercise on memory systems. Presented as part of symposium entitled, "Imaging the immediate and long-term effects of exercise in humans" at the Cognitive Neuroscience Society meeting, San Francisco, CA, March 24. Related press: <https://www.sciencedaily.com/releases/2019/03/190325080354.htm>
- 2018 Effects of physical activity and fitness on memory systems affected by aging. Seminar series at the Psychology Department at Northeastern University, Boston, MA. November 29.
- 2018 Effects of physical activity and fitness on memory systems affected by aging. Iowa Neuroimaging Consortium (INC) meeting, hosted by the Psychiatry Department at the University of Iowa. November 6.



- 2018 Benefits of physical activity and fitness on memory systems affected by aging. Seminar series at the Center for Vital Longevity in Dallas, TX. October 29.
- 2018 Neurotrophic Factors and structural and functional neuroplasticity in exercise science. Presented as part of symposium entitled, "The Neurobiology of Exercise: What Neuroimaging tells us about the Molecular Mechanisms by which Exercise affects Brain Structure and Function" at the Organization of Human Brain Mapping, Singapore, June 20.
- 2018 Exercise effects on the aging brain and cognition: theories, mechanisms, and endpoints. Obesity and Energetics seminar series, hosted by the Obesity Initiative at the University of Iowa. June 11.
- 2017 Exercise effects on the brain and cognition: A systems perspective. Presented at the Exercise and the Brain symposium at Duke University, December 1, 2017.
- 2017 Physical exercise and fitness to improve hippocampal connectivity and learning in older adults. Presented at the Neuroimaging Informatics and Analysis Center (NIAC) seminar series at Washington University in St. Louis, November 17, 2017.
- 2017 Physical exercise to improve hippocampal connectivity in older adults. Presented as part of symposia entitled "Protective effects of exercise in old age: Mechanisms explored" at the Psychoneuroimmunology Research Society in Galveston, TX, June 7-10.
- 2017 Effect of physical activity and exercise on cognitive function. To be presented as part of symposium on brain and vascular health at the North American Artery Society in Chicago, IL, May 19.
- 2017 Physical activity, cognition, and brain health: Moving for a healthier brain and mind. Presented at Experimental Biology in ACSM sponsored symposium on "A roadmap for the future of exercise science: key research directions" at Chicago, IL. April 23.
- 2016 Bridging acute and long-term effects of exercise on changes in functional connectivity and cognitive performance in aging adults. Presented as platform presentation at the 5th Bi-Annual Resting State Conference, Vienna, Austria. September 21.
- 2016 Physical exercise to improve hippocampal connectivity and learning in older adults. Neurology Grand Rounds at the University of Iowa, August 23rd.
- 2016 Investigating the relationships between physical activity and fitness with brain health in older adults. Presented at International Conference on Promoting Healthy Brain Aging and Preventing Dementia: Research and Translation. Alberta, Canada. May 24-27.
- 2016 Bridging acute and long-term effects of exercise on changes in functional connectivity and cognitive performance in aging adults. Presented at Experimental Biology, San Diego, CA. April 4.
- 2016 Investigating the relationships between physical activity, exercise, and fitness with functional brain health in older adults. Presented at the International Neuropsychological Society Conference. Boston, MA, February 6.
- 2016 Investigating the relationships between physical activity and fitness with functional brain health in older adults. Presented at the Park City Winter Conference on the Neurobiology of Learning and Memory, January 7.
- 2015 Sparking plasticity in the aging brain with physical activity and exercise, presented at the Bi-annual ABMI symposium, April 1.
- 2015 Sparking plasticity in the aging brain with physical activity and exercise, presented at the Neuroscience seminar series at the University of Arkansas. January 16.
- 2014 Secondary Outcomes: Biomarkers (imaging, blood, electrophysiology, tissue). Invited collaborative talk with Dr. Marcos Bamman (UAB) at workshop on developing a multicenter exercise intervention for Parkinson's Disease, lead by Dr. Ergun Uc (University of Iowa). Chicago, IL, December 6.
- 2014 Secondary Outcomes: Cognitive, Behavioral, and Quality of Life. Invited collaborative talk with Dr. Lisa Shulman (University of Maryland) at workshop on developing a multicenter exercise intervention for Parkinson's Disease, lead by Dr. Ergun Uc (University of Iowa). Chicago, IL, December 6.

