

Tanya M. Evans, Ph.D.

Curriculum Vitae
2/2023

University of Virginia
School of Education and Human Development
Center for the Study of Teaching and Learning
Center for Healthy Brain Development
Ridley Hall 126, 405 Emmet Street South
P.O. Box 800784
Charlottesville, VA 22904
610.360.2015
tanya@virginia.edu

EDUCATION

Ph.D., Neuroscience, 2013

Georgetown University, Washington, D.C.

Dissertation: *The brain basis of arithmetic, reading and reading disability*

B.S., Chemical Engineering, 2003

Lehigh University, Bethlehem, PA

PROFESSIONAL APPOINTMENTS

2017 – present Assistant Professor
University of Virginia
Center for Advanced Study of Teaching and Learning
Co-Director, Center for Healthy Brain Development
School of Education and Human Development
Departments of Psychology & Neurology (by courtesy)
Charlottesville, VA

2013 – 2017 Postdoctoral Fellow
Stanford University School of Medicine
Child and Adolescent Psychiatry
Palo Alto, CA

PUBLICATIONS

Jirout, J., Eisen, S., Robertson, Z., **Evans**, T.M. (2022). Mother-child synchrony is high across child executive function levels for both physical and digital spatial play. *Trends in Neuroscience and Education*. doi: [0.1016/j.tine.2022.100183](https://doi.org/10.1016/j.tine.2022.100183)

Marzoratti, A.** , **Evans**, T.M. (2022). Measurement of interpersonal physiological synchrony in dyads: A review of timing parameters used in the literature. *Cognitive, Affective, & Behavioral Neuroscience*. doi: [10.3758/s13415-022-01011-1](https://doi.org/10.3758/s13415-022-01011-1)

- Janacsek, K., **Evans**, T.M., Kiss, M., Shah, L.***, Blumenfeld, H., & Ullman, M.T. (2022). Subcortical cognition: the fruit below the rind. *Annual Review of Neuroscience*. doi: [10.1146/annurev-neuro-110920-013544](https://doi.org/10.1146/annurev-neuro-110920-013544)
- Xiong, B., Chen, C., Tian, Y., Zhang, S., Liu, C., **Evans**, T.M., Fernández, G., Wu, J., & Qin, S. (2021). Brain preparedness: The proactive role of the cortisol awakening response. *Prog. Neurobiol.* 102127. doi: [10.1016/j.pneurobio.2021.102127](https://doi.org/10.1016/j.pneurobio.2021.102127)
- Lampi, A.J., Jaswal, V.K., & **Evans**, T.M. (2021). How closely related are parent and child reports of child alexithymia? *Frontiers in Psychology*. doi: [10.3389/fpsyg.2020.588001](https://doi.org/10.3389/fpsyg.2020.588001)
- Earle, F.S., Del Tufo, S.N., **Evans**, T.M., Lum, J.A.G., Cutting, L.E.*, & Ullman, M.T.* (2020). Domain-general learning and memory substrates of reading acquisition. *Mind, Brain and Education*. *equal contributions doi: [10.1111/mbe.12234](https://doi.org/10.1111/mbe.12234)
- Jirout, J., LoCasale-Crouch, J., Turnbull, K., Gu, Y., Cubides, M., Garzzone, S., **Evans**, T.M., Weltman, A., & Kranz, S. (2019). How lifestyle factors affect cognitive and executive function and the ability to learn in children. *Nutrients*, 11(8), 1953. doi: [10.3390/nu11081953](https://doi.org/10.3390/nu11081953)
- Krafnick, A.J. & **Evans**, T.M. (2019). Neurobiological sex differences in developmental dyslexia. *Frontiers in Psychology*, 219(3), 1041–1054. doi: [10.3389/fpsyg.2018.02669](https://doi.org/10.3389/fpsyg.2018.02669)
- Skeide, M.A., **Evans**, T.M., Mei, E.Z.***, Abrams, D.A., & Menon, V. (2018). Neural signatures of co-occurring reading and mathematical deficits. *Developmental Science*, e12680. doi: [10.1111/desc.12680](https://doi.org/10.1111/desc.12680)
- Botham, C.M., **Evans**, T.M. (2018). How to design a winning fellowship proposal. *Nature Careers*. doi: [10.1038/d41586-018-07297-x](https://doi.org/10.1038/d41586-018-07297-x)
- Battista, C.*, **Evans**, T.M.*, Ngoon, T.J.***, Chen, T., Chen, L., Kochalka, J., & Menon, V. (2018). Mechanisms of interactive specialization and emergence of functional brain circuits supporting cognitive development in children. *Nature Partner Journals: Science of Learning*, 3(1). doi: [10.1038/s41539-017-0017-2](https://doi.org/10.1038/s41539-017-0017-2) *equal contributions
- Chen, L., Bae, S.R., Battista, C., Qin, S., Chen, T., **Evans**, T.M., & Menon, V. (2018). Positive attitude toward math supports early academic success: behavioral evidence and neurocognitive mechanisms. *Psychological Science*. doi: [10.1177/0956797617735528](https://doi.org/10.1177/0956797617735528)
- Evans**, T.M., Flowers, D.L., Luetje, M.M., Napoliello, E., & Eden, G.F. (2016). Functional neuroanatomy of arithmetic and word reading and its relationship to age. *NeuroImage*, 143, 304–315. doi: [10.1016/j.neuroimage.2016.08.048](https://doi.org/10.1016/j.neuroimage.2016.08.048)
- Evans**, T.M. & Ullman, M.T. (2016). An extension of the procedural deficit hypothesis from developmental language disorders to mathematical disability. *Frontiers in Psychology*, 7, 1318. doi: [10.3389/fpsyg.2016.01318](https://doi.org/10.3389/fpsyg.2016.01318)

