

# Martin Zettersten

POSTDOCTORAL RESEARCH ASSOCIATE · PRINCETON UNIVERSITY

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## Appointments

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### Princeton University

2020 - present

POSTDOCTORAL RESEARCH ASSOCIATE

- Advisor: Dr. Casey Lew-Williams

## Education

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### University of Wisconsin-Madison

2020

PHD PSYCHOLOGY

- Advisors: Dr. Jenny Saffran, Dr. Gary Lupyan
- Dissertation: "Seeking new words: Active word learning in infants and children"

### Ruprecht Karl University of Heidelberg

2013

1ST STAATSEXAMEN

- Majors: Mathematics, English language and Linguistics; Minor: Psychology
- Advisors: Dr. Stefanie Hoehl, Dr. Sabine Pauen

## Awards, Fellowships, & Grants

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Pending	<b>NRSA F32 Postdoctoral Fellowship (percentile: 24.0, within 2022 payline)</b> , National Institutes of Health
2021	<b>Early Career Award (with Jessica Kosie; \$115,000)</b> , Einstein Foundation
2021	<b>Data-Driven Social Science Grant (co-PI; \$48,000)</b> , Princeton University
2019	<b>Mission Award, ManyBabies1 (contributor)</b> , Society for the Improvement of Psychological Science
2018	<b>Poster Prize</b> , Evolang XII, Torun
2017	<b>Fellow</b> , Kavli Summer Institute in Cognitive Neuroscience
2015-2018	<b>Graduate Research Fellowship</b> , National Science Foundation
2015-2019	<b>Hertz Travel Award</b> , University of Wisconsin-Madison
2015	<b>Student Travel Award</b> , Society for Research in Child Development
2013; 2018	<b>University Fellowship</b> , University of Wisconsin-Madison
2009-2010	<b>Erasmus scholarship</b> , University of Edinburgh
2007-2013	<b>Scholar</b> , German Academic Scholarship Foundation (Studienstiftung des deutschen Volkes)

## Publications

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\* *equal authorship contribution*; Google Scholar: [https://scholar.google.com/citations?user=APLxh\\_UAAAAJ](https://scholar.google.com/citations?user=APLxh_UAAAAJ)

### UNDER REVIEW/IN PREP

**Zettersten, M.**, Bergey, C. A., Bhatt, N., Boyce, V., Braginsky, M., Carstensen, A., deMayo, B., Handa, K. Kachergis, G., Lewis, M., Long, B., MacDonald, K., Mankewitz, J., Marchman, V., Meylan, S. C., Saleh, A. N., Schneider, R. M., Tsui, A.S.T., Uner, S., Xu, T. L., Yurovsky, D., & Frank, M.C. (under review). Peekbank: An open, large-scale repository for developmental eye-tracking data of children's word recognition. <https://psyarxiv.com/tgnzv>

**Zettersten, M.**, Bredemann, C., Kaul, M., Vlach, H., Kirkorian, H., & Lupyan, G. (in prep). Nameability supports rule-based category learning in children and adults.

**Zettersten, M.**, Choi, K., Kirkorian, H., & Saffran, J. (in prep). Children actively select words that support learning.

Schreiner, M., Bergmann, C., Frank, M. C., Fritzsche, T., Gonzalez-Gomez, N., Hamlin, K., Kartushina, N., Kellier, D.J., Mani, N., Mayor, J., Saffran, J., Shukla, M., Silverstein, P., Soderstrom, M., **Zettersten, M.**, & Lippold, M. (in prep). Assessing

test-retest reliability in infant-directed speech preference measures.

Bergmann, C., **Zettersten, M.**, Soderstrom, M., Tsui, A.S.T., Mayor, J., Lundwall, R.A., Lewis, M., Kosie, J.E., Kartushina, N., Fusaroli, R., Frank, M.C., Byers-Heinlein, K., Black, A.K., & Mathur, M.B. (in prep). Investigating discrepancies between multisite replications and published meta-analyses: A case study.

## JOURNAL ARTICLES

**Zettersten, M.**, Pomper, R., & Saffran, J. (accepted). Valid points and looks: Reliability and validity go hand-in-hand when improving infant methods. *Infant and Child Development*.

Wojcik, E., **Zettersten, M.**, & Benitez, V. (accepted). The map trap: Why and how word learning research should move beyond mapping. *WIREs Cognitive Science*.

