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CURRENT POSITION

2023 – present Professor of Psychology, University of Maryland, College Park

PREVIOUS POSITIONS

2016 – 2023 Associate Professor of Psychology, University of Maryland, College Park
2008 – 2016 Assistant Professor of Psychology, University of Maryland, College Park
2007 – 2008 Postdoctoral Fellow, University of Maryland School of Medicine and NIDA-IRP
2005 – 2007 Postdoctoral Fellow, M.I.N.D. Institute, University of California, Davis

EDUCATION

2000 – 2005 Ph.D., Child Psychology
Institute of Child Development, University of Minnesota
Advisors: Patricia J. Bauer, Ph.D. and Charles A. Nelson, Ph.D.
Dissertation: A neurobehavioral investigation of autobiographical memory development: Contributions of source memory and memory for temporal order

1996 – 2000 B.S., Psychology, Minor in Biology
University of California, San Diego
Magna Cum Laude and Psychology Departmental Honors

HONORS/AWARDS

2025 Philip Merrill Presidential Scholars Faculty Mentor Award
2024 University of Maryland Graduate Faculty Mentor of the Year Award
2024 James McKeen Cattell Sabbatical Fellowship Award, Association for Psychological Science
2022 Mentor Award, McNair Scholars Program, University of Maryland
2022 Woman of Influence Award, University of Maryland, President's Commission on Women's Issues
2021 College of Behavioral and Social Sciences "Be The Solution Award," University of Maryland
2021 Psychology Department Outstanding Research Faculty Mentor Award, University of Maryland
2020 Elevate Fellow, University of Maryland
2019 Philip Merrill Presidential Scholars Faculty Mentor Award
2004 Doctoral Dissertation Fellowship, University of Minnesota
2003 Thomas F. Wallace Fellowship, University of Minnesota

PUBLICATIONS

bold indicates trainee

Riggins, T., **Dunstan, J., Cui, Z., & Kohn, B.** (under review). Neural bases of memory development: Insights from Magnetic Resonance Imaging

Cui, Z., Kohn, B., & Riggins, T. (under review). The impact of contextual factors on memory-related brain and behavioral development: Gaps and opportunities for more ecologically valid science.

Kohn, B & Riggins, T. (under review). Autobiographical memory coherence and hippocampal subfield volumes in 4-

to 8-year-old children.

Dunstan, J., Ratliff, E., & Riggins, T. (2026). Scanning Dos and Don'ts: Using Magnetic Resonance Imaging in awake children aged 3 to 5 years to assess brain structure and function. *Journal of Visualized Experiments.*

St. Laurent, C. W., Yousefi, F., Parvizi, P., Holmes, J. F., Lokhandwala, S., Riggins, T., & Spencer, R. M. C. (2026). Sleep and movement behaviors in preschool children: A cross-sectional study with compositional data analysis. *Journal of Sleep Research.* DOI: https://doi.org/10.1111/jsr.70279

Daugherty, A. M.†, Carr, V.†, Canada, K. L., Rådman, G., Brown T, Augustinack J, Amunts K, Bakker A, Berron D, Burggren A, Chetelat G, de Flores R, Ding S-L, Huang Y, Johnson E, Kanel P, Keresztes A, Kedo O, Kennedy KM, Lee J, Malykhin N, Martinez A, Mueller S, Mulligan E, Ofen N, Palombo D, Pasquini L, Pluta J, Raz N, Riggins T, Rodrigue KM, Saifullah S, Schlichting ML, Stark C, Wang L, Yushkevich P, La Joie R ^, Wisse L ^, Olsen R ^. (2026). Harmonized protocol for subfield segmentation in the hippocampal body on high-resolution in vivo MRI from the Hippocampal Subfields Group (HSG). *Hippocampus,*

Cui, Z., Botdorf, M., & Riggins, T. (2025). Associations between experience of typical variations in stressors and hippocampal structure and functional connectivity in childhood. *International Journal of Developmental Neuroscience, 85*(5), 1-19. DOI:10.1002/jdn.70037

Lei, Y., Richards, J., **Geng, F.,** & Riggins, T. (2025). Multimodal analysis of neural signals related to source memory encoding in young children. *Developmental Cognitive Neuroscience, 74,* 101580. https://doi.org/10.1016/j.dcn.2025.101580

St. Laurent, C. W., Lokhandwala, S., Allard, T., Ji, A., Paluch, A., Riggins, T., & Spencer, R. M. C. (2025). Relations between 24-hour movement behaviors, declarative memory, and hippocampal volume in early childhood. *Scientific Reports,* 5(1):9205. doi: 10.1038/s41598-025-92932-7.

Parker, A.J., Sorcher, L., Cutshaw, O.P., **Botdorf, M., Dunstan, J.,** Riggins, T., & Dougherty, L.R. (2025). Hippocampal subregion volumes and preadolescent depression risk in the ABCD sample. *Journal of Affective Disorders,* 378:165-174. doi: 10.1016/j.jad.2025.02.083

Dunstan, J., Canada, K., Spencer, R. M. C. & Riggins, T. (2024). Influence of sleep and nap habituality on mnemonic discrimination in early childhood: An online study. *Cognitive Development*, 72: 101518. doi: 10.1016/j.cogdev.2024.101518.

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Dunstan, J. & Riggins, T. (in press). Infant memory and infantile amnesia. In D. Amso, (Ed.)., *The Oxford Handbook of The Development of Attention, Learning, and Memory.* Oxford University Press.

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Babu Ganesh, D., Pandey, M., Riggins, T., Spencer, R. M. C., **Tiwari, R., Wehland, M., & Leikin, S.** (2024). Why older kids do not nap at school. *Frontiers for Young Minds, section Human Health.* 12:1224593. doi: 10.3389/frym.2023.1224593

Kohn, B. H., Cui, Z., Candelaria, M., Buckingham-Howes, S., Black, M. M., & Riggins, T. (2023). Early emotional caregiving environment and associations with memory performance and hippocampal volume in adolescents with prenatal drug exposure. *Frontiers in Behavioral Neuroscience*, *17*. https://doi.org/doi: 10.3389/fnbeh.2023.1238172

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Canada, K. L., Pathman, T., & Riggins, T. (2020). Longitudinal development of memory for temporal order during early to middle childhood [Special issue]. *The Journal of Genetic Psychology, 181(4),*237-254. doi: 10.1080/00221325.2020.1741504 PMCID: PMC7446139

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Canada, K. L., Geng, F., & Riggins, T. (2020). Age- and performance-related differences in source memory retrieval during early childhood: Insights from event-related potentials. *Developmental Psychobiology*. *62(6),* 723-736. https://doi.org/10.1002/dev.21946

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history predict children's relational binding ability at school-age. *Developmental Psychology, 55(11),* 2417-2427.

