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CURRENT APPOINTMENTS

Northwestern University, Evanston, IL 2015-present
Associate Professor (with tenure), Department of Communication Sciences & Disorders
Charles McCormick Deering Professor of Teaching Excellence (2023-present)
Jane Steiner Hoffman and Michael Hoffman Assistant Professor (2015-2022)
Courtesy appointment, Department of Medical Social Sciences, Feinberg School of Medicine
Affiliate, Northwestern University Interdepartmental Neuroscience (NUIN) program
Principal Investigator, [Language, Education and Reading Neuroscience \(LEARN\) Lab](#)
Associate Director for Neurodevelopmental Innovation and Impact, (2023-present)
Director, Neurodevelopmental Core, and **Executive Committee member**, (2016-present)
[Northwestern Institute for Innovations in Developmental Sciences \(DevSci\)](#)

Massachusetts Institute of Technology, Cambridge, MA 2015-present
Research Affiliate, McGovern Institute for Brain Research

EDUCATION and TRAINING

Post-Doctoral Fellowship, MIT, Cambridge, MA 2012–2015
McGovern Institute for Brain Research/Department of Brain & Cognitive Sciences
PI: John Gabrieli, PhD
Research areas: Neural correlates and biomarkers of reading, dyslexia and autism;
MRI and ERP methods for developmental research; rapid automatized naming (RAN)

Ph.D., Tufts University, Medford, MA 2006–2012
Eliot-Pearson Department of Child Study and Human Development
Advisor: Maryanne Wolf, PhD
Dissertation: Using Cognitive Neuroscience to Predict Dyslexia in Kindergarten
Children: Toward MRI and EEG Predictors of Reading Disabilities

A.B. with high honors, Dartmouth College, Hanover, NH 2001–2005
Language and Brain Development (self-designed major)
Advisor: Laura-Ann Petitto, PhD
Honors thesis: The Spelling Brain: An fMRI Study of Cognitive Processes in Spelling

RESEARCH GRANTS

Current Grants as PI/Site PI

Moebius Syndrome Foundation 2025-
Leveraging Community and Professional Expertise to Accurately Characterize Early 2027
Communication Development in Children with Moebius Syndrome
Direct costs: \$100,000

NIH – NIDA U01 DA055355 (MPIs Norton & L. Wakschlag) 9/24- <i>Healthy Brain and Child Development National Consortium</i> NU Site for national HBCD Study Site direct costs: \$4,958,799	2021- 2026
NIH – NIDCD R01 DC016273 (MPIs Norton & L. Wakschlag) <i>The When to Worry about Language Study (W2W-L): Joint consideration of developmental patterning and neurodevelopmental context for enhancing early identification of language impairment.</i> Total costs including supplements: \$3,640,968 - 2 diversity supplements for post-baccalaureate research staff - COVID-19 supplement to study the effect of COVID pandemic on participants, 2020-2021	2018- 2025 (NCE)
NIH - NIMH R01 MH123716 (Site PI; Consortium PI R. Knickmeyer, Michigan State) <i>Genetic influences on infant brain development: Understanding the developmental origins of mental illness</i> Site direct costs: \$233,810	2021- 2026
Northwestern Memorial Foundation Dixon Translational Research New Investigator Award <i>Neural biomarkers of language in preterm infants</i> Direct costs: \$34,851	2018- 2025 (NCE)
Current Grants as Co-Investigator or Consultant	
NIH – NIMH R01 MH121877 (Co-Investigator; PIs L. Wakschlag, J. Luby, C. Rogers) <i>Optimizing Prediction of Preschool Psychopathology from Brain: Behavior Markers of Emotion Dysregulation from Birth: A Computational, Developmental Cognitive Neuroscience Approach</i> TALK Initiative late talker research supplement (Lead/Submitting Co-Investigator) Direct costs: \$285,723	2020- 2026 (NCE) 2023- 2024
NIH – NIDCD 2R01 DC010191 (Co-Investigator; PI M. Losh, Northwestern) <i>A Family-Genetic Study of Language in Autism</i>	2024- 2029
NIH - NIAID R03 AI178380 (Co-Investigator; PI L. Mithal, Lurie Children's) <i>Characterizing the early childhood neurodevelopmental impact of infants exposed to maternal SARS-CoV-2 infection during pregnancy</i>	2023- 2025
Completed Grants and Fellowships	
NIH – NIMH R01 MH107652 (Co-Investigator/Lead neuroscientist; PI L. Wakschlag) <i>Generating an earlier science of when to worry: A neurodevelopmental, transactional approach to characterizing irritability patterns beginning in infancy</i>	2016- 2022
University of Connecticut Research Excellence Grant (Consultant; PI M. Briggs-Gowan) <i>Auditory threat processing in children at-risk for posttraumatic stress disorder</i>	2021- 2022
NIH – NIDCD R21 DC017210 (PI) <i>Parent-toddler EEG neural synchrony as a window into social communication deficits in autism.</i> Total direct costs: \$275,000	2018- 2022
NIH – NIDA R34 DA050266 (Co-Investigator; PI L. Wakschlag) <i>Optimizing access, engagement and assessment to elucidate prenatal influences on neurodevelopment: The Brains Begin Before Birth (B4) Midwest Consortium</i>	2019- 2021 (NCE)
NIH – NICHD R03 HD096098 (Consultant; PI T. Perrachione, Boston University) <i>Cortical development and neuroanatomical anomalies in developmental dyslexia</i>	2018- 2020

AHA Strategically-Focused Research Network Grant (Co-Investigator/Mentor; PI B. Marino) <i>Cardiovascular health in children – Healthier, earlier</i>	2017-2020
NIH – NICHD R01 HD083310 (Co-Investigator; PI S. Waxman) <i>Linking language and cognition in infancy: Entry points and developmental change</i>	2017-2020
Delaney Fund for Research and Communication Grant, Northwestern University (PI) <i>‘Beginning with Babble’ to improve language development and communication health in low-SES toddlers and their parents: a randomized control pilot intervention study</i> Direct costs: \$46,304	2017-2019
Alumnae of Northwestern University Grant (PI) <i>Predicting children’s response to intensive summer language intervention</i> Direct costs: \$4,081	2016
Simons Center for the Social Brain, Schwinn Family Postdoctoral Fellowship, MIT Role: Fellow, 2 years salary + \$10,000 research expenses	2013-15
National Science Foundation (NSF) Graduate Research Fellowship Role: Fellow, 3 years stipend + tuition + \$10,000 research expenses	2007-10
Evans Literacy Fellowship, Tufts University Role: Fellow, 1 year stipend + tuition	2006-07
Filene Fellowship in Psychological & Brain Sciences, Dartmouth College, \$4,000	2004-05
Hodgson Grant for Cognitive Neuroscience Research, Dartmouth College, \$2,000	2004
Waterhouse Research Grant, Dartmouth College, \$1,500	2003
Rothenburg Research Grant, Dartmouth College, \$1,000	2002

PUBLICATIONS

Published Peer-Reviewed Manuscripts

NOTES: ^Indicates mentee student/postdoc/RA author. Titles are hyperlinks. When available, paper impact is noted as [SJQR journal quartile, Clarivate journal impact factor in publication year, citations]

68. Zarubin, V. C., Haase, C. M., **Norton, E. S.**, Briggs-Gowan, M., Allen, N. B., Wakschlag, L. S., & Mittal, V. A. (accepted). Clues from dyadic interactions in early childhood predict psychotic-like experiences at the transition to adolescence in a sample enriched for psychopathology risk. *Journal of Psychopathology and Clinical Science*.
67. MacNeill, L. A., Zhang, Y., Giase, G., Wiggins, J. L., **Norton, E. S.**, Smith, J. D., Davis, M. M.... & Wakschlag, L. S. (epub before print, 2025). [Developmental foundations of a pediatric mental health decision tool for young children](#). *Academic Pediatrics*.
66. Zuk, J.*, Davison, K. E.*, Doherty, L. A., ^Manning, B., Wakschlag, L. S., & **Norton, E. S.** (2025). [Maternal oral reading expressiveness in relation to toddlers’ concurrent language skills across a continuum of early language abilities](#). *Journal of Speech, Language, and Hearing Research*, 68(3), 1177-1187. [OSF Preprint](#). *Contributed equally
65. Hadley, P. A., Harrington, E., Preza, T., Krok, W., ^Harriott, E. M., ^Manning, B. L., Wakschlag, L. S., & **Norton, E. S.** (2025). [Evaluating the construct validity of sentence-focused diversity measures with late-talking toddlers and same-age peers](#). *Journal of Speech, Language, and Hearing Research*, 68(4), 1886-1901.
64. ^Mon, S., ^Manning, B. L., Wakschlag, L. S., & **Norton, E. S.** (2024). [Leveraging mixed-effects location scale models to assess the ERP mismatch negativity’s psychometric properties and trial-by-trial neural variability in toddler-mother dyads](#). *Developmental Cognitive Neuroscience*, 70, 101459.

