# Dominique Lopiccolo

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#### **EDUCATION**

University of Delaware | Newark, DE, U.S.

Aug 2023 – Present

Ph.D. Student, Interdisciplinary Neuroscience

UNIDEL Graduate Student Scholar

Boston University | Boston, MA, U.S.

Sep 2016 - May 2019

M.A., Applied Linguistics

Concentration: Multilingualism and Cognition

Liberty University | Lynchburg, VA, U.S.

Aug 2012 – May 2016

B.A. with Honors, Teaching English as a Second Language

Minors: Linguistics, Spanish, and English

# SCHOLARSHIPS, GRANTS, FELLOWSHIPS, & AWARDS

## UNIDEL Graduate Student Scholarship (Aug 2023)

University of Delaware

NSF Conference Travel Award (July 2022)

International Mind, Brain, and Education Society

English Language Fellowship (May 2020)

U.S. Department of State

Fulbright Scholarship (Sep 2019)

U.S. Department of State

# CURA Institute Travel Grant (April 2019)

Boston University Institute for Culture, Religion, and World Affairs

## PAM Lab Research Grant (Oct 2018)

Boston University Phonetics, Acquisition, and Multilingualism Lab

## Honors Scholarship (Aug 2012)

Liberty University

#### **PUBLICATIONS**

**Lopiccolo, D.**, & Hafri, A. (2025). Representational momentum for spatial scaling. *Journal of Vision*, 25(9), 2634-2634.

**Lopiccolo, D.,** & Chang, C. B. (2021). Cultural factors weaken but do not reverse left-to-right spatial biases in numerosity processing: Data from Arabic and English monoliterates and Arabic-English biliterates. *PLoS ONE*. *16*(12), e0261146.

#### **PRESENTATIONS**

**Lopiccolo, D.** (2025, June). Geomentum: Where visual processing and geometric reasoning meet. Talk presented at the 2025 Higher Level Math Cognition Workshop. Collège de France, Paris, France

**Lopiccolo, D.** & Hafri, A. (2025, May). Representational momentum for spatial scaling. Poster presented at the 25<sup>th</sup> Annual Meeting of the Vision Sciences Society. St. Pete Beach, FL, U.S.

<sup>\*</sup> denotes equal contribution

\*Redican, E., \*Lopiccolo, D., Viegut, A. A., Resnick, I., Newcombe, N. S., & Jordan, N. C. (2024, June). Effects of playful learning activities on first graders' early fraction knowledge. Symposium presentation at the 2024 Mathematical Cognition and Learning Society Conference. Washington, D.C., U.S.

**Lopiccolo, D.**, Hamami, Y., Amalric, M., & Hafri, A. (2024, May). *Geo-mentum: Exploring a geometric bias using representational momentum.* Poster presented at the 24<sup>th</sup> Annual Meeting of the Vision Sciences Society. St. Pete Beach, FL, U.S.

Carvalho Pereira, J., Elliott, L., Duong, S., Kotahari, D., **Lopiccolo, D.**, Bachman, H., Votruba-Drzal, E., & Libertus, M. (2023, March). *Are some math talk types more/less related to concurrent math skills? Examining preschoolers' quantifier talk.* Poster presented at the 2023 Biennial Meeting of the Society for Research in Child Development. Salt Lake City, UT, U.S.

Duong, S., Carvalho Pereira, J., **Lopiccolo, D.**, Votruba-Drzal, E., Bachman, H., & Libertus, M. (2023, March). *Beneath counts: Exploring the dynamics of caregiver-child conversations about numbers and math in two semi-structured activities.* Poster presented at the 2023 Biennial Meeting of the Society for Research in Child Development. Salt Lake City, UT, U.S.

**Lopiccolo, D.**, & Chang, C. B. (2021, November). *Cultural factors weaken but do not reverse left-to-right biases in numerosity processing: Data from readers of Arabic and English.* Poster presented at the 62<sup>nd</sup> Annual Meeting of the Psychonomic Society. New Orleans, LA, U.S.

**Lopiccolo, D.** (2017, March). The effects of script direction and thematic role on spatial agency bias. Talk presented at the Boston University Graduate Linguistics Research Forum. Boston, MA, U.S.

**Lopiccolo, D.** (2016, April). Exploring shared pitch dimensions in music and Mandarin Chinese: An interdisciplinary approach to L2 Mandarin tone acquisition. Paper presented at the 44<sup>th</sup> Annual Meeting of the Southern Regional Honors Council. Orlando, FL, U.S.

**Lopiccolo, D.** (2016, March). *Language is cognition*. Paper presented at the 2016 Sigma Tau Delta International Convention. Minneapolis, MN, U.S.

