

Eric D. Wilkey, PhD

Contact Information

Department of Psychology & Human Development
Peabody College, Vanderbilt University
230 Appleton Place, PMB 552
Nashville, TN 37203

Phone: 615-421-1611

Email: eric.d.wilkey@vanderbilt.edu

Website: ericdwilkey.com

EDUCATION

- Ph.D.** 2013 – 2018
Neuroscience
Vanderbilt University, Nashville TN
- M. Ed.** 2010 – 2011
Mind, Brain and Education
Harvard University, Cambridge, MA
- B.A.** 2003 – 2007
Philosophy, minors in Classical Greek and Studio Art
Belmont University, Nashville, TN

APPOINTMENTS

- Assistant Professor** *June 2022 – present*
Department of Psychology & Human Development
Peabody College, Vanderbilt University
- Assistant Professor** *Jan 2022 - present*
Center for Computation & Technology
Louisiana State University
- Jan 2022 – May 2022*
Department of Psychology
Louisiana State University
- Postdoc** 2018 – 2021
Brain and Mind Institute
Western University, London, ON, Canada
Advisor: Dr. Daniel Ansari

- Research Analyst** 2011 – 2013
 Vanderbilt University, Peabody Research Institute
- Large-scale meta-analysis of predictors of school success
 - City-wide Kindergarten reading intervention assessment

FELLOWSHIPS & AWARDS

- 2021 Awarded Western University Postdoctoral Scholar of the Year
- 2019–2021 *Banting Postdoctoral Fellowship* (only 70 awarded yearly across Canada), awarded by The Natural Sciences and Engineering Research Council of Canada (NSERC) \$140,000 CAD (\$70K per year CAD).
- 2019–2021 *BrainsCAN Tier I Postdoctoral Fellowship Award Top-Up*, University of Western Ontario, \$20,000 CAD (\$10K per year CAD).
- 2018 Travel grant award by BrainsCAN to attend a workshop on Open Science at University College Cork, Ireland (October 2018)
- 2017–2018 *Hardy Culver Wilcoxon Award*, presented by the Peabody College Department of Psychology & Human Development (Vanderbilt University) to the graduate student with the most distinguished doctoral dissertation in any area of Psychological Inquiry.
- 2017 Competitive *Research-Achievement Fellowship* from Vanderbilt Department of Psychology and Human Development. Award provides stipend for one semester to pursue research aims that build on a previous first-author publication.
- 2016 Fellow at Kavli Summer Institute in Cognitive Neuroscience, UC Santa Barbara, 2016. Fellowship for tuition, room, and board.
- 2016 Stipend awarded from NIH to present at NIH and IES funded Math Cognition and Learning Conference special topic: The Role of Linguistic and Cultural Factors in Mathematical Cognitive Development, Ft. Worth, Texas.
- 2015–2018 Peabody Dean's Fellowship for PhD (Vanderbilt University).
- 2013–2018 Peabody Graduate Honors Scholarship (Vanderbilt University)
- 2014 IMBES outstanding poster award at International Mind, Brain and Education Society, Fort Worth, TX.

GRANTS

- 2020-2023 Co-Investigator (PI's David Purpura, Caroline Hornburg), *My Math Stories: Taking My Place in Our Mathematical World*, NewSchools Venture Fund, \$2,000,000 USD.
<https://www.efmathprogram.org/our-mathematical-world>
- 2022-2023 Collaborator (PI Benjamin Clarke), Mapping Non-Response to Math Interventions \$593,414.00, NSF (1660840) – Subaward to Vanderbilt for 2022

PUBLICATIONS | [ORCiD](#) | [Google Scholar](#) | [ResearchGate](#)

Peer-Reviewed Articles (n = 19, h-index = 12 via google scholar)