63. ^Nikolaeva, J. I., ^Manning, B. L., ^Kwok, E. Y. L., ^Choi, S., Zhang, Y., Giase, G. M., Wakschlag, L. S., & **Norton, E. S.** (2024). Is frontal EEG gamma power a neural correlate of language in toddlerhood? An examination of late talking and expressive language ability. *Brain and Language*, 257, 105462. [Q1, 2.1, 7]
62. Dean, D., Tisdall, M., Wisnowski, J., Feczko, E., Gagoski, B., Alexander, A., ... **Norton, E. S.**, ... & the HBCD MRI Workgroup (2024). Quantifying brain development in HBCD: The magnetic resonance imaging and spectroscopy protocol. *Developmental Cognitive Neuroscience*, 70, 101452. [Q1, 4.6, 5]
61. Fox, N., Perez-Edgar, K., Morales, S., Brito, N., Campbell, A., Cavanaugh, J., ... **Norton, E. S.**, ... & the HBCD EEG Workgroup (2024). The development and structure of the HEALThy Brain and Child Development (HBCD) Study EEG protocol. *Developmental Cognitive Neuroscience*, 70, 101447. [Q1, 4.6, 10]
60. Graham, K., Reedy, E. L., Lee, J., **Norton, E. S.**, Arunachalam, A., Tomic, A., & Martin-Harris, B. (2024). Respiratory-swallow patterning and oropharyngeal swallowing impairment in patients undergoing evaluation for lung transplant. *Neurogastroenterology and Motility*, 36(11) e14912. [Q1, 3.5, 1]
59. Letkiewicz, A. M., Wakschlag, L. S., Briggs-Gowan, M. J., Wang, L., Cochran, A. L., **Norton, E. S.**, & Shankman, S. A. (2024). Preadolescent externalizing and internalizing symptoms are differentially related to drift-diffusion model parameters and neural activation during a go/no-go task. *Journal of Psychiatric Research*, 178, 405-413. [Q1, 3.7, 0]
58. Dufford, A. J., MacNeill, L., Zhang, Y., Nielsen, A. N., Smyser, C., Luby, J., Rogers, C., **Norton, E. S.**, & Wakschlag, L. (2024). Caudate volume is prospectively associated with irritability in toddlerhood. *Developmental Psychobiology*, 66, e22465. medRxiv Preprint.
57. **Norton, E. S.** (2024). Practice doesn't make perfect: Repeated reading is no more effective than continuous reading for improving fluency and comprehension in school-age struggling readers. *The Reading League Journal*, Jan/Feb 2024, 45-49.
56. ^McWeeny, S. & **Norton, E. S.** (2024). Auditory processing and reading disability: a systematic review and meta-analysis [Registered report]. *Scientific Studies of Reading*, 28(2), 167-189. OSF Preregistration. [Q1, 3.7, 3]
55. McDermott, C. L., **Norton, E. S.**, & Mackey, A. P. (2023). A systematic review of interventions to ameliorate the impact of adversity on brain development. *Neuroscience and Biobehavioral Reviews*, 153, 105391. [Q1, 8.2, 6]
54. Wiggins, J. L., Rosario, A., Zhang, Y., MacNeill L., Yu, Q., Krogh-Jespersen, S., **Norton, E. S.**, Smith, J. D., & Wakschlag, L. (2023). Advancing earlier transdiagnostic identification of mental health risk: A pragmatic approach at the transition to toddlerhood. *International Journal of Methods in Psychiatric Research*, 32, e1989. [Q2, 3.1, 17]
53. Neel, M. L., Jeanvoine, A., Key, A., Stark, A., **Norton, E. S.**, Relland, L., Hay, K., & Maitre, N. (2023). Behavioral and neural measures of infant responsivity increase with maternal multisensory input in non-irritable infants. *Brain and Behavior*, 13(11), e3253. [Q2, 3.1, 1]
52. Zhang, Y., MacNeill, L., Edwards, R., Burns, J., Zola, A., Poleon, R., Nili, A., Giase, G., Ahrenholtz, R., Wiggins, J., **Norton, E. S.**, & Wakschlag, L. (2024). Developmental trajectories of irritability across the transition to toddlerhood: Associations with effortful control and psychopathology. *Research on Child and Adolescent Psychopathology*, 52, 125-139. [Q2, 3.6, 6]
51. Zarubin, V. C., Damme, K. S. F., Vargas, T., Osborne, K. J., **Norton, E. S.**, Briggs-Gowan, M., Allen, N. R., Wakschlag, L., & Mittal, V. A. (2024). Neurodevelopmental vulnerability to psychosis: Developmentally based methods enable detection of early life inhibitory control deficits that predict psychotic-like experiences at the transition to adolescence. *Psychological Medicine*, 53, 7746–7755. [Q1, 6.9, 0]
50. Roberts, M. Y., Sone, B., Jones, M., Standley, M., Conner, T., Lee, E. D., **Norton, E. S.**, Roman, J., Speights Atkins, M., Young, R., & Weisleder, A. (2023). What the evidence does (and does not) show for the

- Centers for Disease Control and Prevention child development milestones: an illustrative example using expressive vocabulary. *Journal of Speech, Language, and Hearing Research*, 66(9), 3622-3632. [Q1, 2.6, 7]
49. Wakschlag, L. S., MacNeill, L. A., Pool, L., Smith, J. D., Adam, H., Barch, D. M., **Norton, E. S.**, ... Luby, J. L., & Allen, N. B. (2023). Predictive utility of irritability "in context": Proof-of-principle for an early childhood mental health risk calculator. *Journal of Clinical Child & Adolescent Psychology*, 53(2), 231-245. [Q1, 4.2, 4]
 48. Shah, S., Perez-Cardona, L., Massey, S., Premkumar, A., Edwards, R., **Norton, E. S.**, ... & Wakschlag, L. S. (2023). How penalizing substance use in pregnancy affects treatment and research: A qualitative examination of researchers' perspectives. *Journal of Law and the Biosciences*, 10(2). [Q1, 3.4, 1]
 47. Mues, M., Zuk, J., **Norton, E. S.**, Gabrieli, J., Hogan, T. P., & Gaab, N. (2023). Preliteracy skills mediate the relation between early speech sound production abilities and subsequent reading outcomes. *Journal of Speech, Language, and Hearing Research*, 66(8), 2766-2782. [Q1, 2.6, 3]
 46. LaTourrette, A., Waxman, S., Wakschlag, L. S., **Norton, E. S.**, & Weisleder, A. (2023). From word recognition to word learning: Comparing online speech processing in typically developing and late-talking 2-year-olds. *Journal of Speech, Language, and Hearing Research*, 66(5), 1658-77. [Q1, 0.8, 2]
 45. Alex, A. M., Buss, C., Davis, E. P., de los Campos, G., ... **Norton, E. S.**, ... & Knickmeyer, R., for the ENIGMA ORIGINS group (2023). Genetic influences on the developing young brain and risk for neuropsychiatric disorders. *Biological Psychiatry*, 93(10), 905-920. [Q1, 4.2, 21]
 44. Davison, K., Zuk, J., Mullin, L., Ozernov-Palchik, O., **Norton, E. S.**, Gabrieli, J. D. E., Yu, X., & Gaab, N. (2023). Examining shared reading and white matter organization in kindergarten in relation to subsequent language and reading abilities: A longitudinal investigation. *Journal of Cognitive Neuroscience*, 35(2), 259-275. [Q1, 1.3, 9]
 43. ^Nielsen, A. N., Kaplan, S., Meyer, D., Alexopoulos, D., Kenley, J. K., Smyser, T. A., Wakschlag, L. S., **Norton, E. S.** ... & Smyser, C. D. (2023). Maturation of large-scale brain systems over the first month of life. *Cerebral Cortex*, 33(6) 2788-2803. [Q1, 2.1, 22]
 42. MacNeill, L. A., Krogh-Jespersen, S., Zhang, Y., Giase, G., Edwards, R., Petitcherc, A., Mithal, L., Mestan, K., Grobman, W., **Norton, E. S.**, ... & Wakschlag, L. S. (2023). Liability of prenatal stress during the COVID-19 pandemic links to negative affect in infancy. *Infancy*, 28(1), 136-157. [Q1, 0.8, 20]
 41. Spann, M.N., Wisnowski, J. L., HBCD Phase I Scanning Young Populations Working Group (**Norton as member author**), Smyser, C. D., FIT'NG, Howell, B., & Dean, D. C. (2022). The science, art, and secrets of scanning young children. *Biological Psychiatry*, 93(10), P858-860. [Q1, 4.2, 20]
 40. Ozernov-Palchik, O., Sideridis, G. D., **Norton, E. S.**, Beach, S. D., Wolf, M., Gabrieli, J. D. E., & Gaab, N. (2022). On the cusp of predictability: Disruption in the typical association between letter and word identification at critical thresholds of RAN and phonological skills. *Learning and Individual Differences*, 97, 102166. [Q1, 1.6, 7]
 39. ^McWeeny, S., ^Choi, S. J., LaTourette, A., ^Choe, J., Roberts, M. Y., & **Norton, E. S.** (2022). Rapid automatized naming as a kindergarten predictor of future reading in English: A systematic review and meta-analysis. *Reading Research Quarterly*, 57(4), 1187-1211. [Q1, 2.2, 63]
 38. Krok, W., **Norton, E. S.**, ^Harriott, E., Buccheit, M. K., Wakschlag, L. S., & Hadley, P. (2022). Using animated action scenes to remotely assess sentence diversity in toddlers. *Topics in Language Disorders*, 42(2), 156-172. [Q1, 0.4, 5]
 37. **Norton, E. S.**, ^Manning, B. L., ^Harriott, E., ^Nikolaeva, J., ^Nyabingi, O., ^Fredian, K., ^Page, J., ^McWeeny, S., Krogh-Jespersen, S., MacNeill, L., & Wakschlag, L. (2022). Social EEG: A novel approach to studying brain-behavior links and brain-to-brain synchrony during naturalistic toddler-parent interactions. *Developmental Psychobiology*, 64(3), e2240. [Q2, 3.0, 23]
 36. Damme, K. S. F., **Norton, E. S.**, Briggs-Gowan, M., Wakschlag, L. S., & Mittal, V. (2022). Developmental patterning of irritability enhances prediction of psychopathology in pre-adolescence: Improving

- RDoC with developmental science. *Journal of Psychopathology and Clinical Science* (formerly the *Journal of Abnormal Psychology*), 131(6), 556–566. [Q1, 2.6, 37]
35. Krogh-Jespersen, S., MacNeill, L., Anderson, E. L., Stroup, H. E., ^Harriott, E. M., ^Gut, E., ^Blum, A., Fareedi, E., ^Fredian, K. M., ^Wert, S., Wakschlag, L. S., & **Norton, E. S.** (2022). Disruption leads to methodological and analytic innovation in developmental sciences: Recommendations for remote administration and dealing with messy data. *Frontiers in Psychology*, 12, 732312. [Q2, 3.0, 10]
 34. ^Nili, A., Krogh-Jespersen, S., Perlman, S., Estabrook, R., Petitclerc, A., Briggs-Gowan, M., **Norton, E. S.**, & Wakschlag, L. S. (2022). Joint consideration of inhibitory control and irritability in young children: Contributions to emergent psychopathology. *Research on Child and Adolescent Psychopathology* (formerly *Journal of Abnormal Child Psychology*). [Q1, 1.7, 8]
 33. ^Page, J. M., Wakschlag, L. S., & **Norton, E. S.** (2021). Non-rapid eye movement sleep characteristics and relations with motor and cognitive ability from birth to preadolescence. *Developmental Psychobiology*, 63(8), e22202. [Q2, 3.0, 17]
 32. **Norton, E. S.**, MacNeill, L., ^Harriott, E. M., Allen, N., Krogh-Jespersen, S., Smyser, C. D., Rogers, C., Smyser, T., Luby, J., & Wakschlag, L. S. (2021). EEG/ERP as a pragmatic method to expand the reach of infant-toddler neuroimaging in HBCD: Promises and challenges. *Developmental Cognitive Neuroscience*, 51, 100988. [Q1, 6.5, 33]
 31. ^Nielsen, A., Wakschlag, L. S., & **Norton, E. S.** (2021). Linking irritability and functional brain networks: a case for expanding consideration of development and environment in RDoC. *Neuroscience and Biobehavioral Reviews*, 129, 231-244. [Q1, 9.0, 22]
 30. MacNeill, L. A., Allen, N., Poleon, R., Vargas, T., Osborne, K. J., Damme, K., Barch, D., Krogh-Jespersen, S., **Norton, E. S.**, ... & Wakschlag, L. S. (2021). Translating RDoC to real-world impact in developmental psychopathology: A neurodevelopmental framework for application of mental health risk calculators. *Development and Psychopathology*, 33, 1665–1684. [Q1, 4.2, 20]
 29. **Norton, E. S.**, Beach, S. D., Eddy, M., ^McWeeny, S., Ozernov-Palchik, O., Gaab, N., & Gabrieli, J. (2021). ERP mismatch negativity amplitude and asymmetry reflect phonological and rapid automatized naming skills in English-speaking kindergartners. *Frontiers in Human Neuroscience*, 15. [Q1, 3.2, 15]
 28. Woodruff Carr, K. L., Perszyk, D. R., **Norton, E. S.**, Voss, J. L., Poeppel, D., & Waxman, S. R. (2021). Developmental changes in auditory-evoked alpha activity underlie the increasing precision with which infants link language and cognition. *Developmental Science*, 24(6), e13121. [Q1, 5.1, 710]
 27. Wakschlag, L., Tandon, D., Krogh-Jespersen, S., Petitclerc, A., ^Nielsen, A., ... **Norton, E. S.**, ... & Alshurafa, N. (2021). Moving the dial on prenatal stress mechanisms of neurodevelopmental vulnerability to mental health problems: a personalized prevention proof of concept. *Developmental Psychobiology*, 63(4), 622-640. [Q2, 3.0, 16]
 26. Zuk, J., Dunstan, J., **Norton, E. S.**, Yu, X., Ozernov-Palchik, O., Wang, Y., Hogan, T., Gabrieli, J., & Gaab, N. (2021). Multifactorial pathways facilitate resilience among kindergartners at risk for dyslexia: A longitudinal behavioral and neuroimaging study. *Developmental Science*, 24, e12983. [Q1, 5.1, 61]
 25. ^Manning, B. L., ^Harpole, A., ^Harriott, E., ^Postolowicz, K., & **Norton, E. S.** (2020). Taking language samples home: Feasibility, reliability and validity of child language samples conducted remotely with video chat versus in-person. *Journal of Speech, Language, and Hearing Research*, 63(12), 3982-3990. [Q1, 2.3, 91]
 24. **Norton, E. S.** (2020). What educators need to know about rapid automatized naming (RAN). *Learning Difficulties Australia Bulletin*, 52(1), 25-28. [Q1, not yet ranked, 12]
 23. ^McWeeny, S., & **Norton, E. S.** (2020). Understanding event related potentials (ERPs) in clinical and basic and language and communication disorders research: a tutorial. *International Journal of Language and Communication Disorders*, 55(4), 445-457. [Q1, 3.02, 26]
 22. Yu, X., Zuk, J., Purdue, M. V., Ozernov-Palchik, O., Raney, T., Beach, S., **Norton, E. S.**, Ou, Y., Gabrieli, J., & Gaab, N. (2020). Putative protective neural mechanisms in pre-readers with a family history of