Koranda, M., **Zettersten, M.**, & McDonald, M. (accepted). Good-enough production: Selecting easier words instead of more accurate ones. *Psychological Science*. <https://psyarxiv.com/q2h9d>

**Zettersten, M.\***, Weaver, H.\*, & Saffran, J. (Stage 1 registered report, in-principle acceptance). Becoming word meaning experts: Infants' processing of familiar words in the context of typical and atypical exemplars. *Child Development*. <https://psyarxiv.com/njh38/>

Visser, I., Bergmann, C., Byers-Heinlein, K., Dal Ben, R., Duch, W., Forbes, S., Franchin, L., Frank, M. C., Geraci, A., Hamlin, J. K., Kaldy, Z., Kulke, L., Lavery, C., Lew-Williams, C., Mateu, V., Mayor, J., Moreau, D., Nomikou, I., Schuwerk, T., Simpson, E. A., Singh, L., Soderstrom, M., Sullivan, J., van den Heuvel, M. I., Westermann, G., Yamada, Y., Zaadnoordijk, L., & **Zettersten, M.** (2022). Improving the generalizability of infant psychological research: The ManyBabies model. *Behavioral and Brain Sciences*, 45, E35. <https://doi.org/10.1017/S0140525X21000455>

Woodard, K., **Zettersten, M.**, & Pollak, S.D. (2021). Developmental changes in children's knowledge of facial configurations. *Child Development*. <https://doi.org/10.1111/cdev.13716>

Santolin, C., Garcia-Castro, G., **Zettersten, M.**, Sebastian-Galles, N., & Saffran, J. (2021). Experience with research paradigms relates to infants' direction of preference. *Infancy*, 26(1), 39-46. <https://doi.org/10.1111/infa.12372>

**Zettersten, M.**, & Saffran, J. (2021). Sampling to learn words: Adults and children sample words that reduce referential ambiguity. *Developmental Science*, 24(3), e13064. <https://doi.org/10.1111/desc.13064>

Byers-Heinlein, K., Bergmann, C., Davies, C., Frank, M. C., Hamlin, K., Kline, M., ..., **Zettersten, M.**, & Soderstrom, M. (2020). Building a collaborative Psychological Science: Lessons from ManyBabies 1. *Canadian Psychology*, 61(4), 349-363. <https://doi.org/10.1037/cap0000216>

Benitez, V., **Zettersten, M.**, & Wojcik, E. (2020). The temporal structure of naming events differentially affects children's and adults' statistical word-referent learning. *Journal of Experimental Child Psychology*, 200, 104961. <https://doi.org/10.1016/j.jecp.2020.104961>

**Zettersten, M.**, Potter, C., & Saffran, J. (2020). Tuning in to non-adjacencies: Exposure to learnable patterns supports discovering otherwise difficult structures. *Cognition*, 202, 104283. <https://doi.org/10.1016/j.cognition.2020.104283>

The ManyBabies Consortium (2020). Quantifying sources of variability in infancy research using the infant-directed-speech preference. *Advances in Methods and Practices in Psychological Science*, 3(1), 24-52. <https://doi.org/10.1177/2515245919900809>

**Zettersten, M.**, Schonberg, C., & Lupyan, G. (2020). What does a radical exemplar view not predict? A commentary on Ambridge (2020). *First Language*, 40(5-6), 636-639. <https://doi.org/10.1177/0142723720903895>

**Zettersten, M.**, & Lupyan, G. (2020). Finding categories through words: More nameable features improve category learning. *Cognition*, 196, 104135. <https://doi.org/10.1016/j.cognition.2019.104135>

Lewis, M., **Zettersten, M.**, & Lupyan, G. (2019). Distributional semantics as a source of visual knowledge. *Proceedings of the National Academy of Sciences*, 116(39), 19237-19238. <https://doi.org/10.1073/pnas.1910148116>

**Zettersten, M.**, Wojcik, E. W., Benitez, V., & Saffran, J. R. (2018). The company objects keep: Linking referents together during cross-situational word learning. *Journal of Memory & Language*, 99, 62-73. <https://doi.org/10.1016/j.jml.2017.11.001>

Hoehl, S., **Zettersten, M.**, Schleihauf, H., Graetz, S., & Pauen, S. (2014). The role of social interaction and pedagogical cues for eliciting and reducing overimitation in preschoolers. *Journal of Experimental Child Psychology*, 122, 122-133. <https://doi.org/10.1016/j.jecp.2013.12.012>