- 2014 Sparking plasticity in the aging brain with physical activity. Invited talk at the Cognitive and Motor Neuroscience seminar series, Michigan State University, November 14.
- 2014 Investigations of exercise-induced plasticity in the aging brain with resting state fMRI. Invited presentation at satellite workshop entitled Interventions and Consciousness, Hosted by Michelle Hampson and Susan Whitfield-Gabrieli, Boston, MA, September 14.
- 2014 Sparking plasticity in the aging brain with physical activity. Invited talk for Division 40 Symposium at the American Psychological Association (APA) convention, Washington D.C., August 8.
- 2014 Sparking plasticity in the aging brain with physical activity and exercise. Invited talk at seminar series for the Clinical division of Psychology at The University of Iowa. April 23.
- 2013 Exercise effects on functional brain networks: from months to minutes. Presented at brownbag seminar series for Cognitive, Developmental, and BCN divisions of Psychology at The University of Iowa. November 6.
- 2013 Sparking plasticity in the aging brain with physical exercise. Invited guest speaker at Neuroscience Research Day, The University of Iowa. October 24.
- 2013 Resting State part 2: ICA-Cleaning and Advanced Methodology. Invited guest lecture and tutorial at the 2013 Summer BRAINS workshop at the University of Iowa. August 2.
- 2013 Effects of physical exercise on the brain and cognition in elderly humans. Invited speaker for symposium presentation given at the American Association for Geriatric Psychiatry Annual Scientific Meeting, in Los Angeles, LA, March 14-17.
- 2012 The Relationship of Aerobic Fitness to Brain Network Architecture in Healthy Older Adults. Invited speaker for symposium presentation at The Gerontological Society of America's 65th Annual Scientific Meeting, in San Diego, CA from November 14-18.
- 2012 The Relationship of Physical Activity and Aerobic Fitness to Brain Health in Late Life. Presentation at the Aging Mind and Brain Monthly Seminar, October 18.
- 2012 Maximizing brain plasticity with physical exercise. Invited speaker for symposium presentation at The 7th international sport sciences symposium of "Active Life," in Tokyo on September 3.
- 2012 Functional connectivity analysis of resting state fMRI data: Seed voxel approach. Invited guest lecture and tutorial at the 2012 Summer BRAINS workshop at the University of Iowa. August 9.
- 2012 Maximizing brain plasticity with physical exercise and implications for TBI intervention. Invited presentation at The Sustained Cognitive Performance in the Warfighter Workshop, West Point, New York on July 28.
- 2012 Neuropathology and cognitive and behavioral sequelae of traumatic brain injury. Invited presentation at The Sustained Cognitive Performance in the Warfighter Workshop, West Point, New York on July 27.
- 2012 Brain and cognitive aging: a network science perspective. Invited presentation at the bi-annual Cognitive Aging Conference in Atlanta, Georgia, April 20.

