

Elizabeth S. Norton, Ph.D.

2240 Campus Drive
Frances Searle Building
Evanston, IL 60208

(847) 491-2519, office
(617) 286-2856, mobile
enorton@northwestern.edu

CURRENT APPOINTMENTS

- Northwestern University, Evanston, IL** 2015-present
Associate Professor
Jane Steiner Hoffman and Michael Hoffman Assistant Professor (2015-2022)
Department of Communication Sciences & Disorders, School of Communication;
By courtesy, Department of Medical Social Sciences, Feinberg School of Medicine
Northwestern University Interdepartmental Neuroscience (NUIN) program
Principal Investigator, Language, Education and Reading Neuroscience (LEARN) Lab
Director, Neurodevelopmental Core, and Executive Committee member,
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

- NIH – NIDA U01 DA055355 (MPIs Norton & L. Wakschlag) 2021-
9/24- *Healthy Brain and Child Development National Consortium* 2026
NU Site for national HBCD Study
Site Direct Costs: \$4,958,799

NIH – NIDCD R01 DC016273 (MPIs Norton & L. Wakschlag) 2018-
The When to Worry about Language Study (W2W-L): Joint consideration of developmental 2023
patterning and neurodevelopmental context for enhancing early identification of language
impairment. Direct costs: \$2,498,151
 -2 diversity supplements for post-baccalaureate staff
 -COVID-19 supplement to study the effect of COVID pandemic on participants, 2020-2021
 Additional direct costs: \$124,737

NIH - NIMH R01 MH123716 (Site PI; Consortium PI R. Knickmeyer, Michigan State) 2021-
Genetic influences on infant brain development: Understanding the developmental origins of 2026
mental illness
 Site direct costs: \$233,810

Northwestern Memorial Foundation Dixon Translational Research New Investigator Award 2018-
Neural biomarkers of language in preterm infants 2022
 Direct costs: \$34,851 (NCE)

Current Grants as Co-Investigator or Consultant

NIH – NIMH R01 MH121877 (Co-Investigator, PI L. Wakschlag) 2020-
Optimizing Prediction of Preschool Psychopathology from Brain: Behavior Markers of Emotion 2025
Dysregulation from Birth: A Computational, Developmental Cognitive Neuroscience Approach

NIH – NIMH R01 MH107652 (Co-Investigator, PI L. Wakschlag) 2016-
Generating an earlier science of when to worry: A neurodevelopmental, transactional 2022
approach to characterizing irritability patterns beginning in infancy (NCE)

Completed Grants and Fellowships

University of Connecticut Research Excellence Grant (Consultant, PI M. Briggs-Gowan) 2021-
Auditory threat processing in children at-risk for posttraumatic stress disorder 2022

NIH – NIDCD R21 DC017210 2018-
Parent-toddler EEG neural synchrony as a window into social communication deficits in 2022
autism. (No-cost extension to 2022)
 Total direct costs: \$275,000

NIH – NIDA R34 DA050266 (Co-Investigator, PI L. Wakschlag) 2019-
Optimizing access, engagement and assessment to elucidate prenatal influences on 2021
neurodevelopment: The Brains Begin Before Birth (B4) Midwest Consortium (NCE)

NIH – NICHD R03 HD096098 (PI T. Perrachione, Boston University) 2018-
Cortical development and neuroanatomical anomalies in developmental dyslexia. 2020
 Role: Consultant

AHA Strategically-Focused Research Network Grant (PI B. Marino) 2017-
Cardiovascular health in children – Healthier, earlier. 2020
 Role: Co-Investigator and Mentor

NIH – NICHD R01 HD083310 (PI S. Waxman) 2017-
Linking language and cognition in infancy: Entry points and developmental change. 2020
 Role: Co-Investigator (Competing revision – adding EEG/ERP to existing paradigm)

Delaney Fund for Research and Communication Grant 2017-
'Beginning with Babble' to improve language development and communication health in 2019