- Wilkey, E. D.**, Shanley, L., Sabb, F., Ansari, D., Cohen, J. C., Men, V., Heller, N. A., & Clarke, B. (2022). Sharpening, focusing, and developing: A study of change in nonsymbolic number comparison skills and math achievement in 1st grade. *Developmental Science*, 25(3), e13194.
<https://doi.org/10.1111/desc.13194>
- Pollack, C., **Wilkey, E. D.**, & Price, G. R. (2022). Predictors of Middle School Students' Growth in Symbolic Number Comparison Performance. *Journal of Numerical Cognition*, 8(1), 53–72.
<https://doi.org/10.5964/jnc.8069>
- Lau, T. T., **Wilkey, E. D.**, Soltanlou, M., Lagacé-Cusiac, R., Peters, L., Tremblay, P., Goffin, C., Starling Alves, I., Ribner, A. D., Thompson, C., Van Hoof, J., Bahnmueller, J., Alvarez, A., Bellon, E., Coolen, I., Ollivier, F., Ansari, D. (2022) Numeracy and COVID-19: examining interrelationships between numeracy, health numeracy and behaviour. Project page: <https://osf.io/qpdnt/>
- Lynn, A., **Wilkey, E. D.**, & Price, G. R. (2021). Predicting Children's Math Skills from Task-Based and Resting-State Functional Brain Connectivity. *Cerebral Cortex*, 1–11, epub ahead of print.
<https://doi.org/https://doi.org/10.1093/cercor/bhab476>
- Wilkey, E. D.**, & Ansari, D. (2020). Challenging the neurobiological link between number sense and symbolic numerical abilities. *Annals of the New York Academy of Sciences*.
<https://doi.org/10.1111/nyas.14225>
- Wilkey, E. D.**, Conrad, B. N., Yeo, D. J. & Price, G. R. (2020). Shared Numerosity Representations Across Formats and Tasks Revealed with 7 Tesla fMRI: Decoding, Generalization, and Individual Differences in Behavior. *Cerebral Cortex Communications*. <https://doi.org/10.1093/texcom/tgaa038>
- Conrad, B. N., **Wilkey, E. D.**, Yeo, D. J. & Price, G. R. (2020). Network topology of symbolic and nonsymbolic number comparison. *Network Neuroscience*. https://doi.org/10.1162/netn_a_00144
- Wilkey, E.D.**, Pollack, C., Price, G. R. (2020). Dyscalculia and typical math achievement are associated with individual differences in number specific executive function. *Child Development*, 91(2), 596-619. <https://doi.org/10.1111/cdev.13194>

Yeo, D. J., **Wilkey, E.D.**, Price, G. R. (2019). Malleability of mapping between Arabic numerals and approximate quantities: Factors underlying individual differences and the relation to math. *Acta Psychologica*, 198, 102877. <https://doi.org/10.1016/j.actpsy.2019.102877>

Wilkey, E. D., & Price, G. R. (2019). Attention to number: The convergence of numerical magnitude processing, attention, and mathematics in the inferior frontal gyrus. *Human Brain Mapping*, 1–16. <https://doi.org/10.1002/hbm.24422>

Wilkey, E. D., Cutting, L. E., & Price, G. R. (2018). Neuroanatomical correlates of performance in a state-wide test of math achievement. *Developmental Science*, 21(2), e12545. <http://doi.org/10.1111/desc.12545>

Price, G. R., Yeo, D. J., **Wilkey, E. D.**, & Cutting, L. E. (2018). Prospective relations between resting-state connectivity of parietal subdivisions and arithmetic competence. *Developmental Cognitive Neuroscience*, 30, 280–290. <http://doi.org/10.1016/j.dcn.2017.02.006>

Wilkey, E. D., Barone, J. C., Mazzocco, M. M. M., Vogel, S. E., & Price, G. R. (2017). The effect of visual parameters on neural activation during nonsymbolic number comparison and its relation to math competency. *NeuroImage*, 159 (August), 430–442. <http://doi.org/10.1016/j.neuroimage.2017.08.023>

Price, G. R. & **Wilkey, E. D.** (2017). Cognitive mechanisms underlying the relation between nonsymbolic and symbolic magnitude processing and their relation to math. *Cognitive Development*, 44(September), 139–149. <http://doi.org/10.1016/j.cogdev.2017.09.003>

Yeo, D. J., **Wilkey, E. D.**, & Price, G. R. (2017). The search for the number form area: A functional neuroimaging meta-analysis. *Neuroscience & Biobehavioral Reviews*, 78(April), 145–160. <http://doi.org/10.1016/j.neubiorev.2017.04.027>