Jolles, D.*, Ashkenazi, S.*, Kochalka, J., **Evans**, T.M., Richardson, J., Rosenberg-Lee, M., Zhao, H., Supekar S., Chen, T., & Menon, V. (2016). Parietal hyper-connectivity, aberrant brain organization, and circuit-based biomarkers in children with mathematical disabilities. *Developmental Science*, 19(4), 613–631. doi: [10.1111/desc.12399](https://doi.org/10.1111/desc.12399) *equal contributions

Evans, T.M., Kochalka, J., Ngoon, T.J.***, Wu, S.S., Qin, S., Battista, C., & Menon, V. (2015). Brain structural integrity and intrinsic functional connectivity forecast 6 year longitudinal growth in children’s numerical abilities. *The Journal of Neuroscience: The Official Journal of the Society for Neuroscience*, 35(33), 11743–11750. doi: [10.1523/JNEUROSCI.0216-15.2015](https://doi.org/10.1523/JNEUROSCI.0216-15.2015)

Eden, G.F., Olulade, O.A., **Evans**, T.M., Krafnick, A.J., & Alkire, D.R. (2015). Imaging studies of reading and reading disability. In A. W. Toga (Ed.), *Brain Mapping* (pp. 571–578). Academic Press. doi: [10.1016/B978-0-12-397025-1.00065-8](https://doi.org/10.1016/B978-0-12-397025-1.00065-8)

Eden, G.F., Olulade, O.A., **Evans**, T.M., Krafnick, A.J., & Alkire, D.R. (2015). Developmental dyslexia. In G. Hickok & S. L. Small (Eds.), *The Neurobiology of Language* (pp. 815-822). Academic Press. doi: [10.1016/B978-0-12-407794-2.00065-1](https://doi.org/10.1016/B978-0-12-407794-2.00065-1)

Evans, T.M., Flowers, D.L., Napoliello, E.M., Olulade, O.A., & Eden, G.F. (2014). The functional anatomy of single-digit arithmetic in children with developmental dyslexia. *NeuroImage*, 101, 644–652. Academic Press. doi: [10.1016/j.neuroimage.2014.07.028](https://doi.org/10.1016/j.neuroimage.2014.07.028)

Evans, T.M., Flowers, D.L., Napoliello, E.M., & Eden, G.F. (2014). Sex-specific gray matter volume differences in females with developmental dyslexia. *Brain Structure & Function*, 219(3), 1041–1054. doi: [10.1007/s00429-013-0552-4](https://doi.org/10.1007/s00429-013-0552-4)

Ullrich, L., Dumanis, S.B., **Evans**, T.M., Jeannotte, A.M., Leonard, C., Rozzi, S.J., Taylor, C.M., Gale, K., Kanwal, J. S., Maguire-Zeiss, K.A., Wolfe, B.B., & Forcelli, P.A. (2014). From student to steward: the Interdisciplinary Program in Neuroscience at Georgetown University as a case study in professional development during doctoral training. *Medical Education Online*, 19, 22623. doi: [10.3402/meo.v19.22623](https://doi.org/10.3402/meo.v19.22623)

**mentee co-author

MANUSCRIPTS UNDER REVIEW

Marzoratti, A.***, Liu, M.***, Krol, K., Sjobeck, G., Connelly, J., Boker, S., Pelphrey, K., **Evans**, T.M. Methylation of parental oxytocin receptors is associated with neural synchrony between parent-child dyads during interactive gameplay. *Developmental Cognitive Neuroscience* call for papers: "Child Social Interactions in Context: Novel methods and empirical work."

