Sarah J. Short, Ph.D.

Personal Information

Name: Sarah J. Short
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Education

Post-doctoral Fellow	University of North Carolina, Chapel Hill	2012	Developmental Cognitive Neuroscience
Ph.D.	University of Wisconsin - Madison	2009	Biological Psychology & Neuroscience Specialty
M.S.	University of Wisconsin - Madison	2004	Biological Psychology
B.S.	Colorado State University, Fort Collins	2000	Psychology
B.A.	Colorado State University, Fort Collins	2000	Sociology

Professional Experience

2018 – present	Assistant Professor, Dorothy King Chair, Department of Educational Psychology | Center for Healthy Minds, University of Wisconsin - Madison
2017 – 2018	Co-Scientific Director and Associate Scientist, Center for Healthy Minds, University of Wisconsin - Madison
2013 – 2016	Assistant Professor, Department of Psychiatry, University of North Carolina Research: Characterizing brain and cognitive development in typical and high-risk children from birth through early childhood. Investigating neural networks and structural-plasticity associated with working memory training in children.
2002 - 2003	Associate Research Specialist, University of Wisconsin - Madison Waisman Laboratory for Functional Brain Imaging Research: Functional neurobiology of expectancy in the human brain Director: Richard J. Davidson
2002 - 2003	Associate Research Specialist, University of Wisconsin - Madison Harlow Center for Biological Psychology Research: Effects of maternal nutrition and prenatal stress on infant brain development and immune competence in rhesus monkeys Director: Christopher L. Coe
2001 - 2002	Research Assistant, University of Wisconsin - Madison Laboratory for Affective Neuroscience Research: Psychophysiological substrates of emotional individuality in twins Director: Richard J. Davidson & Hill H. Goldsmith

Honors and Awards

2012	Top Poster Award for Clinical/Translational Research, Soc. Bio. Psychiatry
2012	*Young Investigator Award*, Wisconsin Symposium on Emotion
2011	*Young Investigator Award*, Intl Congress on Schizophrenia Research
2011	*Best Postdoctoral Presentation*, International Neurotoxicology Conference
2011	*Young Investigator Award*, Interdisciplinary Training in Dev. Disabilities
2010	*Young Investigator Award*, Executive Function in Preschoolers - NICHD
2008	*Scholars Award*, PsychoNeuroImmunology Research Society
2007	*Young Investigator Award*, Intl. Soc. of PsychoNeuroEndocrinology
2007	*Scholars Award*, PsychoNeuroImmunology Research Society
2007	*Young Investigator Award*, American Society of Psychosomatic Medicine
2004	Honors and Distinction awarded for Masters Degree

Bibliography and products of scholarship

Peer Reviewed Publications

Short, S.J., Willoughby, M.T., Camerota, M., Stephens, R.L., Steiner, R.J., Styner, M., Gilmore, J. (2019). Individual difference in neonatal brain development predict executive function at age 3 years. *Brain Structure and Function.* doi: 10.1007/s00429-019-01955-0. PMID: 31520254

Green, C. S., Bavelier, D., Kramer, A. F., Vinogradov, S.,… **Short, S. J.**,… Witt, C. M. (2019). Improving methodological standards in behavioral interventions for cognitive enhancement. *Journal of Cognitive Enhancement.* doi: 10.1007/s41465-018-0115-y

Dean III, D.C., Planalp, E.M., Wooten, W., Kecskemeti, S.R., Adluru, N., Schmidt, C.K., Frye, C., Birn, R.M., Burghy, C.A., Schmidt, N.L., Styner, M.A., **Short, S.J.,** Kalin, N.H., Goldsmith, H.H., Alexander, A.L., Davidson, R.J. (2018). Association of prenatal maternal depression and anxiety symptomology impacts early white matter microstructure. *JAMA Pediatrics*, 172(10):973-981. PMID: 30177999 PubMed Central PMCID: PMC6190835

Stephens, B.L., Langworthy, B., **Short, S.J**., Goldman, B.D., Bullins, J.N., Fine, J.P., Reznick, J.S., Gilmore, J.H. (2018). Verbal and nonverbal predictors of executive function in early childhood. *Journal of Cognition and Development,* 19(2): 182-200. PMID: 30333714 PubMed Central PMCID: PMC6186452

Lee, S.J., Steiner, R.J., Yu, Y., **Short, S.J**., Neale, M.C., Styner, M., Zhu, H., Gilmore, J.H. (2017). Common and heritable components of white matter microstructure predict cognitive function at 1 and 2 years. *Proc Natl Acad Sci United States Am*., 114(1): 148-153. PMID: 27994134 Pubmed Central PMCID: PMC5224366

Short, S.J., Stalder, T., Marceau, K.P., Entringerd, S., Moogd, N.K., Shirtclifff, E.A., Wadhwa, P.D., Buss, C. (2016). Correspondence between hair cortisol concentrations and 30-day integrated daily salivary and weekly urinary cortisol measures. *Psychoneuroendocrinology,* 71:12-18. PMID: 27235635; PubMed Central PMCID: PMC4955743

*Emerson, R.W., ***Short, S.J.,** Weili, L., Gilmore, J.H., Gao, W. (2015). Network-level connectivity dynamics of movie watching in 6-year old children. *Frontiers in Human Neuroscience*, 9:631. PMID: 26635584; PubMed Central PMCID: PMC4658779
*shared first author

Alcauter, S., Lin, W., Smith, J., **Short, S.J.,** Goldman, B.D., Reznick, J.S., Gilmore, J.H., Gao, W. (2014). Development of thalamocortical connectivity during infancy and its cognitive correlations. *Journal of Neuroscience,* 34(27): 9067-9075. PMID: 24990927; PubMed Central PMCID: PMC4078084.