<i>low-SES toddlers and their parents: a randomized control pilot intervention study.</i>	
Role: PI	Direct costs: \$46,304
Alumnae of Northwestern University Grant, <i>Predicting children's response to intensive summer language intervention</i>	2016
Role: PI	Direct costs: \$4,081
Simons Center for the Social Brain, Schwinn Family Postdoctoral Fellowship, MIT	2013-15
Role: Fellow, 2 years salary + \$10,000 research expenses	
National Science Foundation Graduate Research Fellowship	2007-10
Role: Fellow, 3 years stipend + tuition + \$10,000 research expenses	
Evans Literacy Fellowship, Tufts University	2006-07
Role: Fellow, 1 year stipend + tuition	
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

[^]Indicates Student/postdoc/RA mentee author. Titles are hyperlinks.

Where noted, [SJR journal quartile, Clarivate journal impact factor for pub year, citations]

42. MacNeill, L. A., Krogh-Jespersen, S., Zhang, Y., Giase, G., Edwards, R., ... **Norton, E. S.**, Alshurafa, N., Moskowitz, J. T., Tandon, D., & Wakschlag, L. S. (2022, epub ahead of print). Liability of prenatal stress during the COVID-19 pandemic links to negative affect in infancy. *Infancy*.
41. [^]Nielsen, A. N., Kaplan, S., Meyer, D., Alexopoulos, D., Kenley, J. K., Smyser, T. A., Wakschlag, L. S., **Norton, E. S.** ... & Smyser, C. D. (in press). Maturation of large-scale brain systems over the first month of life. *Cerebral Cortex*. [Q1, 2.07, 0]
40. Ozernov-Palchik, O., Sideridis, G. D., **Norton, E. S.**, Beach, S. D., Wolf, M., Gabrieli, J. D. E., & Gaab, N. (in press). 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*. [Q1, 1.55, 0]
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*. [Q1, 2.24, 0]
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, 0.38, 1]
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, 3.04, 0]
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, 2.64, 7]
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, 2.99, 0]
 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, 1.71, 0]
 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, 3.04, 1]
 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, 6.46, 1]
 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, 8.98, 3]
 30. MacNeill, L. A., Allen, N., Poleon, R., Vargas, T., Osborne, K. J., Damme, K., Barch, D., Krogh-Jespersen, S., **Norton, E. S.**, Smyser, C. D., Rogers, C. E., Luby, J. L., Mittal, V. A. & 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, 4.15, 0]
 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, 3.17, 2]
 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, 5.13, 0]
 27. ^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, 2.30, 19]
 26. **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, 2]
 25. 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, 3.04, 5]
 24. 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, 5.13, 20]
 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, 5]
 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, 5.04, 7]
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, 2.00, 17]
 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, 4.50, 14]
 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, 2.74, 8]
 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, 4.35, 37]
 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, 3.66, 41]
 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, 4.42, 39]
 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, 2.02, 9]
 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, 2.26, 20]
 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, 5.71, 21]
 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, 48]
 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). [Q1, 4.10, 98]
 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, 17.84, 271]
 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, 3.42, 93]
 8. **Norton, E. S.**, Beach, S. D., & Gabrieli, J. D. E. (2015). Neurobiology of dyslexia. *Current Opinion in Neurobiology*, 30, 73-78. [Q1, 6.37, 293]
 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, 3.30, 121]

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, 6.75, 228]
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, 15.27, 786]
4. Gabrieli, J. D. E. & **Norton, E. S.** (2012). Reading abilities: Importance of visual-spatial attention. *Current Biology*, 22(9), 298-299. [Q1, 9.49, 87]
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, 6.54, 171]
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, 1.28, 97]
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, 1.28, 53]

Publication Metrics

In Google Scholar as of 9/12/2022: Citations: 2,958 | H-index: 20 | i-10 index: 27

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. [8 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.