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Bauer, P. J., Dugan, J. A., Varga, N. L, & Riggins, T. (2019). Relations between neural structures and children's self-derivation of new knowledge through memory integration. *Developmental Cognitive Neuroscience. 36,* 100611. https://doi.org/10.1016/j.dcn.2018.12.009

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Blankenship, S., Chad-Friedman, E., Riggins, T., & Dougherty, L.R. (2019). Early parenting predicts hippocampal subregion volume via stress reactivity in childhood. *Developmental Psychobiology, 61(1),* 125-140. https://doi.org/10.1002/dev.21788 *NOTE: Winner of the 2019 Hennessy-Smotherman Wiley Best Student Paper Award

Canada, K. L., Ngo, C. T., Newcombe, N. S., Geng, F., & Riggins, T. (2019). It's all in the details: Relations between young children's developing pattern separation abilities and hippocampal subfield volumes. *Cerebral Cortex*, *29*(8), 3427-3433. https://doi.org/10.1093/cercor/bhy211

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Lukowski, A. F., Wiebe, S. A., Haight, J. C., *DeBoer, T., Nelson, C. A., & Bauer, P. J. (2005). Forming a stable memory representation in the first year of life: Why imitation is more than child's play. *Developmental Science, 8*(3), 279-298. DOI:10.1111/j.1467-7687.2005.00415.x

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EXTERNAL GRANTS

Co-Investigator: Function of Biphasic Sleep in Infants, PI: Rebecca Spencer, R01HL169995, 7/5/23-6/30/28.

Multiple Principal Investigator: Longitudinal Investigation of Sleep, Memory, and Brain Development Across the Nap Transition. R01HL164628, 6/1/2023-5/31/2028, Total costs $6,471,410

Multiple Principal Investigator: 16/24 Healthy Brain and Child Development National Consortium. U01, NIDA DA055316, 09/2021 through 06/2026, UMD total costs $6,429,557

Multiple Principal Investigator: Collaborative research: Hippocampal development and sleep-dependent memory consolidation in preschoolers, NSF, Social, Behavioral, and Economic Sciences, BCS 1749280, 5/17/2018 through 5/16/22, UMD total costs $489,261 (UMass total costs $109,815)

Collaborator: The effects of acute aerobic exercise on hippocampal function and microstructure in older adults, PI: Daniel Callow, NIH F31AG074670

Co-Sponsor: Interaction of physical activity and sleep in early childhood and their influence on cognition and the hippocampus. PI: Christine St. Laurent, NIH F32HD105384

Co-Investigator: 3/5 The cumulative risk of substance exposure and early life adversity on child health development and outcomes, PI: Nathan Fox, University of Maryland, NIH NIDA R34DA050285, 9/30/2019-3/29/2021, UMD total costs $264,055

Multiple Principal Investigator: Hippocampal development and sleep-dependent memory consolidation in preschoolers. R21, NICHD HD094758 3/1/2018 through 2/29/2020, total costs across sites $423,208

Principal Investigator: Hippocampal-memory network development and episodic memory in early childhood. (R01), NICHD HD079518, 5/1/2014 through 4/30/2020, $1,542,995 (total costs)

Consultant: The development and neural bases of pattern separation and relational memory. PI Chi Ngo, NIH F31 HD090872-01

Principal Investigator: Neural correlates of risk taking in adolescents exposed to drugs prenatally. NIDA I/START DA029113, 8/1/2010 through 7/31/2012, $232,173 (total costs)

Principal Investigator: Neurobehavioral investigation of recollection and familiarity in early childhood. NICHD R03 HD067425, 1/1/2011 through 12/31/2013, $150,000 (total costs)

INTERNAL GRANTS

2023 Dean's Research Initiative Award ($20,000), University of Maryland
2021 Faculty-Student Research Award ($10,000), University of Maryland
2020 Maryland Neuroimaging Center Seed Grant, University of Maryland
2013 Dean's MRI Research Initiative Award ($45,000), University of Maryland
2013 Research and Scholarship Award (RASA), University of Maryland
2012 Maryland Neuroimaging Center Seed Grant ($12,000), University of Maryland
2012 ADVANCE Research Award ($20,000), University of Maryland
2011 Dean's Research Initiative Award ($40,000), University of Maryland
2009 General Research Board (GRB) Award, University of Maryland, Graduate School

EDITORIAL ACTIVITIES

Editorial Boards:

Cognitive Development (2014-present)
Developmental Cognitive Neuroscience Board (2022-present)

Managing Guest Editor: Developmental Cognitive Neuroscience (2024)

Ad hoc journal review:

PLOS One, Neuroscience Letters, Psychophysiology, Brain, Memory, Developmental

Science, Journal of Cognitive Neuroscience, Child Development, Journal of Experimental Psychology: Learning, Memory, and Cognition, Cognition, Neuropsychologia, International Journal of Behavioral Development, Developmental Cognitive Neuroscience, JINS (official journal of the International Neuropsychological Society), Psychophysiology, Developmental Neuroscience, Human Brain Mapping, Hippocampus, Proceedings of the National Academy of Science (PNAS), Journal of Neuroscience, Cognitive Development, Journal of Abnormal Child Psychology, Pediatrics, eLife, Genetic Psychology, Journal of Anatomy

PROFESSIONAL ACTIVITIES

Grant review:

Canada Social Sciences and Humanities Research Council (2025)
German Research Foundation (2023)
NIH Study Section "Fellowships: Learning and Memory, Language, Communication and Related Neurosciences – F01B" (2022)
Member of the Biobehavioral & Behavioral Sciences Sub-Committee [NIH-CHHD-H] (2016-2021)
Office of Independent Research Fund Denmark, Danish Agency for Higher Education and Science (2021)
National Science Foundation (2015, 2019, 2021)
Natural Sciences and Engineering Research Council of Canada (2017, 2025)
National Institutes of Health, Cognition and Perception Study Section, Ad hoc member (2015, 2016)