Short, S.J., Lubach, G.R., Shirtcliff, E.A., Styner, M.A., Gilmore, J.H., Coe, C.L. (2014). Population variation in neuroendocrine activity is associated with behavioral inhibition and hemispheric structure in young rhesus monkeys. *Psychoneuroendocrinology*, 47: 56-67. PMID: 24954302; PubMed Central PMCID: PMC4205758.

Lyall, A.E., Geng, X., **Short, S.J.**, Ballan, M., Gilmore, J.H. (2013). Imaging Early Childhood Brain Development. *The Oxford Handbook of Infant, Toddler, and Preschool Mental Health Assessment, Second Edition.*

Short, S.J., Elison, J., Goldman, B.D., Styner, M., Gu, H., Connelly, M., Maltbie, E., Woolson, S., Lin, W., Gerig, G., Reznick, S., Gilmore, J.H. (2013) Associations between white matter microstructure and infants' working memory. *NeuroImage,* 64: 156-166. PMID: 22989623; PubMed Central PMCID: PMC3838303.

Shi, Y., **Short, S.J**., Knickmeyer, R., Wang, J., Coe, C.L., Zhu, H., Gilmore, J.H., Styner, M.S. (2012). Diffusion tensor imaging based characterization of neurodevelopment in primates. *Cerebral Cortex*, 23(1): 36-48. PMID: 22275483; PubMed Central PMCID: PMC3513950.

Gilmore, J.H., Shi, F., Woolson, S., Knickmeyer, R.C., **Short, S.J**., Lin, W., Zhu, H., Hamer, R.M., Styner, M., Shen, D. (2012). Longitudinal development of cortical and subcortical gray matter from birth to 2 years. *Cerebral Cortex*, 22(11): 2478-2485. PMID: 22109543; Pubmed Central PMCID: PMC3464410.

Willette, A., Lubach, G.R., Knickmeyer, R., **Short, S.J**., Styner, M.S., Gilmore, J.H., Coe, C.L. (2011). Brain enlargement and increased behavioral and cytokine reactivity in infant monkeys following acute prenatal endotoxemia. *Behavioral Brain Research,* 219(1): 108-115. PMID: 21192986; PubMed Central PMCID: PMC3662233.

Short, S.J., Lubach G.R., Karasin, A.I., Olsen, C.W., Styner, M., Knickmeyer, R.C., Gilmore, J.H., Coe, C.L. (2010). Maternal influenza infection during pregnancy impacts postnatal brain development in the rhesus monkey. *Biological Psychiatry*, 67(10): 965-973. PMID: 20079486; PubMed Central PMCID: PMC3235476.

Knickmeyer, R., Styner, M., **Short, S.J.,** Lubach G.R., Kang, C., Hamer, R., Coe, C.L., Gilmore, J.H. (2010). Maturational trajectories of cortical brain development through the pubertal transition: Unique species and gender differences in the monkey revealed through structural magnetic resonance imaging. *Cerebral Cortex*, 20(5): 1053-1063. PMID: 19703936; PubMed Central PMCID: PMC2852502.

Styner, M., Knickmeyer, R., Coe, C., **Short, S.J.**, Gilmore, J. (2008). Automatic regional analysis of DTI properties in the developmental macaque brain. *SPIE Medical Imaging Proceedings,* 6914: 1-11.

Styner, M., Knickmeyer, R., Joshi, S., Coe, C., **Short, S.J.**, Gilmore, J. (2007). Automatic brain segmentation in rhesus monkeys. *SPIE Medical Imaging Proceedings.* 6512: 1-8.

Nitschke, J.B., Dixon, G.E., Sarinopoulos, I., **Short, S.J**., Cohen, J.D., Smith, E.E., Kosslyn, S.M., Rose, R.M., Davidson, R.J. (2006). Altering expectancy dampens neural response to aversive taste in primary taste cortex. *Nature Neuroscience* 9(3): 435-442. PMID: 16462735.

Sarinopoulos, I., Dixon, G.E., **Short, S.J**., Davidson, R.J., Nitschke, J.B. (2006). Brain mechanisms of expectation associated with insula and amygdala response to aversive taste: Implications for placebo. *Brain, Behavior, and Immunity* 20(2): 120-132. PMID: 16472720.

Manuscripts Submitted or In Prep

Perrier, M-F., Flowers, H., Gurgel-Juarez, N.C., McCormick, A. & Short, S.J. (submitted). Mindfulness-based interventions for children and adolescents: A scoping review protocol. Systematic Reviews.

Stevens, R.L., Langworthy, B., **Short S.J.**, Girault, J.B., Styner, M. A., Gilmore, J. H. (re-submitted). White matter development from birth to 6 years of age: A longitudinal study. *Cerebral Cortex.*

Murphy, V.A.*, **Short, S.J.*,** Cornea, E., Li, G., Goldman, B.D., Styner, M., Shen, D., Styner M., Gilmore J.H. (re-submitted). Early brain structure and cognitive development in children at risk for schizophrenia. *Schizophrenia Bulletin.*
*shared first author

Steiner, R.J., **Short, S.J.**, Knickmeyer, R.C., Verde, A.R., Aditya, G., Budin, F., Gimore, K.A., Young, J.T., Adluru, N., Gilmore, J.H., Styner, M. (in prep). Neonate and pediatric diffusion tensor imaging atlases for the study of human brain development. *Frontiers in Human Neuroscience.*

Published Abstracts and Conference Presentations

Stephens, R.L., **Short, S.J.**, Goldman, B.D., Styner, M.A., Gilmore, J.H. White matter correlates of emotional control in early childhood. SRCD 2019 Biennial Meeting. Baltimore, MD. March 2019.

