

Federica Bulgarelli, Ph.D.
Curriculum Vitae

University at Buffalo
Psychology
Learning and Instruction
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Buffalo, NY 14260

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EMPLOYMENT AND EDUCATION

- 2022- **Assistant Professor**
 University at Buffalo
 Department of Psychology
 Department of Learning and Instruction
- 2018-2022 **Postdoctoral Scholar**
 Duke University
 Department of Psychology and Neuroscience
 P.I. Dr. Erika Bergelson
- 2013-2018 **Ph.D. in Cognitive Psychology and Language Science**
 Pennsylvania State University
 Dissertation: Talker Variability as a Desirable Difficulty for Language Learning
 Committee: Dr. Daniel Weiss (advisor), Dr. Judith Kroll, Dr. Janet van Hell, Dr.
 Matt Carlson, Dr. Koraly Perez-Edgar
- 2013-2015 **M.S. in Cognitive Psychology**
 Pennsylvania State University
 Thesis: Tracking Multiple Inputs: An Investigation of the Primacy Effect in
 Monolinguals and Bilinguals
 Committee: Dr. Daniel Weiss (advisor), Dr. Judith Kroll, Dr. Paola Dussias
- 2009-2013 **Bachelor of Science in Human Development and Family Studies**
 Bachelor of Arts in Linguistics
 University of Wisconsin - Madison

RESEARCH SUPPORT

Current

Submitted

- 2022** **Language Learning Early Career Research Grant.**
 Title: Adult Processing of Child-Produced Speech (\$10,000)
 Role: PI

Completed

- 2019-2022 NIH-NRSA Ruth Kirschstein Postdoctoral Fellowship**
Title: Within- and between- talker variability and word learning (\$183,000)
Role: PI
- 2020-2021 Charles Lafitte Foundation**
Title: Extending our reach: recruiting bilingual families to examine flexibility in early word learning (\$4200)
Role: PI
- 2018 Language Learning Dissertation Grant**
Title: Talker variability as a desirable difficulty for language learning (\$2000)
- 2016 National Science Foundation Partnerships for International Research and Education Fellowship**
Title: Understanding the bilingual mind and brain
- 2015-2018 National Science Foundation Graduate Research Fellowship**
Title: Know when to fold 'em: Overcoming the stationarity bias (\$102,000)

AWARDS

- 2019 Charles Lafitte Foundation Travel Award**
- 2018 Boston University Conference on Language Development Student Award**
- 2017 PSU Global Programs Graduate Student Travel Grant**
- 2012, 2013 AmeriCorps Education Award**

PUBLICATIONS +denotes joint first authorship, *Indicates mentee

Bulgarelli, F., Bergelson, E. (under review). Linking acoustic variability in the infants' input to their early word production.

Bulgarelli, F., Potter, C.E. (accepted). Stability and change in young children's linguistic experience during the COVID-19 pandemic in the United States

Bulgarelli, F., Bergelson, E. (2023). Talker variability is not always the right noise. 14-month-olds struggle to learn dissimilar word-object pairs under talker variability conditions. *Journal of Experimental Child Psychology*