Preprints/Registered Reports

(^Student mentee author)

1. ^McWeeny, S. & **Norton, E. S.** (Stage 1 in-principle acceptance). Auditory processing and reading disability: a systematic review and meta-analysis. *Scientific Studies of Reading*. [OSF Preregistration](#).
2. Mues, M., Zuk, J., **Norton, E.**, Gabrieli, J., Hogan, T. P., & Gaab, N. (preprint, manuscript under review). Clarifying the relationship between early speech-sound production abilities and subsequent reading outcomes. [OSF Preprint](#).
3. 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. (preprint, manuscript under review). What the evidence does (and doesn't) say about the updated CDC milestones for child development: An illustrative example using number of words.

Publications Under Review

([^]Student/postdoc mentee author)

4. [^]Nikolaeva, J. I., [^]Kwok, E., [^]Choi, S., [^]Manning, B. L., Wakschlag, L. S., & **Norton, E. S.** (submitted). Associations between frontal EEG gamma power and late talking status and expressive language ability during toddlerhood.
5. [^]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.
6. Wakschlag, L. S., Pool, L. R., MacNeill, L. A., Krogh-Jespersen, S., Adam, H., Barch, D. M., **Norton, E. S.**, Rogers, C. E., Ahuvia, I., Smyser, C. D., Luby, J. L., & Allen, N. B. (revise and resubmit). Predictive utility of irritability “in context”: Proof-of-principle for an early childhood mental health risk calculator. Special issue of *Journal of Clinical Child and Adolescent Psychology*.
7. Davison, K., Zuk, J., Mullin, L., Ozernov-Palchik, O., **Norton, E. S.**, Gabrieli, J. D. E, Yu, X., & Gaab, N. (accepted pending revisions). Examining shared reading and white matter organization in kindergarten in relation to subsequent language and reading abilities: A longitudinal investigation.
8. Neel, M. L, **Norton, E. S.**, & Maitre, N. (revise and resubmit). Behavioral and neural measures of infant responsivity increase with maternal multisensory input in non-irritable infants.
9. Nayar, K., Guilfoyle, J. L., Stevens, C. J., Elahi, S., [^]Clement-Lam, S., ***Norton, E. S.**, & *Losh, M. (submitted). The neurocognitive underpinnings of global perception in ASD and first-degree relatives: A neurophysiological study of illusory contour processing. (**co-senior authors*)
10. Alex, A. M., Buss, C., Davis, E. P., de los Campos, G., ... **Norton, E. S.**, ... & Knickmeyer, R. for the ENIGMA ORIGINS group (submitted). Genetic influences on the developing young brain and risk for neuropsychiatric disorders.
11. 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. (submitted). The science, art, and secrets of scanning young children.

Publications in Preparation

12. [^]Manning, B. L., & Roberts, M., & **Norton, E. S.** Neural correlates of naturalistic face-to-face parent-child interaction in typical child development and autism.
13. **Norton, E. S.**, [^]Page, J. M., Sherlock, P., Briggs-Gowan, M., & Wakschlag, L. S. The impact of parent factors on toddlers’ language and irritable behavior: a latent profile analysis.
14. [^]McWeeny, S., [^]Choe, Y. J., & **Norton, E. S.** SnowGlobe: A tool for streamlining forward and backward searching for systematic reviews and meta-analyses. [OSF Page](#).
15. [^]Clement-Lam, S., [^]McWeeny, S., [^]Manning, B. L., & **Norton, E. S.** The neural correlates of letter-sound integration and its relation to children’s reading performance.
16. LaTourrette, A., Waxman, S. Wakschlag, L. S., **Norton, E. S.**, & Weisleder, A. From word recognition to word learning: Comparing online speech processing in typically developing and late-talking 2-year-olds.

