# **Graduate Student, University of Chicago**

| Norman H. Anderson Award   | 2011    |
|--|---------|
| APA Dissertation Research Award                                    | 2010    |
| Elderhostel K. Patricia Cross Doctoral Research Grant, Top 15      | 2010    |
| Dewey Lecture Fellowship, University of Chicago                    | 2010    |
| Doolittle-Harrison Fellowship, University of Chicago               | 2009    |
| Travel Award for Festschrift in Honor of Dr. Robert A. Bjork, UCLA | 2008    |
| Psychology Graduate Student Travel Awards, University of Chicago   | 2007-11 |
| Century Fellowship, University of Chicago                          | 2006-11 |

## **CURRENTLY FUNDED GRANTS**

## **Co-Investigator**

31R01HD098179, National Institutes of Health, "Early Cognitive Decline in Down Syndrome", PI: Frances Conners; \$3,339,920; 01/20 – 12/24

### PAST FUNDED GRANTS

## **Principal Investigator**

- Office for Research and Economic Development Small Grant Program, "Predictiveness of Baseline Brain Activity to Cognitive Decline in Adults at Risk for Alzheimer's Disease", PI, \$5,250, 1/01/2020 12/31/2021
- P30AG031054-11, RCMAR Pilot Grant, "Measuring the Impact of Stress on Brain Structure and Function in Middle-Aged African Americans", PI of Center Grant: Burgio; PI of Subaward: McDonough; \$25K, 2019, 10/01/19 06/30/22
- R03AG059188, National Institute of Health, "Longitudinal Biological Pathways Leading to Alzheimer's Disease Health Disparities in Blacks," PI, \$143K, 02/01/19 11/30/20
- UAB, "Consulting Agreement: Prospective Cognitive and Neuroimaging Study," PI, \$5K, 01/01/18 07/01/19
- College Academy of Research, Scholarship, and Creative Activity (CARSCA), "Measuring the Impact of Stress on Brain Structure and Function in Older African Americans," PI, \$6K, 01/01/18 12/31/18

APF/COGDOP Graduate Research Scholarship in Psychology, PI, \$1K, 2010 APF Pre-College Psychology Grant, Co-PI, \$6K, 2010

## **Co-Investigator**

1R21AG072469-01, National Institutes of Health, "Validation of a Virtual Reality Floor Maze Test to Detect Early Signs of Cognitive Impairment", PI: Dario Martelli; \$355,890; 09/21 – 08/23

#### STATISTICAL & NEUROIMAGING CONSULTING

| PI: Safiya George—DTI, functional connectivity, and Freesurfer in adolescents   | 2017      |
|---|-----------|
| PI: David A. Gallo—MVPA and functional connectivity in younger and older adults | 2016-2018 |

## REFEREED

- 2. \*Brasfield, M. B., Bui, C., Patihis, L., Crowther, M. R., Allen, R. S., & **McDonough, I. M.** (Accepted). Self-reported Chronic Stress is Unique Across Lifetime Periods: A Test of Competing Structural Equation Models. *The Gerontologist*.
- 3. Aiken-Morgan, A., **McDonough, I. M.**, Parisi, J., Clay, O., Thomas, K., Rotblatt, L., Thorpe, R. & Marsiske, M. (Accepted). Associations between Body Mass Index (BMI) and Cognitive Change in the ACTIVE Study: Variations by Race and Social Determinants of Health. *Journal of Aging & Health*.
- 4. Dean, L. T., Chung, S.-E., Gross, A. L., Clay, O. J., Willis, S. L., Crowe, M., **McDonough, I. M.**, Thomas, K. R., Marsiske, M., Aysola, J., Thorpe, R. J., Felix, C., Berkowitz, M., & Coe, N. B. (Accepted). Does consumer credit precede or follow changes in cognitive impairment among older adults? An investigation in the ACTIVE Trial. *Journal of Aging & Health*.
- 5. Nielson, K. A., **McDonough, I. M.**, & Soldan, A. (2023). Editorial: Insights in Neurocognitive Aging and Behavior: 2021. *Frontiers in Aging Neuroscience*.
- 6. **McDonough, I. M.**, Byrd, D., & Choi, S. L. (2023). Resilience Resources May Buffer Some Middle-Aged and Older Black Americans from Memory Decline Despite Experiencing Discrimination. *Social Science & Medicine*, 316, 1-12.
- 7. **McDonough, I. M.**, \*Erwin, H. B., Sin, N. L., & Allen, R. S. (2022). Pet Ownership is Associated with Greater Cognitive and Brain Health. *Frontiers in Aging Neuroscience*.
- 8. **McDonough, I. M.**, \*Nolan, S. A., & Visscher, K. M. (2022). 25 Years of Neurocognitive Aging Theories: What Have We Learned? *Frontiers in Aging Neuroscience*.
- 9. Cundiff, J. M., \*Lin, S.-H., \*Faulk, R., & **McDonough, I. M.** (2022). Educational quality may be a closer correlate of cardiometabolic health than educational attainment. *Scientific Reports*, *12*, 1-12.
- 10. \*Chen, Y.-T., **McDonough, I. M.**, Faig, K. E., Norman, G. J., & Gallo, D. A. (2022). Impact of Stereotype Threat on Brain Activity During Memory Tasks in Older Adults. *Neuroimage*, 260, 1-13.
- 11. **McDonough, I. M.**, \*\*Mayhugh, C., \*\*Moore, M. K., \*Brasfield, M. B., \*Letang, S. K., Madan, C. R., & Allen, R. S. (2022). Young