Conference review:

Flux
Cognitive Science Society
Society for Research in Child Development
International Society on Infant Studies
Cognitive Development Society

Secretary, Cognitive Development Society (elected, 2017-2022)

Participant, Early Childhood National Summit, University of Florida (2017)

INVITED ACADEMIC PRESENTATIONS

2026 Florida International University, Miami, FL, *Development of the hippocampal memory network in childhood*
2025 Cradle of Cognition Lecture series hosted by the Max Planck Institute for Human Cognitive and Brain Sciences, *Development of hippocampal subfields in childhood: Relations with memory and individual differences*
2024 Tulane University, New Orleans, LA, *Development of hippocampal subfields in childhood: Relations with memory and individual differences*
2023 Maryland Psychiatric Research Center (MPRC), Baltimore, MD, *Development of hippocampal subfields in childhood: Relations with memory and individual differences*
2022 University of Maryland, School of Medicine, Substance Use in Pregnancy (SUP) Symposium, Baltimore, MD, *Links between substance use in pregnancy and long-term cognitive and neural development in offspring*
2022 York University, Department of Psychology, Toronto, Ontario, Canada, *Hippocampal-memory network development and episodic memory in early childhood: Age-related changes and individual variation* (virtual presentation due to COVID-19 pandemic)
2021 5th International Conference of Human Brain Development (ICHBD 2021) Key note speaker, Beijing, China, *Hippocampal-memory network development and episodic memory in early childhood: Age-related changes and individual variation* (virtual presentation due to COVID-19 pandemic)
2021 Seminar in Education, Cognition, and Neuroscience in the College of Education at Zhejiang University and funded by the Global Partnership Fund and the Fundamental Research Funds for the Central

Universities, Zhejiang, China, *Hippocampal-memory network development and episodic memory in early childhood: Age-related changes, individual variation*, *and implications for education* (virtual presentation due to COVID-19 pandemic)

2021 Max Planck Institute for Human Development, Lifespan Psychology, Berlin, Germany, *Development of hippocampal subfields in early childhood: Relations with memory and individual differences* (virtual presentation due to COVID-19 pandemic)

2021 University of New South Wales, School of Psychology, Sydney, Australia, *Hippocampal-memory network development and episodic memory in early childhood: Age-related changes and individual variation* (virtual presentation due to COVID-19 pandemic)

2021 University of Toronto, Department of Psychology, Ebbinghaus Empire Cognitive and Cognitive Neuroscience Colloquium series, Toronto, Ontario, Canada, *Hippocampal-memory network development and episodic memory in early childhood: Age-related changes and individual variation* (virtual presentation due to COVID-19 pandemic)

2021 The University of Sydney, School of Psychology, Carlson Lab, *EEG methods in early childhood* (virtual presentation due to COVID-19 pandemic)

2021 Children's Hospital of Pittsburgh/University of Pittsburgh Medical Center, Pediatric Radiology, *MRI methods in early childhood* (virtual presentation due to COVID-19 pandemic)

2021 Hippocampal Subfields Group Virtual Webinar Series (over 200 International Scientists), *Development of hippocampal subfields: Relations with memory and stress*

2020 University of California, Irvine, Department of Psychological Science, *Hippocampal-memory network development and episodic memory in early childhood: Age-related differences and individual variation* (postponed due to COVID-19 pandemic)

2019 University of Maryland, School of Medicine, Imaging Science Seminar, Baltimore, Maryland, *Hippocampal-memory network development and episodic memory in early childhood: Age-related differences and individual variation*

2019 Maryland Neuroimaging Retreat, University of Maryland, Baltimore, *Hippocampal-memory network development and episodic memory in early childhood*

2018 University of Massachusetts, Amherst, Psychological and Brain Sciences, *Hippocampal-memory network development and episodic memory in early childhood: Age-related differences and individual variation*

2018 University of California, Davis, Memory Development Summit, *Episodic memory in early childhood: Meaningful age-related and individual differences.*

2017 University of Iowa, Delta Center, *Hippocampal-memory network development and episodic memory in early childhood*

2016 University of Maryland, Bioscience Day, *Hippocampal-memory network development and episodic memory in early childhood*

2016 NeuroTech DC, NeurotechX - The International Neurotechonology Network, *Principles of Neuroscience: How memory develops in children,* (with graduate student Kelsey Canada)

2015 University of Iowa, Delta Center, *Implications of basic memory development research for applied purposes* (declined)

2015 University of Virginia, Cognitive Psychology, *Episodic memory development in early childhood: Insights from ERPs and fMRI*

2014 St. Mary's College of Maryland, *Neurobehavioral investigation of episodic memory in early childhood*

2013 University of Minnesota, Center for Neurobehavioral Development, *Episodic memory in early childhood: Insights from Magnetic Resonance Imaging*

2013 University of Arizona, *Neurobehavioral investigation of episodic memory in early childhood*

2011 University of Virginia, Developmental Psychology, *Neurobehavioral investigation of recollection and familiarity in early childhood*

2011 Cognitive Development Society, *Memory development and the brain: New methods to address old questions*, Philadelphia, PA

2010 University of Maryland, School of Medicine, Pediatrics, *Development of recollection in early childhood*

WORK TO PROMOTE JUSTICE, EQUITY, DIVERSITY AND INCLUSION

2026 Mentor, McNair Summer Scholars, Justin Seibure
2025 Mentor, McNair Summer Scholars, Wendy Contreas
2024 Mentor, McNair Summer Scholars, Cansu Ekran and Jonathan Booker
2023 Mentor, BSOS Summer Research Initiative Scholar, Crystal Hillaire
2023 Mentor, McNair Summer Scholar, Jonathan Booker
2022 Mentor, McNair Summer Scholars, Kayla Kellner and Jennifer Tabet
2020 Member, Advancing Anti-Racist Education Workshop and Discussion Series
2019 Mentor, Summer Research Initiative, Morgan State University student, Oluwadunsin Akinyemi
2019 Discussion Leader, Promoting diversity in cognitive development, Cognitive Development Soc.
2019, 2020 Presenter, Enter the Terp Graduate School Workshop, University of Maryland
2019 Mentor, Scholar Development Program, Society for Research in Child Development
2018 Mentor, Psychology Research Empowerment Program (Prep), University of Maryland, Laura Campos, Dylan Cooper
2017 - 2018 Mentor, McNair Scholar, Angel Tse
2014 - present University of Maryland President's Commission on Women's Issues
2011 - 2012 Mentor, McNair Scholar, Sope Lan
2010 - 2013 Mentor, Louis Stokes Alliances for Minority Participation (LSAMP) program Bridge to the Doctorate, Vanessa Williams
2013 Speaker, University of Maryland Summer Diversity Conference