Shah, L.***, Marzoratti, A.***, Sjobeck, G., Boker, S., Pelphrey, K., Krafnick, A., **Evans**, T.M. Interpersonal Neural Synchrony Between Parent and Child Differentially Predicts Aspects of Children’s Reading Skills. *Developmental Science* call for papers: “Special Issue on The Nature of Love.”

Marzoratti, A.**, Min, H., **Evans**, T.M. Talking technology with teachers: Adult-teaching principles and relational skills among Virginia instructional technology coaches. Paper accepted for AERA 2023 Meeting- Interrogating Consequential Education Research in Pursuit of Truth.

Evans, T.M., Earle, F.S., Del Tufo, S.N., Lipscomb, D.W.**, Lum, J.A.G., Ullman, M.T.*, & Cutting, L.E.* Arithmetic outcome predicted by children's early learning and memory. *equal contributions

Hao, L., Zhou, Y., Chen, X., Qiu, J., Luo, W., Zhuang, L., Xu, J., Chen, M., Wang, Y., Luo, J., Tan, S., Gao, J., He, Y., **Evans**, T.M., Fan, J., Tao, S., Dong, Q., & Qin, S. Mapping neural specialization and generalizable representations in children's attention development.

**mentee co-author

RESEARCH FUNDING

Ongoing

2022 – 2027 National Institute of Mental Health/
National Institute of Neurological Disorders and Stroke
Autism Center of Excellence Network: Neurodevelopmental Biomarkers of Late
Diagnosis in Female and Gender Diverse Autism
Objective: accelerate identification of adolescents and adults with ASD who have
traditionally been missed or misdirected in the diagnostic process
Role: Co-Investigator
PI: Kevin Pelphrey
R01MH100028
\$12,331,452

2020 – 2025 National Institute of Child Health and Human Development
Longitudinal Investigation into Declarative and Procedural Memory Brain
Systems Supporting the Development of Math Skills
Objective: conduct longitudinal fMRI investigation of brain substrates underlying
math, declarative and procedural memory in elementary school children
Role: Principal Investigator
Multi-PI: Ian Lyons
R01HD100429
\$2,983,880

Completed

2019 – 2021 Supporting Transformative Autism Research Pilot Award
University of Virginia
Parent-Child Brain Synchrony in Autism Spectrum Disorders
Objective: evaluate dyadic brain synchrony as a potential biomarker for social
engagement in parents and children with autism
Role: Principal Investigator

\$99,424

- 2019 – 2021 National Center for Advancing Translational Sciences
Brain Synchrony in Autism Spectrum Disorders
Objective: train in mobile EEG data acquisition for dyadic experiments
Role: KL2 Scholar Investigator
Mentors: Kevin Pelphrey & Steven Boker
KL2TR003016
\$282,515
- 2018 – 2020 Smith Richardson Foundation
A Kindergarten-Based Lottery Evaluation of Core Knowledge Charter Schools
Objective: evaluate the impact of a core knowledge curriculum on children’s math and reading skills
Role: Co-Investigator
PI: David Grissmer
\$328,728
- 2018 – 2019 3 Cavaliers
University of Virginia
Brain Synchrony During Student-Teacher Interactions
Objective: conduct feasibility testing for subsequent in-classroom mobile EEG work, apply for external funding to fund full study
Role: Co-Principal Investigator
Co-PIs: Robert Pianta, Wynn Legon
\$60,000
- 2017 – 2019 National Science Foundation
Developmental Skills Linked to Math and Science Achievement: An Interdisciplinary Data-Intensive Approach to Identification and Improvement Through Experimental Intervention
Objective: evaluate the impact of a core knowledge curriculum on children’s math and reading skills
Role: Co-Investigator
PI: David Grissmer
\$2,499,248
- 2015 – 2017 Ruth L. Kirschstein National Research Service Award
Neurodevelopmental Basis of Persistent Mathematical Learning Disabilities
National Institute of Child Health and Human Development
Objective: examine the cognitive and neural profile of persistent low math skills from childhood to adolescence
Role: Principal Investigator
Mentor: Vinod Menon
F32HD080367

\$170,166

2014 – 2015 Stanford Child Health Research Institute Postdoctoral Fellowship
Neurodevelopmental Basis of Persistent Mathematical Learning Disabilities
Objective: examine the cognitive and neural profile of persistent low math skills
from childhood to adolescence
Role: Principal Investigator
\$50,000