Price, G. R., **Wilkey, E. D.**, & Yeo, D. J. (2017). Eye-movement patterns during nonsymbolic and symbolic numerical magnitude comparison and their relation to math calculation skills. *Acta Psychologica*, 176(March), 47–57. <http://doi.org/10.1016/j.actpsy.2017.03.012>

*Merkley, R., **Wilkey, E. D.**, & Matejko, A. A. (2016). Exploring the Origins and Development of the Visual Number Form Area: A Functionally Specialized and Domain-Specific Region for the Processing of Number Symbols? *Journal of Neuroscience*. 36, 4659–4661. DOI: <http://dx.doi.org/10.1523/JNEUROSCI.0710-16.2016>

* co-first-author publication

Price, G. R., **Wilkey, E. D.**, Yeo, D. J., & Cutting, L. E. (2016). The relation between 1st grade grey matter volume and 2nd grade math competence. *NeuroImage*, 124, 232–237. <https://doi.org/10.1016/j.neuroimage.2015.08.046>

Tripney, J., Hombrados, T. J., Newman, M., Hovish, K., Brown, C., Steinka-Fry, K., & **Wilkey, E. D.**

(2013). Technical and Vocational Education and Training Training (TVET) Interventions to Improve the Employability and Employment of Young People in Low- and Middle Income Countries : Systematic Review. *Campbell Systematic Reviews*, 9. [doi:10.4073/csr.2013.9](https://doi.org/10.4073/csr.2013.9)

Book Chapters, Encyclopedia Entries, and Reports (n = 3)

Price, G. R. & **Wilkey, E. D.** (2018). Developmental Dyscalculia. In *The SAGE encyclopedia of intellectual and developmental disorders*. E. B. Braaten (Ed.). (Vol. 1, pp 379-383). Thousand Oaks, CA. Sage. <http://dx.doi.org/10.4135/9781483392271.n125>

Wilson, S. J., & **Wilkey, E. D.** (2012). Final evaluation report: Enhanced Language and Literacy Project. Unpublished manuscript. Nashville, TN: Peabody Research Institute, Vanderbilt University.

Cerruti, C., **Wilkey, E. D.**, (2011) Verbal overshadowing and verbal facilitation in creative cognition. In L. DellaPietra (Ed.), *Perspectives on Creativity Vol. 2*. (pp. 178-187). Cambridge, UK: Cambridge Scholars Press. [download](#).

Manuscripts In Progress (n = 4) (in press, registered reports accepted, and under review)

Wilkey, E. D., Peiris, A., Gupta, I., Ansari, D. (*under review*) The Mathematical Brain at Rest.

Smith, J., **Wilkey, E. D.**, Clarke, B., Shanley, L., Men, V., Fair, D., Sabb, F. W.. (*under review*) Can this data be saved? Techniques for high motion in resting state scans of first grade children.

*Kwok, F.Y., ***Wilkey, E. D.**, *Peters, L., Khiu, E., Lee, K., Rifkin, A., Bull, R., Ansari, D. (*under review*) Math learning difficulties are not associated with atypical brain activation during basic number processing, mental arithmetic, or visuo-spatial working memory: an fMRI study. Preregistration here: <https://osf.io/vsr8b>

* **co-first-authors**

Mielicki, M., **Wilkey, E. D.**, Scheibe, D., Fitzsimmons, C., Sidney, P., Bellon, E., Ribner, A., Soltanlou, M., , Starling-Alves, I., Coolen, I., Ansari, D., Thompson, C. A.. (*under review*) Task features change the relation between math anxiety and number line estimation performance with rational numbers: Two large-scale online studies. Preregistration: <https://doi.org/10.31219/osf.io/wvezm>

PRESENTATIONS

International Conference Talks & Poster Presentations (indicates conference talk (n = 31)**

****Wilkey, E.D.**, Kwok, F.Y., Peters, L., Ansari, D. Developmental Dyscalculia is not associated with atypical brain activation during basic number processing, mental arithmetic, or visuo-spatial working memory: an fMRI study. **Symposium talk presented at** the annual conference of the Mathematical Cognition and Learning Society, Antwerp, Belgium. June 2022.