Stephens, R.L., Goldman, B.D., Reznick, J.S., Gilmore, J.H., **Short, S.J.** Maternal education moderates the association between emotional self-control and intelligence in early childhood. SRCD 2019 Biennial Meeting. Baltimore, MD. March 2019.

Kim, A., Burghy, C. A., Mumford, J.A., **Short, S.J.** Relations between depressive symptomatology and nucleus accumbens activity with while viewing positive images among healthy adolescents. Internship Symposium at Lawrence University. Appleton, WI. 2018.

Stephens, R.L., **Short, S.J.**, Girault, J.B., Goldman, B.D., Styner, M.A., Gilmore, J.H. White matter microstructure and nonverbal cognition in infancy. Flux Conference in Chapel Hill, NC. May 2018.

Murphy, V., **Short, S.J.**, Cornea, E., Goldman, B., Li, G., Shen, D., Gilmore, J. Early brain and cognitive development in children at risk for schizophrenia. Schizophrenia International Research Society Conference. Florence, Italy. April 2018.

Ellis, K.*, Sommerfeldt, S.L.*, Schoen, A., Schaefer, S.M., Gresham, L. Davidson, R.J., **Short, S.J.** When to intervene: Costly manual edits to FreeSurfer-processed structural MRI data impact few regions. Emotion Symposium, Madison, WI. April 2018.

Steiner, R.J., Mumford, J., **Short, S.J.** Mindfulness intervention is associated with working memory training gains in school-aged children. FLUX: Society for Developmental Cognitive Neuroscience. Portland, OR. September 2017.

Steiner, R.J., **Short, S.J.**, Knickmeyer, R.C., Verde, A.R., Gupta, A., Budin, F., Gilmore, K.A., Styner, M.A., Gilmore, J.H. The Neonatal DTI fiber atlas for studies of brain development at birth. Accepted as an electronic poster presentation to be presented at the ISMRM 25th Annual Meeting & Exhibition, Honolulu, HI. April 2017.

Ratliff, M., Stephens, R., Goldman, B.G., Fox, M., **Short, S.J.** Parent-Child Mindfulness Based Training: A pilot study examining the impact of mindfulness practices on children's executive functions and working memory. Mindfulness Research Conference – Mindful Families Schools and Communities. Seattle, WI. April 2017.

Ratliff, M., Stephens, R., Goldman, B.G., Fox, M**., Short, S.J.** Parent-Child Mindfulness Based Training: A pilot study examining the impact of mindfulness practices on children's executive functions and working memory. Bridging the Hearts and Minds of Youth. San Diego, CA. February 2017.

Akbar, S., Styner, M., Goldman, B.D., Li, G., Bullins, J., Jha, S., Zopp, J., Shen, D., Gilmore, J.H., **Short, S.J.** Early brain development predicts deficits in attention and working memory at school entry. FLUX: Society for Developmental Cognitive Neuroscience. St. Louis, MO. September 2016.

Short, S.J., Steiner, R.J., Goldman, B.D., Emerson, R., Zhang, J., Gilmore, J.H. Neural plasticity associated with working memory training in 6-year-old children. Psychiatry Research Day, University of North Carolina – Chapel Hill. October 2015.

Short, S.J., Steiner, R.J., Goldman B.D., Zhang J., Gilmore J.H. White matter plasticity associated with working memory training in 6year old children. Society for Research in Child Development (SRCD), Leiden, Netherlands. September 2015.

Short, S.J., Steiner, R.J., Goldman B.D., Zhang J., Gilmore J.H. White matter plasticity associated with working memory training in 6year old children. International Congress for Integrative Developmental Cognitive Neuroscience, Leiden, Netherlands. September 2015.

Short, S.J., Goldman, B.D., Woolson, S., Steiner, R.J., Hamer, R., Reznick, S., Styner M., Gilmore J.H. Early brain and cognitive development in children at risk for schizophrenia. UNC Psychiatry Research Day, Chapel Hill, NC. October 2014.

Short, S.J., Goldman, B.D., Woolson, S., Steiner, R.J., Hamer, R., Reznick, S., Styner M., Gilmore J.H. Early brain and cognitive development in children at risk for schizophrenia. International Congress for Integrative Developmental Cognitive Neuroscience, Hollywood, CA. September 2014.

Short, S.J., Stalder, T., Moog, N., Entringer, S., Wadhwa, P.D., Buss, C. Validating cortisol hair measurement by 30-day diurnal salivary cortisol measures. International Society for Psychoneuroendocrinology (ISPNE), Montreal, Canada. August 2014.

Short, S.J., Goldman, B.D., Woolson, S., Steiner, R.J., Styner M., Gilmore J.H. Brain structure and cognitive development in young children at high-risk for schizophrenia. International Congress on Schizophrenia Research, Orlando, FL. April 2013.

