Curriculum Vitae Elika Bergelson

elika.bergelson@duke.edu

Education & Research Positions Held

2016- Assistant Professor, Duke University

Psychology and Neuroscience Department Center for Cognitive Neuroscience, Duke University Center for Developmental Science, Carolina Consortium on Human Development

2014-16 Research Assistant Professor, University of Rochester,

Department of Brain & Cognitive Sciences; Center for Language Sciences

2013-14 Postdoctoral Researcher, University of Rochester, Center for Language Sciences, Department of Brain & Cognitive Sciences

Sponsor: Dr. Richard Aslin

2008-13 Ph.D, University of Pennsylvania, Psychology Department

Dissertation: "Word Learning in 6-16 Month Old Infants"

Committee: Drs. Dan Swingley (Advisor), John Trueswell, and Delphine Dahan

2008-09 M.A., University of Pennsylvania, Psychology Department

Committee: Drs. Dan Swingley (Advisor), Lila Gleitman, Robert Seyfarth

2007-08 Baggett Research Fellow, University of Maryland, Linguistics Department

Advisors: Drs. Jeff Lidz, William Idsardi, David Poeppel

2003-07 B.A., *Summa Cum Laude,* **New York University,** Majors: Language & Mind, Music Honors Thesis: "The Roles of Language and Music in Infant Pattern Abstraction" Advisors: Drs. Gary Marcus, Scott Johnson

Research Interests

- Development of the link between word-form and meaning in infancy
- Acquisition of early vocabulary items and semantic categories
- Learning mechanisms and representations in first language acquisition
- Parallels in representation and processing of language and music
- Effects of word comprehension and production on visual search

Research Grants

2017-2020 Digging into Data Challenge (NEH; \$200,000 USD)

Analyzing Child Language Experiences Around the World

U.S. PI (8 Co-PIs in 6 countries, ~\$1,000,000 total).

- **2014-2019** NIH Early Independence Award (\$1,250,000)
 - PI. Mechanisms of Word Learning in Infancy

2014	NIH National Research Service Award (8 th Percentile; declined for NIH-EIA)
2013-2014	NIH Postdoctoral Fellowship, Center for Language Sciences (\$40,000)
2010-2013	NSF Graduate Research Fellowship (\$90,000)
2008-2010	NSF IGERT Traineeship in Language and Comm. Science (\$60,000)
2005-2007	Dean's Undergraduate Research Fund at New York University (\$1,500)
Honors and Awards	
2015	Rising Star, Association for Psychological Science
2015	Forbes Magazine 30 under 30 in Science
2014	Best Dissertation, International Society for Infant Studies, \$1,500
2013	U. Pennsylvania's President Gutmann Leadership Award, \$1,000
2012	60 Second Lecture Audience Choice Award, Arts & Sciences, U. Pennsylvania
2012	Women in Cognitive Science Award, \$1,000
2012	Society for Language Development Student Award
2010,12	Travel Award, Boston University Conference on Language Development
2010,12,13	Travel Award, Psychology Department, University of Pennsylvania
2010	Travel Award, International Conference on Music Cognition and Perception
2010,12,13	Travel Award, School of Arts and Sciences, University of Pennsylvania
2008	Travel Award, Graduate & Professional Student Association, U. of Pennsylvania
2007	Dept. Research Award, from NYU College of Arts and Science Psychology Dept.
2006	Phi Beta Kappa Inductee
2005	Gustave Reese Prize in Music, from NYU College of Arts & Science Music Dept.
2003-07	Presidential Honors Scholar (2003-2007)