OPEN SCIENCE ACTIVITIES

2022 – present Spearheaded activities to add measure of long-term memory to HEALthy Brain and Child Development (HBCD) Study
2025 – present Co-Chair of Scanning Young Populations Working Group for HEALthy Brain and Child Development (HBCD) Study
2019 – 2024 Co-Chair of fMRI Working Group for HEALthy Brain and Child Development (HBCD) Study
2020 – 2023 Open Science Committee, Psychology Department, University of Maryland
Open source data for publications (on journal websites and by request)
Supporting and encouraging pre-registration, especially for student projects
Grant submission to make current dataset open access (OpenNeuro.org)

COMMUNITY EDUCATION AND BROADER ENGAGEMENT

2025 Planned and organized *"RA for a Day"* event to introduce local high school students to the field of developmental cognitive neuroscience https://psyc.umd.edu/featured-content/giving-high-school-students-glimpse-neuroscience-research
2025 NeuroCardio Summit, Global group for teen innovators interested in neuroscience and cardiology, *Developmental Cognitive Neuroscience*
2025 *Brain development* presentation, Severn River Middle School, Anne Arundel County
2024 Shoe drive for Foster the Family DC
2024 Anne Arundel County Community College, Mathematics Awareness Program and Awards Ceremony, *Using Math to Understand the Development of Early Childhood Memory and Brian Development*
2024 National Association of County and City Health Officials (NACCHO) General Body Meeting, *Brain development*

2021 Psychology Department, Cognitive and Neural Systems Areas, Work/Life Balance
2019 Center for Young Children, University of Maryland, Lecture: *Babies 101*
2019 NASA Goddard Preschool, Lecture: *Memory, Sleep, and Brain Development*
2019 Lactation/Feeding Practices at UMD Panel
2017 Psychology Department, Clinical and Counseling Areas, *Academia Work/Life Balance Panel*
2017 Kinesiology Department, UMD, Lecture: *Experience Lab: Parenthood and Research*
2016 - 2019 Anne Arundel County Public Schools, Lecture: *Brain Development*
2016 Consultant for Arena Stage and Mead Center for American Theater
2014 Founded UMDParents listserv, an online resource for UMD students, staff and faculty who are parents
2014 Infant and Child Studies Parent Group, Lecture: *What Parents Should Know about Memory Development*

PROFESSIONAL SOCIETY MEMBERSHIPS

2022-present Memory Disorders Research Society (MDRS) [by-invitation-only professional society]
2016-present Developmental Cognitive Neuroscience Society (Flux Congress) *International
2003-present Cognitive Development Society (CDS)
2003-present Cognitive Neuroscience Society (CNS) *International
2001-present Society for Research in Child Development (SRCD) *International

RESEARCH-RELATED TRAINING

2022 NIH and NSF Eliminating Bias in Peer Review Training and NIH Review Integrity Course
2019 National Research Mentoring Network (NRMN) Mentor Workshop to promote training and career development of individuals from diverse backgrounds, communities, and cultures who are pursuing biomedical research careers.
2018 Structural Equation Modeling Workshop: First and Second Courses
2008 NIDA Short Course on the Genetics and Epigenetics of Addiction
2007 Analysis of Functional NeuroImages (AFNI) Boot camp
2007 Brain Electrical Source Analysis (BESA) workshop
2007 Laboratory Management Institute
2005 APA Advanced Training Institute: Functional Magnetic Resonance Imaging
2005 Summer Institute in Cognitive Neuroscience
2004 John Merck Fund Summer Institute on the Biology of Developmental Disabilities
2002 MATLAB Fundamentals and Programming Techniques
2001 High-Density Electrophysiological Data Collection and Analysis, EGI

TEACHING EXPERIENCE

University of Maryland

Developmental Cognitive Neuroscience (PSYC725/NACS728D), Psychology Department
Introduction to Developmental Psychology (PSYC355), Psychology Department
Cognitive Electrophysiology Seminar (PSYC888D), Psychology Department
Advanced Developmental Psychology (PSYC611), Psychology Department
Developmental Psychology Seminar (PSYC888A), Psychology Department

University of Minnesota

Introduction to Child Psychology, Institute of Child Development

INSTITUTIONAL SERVICE

2025 – present Director of Admissions, Neuroscience and Cognitive Science (NACS) Graduate Training Program
2023 – 2025 Appointment, Promotion and Tenure (APT) Committee, College of Behavioral and Social Sciences
2022 Human Computational Neuroscience Search Committee, Department of Psychology
2021 – 2022 Peer Teaching Review Committee, Department of Psychology
2019 Developmental Area Faculty Search Committee, Department of Psychology
2018 – present Executive Committee, Neuroscience and Cognitive Science Program
2017 – 2019 Executive Committee, Department of Psychology
2017 – present Department of Psychology IRB Liaison, Chair
2016 – present Strategic Planning Committee, Neuroscience and Cognitive Science Program
2016 University of Maryland Undergraduate Researcher of the Year Selection Committee
2016 – 2017 Maryland Neuroimaging Center Scientific Director Review Committee
2014 University of Maryland Graduate Faculty Mentor of the Year Committee, Outstanding Director of Graduate Studies Committee, and Outstanding Coordinator of Graduate Studies Committee
2014 – present University of Maryland President's Commission on Women's Issues
2014, 2017 University of Maryland Research and Scholarship Award Committee
2013 University of Maryland Distinguished Dissertation Award Selection Committee
2013 & 2016 Merit Review Committee, Department of Psychology
2013-2014 Co-advisor for Developmental Science workshop entitled "Cognitive and Linguistic Development: Translations of Research for Educational Applications"
2012 Advisor to T.U.S.K. "Teaching Underrepresented Sciences to Kids" Student Organization
2011 Neuroscience Area Faculty Search Committee, Department of Psychology
2011 – 2012 Department Chair Search Committee, Department of Psychology
2011 – present Executive Committee, Graduate Field Committee in Developmental Science
2011 – 2016 Graduate Recruitment ("NACS-fest") Chair, Neuroscience and Cognitive Science Program
2011 – 2012 Brain and Behavioral Sciences Equipment Committee Chair, Department of Psychology
2010 Developmental Area Faculty Search Committee, Department of Psychology
2009 – 2010 Undergraduate Education Curriculum Committee, Department of Psychology
2009 – 2010 Graduate Admissions Committee, Neuroscience and Cognitive Science Program
2009 Developmental Area Faculty Search Committee, Department of Psychology
2009 Dean Search Committee, College of Behavioral and Social Sciences
2009 – 2019 Faculty Recruitment and Hiring Committee, Department of Psychology