Kwok, F.Y., **Wilkey, E.D.**, Peters, L. Khiu, E., Cheung, P., Lee, K., Bull, R., Ansari, D., (2022) No evidence for functional neuroanatomical deficits in children with dyscalculia. Poster presented at the Organization of Human Brain Mapping Annual Meeting, Glasgow, Scotland. June, 2022.

Hornburg, C. B., McElveen, T. L., Miller-Cotto, D., **Wilkey, E. D.**, Ribner, A. D., Prishker, N., Choe, K. W, Mayes, A. S., Andres-Salgarino, M. B., Powell, S. R., Schmitt, S. A., & Purpura D. J. (2022). Relations among a sense of belonging to math, math identity, and math achievement in the late elementary grades. **Poster presented at** the annual conference of the Mathematical Cognition and Learning Society, Antwerp, Belgium. June 2022.

Cook, M., Shanley, L., **Wilkey, E. D.**, Sabb, F., Clarke, B. (2022) Examining patterns of network connectivity associated with symbolic and non-symbolic numerical magnitude processing for first graders using rs-fcMRI. **Poster presented at** the annual conference of the Mathematical Cognition and Learning Society, Antwerp, Belgium. June 2022.

Lynn, Andrew, **Wilkey, E. D.**, Price, G. R. (2021). Predicting children's math skills from functional brain network connectivity. **Poster presented at** the Organization of Human Brain Mapping Annual Meeting. June 2021.

Lynn, Andrew, **Wilkey, E. D.**, Price, G. R. (2021). Canonical network functional connectivity predicts math achievement in childhood: A connectome-based predictive modeling approach. **Poster presented at** the Flux Virtual Congress. September 2021.

****Wilkey, E. D.** (accepted 2020 – conference canceled). Attention to Number: The convergence of numerical magnitude processing, attention, and mathematics development. **Symposium talk to be presented at** the biennial conference of the International Mind, Brain, and Education Society, Montreal, Canada. June 2020.

****Wilkey, E. D.**, Conrad, B. N., Price, G. R. (2020) Shared Representation of Symbolic and Nonsymbolic Number, But Overlap Negatively Predicts Math. **Symposium talk presented at** the annual conference of the Organization of Human Brain Mapping, Montreal, Canada. June 2020.

Wilkey, E. D., Conrad, B. N., Price, G. R. (2020) Shared Representation of Symbolic and Nonsymbolic Number, But Overlap Negatively Predicts Math. **Poster to be presented at** the annual conference of the Organization of Human Brain Mapping, Montreal, Canada. June 2020.

Wilkey, E. D., Conrad, B. N., Price, G. R. (2020) Individual Differences in Shared Representation of Symbolic and Nonsymbolic Number at 7T fMRI. **Poster to be presented at** the annual conference of the Association for Psychological Science, Chicago Illinois. May 2020.

****Wilkey, E. D.** & Price, G. R. (2019). Attention to Number: The convergence of numerical magnitude processing, attention, and mathematics. **Symposium talk presented at** the annual conference of the Mathematical Cognition and Learning Society, Ottawa, Ontario. June 2019.

Pollack, C., **Wilkey, E. D.**, Price, G. R. (2019) What predicts middle school students' growth in symbolic number comparison performance? **Poster presented at** the biennial conference of the Society for Research in Child Development, Baltimore, Maryland, USA. March 2019.

Wilkey, E.D. & Price, G. R. (2018). The influence of attentional modulation on numerical magnitude processing mechanisms and their relation to math achievement. **Poster presented at** the biennial conference of the International Mind, Brain, and Education Society, Los Angeles, USA. September 2018.

Conrad, B. N., **Wilkey, E. D.**, & Price, G. R. (2018). Frontoparietal reorganization during symbolic and nonsymbolic number processing. **Poster presented at** the annual conference of the Society for Neuroscience, San Diego. November 2018.

Yeo, D. J., **Wilkey, E.D.**, Price, G. R. (2018). Malleability of mapping between Arabic numerals and approximate quantities: Factors underlying individual differences and the relation to math. **Poster presented at** the Mathematics Education Center's 3rd annual symposium: The symbol grounding problem, Loughborough, UK. June 2018.