Published Journal Articles

- **Bergelson E., &** Aslin, R. (*in press*). Nature and Origins of the Lexicon in Six-month-olds. *Proceedings of the National Academy of Sciences of the USA*.
- **Bergelson, E., &** Swingley, D. (2017). Young Infants' Word Comprehension Given an Unfamiliar Talker or Altered Pronunciations. *Child Dev.* doi:10.1111/cdev.12888
- **Bergelson, E.,** & Aslin, R. (2017). Semantic Specificity in One-Year-Olds' Word Comprehension. *Language Learning and Development*, 1-21.
- Frank, M., **Bergelson, E.,** Bergmann, C., Cristia, A., Floccia, C., Gervain, J., Hamlin, J., Hannon, E., Kline, M., Levelt, C., Lew-Williams, C., Nazzi, T., Panneton, R., Rabagliati, H., Soderstrom, M., Sullivan, J., Waxman, S., Yurovsky, D. (2017). A collaborative approach to infant research: Promoting reproducibility, best practices, and theory building. *Infancy*.
- VanDam, M., Warlaumont, A., **Bergelson, E.,** Cristia, A., Soderstrom, M., De Palma, P., & MacWhnney, B. (2016). HomeBank, an online repository of daylong child-centered audio recordings. *Seminars in Speech and Language*, *37*, 128-142.
- **Bergelson, E., &** Swingley, D. (2015). Early Word Comprehension in Infants: Replication and Extension. *Language Learning and Development*, 11, 369-380.

- **Bergelson, E.,** Shvartsman, M., & Idsardi, W. (2013). Differences in Mismatch Responses to Vowels and Musical Intervals: MEG Evidence. *PloS One.* 8, e76758.
- **Bergelson, E.,** & Swingley, D. (2013). Young Toddlers' Word Comprehension is Flexible and Efficient. *PloS One.* 8, e73359.
- **Bergelson, E., &** Swingley, D. (2013). The Acquisition of Abstract Words by Young Infants. *Cognition. 127*, 391-397.
- **Bergelson, E.,** & Swingley, D. (2012). At 6 to 9 months, human infants know the meanings of many common nouns. *Proceedings of the National Academy of Sciences of the USA 109*, 3253-3258.
- **Bergelson, E., &** Idsardi, W. (2009). A Neurophysiological Investigation into the Foundations of Tonal Harmony. *Neuroreport. 20*, 239-244.

Published Conference Proceedings and Commentaries

- +Laing, C., & **Bergelson**, E. (2017). More Siblings Means Lower Input Quality in Early Language Development. *Proc. of the 39th Annual Conference of the Cognitive Science Society*.
- +Amatuni, A., & **Bergelson**, E. (2017). Semantic Networks Generated from Early Linguistic Input. *Proc. of the 39th Annual Conference of the Cognitive Science Society*.
- Casillas, M., **Bergelson, E**., Sloetjes, H., Soderstrom, M., DARCLE group, Cristia, A. (2017). A New Workflow for Semi-automatized Annotations: Tests with Long-Form Naturalistic Recordings of Children's Language Environments. *Proc. INTERSPEECH*.
- Casillas, M., +Amatuni, A., Seidl, A., Soderstrom, M., Warlaumont, A., **Bergelson, E**. (2017). What do Babies hear? Analyses of Child- and Adult-Directed Speech. *Proc. INTERSPEECH*.
- Schuller, B., Steidl, S., Batliner, A., **Bergelson, E.**, Krajewski, J., Janott, C., Amatuni, A., Casillas, M., Seidl, A., Soderstrom, M., Warluamont, A., Hidalgo, G., Schnieder, S., Heiser, C., Hohenhorst, W., Herzog, M., Schmitt, M., Qian, K., Zhang, Y., Trigeorgis, G., Tzirakis, T., Zafeiriou, S. *(2017)*. The INTERSPEECH 2017 Computational Paralinguistics Challenge: Addressee, Cold & Snoring. *Proc. INTERSPEECH*.
- Metze, F., Riebling, E., Warlaumont, A., **Bergelson, E.,** (2016). Virtual Machines and Containers as a Platform for Experimentation. *Proc. INTERSPEECH*.
- **Bergelson, E.** (2016). Workshop on Corpus Collection, (Semi)-Automatic Analysis, and Modeling of Large-Scale Naturalistic Language Acquisition Data. *Proceedings of the 38th Annual Conference of the Cognitive Science Society*.
- **Bergelson, E.,** & Swingley, D. (2013). Social and Environmental Contributors to Infant Word Learning. In M. Knauff, M. Pauen, N. Sebanz, & I. Wachsmuth (Eds.), *Proceedings of the 35th Annual Conference of the Cognitive Science Society*, 187-192.
- **Bergelson, E., &** Idsardi, W. (2009). "Structural Biases in Phonology: Infant and Adult Evidence from Artificial Language Learning" *BUCLD 33: Proceedings of the 33rd Annual Boston University Conference on Language Development,* 85-96.
- Poeppel, D., & **Bergelson, E.** (2008). "How music speaks to us." *Nature, 452*, 695-696. (book review of Ani Patel's Music, Language, and the Brain)