- Bulgarelli, F.,** Bergelson, E., (2022). Talker variability shapes early word representations in 8-month-olds. *Infancy*.
- Bulgarelli, F.,** Mielke, J., Bergelson, E., (2021). Quantifying talker variability in North-American infants' daily input. *Cognitive Science*. 46(1), e13075
- Bulgarelli, F.,** Weiss, D. J. (2021). Desirable difficulties in statistical learning? How talker variability impacts artificial grammar learning. *Language Learning*
- Bulgarelli, F.,** Weiss, D. J., Dennis, N. A. (2020) Cross-situational statistical learning in younger and older adults. *Aging, Neuropsychology, and Cognition*, 1-12
- Koranda, M. J., **Bulgarelli, F.,** Weiss, D. J., MacDonald, M. C. (2020). Is language production planning emergent from action planning? A preliminary investigation. *Frontiers in Psychology* 11, 1193
- Cristia, A., **Bulgarelli, F.,** & Bergelson, E. (2020). Accuracy of the Language Environment Analysis System Segmentation and Metrics: A Systematic Review. *Journal of Speech, Language, and Hearing Research*, 63(4), 1093-1105.
- +Benitez, V. L., +**Bulgarelli, F.,** Byers-Heinlein, K., Saffran, J. R., & Weiss, D. J. (2020). Statistical learning of multiple speech streams: A challenge for monolingual infants. *Developmental Science*, 23(2), e12896.
- Bulgarelli, F.,** & Bergelson, E. (2019). Look who's talking: A comparison of automated and human-generated speaker tags in naturalistic day-long recordings. *Behavior Research Methods*, 1-13.
- George, N. R., **Bulgarelli, F.,** Roe, M., & Weiss, D. J. (2019). Stacking the evidence: Parents' use of acoustic packaging with preschoolers. *Cognition*, 191, 103956.
- Bulgarelli, F.,** Bosch, L., Weiss, D. J. (2019). Simultaneous visual statistical learning in monolinguals and bilinguals. *Frontiers in psychology*, 10.
- Bulgarelli, F.,** Lebkuecher, A. L., & Weiss, D. J. (2018). Statistical learning and bilingualism. *Language, speech, and hearing services in schools*, 49(3S), 740-753.
- Weiss, D. J., **Bulgarelli, F.,** Navarro-Torres, C., & Morales, J., (2017). Translating research to practice in the language sciences. *Translational Issues in Psychological Science*, 3(1), 1.
- Bulgarelli, F.,** & Weiss, D. J. (2016). Anchors Aweigh: The Impact of Overlearning on Entrenchment Effects in Statistical Learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*.
- Karuza, E., Li, P., Weiss, D.J., **Bulgarelli, F.,** Zinszer, B., Aslin, R.N. (2016) Sampling over Non-uniform Distributions: A Neural Efficiency Account of the Primacy Effect in Statistical Learning. *Journal of Cognitive Neuroscience*.

WORKS IN PROGRESS

Bulgarelli, F., Bergelson, E. (in prep). Useful properties for predicting child productive vocabulary.

Bulgarelli, F., Bergelson, E. (in prep). Word learning and recognition in monolingually- and bilingually-raised infants.

CONFERENCE PROCEEDINGS

Bulgarelli, F., Weiss, D. J. (2019) The more the merrier? The impact of talker variability on artificial grammar learning in preschoolers and adults. *Proceedings of the 43rd Boston University Conference on Language Development.*

Bulgarelli, F., Benitez, V., Saffran, J., Byers-Heinlein, K., Weiss, D. J. (2017). Statistical Learning of Multiple Structures by 8-month-old Infants. *Proceedings of the 41st Boston University Conference on Language Development.*

CONFERENCE TALKS *Indicates mentee

Bulgarelli, F., Bergelson, E (2022). *Linking acoustic variability in everyday input to early word productions.* Talk to be presented at the 47th Boston University Conference on Language Development.

Dailey, S., **Bulgarelli, F.,** Bergelson, E. (2021) *Links Between Language Input in Infancy and Vocabulary in Childhood.* Talk to be presented at the 2021 Society for Research in Child Development Conference.

Bulgarelli, F., Bergelson, E. (2019). *Who says it and what does it sound like? Quantifying within- and between- talker variability in infants' naturalistic input.* Talk presented at the 44th Boston University Conference on Language Development. Boston, MA.

Bulgarelli, F., Weiss, D.J. (2019). *Limited talker variability differentially impacts artificial grammar learning in preschoolers and adults.* Talk presented at the 2019 Society for Research in Child Development Meeting. Baltimore, MD.

Bulgarelli, F., Weiss, D. J. (2018). *The more the merrier? The impact of talker variability on artificial grammar learning in preschoolers and adults.* Talk presented at the 43rd Boston University Conference on Language Development. Boston, MA.

Bulgarelli, F. George, N. R., Roe, M. D., Weiss, D. J. (2017). *Bottom-up cues to event segmentation: The use of audiovisual synchrony in speech to preschoolers.* Talk presented at the 42nd Boston University Conference on Language Development. Boston, MA.

Bulgarelli, F., George, N. R., Weiss, D. J. (2017). *Stacking Evidence: Parents' Use of Acoustic Packaging Continues into the Preschool Years*. Talk presented at the 2017 Society for Research in Child Development Meeting. Austin, TX

Weiss, D.J., **Bulgarelli, F.,** Poepsel, T. (2015) *The one that got away: Statistical learning of multiple inputs*. Talk presented at the 2015 Interdisciplinary Advances in Statistical Learning Conference. San Sebastian, Spain.

Bulgarelli, F., Weiss, D. J. (2014) *Multi-Stream Statistical Learning in Monolinguals and Bilinguals*. Talk presented at the 2014 UIC Bilingualism Forum. Chicago, IL.