CURRENT ADVISING

Junior faculty

2020 - present Arianna Gard, Department of Psychology
Fanita Tyrell, Department of Psychology

Postdocs

2023 – present Erin Ratliff, Ph.D.
2022 – present Zehua Cui, Ph.D.

Ph.D. students

2024 - present Isabel Wilder, Neuroscience and Cognitive Science
2023 - present Isabella Schneider, Department of Psychology
2021 - present Brooke Kohn, Department of Psychology (R36, DA064874, Mapping How Trajectories of Perinatal Substance Use and Depression Impact Neonatal Brain Development 2026-2028)
2020 - present Jade Dunstan, Department of Psychology (University of Maryland Flagship Fellow, UMD Graduate School's Outstanding Graduate Assistant Award AY 2023-24, Bartlett Award 2026).

Undergraduate students (from many Departments including: Psychology, Biology, Computer Science,

Neurobiology and Physiology, Education, Special Education)
Anna Karan, Injoo Lee, Cansu Erkan, Yusra Umer, Leah Freisinger, Angela Tan, Makayla Anfuson (away for the summer), Aidan Vaca, Isabella (Isa) Bernat, Nicole Ahmadpour, Jenny Nguyen-Khoa, Megan Quan, Samantha (Sam) Halling, Aditi Gubba, Christian Diaz (MiNDS Scholar), Jonathan Booker (McNair Scholar), Rohan Jaggi, Tracy Ly, Perfect Sare (SPIRE Scholar), Olivia Milne, Ariana Chalkias

CONFERENCE PRESENTATIONS (last 5 years)
Bold indicates trainee

Riggins, T., & Smith, B. (2025, November 11-13). *What HBCD Is Doing Exceptionally Well? A candid look at effective strategies and practices worth emulating in large-scale perinatal research.* [Preconference Talk]. International Society for Developmental Psychobiology, San Diego, CA.

Payne, P., Allen, C., Cui, Z., Schneider, I., & Riggins, T. (2025, November 11-13). *Associations between Moderate Early Life Stress and Hippocampal Microstructure: Evidence for Sex-Specific Effect in a Typically Developing Sample of Young Children* [poster presentation]. International Society for Developmental Psychobiology, San Diego, CA.

Perry, A., Tovar, A., Ratliff, E., Riggins, T. (2025, November 11-13). *Early childhood brain connectivity related to emotion regulation* [poster presentation]. International Society for Developmental Psychobiology, San Diego, CA.

Riggins, T. (2025, September 7-8). *HEALthy Brain and Child Development Study: Initial Data Release* [Poster presentation]. FIT'NG. Dublin, Ireland.

Riggins, T., **Cui, Z., Gronow, F., Pittner, K., Schröder, T.,** Moog, N., Bauer, M., Shing, Y.L., & Buss, C. *Applying the Harmonized Hippocampal Subfields Protocol to neonatal MRI scans (WIP)* [Poster presentation]. FIT'NG. Dublin, Ireland.

Riggins, T., **Lei, Y., Ratliff, E., Dunstan, J.** (2025, September 4-6). *Multimodal imaging reveals insights into the neural mechanisms of memory encoding and retrieval in young children.* [paper symposium]. 13th annual Flux Congress. Dublin, Ireland.

Kohn, B.H. & Riggins, T. (2025, September 4-6). *Co-Development of Autobiographical Memory and Hippocampal Subfield Volumes in Early Childhood* [Poster presentation]. 13th annual Flux Congress. Dublin, Ireland.

Schneider, I., Jones, M., Mooney, L., Ratliff, E. L., Callow, D., Spencer, R. M. C., Riggins, T. (2025, September 4-6). *Exploring Relations Between Hippocampal Microstructure and Mnemonic Discrimination in Preschoolers* [Poster presentation]. Flux Congress 2025. Dublin, Ireland

Mooney, L., Balcells Sanchez, R., Lokhandwala, S., Horger, M., Dunstan, J., Cui, Z., Riggins, T., & Spencer, R. M. C. (2025, June). *Relations between slow oscillation–spindle coupling and hippocampal subfields in development.* Poster presented at Sleep 2025, Seattle, WA, United States.

Gaudette, L., Mooney, L., Horger, M., Riggins, T., & Spencer, R. M. C. *Does Sleep Physiology Predict Language and Literacy Development in Early Childhood?, Sleep, Volume 48*, Issue Supplement_1, May 2025, Page A139, https://doi.org/10.1093/sleep/zsaf090.0319

Perry, A., Reckner, E., Redcay, E., Riggins, T. (2025, May 1-3). *Relations between parent-reported social behavior and amygdala volumes in 4- to 8-year-old children.* [poster presentation]. Society for Research in Child Development, Minneapolis, MN

Wilder, I., Spencer, R. & Riggins, T. (2025, May 1-3). *Exploring relations between sleep and stress in early childhood using DHEA-Cortisol Ratios from hair* [poster presentation]. Society for Research in Child Development, Minneapolis, MN

Schneider, I., Nolan, L., Simon, L., Wilder, I., Chase, J., Mooney, L., Horger M., Ratliff, E. L., Spencer, R. M. C. & Riggins, T. (2025, May 1-3). *Effects of sleep on mnemonic discrimination and their relation to hippocampal subfield volumes in preschoolers* [poster presentation]. Society for Research in Child Development, Minneapolis, MN, United States.