**Lopiccolo, D.** (2015, April). Adaptation strategies for the translation of Western hymns to Asian tonal languages. Paper presented at the 2015 Biennial Big South Undergraduate Research Symposium. Buies Creek, NC, U.S.

## RESEARCH EXPERIENCE

# Graduate Research Assistant, University of Delaware

Aug 2023 – Aug 2024

Early Fractions Project, Dr. Nancy Jordan (PI)

Newark, DE, U.S.

- Conducted behavioral research with first-grade children in schools
- Ran statistical models for a longitudinal dataset

# Research Assistant, University of Pittsburgh

July 2022 – Aug 2023

Parents Promoting Early Learning Project, Dr. Melissa Libertus (PI) *Pittsburgh*, PA, U.S.

- Conducted behavioral testing with children (2-5 years) and adults (25+ years)
- Analyzed video recordings of caregiver-child interactions during spatial and number tasks

# Research Assistant, Vanderbilt University

Aug 2021 – June 2022

Numerical Brain Lab, Dr. Gavin Price (PI)

Nashville, TN, U.S.

- Conducted behavioral and functional magnetic resonance imaging (fMRI) research with children (6-10 years) and adults (18+ years)
- Processed, scored, and organized data using MATLAB, R, and REDCap
- Trained and supervised undergraduate and master's student research assistants

## Graduate Student Researcher, Boston University

May 2018 – May 2019

Master's Project: <a href="https://osf.io/fq8ka/">https://osf.io/fq8ka/</a>

Boston, MA, U.S.

- Designed experiment materials in Arabic and English using Praat, Qualtrics, OpenSesame Experiment Builder, and MATLAB
- Recruited and tested over 200 participants in the U.S. and Jordan
- Conducted data cleaning, analyses, and visualizations in R

#### **TEACHING EXPERIENCE**

# Teaching Assistant, University of Delaware

Aug 2024 – Dec 2024, Feb 2025 – May 2025

Newark, DE, U.S.

CGSC 170, Introduction to Cognitive Science

- Assisted an undergraduate course with over 100 students
- Graded assignments, provided feedback, held office hours, and led exam study sessions
- Developed and taught original content for numerical cognition lecture

# University Lecturer, University of Petra

Sep 2019 – March 2020

Amman, Jordan

Taught English courses to undergraduate English majors

# Lead Instructor, ASC English School

April 2017 – May 2019

Boston, MA, U.S.

- Taught adult ESL (English as a second language) courses
- Taught TOEFL and ISEE preparatory courses

#### **ADVISEES**

#### **Jessica Sitlinger**

Dec 2024 - Feb 2025

Undergraduate Winter Fellow, University of Delaware

Project Title: "How does numeracy skills relate to early informal fraction knowledge?"

## Sophia Surdovel

May 2024 - Aug 2024

Undergraduate Summer Scholar, University of Delaware

Project Title: "Investigating whole number bias in first graders' informal fraction learning"

## **ACADEMIC SERVICE**

# Mentor Program Liaison, Neuroscience Graduate Student Association

Jan 2024 – Present

Interdisciplinary Neuroscience Graduate Program, University of Delaware

- Managed mentoring opportunities for UD alumni and neuroscience PhD students
- Advocated for graduate student program concerns at monthly Executive Committee meetings

# Moderator, We Represent

June 2021

We Represent Conference

• Led two virtual writing workshops for undergraduate students from across the U.S. interested in applying to the Fulbright and Gilman scholarships

# Volunteer Chairperson, Boston University

Aug 2017 – March 2018

42<sup>nd</sup> Annual Boston University Conference on Language Development

- Recruited, trained, and organized schedules for over 100 volunteers
- Reviewed and edited conference proceedings

# PROFESSIONAL MEMBERSHIPS

Mathematical Cognition and Learning Society	Cognitive Science Society
International Mind, Brain, and Education Society	Vision Sciences Society
Society for Philosophy and Psychology	Psychonomic Society

# **SKILLS**

• R, Python, REDCap, Git(Hub), interpersonal communication, curriculum development, organization, public speaking

#### **LANGUAGES**

•	Spanish	B1 Intermediate (based on CEFR system)
•	Arabic (Levantine dialect)	A2 Beginner

## **REFERENCES**

Dr. Alon Hafri, U. of Delaware	<u>alon@udel.edu</u>
Dr. Nancy Jordan, U. of Delaware	njordan@udel.edu
Dr. Melissa Libertus, U. of Pittsburgh	libertus@pitt.edu
Dr. Gavin Price, U. of Exeter (previously Vanderbilt U.)	g.price5@exeter.ac.uk
<b>Dr. Charles Chang</b> , City U. of Hong Kong (previously Boston U.)	cbchang@post.harvard.edu
<b>Dr. Daniel Erker</b> , Boston U.	danerker@bu.edu

More References Available Upon Request