Wilkey, E.D., Pollack, C., & Price, G.R. (2018). ANS acuity, mathematics achievement, and dyscalculia: Evidence for a domain-specific executive function relation. **Poster presented at** the Annual Meeting of the Cognitive Neuroscience Society, Boston, MA. March 2018.

****Conrad, B. N., Wilkey, E. D., & Price, G. R. (2018). Network Topology of Symbolic and Nonsymbolic Number Processing: A 7T fMRI Study. Data blitz talk presented at** the Annual Meeting of the Cognitive Neuroscience Society, Boston, MA. March 2018.

Conrad, B. N., **Wilkey, E. D.**, & Price, G. R. (2018). Network Topology of Symbolic and Nonsymbolic Number Processing: A 7T fMRI Study. **Poster presented at** the Annual Meeting of the Cognitive Neuroscience Society, Boston, MA. March 2018.

****Wilkey, E.D.**, Barone, J. C., Mazzocco, M. M. M., Vogel, S. E., & Price, G. R. (2017). The Influence of Visual Cues on Nonsymbolic Number Comparison and Their Relation to Math Competency. **Nanosymposium talk presented at** the annual conference of the Society for Neuroscience, Washington, DC. November, 2017.

Yeo, D. J., **Wilkey, E. D.**, & Price, G. R. (2017). An ALE meta-analytical search for the putative number form area and its associated network. **Poster presented at** the annual conference of the Organization of Human Brain Mapping, Vancouver, Canada. June 2017.

Wilkey, E. D., & Price, G. R. (2017). Symbolic and Nonsymbolic Magnitude Processing, the Neural Distance Effect, and Math Achievement. **Poster presented at** the annual conference of the Organization of Human Brain Mapping, Vancouver, Canada. June 2017.

Wilkey, E.D., Barone, J. C., Mazzocco, M. M. M., Vogel, S. E., & Price, G. R. (2017). The Influence of Visual Cues on Nonsymbolic Number Comparison and Their Relation to Math Competency. **Poster presented at** the Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA March

2017.

Yeo, D. J., **Wilkey, E. D.**, & Price, G. R. (2017). The search for the putative number form area: A meta-analysis. **Poster presented at** the Annual Meeting of Cognitive Neuroscience Society, San Francisco, CA, March 2017.

Wilkey, E.D., Barone, J. C., Mazzocco, M. M., Vogel, S. E., Price, G. R. (2016). The Influence of Non-Numeric Visual Parameters on Performance and Neural Activation Patterns During Nonsymbolic Number Comparison. **Poster presented at** the biannual conference of the International Mind, Brain, and Education Society, Toronto, Canada. September 2016.

Yeo, D. J., **Wilkey, E.D.**, Price, G. R. (2016). The relation between numerical estimation flexibility and mathematical competence. **Poster presented at** the biannual conference of the International Mind, Brain, and Education Society, Toronto, Canada. September 2016.

Wilkey, E.D., Price, G. R. (2016). Eight-Year Growth in Math Skills and Its Relationship to Nonsymbolic and Symbolic Number Processing. **Poster presented at** the NIH and IES funded Math Cognition and Learning Conference special topic: The Role of Linguistic and Cultural Factors in Mathematical Cognitive Development, Ft. Worth , Texas. May 2016.

Yeo, D. J. , **Wilkey, E.D.**, Price, G. R. (2016). Eye movement patterns underlying symbolic and nonsymbolic numerical magnitude comparison. **Poster presented at** the NIH and IES funded Math Cognition and Learning Conference special topic: The Role of Linguistic and Cultural Factors in Mathematical Cognitive Development, Ft. Worth, Texas. May 2016.

Wilkey, E.D., Price, G. R. (2016). Task-Specific Processing of Arabic Digits in the Left Angular Gyrus. **Poster presented at** the annual conference of Cognitive Neuroscience Society, New York City, NY. April 2016.

Price, G. R., **Wilkey, E.D.**, Yeo, D. J., Cutting, L. E. (2015). Resting-State Connectivity At 1st Grade Predicts Math Competence at 2nd Grade. **Poster presented at** the annual conference of the Society for Neuroscience, Chicago, IL. October 2015.