Bulgarelli, F., Weiss, D. J. (2014) *Tracking Multiple Structures in Statistical Learning*. Talk presented at the 2014 APA Annual Convention. Washington, D.C.

Lew-Williams, C., **Bulgarelli, F.,** & Saffran, J. R. (2013). *Infants' tracking of statistical regularities across multiple talkers: A cautionary tale*. Talk presented at the Symposium on Research in Child Language Disorders. Madison, WI

CONFERENCE POSTERS *Indicates mentee

Bulgarelli, F., Potter, C.E. (2022). *Investigating changes in daycare arrangements and English exposure during the COVID-19 Pandemic*. Poster presented at the 2022 International Congress on Infant Studies.

Bulgarelli, F., Bergelson, E (2022) *Social and referential cues shape 8-month-old's processing of talker variability during word learning*. Poster presented at the 2022 Cognitive Development Society Meeting.

Bulgarelli, F., Bergelson, E. (2020) *The Role of Within- and Between-Talker Variability in Early Word Learning*. Poster to be presented at the 45th Boston University Conference on Language Development

Bacon, D., **Bulgarelli, F.,** Benitez, V., Byers-Heinlein, K., Saffran, J., Weiss, D. J. (2020). *Social cues and statistical learning of multiple structures by infants*. Poster presented at the 2020 International Congress of Infant Studies.

*Levin, H., **Bulgarelli, F.,** Bergelson, E. (2019) *Single and multiple talker acoustic variation in relation to object presence*. Poster presented at the 2019 State of North Carolina Undergraduate Research and Creativity Symposium. Durham, NC

Bulgarelli, F., Weiss, D. J., Dennis, N. A. (2018). *The effect of healthy aging on cross situational statistical word learning*. Poster presented at the 2018 Cognitive Aging Conference. Atlanta, GA.

Bulgarelli, F., Bosch, L., Weiss, D. J. (2017) *Simultaneous visual statistical learning in monolinguals and bilinguals*. Poster presented at the 2017 Interdisciplinary Advances in Statistical Learning Conference. Bilbao, Spain.

Bulgarelli, F., Benitez, V., Saffran, J., Byers-Heinlein, K., Weiss, D. J. (2016). *Statistical Learning of Multiple Structures by 8-month-old Infants*. Poster presented at the 41st Boston University Conference on Language Development. Boston, MA.

Bulgarelli, F., Bosch, L., Weiss, D. J. (2016). *Comparing Monolingual and Bilingual Learner's Performance on a Multi-Level Statistical Learning Task*. Poster presented at the 2016 Meeting of the Psychonomics Society. Boston, MA

George, N. R., **Bulgarelli, F.,** +Theoret, C., Weiss, D. J. (2016). *Dancing with Words: The Acoustic Packaging of Events in Adult-Directed Speech*. Poster presented at the 2016 Meeting of the Psychonomics Society. Boston, MA

Koranda, M. J., **Bulgarelli, F.,** Weiss, D. J., MacDonald, M. C. (2016) *Parallels between Action Priming and Syntactic Priming*. Poster presented at the Ninth International Workshop on Language Production. San Diego, CA.

*Theoret, C., **Bulgarelli, F.,** George, N. R. & Weiss, D. J. (2016). *What to say about ballet? How the timing of language can be instructive*. Poster presented at the 2016 Undergraduate Exhibition. University Park, PA

Bulgarelli, F., Weiss, D.J. (2015) *Individual Differences in Tracking Multiple Structures: Investigating the Primacy Effect*. Poster presented at the 2015 Learning Sciences/Science of Learning Poster Conference. University Park, PA

Bulgarelli, F., Weiss, D.J. (2015) *Enough is Enough: Anchoring Effects in Statistical Learning*. Poster presented at the 2015 Interdisciplinary Advances in Statistical Learning Conference. San Sebastian, Spain.

Bulgarelli, F., Weiss, D.J. (2015) *Individual Differences in Tracking Multiple Structures: Investigating the Primacy Effect*. Poster presented at the 2015 Society for Research in Child Development. Philadelphia, CA

Bulgarelli, F., Weiss, D.J. (2014) *Tracking Multiple Structures: An Insight into the Primacy Effect*. Poster presented at the 2014 Psychonomics Annual Meeting. Long Beach, CA.

Bulgarelli, F., Weiss, D. J. (2014) *Tracking multiple inputs: Investigating the time course of statistical learning*. Poster presented at Young Scholar Speaker Series, CLS. University Park, PA.