- 20. Lee, S., **McDonough, I. M**., \*Mendoza, J. S., \*Brasfield, M. B., \*Enam, T., \*\*Reynolds, C., & \*\*Pody, B. C. (2021). Cellphone addiction explains how cellphones impair learning for lecture materials. *Applied Cognitive Psychology*, *35*, 123-135.
- 21. **McDonough, I. M.**, Festini, S. B., & Wood, M. M. (2020). Risk for Alzheimer's Disease: A review of long-term episodic memory encoding and retrieval fMRI studies. *Ageing Research Reviews*, 62, 1-25
- 22. \*Mendoza, J. S., Lee, S., & **McDonough, I. M**. (2020). The relationship between nomophobia and classroom learning: How fear of being without cellphones affects the youth population in a digital age. *Media Education Research Journal*, *9*, 112-119.
- 23. **McDonough, I. M.**, & \*\*Popp, T. E. (2020). Linear and non-linear relationships between cognitive subdomains of ability discrepancy and Alzheimer's disease biomarkers. *Neuropsychology*, *34*, 211-226.
- 24. Choi, S. L., **McDonough, I. M.,** Kim, M., & Kim, G. (2020). The association between the number of chronic health conditions and advance care planning varies by race/ethnicity. *Aging & Mental Health*, 24, 453-463.
- 25. **McDonough, I. M.**, McDougall, G. J., LaRocca, M., George, S., Lyon, L., & Arheart, K. (2020). Refining the Metamemory in Adulthood Questionnaire: A 20-

- 58. Scimeca, J. M., **McDonough, I. M.,** & Gallo, D. A. (2011). Quality trumps quantity at reducing memory errors: Implications for retrieval monitoring and mirror effects. *Journal of Memory and Language*, 65, 363-377.
- 59. **McDonough, I. M.** & Gallo, D. A. (2010). Separating past and future autobiographical events in memory: Evidence for a reality monitoring asymmetry. *Memory & Cognition*, 38, 3-12.
- 60. Gallo, D. A., **McDonough, I. M.,** & Scimeca, J. M. (2010) Dissociating source memory decisions in prefrontal cortex: fMRI of diagnostic and disqualifying monitoring. *Journal of Cognitive Neuroscience*, 22, 955-969.
- 61. Richland, L. E., & **McDonough, I. M.** (2010). Learning by analogy: Discriminating between potential analogs. *Contemporary Educational Psychology*, *35*, 28-43.
- 62. **McDonough, I. M.** & Gallo, D. A. (2008). Autobiographical elaboration reduces memory distortion: Cognitive operations and the distinctiveness heuristic. *Journal of Experimental Psychology: Learning, Memory, & Cognition, 34*, 1430-1445.

### **INVITED BOOK CHAPTERS**

- 1. Harrell, E. R., & **McDonough, I. M.** (2022). Episodic memory and cognition in normative aging and dementia. In T. J. Farrer & E. K. Eifert (Eds.), *Dementia and Memory: Introduction for Professionals in Health and Human Services*. (pp. 37-54). Hoboken, NJ: John Wiley & Sons, Inc.
- 2. Allen, R. S., **McDonough, I. M.**, Albright, A., Erickson, S., Brake, G., & Salekin, K. (2018). Assessment and restoration of competency to be executed: Issues related to dementia and cognitive disability. In S. S. Bush & A. L. Heck (Eds.), *Forensic Geropsychology: Practice Essentials*. (pp. 135-166). Washington, DC: American Psychological Association.