Wilkey, E.D., Price, G. R., Cutting, L. E. (2015). Neuroanatomical Correlates of Performance in State-Wide Test of Math Achievement. **Poster presented at** the annual conference of the Cognitive Neuroscience Society, San Francisco, CA March 2015.

* Price, G. R., **Wilkey, E.D.**, Cutting, L. E. (2014). Neuroanatomical predictors of 3rd Grade Math Competence. **Poster presented at** the biannual conference of the International Mind, Brain and Education Society, Fort Worth, TX. November 2014.

* outstanding poster award; only one award for research posters at conference

Invited Talks

Title: Neurocognitive Foundations of Math Skills
Date: June 14th, 2022

- Event:** The Dyslexia Foundation: Extraordinary Brain Series XVIII
Location: Bermuda
- Title:** IMBES Ask Me Anything with Lina Shanley and Eric Wilkey
Date: March 29th, 2022
Event: International Mind Brain & Education Society: Ask-Me-Anything Series
Location: virtual
- Title:** Challenging & Investigating the Link Between Symbolic and Nonsymbolic Numbers
Date: March 8th, 2022
Event: Centre for Mathematical Cognition, Seminar
Location: virtual, Center for Mathematical Cognition, Loughborough University, UK
- Title:** Sharpening, Focusing, Developing
Date: February 14th, 2022
Event: Learning Research & Development Center, lab presentation
Location: virtual, University of Pittsburgh
- Title:** Academic Job Market Panel
Date: August 20th, 2021
Event: Mathematical Cognition & Learning Society (MCLS) 2021
Location: virtual MCLS conference panel
- Title:** Preparing for the Academic Job Market
Date: July 30th, 2021
Event: Postdoc Professional Development Series
Location: University of Western Ontario, London, Ontario, Canada
- Title:** Foundations of Mathematics
Date: September 16th, 2020
Event: Educational Psychology Colloquium
Location: University of Alabama, Tuscaloosa
- Title:** Going for the Big Prize
Date: February 26th, 2020
Event: Scholars to Leaders Speaker Series
Location: Western University; London, Ontario
- Title:** Open Science in Numerical Cognition (workshop)
Date: June 16th, 2019
Event: Workshop, Mathematical Cognition and Learning Society Annual Conference
Location: Carleton University; Ottawa, Ontario
- Title:** Attention to Number, Neurocognitive Foundations of Mathematical Competence
Date: May 31st, 2019
Event: Visiting Scholar, Research Group Talk

Location: University of Oregon; Eugene, Oregon

Title: Panel Discussion on Securing a Postdoctoral Fellowship

Date: May 2nd, 2019

Event: Postdoctoral Research Forum

Location: Western University; London, Ontario; Canada

Title: Open Science

Date: November 13th, 2018

Event: Knowledge dissemination; sponsored workshop

Location: Western University, London, ON

Title: *Learning and the Brain: Where are we now* (**keynote address**)

Date: July 20, 2016

Conference: Making Math Matter: Integrating Math Skills in Grades PK – 8; Teacher Training

Location: Memphis, TN

Title: *The Mathematical Brain*

Date: July 19, 2016

Conference: Making Math Matter: Integrating Math Skills in Grades PK – 8; Teacher Training

Location: Memphis, TN

Title: *The Mathematical Brain*

Date: March 1, 2016

Event: Brain Awareness Month; talk open to the general public

Location: Nashville, TN

TEACHING

Vanderbilt University

2022 Cognitive Aspects of Human Development

Louisiana State University

2022 Cognitive Neuroscience

MENTORING

Vanderbilt University

Jake Kaufman (2022 – current)

Ph.D. Psychology, Vanderbilt University

Role: Advisory Committee Member

Western University

Julia Schmid (2019 - 2022), honors undergraduate in Neuroscience

- co-advisor for NSERC award (Summer 2021)
- co-advisor for independent study (Spring 2021)

Ashini Peiris (2019 - 2022), honors undergraduate in Neuroscience

- co-advisor for Diversity in Neuroscience Summer Internship (2021)
- co-advisor for USRI award (undergraduate summer research internship, 2020)