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## SERVICE

### Field

### *Editorial Positions*

2024 – present Editorial Advisory Board, *Neurobiology of Aging*

## ***Journal Reviewing***

British Journal of Sports Medicine (2018, 2023)  
 Cerebral Cortex (2011, 2012, 2014, 2021, 2022, 2024)  
 Contemporary Clinical Trials (2021, 2022, 2023)  
 Hippocampus (2014, 2015(2), 2016(2), 2017,2019, 2020(2), 2021, 2023)  
 Human Brain Mapping (2025)  
 Journal of Alzheimer's Disease (2023, 2024)  
 Journal of American Medical Association (2023)  
 Journal of Gerontology: Medical Sciences (2023)  
 Journal of Gerontology: Psychological Sciences (2024)  
 Journal of Neuroscience (2013, 2014, 2015, 2021)  
 Medicine & Science in Sports and Exercise (2012(2), 2013, 2014, 2015, 2017,2019, 2022, 2023,2024)  
 Molecular Psychiatry (2022)  
 Nature Communications (2024)  
 Neurobiology of Aging (2009, 2012, 2014, 2016(3), 2017(2),2018(2),2019, 2022, 2023, 2024(4), 2025(2))  
 NeuroImage (2009, 2013(3), 2014, 2015(3), 2016(3), 2017(2), 2022)  
 Neuroscience & Biobehavioral Reviews (2012, 2013, 2020)  
 Proceedings of the National Academy of Sciences (2018(2))  
 Psychology and Aging (2020)  
 Trends in Cognitive Sciences (2017,2018, 2021, 2023)

## ***Clinical Trial Monitoring***

2021 – 2024	Data and Safety Monitoring Board, Elucidating the Necessary Components and Mechanisms of Cognitive Training: ENACT Trial, Member, Funded by NIA, PI: Ross, Role: Member
2020 – 2024	Data and Safety Monitoring Board, Acute Exercise Response on Brain Imaging and Cognition (AEROBIC) and LEAN Trials, Chair, Funded by NIA, PI: Morris

## **Department**

2025- present	PBS Faculty Advisory Committee
2021 - 2023	Search committee member for PBS Ketchel Family Chair Position
2020 – present	Access, Opportunity, and Inclusion Committee
2019 – 2020	PBS Faculty Advisory Committee
2018 – 2019	Learning and Neuroplasticity, Search Committee
2015 – present	BBIP T32, Executive Committee
2022 – 2024	BBIP T32 Curriculum and Seminar Committee, Member
2014 – 2021	BBIP T32 Curriculum and Seminar Committee, Chair
2014 – 2017	BBIP T32 Admissions Committee
2013 – 2016	PBS Faculty Advisory Committee
2012 – 2015	Chair of Cognitive Neuroscience curriculum committee

## **University**

2024 – present	Campus Planning Committee, charter committee to bring institutional oversight and involvement to campus planning, including general policies, advise on proposals for major developments or building projects, and advise on policies of space allocation and utilization
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2021 – 2022	Liberal Arts & Sciences Scholarship Committee
2020 – 2022	Liberal Arts & Sciences Research Advisory Board
2020 – present	Diversity, Equity, Inclusion Iowa Neuroscience Committee
2019 – 2024	Presidential Committee on Athletics (PCA), Advisory charter committee for the UI president and the director of athletics on policies governing the Department of Intercollegiate Athletics. Since Fall 19 I have also served as a member on the Student Athlete Well-Being Subcommittee; Spring 20 - Spring 22 Committee Chair.
2019	Summer Research Opportunities Program (SROP), Co-presenter and discussant, “Research Collaboration”
2019	Summer Research Opportunities Program (SROP), Panelist, “Life as a Faculty Member”
2017 – 2020	Faculty Assembly
2018	Panelist on teaching advice in “Neurobiology of Disease”
2017	Panelist, “Women in Science”, Graduate Women in Science (GWIS)
2017	Poster Judge, Neuroscience Research Day
2016	Elevator Talk Workshop, Graduate Women in Science (GWIS)
2016 – 2019	Recreational Services Charter Committee Meeting
2014 – 2015	Tenure track faculty search committee, Joint Psychology/Neurology/AMBI faculty position
2013 – 2014	Tenure track faculty search committee, Neuroplasticity, Rehabilitation, and Movement Control faculty position, Department of Physical Therapy
2013 – 2014	Tenure track faculty search committee, Cognitive Neuroscience faculty position, Department of Neurology and Aging Mind and Brain Initiative (AMBI)
2014 – 2015	Interdisciplinary Neuroscience Graduate Program Seminar Committee, Chair
2013	University of Iowa LEAP center course, “Introduction to Brain Research, "Brain Mapping," and How it Relates to You!”
2012	University of Iowa LEAP center courses, “Working Out Your Brain: Tips for Successful Aging by Staying Mentally Active”
2012 – 2024	MRI Research Advisory Committee, meets bi-weekly at UIHC to discuss proposed neuroimaging projects run at MRRF
2012	Aging Mind and Brain Initiative, Executive committee
2012 – 2013	Aging Mind and Brain Initiative, Annual Symposium planning committee