AWARDS and HONORS

2022 – 2024 National Institutes of Health Loan Repayment Program Renewal Award
2019 – 2021 integrated Translational Health Research Institute of Virginia (iTHRIV) KL2 Career
Development Award
2017 – 2019 National Institutes of Health Loan Repayment Program Award
2015 – 2017 NIH NRSA Postdoctoral Fellow
2014 – 2015 Children’s Health Research Institute (CHRI) Postdoctoral Fellow, Stanford University
2013 Apprenticeship in Teaching, Georgetown University
2007 – 2009 Graduate Dean’s Pre-thesis Fellow, Georgetown University

TALKS

International Max Planck Research School on the Life Course (LIFE) Academy, Berlin, Germany (virtual),
“School Readiness and Brain Development,” October 2020.

Georgetown University, Department of Psychology, Washington, DC, “Longitudinal Profiles of Brain
Networks Supporting Children’s Academic Skills,” October 2018.

University of Delaware, School of Education, Newark, DE, “Longitudinal Profiles of Brain Networks
Supporting Children’s Academic Skills,” October 2018.

International Mind, Brain and Education Society, University of Southern California, Los Angeles, CA,
“Domain-General Skills in Education: Psychology, Education and Neuroscience Perspectives,” September
2018.

Mathematical Cognition and Learning Society, University of Oxford, UK, “Early Childhood General
Knowledge: A Domain-General Mechanism for Long-Term Achievement in Arithmetic and Reading,” April
2018.

Science and Art of Grant Writing Symposium, Stanford University, Palo Alto, CA, “A Formula for Success,”
August 2017.

Learning and the Brain, San Francisco, CA, “Brain Bases of Longitudinal Growth in Math Abilities and
Positive Mindset,” February 2016.

Yale University, Haskins Laboratories, New Haven, CT, “Brain Networks Supporting the Acquisition of

Skilled Reading and Arithmetic,” November 2015.

University of Wisconsin, Madison, Department of Psychology, “Brain Networks Supporting the Acquisition of Skilled Reading and Arithmetic,” October 2015.

Johns Hopkins University, CogNeuro Research Lab, Baltimore, MD, “Brain Networks Supporting the Acquisition of Skilled Reading and Arithmetic,” August 2015.

Winter Conference on Brain Research, Big Sky, Montana, “The Learning Brain: Cognitive Neuroscience for the Educational System,” January 2015.

University of Oxford Department of Experimental Psychology Seminar, Oxford, UK, “Intact Language Networks Support the Acquisition of Both Skilled Reading and Arithmetic,” September 2014.

Cardiff University Brain Research Imaging Centre, Cardiff, UK, “Intact Language Networks Support the Acquisition of Both Skilled Reading and Arithmetic,” September 2014.

Inter-Science of Learning Center Conference, Philadelphia PA, “Common Neural Substrates of Arithmetic and Reading,” March 2013.

CONFERENCE ACTIVITY

Liu, M.**, Marzoratti, A**, Krol, K., Sjobeck, G., Boker, S., Connelly, J., Pelphrey, K. **Evans**, T.M. 2023. Methylation of the parental oxytocin receptor gene is associated with parent-child neural synchrony during gameplay. Association for Psychological Science, Washington, D.C.

Marzoratti, A.**, Sjobeck, G., Boker, S., **Evans**, T.M. 2023. Effects of Differing Degrees of Direct Parental Support During Arithmetic Problem Solving on Children’s Performance. Mathematical Cognition and Learning Society, Loughborough, U.K.

Ullman, M.T., **Evans**, T.M., Kiss, M., Shah, L.**, Blumenfeld, H., Janacsek, K. 2022. Subcortical contributions to language: the fruit below the rind. Society for the Neurobiology of Language, Philadelphia, PA.

Marzoratti, A.**, Sjobeck, G.R., **Evans**, T.M. 2022. Examining the mechanisms for the effects of parent-child neural synchrony during child mathematical processing. Organization for Human Brain Mapping, Glasgow, Scotland, U.K.

Marzoratti, A.**, Sjobeck, G.R., **Evans**, T.M. 2022. Characterizing the associations between parent-child neural synchrony and child math processing. Mathematical Cognition and Learning Society, Antwerp, Belgium.

Jordan, R., Sukhodolsky, D.G., Wolff, J., **Evans**, T.M., Pelphrey, K., Eilbott, J. 2022. Task-based functional connectivity predicts language ability of autistic and typically-developing adolescents using connectome-based predictive modeling. International Society for Autism Research, Austin, TX.