- dyslexia who subsequently develop typical reading skills. *Human Brain Mapping*, 41(10), 2827-2845. [Q1, 5.0, 30]
21. ^Manning, B. L., Roberts, M. Y., Estabrook, R., Petitclerc, A., Burns, J., Briggs-Gowan, M., Wakschlag, L. S., & **Norton, E. S.** (2019). Relations between toddler expressive language and temper tantrums in a community sample. *Journal of Applied Developmental Psychology*, 65, 101070. [Q1, 2.0, 65]
 20. Luby, J., Allen, N., Estabrook, R., Pine, D., Rogers, C., Krogh-Jespersen, S., **Norton, E. S.**, & Wakschlag, L. (2019). Mapping infant neurodevelopmental precursors to mental disorder: Enhancing prediction of early childhood psychopathology via synthetic cohort & computational approaches. *Behaviour Research and Therapy*, 123, 103484. [Q1, 4.5, 26]
 19. ^Nayar, K., McKinney, W., Hogan, A., Martin, G., La Valle, C., Sharp, K., Berry-Kravis, E., **Norton, E. S.**, Gordon, P., & Losh, M. (2019). Language processing skills linked to FMR1 variation: A study of gaze-language coordination during rapid automatized naming among women with the FMR1 premutation. *PLoS One*, 14(7), e0219924. [Q1, 2.7, 13]
 18. Centanni, T. M.*, **Norton, E. S.***, Park, A., Beach, S. D., Halverson, K., Gaab, N., & Gabrieli, J. D. (2019). Disrupted left fusiform response to print in kindergartners is associated with subsequent reading impairment. *NeuroImage: Clinical*, 22, 101715. (*Co-first authors) [Q1, 4.4, 82]
 17. Wakschlag, L., Roberts, M., Flynn, R., Smith, J., Krogh-Jespersen, S., Kaat, A., Gray, L., ... **Norton, E. S.**, & Davis, M. (2019). Future directions for early childhood prevention of mental disorders: A healthier, earlier roadmap. *Journal of Clinical Child and Adolescent Psychology*, 48, 539-554. [Q1, 3.7, 130]
 16. Ozernov-Palchik, O., **Norton, E. S.**, Wang, Y., Beach, S. D., Zuk, J., Wolf, M., Gabrieli, J. D. E., & Gaab, N. (2019). The relationship between socioeconomic status and white matter structure in pre-reading children: A longitudinal investigation. *Human Brain Mapping*, 40, 741-754. [Q1, 4.4, 100]
 15. Deveney, C. M., Briggs-Gowan, M. J., ... **Norton, E. S.**, Pine, D. S., Brotman, M., Leibenluft, E., & Wakschlag, L. S. (2019). Temporally sensitive neural measures of inhibition in preschool children with varying irritability symptoms. *Developmental Psychobiology*, 61, 216-227. [Q2, 2.0, 33]
 14. Roberts, M. Y., Curtis, P., Estabrook, R., **Norton, E. S.**, Davis, M., Burns, J., Briggs-Gowan, M., Petitclerc, A., & Wakschlag, L. S. (2018). Talking tots and the terrible twos: Generating a developmental understanding of the relationships between early language and disruptive behavior in toddlers. *Journal of Developmental & Behavioral Pediatrics*, 39(9), 709-714. [Q1, 2.3, 37]
 13. ^Nayar, K., Gordon, P., Martin, G., Hogan-Brown, A., La Valle, C., McKinney, W., Lee, M., **Norton, E. S.**, & Losh, M. (2018). Links between looking and speaking in autism and first-degree relatives: Insights into the expression of genetic liability to autism. *Molecular Autism*, 9, 51. [Q1, 5.7, 39]
 12. Centanni, T. M.*, **Norton, E. S.***, Park, A., Beach, S., Halverson, K., Gaab, N., & Gabrieli, J. D. E. (2018). Early development of letter specialization in left fusiform is associated with better word reading and smaller fusiform face area. *Developmental Science*, 21(5), e2658. (*Co-first authors) [Q1, 4.1, 87]
 11. Ozernov-Palchik, O., **Norton, E. S.**, Sideridis, G., Beach, S. D., Gabrieli, J. D. E., & Gaab, N. (2017). Longitudinal stability of pre-reading skill profiles of kindergarten children: Implications for early screening and theories of reading. *Developmental Science*, 20(5), e12471. [Q1, 4.1, 187]
 10. Saygin, Z. M., Osher, D., **Norton, E. S.**, Youssoufian, D., Beach, S. D., Feather, J., Gaab, N., Gabrieli, J. D. E., & Kanwisher, N. (2016). Connectivity precedes function in the development of the visual word form area. *Nature Neuroscience*, 19, 1250-1255. [Q1, 17.8, 415]
 9. Vandermosten, M., Hoeft, F., & **Norton, E. S.** (2016). Integrating MRI brain imaging studies of pre-reading children with current theories of developmental dyslexia: A review and quantitative meta-analysis. *Current Opinion in Behavioral Sciences*, 10, 155-161. [Q1, 3.4, 156]
 8. **Norton, E. S.**, Beach, S. D., & Gabrieli, J. D. E. (2015). Neurobiology of dyslexia. *Current Opinion in Neurobiology*, 30, 73-78. [Q1, 6.4, 461]
 7. **Norton, E. S.**, Black, J. M., Stanley, L. M., Tanaka, H., Gabrieli, J. D. E., Sawyer, C., & Hoeft, F. (2014). Functional neuroanatomical evidence for the double-deficit hypothesis of developmental dyslexia.

Neuropsychologia, 61, 235-246. [Q1, 3.3, 181]

6. Saygin, Z. M.*, **Norton, E. S.***, Osher, D., Beach, S. D., Cyr, A., Ozernov-Palchik, O., Yendiki, A., Fischl, B., Gaab, N., & Gabrieli, J. D. E. (2013). Tracking the roots of reading ability: White matter volume and integrity correlate with phonological awareness in pre- and early-reading kindergarten children. *The Journal of Neuroscience*, 33, 13251-13258. (*Co-first authors) [Q1, 6.8, 299]
5. **Norton, E. S.**, & Wolf, M. (2012). Rapid automatized naming (RAN) and reading fluency: Implications for understanding and treatment of reading disabilities. *Annual Review of Psychology*, 63, 427-452. [Q1, 15.3, 1143]
4. Gabrieli, J. D. E. & **Norton, E. S.** (2012). Reading abilities: Importance of visual-spatial attention. *Current Biology*, 22(9), 298-299. [Q1, 9.5, 112]
3. Kovelman, I., **Norton, E. S.**, Gaab, N., Christodoulou, J., Triantafyllou, C., ... Wolf, M., Whitfield-Gabrieli, S., & Gabrieli, J. D. E. (2011). Brain basis of phonological awareness for spoken language in children and its disruption in dyslexia. *Cerebral Cortex*, 22(4), 754-764. [Q1, 6.5, 247]
2. Wolf, M., Barzillai, M., Gottwald, S., Miller, L., Spencer, K., **Norton, E.**, Lovett, M., & Morris, R. (2009). The RAVE-O intervention: Connecting neuroscience to the classroom. *Mind, Brain, and Education*, 3(2), 84-93. [Q2, 1.3, 129]
1. **Norton, E. S.**, Kovelman, I., & Petitto, L. A. (2007). Are there separate neural systems for spelling? New insights into the role of rules and memory in spelling from fMRI. *Mind, Brain, and Education*, 1(1), 48-59. [Q2, 1.3, 61]

Publication Metrics

In Google Scholar as of 10/15/2025: Citations: 5,177 | h-index: 28 | i-10 index: 53

Publications Under Review

Including Preprints/Pre-registrations; ^Indicates student/postdoc/RA mentee author

1. ^Manning, B. L., Roberts, M., Wakschlag, L., & **Norton, E. S.** (revise and resubmit). Neural correlates of naturalistic face-to-face parent-child interaction in typical child development and autism.
2. ^Manning, B. L., ^Page, J. M., Zola, A., Zhang, Y., Wakschlag, L. S., & **Norton, E. S.** (revise and resubmit). From child to context: Joint consideration of toddler language and irritability regulation with maternal responsiveness.
3. ^Clement-Lam, S., Grieco-Calub, T., & **Norton, E. S.** (revise and resubmit). Letter-sound integration is modulated by automaticity demands and related to reading performance in English-speaking children.
4. ^Nayar, K., Guilfoyle, J. L., Stevens, C. J., Elahi, S., ^Clement-Lam, S., ***Norton, E. S.**, & *Losh, M. (revise and resubmit). The neurocognitive underpinnings of global perception in ASD and first-degree relatives: A neurophysiological study of illusory contour processing. (*co-senior authors)
5. ^Choi, S., ^Clement-Lam, S., & **Norton, E. S.** (in revision). Investigating the association of EEG theta power to phonological awareness and reading impairment in school-age children.
6. Henry, L. M., Lee, K., Hansen, E., Tandilashvili, E., Rozsypal, J., Erjo, T., Raven, J. G., Reynolds, H. M., Curtis, P., Haller, S. P., Pine, D. S., **Norton, E. S.**, Wakschlag, L. S., Pereira, F., & Brotman, M. A. (revise and resubmit). Detecting cry in daylong audio recordings using machine learning: The development and evaluation of binary classifiers. Preprint: https://osf.io/preprints/osf/3rd2y_v1
7. Krok, W., ... **Norton, E.S.**, & Hadley, P. (under review). Assessing sentences in young children: a comparison of the sentence diversity priming task and play-based language samples.
8. Edwards, R. C., Shah, S. K., Sinche, B. K., Massey, S. H., Ahrenholtz, R., Cao, Q., Davis, T. J., Blum, A. L., Premkumar, A., **Norton, E. S.**, & Wakschlag, L. S. (under review). Navigating complexity: Understanding the experiences, motivations and challenges of conducting research with perinatal individuals who use opioids and other substances.