Nolan, L., Simon, L., Jones, M., Dunstan, J., Ratliff, E. L., Ross-Sheehy, S., Riggins, T. (2025, May 1-3). *Attention and Working Memory Correlate with Episodic Memory during Mnemonic Similarity Task in Young Children* [Poster presentation]. Society for Research in Child Development. Minneapolis, Minnesota, United States.

Booker, J., Kohn, B.H., Riggins, T. (2025). *Impact of neighborhood environment and prenatal drug exposure on amygdala volume in urban adolescents* [Poster Session]. Undergraduate Research Day. University of Maryland, College Park, MD, United States.

Bernat, I., Erkan, C. N., Freisinger, L., Vaca, A., Nolan, L., Schneider, I., Ratliff, E., & Riggins, T. (2025, April 25). Cortical thickness as a neurodevelopmental marker of memory in early childhood [Poster presentation]. Undergraduate Research Day, Neuroscience Research Day, Psychology Research Day, University of Maryland, College Park, MD.

Erkan, C. N., Lee, I. E., Umer, Y., Tovar, A., Simon, L. R., Wilder, I. M., Ratliff, E., & Riggins, T. (2025, April 23). Primary caregivers' stress, children's sleep quality, and parent-child sleep interactions among preschooler habitual nappers [Poster presentation]. Undergraduate Research Day, Neuroscience Research Day, and PSYC Research Day, University of Maryland, College Park, MD.

Magesh, T., Jaggi, R., Krishnakumar, M., Cui, Z., Dunstan, J., & Riggins, T. (2025, April 23). *A tale of two software programs: Computing difference in brain volume estimates* [Poster Session]. Undergraduate Research Day. University of Maryland, College Park, MD, United States

Gubba, A., Halling, S., Quan, M., Kohn, B.H., & Riggins, T. (2025, April 23). *Overgeneral autobiographical memory and internalizing symptoms in young children* [Poster Session]. Undergraduate Research Day. University of Maryland, College Park, MD, United States.

Karan, A., Blaustein, M., Collins, M., Perry, A., & Riggins, T. (2025, April 23-25). *Associations between social responsiveness and brain structure in children* [Poster Session]. Undergraduate Research Day, Psychology Research Day, Neuroscience Research Day. University of Maryland, College Park, MD

Erkan, C. N., Nolan, L., Schneider, I., Ratliff, E., & Riggins, T. (2025, March 6-8). Why some children struggle to remember: The role of attention and hippocampal subfields in episodic memory [Poster presentation]. Eastern Psychological Association Annual Meeting, New York City, NY.

Kohn, B.H., Ratliff, E.L., Horger, M. N., Riggins, T. (2024, November 14-17). *Adolescent, but not early-life, caregiver depression is associated with smaller hippocampal volumes in adolescents with a history of prenatal drug*

exposure [Poster presentation]. Association for Behavioral and Cognitive Therapies annual meeting, Addictive Behaviors Special Interest Group. Philadelphia, Pennsylvania, United States.

Kohn, B.H., Ratliff, E.L., Horger, M. N., Riggins, T. (2024, September 28-30). *Adolescent, but not early-life, caregiver depression is associated with smaller hippocampal volumes in adolescents with a history of prenatal drug exposure* [Poster presentation]. 12th annual Flux Congress. Baltimore, Maryland, United States.

Nolan, L., Schneider, I., Ratliff, E., & Riggins, T. (2024, September 28-30). *Association between Total Hippocampal Volume, Cortical Thickness, and Episodic Memory in Early to Mid Childhood.* [Poster Session]. Flux Society. Baltimore, MD, United States

Ratliff, E., Dunstan, J., Cui, Z., Dougherty, L., & Riggins, T. (2024, September 28-30). *The effect of socioeconomic disadvantage on longitudinal growth of hippocampal subfield volumes in the Adolescent Brain Cognitive Development (ABCD) Study*. [Poster Session]. Flux Society. Baltimore, MD, United States

Jones, M., Callow, D., Dunstan, J., Spencer, R.M.C., & Riggins, T. (2024, September 28-30). *Microstructural Integrity of the Hippocampus During Early Childhood: Relations with Visuospatial Memory.* [Poster Session]. Flux Society. Baltimore, MD, United States

Cui, Z., Jones, M., Davis, A., Kimock, F., & Riggins, T. (2024, September 28-30). *DREAMIES T-M: A Novel Ear Protection Method in Infant Neuroimaging Research.* [Poster Session]. Flux Society. Baltimore, MD, United States

Cui, Z., Dunstan, J., Schneider, I., Illapani, V., Xie, H., Sepeta, L., & Riggins, T. (2024, September 28-30). *A comparison of FreeSurfer, HippUnfold, and Automatic Segmentation of Hippocampal Subfields (ASHS) for Estimating Hippocampal Volumes in Early Childhood.* [Poster Session]. Flux Society. Baltimore, MD, United States

Dunstan, J., Leikin, S., Schneider, I., Cui, Z., Nolan, L., Spencer, R.M.C., & Riggins, T., (2024 September 28-30). *Picture Perfect: Investigating relations between hippocampal subfield volumes and episodic memory in preschoolers using a visuospatial paradigm.* [Poster presentation]. 12th annual Flux Congress, Baltimore, MD.

Schneider I., Mooney, L., Ratliff, E. R., Spencer, R. M. C., & Riggins, T. (2024, September 28 - 30). *Relation between cortical thickness and sleep-dependent episodic memory performance in preschoolers*. [Poster Presentation]. Flux Congress, Baltimore, MD, United States.

Kable, J.A., Potter, A.P., & Riggins, T. (2024). Assessing neurocognitive and language development in the Healthy Brain and Child Development (HBCD) Study. Poster presentation at the 47th Annual RSA Scientific Meeting, Minneapolis, Minnesota, June 22-26, 2024.

Cui, Z., Dunstan, J. & Riggins, T. (2024, April). *A comparison of Freesurfer and Automatic Segmentation of Hippocampal Subfields (ASHS) for estimating hippocampal volumes among preschoolers.* [Poster Session]. Cognitive Neuroscience Society, Toronto, Canada.