- Morrel, J.** , Krafnick, A., J., **Evans**, T.M. 2021. Functional brain differences due to familial history of dyslexia: a meta-analysis. (virtual) Society for Neuroscience, Chicago, IL.
- Xia, R.** , Chen, R.** , Stockwell, K.M., Hofkens, T., **Evans**, T.M. 2020. Characterizing Social Interaction Via Dyadic Hyperscanning Techniques. (virtual) Cognitive Neuroscience Society, Boston, MA.
- Lampi, A.J., Shah, L.** , Jaswal, V.K., **Evans**, T.M. 2019. Educating about Neurodiversity: Incorporating Autistic Perspectives into the Classroom. Society for Neuroscience, Chicago, IL.
- Krafnick, A.J., & **Evans**, T.M. 2019. Sex and DYX1C1 genotype effects on pediatric cortical thickness and surface area. Organization for Human Brain Mapping, Rome, Italy.
- Ullman, M.T., **Evans**, T.M., Shah, L.** , Kiss, M., Blumenfeld, H., Janacek, K. 2018. The fruit below the rind: The importance of subcortical structures in cognition. Cognitive Neuroscience Society, San Francisco, CA.
- Grissmer, D.W., & **Evans**, T.M. 2018. Early childhood general knowledge: A domain-general mechanism for long-term achievement in arithmetic and reading. EARLI Special Interest Group (SIG) 22: Neuroscience and Education, London, UK.
- Mei, E.Z.** , **Evans**, T.M., Skeide, M.A., Kochalka, J., Chen, L., Beidelman, M., Schaer, M., Menon, V. 2018. Reading ability modulates the brain network of children with mathematical difficulties. EARLI Special Interest Group (SIG) 22: Neuroscience and Education, London, UK.
- Abrams, D.A., Kochalka, J., Chen, T., Bhide, S., **Evans**, T.M., Ryali, S., & Menon, V. 2017. Intrinsic functional architecture of Wernicke's, Broca's, and Geschwind's areas of the human speech network. Organization for Human Brain Mapping, Vancouver, BC, Canada.
- Evans**, T.M., & Ullman, M.T. 2017. An extension of the procedural deficit hypothesis from developmental language disorders to mathematical disability. Cognitive Neuroscience Society, San Francisco, CA.
- Evans**, T.M., Abrams, D.A., Kochalka, J., Chen, L., Kaushal, S.** , Battista, C., & Menon, V. 2016. Multiple cognitive networks anchored in the visual word form area. Organization for Human Brain Mapping, Geneva, Switzerland.
- Evans**, T.M.* , Schaer, M.* , Kochalka, J., Ngoon, T.J.** , Chen, L., Battista, C., & Menon, V. 2015. Cortical maturation accompanying individual differences in longitudinal development of children's reading ability. Neurobiology of Language, Chicago, IL. *equal contributions
- Battista, C., Ngoon, T.J.** , Chen, T., Chen, L., Baker, A., Kochalka, J., **Evans**, T.M., & Menon, V. 2015. Interactive specialization and the development of functional systems supporting complex cognitive skills in children. Society for Neuroscience, Chicago, IL.
- Bae, S., Schaer, M., Beidelman, M., **Evans**, T.M., Zeineh, M., Battista, C., & Menon, V. 2015. Dorsal damage - ventral compensation: A longitudinal case study examining structural reorganization of left superior temporal and bilateral fusiform gyri induced by perinatal infarct in occipito-parietal cortex. Society for

Neuroscience, Chicago, IL.

Chen, L., Bae, S., Battista, C., **Evans**, T.M., & Menon, V. 2015. Behavioral and neurobiological correlates of positive mindset in children. Society for Neuroscience, Chicago, IL.

Bae, S., Schaer, M., Beidelman, M., **Evans**, T. M., Zeineh, M., Battista, C., & Menon, V. 2015. Dorsal damage - ventral compensation: structural reorganization of left superior temporal and bilateral fusiform gyri induced by perinatal infarct in occipito-parietal cortex. International Conference on Pediatric Acquired Brain Injury, Liverpool, U.K.

Evans, T.M.*, Schaer, M.*, Kochalka, J., Ngoon, T.J.***, Mei, E.Z.***, Menon, A.***, Sarukkai, M.***, Beidelman, M., Battista, C., & Menon, V. 2015. Cortical maturation accompanying individual differences in longitudinal development of children's mathematical ability. Organization for Human Brain Mapping, Honolulu, Hawaii. *equal contributions

Battista, C., Ngoon, T.J.***, Chen, T., Chen, L., Kochalka, J., **Evans**, T.M., & Menon, V. 2015. Emerging brain systems supporting cognition: A longitudinal study of mental arithmetic. Organization for Human Brain Mapping, Honolulu, Hawaii.