Publications in Preparation (drafted, approaching submission)

9. ^Nikolaeva, J. I., Manning, B. L., Zhang, Y., Giase, G., Wakschlag, L. S., & **Norton, E. S.** Trajectories of vocabulary development among toddlers at risk for language disorders.
10. ^Kim, J., ^Harriott, E., Spencer, M., Gaab, N., Gabrieli, J. D. E., & **Norton, E. S.** Beyond total time in rapid automatized naming: assessing whether pause time variability and alternate task lengths improve prediction of future reading

Published Chapters

3. **Norton, E. S.** (2019). Bringing together multiple methods and measurements to improve our understanding of dyslexia. In J. Washington, D. Compton, & P. McCardle (Eds.), *Dyslexia 101: Revisiting etiology, diagnosis, treatment, and policy*. Baltimore, MD: Brookes.
2. **Norton, E. S.**, Gabrieli, J. D. E., & Gaab, N. (2019). Neural predictors of dyslexia. In L. Verhoeven, C. Perfetti & K. Pugh (Eds.), *Developmental dyslexia across languages and writing systems: A handbook* (pp. 253-276). Cambridge, UK: Cambridge University Press. [9 citations]
1. Wolf, M., Gottwald, S., Galante, W., **Norton, E.**, & Miller, L. (2009). How the origins of reading inform reading instruction. In P. McCardle & K. Pugh (Eds.), *How children learn to read: Current issues and new directions in the integration of cognition, neurobiology and genetics of reading and dyslexia research and practice*. New York: Routledge.

AWARDS and HONORS

Karl Rosengren Award , Northwestern University <i>Awarded to mentors of top 3 undergraduate summer research projects per year</i>	2024
Gift funds for research on interactive social EEG , Dolby Corporation	2024-2026
Recognition of top-10 most-cited paper published in <i>Developmental Psychobiology</i> in 2022-2023 for "Social EEG..." (Norton et al., 2022)	2023
Charles McCormick Deering Teaching Excellence Award , Northwestern University <i>Awarded to ~4 faculty across the university per year, including title and salary stipend</i>	2023
Meritorious Poster Award, ASHA Convention (<i>awarded to <5% of posters</i>)	2022, 2023
Recognition for Outstanding Undergraduate Research Mentoring Northwestern Office of Undergraduate Research	2022
Clarence Simon Award for Outstanding Teaching and Mentoring School of Communication, Northwestern University	2020
ASHA Lessons for Success , <i>Invited alumni speaker</i>	2019
Searle Fellow , Searle Center for Teaching and Learning, Northwestern University	2017
ASHA Lessons for Success , <i>Invited participant (competitive)</i>	2017
MIT Postdoctoral Association Travel Award <i>Ranked 1st of over 300 applicants from all of MIT, \$600 award to present at SSSR</i>	2015
ERP Boot Camp Fellowship , UC Davis Center for Mind and Brain <i>Full tuition/travel award (competitive) for 10-day EEG/ERP training workshop</i>	2013
Outstanding Young Investigator Award (The Rebecca Sandak Award) <i>Awarded by Society for the Scientific Study of Reading to one postdoc or junior faculty member per year who shows outstanding promise in research</i>	2012

Outstanding Research Presentation, Tufts Graduate Research Symposium
Best research presentation among Ph.D. students of all disciplines

2012

Graduate Travel Award, Tufts University, *Awarded five times*

2007-2012

SOFTWARE DEVELOPED

SnowGlobe (<https://snowglobe.soc.northwestern.edu>; [OSF Page](#)) is an open-source tool for academic literature searching, specifically for conducting rigorous forward/backward (“snowball”) searches, crucial for systematic reviews and meta-analyses. This novel software, developed by students Sean McWeeny and June Choe in my lab, automates the forward and backward searching process from a paper or set of papers, tracking duplicates between sources or in subsequent searches. This allows researchers to identify the maximum number of relevant sources and saves potentially hundreds of person hours per review. NU Libraries support costs to provide free public access to this software.

INVITED LECTURES / COLLOQUIA

Invited Academic Colloquia

Boston University, Department of Speech, Language, and Hearing Sciences	2025
UCSF, Department of Psychiatry	2025
University of California, Davis, MIND Series	2025
University of Indianapolis, Center for Excellence in Learning	2023
UCSF, Department of Psychiatry	2023
Boys Town National Research Hospital	2022
University of Toronto, Department of Psychology	2021
Lurie Children’s Hospital, Neuroscience of Disease Series	2021
University of Connecticut, Brain Imaging Research Center	2021
University of Wisconsin-Madison, Waisman Center, John D. Wiley Colloquium	2020
University of Michigan, Department of Psychology, Developmental Colloquium	2020
MIT, Department of Brain & Cognitive Sciences/Simons Center for the Social Brain	2019
Chinese University of Hong Kong, The Brain and Mind Institute Annual Symposium	2019
Washington University in St. Louis, Department of Psychiatry	2018
Harvard University, Department of Psychology, Language and Cognition Seminar Series	2015
MIT, Simons Center for the Social Brain, Simons Social Talk Series	2013
Children’s Hospital Boston, Laboratories of Cognitive Neuroscience	2011

Invited Conference Presentations

Moebius Syndrome Foundation biennial meeting, scientific symposium	2025
American Academy of Child and Adolescent Psychiatry annual meeting	2022
International Congress on Infant Studies (ICIS) social neuroscience pre-conference	2022
Missouri Speech-Hearing-Language Association annual conference	2022
International Congress on Infant Studies (ICIS) annual conference, held virtually	2020
NIH HEALthy Brain and Child Development Study Phase I PI Meeting	2020

Illinois Speech-Hearing-Language Association (ISHA) Conference, Rosemont, IL	2021, 2020
American Speech-Hearing-Language Association (ASHA) national convention	2017, 2019
Netherlands Institute for Advanced Study, <i>Cross-Linguistic Perspectives on Dyslexia</i>	2014
MIT, Simons Center for the Social Brain, <i>Workshop on The Social Brain</i>	2014

Invited Talks for Professional and Educational Organizations

Everyone Reading Illinois Annual Conference, Naperville, IL (four times)	2016-2024
Dyslexia Training Institute (virtual)	2024
The Dyslexia Foundation, Boston, MA	2023
Learning MATTERS, New Zealand (virtual)	2023
The Reading League Illinois Chapter (virtual)	2023
Professionals In Learning Disabilities and Special Education, Chicago, IL	2023
Dutch Dyslexia Week, the Netherlands (virtual)	2022
Hyde Park Day School, Bellick Family Community Education Program, Hyde Park, IL	2021
Commonwealth of Virginia, Department of Education (series of 3 lectures)	2021
Northwestern Medicine: Women in Medicine Seminar Series, <i>MD-PhD partnerships</i>	2020
AVOCA West School District, Wilmette, IL	2021, 2020
SLANT Literacy Summer Institute, Buffalo Grove, IL	2019
Association of Educational Therapists Conference, Chicago, IL	2019
Jobs for Dyslexics, Annual Gala, Chicago, IL	2016
Watertown Public Schools, Watertown, MA	2012
Landmark School, Pride's Crossing, MA	2011

Invited Talks at Northwestern University

Provost's Office New Faculty Mentoring Program Kickoff	2024
Provost's Office Panel on Navigating Tenure	2023
DevSci Institute, Annual Scientific Exchange	2017, 2021
Family Weekend	2019
Women in Science and Engineering Research (WISER)	2019
Department of Communication Sciences & Disorders, Alumni Conference	2016, 2018
Center for Talent Development, <i>Invited presentation to teachers/families</i>	2017
Cognitive Brain Mapping Group, <i>Colloquium</i>	2015

PEER-REVIEWED CONFERENCE PRESENTATIONS (SELECTED)

Talks

(^Student/research staff mentee author)

- Henry, L., Lossio-Ventura, J. A., Lee, K., Tandilashvili, E., Kim, K., Wood, M., Pine, D. S., Pereira, F., **Norton, E. S.**, Wakschlag, L. S., & Brotman, M. A. (2025). Sentiment analysis of the caregiving environment as an early, objective, and scalable predictor of child psychopathology. Annual Meeting of the American College of Neuropsychopharmacology, Nassau, Bahamas.
- Norton, E. S.** & Orkin, M. (2024). When practice isn't enough: providing explicit, systematic fluency instruction in upper elementary. The Reading League Annual Conference, Charlotte, NC.
- Dufford, A., MacNeill, L., ^Nielsen, A., Smyser, C., **Norton, E. S.**, & Wakschlag, L. (2023). Infant hippocampal volume is