## **PUBLISHED E-BOOKS**

1. Nielson, K. A., **McDonough, I. M.**, & Soldan, A. (2023). *Insights in Neurocognitive Aging and Behavior:* 2021. Lausanne: Frontiers Media SA. doi: 10.3389/978-2-83251-720-8

### NON-REFEREED PUBLICATIONS

- 1. Bolton, K. & **McDonough, I. M.** (2023). The Effects of Loneliness on Brain Structure and Cognition Across the Lifespan. *The Journal of Science and Health at The University of Alabama*, 20, 39-46.
- 2. Cox, M. & **McDonough, I. M.** (2022). How Racial and General Discrimination Affect the Brain: The Effect of Perceived Discrimination on the Volume of the Hippocampus and Amygdala. *The Journal of Science and Health at The University of Alabama*, 19, 39-46.
- 3. Bolling, A. J., King, V. L., Welch, M. M., Schrobilgen, A. N., Enam, T., & McDonough, I. M. (2020). The Effectives of Transcranial Direct Current Stimulation on the Dorsolateral Prefrontal Cortex During Language Learning. *The Journal of Science and Health at The University of Alabama*, 17, 39-44.
- 4. **McDonough, I. M.**, Green, C. R., & Letang, S. K. (2019). Brain training and cognitive performance: Evidence from an interventional lifestyle program. *Vqf c{øu'I gt kcvt ke'O gf kekpg*, 12, 5-7.
- 5. **McDonough, I. M.** (2018). Fighting racial health disparities in Alzheimer's disease: How biology and the social environment put Blacks at risk. *Vqf c [ou'l gt kc vt ke' O gf kelpg, 11, 10-15.*
- 6. Keshavan, A., Madan, C. R., Datta, E., **McDonough, I. M.** (2017) Mindcontrol: Organize, quality control, annotate, edit, and collaborate on neuroimaging processing results. Research Ideas and Outcomes 3: e12276.
- 7. **McDonough, I. M.** (2016). Use it or lose it: Redefining an old idea. Vqf c[øu'I gt kc vt ke''O gf kekpg, 9, 5-7.

- **McDonough, I. M.** (September, 2022). *Measuring the Impact of Stress on Brain Structure and Function in Middle-aged Black Americans*. 2022 RCMAR Advisory Meeting. Virtual.
- **McDonough, I. M.** (February, 2022). Structural Complexity is Negatively Associated with Brain Activity: A Novel Multimodal Test of Compensation Theories of Aging. Talk delivered at the University of North Carolina Asheville Brownbag. Virtual.
- **McDonough, I. M.** (December, 2021). *Is There More to Metamemory? An Argument for Two Specialized Monitoring Abilities.* Talk delivered at the University of Chicago, Gallo Laboratory. Virtual.
- **McDonough, I. M.** (July, 2021). Structural Complexity is Negatively Associated with Brain Activity: A Novel Multimodal Test of Compensation Theories of Aging. Talk delivered at the 10<sup>th</sup> Annual AAIC Imaging Retreat. Virtual.
- **McDonough, I. M.** (November, 2018). *Alabama Brain Study on Risk for Dementia: An Assessment of Cumulative Risk on the Brain*. Talk delivered at the 7th Annual Mississippi Alzheimer's Summit. Jackson, Mississippi.
- **McDonough, I. M.** (February, 2018). Advances in preclinical AD: Consequences for cognition, the brain, and health disparities. Talk delivered at the monthly Behavioral Neurology &

- \*McDonough, I. M., Chen, Y.-T., & Gallo, D. A. (November, 2020). Machine Learning Classification of Brain Activity Reveals Unique Effects of Aging Stereotypes on Cognition. Talk delivered at the 61<sup>st</sup> Annual Meeting of the Psychonomic Society. Virtual.
- \*McDonough, I. M. (January, 2019). Converging evidence for an ability discrepancy to detect risk for Cn/j glo gt ou'f kugcug0Talk presented at the 2019 Dallas Aging and Cognition Conference. Dallas, Texas.
- McDougall, G. J., **McDonough, I. M.**, (September, 2018). *Memory self-efficacy and cognitive interventions*. Talk presented at the 2018 State of the Science Congress on Nursing Research: Precision Health. Washington, DC.

- Choi, S. L., Choi, J., **McDonough, I. M.**, & Jiang, Z. (April, 2020). *Aging Alone and Depression in Later Life*. Paper presented at the UAB Personal Finance Symposium. Birmingham, Alabama.
- \*McDonough, I. M., Letang, S.K., & Stinson, E. A. (April, 2019). Biological Mechanisms Underlying Social Determinants of Risk for Dementia: An fMRI Analysis of Middle Aged and Older Adults. Paper presented at the 14th Annual UAB Health Disparities Research Symposium. Birmingham, Alabama.
- \*McDonough, I. M. (May, 2017). Beta.