INVITED TALKS

Bulgarelli, F. (2022). *Navigating variability: learning language from varying talkers*. Invited talk presented at the Center for Cognitive Science Talk Series, University at Buffalo

Bulgarelli, F. (2022). *Language input during COVID-19*. Invited talk presented at the University of Texas-El Paso.

Bulgarelli, F. (2022). *Talker variability and word learning: evidence from lab experiments and naturalistic recordings*. Invited talk presented at the University of Iowa.

Bulgarelli, F. (2020). *Input variability and language learning*. Invited talk presented at Princeton University.

Bulgarelli, F. (2019). *Input variability and language learning*. Invited talk presented at UNC-Chapel Hill

Bulgarelli, F. (2019). *Input variability and language learning*. Invited talk presented at the Duke Center for Cognitive Neuroscience Colloquium series.

Bulgarelli, F. (2014). *Learning in a Non-Stationary Environment: Investigating the Primacy Effect*. Invited talk presented at the Pennsylvania State University Center for Language Science Speaker Series.

TEACHING EXPERIENCE

University at Buffalo

Cognitive Development (PSY457), Fall 2022, Spring 2023

Pennsylvania State University

Research Methods (PSY301W), Instructor, Summer 2018

Advanced Cognitive Psychology, Teaching Assistant Spring 2015

Multicultural Psychology, Teaching Assistant, Fall 2014

Neural Bases of Human Behavior, Teaching Assistant, Fall 2014

Leadership in the Work Setting, Teaching Assistant, Fall 2013

Certificates

Graduate Online Teaching Certificate, *Pennsylvania State University*, 2017

Guest Lectures

2021 Language Development, *Duke University*

2021 Education Neuroscience, *Duke University*

2019 Language Development, *Duke University*

2017 The ABCs of Bilingualism: Acquisition, Brain and Community, *Pennsylvania State University*

2015 Advanced Cognitive Psychology, *Pennsylvania State University*

2014 Multicultural Psychology, *Pennsylvania State University*

MENTORING/ADVISING

Ph.D. Committee Member

Chihiro Honda (Cognitive Psychology, 2022-)

Undergraduate Honors Thesis Committee Member

Mythili Thamilchelvam (2023)

Duke University

2021 – Sophie Barry, Graduation with Distinction student

2019 – Halden Levin, NCSSM Summer Research Intern

Pennsylvania State University

2018 – Melina Pinamonti, Honors senior thesis

2018 – Ashley Keltz, Honors senior thesis

2016 – Cara Theoret, Senior project

ADDITIONAL RESEARCH EXPERIENCE

2012-2013 Undergraduate research assistant
 Infant Learning Lab, *University of Wisconsin – Madison*, P.I. Dr. Jenny Saffran

SERVICE

Professional Service

Ad-hoc reviewer (grants)

- NSF Developmental Science (2022-present)
- NSF Graduate Research Fellowship Program (2022-present)
- Israel Science Foundation (2023-present)

Application Statement Feedback Program (asfp.io)

- Editor (2021-present)

Ad-hoc reviewer (journal articles)

- Developmental Science
- Memory and Cognition
- Child Development
- Language Learning and Development
- Laboratory Phonology
- Bilingualism; Language and Cognition
- Journal of Experimental Psychology: Language, Memory and Cognition
- Journal of Neurolinguistics
- Journal of Experimental Child Psychology

- Cognitive Processing
- Infancy
- Language Development Research
- Brain and Language
- Psychonomic Bulletin and Review
- First Language
- Aging, Neuropsychology and Cognition
- American Journal on Intellectual and Developmental Disabilities
- Journal of Child Language
- Developmental Psychology
- Cognition
- Language Learning

Editorial experience

- Translational Issues in Psychological Science: Translating Research to Practice in the Language, graduate student editor (2015-2017)

Conference reviewer

- ICIS (2019-present)
- BUCLD (2023-present)
- MPAL (2023-present)

Symposia

Contending with talker variability across development. Co-chaired with Dr. Chris Potter at the 2019 Society for Research in Child Development Meeting.

Bilingualism Matters at Penn State (2014-2018)

AXONS: Academic eXperimental Organization for Neuroscience Students (2014-2018)

Departmental Service

- University at Buffalo, Awards and Recognition Committee (2022-2024)
- University at Buffalo, Graduate Admissions Committee (2022-2023)
- University at Buffalo, Grievance Committee (2022-2023)
- Pennsylvania State University, Search Committee for Cognitive Psychology Faculty Search (2017-2018)