Erkan, C., Freisinger, L., Karan, A., Sharan, R., Schneider, I., Ratliff, E., & Riggins, T. (2024, April 17-26). *Exploring sleep-dependent memory in consolidation in preschoolers* [Poster Session]. Undergraduate Research Day, Psychology Research Day, Neuroscience Research Day. University of Maryland, College Park, MD, United States

Riggins, T., Kable, J. & Potter, A. (2024, March 21-23). *Assessing neurocognitive and language development in the HEALthy Brain and Child Development (HBCD) study* [Poster Session]. Cognitive Development Society Meeting, Pasadena, CA.

Wilder, I., Cui, Z., & Riggins, T. (2024, March 21-23). *Relations between stress, sleep, and parenting style in young children: An exploratory analysis* [Poster Session]. Cognitive Development Society Meeting, Pasadena, CA.

Davis, A., Cui, Z., Gopisetti, S., Riggins, T. (2024, March) *Socioeconomic Hardship and Psychopathology: The Moderating Role of Individual Differences in White Matter Integrity.* [Symposium]. National Institutes of Health, Bethesda, MD.

Booker, J., Kohn, B.H., Riggins, T. (2024, February 29- March 2). *Hippocampal volumes and caregiver changes in adolescents with prenatal drug exposure* [Poster presentation]. Eastern Psychological Association Conference. Philadelphia, PA, United States. http://tinyurl.com/BookerEPAPoster

Leikin, S., & Riggins, T. (2024, February 29-March 1). *Exploring neural mechanisms linking stress & sleep in childhood* [Poster Presentation]. Eastern Psychological Association. Philadelphia, Pennsylvania. United States.

Booker, J., Kohn, B.H., & Riggins, T. (2023, October 19-21) *Hippocampal volume, caregiver changes, and family cohesion in adolescents with prenatal drug exposure* [Poster Session]. Black Doctoral Network, Atlanta, GA, United States https://tinyurl.com/BookerBDNPoster

Kohn, B.H., Cui, Z., Candelaria, M.A., Buckingham-Howes, S., Black, M.M., Riggins, T. (2023, August 14-15). *Early caregiving emotional environment and associations with memory performance and hippocampal volume in adolescents with prenatal drug exposure* [Oral presentation]. Social Neuroscience of Relationships, Attachment, and Caregiving conference. University of Essex, Colchester, United Kingdom.

Cui, Z., Riggins, T. (2023). *Developing a segmentation protocol for hippocampal subfields in human infants (pre-registered report)*. Poster presentation at FIT'NG, Santa Rosa, California.

Cui, Z., Parker, A., Ratliff, E., Riggins, T (2023). *The impact of prenatal drug exposure on neural correlates subserving the processing of negative emotional stimuli.* Poster presentation at Flux, Santa Rosa, California.

Dunstan, J., Purcell, J., Callow, D., Riggins, T. (2023, September 6-9) *Investigating the local representation quality differences underlying pattern separation processes during a mnemonic discrimination fMRI task* [Poster presentation]. Flux Society, Santa Rosa, CA.

Lei, Y., Richards, J., Geng, F., Riggins, T. (2023, September). *Multimodal Analysis of Neural Signals Related to Source Memory in Young Children.* Poster at the FLUX Society Annual Conference, Santa Rosa, CA.

Lokhandwala, S., Noh, E., Riggins, T., Spencer, R.M.C. (February 2023). *Association between slow oscillation-spindle coupling and declarative memory in early childhood.* Poster presented at the FLUX2023, Santa Rosa, California.

Lei, Y., Allard, T. L., Cui, Z., Canada, K. L., & Riggins, T. (March 2023). "Cortical thickness is related to episodic memory in early childhood." Poster presentation at the *Society for Research in Child Development* biennial meeting. Salt Lake City, Utah.

Lei, Y., Cui, Z., Canada, K. L., & Riggins, T. (March 2023). "Do ERP and fMRI signals explain different sources of individual variability in memory during childhood?" Poster presentation at the *Society for Research in Child Development* biennial meeting. Salt Lake City, Utah.

Kohn, B.H.*, Davis, A.*, Cui, Z., Wehland, M., Riggins, T. (March 2023). "Associations between Positive Parenting, Cortical Thickness, and Depressive Symptoms in Young, Typically Developing Children." Poster presentation at the *Society for Research in Child Development* biennial meeting. Salt Lake City, Utah.

Dunstan, J. & Riggins, T. (2023, March). *Exploring the Neural Mechanisms Underlying Pattern Separation in Preschool-Aged Children: An fMRI Paradigm,* Paper presented at the Society for Research in Child Development, Salt Lake City, UT.

Fox, N. A. & Riggins, T. (2023, March). *Approaches to explore early brain development in the HEALthy Brain and Child Development (HBCD) Study: MRI and EEG.* Paper presented at the Society for Research in Child Development, Salt Lake City, UT.

Allard, T., Botdorf, M., Dunstan, J., Lokhandwala, S., Spencer, R., Riggins, T. (2023, March). *Association between hippocampal functional connectivity, sleep, and memory during early childhood.* Poster presented at the Society for Research in Childhood Development, Salt Lake City, UT.

Dunstan, J., Allard, T., Lokhandwala, S., Spencer, R., Riggins, T. (2023, March). *Hippocampal Subfield Volumes in Preschool-Aged Habitual Nappers and Non-Nappers*. Poster presented at the Society for Research in Childhood Development, Salt Lake City, UT.

Noh, E., Lokhandwala, S., Riggins, T., Spencer, R.M.C. (2023, February). *Longitudinal changes in slow oscillation-spindle coupling in early childhood*. Poster presented at the Advances in Sleep & Circadian Science, Clearwater Beach, FL.

Riggins, T. & Gao, W. (2022, September 7-9*). HEALthy brain and child development study: fMRI Working Group process and decisions.* Paper symposium at the 1st annual Fetal, Infant, and Toddler Neuroimaging Society, La Sorbonne Paris, France.

Spencer, R. M. C. & Riggins, T. (2022, September 7-9). *Neurocognitive development of sleep.* Paper symposium at the 10th annual Flux Congress, La Sorbonne Paris, France.