- prospectively associated with irritability in toddlerhood. Society for Research in Child Development, Salt Lake City, UT.
- Zhang, Y., MacNeill, L., Edwards, R. C., ... ^Nili, A., ^Giase, G., ^Ahrenholtz, R., Wiggins, J. L., Norton, E. S., & Wakschlag, L. (2023). "When to Worry" about early irritability: Developmental trajectories of irritability at the transition to toddlerhood. Society for Research in Child Development, Salt Lake City, UT.
- ^McWeeny, S., ^Choi, S., ^Choe, J., Roberts, M. & **Norton, E. S.** (2022). Rapid automatized naming (RAN) as a predictor of future reading: A systematic review & meta-analysis. Society for the Scientific Study of Reading, Newport Beach, CA.
- LaTourette, A., Waxman, S., **Norton, E. S.**, & Weisleder, A. (2021). From word recognition to word learning: Comparing online speech processing in typically developing and late-talking 2-year-olds. BU Conference on Child Language Development.
- ^Nielsen, A., Gratton, C., Rogers, C., Smyser, C., Wakschlag, L., & **Norton, E.** (2020). Investigating whether dissociable types of hubs integrate brain function in infants. Flux Congress for Developmental Cognitive Neuroscience, virtual conference.
- Norton, E. S.** (2020). What can the brain tell us about parent-child interaction? In symposium: Advances and roadblocks in measuring parent-child interactions. Conference on Research Innovations in Early Intervention, San Diego, CA.
- Smith, N., **Norton, E.**, Gottfred, C., Lybolt, J., ^Manning, B., ^Baime, E., ^Harriott, E., & Holton, J. (2019). Promises and challenges of converting your skills/ideas into an app. ASHA Convention, Orlando, FL.
- Norton, E.**, ^Lam, S., ^Gillespie, T., ^Harriott, E., & ^Postolowicz, K. (2019). Atypical neural correlates of letter-sound integration in dyslexia. Society for the Scientific Study of Reading, Toronto, Canada.
- Gottfred, C., Smith, N., **Norton, E.**, Robinson, T., Lybolt, J., & Hornback, J. (2018). Beginning with Babble: Technology maximizes impact of SLP skills with parents, professional collaborators, and communities. ASHA Convention, Boston, MA.
- ^Cook, K., Kessler, C., Briggs-Gowan, M., Wakschlag, L., **Norton, E. S.** (2018). How multiple indicators of socio-economic skills and parent psychosocial factors relate to language abilities in a diverse sample of young children. Symposium on Research in Child Language Disorders, Madison, WI.
- ^Manning, B., ^Harriott, E., ^Nuttall, C., & **Norton, E. S.** (2018). Investigating the efficacy of an app-based, parent-implemented language intervention for toddlers of varying SES. Symposium on Research in Child Language Disorders, Madison, WI.
- Gottfred, C., **Norton, E.**, Lybolt, J., Smith, N., & Robinson, T. (2017). Addressing the language impact of growing up from a background of poverty/low resources. ASHA Convention, Los Angeles, CA.
- Norton, E. S.**, Saygin, Z. M., Beach, S. D., Ozernov-Palchik, O., Gaab, N., & Gabrieli, J. D. E. (2017). The utility of EEG and MRI brain measures for predicting future reading difficulty. Society for Research in Child Development, Austin, TX.
- Yu, X., Raney, T., **Norton, E. S.**, Saygin, Z. M., Ozernov-Palchik, O., Beach, S. D., Gabrieli, J. D. E., & Gaab, N. (2017). The neural compensatory mechanisms in prereaders with a family history of dyslexia who subsequently develop typical reading skills. Society for Research in Child Development, Austin, TX.
- Norton, E. S.**, Beach, S. D., Saygin, Z. M., Ozernov-Palchik, O., Park, A., Robinson, S., Gaab, N., & Gabrieli, J. D. E. (2016). Brain measures identify which kindergartners at risk for reading difficulties go on to develop dyslexia. Society for the Scientific Study of Reading, Porto, Portugal.
- Norton, E. S.**, Beach, S. D., Ozernov-Palchik, O., Gaab, N., & Gabrieli, J. D. E. (2015). Brain structure differences associated with risk for dyslexia: Different patterns of phonological awareness and RAN deficit subtypes. Society for the Scientific Study of Reading, Kona, HI.
- Norton, E. S.**, Beach, S., Saygin, Z., Ozernov-Palchik, O., Cyr, A., Halverson, K., Gaab, N., & Gabrieli, J. D. E. (2014). Linking brain structure and function with reading: Relations among arcuate fasciculus structure, ERP mismatch negativity response, and reading-related skills in kindergarten and 1st grade. Society for the Scientific Study of Reading, Santa Fe, NM.
- Norton, E. S.**, Beach, S., Cyr, A., Ozernov-Palchik, O., Perrachione, T., Wolf, M., Gabrieli, J. D., & Gaab, N. (2012). Brain differences in kindergarten children with and without behavioral risk for dyslexia: Toward fMRI and EEG predictors of reading difficulties. Society for the Scientific Study of Reading, Montreal, Canada.
- Norton, E. S.**, Spencer, K. E., & Wolf, M. (2009). Improving reading fluency and comprehension for students with reading disabilities: Comparing phonology-only with multi-componential intervention on key reading outcomes. International Dyslexia Association, Orlando, FL.
- Wolf, M., **Norton, E.S.**, Barzillai, M., Ullman, C., & Orkin, M. (2009). Understanding diverse readers: Assessing the unique abilities of each child. International Dyslexia Association, Orlando, FL.
- Norton, E. S.**, Barzillai, M. & Wolf, M. (2008). How the components of RAVE-O instruction simulate the reading brain. International Dyslexia Association, Seattle, WA.
- Gaab, N., Kovelman, I., Christodoulou, J. A., Lieberman, D. A., Weinberg, A., Hostetter, M. K., **Norton, E.**, ... & Gabrieli, J. D. E. (2007). Learning to read changes the developing brain: Comparing phonological and semantic processing between prereaders and readers. Society for Neuroscience, San Diego, CA.
- Petitto, L. A., Baker, S., Baird, A., Kovelman, I., & **Norton, E.** (2004). Near-infrared spectroscopy studies of children and adults during language processing. International Workshop on Near-Infrared Spectroscopy, Cambridge, MA.

Posters

- ^Kim, J., ^Harriott, E., Gaab, N., Gabrieli, J., & **Norton, E.** (2025). Item-level pause time and pause time variability in

- kindergarten rapid automatized naming as a predictor of future reading ability: A multilevel analysis. Society for the Scientific Study of Reading, Calgary, Canada.
- Lee, K., Henry, L. M., Hansen, E., Tandilashvili, E., Wakschlag, L. S., **Norton, E.**, Pine, D. S., Brotman, M. A., & Pereira, F. (2025). Enhancing infant crying detection with gradient boosting for improved emotional and mental health diagnostics. Proceedings of the 2025 IEEE International Conference on Acoustics, Speech and Signal Processing, Hyderabad, India.
- Henry, L. M., Lossio-Ventura, J. A., Tandilashvili, E., Kim, K., Wood, M., Lee, K., Pine, D. S., Pereira, F., **Norton, E. S.**, Wakschlag, L. S., and Brotman, M. A. (submitted). Sentiment analysis of the caregiving environment as an early, objective, and scalable predictor of child psychopathology In M. Brotman and L. Henry (Chairs), Digital Phenotyping of Psychopathology: The Multi-Method Identification of Risk Across Disorder and Development. 64th Annual Meeting of the American College of Neuropsychopharmacology, Nassau, Bahamas.
- Harrington, E. K., Krok, W., Preza, T., Wakschlag, L., **Norton, E.**, & Hadley, P. A. (2024). Investigating early predictors of sentence development in toddlers. American Speech-Language-Hearing Association, Seattle, WA.
- ^Acosta-Juarez, A., ^Mittal, A., ^Mon, S., Wakschlag, L. S., & **Norton, E. S.** (2024). How toddler irritability relates to EEG data quality and ERP mismatch negativity amplitude. Flux Congress, Baltimore, MD and Annual Biomedical Research Conference for Minoritized Scientists (ABRCMS), Pittsburgh, PA.
- ^Manning, B. L., ^Nikolaeva, J. I., ^Choi, S., ^Mon, S. K., ^Licht, J., ^Holubecki, A., ^Kim, J., Wakschlag, L. S., & **Norton, E. S.** (2024). Language learning in sync: How child EEG power and parent-child synchrony during naturalistic interaction relate to child language ability and disorder risk. Fetal, Infant & Toddler Neuroimaging Group (FIT'NG) Conference, Baltimore, MD.
- ^Nikolaeva, J. I., ^Manning, B. L., ^Choi, S., Wakschlag, L. S., & **Norton, E. S.** (2024). Trajectories of vocabulary growth in toddlerhood and later language outcomes: Relations to EEG power and coherence. Fetal, Infant, & Toddler Neuroimaging Group (FIT'NG) Conference, Baltimore, MD.
- ^Choi, S., ^Mon, S. K., ^Nikolaeva, J. I., ^Reynolds, H. M., ^Turner, N. A., Wakschlag, L. S., & **Norton, E. S.** (2024). Exploring the utility of toddler ERP MMN and language for predicting school-age early reading skills. Fetal, Infant, & Toddler Neuroimaging Group (FIT'NG) Conference, Baltimore, MD.
- ^Mon, S. K., ^Manning, B. L., Wakschlag, L. S., & **Norton, E. S.** (2024). Leveraging mixed-effects location scale models to assess the ERP mismatch negativity's psychometric properties and trial-by-trial neural variability in toddler-mother dyads. Flux Society Conference, Baltimore, MD.
- Davison, K. E., Doherty, L. A., Manning, B., Wakschlag, L., Norton, E. S., & Zuk, J. (2024). Maternal oral reading expressiveness relates to late-talking and typically-developing toddlers' receptive language skills. Symposium on Research in Child Language Disorders, Madison, WI.
- Preza, T., Krok, W., Wakschlag, L., **Norton, E.**, & Hadley, P. (2023). Short Sentences aren't so simple: What might they tell us about late-talking toddlers? American Speech-Language-Hearing Association, Boston, MA.
- Zhang, Y., MacNeill, L. A., Edwards, R. C., Burns, J. L., Zola, A. R., Poleon, R. B., Nili, A. N., Giase, G. M., Ahrenholtz, R. M., Wiggins, J. L., **Norton, E. S.**, & Wakschlag, L. S. (2023). Irritability trajectories at the transition to toddlerhood: Associations with effortful control and psychopathology risk. In Flash Talk Session: Transitions in early childhood: Longitudinal links to later internalizing symptoms. Society for Research in Child Development 2023 Biennial Meeting, Salt Lake City, UT.
- Hansen, E., Henry, L., Erjo, T., Rozsypal, J., Pine, D., **Norton, E. S.**, Wakschlag, L. S., & Brotman, M. A. (2023). Creating a 'fingerprint' to predict early childhood psychopathology using naturalistic Cry. Association for Behavioral and Cognitive Therapies 2023 Convention, Seattle, WA.
- Henry, L., Lee, K., Rozsypal, J., Erjo, T., Hansen, E., Curtis, P., Pereira, F., Pine, D. S., **Norton, E. S.**, Wakschlag, L. S., & Brotman, M. A. (2023). Naturalistic infant vocalizations at 12 months: Concurrent and predictive validity with irritability and psychopathology. 62nd Annual Meeting of the American College of Neuropsychopharmacology, Tampa, FL.
- Wong, J. N., Walter, J., Conrad, E., & **Norton, E. S.** (2023). Linear association between age and key EEG power spectra from infancy in epilepsy. Fetal, Infant, and Toddler Neuroimaging Group, Santa Rosa, CA.
- Nayar, K., Shic, F., Guilfoyle, J., Winston, M., Stevens, C., Elahi, S., ^Clement-Lam, S., **Norton, E. S.**, & Losh, M. (2023). Distinct attentional, perceptual, and neural phenotypes in autism and first degree relatives: Neurocognitive insights from a multi-method, family study of visual perception and attention. International Society for Autism Research, Stockholm.
- Hansen, E., Henry, L., Erjo, T., Rozsypal, J., Pine, D., **Norton, E. S.**, Wakschlag, L. S., Brotman, M. A. (2023, submitted). Creating a 'fingerprint' to predict early childhood psychopathology using naturalistic cry audio. Poster submitted to the Association for Behavioral and Cognitive Therapies Convention, Seattle, WA.
- ^Choi, S., ^Clement-Lam, S., & **Norton, E. S.** (2023). Examining phonological awareness and reading impairment in school age children with resting EEG. International Workshop on Reading and Developmental Dyslexia, San Sebastian, Spain.
- Hadley, P., Harrington, E., Krok, W., Preza, T., Wakschlag, L., & **Norton, E. S.** (2022). Sentence-focused diversity measures: A comparison of late-talking toddlers and typical peers. American Speech-Language-Hearing Association, New Orleans, LA.
- ^Choi, S., ^Clement-Lam, S., ^Kwok, E., ^Manning, B., ^McWeeny, S., ^Nikolaeva, J., & **Norton, E. S.** (2022). Can EEG theta inform us about reading impairment & phonological awareness? Society for the Scientific Study of Reading, Newport Beach, CA.
- Krok, W., Harrington, E., Preza, T., Buccheit, M., ^Harriott, E. M., ^Fredian, K., Wakschlag, L., **Norton, E. S.**, & Hadley, P. A. (2022). The sentence diversity priming task: An efficient tool for assessing toddlers' sentence production. Symposium on Research in Child Language Disorders, Madison, WI.