AWARDS and HONORS

Clarence Simon Award for Outstanding Teaching and Mentoring School of Communication, Northwestern University	2020
ASHA Lessons for Success, Invited alumni speaker	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 <i>Best research presentation among Ph.D. students of all disciplines</i>	2012
Graduate Travel Award , Tufts University, <i>Awarded five times</i>	2007-2012
Sigma Xi Outstanding Thesis Award , Dartmouth College	2005

SOFTWARE DEVELOPED

SnowGlobe (<https://snowglobe.soc.northwestern.edu/>) is an open-source tool for academic literature searching, specifically for conducting rigorous forward and backward (“snowball”) searches, crucial for systematic reviews and meta-analyses. This novel software, developed by students Sean McWeeny & 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

University of Toronto, Department of Psychology	2021
Lurie Children’s Hospital, Neuroscience of Disease Series	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
Dartmouth College, Psychological and Brain Sciences Department, Cognitive Brown Bag Series	2008

Invited Conference Presentations

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
ASHA Convention	2017, 2019
Netherlands Institute for Advanced Study, Wassenaar, Netherlands <i>Invited presentation at Cross-Linguistic Perspectives on Dyslexia workshop</i>	2014
MIT, Simons Center for the Social Brain, <i>Workshop on The Social Brain: Opportunities for Discovery & Technology Development</i>	2014

Invited Talks for Professional and Educational Organizations

Hyde Park Day School, Bellick Family Community Education Program, Hyde Park, IL	2021
Northwestern Medicine: Women in Medicine Seminar Series, <i>MD-PhD partnerships</i>	2021
Commonwealth of Virginia, Department of Education (Series of 3 lectures)	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
Everyone Reading Illinois Annual Conference, Naperville, IL	2016-17, 2020
Jobs for Dyslexics, Annual Gala, Chicago, IL	2016
Watertown Public Schools, Watertown, MA	2012
Landmark School, Beverly, MA	2011

Invited Talks at Northwestern University

DevSci Institute, Scientific Exchange on HBCD Study	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 mentee author*)

[^]McWeeny, S., [^]Choi, S.J., [^]Choe, J., Roberts, M. & **Norton, E. S.** (2022). Rapid automatized naming (RAN) as a kindergarten predictor of future reading: A systematic review and 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). A pilot investigation of 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.** (2014). Predicting 1st grade reading from kindergarten ERP, MRI and behavior: Toward accurate early identification of dyslexia. New England Research on Dyslexia Society, Boston, MA.
- 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-compensational 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

- 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 and 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.
- 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.
- Ullman, C., **Norton, E. S.**, Gottwald, S., Spencer, K., & Wolf, M. (2009). Evidence for a fluency-specific deficit in 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 (capped at 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 in children who are bilingual, acquiring a signed language, in poverty, or have a language disorder. Research methods and inquiry are highlighted. Enrollment 25-37 students.

Seminar: Experimental and Theoretical Aspects of Audiology, CSD 516 2017-2022
 The goal of this PhD student seminar (sometimes co-taught) is to review major and emerging issues in hearing sciences and their relation to broader communication. Students engage in a journal club format to evaluate articles from the literature in terms of their 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 lead 4 workshops and work with students individually to complete their honors thesis. Workshops focus on development of their projects from communicating methods and results to developing an effective spoken presentation. 2-6 students per year typically complete the honors thesis.

Previous 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 October 2022-2025; Ad-hoc member June 2018
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:** University of Rochester Del Monte Neuroscience grants, 2022
Research Grants Council of Hong Kong, 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>American Journal of Speech-Language Pathology</i> | <i>Journal of Research in Reading</i> |
| <i>Brain Structure & Function</i> | <i>Journal of Speech, Language, and Hearing Research</i> |
| <i>Cerebral Cortex</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>PLoS One</i> |
| <i>Journal of the American Academy of Child & Adolescent Psychiatry</i> | <i>Psychophysiology</i> |
| <i>Journal of Educational Psychology</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
- Outside thesis examiner:** University of Western Ontario, Department of Psychology, 2020
University of Western Australia, School of Psychological Science, 2017
- Advisory boards:** 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
"Bridging the word gap" grant project, 2015-2016
- Continuing education:** Certificate in Leadership and Management Strategies for Clinical Investigators, NU Kellogg School of Management, May 2022