Short, S.J., Elison, J.T., Goldman, B.D., Styner, M., Gu, H., Connelly, M., Maltbie, E., Woolson, S., Gerig, G., Lin, W., Reznick, S., Gilmore, J.H. Infants' working memory scores are associated with white matter microstructure in major fiber bundles throughout the brain. Wisconsin Symposium of Emotion, Madison, WI. April 2012.

Short, S.J., Elison, J.T., Goldman, B.D., Styner, M., Gu, H., Maltbie, E., Woolson, S., Gerig, G., Lin, W., Reznick, J.S., Gilmore, J.H. White matter integrity in putative working memory tracts is associated with infant working memory scores. Society for Biological Psychiatry (SOBP), Philadelphia, PA. May 2012.

Short, S.J., Goldman, B.D., Connelly, M., Woolson, S., Maltbie, E., Elison, J.T., Reznick, S., Gilmore J.H. Language ability in one-year-old infants is associated with structural integrity of language-related white matter tracts. Society for Research in Child Development (SRCD), Montreal, Canada. March 2011.

Goldman, B.D., **Short, S.J**., Maltbie, E., Elison, J.T., Reznick, S., Gilmore J.H. Mapping working memory's path: Characterizing white matter fiber tracts that support spatial working memory in 12-month-olds. Society for Research in Child Development (SRCD), Montreal Canada. March 2011.

Short, S.J., Coe C.L., Shi Y., Zhu H., Styner M., Gilmore J.H. Influenza infection prenatally alters offspring brain development: Diffusion tensor imaging (DTI) tractography of white matter pathways in the rhesus monkey. International Congress on Schizophrenia Research, Colorado Springs, CO. April 2011.

Short, S.J., Shi Y., Zhu H., Knickmeyer R., Coe C.L., Niethammer M., Gilmore J.H., Styner M. Atlas-based analysis and visualization of diffusion properties in group studies with linear regression model over time. Society of Biological Psychiatry (SOBP), New Orleans, LA. May 2010.

Short, S.J., Coe, C.L., Lubach G., Styner, M., Gilmore, J.H. Maternal flu infection during pregnancy impacts brain development in the infant monkey. Society of Biological Psychiatry (SOBP), San Diego, CA. May 2007.

Short, S.J. & Coe, C.L. Maternal flu infection during pregnancy and infant brain development. Psychoneuroimmunology Research Society (PNIRS), Miami, FL. May 2006.

Short, S.J. & Coe, C.L. Individual variation in neuroendocrine phenotypes. American Psychosomatic Society (APS), Denver, CO. March 2006.

Dixon, G.E., Nitschke, J.B., **Short, S.J**., Lakshmanan, A., Carew, M.E., Anderle, M.J., Schaefer, H.S., Johnstone, T., Cohen, J.D., Kosslyn, S.M., Smith, E.E., Davidson, R.J. The Neural Correlates of Anticipation: The Functional Neurobiology of Gustatory Expectancy in the Human Brain. Society for Neuroscience (SfN), San Diego, CA, October 2004.

Invited Lectures & Symposia Presentations

International

Maternal flu infection during pregnancy impacts brain and behavioral development in the infant monkey. Psychoneuro-immunology Research Society (PNIRS), Arcachon, France. May 2007.

Maternal flu infection during pregnancy impacts brain development in the infant monkey. American Psychosomatic Society (APS), Budapest, Hungary. March 2007.

National

Poverty and Brain Development: Vulnerabilities and Opportunities. Poverty and Stress Workshop. Center for Social Concerns. University of Notre Dame, Notre Dame, IA. October 2018.

Infant Imaging Panel: Longitudinal Studies of Brain-Behavior Associations. Can infants' white matter integrity at birth predict their working memory performance at 1 and 2 years of age? Society of Research in Child Development (SRCD), Philadelphia, PL. March 2015.

Prenatal influenza infection alters offspring brain development: Diffusion tensor imaging (DTI) tractography of white matter pathways in the rhesus monkey. Society of Biological Psychiatry (SOBP), New Orleans, LA. May 2010.

Alterations in brain and behavioral development of offspring following prenatal flu infection in rhesus monkeys. Psychoneuro-immunology Research Society (PNIRS), Madison, WI. May 2008.

Maternal flu infection during pregnancy impacts brain and behavioral development in the infant monkey. International Society of Psychoneuroendocrinology (ISPNE), Madison, WI. August 2007.

Regional/Local

Guest Lecturer, Seminar in Emotion. University of Wisconsin – Madison, Madison, WI. November 2019

Mitigating Risk and Promoting Resilience in Children. PIE (Prevention, Intervention, and Enhancement) Colloquium, University of Wisconsin – Madison, Madison, WI. September, 2019

Stress: Implications for brain structure and function. Psychobiology of Stress and Coping. University of Wisconsin – Madison, Madison, WI. October 2017

Measuring cortisol in hair: What does it mean? Stress Physiology Investigative Team Laboratory. Iowa State University, Ames, IA. October 2017

Neural plasticity associated with working memory training in young children. Neuroimaging Development Group, Chapel Hill, NC. November 2015.

Organizing heterogeneity in neural connectivity - An analytic approach for identifying subgroups of individuals with similar patterns of brain physiology. T32 Biostatistics Journal Club, University of North Carolina at Chapel Hill, NC. November 2015.

What happens in a child's brain when working memory capacity is strengthened? Early Brain Development Research Lab, University of North Carolina at Chapel Hill, NC. November 2015.

Prenatal influences on long-term brain and behavioral development. Oglethorpe University, Atlanta, GA. October 2010.