Manuscripts In Preparation and Under Review

(*= joint 1st author, += current or former mentee)

- +Laing, C., & **Bergelson**, E. (*under review*). The Effect of Mothers' Working Schedules on 17-month-olds' Productive Vocabulary.
- *Bergelson, E., *Casillas, M., Soderstrom, M., Seidl, A., Warlaumont, A., +Amatuni, A. (*under review*). What do North American Babies Hear? A large-scale cross-corpus analysis.
- **Bergelson E.,** +Koorathota, S., +Tor, S., +Dailey, S., and +Amatuni A., (*in prep*). Talk, You're On Camera! Or, Comparing Naturalistic Audio and Video Recordings of Infants
- **Bergelson, E.,** & Dahan, D. (*in prep*). Preferred Labels for Objects Influence but Do Not Stifle Lexical Competition in the Visual-World Paradigm.

Invited Talks and Colloquia

- Bergelson, E. (September 2017) The Nascent Lexicon: Word Learning in Infants, Developmental Lunch, UNC-CH.
- Bergelson, E. and Cristia, A (July, 2017) How to Grow a Language: Is "Big" Data Enough? JSALT Workshop, CMU.
- Bergelson, E., (December, 2016). What's in a (Baby's) Word? ECOM Workshop, University of Connecticut
- Bergelson, E., (November, 2016). Predicting Word Learning from Infants' Home Environment. Psychology & Neuroscience Cognitive Area Colloquium, UNC-Chapel Hill
- Bergelson, E., (October, 2016). Predicting Word Learning from Infants' Home Environment. RuCCS Colloqium, Rutgers University
- Bergelson, E., (September, 2016). Predicting Word Learning from Infants' Home Environment. Center for Cognitive Neuroscience Colloquium, Duke University
- Bergelson, E., (February, 2016). Word Learning in Infants: Linking In-lab Measures with Home Environment. Neurology Grand Rounds, University of Rochester.
- Bergelson, E., (December, 2015). Environmental variability and its relation to early noun Comprehension. Workshop on Extension and Intensive Recordings of Children's Language Environments, Ecole Normale Superieure.
- Bergelson, E., (April, 2015). Word Learning in Infants. Developmental Brownbag, University of Chicago.
- Bergelson, E., (March, 2015). Word Learning in Infants. Psychology & Neuroscience, Duke University.
- Bergelson, E., (February, 2015). Word Learning in Infants. Cognition & Perception Colloquium, New York University.
- Bergelson, E., (June, 2014). Word Learning in Infants.

 Laboratory for Language Development, RIKEN Brain Science Institute, Tokyo.
- Bergelson, E., (January, 2014). Word Learning in Infants.
 Psychology Department, University of California, San Diego.
- Bergelson, E., (November, 2013). Word Learning in 6-16 Month Old Infants.

- Center for Language Science Colloquia Series, University of Rochester.
- Bergelson, E., (November, 2013). Music and Language: Processing and Acquisition. Eastman/Rochester/Cornell/Buffalo Music Cognition Symposium.