Ira Gupta (2019 - 2022), honors undergraduate in Neuroscience

- co-advisor for USRI award (undergraduate summer research internship, 2021)
- co-advisor for USRI award (undergraduate summer research internship, 2020)

SERVICE

Editorial Boards:

Developmental Psychology, Editorial Board Reviewer

Ad hoc Journal Article Reviews:

Acta Psychologica

Attention, Perception, & Psychophysics

Brain and Cognition

Cerebral Cortex

Child Development

Child Neuropsychology

Cognition

Cognitive Science

Communications Biology

Current Research in Behavioral Sciences

Developmental Psychology

Developmental Cognitive Neuroscience

eLife

Human Brain Mapping

Journal of Cognitive Neuroscience

Journal of Educational Psychology

Journal of Experimental Child Psychology

Journal of Experimental Psychology: Human

Perception and Performance

Journal of Neuroscience

Neuroimage

Neuroimage-Clinical

NPJ Science of Learning

Trends in Neuroscience & Education

Grant Review Committees:

2022 National Science Foundation, panel member

2021 National Science Foundation (*ad hoc reviewer*)

2020 Singapore National Institute of Education

2020 National Science Foundation, panel member

2019 National Science Foundation (*ad hoc reviewer*)

2019 Postdoctoral Fellowship Reviewer, University of Western Ontario

Conference Committees:

2021 Mathematical Cognition and Learning Society, Abstract Reviews

2018 International Mind, Brain, and Education Conference Poster Committee (Co-Chair)

Thesis Committees:

- 2018 Undergraduate Honors Thesis Committee; Olivia Lasala, Vanderbilt University
 2018 Undergraduate Honors Thesis Committee; Jack Lyden, Vanderbilt University
 2017 Undergraduate Honors Thesis Committee; Rachel Telles, Vanderbilt University

Academic Committees:

- 2016 Neuroscience Student Organization- elected to Curriculum Committee, Vanderbilt University
 2015 Neuroscience Student Organization- elected to Curriculum Committee, Vanderbilt University

University Event Organizing:

- 2021 Western University – Brain and Mind Institute: *Lab Fair Event Organizer*: see below
 2020 Western University – Brain and Mind Institute: *Lab Fair Event Organizer*: see below
 2019 Western University – Brain and Mind Institute: *Lab Fair Event Organizer*: Proposed and help organize inaugural Lab Fair event for undergraduates interested in research to connect with research labs at the Brain and Mind Institute

Symposium Organized

Title: *Current Perspectives in Developmental Dyscalculia*

Date: June, 2022

Event: Annual Meeting of the Mathematical Cognition & Learning Society (MCLS)

Role: Organizer and presenter

Other Presenters: Flávia H. Santos, Bert De Smedt, Mojtaba Soltanlou, Daniel Ansari (*chair*)

ADVANCED COURSES ATTENDED

- | | | |
|------|--|---|
| 2020 | NeuroHackademy | online: https://neurohackademy.org/ |
| 2018 | Open Science Workshop | Cork, Ireland |
| 2017 | Connectivity Course: Structural and Functional | Boston, USA |
| 2016 | Summer Institute in Cognitive Neuroscience | UC Santa Barbara, USA |
| 2015 | Freesurfer Training Course | Boston, USA |

LANGUAGE, SOFTWARE, AND CODING SKILLS

- **English:** mother tongue; **Spanish:** upper intermediate/advanced
- Proficient at handling large-scale datasets, complex analyses, and creating graphical displays in: **R, MATLAB, jamovi, Python, SPSS, STATA, JASP** (in order of competency).
- Proficient at neuroimaging analysis in: **fMRIPrep, Brainvoyager (Neuro-elf, batch processing, Python scripting), Freesurfer, MATLAB, CONN Toolbox, and SPM.**
- Coding skills in: **R, Python, BASH, and C++, Markdown, R Markdown, Git, MATLAB**
- Experiment presentation in: **PsychoPy, EPrime, PsychToolbox, Experiment Builder, Presentation, Pavlovia, Qualtrics, Open Sesame**
- Database creation and management using REDCAP & Filemaker