Society memberships: Cognitive Neuroscience Society
Society for the Scientific Study of Reading, Voting Member, 2015–present
Society for Research in Child Development
International Dyslexia Association
Society for Neuroscience

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

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-leader, Northwestern University Autism Research and Clinical Collaborative (NUARCC), 2019–present
Advisor, Desire 2 Aspire (mentoring group for undergraduate women to support elementary-age girls), 2019–present
Faculty search committee (developmental MRI focus), Department of Medical Social Sciences, 2021-2022
Provost’s Pandemic Faculty Impact Response Workgroup, 2021
Faculty search committee, Department of Psychology, 2017-2018

School / departmental service: Director of Undergraduate Studies, CSD Department, 2020–present
Module designer and coordinator, The Communicating Brain, 2018–present
Module coordinator, Children and Communication, 2019–present
Undergraduate committee, Chair, 2018-present, member 2015–present
PhD program committee, 2015–present
NTE faculty/academic advisor in SoC search committee, 2022
Mancosh Pathways to the Professorate program, review committee, 2021
Committee on the first-year experience, School of Communication, 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, primary mentor (7)

Silvia Clement-Lam, Ph.D. '19 (2015-19) – postdoc (F32 w/Fumiko Hoeft, University of Connecticut)
Brittany Manning, CCC-SLP Ph.D. '21 (2016-21) – postdoc (w/Sophy Kim, Weill Cornell Medical Center)
Serena Mon (2022-present)
Sean McWeeny, Ph.D. '22 (2016-2022) – postdoc (w/Laurel Trainor, LIVE Lab, McMaster University)
Hudi (Judith) Licht (2021-present)
Julia Nikolaeva (2019-present)
Jinnie (Soujin) Choi (2019-present)

Northwestern PhD students, doctoral rotation or program/thesis committee member (22)

CSD students unless noted (e.g., NUIN, Northwestern Interdisciplinary Neuroscience PhD)

Peiyao Chen, Ph.D. '19 (2015-19)
Phillip Curtis, Ph.D. '21 (2016-19)
Donnisa Edmonds, NUIN (2022; lab rotation)
Hannah Feiner (2022-present)
Hannah Fipp-Rosenfield (2021-present)
Kahla Graham CCC-SLP (2022-present)
Lisa Gresch CCC-SLP (2017-19; lab rotation)
Allison Hilger CCC-SLP, Ph.D. '20 (2017-18; lab rotation)
Maranda Jones (2019-present)
Jordan Lee (2021-present)
Kailyn McFarlane (2021-present)
Kritika Nayar, Ph.D. '20, Clinical Psychology (2015-2020)
Amanda Nili, Clinical Psychology (2017-present; NIH diversity supplement co-mentor)
Alejandra Reinoso (2022-present)
Bailey Sone CCC-SLP (2019-present)
Yael Stern, Ph.D. '21 (2016-present)
Devin St. John (2015-16; lab rotation)
Murielle Standley (2021-present)
Kenya Thomas (2019)
Anele Villanueva (2019-present)
Kristi Ward, Ph.D.-Au.D. '20 (2017-20; NIH F31 co-sponsor)
Matthew Zellner CCC-SLP (2021-present)

Northwestern postdoctoral Scholars, primary mentor (3) and 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) – Research Fellow, American Academy of Sleep Medicine

Northwestern MS-SLL (speech-language pathology) student research assistants (16)