Longitudinal neuroimaging study of early brain development. University of Washington, Seattle, WA. June 2010.

Neuroscience course: the role of your brain in emotion, learning, and memory. Science Enrichment Preparation (SEP) program - University of North Carolina, Chapel Hill. June 2010

DTI Tractography Tutorial - Tracing the arcuate fasciculus in early development. Neuroimaging Development Group, Chapel Hill, NC. February 2010.
The role of the amygdala in emotion, learning, and memory. Fayetteville State University, Fayetteville, NC. February 2010.

Teaching Experience

Spring 2020 Professor, EDPYSCH 710: *Seminar in Research in Educational Psychology II*, University of Wisconsin – Madison.

Spring 19/20 Professor, EDPSYCH 326: *Mind, Brain, and Education*, University of Wisconsin-Madison

Fall 18/19 Professor, EDPSYCH 506: *Brain and Behavioral Development from Prenatal to Pre-K*, University of Wisconsin-Madison.

Fall 2005 Teaching Assistant, *Experimental Psychology*, Professor Tina Winston, University of Wisconsin-Madison. Duties: led two weekly lab and discussion sections. Taught students how to interpret and design research projects in accordance with APA guidelines.

Spring 2005 Teaching Assistant, *Behavioral Pathology: Psychoses*, Professor Diane Gooding, University of Wisconsin- Madison. Duties: assisted students with course material. Contributed questions for exams, assisted the professor in routine course duties.

Spring 2005 Teaching Assistant, *Animal Behavior-The Primates*, Professor Christopher Coe, University of Wisconsin- Madison. Duties: assisted professor with course material, held office hours, responded to student's queries, conducted review sessions, proctored exams, 1 guest lecture.

Fall 2004 Teaching Assistant, *Animal Behavior*, Professor Rebecca Addington, University of Wisconsin- Madison. Duties: graded written exams and projects, held office hours, assisted students with course material, conducted review sessions.

Fall 2004 Teaching Assistant, *Introductory Psychology*, Professor Ben Dykeman, University of Wisconsin- Madison. Duties: facilitated student's comprehension of course material. Held office hours, responded to student's queries, proctored exams.

Spring 2004 Teaching Assistant, *Animal Behavior*, Professor Christopher Coe, University of Wisconsin- Madison. Duties: assisted professor with course material. Held office hours, responded to student's queries, conducted review sessions, proctored exams, guest lectured.

Fall 2003 Teaching Assistant, *Psychometric Methods*, Professor Bryan Hendricks, University of Wisconsin- Madison. Duties: independently instructed four lab sections, graded homework and exams of 72 students, held office hours and conducted review sessions.

Spring 2000 Undergraduate Teaching Assistant, *Child Exceptionality & Psychopathology*, Professor Kevin Powell, Colorado State University. Duties: researched literature relevant to course material, assisted with grading papers, held office hours, proctored exams.

Spring 2000 Undergraduate Teaching Assistant, *Controversial Issues in Psychology*, Professor Frank Vattano, Colorado State University. Duties: prepared principal and supplemental course materials, assigned and graded student papers, assisted students with research and facilitated class debates.

Educational/Training Activities Related to Discipline

2019 Excel Program: Extending Teaching Professional Development to the Classroom.
University of Wisconsin – Madison. 2019-2020

2019 Selected Fellow, Morgridge Fellows Program, Second Cohort.
Morgridge Center for Public Service, University of Wisconsin – Madison. 2019-2020

2019 Madison Teaching and Learning Excellence Fellow, Nu Cohort
University of Wisconsin – Madison. January-December 2019.

2018 Attendee, Professional Training with Susan Kaiser Greenland
Guadalajara, Mexico, November 2-4, 2018

2018 Attendee, Conference for Parents, Teachers, and Professionals with Susan Kaiser Greenland, Mexico City, Mexico, November 7, 2018

2018 Attendee, Mindfulness and Racial Justice: A Presentation with Rhonda McGee
Edgewood College, Madison, WI. October 12, 2018

2018 Attendee, TASI Workshop: Teaching Academy Summer Institute
University of Wisconsin - Madison, June 4-7, 2018

2018 Attendee, FLUX: Infant Brain Processing Workshop
University of North Carolina at Chapel Hill, May 6, 2018

2017 Attendee, Prenatal to Five Summit, School of Human Ecology, UW – Madison
Madison, WI. June 2, 2017

2015 Selected participant, R-Writing Group with NC TraCS
University of North Carolina, at Chapel Hill. September 2014 – June 2015

2014 Center for Developmental Science Seminar Series- Longitudinal Analysis
University of North Carolina at Chapel Hill. January – May.

2014 Selected participant, Leadership in Bioscience Training Program
Cold Spring Harbor Laboratory, Cold Spring Harbor, NY. March 14-17.

2014 Center for Faculty Excellence – Clinical Trial Investigator Series
University of North Carolina, at Chapel Hill. September 9.