Allard, T., Botdorf, M., Dunstan, J., Lokhandwala, S., Spencer, R., Riggins, T. (2022, September). *Is hippocampal connectivity related to nap status?* Poster presented at the 10th annual Flux Congress, La Sorbonne Paris, France.
Dunstan, J., Ji, A., & Riggins, T. (2022, September 7-9). *Developing a child-friendly paradigm to explore neural mechanisms underlying pattern separation.* Poster presented at the 10th annual Flux Congress, La Sorbonne Paris, France.

Riggins, T. (2022, July 7-9). *Magnetic Resonance Imaging (MRI) techniques to explore early brain development.* Poster presented at the International Congress on Infant Studies, Ottawa, Canada.

Tabet, J., & Riggins, T. (2022, July 8). *Parent-child touch and children's brain development.* Poster presented at the University of Maryland McNair Scholars Program Awards & Recognition Luncheon 2022, College Park, MD.

Kellner, K., & Riggins, T. (2022, July 8). *Parenting styles and emotion regulation in children* [Poster presentation]. McNair Closing Ceremony, College Park, MD. [Winner of outstanding presentation award.]

Dunstan, J., Ji, A., & Riggins, T. (2022, April). *Investigating the role of sleep on mnemonic discrimination in napping vs. non-napping preschool-age children.* Poster presented at the Cognitive Development Society Meeting, Madison, WI.

Lorenz, M.*, Pandey, M.*, Allard, T., Riggins, T. (2022, April). *Do naps enhance memory during early childhood?* Poster presented at the 2022 Undergraduate Research Day Fair, College Park, MD.

St. Laurent, C.W., Lokhandwala, S., **Allard, T., Ji, A.,** Riggins, T., and Spencer, R.M.C. (2022, April). *Relations between wake behaviors, naps, and movement behaviors in early childhood.* Recorded presentation at the Society of Behavioral Medicine Annual Meeting, Baltimore, MD.

Herberholz, E.S., Ji, A., Riggins, T. (2022, March 3-5). *Exploring relations between COVID-19 impact and memory task administration on children's memory.* Poster presented at the 93rd annual Eastern Psychological Association Conference, New York City, NY**.**

Ji, A., Riggins, T., (2022, March 3-5). *Influence of limbic regions on effortful control in children.* Poster presented at the 93rd annual Eastern Psychological Association Conference, New York City, NY.

Botdorf, M. & Riggins, T. (2021, September). *Typical variations in stressful life events relate to smaller hippocampal subfield volumes in children.* Poster presented at the Flux Virtual Congress.

Riggins, T., Weinberg, B., Ewell, A., **Allard, T., Lokhandwala, S., Botdorf, M.,** & Spencer, R. M. C. (2021, June 17-19). *Sleep-dependent memory consolidation and hippocampal development in preschoolers.* Paper presented at the International Mind, Brain and Education Society (IMBES), Montreal, CA. *Cancelled due to the COVID-19 pandemic.

St. Laurent, C., Lokhandwala, S., Allard, T., Ji, A., Riggins, T. & Spencer, R., (2021, April). *Associations between 24-hour Behavior Compositions, Memory and Hippocampal Volume in Preschoolers*. Paper presentation at the biennial meeting of the Society for Research in Child Development, Minneapolis, MN, Virtual.

Ji, A., Canada, K., Munshell, P., Coley, K., Dunstan, J., & Riggins, T. (2021, April 7-9). *Exploring the effects of napping on mnemonic discrimination during early childhood* [Poster presentation]. Society for Research in Child Development, Minneapolis, MN, Virtual.

Ewell, A.*, Allard. T.*, Botdorf, M., & Riggins, T. (April 2021). *Exploring neural mechanisms of emotion regulation in early childhood.* Oral presentation at the virtual biennial meeting of the Society for Research in Child Development, Minneapolis, MN.

Dunstan, J., Duncan, R., Amin, S., Fine. C., & Riggins, T. (2021, April). *Examining the relations between autobiographical memory and hippocampal volume in 4- to 7-year-old children.* Poster to be presented at the biennial meeting of the Society for Research in Child Development, Virtual Meeting.

Ewell, A., **Allard, T., Botdorf, M.,** & Riggins, T. (October 2020). *Relations between Parent-Reported Emotional Lability and Children's Cortical Thickness in Early to Mid-Childhood.* Poster presented at the annual meeting of the International Society for Developmental Psychobiology, Bethesda, MD.

Botdorf, M., Dougherty, L.R., & Riggins, T. (2020, September). *Examining associations between stressful life events and hippocampal subfield volumes using the ABCD cohort.* Poster presented at the Flux 2020 Virtual Congress, Santa Rosa, CA.

Allard, T., Meredith, L., Lokhandwala, S., Ewell, A., Weinberg, B., Spencer, R. & **Riggins, T.** (2020, September). *Is habitual nap status related to memory, sleep physiology, and hippocampal volumes during early childhood?* Poster presented at the Flux 2020 Virtual Congress, Santa Rosa, CA.

Lokhandwala, S., Allard, T., Spencer, R., Riggins, T. (2020, August). *Hippocampal Development, Slow Wave Activity, And Nap-dependent Memory Consolidation In Early Childhood*. Poster presentation at the annual SLEEP meeting, Philadelphia, PA.

Allard, T., Lokhandwala, S., Spencer, R., Riggins, T. (2020, August). *Sleep and Hippocampal Development in Early Childhood*. Oral presentation at the annual SLEEP meeting, Philadelphia, PA.

Chad-Friedman, E., Botdorf, M., Riggins, T., Dougherty, L.R. (May, 2020). *Parental hostility predicts reduced cortical thickness and surface area in boys but not girls.* Poster presented at the 32nd Association for Psychological Science Annual Convention, Chicago, IL.

Meredith, L., Allard, T., Riggins, T. (2020, April). *Exploring Hippocampal Structural Differences in Habitual vs Non-habitual Nappers During Early Childhood.* Poster presented at the 2020 Department of Psychology Undergraduate Research Fair, College Park, MD.

Karayianis, K., Ewell, A., **Allard, T.,** Weinberg, B., & Riggins. T. (2020, March). *Relations between hippocampal volume and story recall in early childhood.* Poster presented at the Eastern Psychological Association Annual Meeting, Boston, MA.