- ^Nikolaeva, J., ^Kwok, E., ^Choi, S. J., ^Manning, B. L., Wakschlag, L. S., & **Norton E. S.** (2022). A multi-contextual examination of predictors of expressive vocabulary among late and typical talking toddlers using a machine learning approach. Symposium on Research in Child Language Disorders. Madison, WI.
- ^Licht, H., ^Choi, S. J., ^Nikolaeva, J., ^Kwok, E., ^Manning, B. L., ^McWeeny, S., & **Norton E. S.** (2022). Comparing manual and automated EEG data processing methods for analyzing developmental EEG data. Cognitive Neuroscience Society, San Francisco, CA.
- Letkiewicz, A., Wakschlag, L., Briggs-Gowan, M., Norton, E., & Shankman, S. (2022). Computational and neural evidence of aberrant inhibitory control in preadolescents with an internalizing and/or externalizing disorder. Society for Biological Psychiatry, New Orleans, LA.
- ^Nikolaeva, J. I., ^Manning, B. L., ^Choi, S. J., ^Harriott, E. M., ^Fredian, K. M., Wakschlag, L. S. & **Norton, E. S.** (2021). Assessing how EEG gamma power and SES explain variability in language skills among late and typical talking toddlers. Flux Congress on Developmental Cognitive Neuroscience.
- ^Nyabingi, O. S., ^Manning, B., ^Jo, Y., ^Liang, W., & **Norton, E. S.** (2021). Does joint engagement influence the relation between home environmental factors and child vocabulary development? Symposium on Research in Child Language Disorders.
- ^Clement-Lam, S. S. Y., ^Manning, B., ^McWeeny, S., & **Norton, E. S.** (2020, conference cancelled). The unique contribution of letter-sound integration to English-speaking children's reading performance. Society for the Scientific Study of Reading.
- ^Choi, J., ^McWeeny, S., Roberts, M. Y., & **Norton, E. S.** (2020, conference cancelled). Rapid automatized naming as a kindergarten predictor of future reading: A Meta-analysis. Symposium on Research in Child Language Disorders, Madison, WI.
- ^Nikolaeva, J., Roberts, M. Y., & **Norton, E. S.** (2020, conference cancelled). Evaluating reliability and validity of an automated measure of verbal responsiveness among parents of children with autism spectrum disorder. Symposium on Research in Child Language Disorders, Madison, WI.
- Woodruff Carr, K., Perszyk, D. R., **Norton, E. S.**, Voss, J. L., & Waxman, S. R. (2019). Alpha oscillatory activity reflects infants' emerging link between sounds and cognition. Society for Neuroscience, Chicago, IL.
- ^Manning, B., Hampton, L., Roberts, M., & **Norton, E.** (2019). EEG correlates of social engagement during naturalistic parent-child interaction in typical development and ASD. Society for Research in Child Development, Baltimore, MD.
- Kessler, C., Sabol, T. J., **Norton, E.**, Heard-Garris, N., Briggs-Gowan, M., & Wakschlag, L. (2019). Effects of early life stress on children's disruptive behaviors: Perceptions matter. Society for Research in Child Development, Baltimore, MD.
- Norton, E. S.**, Sideridis, G., Ozernov-Palchik, O., Beach, S. D., Wolf, M., Gabrieli, J. D. E., & Gaab, N. (2018). Both low phonological and low rapid naming skills disrupt typical patterns of reading development: A cusp catastrophe model. Society for the Scientific Study of Reading, Brighton, UK.
- ^Lam, S. S. Y., Ozernov-Palchik, O., Gaab, N., & Gabrieli, J. (2018). Modeling relations among rapid automatized naming, processing speed, and reading fluency in reading development. Society for the Scientific Study of Reading, Brighton, UK.
- ^Harriott, E., ^Manning, B., & **Norton, E.** (2018). Examining how parents' language abilities relate to toddler language abilities and growth after a pilot app-based language intervention. Symposium on Research in Child Language Disorders, Madison, WI.
- ^McWeeny, S., ^Manning, B., ^Harriott, E., ... Gabrieli, J., Gaab, N., & **Norton, E. S.** (2018). Reliability of the mismatch negativity in a kindergarten population oversampled for dyslexia risk. Cognitive Neuroscience Society, Boston, MA.
- Ozernov-Palchik, O., Brown, M., **Norton, E. S.**, Perrachione, T., Beach, S., Wolf, M., Kuperberg, G., Gaab, N., & Gabrieli, J. (2017). Investigating lexical and perceptual learning effects on phonetic processing in young children with dyslexia. Society for the Scientific Study of Reading, Halifax, Canada.
- Norton, E. S.**, ^Harriott, E. M., ^Brown, S., ^Isaacs, S. H., ^Kaufer, S., ^Selph, L., Gaab, N., & Gabrieli, J. D. E. (2016). How response time variability during a rapid automatized naming task relates to pre-reading skills and future reading ability. Psychonomic Society Annual Meeting, Boston, MA.
- Nayar, K., Hogan-Brown, A., La Valle, C., Gordon, P., Martin, G., **Norton, E. S.**, & Losh, M. (2016). Rapid automatized naming as a marker of genetic liability to autism: An eye tracking study. International Meeting for Autism Research, Baltimore, MD.
- Zuk, J., Becker, B., **Norton, E.**, Ozernov-Palchik, O., Mauer, M., Beach, S., Hogan, T., Gabrieli, J., & Gaab, N. (2016). Structural brain alterations in kindergarteners with speech sound disorders. Cognitive Neuroscience Society, New York, NY.
- Norton, E. S.**, Beach, S. D., Cyr, A., Ozernov-Palchik, O., Gaab, N., & Gabrieli, J. D. (2014). Kindergarten pre-reading skills and ERP mismatch negativity predict 1st grade connected text reading fluency. Cognitive Neuroscience Society, Boston, MA.
- Litt, R., de Jong, P., **Norton, E. S.**, & Nation, K. (2014). To repeat or not to repeat? The effect of item repetition on RAN performance. Society for the Scientific Study of Reading, Santa Fe, NM.
- Ozernov-Palchik, O., **Norton, E. S.**, Beach, S. D., Langer, N., Cyr, A., Gabrieli, J., & Gaab, N. (2013). Subcomponents of early reading correlate with cortical thickness in distinct reading network areas. Organization for Human Brain Mapping, Seattle, WA.
- Norton, E. S.**, Beach, S., Ozernov-Palchik, O., Cyr, A., Gaab, N., & Gabrieli, J. (2013). Rapid automatized naming skill is associated with brain activation for orthographic processing in kindergarteners. Cognitive Neuroscience Society, San Francisco, CA.
- Saygin, Z., **Norton, E. S.**, Beach, S., Cyr, A., Ozernov-Palchik, O., Gaab, N., & Gabrieli, J. D. E. (2012). Structural connectivity predicts risk for dyslexia in kindergarteners. Society for Neuroscience, New Orleans, LA.
- Norton, E. S.**, Eddy, M., Perrachione, T., Cyr, A., Wolf, M. & Gabrieli, J. D. (2011). ERP mismatch negativity predicts reading fluency in young children. Cognitive Neuroscience Society, San Francisco, CA.

- Perrachione, T., Kovelman, I., Ostrovskaya, I., **Norton, E.**, Ghosh, S., & Gabrieli, J. (2009). Temporal and prefrontal cortical contributions to phonological working memory for words and pseudowords. Society for Neuroscience, Chicago, IL.
- Norton, E. S.**, Kovelman, I., Gaab, N., Christodoulou, J. A., Triantafyllou, C., Lieberman, D. A., ... & Gabrieli, J. D. E. (2009). Evidence for different neural processing of auditory language phonological awareness in children with developmental dyslexia. Society for the Scientific Study of Reading, Boston, MA.
- Norton, E. S.**, Kovelman, I., Gaab, N., Christodoulou, J. A., Lieberman, D.A., Whitfield-Gabrieli, S., Wolf, M., & Gabrieli, J. D. E. (2009). Neural correlates of auditory phonological processing in typical reading development and dyslexia. Cognitive Neuroscience Society, San Francisco, CA.

TEACHING

At Northwestern University

Cognitive Neuroscience of Human Communication, CSD 369/395 2018-present

This undergraduate seminar includes didactic discussions of published papers and critical reflections in order to help students become critical readers of cognitive neuroscience literature. Students design and execute an ERP study as part of the course. Enrollment 4-8 students (cap=8).

Language Development and Usage, CSD 392 2017-present

This undergraduate course gives an overview of language development from birth through adulthood, in typical development and as well as influences on heterogeneity in development including from multilingualism, sign language, language disorders, and varied home environments. Research methods and inquiry are highlighted. Enrollment 25-36 students (cap typically=32).

Serious Play, From the Sandbox to the Stage (first-year seminar), CMN 100 2023-present

This seminar (co-taught with Theatre Prof. Roxane Heinze-Bradshaw) brings together theatre and improv games with the study of play in child development. Enrollment 10-18 students (cap=18).

Experimental and Theoretical Aspects of Audiology (PhD Seminar), CSD 516 2017-2022

This seminar uses a journal club format to review major and emerging issues in hearing sciences and their relation to broader communication. Students focus on scientific rigor and argumentation.

Pediatric Language Disorders, CSD 492 2016-2017

This course for MS-SLL students provides an overview of the etiology, characteristics, and treatment approaches for children with primary and secondary language disorders. Students complete assignments designed to develop their practical skills, such as weighing the evidence for different treatment approaches for a particular child's profile. Enrollment 25-37 students.

CSD Honors Thesis Seminar 2016-present

I work with students individually to support their honors thesis work and lead workshops on topics such as communicating results to developing an effective spoken presentation. 2-6 students per year.

Other teaching

Harvard University, Department of Psychology, 2010-11, Social Development, Teaching Fellow

Tufts University, Department of Child Development, 2007-10, Introduction to Child Development, Lead Teaching Assistant, Language Development, Teaching Assistant

Landmark School, Beverly, MA, 2005-06, Teacher for two sections each of Chemistry, Biology, and 1-on-1 reading tutorials for high school students with language-based learning disabilities.