## **Community**

2025	Cedar Rapids Downtown Rotary, Healthspan for your brain: how do W.E. get there together? Presenter. July 20.
2025	Iowa City Noon Rotary (Elks Club), Healthspan for your brain: how do W.E. get there together? Presenter. January 25
2025	North Liberty Public Library, What’s Good for your Heart is Good for your Brain. Weekly book club series on Outlive. Lead instructor. Jan 9- Jan 30. Representative course outline: <a href="https://sites.google.com/view/hbc-outlive-nlpl/home">https://sites.google.com/view/hbc-outlive-nlpl/home</a>
2024	Discussion Guest at Queer Elders Club, Iowa City Senior Center, December 4
2024	Health, Brain, & Cognition 1 <sup>st</sup> Annual Open House, Event hosted by the HBC lab to our participants and people in the community curious about what we do. Presentations by HBC lab director, staff, and students. November 16.
2024	Iowa City Public Library, What’s Good for your Heart is Good for your Brain. Weekly book club series on Outlive. Lead instructor. Oct 24-Nov 14.
2024	Kiwanis Club in Iowa City, Healthspan for your brain: how do W.E. get there together? Presenter. September 26.
2024	Lions Club in West Branch, Healthspan for your brain: how do W.E. get there together? Presenter. September 18.
2024	Vintage Cooperative of Coralville, Healthspan for your brain: how do W.E. get there together? Presenter. August 20.
2024	Prairie Hill Co-Housing Community, Healthspan for your brain: how do W.E. get there

	together? Presenter. July 23.
2024	Rotary Presentations, Healthspan for your brain: how do W.E. get there together? Presenter. Iowa City Downtown Rotary (April 15), Iowa City (east) Rotary at Kirkwood Room (April 16), Washington County Rotary (June 6).
2024	Healthy Brains, Active Lives: Hills Bank Community Program at Hills Bank in North Liberty, Hosted by Hills Bank Friends Club May 24, 2024
2024	Iowa City Senior Center, What's Good for your Heart is Good for your Brain. Weekly book club series on Outlive. Lead instructor. Winter: Jan 24-Feb 28 2024, Spring: May 1-June 5
2023	Coralville-North Corridor Rotary, Healthspan for your brain: how do W.E. get there together? Presenter. December 6.
2023-present	Cycling Without Age at the Bike Library, Co-Founder, Community program to bring the joy of cycling to older adults unable to bike independently. Uniquely designed e-trishaws and trained volunteers enable older people to experience the health benefits of nature and socialization. In partnership with the Bike Library, Csomay Center at the University of Iowa, Iowa City Senior Center, TRAIL, and Johnson County Livable Community for Successful Aging Policy Board.
2018	Senior Center Brain Health Fair, "Maximizing brain and cognitive health", Keynote
2012	Lemme Lego League aging primer, "Working Out Your Brain: Tips for Successful Aging by Staying Mentally Active". Advised on helpful tips for designing products to aid senior citizens.

### **Media Contributions**

2024	Expert source for New York Times article, "How Exercise Strengthens Your Brain", by Dana G. Smith, Interviewee
2021	Iowa Public Radio, River to River conversation about our research and healthy brain aging Iowa Public Radio, Interviewee