2014 Attendee, SAS programming ANOVA and Regression Course
SAS Campus, Raleigh, NC. January 27-29.

2014 Network for Research Professionals-Leadership Course
University of North Carolina, at Chapel Hill. November 21.

2010 Attendee, Mind and Life Summer Research Institute, week-long event at the Garrison Institute in New York Education, Developmental Neuroscience, and Contemplative Practices: Questions, Challenges, and Opportunities

2009 Mini EEG/ERP Boot Camp. Three-day workshop on ERP methods at University of Maryland Center for Advanced Study of Language, Steven J. Luck

2009 Attendee, Mind and Life Summer Research Institute, week-long event at the Garrison Institute in New York Scientific and Contemplative Perspectives on the Self

Student Mentorships and Research Assistant Training

Mid-Career Mentorship

08/2018 – present Robin Puett Ph.D., University of Maryland – College Park

Postdoctoral Students

01/2016 – present Rebecca Stephens Ph.D. University of North Carolina – Chapel Hill
Training includes neuroimaging methods for measuring cortical thickness and surface area (Free Surfer) and white matter tractography (Slicer and DTI prep). She will use these methods to examine experience-dependent structural plasticity associated with working memory training in school-aged children.

Graduate Students

08/2019 – present Pema Lhamo, University of Wisconsin – Madison
Primary faculty adviser for graduate work toward a Ph.D in Education Psychology

05/2019 – present Xiaoxu Rong, University of Wisconsin – Madison
Provide direction and oversight for the completion of codebooks for all R01-funded research study measures

06/2019 – present Marie-France Perrier, MITACS award
Provide mentorship and training for initial grant application and subsequent work related to this award which included the implementation and collection of LENA devices for the acquisition of language measurements

12/2012 – 05/2013 Shaili Jha, University of North Carolina – Chapel Hill
Mentored first year research project, 'Cortical lateral ventricle volumes in children at high-risk for schizophrenia.'

Undergraduate Students

09/2019-present Melanie Benito, University of Wisconsin – Madison
Supervised student's assisting with development of a novel neuroimaging task related to infant processing of olfactory stimuli

08/2018-01/2019 Jesus Gastanaduy, University of Wisconsin – Madison
Mentored student's involvement in supporting research in Mexico to provide mindfulness training for preschool principals.

08/2018-05/2019 Maddie Tew, University of Wisconsin – Madison
Provided oversight and direction for her to conduct a thorough literature review supporting the development of focus groups to determine needs and opportunity for delivering mindfulness intervention for children with asthma.

05/2018-08/2018 Anna Kim, Lawrence University
Mentored research project, 'Relations between depressive symptomatology and nucleus accumbens activity with while viewing positive images among healthy adolescents.'

01/2018-01/2019	DK Jang, University of Wisconsin – Madison Provided training and oversight in neuroimaging software programs designed to analyze white matter tractography.
08/2017-12/2019	Erika Bannister, University of Wisconsin – Madison Provided training and oversight in neuroimaging software programs designed to analyze white matter tractography.
01/2016 – 05/2016	Douglas Terry, University of North Carolina – Chapel Hill Mentored research project for UNC's Gil Internship included training in neuroimaging methods for measuring cortical thickness and surface area (Free Surfer) to examine experience-dependent structural plasticity associated with working memory training in school-age children.
10/2015 – 5/2016	Rachel Schomp, University of North Carolina – Chapel Hill Independent research project, 'Comparison of automatic and manual segmentation methods for structural MRI data.'
08/2015 – 08/2016	Saima Akbar, University of North Carolina – Chapel Hill Mentored research project for UNC's Gil Internship, 'Early brain predictors of attention deficit in early adolescents.'
06/2015 – 05/2015	Matt Lemming, University of North Carolina – Chapel Hill Mentored research project, 'Diffusion Tensor Imaging (DTI) and functional analysis of white matter tract properties in children at high-risk for psychiatric illness.'
01/2008 – 05/2008	Stacey Weber, University of Wisconsin – Madison. Mentored Research – Bio152 'Effects of maternal influenza infection on behavior and neuroendocrine functioning in juvenile Rhesus macaques (Macaca mulatta).'
12/2006 – 06/2008	Allison Schenk, University of Wisconsin – Madison Mentored Research – Bio 152 'Maternal influenza infection during pregnancy impacts offspring brain and behavior in rhesus monkeys.' This student stayed on after her independent research project as a research assistant, trained her in animal handling, MRI collection methods, blood sampling, behavioral observation methods, and cognitive testing.
01/2006 – 05/2007	Laurie Donnell, University of Wisconsin – Madison Mentored Research – Bio 152 'Behavioral effects of maternal influenza infection on neonatal development in rhesus monkeys.'
01/2005 – 12/2006	Justin Laube, University of Wisconsin – Madison Mentored Research – Bio 152 and Senior Honors Thesis, 'Impact of maternal influenza on offspring motor skills' and 'Individual variation in stress reactivity to novelty in rhesus monkeys.'
08/2003 – 05/2004	Jessica Vandeleest, University of Wisconsin – Madison Senior Honors Thesis, 'Individual differences in infant temperament associated with maternal stress during pregnancy in rhesus monkeys.'
01/2003 – 05/2003	Sara Schlachet, University of Wisconsin – Madison

Mentored Research – Bio 152, 'Mother-infant interactions are associated with infant temperament in young rhesus monkeys.'

09/2002 – 12/2003 Phil Jaynes, University of Wisconsin – Madison
Mentored Research – Bio 152, 'Effects of prenatal stress on offspring immune function in rhesus macaques.' This student stayed on after his independent project, trained him in animal handling, behavioral observation methods, and cognitive testing of juvenile monkeys.

Research Assistants/ Lab Trainees

03/2019 – present DK Jang, University of Wisconsin – Madison, Center for Healthy Minds
Trained in the methods required to develop a high-quality infant brain atlas.