PROFESSIONAL ACTIVITIES AND SERVICE

- Grant review panels:** NIH Language and Communication (LCOM) Grant Review Panel,
Standing member 2022-23, 2024-present
Ad-hoc member June 2018
US Department of Defense (DoD) Congressionally Directed Medical Research
Programs, October 2022
NIH Behavioral Neuroscience Fellowship Review Panel (F02A), March 2022
NIH Voice, Speech and Language Fellowship Review Panel
(ZDC1 SRB-Z41L), June 2021
ASHA Grants Review Panel, 2018, 2019, 2020
- Ad-hoc grant review:** NSF CAREER Award program, 2024
Research Grants Council of Hong Kong, 2022, 2023
University of Rochester Del Monte Neuroscience grants, 2022
Hong Kong Innovation and Technology Commission, 2018
NIH Building Infrastructure Leading to Diversity Initiative (U54), 2017
NSF Developmental and Learning Sciences Research Program, 2016
Graduate Women in Science Research Awards, 2016
US-Israel Binational Science Foundation, 2014
- Journal editorial boards:** *Scientific Studies of Reading*, 2019-present
Journal of Learning Disabilities, 2017-present
Journal of Speech, Language, and Hearing Research, 2018-2019
- Ad-hoc journal review (past 3 years):**
- | | |
|---|--|
| <i>Brain Research</i> | <i>Journal of Speech, Language, and Hearing Research</i> |
| <i>Child Development Perspectives</i> | <i>Mind, Brain & Education</i> |
| <i>Developmental Cognitive Neuroscience</i> | <i>NeuroImage</i> |
| <i>Developmental Psychobiology</i> | <i>Neuropsychologia</i> |
| <i>Developmental Science</i> | <i>Reading & Writing</i> |
| <i>Journal of the American Academy of Child & Adolescent Psychiatry</i> | <i>The Journal of Neuroscience</i> |
| <i>Journal of Experimental Child Psychology</i> | <i>Trends in Neuroscience & Education</i> |
- Conference program committees:** Cognitive Neuroscience Society, Poster Committee, 2021, 2022
Fetal, Infant, and Toddler Neuroimaging Group (FIT'NG), 2022, 2023
- Outside thesis examiner:** University of Western Ontario, Department of Psychology, 2020
University of Western Australia, School of Psychological Science, 2017
- Advisory boards:** Steering committee, Healthy Brain and Child Development (HBCD)
national study, 2024-present
The Reading League, Illinois Chapter, 2023-
Home Visiting Applied Research Collaborative (HARC), Johns Hopkins
University (consultant), 2021-2022
EEG and MRI workgroups, Healthy Brain and Child Development (HBCD)
national study, 2020-present
Illinois State Board of Education, Reading Teacher/Reading Specialist
Certification Advisory Panel, 2017
LEAP (Language Empowers All People), Chicago IL,
Academic advisory panel, 2016-present

Society memberships: Cognitive Neuroscience Society
Fetal, Infant, and Toddler Neuroimaging Group (FIT'NG)
Flux Society for Developmental Cognitive Neuroscience
Society for the Scientific Study of Reading; Voting Member, 2015–present

**Continuing education/
trainings completed:** Data Management and Data Sharing Workshop, Vanderbilt U., 2024
Northwestern University Mid-Career Faculty Institute, 2023-24
The coaching model approach to mentorship, 2023
Opioid overdose prevention and response training,
Chicago Recovering Communities Coalition, February 2023
Certificate in Leadership and Management Strategies for Clinical
Investigators, NU Kellogg School of Management, May 2022

Conferences and symposia organized:

“Understanding the autism spectrum: Clinical, biological, and cultural perspectives,” Conference at Northwestern University, co-organized with Molly Losh and Megan Roberts, 2019.

“Learning and learning disabilities,” Symposium co-organized with Steve Zecker for Northwestern CSD Connect Conference, 2018.

“New insights into reading development and disorders from diverse brain imaging modalities” Symposium co-organized with Robin Litt at the Society for the Scientific Study of Reading conference, Porto, Portugal, 2016.

“Neurobiology, neurochemistry, and genetics of dyslexia” Symposium co-organized with Nicole Landi at the Society for the Scientific Study of Reading conference, Kona, Hawaii, 2015.

NORTHWESTERN UNIVERSITY SERVICE
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University service: Northwestern University Institute for Innovations in Developmental Sciences (DevSci), Executive committee member and Director of Neurodevelopmental Core, 2016–present
Co-founder and co-director, Northwestern University Autism Research and Clinical Collaborative (NUARCC), 2019–present
Interviewer, Physician Scientist Training Program and Medical Scientist Training Program, Feinberg School of Medicine, 2019-present
Provost’s new faculty mentoring program mentor, 2023-2024
Advisor, Desire 2 Aspire (mentoring group for undergraduate women to support elementary-age girls), 2019–2023
Provost’s pandemic faculty impact response workgroup, 2021-2023
Faculty search committee (developmental MRI focus), Department of Medical Social Sciences, 2021-2022
Faculty search committee, Department of Psychology, 2017-2018

School / departmental service: Director of Curriculum and Instruction, CSD Department, 2025-present
Director of Undergraduate Studies, CSD Department, 2020–2025
Module coordinator, Children and Communication, 2019–2025
CSD Undergraduate committee, Chair, 2018–present, member 2015–2025
Module designer and coordinator, The Communicating Brain, 2018–2024
MS-SLL Academic Integrity Review Committee, 2024
CSD PhD program and admissions committee, 2015–2023

NTE faculty/academic advisor in SoC, Search committee, 2022, 2023, 2024
 Mancosh Pathways to the Professorate program review committee, 2021
 Committee on the first-year experience, SoC, 2017
 CSD faculty search committee, 2016–2017

**Preceptor for
training grants:**

Neuroscience of Human Cognition T32 (NINDS, PI Paller, 2019-present,
 Steering committee, 2022-present)
 Mental Health Earlier T32 (NIMH, PIs Wakschlag/Shankman, 2021-present)

STUDENT MENTORING

Northwestern PhD students

Current PhD students (5):

Jiyoon Kim (2023-present)	Ananya Mittal (MD-PhD, 2023-present)
Hudi (Judith) Licht (2021-present)	Serena Mon (2022-present)
Amelia Murray (2025-present)	

PhD student alumni (5) noted with their subsequent/current roles:

Silvia Clement-Lam, Ph.D. '19 (2015-19) – Associate director of research, University of Connecticut Waterbury; previous F32 postdoc w/Fumiko Hoeft, University of Connecticut
 Jinnie (Soujin) Choi, Ph.D. '25 (2019-25) – Postdoctoral Fellow, Dept. of Communication Sciences & Disorders, University of Minnesota
 Brittany Manning, CCC-SLP Ph.D. '21 (2016-21) – T32 postdoc w/Laurie Wakschlag, Northwestern; previous postdoc with Sophy Kim, Weill Cornell Medicine
 Julia Nikolaeva (2019-25) – Postdoc, Boys Town National Research Hospital (PI Karla McGregor)
 Sean McWeeny, Ph.D. '22 (2016-22) – research scientist in developmental-behavioral pediatrics, Lurie Children's Hospital, Chicago IL; previous postdoc with Laurel Trainor, LIVE Lab, McMaster University

Northwestern PhD students, doctoral rotation or program/thesis committee member –

CSD students unless noted (NUIN: Northwestern U. Interdepartmental Neuroscience PhD program)

Current (10)

Rahma Almajid (2024-)	Ania Holubecki, NUIN (2024-; lab rotation)
Krystal Alvarez-Hernandez (2023-)	Alejandra Reinoso (2022-)
Donnisa Edmonds, NUIN (2022-; lab rotation)	Murielle Standley (2021-)
Hannah Feiner (2022-)	Shengyue Xiong (2024-)
Milton Guendica (2023-)	Suisui Xu (2024-)

Alumni (18)

Peiyao Chen, Ph.D. (2015-19)	Amanda Nili, Ph.D. Clinical Psych. (2017-23; NIH F31 co-mentor)
Phillip Curtis, Ph.D. (2016-19)	Bailey Sone, Ph.D. CCC-SLP (2019-24)
Hannah Fipp-Rosenfield, Ph.D. (2021-25)	Yael Stern, Ph.D. (2016-21)
Kahla Graham CCC-SLP (2022-)	Devin St. John (2015-16; lab rotation)
Lisa Gresch CCC-SLP (2017-19; lab rotation)	Kenya Thomas (2019)
Allison Hilger CCC-SLP, Ph.D. (2017-18; lab rotation)	Anele Villanueva (2019-2023)
Jordan Lee Ph.D., CCC-SLP (2021-25)	Kristi Ward, Ph.D.-Au.D. (2017-20; NIH F31 co-sponsor)
Kailyn McFarlane, Ph.D. (2021-24)	Matthew Zellner CCC-SLP, Ph.D. (2021-25)
Maranda Jones, Ph.D. (2019-24)	
Kritika Nayar, Ph.D. Clinical Psych (2015-20)	

Northwestern postdoctoral scholars, primary mentor (3) and their current roles:

Elaine Kwok, Ph.D. CCC-SLP (2021-2022) – Research Scientist, University of Pittsburgh
 Ashley Nielsen, Ph.D. (2019-2021) – Senior postdoc, Washington University in St. Louis
 Jessica Page, Ph.D. (2018-2020) – Fellow, Boston Children’s Hospital; previous Research Fellow,
 American Academy of Sleep Medicine

Northwestern PREP (Postbaccalaureate Research Education Program) scholar (1)

Aldair Acosta Juarez (2024-25)

Northwestern MS-SLL (speech-language pathology) student research assistants (17)

Biya Ahmed, ‘19 (2017-18)	Alexandra Harpole ‘20 (honors thesis, diagnostic
Maryam AlRashied (2023-present)	clinical placement, 2018-20)
Emma Baime ‘20 (diagnostic clinical placement, 2018-20)	Caitlin Hertzendorf ‘22 (2021)
Maggie Boland, ‘19 (2017-19)	Ann Lee ‘17 (2017)
Sara Brown ‘17 (2016-17)	Shradha Mehta ‘18 (2017)
Celia Kaufer ‘17 (2016-17)	Camille Nuttall ‘20 (2018-20)
Eliana Cashman ‘19 (2017-19)	Heather Turnbull ‘17 (2017)
Kiera Cook ‘18 (honors thesis, 2017-18)	Gabrielle Schwarte, ‘18 (diagnostic clinical
Shauna Czarnik ‘17 (2017)	placement, 2018)
	Linda Selph ‘17 (2016)
	Jiixin Alice Wang ‘21 (2019-21)

Northwestern undergraduate students (39)

Noted honors/grants/awards: early research experience award (EREA), undergraduate research assistant (URAP), undergraduate research grant (URG), summer internship grant program (SIGP)

Current undergraduate students (6):

Lyla Heising (EREA, 2022-)	Nicole Rogus (URG, 2023-)
Pooja Krishnan (2023-)	Naomi Szmilowicz (URG, 2025-)
Justine Liu (2023-)	Yena Son (SIGP, 2024-)

Undergraduate alumni (33) and their subsequent roles:

Emma Baime ‘18 (2017-18) – MS-SLP at Northwestern ‘21; SLP early intervention provider
 Elaine Botros ‘22 (2020-22) – Medical student, Medical College of Wisconsin
 Victor Chen ‘24 (2022-24, indep study) – Law school
 June Choe ‘20 (2019-20) – PhD student in Linguistics, University of Pennsylvania
 Victor Criollo (URG, 2022-2025) – MS-SLP student at MGH Inst. Of Health Professions
 Nathalie Diaz-Lopez ‘23 (EREA, 2020-2022)
 Maggie Flores (Honors thesis, 2024-25) – Applying to law school
 Emily Harriott ‘19 (EREA, URAP, URG, advanced URG, all-school outstanding sophomore honor, alumnae award, honors thesis, UG 2015-19, full-time research assistant, 2019-21) – PhD Student, Neuroscience (Laurie Cutting lab), Vanderbilt University
 Shelby Isaacs ‘18 (independent study, honors thesis, 2016-18) – resident physician, MD ‘23, Hofstra University
 Yuri Jo ‘21 (independent study, 2018-22) – SLP master’s student, USC
 Jissmaria Karickal ‘20 (SIGP, independent study, 2019-20) – Medical student, St. Louis University
 Haroon Khan ‘20 (2019) – Applying to medical school
 Natalia Kolek ‘22 (SIGP, honors thesis, 2020-2022) – Full time MRI coordinator, HBCD study at Northwestern
 Bari Lefkowitz ‘24 (indep study, 2023-24) - MS-SLP at Northwestern
 Winnie Liang ‘22 (EREA, all-school outstanding sophomore honor, independent study, 2018-2022) – Applying to medical school
 Gabriella Leibowitz ‘21 (URAP, 2020-22) - SLP masters at Northwestern; CF, University of Miami
 Anabel Marre (2020-2021)

Jade Tierra Mitchell '18 (independent study, 2017-18) – Master's SLP then PhD program, Vanderbilt, Amira Mohamed (2022-2023)
 Melany Morales (Goldwater Scholar, URG, Fletcher award for outstanding URG; 2023-5) – RA, HBCD study at Northwestern
 Olufemi Nyabingi '21 (Weinberg summer research grant, URG, honors thesis, 2019-21) – PhD student in Psychology, UC Davis; previous Research Assistant, Nathan Fox lab, U. of Maryland
 Skylar Ngozichukwu Ozoh '19 (URG, 2017-19) – applying to medical school
 Meakailyn Philips '23 (EREA, 2019-2020)
 Kamila Postolowicz '20 (EREA, undergraduate language grant, independent study, 2017-2020) – SLP '23, University of Wisconsin-Madison, current SLP
 Anuradha Raife '20 (2019-20, 2023-present) – consultant/computer scientist, applying to MS-SLP
 Smitha Ramesh '23 (URAP, 2020-2021)
 Cadence Reed-Bippen '20 (EREA, 2016-20) – SLP master's program
 Tessneem Shahbandar '23 (2021-22), dental school
 Maggie Stanton '24 (2023-24), physical therapy program, Northwestern
 Vivianna White (EREA, 2021-25), AuD program, UNC Chapel Hill
 Ola Wicko '22 (independent study, SIGP, URG, honors thesis, 2020-22) - SLP master's student, Northwestern
 Ambreen Zaidi '20 (2019-20) – applying to medical school
 Kevin Zhang '19 (URG, 2016-17) – Researcher, St. Jude Children's Research Hospital

Research staff mentees (>7) and subsequent roles:

Tose Akinmola (NIH diversity supplement) – Human Development PhD student at UT Austin
 Abby Blum – clinical psychology PhD student at Vanderbilt University
 Kaitie Fredian – clinical psychology PhD student at Marquette University
 Ellen Grimes – school psychology PhD student at Baylor University
 Corey Richier – clinical psychology PhD student at University of Illinois Urbana-Champaign
 Haley Reynolds – medical school
 Tosin Shenbanjo (NIH diversity supplement) –policy analyst, Mathematica
 Stephanie Wert – psychology PhD student at University of California, Los Angeles

Other students/mentees:

(HS=high school)

Lauryn Mitchell (Hampton U.), SROP, 2025	Madlyn Kates (HS), Summer 2014
Rick Qian (HS), Fall 2021-Spring 2022	Ebenezer Nkwate (MIT), Summer 2014
Jolie Davidson (Tufts), Summer 2019	Maria Ruiz (MIT), 2014
Remi Weibel (Middlebury) Summer 2019	Andrew Peach (SLP clinical fellowship), 2013
Naomi Fischhoff (HS) Summer 2018	Cirkine Sherry (HS), Summer 2013
Camille Nuttall (BYU), Summer 2017	Candice Coulter (post-baccalaureate), 2012
Elizabeth Hasseltine (UVA), Summer 2014, 2015	Gina DiStefano (HS), Summer 2012
Blair Daniel (Wellesley), 2014-2015	Jessie Hild (HS), Summer 2012
Lucy Cronin-Golomb (Tufts), Summer 2015	

Trainee grants/fellowships mentored

Lilian Yanqing Li, PhD, (Northwestern), co-mentor on NIH K99MH133991
 Jinnie Choi, Dingwall Foundation Fellowship in language neuroscience, 2023-24
 Julia Nikolaeva, DevSci Graduate Student Fellowship, 2023-24
 Silvia Clement-Lam, DevSci Graduate Student Fellowship, 2018-2019
 Alice Wang, ASHA SPARC (Students Preparing for Academic Research Careers), 2020
 Rose Donohue, PhD (Washington University in St. Louis), consultant on K23MH125023:
Neurodevelopmental emergence of callous-unemotional behavior beginning in infancy: Neural markers and environmental risk and protective Factors, 2021-2026
 Mary Lauren Neel, MD (Nationwide Children's Hospital/Ohio State), consultant on K23 application,
Early multimodal measures of preterm infant-parent emotional connection

MEDIA and PRESS COVERAGE

Coverage of research in the Daily Northwestern

- [Communication Prof. Elizabeth Norton talks children's language, reading development research](#) 2025
- [Brainstorm: Sounding it out: Advocates fight for better reading education](#) [podcast/article] 2022
- [Reading the sings/ Parents advocate for District 65 dyslexia diagnosis, reading support](#) 2022

Northwestern Searle Center for Teaching and Learning, [Educator Spotlight](#) 2024

Northwestern Medicine HealthBeat, '[Can Dyslexia be Cured?](#)' 2024

General info on child/brain development

- [Today.com](#), 'Why do babies say Dada first?' 2024
- [Fatherly.com](#), 'Your kid's brain development in the first 1,000 days' 2021

Coverage of "Lability of prenatal stress" paper 2022

- [Northwestern News](#), 'Mothers' stress rollercoaster while pregnant linked to negative emotions in babies'
- [CNN.com](#), 'Stress during pregnancy may have a negative emotional impact on babies, study finds'
- [USA Today](#), 'Stress levels during pregnancy linked to 3-month-old babies who cry, fuss more, study finds'
- [The Onion](#), 'Stress during pregnancy may have negative impact on babies' (*satire is flattery!*)

Holderness School Today alumni profile, "[Doing Good Science and Doing Good](#)" 2022

HBCD Study Launch 2021

- [Northwestern News](#), 'One of the largest-ever early-brain development studies has just launched'

Work on impact of COVID-19 on child language learning 2021-22

- [Honolulu Civil Beat](#), 6/22/2022, 'Here's what we know and don't know about the impact of masks on kids'
- [Axios Today Podcast](#), 9/14/2021, 'How the pandemic might be changing young kids' learning'
- [Illinois NPR station WILL](#), 217 broadcast and podcast, also carried on [WFYI Indianapolis](#)
- [Illinois Public Media's Illinois Newsroom](#), 'Will the pandemic have lasting effects on child development?'
- [The Southern Illinoisan](#), 'Concerned about your toddler's speech development? Don't delay seeking help'
- [The Southern Illinoisan](#), 'Masks are necessary but pose a challenge for speech therapists working with young children'
- [Chicago Tribune](#) and [syndicated](#), 'In these times of COVID-19, how does adults wearing masks affect children's speech development?'
- [Northwestern News](#), 'Remote data collection study offers promise for continuing research during the pandemic'

Coverage of "Taking language samples home" paper 2020

- [SALT Software Blog/Newsletter](#), 'Desperate Time Calls for Desperate Measures: Take a Language Sample'
- [ASHA Now Newsletter](#), January 11, 2021, 'Remote Versus In-Person Child Language Samples'
- #1 "Most Read" paper on ASHA Journals with over 5,800 downloads on that platform, 2021
- As of May 2022, over 11,000 combined downloads/views from ASHA and Psyrxiv

Coverage of "Relations between toddler expressive language & temper tantrums" paper 2019

- [NBC Chicago](#), 'Researchers look into link between delayed speech, severe tantrums in toddlers'
- [Parents magazine](#), 'Late talkers have more tantrums, according to new study'
- [ASHA Leader](#), 'Study indicates possible link between speech delays and Tantrums'
- [Fatherly.com](#), 'Do your toddler's tantrums point to a bigger problem? Here's how to know'
- [Northwestern News](#), Top 10 most-read story of the year, 'Late talkers twice as likely to have severe, frequent temper tantrums'
- [Reddit](#): #1 post on /r/science, #15 on r/all on November 17, 2019; 39.7k upvotes

Also covered by Science Daily, Consumer Affairs, ecounseling.com, the Daily Northwestern, others.
International: Times of Malta, The Sector (Australia), Babyology (Australia), Southern Weekly (China).

"Blame it on Gutenberg" Documentary , featured expert, Black Pearl Productions/ Filmmakers Collaborative, https://vimeo.com/342004109	2019
Interview on myths about dyslexia, Society for Neuroscience's brainfacts.org	2018
Coverage of "Connectivity Precedes Function in the VWFA" paper Covered by Ars Technica, Science Daily, and others. MIT News Office article Commentary in journal issue by Dehaene & Dehaene	2016
NPR, "Here and Now" story on dyslexia prediction research Story about dyslexia and brain imaging research with kindergarteners produced by WBUR Boston	2014
Coverage of "Tracking the Roots of Reading Ability" paper MIT News Office article and video Covered by the BBC, CBS News, US News and World Report, Boston Public Radio/WBUR, Fox, Boston Magazine, and others.	2013
Newsweek, "Is Brain-Based Learning a Myth?" Discussed findings from "Are There Separate Neural Systems for Spelling?" paper	2012

PUBLIC OUTREACH AND ADVOCACY

Illinois Early Literacy Coalition/grassroots science of reading legislation

- Provided input on reading screening and intervention bill HB 1124, 2023 and dyslexia toolkit
- Prepared expert testimony for IL house

Hyde Park Day Schools, Illinois

- Provided consultations and talks for parents and teachers, 2019-present

AVOCA West Illinois School District 37

- Worked with school leaders to provide training on evidence-based practices in reading instruction and develop literacy screening battery, 2020-present

Decoding Dyslexia – Virginia branch

- Provided consultation on screening for dyslexia in kindergarten, 2019-2020

Northwestern National High School Institute summer program in CSD and Neuroscience

- Program organizing committee, 2019
- Presented workshops on scientific communication and brain imaging tools to diverse students

Illinois State Board of Education

- Served as a member of workgroup on revision of Reading Specialist and Reading Teacher licensing and endorsement standards, 2017

Jobs for Dyslexics

- Delivered invited keynote at yearly fundraising dinner
- Provided consultation on science of dyslexia

Everyone Reading Illinois

- Presented to annual conference for teachers, clinicians and parents, 2016 and 2017

Decoding Dyslexia – Massachusetts branch

- Provided expert testimony regarding dyslexia legislation to MA Congress Joint Education Committee
- Organized two meetings on dyslexia research with state Secretary of Education

Landmark School

- Presented to national Outreach event on reading fluency
- Wrote invited blog for Landmark360.org on dyslexia brain research
- Panel member for student career day and for presentations to faculty about dyslexia research