Chen, L., Bae, S., Battista, C., **Evans**, T.M., & Menon, V. 2015. When good meets bad: The neural correlates of positive attitude and anxiety towards math in young children. Organization for Human Brain Mapping, Honolulu, Hawaii.

Evans, T.M., Kochalka, J., Ngoon, T.J.***, Qin, S., Battista, C., & Menon, V. 2014. Predicting longitudinal gains in math skills with brain structure and intrinsic connectivity. Society for Neuroscience, Washington, D.C.

Battista, C., **Evans**, T.M., Ngoon, T.J.***, Chen, T., & Menon, V. 2014. Six-year longitudinal growth-curve modeling of functional brain changes during problem solving in children. Society for Neuroscience, Washington, D.C.

Evans, T.M., Kochalka, J., Vellanki, N.***, Ngoon, T.J.***, Battista, C., & Menon, V. 2014. Intrinsic connectivity to the visual word form area and the putative visual number form area. Society for the Neurobiology of Language, Amsterdam, The Netherlands.

Evans, T.M., Olulade, O.A., Koo, D.S., & Eden, G.F. 2012. Effects of sensory and signed language experience on the neural basis of visual motion processing. Society for Neuroscience, New Orleans, LA.

Forcelli, P.A., Connor, T., Dumanis, S.B., **Evans**, T.M., Krafnick, A. J., Smirnov, M., Ullrich, L., & Gale, K. 2012. Teaching as a "Want-To" Rather Than a "Have-To." Society for Neuroscience, New Orleans, LA.

Evans, T.M., Ingala, E., Flowers, D.L., & Eden, G.F. 2012. Common neural substrates of reading and arithmetic. Organization for Human Brain Mapping, Beijing, China.

Evans, T.M., Flowers, D.L., Napoliello, E.M., Einbinder, E., & Eden G.F. 2011. Developmental changes underlying calculation: an fMRI study. Society for Neuroscience, Washington, D.C.

Evans, T.M., Flowers, D.L., Luetje, M., Napoliello, E.M., & Eden, G.F. 2011. Operation specific-development of arithmetic processing and its relationship to word reading. *Neurobiology of Language*, Annapolis, MD.

Gerner, T.M., Brar, J., Kalbfleisch, M.L., & Vanmeter, J.W. 2009. Classification of subtypes in a pediatric sample with autism spectrum disorders. Organization for Human Brain Mapping, San Francisco, CA.

Gerner, T.M., Wall, A.E., Napoliello, E.M., Flowers, D.L., & Eden, G.F. 2008. The anatomical profile of dyslexic females: a voxel-based morphometry study. Society for Neuroscience, Washington, D.C.

**mentee co-author

NEWS and MEDIA

“Looking Into the Brain to Help Understand Math Learning and Memory,” *CBS19 News*, May 4, 2021.

“Study: What Brain Scans Reveal About Learning Math,” Laura Hoxworth, *UVA Today*, May 4, 2021.

“iTHRIV Scholar Spotlight: Tanya Evans, 2019 Cohort,” Keith Jones, *integrated Translational Health Research Institute of Virginia Newsletter*, Fall 2020.

“Q&A: Predicting Academic Outcomes: Neuroimaging Provides Novel Insights,” Meeri Kim, *Blog on Learning & Development*, November 2018.

“Q&A: What Can the Brain Teach Us About How Children Learn?” Laura Hoxworth, *UVA Today*, March 7, 2018.

“Math and Dyslexia,” interviewed by Dr. Fernet Eide, co-founder of *Dyslexia Advantage* charitable organization, October 31, 2016.

“Struggled in Algebra Class? You May Have a ‘Math Disability,’” interviewed on WNYC Public Radio International’s program *The Takeaway* with John Hockenberry, October 5, 2016.

“Math Difficulties May Reflect Problems in a Crucial Learning System in the Brain,” *Science Daily*, September 15, 2016.

“This is Your Brain on Math,” Kevin Hartnett, *Boston Globe*, September 17, 2015.

“Brain Scans May Predict Math Gains in Children, Study Finds,” Maggie Fox, *NBC News*, August 18, 2015.

“Dyslexic Brain May Solve Some Math Problems in a Roundabout Way,” Laura Sanders, *Science News*, September 23, 2014.

“Brain Anatomy of Dyslexia is Not the Same in Men and Women, Boys and Girls,” *Science Daily*, May 8, 2013.