07/2015 – 2018 Margaret Fox, B.S., Research Assistant, University of North Carolina – Chapel Hill. Trained her in cognitive assessment methods (Automated Working Memory Assessment and CANTAB) for research project examining working memory training in young children. Oversee the collection of behavioral and cognitive measures for our longitudinal brain development research projects examining children 1-10yrs.

03/2015 – present Macy Ratilff, M.S., Research Assistant, University of North Carolina – Chapel Hill. Assisted in development of Parent-Child Mindfulness Based Training program. Trained her in curriculum design, budget development, IRB protocols, and cognitive testing measures.

01/2015 – 07/2016 Erin Haley, M.S., Research Assistant, University of North Carolina – Chapel Hill. Assisted in development of Parent-Child Mindfulness Based Training program. Training included curriculum design, budget development, IRB protocols, and cognitive testing measures.

01/2015 – 06/2015 Niman Mann, Research Assistant, University of North Carolina – Chapel Hill
Assisted with development of Parent-Child Mindfulness Based Training program.

07/2012 – 08/2015 Rachel Steiner, B.S., Research Assistant, University of North Carolina – Chapel Hill. Training included applied neuroimaging techniques and medical image analysis tools to investigate brain structure development (automatic and manual segmentation of gray matter and ventricles; VBM and functional analysis methods of white matter tracts) in typical, atypical, and at-risk infants and young children. Training also included QC methods for the above imaging protocols.

07/2012 – 02/2013 Caroline Rosenberg, B.S., Research Assistant, University of North Carolina – Chapel Hill. Assisted with Cortisol Validation Study. Training focused on lab methods used to process urine and saliva samples for cortisol analyses.

09/2008 – 05/2009 Brenda Schafer, Research Assistant, University of Wisconsin – Madison
Training included animal handling techniques, recording and scoring mother-infant behavioral observations, and multiple cognitive assessment batteries specific to nonhuman primates.

06/2005 – 08-2005 Ian Coe, Summer Research Assistant, University of Wisconsin – Madison
Training and responsibilities included manual segmentation and QC methods used to characterize the structural volume of the hippocampus and amygdala in rhesus monkeys.

Prelim, Master's, and Dissertation Committee

12/2019 Nahlah Mandurah, University of Wisconsin – Madison
Master's thesis, 'Measuring forgiveness in Saudi Arabia'

12/2019 Janet Lindstrom-Moore, University of Wisconsin – Madison
Master's thesis proposal, 'How is attachment associated with the ability to forgive an intimate partner who is engaged in Narcisstic Abuse'

12/2019 Yunji Park, University of Wisconsin – Madison
Master's thesis, 'What Makes Fractions Special? A Review of fraction processing from a Neurocognitive Developmental Viewpoint'

12/2019 Marie-France Perrier, University of Ottawa
Master's thesis committee member

08/2019 Leandro Chernicoff, University of Wisconsin – Madison
Master's thesis, 'Improving Well-Being and Socioemotional Competence in Preschool Principals: A Pilot Study'

05/2019 Zhuojun (Mona) Yao, Univeristy of Wisconsin – Madison
Dissertation proposal committee, 'A developmental cascade model of prosocial behavior, academic competence, and peer exclusion across middle childhood and early adolescence.'

05/2019 Melina Knabe, University of Wisconsin – Madison
Master's proposal, 'To repeat or not to repeat: Contextual repetition and variability in long-term novel word learning of preschool-aged children'

12/2018 Chelsea Olson, University of Wisconsin – Madison
Master's committee, Cyberbullying and online aggression in adolescents

Outreach Education and Mentorship

Professional Involvement

2019 Faculty Instructor for the Emory Tibetan Science Initiative; provided instruction in neuroscience education for first-year monastic scholars, Drepung Loesing Monastery, India. June 15-28.

2019 Faculty Facilitator for Career Development Roundtables, "Participating in Scientific Societies" Society of Biological Psychiatry. Chicago, IL. May 17.

2018 Roundtable Discussion Leader for NIH K01 Clinical and Translational Awards, Society of Biological Psychiatry. New York City, NY. May 11.

2018 Moderator for the National Institutes of Health Funding Panel at Society of Biological Psychiatry. New York City, NY. May 11.

2018	Faculty Instructor for the Emory Tibetan Science Initiative; provided instruction in neuroscience education for first-year monastic scholars, Drepung Loesing Monastery, India. June 13-29.
2017	Faculty Instructor for the Emory Tibetan Science Initiative; provided instruction in neuroscience education for first-year monastic scholars, Gaden Monastery, India. June 8-21.
2017	Roundtable Discussion Leader for NIH K01 Clinical and Translational Awards, Society of Biological Psychiatry. San Diego, CA. May 19.
2016	Scientific Judge, Women in Science Symposium, University of North Carolina, at Chapel Hill. April 6.
2016	Panel member, Duke NIH K-Award Day, Duke University, Durham, NC. January 14.
2016	Panel member, NIH Funding, Society of Biological Psychiatry, Atlanta, GA. May 13.
2016	Discussion Leader, Responsible Conduct of Research (RCR) Training Program, NC TraCS Institute NIH, University of North Carolina, at Chapel Hill. July 12-14, 2016.
2016	Neurocamp Instructor, Healthy Living Course on Stress & Resilience, for high school students, taught at the University of North Carolina, at Chapel Hill. July 25-29.
2016	Career Development Discussion Leader for NIH K01 Clinical and Translational Awards, Society of Biological Psychiatry. May 13.
2015	Neurocamp Instructor, Healthy Living Course on Stress & Resilience, for high school students, taught at the University of North Carolina, at Chapel Hill. July 27-31.
2015	Roundtable Discussion Leader for Work/Life Balance, Society of Biological Psychiatry, May 14.
2014 – 2015	Discussion Co-Leader, Responsible Conduct of Research (RCR) Training Program, NC TraCS Institute NIH, University of North Carolina, at Chapel Hill. July 6-10.