Biya Ahmed, '19 (2017-18)
Emma Baime '20 (diagnostic clinical placement, 2018-2020)
Maggie Boland, '19 (2017-19)
Sara Brown '17 (2016-17)
Celia Kaufer '17 (2016-17)
Eliana Cashman '19 (2017-19)
Kiera Cook '18 (honors thesis, 2017-18)
Shauna Czarnik '17 (2017)
Caitlin Hertzendorf (2021)
Alexandra Harpole '20 (honors thesis, diagnostic clinical placement, 2018-20)
Ann Lee '17 (2017)
Shradha Mehta '18 (2017)
Camille Nuttall '20 (2018-20)
Heather Turnbull '17 (2017)
Gabrielle Schwarte, '18 (diagnostic clinical placement, 2018)
Linda Selph '17 (2016)
Jiaxin Alice Wang '21 (2019-21)

Northwestern Undergraduate Students (26)

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:

Elaine Botros (2020-present)
Victor Criollo (2022-present)
Nathalie Diaz-Lopez (EREA, 2020-present)

Natalia Kolek (SIGP, honors thesis, 2020-present)
Winnie Liang (EREA, all-school outstanding sophomore honor, independent study, 2018-present)

Anabel Marre (2020-present)
Amira Mohamed (2022-present)
Vivianna White (EREA, 2021-present)
Ola Wicko (independent study, SIGP, URG, honors thesis, 2020-present)

Undergraduate alumni and their current roles:

Emma Baime '18 (2017-18) – MS-SLP at Northwestern '21; early intervention provider
June Choe '20 (2019-20) – PhD student in Linguistics, University of Pennsylvania
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, Vanderbilt University
Shelby Isaacs '18 (independent study, honors thesis, 2016-18) – Medical student, 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
Gabriella Leibowitz '21 (URAP, 2020-present) - SLP master's student, Northwestern
Jade Tierra Mitchell '18 (independent study, 2017-18) - SLP master's program, Vanderbilt, CCC-SLP
Olufemi Nyabingi '21 (Weinberg summer research grant, URG, honors thesis, 2019-21) – Research Assistant, Nathan Fox lab, University of Maryland College Park
Skylar Ngozichukwu Ozoh '19 (URG, 2017-19) – applying to medical school
Meakailyn Philips (EREA, 2019-2020)
Kamila Postolowicz '20 (EREA, undergraduate language grant, independent study, 2017-2020) – SLP master's program, University of Wisconsin-Madison
Anuradha Raife '20 (2019-20) – consultant/computer scientist
Smitha Ramesh (URAP, 2020-2021)
Cadence Reed-Bippen '20 (EREA, 2016-20) – applying to SLP master's programs
Tessneem Shahbandar (2021-22)
Ambreen Zaidi '20 (2019-20) – applying to medical school
Kevin Zhang '19 (URG, 2016-17) – Researcher, St. Jude Children's Research Hospital

Other Students/Mentees

(HS=high school)

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

Trainee Grants Mentored

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/The Ohio State University), consultant on K23 application (resubmitted), *Early multimodal measures of preterm infant-parent emotional connection*

MEDIA and PRESS COVERAGE

- Coverage of Liability of prenatal stress liability 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](#) (satire is an extreme form of flattery)
- "Doing Good Science and Doing Good"** 2022
[Holderness School Today](#) alumni profile
- General Info on Child/Brain Development**
[Fatherly.com](#), 'Your kid's brain development in the first 1,000 days' 2021
- 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](#), 09/14/2021, '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** 2016
Covered by Ars Technica, Science Daily, and others.
[MIT News Office article](#)
[Commentary](#) in journal issue by Dehaene & Dehaene

- NPR, “Here and Now” story on dyslexia prediction research** 2014
Story about dyslexia and brain imaging research with kindergarteners produced by WBUR Boston
- Coverage of “Tracking the Roots of Reading Ability” paper** 2013
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.
- Newsweek, “Is Brain-Based Learning a Myth?”** 2012
Discussed findings from “Are There Separate Neural Systems for Spelling?” paper

PUBLIC OUTREACH AND ADVOCACY

Hyde Park Day Schools, Illinois

- Provided consultation and talk 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

- Wrote invited blog for Landmark360.org on dyslexia brain research
- Panel member for student career day and for presentations to faculty about dyslexia research