Conference Talks

- **Bergelson, E.** Trajectories of Lexical Comprehension Improvement: Investigating the 14month Boost. *Boston University Conference for Language Development*. Boston University. Boston, Nov 2017. (<20% acceptance rate)
- Laing, C., **Bergelson E**. What did you say? Infants' early productions match caregiver input. *Boston University Conference for Language Development*. Boston University. Boston, Nov 2017. (<20% acceptance rate)
- Casillas, M., **Bergelson, E.**, Warlaumont, A., Cristia, A., Soderstrom, M., VanDam, M., Sloetjes, H. A New Workflow for Semi-automatized Annotations: Tests with Long Form Naturalistic Recordings of Children's Language Environments. *Interspeech*, Stockholm, Aug 2017.
- **Bergelson, E.** Linking "Useful" Input Properties With Early Noun Production. *Cognitive Development Society*, Portland, Oct 2017.
- **Bergelson, E.,** Amatuni, A., Casillas, M., Seidl, A, Soderstrom, M., Warlaumont, A. Description of the Homebank Child/Adult Addressee Corpus (HB-CHAAC). *Interspeech*, Stockholm, Aug 2017.
- Casillas, M., Amatuni, A., Seidl, A, Soderstrom, M., Warlaumont, A., **Bergelson, E.** What do babies hear? Analyses of child- and adult-directed speech. *Interspeech*, Stockholm, Aug 2017.
- Laing, C., & **Bergelson**, E. More Siblings Means Lower Input Quality in Early Language Development. *Cognitive Science Society*, London, Jul 2017.
- Dailey, S., & **Bergelson**, E. Semantic relatedness effects in early word comprehension. *Society for Research in Child Development*. Austin, Mar 2017.
- Koorathota, S., Morton, S., Amatuni, A, & **Bergelson, E.** 6- and 7-month-olds' Noun Input: Human and Automated Corpus Analysis, *International Congress on Infant Studies*, New Orleans, May 2016.
- **Bergelson, E., &** Swingley, D. The Effects of Maternal Education on Reports of Infants' Early Vocabulary. *Workshop on Infant Language Development*. Stockholm, Jun 2015.
- **Bergelson, E., &** Aslin, R. Narrowing Meaning Specificity from 12-20 Months. *Society for Research in Child Development*. Philadelphia, Mar 2015.
- **Bergelson, E., &** Swingley, D. Non-Linearities in Word Comprehension Trajectories. *Society for Research in Child Development*. Philadelphia, Mar 2015.
- **Bergelson, E., &** Aslin, R. Meaning Specificity in One-Year-Olds' Word Comprehension. *Boston University Conference for Language Development*. Boston University. Boston, Nov 2014. (<20% acceptance rate)
- **Bergelson, E., &** Swingley, D. Early Word Form Generalizations in the Context of Meaning. *International Conference for Infant Studies Biennial Meeting, Berlin, Jul 2014*

- **Bergelson, E., &** Swingley, D. Social and Environmental Contributors to Infant Word Learning. 35th Annual meeting of the Cognitive Science Society, Berlin, Aug 2013.
- **Bergelson, E., &** Swingley, D. Infant Word Comprehension: Robust to Speaker Differences but Sensitive to Single Phoneme Changes *Workshop on Infant Language Development,* San Sebastian, Jun 2013. (<20% acceptance rate)
- **Bergelson, E.,** & Swingley, D. Talker-independence in word comprehension before 12 months. *Boston University Conference for Language Development*. Boston University. Boston, Nov 2012. (<20% acceptance rate)
- **Bergelson, E.,** Swingley, D. 6-11-Month-Olds' Comprehension of Concrete and Abstract Words. *Budapest CEU Conference on Cognitive Development*, Budapest, Jan 2012.
- Gorman, K., Faber, D., **Bergelson**, E., and Yang, C. 2012. Word vs. rule frequencies in irregular acquisition. *Linguistic Society of America Annual Meeting*, Portland, Jan 2012.
- **Bergelson, E.,** Swingley, D. What 6-10-Month-Olds Know about Word Meaning. *Society for Research in Child Development Biennial Meeting*, Montreal, Apr 2011.
- **Bergelson, E.,** Swingley, D. Mother's education predicts spoken word recognition in 6-16-mo.-old Infants. *Boston University Conference for Language Development*. Boston University. Boston, Nov 2010. (<20% acceptance rate)
- **Bergelson, E.,** Shvartsman, M., Idsardi, W. Differences in Brain Responses to Vowels and Musical Intervals. *International Conference for Music Perception and Cognition*, Seattle, Aug 2010.
- **Bergelson, E.,** Merickel, J., Idsardi, W., Lidz, J. Structural Biases in Phonology: Evidence from Artificial Language Learning. *Linguistic Society of America Annual Meeting*, Baltimore. Jan 2010.
- **Bergelson, E.**, Idsardi, W. Structural Biases in Phonology: Infant and Adult Evidence from Artificial Grammar Learning. *Boston University Conference for Language Development*. Boston University. Boston, Nov 2008. (<20% acceptance rate)
- **Bergelson, E.** Infants' ability to learn patterns from language and music. *Undergraduate Research Conference*. New York University. April 2007.