Funding

Current

Fall Research Competition Award, UW-Madison OVCRGE Short (PI) 07/01/20-06/30/21
How does poverty 'get under the skin?' The role of infants' early experience on brain development and later opportunities for learning
Role: PI
Funding Amount: $41,878

Mitacs Globalink Research Award Perrier (PI) 06/03/19-08/23/19
A mechanistic study of the association between poverty and executive functions in early childhood: Contributions of early brain development and the early caregiving environment
Role: Primary Advisor
Funding Amount: $6,000

P50 MH100031, NIH Davidson (PI) 09/01/13-08/31/19
Silvio O. Conte Center for Basic and Translational Mental Health Research grant
Early neurodevelopmental origins of anxiety
Role: Co-Investigator on Project 1
Funding Amount: $10,394,004

Grand Challenges Seed Grant Short (PI) 08/01/19-06/30/21
The Association Between Poverty, Executive Function, & Early Brain Development
Role: PI
Funding Amount: $75,000

R01 HD091148, NIH Short, Propper (Multi-PI) 12/01/17-11/30/22
A Mechanistic Study of the Association between Poverty and Executive Functions in Early Childhood: Contributions of Early Brain Development and the Early Caregiving Environment
Role: PI (20% FTE)
Funding Amount: $3,211,896

Fall Research Competition Award, UW-Madison OVCRGE Short (PI) 07/01/19-06/30/20
Socioeconomic disadvantage, maternal prenatal health, and infant neurodevelopment
Role: PI
Funding Amount: $25,000

Completed

Foundation of Hope Short (PI) 07/01/16-06/30/21
Investigating Brain and Behavioral Development in Typical and High-Risk Children
Role: PI (50% FTE-- Concurrent with K01)
Funding Amount: $46,921

1K01MH099411, NIMH Short (PI) 12/15/12-11/30/17
White Matter and Working Memory Development in Typical and High-Risk Children
Role: PI (100% FTE)
Funding Amount: $142,123

Francisco J. Varela Research Foundation Short (PI) 01/01/14-12/31/16
Mind and Life (50% FTE- Concurrent with K01)
The Effects of Contemplative Training on Brain Structure and Function in 6 Year old Children
Role: PI
Funding Amount: $14,871

Junior Faculty Development Award, UNC Provosts Office Short (PI) 01/01/14-12/31/14
The Effects of Working Memory Training on Brain Structure and Function in 6-year-old Children
Role: PI
Funding Amount: $7,500

TraCS Pilot Study Award: 2KR381203 Short (PI) 03/01/12-02/28/13
Title: Validating Hair Samples as a Cumulative Index of Circulating Cortisol
Role: PI
Funding Amount: $2,000

T32 Postdoc Fellowship Award, NRSA, NICHD Piven (PI) 08/17/09-08/16/11
Postdoctoral Research in Neurodevelopmental Disorders
Role: Awardee
Funding Amount: $45,718 (Yr 1), $48,106 (Yr 2)

NRSA Predoctoral Fellowship Award, NIMH Short (PI) 01/01/06-12/31/08
Prenatal Influences on Brain and Behavioral Development
Role: PI/Awardee
Funding Amount: $107,428

Professional Service

Journal Reviewer

Biological Psychiatry
Brain Topography
Brain Structure and Function
Cerebral Cortex
Mindfulness
Nature Pediatric Research
Neuroimage
Psychiatric Research
Psychoneuroendocrinology
PLOS One
Behavioural Brain Research
Frontiers in Human Neuroscience
Human Brain Mapping
Stress
Cognitive Enhancement

To Discipline

2018 – present	Committee Member – Programming Committee, SOBP
2011 – 2019	Committee Member (former chair, 2017-18) Education Committee for the Society of Biological Psychiatry (SOBP)
2017 – present	Committee Member, Women's Leadership, SOBP
2016 – 2019	Committee Member, Educational Development Group Uniting ACNP, APA, and SOBP programming for early career investigators
2015 – present	Member, Association for Professional Women in Medical Sciences
2015 – 2018	Committee Member, SOBP Subgroup – Distinguished Teaching Award in Biological Psychiatry
2015 – 2016	Co-Chair, Society of Biological Psychiatry: Educational Development Committee
2014 – 2019	Committee Member, SOBP Subgroup – Training Outreach Innovation and Communication in Neuroscience Education
2014	Student Mentor, International Society of Psychoneuroendocrinology
2013 – present	Student Mentor, Society of Biological Psychiatry
2013 – present	Member, Women in Sciences Need Opportunities and Mentoring (WISDOM)

Professional Societies

2014	Flux: The Society for Developmental Cognitive Neuroscience
2010	Society for Research in Child Development
2007	Society for Biological Psychiatry
2007	International Society of Psychoneuroendocrinology
2006	American Society of Psychosomatic Medicine
2006	Sigma Delta Epsilon, Graduate Women in Science
2004	Psychoneuroimmunology Research Society
2004	Society for Neuroscience