TEACHING and MENTORING

University of Virginia

Teaching

Ad hoc lectures

- 2021 Cognitive Psychology and Education, “Neuroscience in Education” (undergraduate and graduate students)
- 2020 Cognitive Psychology and Education, “Technology & Learning: Mobile EEG Demo” (undergraduate and graduate students)
- 2018 – 2019 Neurodevelopmental Disorders, “Co-morbid Learning Disabilities in Reading and Mathematics” (undergraduate students)

Mentoring

- 2022 – present Mentor, Raj Joshi (undergraduate student, Biology/Pre-Med)
- 2022 – present Mentor, Gabby Snetkov (undergraduate student, Neuroscience)
- 2022 – present Mentor, Isabelle Meeks (undergraduate student, Biology/Computer Science)
- 2022 – present Mentor, Sarah Song (undergraduate student, Biology)
- 2022 – present Mentor, Songy Choi (undergraduate student, Biology)
- 2022 – present Mentor, Gavin Ryno (undergraduate student, Neuroscience)
- 2022 – present Mentor, Emma Diehl (undergraduate student, Cognitive Science)
- 2021 – 2022 Mentor, Christina Cucolo (undergraduate student, Chemistry)
- 2021 – present Mentor, Ava Hogan (undergraduate student, Pre-Med)
- 2021 – present Mentor, Nathan Geng (undergraduate student, Neuroscience)
- 2021 – present Mentor, Lucas Huynh (undergraduate student, Neuroscience)
- 2021 – present Mentor, Renee Pen (undergraduate student, Biology)
- 2021 – present Mentor, Cara Grady (undergraduate student, Biology)
- 2021 – present Mentor, Analia Marzoratti (PhD student, Educational Psychology – Applied Developmental Science)
- 2020 – present Mentor, Jessica Morrel (undergraduate student, Psychology)
- 2019 – 2022 Mentor, Y-Minh Nguyen (undergraduate student, Kinesiology)
- 2019 – present Mentor, Megan Liu (undergraduate student, Neuroscience)
- 2019 – 2020 Mentor, Sarah Paquette (undergraduate student, Kinesiology)
- 2019 – 2020 Mentor, Ruohan Xia (master’s student, Educational Psychology – Applied Developmental Science)
- 2018 – present Mentor, Leela Shah (undergraduate student, Echols Interdisciplinary Major – Developmental Cognitive Neuroscience)
- 2018 – 2020 Mentor, Runzhi Chen (master’s student, Educational Psychology – Applied Developmental Science)

Committee Membership

- 2021 Dissertation Committee Member, Sara Medina-DeVilliers (PhD student, Clinical Psychology)
- 2020 – present Dissertation Committee Member, Nauder Namaky (PhD student, Clinical Psychology)
- 2020 – present Dissertation Committee Member, Gus Sjobeck (PhD student, Quantitative Psychology)
- 2020 – present Comprehensives and Dissertation Committee Member, Ian Becker (PhD student, Developmental Psychology)

2020 Dissertation Committee Member, Robert Moulder (PhD student, Quantitative Psychology)

Stanford University

Teaching

2015 Senior Instructor, Grant Writing Academy, Writing Compelling Fellowships and Career Development Awards (graduate students and postdoctoral fellows)

2014 Instructor, Grant Writing Academy, Writing Compelling Fellowships and Career Development Awards (graduate students and postdoctoral fellows)

Ad hoc lectures

2015 Brain Training: Hype or Help? “Developmental Dyslexia: Neuroanatomy, Training and Co-morbidity” (undergraduate students)

2013 Mathematical Cognition, “Cognitive Neuroscience of Numerical Abilities” (undergraduate students)

Mentoring

2015 – 2018 Mentor, Edward Mei (undergraduate student)

2016 – 2017 Co-Mentor, Julia Kang (research assistant)

2015 – 2016 Co-Mentor, Shivani Kaushal (research assistant)

2015 Co-Mentor, Adi Menon (high school student)

2014 – 2016 Co-Mentor, Mayuka Sarukkai (undergraduate student)

2014 Co-Mentor, Mounika Narayanan (high school student)

2014 Mentor, Neha Vellanki (undergraduate student)

2014 Co-Mentor, Samantha Hoffman (undergraduate student)

2013 – 2015 Co-Mentor, Tricia Ngoon (research assistant)

Georgetown University

Teaching

2009 – 2013 Course Coordinator, Introduction to Cognitive Science (undergraduate students)

Ad hoc lectures

2013 – 2015 Introduction to Cognitive Science, “Numerical Cognition and Dyscalculia” (undergraduate students)