Apostolou, H. L., & McDonough, I. M. (November, 2022). Effects of Loneliness in Middle-Aged and

- Enam T. & **McDonough, I. M.** (August, 2018). *Effect of multiple fluency cues on feeling of knowing judgments*. Poster presented at the 2018 American Psychological Association Convention. San Francisco, California.
- Enam, T., KRierford Kl. 201- KA (1) J. M. (May, 2018). False memory and aging: The role of cognitive reserve in young-old and old-old adults. Poster presented at the 2018 Cognitive Aging Conference. Atlanta, Georgia.
- Letang, S., **McDonough, I. M.**, Mayhugh, C., Moore, M. K., & Brasfield, M. **B.** (May, 2018). *Family j kwqt { "qh"Cn|j gko gt &u"f kugcug"t gxgcnu"j krrqeco rcn"cdpqto cnkkgu"kp"{ qwpi "cf wnj qqf 0 Poster presented at the 2018 Cognitive Aging Conference. Atlanta, Georgia.*
- In the Sughty F.18 In the War Rylagging: 87. he Bole Brain Health® programs improve brain health knowledge and memory self-efficacy in older adults: A pilot study. Poster presented at the 2018 Cognitive Aging Conference. Atlanta, Georgia.
- McDougall, G. J. & McDonough, I. M. (March, 2018). *Memory training for adults with mild cognitive impairment*. Poster presented at the 9th annual evidenced based practice research conference. Optimizing Outcomes Through Interprofessional Care Delivery. Sponsored by Ochsner Health System. New Orleans, Louisiana.
- Enam, T., Kraemer, K. R., Gallo, D. A., & **McDonough, I. M.** (November, 2017). *False memory and aging: The role of cognitive reserve in young-old and old-old adults.* Poster presented at the 58(he)-10()-I-44(re

- Threadgill, H. (2019). From Preparation to Assessment: Exploring the Neural Substrates of Approach-Motivated Goal Pursuit.
- Newman, A. (2019). An Intersectional Identity Approach to Chronic Pain Disparities Using Latent Class Analysis.
- Condeelis, K. (2018). Expanding On Rowe and Kahnøs Model of Successful Aging Through an Examination of The Associations Between Affective Functioning, Global Sleep Quality, And Global Cognition Among Adults.
- Ungvary, S. (2018). Value Profiles of Emerging Adults.
- deLacy, R. (2017). Impulsivity and the Ability to Plan in Context: The Impact of Psychop/F1W\* nBT/F3 11 Tf1 0 0 1 163.0

Guest Editor, Aging and Mental Health, Special Issue: *Biological Markers of Aging and Mental Health*Associate Editor, Neurocognitive Aging and Behavior Section for Frontiers in Aging Neuroscience
Guest Editor, Frontiers in Aging Neuroscience, Special Issue: *Insights in Neurocognitive Aging and Behavior* 

### **AD-HOC REVIEWER**

Journal Reviewing Details: https://publons.com/researcher/195591/ian-m-mcdonough/peer-review/

# **Reviewer for Grant Agencies**

Alzheimer's Association: Research Fellowship Program Alzheimer's Association: Research Grant Medical Research Council: Research Grant National Natural Science Foundation of China Research Grants Council (RGC) Joint Research Scheme NSF Career Grant NIH Special Section

### **Reviewer for Textbook Publishers**

Principles of Psychology, 2nd ed. Sinauer Associates Publishers. (S. Marc Breedlove) Psychology. Sage Publishing (James S. Nairne & Dawn M. McBride)

# PROFESSIONAL ACTIVITIES

| Resource Centers for Minority Aging Research - RCMAR Analysis Core      | 2023      |
|---|-----------|
| Resource Centers for Minority Aging Research - RCMAR Steering Committee | 2023      |
| Psychonomic Society Task Force on Racism, Committee Member              | 2020-2023 |
| APA Division 20 Mentor  | 2020+     |
| Fellow, Psychonomic Society   | 2018+     |
| MIND Center State Plan Research Group                                   | 2018-2019 |
| Alabama Advanced Imaging Consortium Steering Committee                  | 2018-2023 |
| Guest Editor, Special Issues in Aging and Mental Health                 | 2017-2018 |
| NIH Health Disparities Research Training Program                        | 2016-2017 |
| Neurohackweek,  |           |

# **TEACHING**

Graduate Courses Taught, The University of Alabam]TJ( 16 2 reW\* nBT/F3Tf10f24f4itT2 2 reW\* n 1Tf10 t (m)f1)f2

# **PEDAGOGY**

Quality Circles Grant Training (David Bauer)Spring 2018Active Learning InitiativeFall 2015How Do Students Learn WorkshopSummer 2009Integration of Teaching and Learning ConferenceSpring 2009Academic and Professional WritingFall 2008Workshop on Teaching in the CollegeFall 2008Seminar on Course DesignSummer 2007

# TECHNICAL AND SOFTWARE SKILLS

Statistics: SPSS, SAS, R

Programming: Matlab, R, Perl, PHP, HTML

Stimulus Presentation: Psyscope X, Cogent2000, Psychtoolbox, Collector

Neuroimaging: SPM5-12, Freesurfer, FSL, ART, PLS, VBM, SVM, REST, AFNI, TBSS

Neuroimaging modalities: sMRI, fMRI, DTI, PET