Conference Posters

- Casillas, M., Amatuni, A., Seidl, A, Soderstrom, M., Warlaumont, A., **Bergelson, E.**Characterizing North American Child-Directed Speech by Age, Gender, and SES
 Boston University Conference for Language Development. Boston University. Boston,
 Nov 2017. (<20% acceptance rate)
- Dailey, S., **Bergelson,** E. Why Do Female Infants Say More Words? An Input/Output Analysis of Talking Status and Gender. *Boston University Conference for Language Development*. Boston University. Boston, Nov 2017. (<20% acceptance rate)
- Moore, C., **Bergelson, E.** More Than Wordplay: An Analysis of Word-form Variability in Speech to Infants. *Boston University Conference for Language Development*. Boston University. Boston, Nov 2017. (<20% acceptance rate)
- Warlaumont, A., VanDam, M., **Bergelson, E.,** Cristia, A. HomeBank: A repository for long-form real-world audio recordings of children. *Interspeech*, Stockholm, Aug 2017.
- Amatuni, A., & Bergelson, E. Semantic Networks Generated from Early Linguistic Input.

- Cognitive Science Society, London, Jul 2017.
- Amatuni, A., Dailey, S. & **Bergelson, E**. Early Lexical Development: The Roles of Semantic Similarity and Home Environment. *Duke Research Computing Symposium*, Durham, Jan 2016.
- Dailey, S., Amatuni, A., & **Bergelson, E**. Effects of Home Environment & Semantic Structure on Early Lexical Development. *NIH High Risk, High-Reward Research Symposium*, Bethesda, Dec 2016.
- **Bergelson, E.,** and Eagle, T. Links between talking, walking, and pointing: analysis of parental report & observation, *Boston University Conference for Language Development*. Boston, Nov 2016. (acceptance rate <20%)
- **Bergelson, E.,** and Swingley, D. Differing Effects of Socioeconomic Status on Infants' Reported Receptive and Productive Vocabulary, *Cognitive Development Society Meeting*, Columbus, Oct 2015.
- **Bergelson, E.,** and Swingley, D. Development in 11—15-month-olds' Noun and Verb Learning Following Extended At-Home Teaching, *Cognitive Development Society Meeting*, Columbus, Oct 2015.
- **Bergelson, E.,** and Dahan, D. Preferred Labels for Objects Influence but Do Not Stifle Lexical Competition in the Visual-World Paradigm, *Psychonomics Society Annual Meeting*. Minneapolis, Nov 2012.
- **Bergelson, E.,** and Swingley, D. Word Recognition at 20 Months is Flexible and Efficient. *Internat'l Conference for Infant Studies Biennial Meeting*. Minneapolis, June 2012.
- Gorman, K., Faber, D., **Bergelson**, E., and Yang, C. Word vs. rule frequencies in irregular acquisition. *Boston University Conference for Language Development*. Boston, Nov 2011.
- **Bergelson, E.,** Swingley, D. 6-9-Month-Olds Match Spoken Words to Visual Referents. *Internat'l Conference for Infant Studies Biennial Meeting*. Baltimore, Mar 2010.
- Barriere, I. Frenkel, S. Halberstam, F. Smedesdran, S. **Bergelson, E**. & Chen, J., Quantitative effects on Yiddish/English bilingual development. *Boston University Conference for Language Development*. Boston, Nov 2008. (acceptance rate <20%)
- Shvartzman, M., **Bergelson, E.,** Idsardi, W. From Tones To Vowels: A Neurophysiological Investigation of Sine and Formant Dyads. *Neurobiology of Language Conference*. Chicago, Oct 2009.
- **Bergelson, E.**, Idsardi, W. An MEG MMF study into the foundations of harmony. *Society for Neuroscience*. Washington D.C. Nov 2008.
- **Bergelson, E.**, de Souza, K. and Idsardi, W., A neurophysiological study into the foundations of harmony. *Music and Language*. Tufts University, Boston, July 2008.