2009 – 2013 Systems & Cognitive Neuroscience, “Human Cognition Lab” (graduate students)

2012 Drugs, Brain & Behavior, “Executive Function” (undergraduate students)

2010 – 2012 Introduction to Cognitive Science, “Neuroanatomy and Neural Circuits” (undergraduate students)

2009 – 2012 Neuroscience Summer Course, “Neuroanatomy Laboratory” (graduate students)

2009 Diseases/Disorders of the Brain, “Developmental Language Disorders” Graduate Student Directed Course (undergraduate students)

K-12 Teaching

2006 – 2007 Substitute Instructor, Kelly Educational Staffing (K-12 students)

2005 – 2006 Private Tutor, Self Employed (K-12 students)

2005 Classroom and Private Tutor, Kaplan Test Prep (high school students)

OTHER RESEARCH EXPERIENCE

- 2008 Special Volunteer, National Institute of Mental Health, Bethesda, MD
2006 Research Assistant, University of Delaware, Newark, DE

SERVICE TO PROFESSION

- 2022 Reviewer, National Institute of Child Health and Human Development, Biobehavioral and Behavioral Sciences Study Section
2022 Reviewer, National Institute of Child Health and Human Development, Special Emphasis Panel: Learning Disabilities Innovation Hubs Reissue
2021 Reviewer, National Institute of Child Health and Human Development, Human Complex Mental Function Study Section
2020 – present Consulting Editor, Elements – The International Journal of Applied Educational Research
2020 Reviewer, Israel Science Foundation
2019 Reviewer, integrated Translational Health Research Institute of Virginia (iTHRIV) Community Seed Grant Program
2019 Ad hoc reviewer, National Science Foundation
2015 Invited Workshop Participant, Science of Learning: Integration and Synthesis, National Science Foundation, Arlington, VA
2013 Invited Workshop Participant, Science of Learning: Prospects, National Science Foundation, National Science Foundation, Arlington, VA
2011 – 2012 Chair, Student Grant Review Committee, National Science Foundation Visual Language Visual Learning Science of Learning Center

UNIVERSITY SERVICE

- 2020 Member, Admissions Committee, Educational Psychology – Applied Developmental Science PhD Program, University of Virginia
2015 – 2016 Member, Stanford University Faculty Senate Committee on Research
2014 – 2016 Council Member, Stanford University Postdoctoral Association
2014 Planning Committee Member, Stanford University Teaching Academy
2009 – 2013 Program Coordinator, Interdisciplinary Program in Cognitive Science, Georgetown University
2007 – 2011 Member, Executive Committee, Interdisciplinary Program in Neuroscience, Georgetown University
2008 – 2010 President, Interdisciplinary Program in Neuroscience Student Organization, Georgetown University

OUTREACH

- 2017 – present Member, Special Education Advisory Committee, Albemarle County, VA
2015 Invited Panelist, “A Panel on Developmental Disorders: Identifying and Tackling Children’s Learning Challenges,” Stanford Professional Women, Palo Alto, CA
2013 – 2014 Volunteer, Science is Elementary, Mountain View, CA
2012 Anatomy Demonstrator, Howard Hughes Pre-college Program, Washington, D.C.

2010 – 2012 Judge, Key School Science Fair, Washington, D.C.
2007 – 2009 Tutor, EVOL (Education + VOLunteers is a reflection of LOVE), Washington, D.C.

INDUSTRY EXPERIENCE

2015 – 2017 Consultant, eCarrot
2003 – 2005 Engineer, Akzo Nobel Chemicals Inc., Dobbs Ferry, NY
2002 – 2003 Systems Engineer, Diagnostic Products Corporation, Flanders, NJ

AD HOC REVIEWER

Applied Psycholinguistics
Brain and Language
Cerebral Cortex
Child Development
Cortex
Developmental Cognitive Neuroscience
European Journal of Neuroscience
Frontiers in Human Neuroscience
Frontiers in Neuroscience
Frontiers in Psychology
Human Brain Mapping
Journal of Abnormal Psychology
Journal of Cognitive Education and Psychology
NeuroImage
Neuropsychologia
Mind, Brain and Education
PLOS ONE
Psychonomic Bulletin and Review
Science Advances
Trends in Neuroscience and Education

PROFESSIONAL MEMBERSHIPS

EARLI Special Interest Group (SIG) 22: Neuroscience and Education
FLUX: The International Society for Integrated Developmental Cognitive Neuroscience
International Mind, Brain and Education Society
The Mathematical Cognition and Learning Society
Organization for Human Brain Mapping
Society for Neuroscience
Society for the Neurobiology of Language