Teaching Experience

- Graduate course on Language Development (2017)
- Workshop for Psych & Neuroscience Community on Data Tidying and Visualization in R (with tidyverse and ggplot2) (2017)
- Organizer for Grad/Postdoc Textbook Reading Group "Introduction to Statistical

- Learning" (2014)
- TA for Psychology 101 and Human Memory (2010-2011)
- Guest Lecturer for UG/G Introduction to Cognitive Science, Psychology, Linguistics, Language Development, and Psycholinguistics (2008-2015)
- Teaching Hebrew/Jewish Studies (2003-2012) and Music (2003-2007); grades K-12
- Teaching and Tutoring for Kaplan (2005-2007)

Advising/Supervision

Postdoctoral Scholars

• Catherine Laing: Postdoc (2016-2017; now faculty at Cardiff University, Wales)

Graduate Students

- Shannon Dailey: Graduate Student (2017-)
- Charlotte Moore: Graduate Student (2016-); SSHRC Grad Funding Awardee
- Emmaline Drew: Graduate Practicum Student, Marsh lab (Spring 2017)

Undergraduate Independent Study/Human Dev. Certificates/Honors Thesis Advisees

- 2017: Reena Jasani, Hannah Ballock, Haley Weaver
- 2016: Tessa Eagle, Javde Homer, Sophie Werk
- 2015: Ashwini Manjunatha, Sarah Markowitz, Alexis Rickwood

Undergraduate Research Assistants for >1 semester:

- <u>Duke (2016-)</u>: Afua Ansah, Hannah Ballock, Micaela Brewington, Natasha Derezinski-Choo, Savanna Groft, Estelle He, Danielle Mayorga-Young,
- Rochester (2014-2016): Andrei Amatuni, Bella Clemente, Jayde Homer, Valerie Langlois*, Dustyn Levenson, Sarah Markowitz, Ashwini Manjunatha, Leah Nason, Adina Poras, Alexis Rickwood*, Haley Weaver* (*= summer research fellow award)
- CVS@Rochester: John Collins, Summer Research Student (2014)
- UPenn: Elizabeth Yellin, Undergraduate Research Project (2013)

High School Mentees

- Alexis Aberman: Science Fair Student/Research Assistant (2016-2018)
- Cristopher Alvarado: NCSSM Research Assistant (2016-2017)
- Maia Donald (Summer 2017)
- Claire Patrick NCSSM Summer Intern (2017)

Service

- President, DARCLE (Daylong Audio Recordings of Children's Linguistic Environments); darcle.org (2017-)
- Consulting Editor for Developmental Psychology (2016-)
- Departmental Advisory Committee (2016-)

Press Coverage

- January 2015: Forbes Magazine 30 under 30 in Science coverage
- Fall 2014: Coverage of NIH EIA award (print & social media); details on lab website: http://www.bcs.rochester.edu/seedlings/
- February & March 2012: Coverage of Bergelson & Swingley, 2012, PNAS
- Radio and TV: BBC News Hour, WHYY Newsworks, France 2 news program '20h',

- WROC, Time Warner Cable News, WXXI
- Newspaper and Popular Press: Science News Daily, Telegraph, Daily Mail (UK), Science Daily, La Repubblica (Italy), Corrier della Sera (Italy), Trouw (Netherlands), Democrat and Chronicle (US)

Ad-Hoc Reviewing

- Child Development
- Cognition
- Developmental Science
- Frontiers in Psychology
- Journal of Experimental Child Psychology
- Journal of Exp. Psychology: General
- Journal of Memory and Language

- Language Acquisition
- Language Learning & Development
- PNAS
- Society for Research in Child Development
- Behavioral Research Methods
- Psych Science
- Infancy