## BOOK CHAPTERS

- Lupyan, G., & **Zettersten, M.** (2021). Does vocabulary help structure the mind? In Sera, M., & Koenig, M (Eds.). *Minnesota Symposia on Child Psychology: Human Communication: Origins, Mechanisms, and Functions, Volume 40* (pp. 160-199). Hoboken, NJ: John Wiley & Sons. <https://doi.org/10.1002/9781119684527.ch6>. Preprint: <https://psyarxiv.com/b74u9>
- Zettersten, M.** (2019). Learning by predicting: How predictive processing informs language development. In Busse, B., & Moehlig-Falke, R. (Eds.). *Patterns in Language and Linguistics: New Perspectives on a Ubiquitous Concept* (pp. 255-288). Berlin: Mouton de Gruyter. <https://doi.org/10.1515/9783110596656-010>

## PEER-REVIEWED CONFERENCE PROCEEDINGS

- Zettersten, M.,** Bergey, C. A., Bhatt, N., Boyce, V., Braginsky, M., Carstensen, A., deMayo, B., Kachergis, G., Lewis, M., Long, B., MacDonald, K., Mankewitz, J., Meylan, S. C., Saleh, A. N., Schneider, R. M., Tsui, A.S.T., Uner, S., Xu, T. L., Yurovsky, D., & Frank, M.C. (2021). Peekbank: Exploring children's word recognition through an open, large-scale repository for developmental eye-tracking data. *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*. Preprint: <https://psyarxiv.com/ep693/>
- Zettersten, M.,** Suffill, E., & Lupyan, G. (2020). Nameability predicts subjective and objective measures of visual similarity. *Proceedings of the 42nd Annual Conference of the Cognitive Science Society*.
- Zettersten, M.,** & Saffran, J. (2019). Sampling to learn words: Adults and children sample words that reduce referential ambiguity. *Proceedings of the 41st Annual Conference of the Cognitive Science Society*.
- Koranda, M.\*, **Zettersten, M.\***, & McDonald, M. (2018). Word frequency can affect what you choose to say. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.
- Zettersten, M.,** Potter, C., & Saffran, J. (2018). Tuning in to non-adjacent dependencies: How experience with learnable patterns supports learning novel regularities. *Proceedings of the 40th Annual Conference of the Cognitive Science Society*.
- Zettersten, M.,** & Lupyan, G. (2018). Using language to discover categories: More nameable features improve category learning. In C. Cuskley, M. Flaherty, H. Little, Luke McCrohon, A. Ravignani, & T. Verhoef (Eds.), *The Evolution of Language: Proceedings of the 12th International Conference (EVLANGXII)*.

## Presentations

\* equal authorship contribution

### INVITED TALKS

- Language and Development Seminar, University of Oxford, 2022.
- Cognitive Development and Learning Lab Meeting, UC Berkeley, 2021.
- Language & Cognitive Development Lab Meeting, UC Berkeley, 2021.
- Goldstone Lab Meeting, Indiana University, 2021.
- Bergelson Lab Meeting, Duke University, 2020.
- Cognitive Area Meeting, Lehigh University, 2020.
- Baby BRAIN Group meeting, Donders Institute, 2020.
- Departmental Colloquium, University of Wisconsin-Madison, 2019.
- Language Brownbag, University of Illinois Urbana-Champaign, 2019.
- Princeton Baby Lab Meeting, Princeton University, 2019.
- Developmental Brownbag, University of Chicago, 2017.

### CONFERENCE PRESENTATIONS

- Zettersten, M.,** Saleh, A., Bhatt, N., Yurovsky, D., Xu, T. L., Uner, S., Tsui, A., Schneider, R. M., Meylan, S. C., Marchman, V., Mankewitz, J., MacDonald, K., Long, B., Lewis, M., Kachergis, G., deMayo, B., Carstensen, A.S.T., Braginsky, M., Boyce, V., Bergey, C., & Frank, M. C. (2021). Increases in speed and accuracy of children's online word recognition measured via a large-scale, open database of developmental eye-tracking data. Oral presentation. BUCLD 46. Virtual.
- Zettersten, M.,** Bergey, C. A., Bhatt, N., Boyce, V., Braginsky, M., Carstensen, A., deMayo, B., Kachergis, G., Lewis, M., Long, B., MacDonald, K., Mankewitz, J., Meylan, S. C., Saleh, A. N., Schneider, R. M., Tsui, A.S.T., Uner, S., Xu, T. L., Yurovsky,

- D., & Frank, M.C. (2021). Peekbank: Exploring children's word recognition through an open, large-scale repository for developmental eye-tracking data. Poster. 43rd Annual Meeting of the Cognitive Science Society. Virtual.
- Zettersten, M.**, Choi, K., Kirkorian, H., & Saffran, J. (2021). Children actively sample information in support of learning new words. Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Kosie, J.\*, **Zettersten, M.\***, & the ManyBabies5 team (2021). ManyBabies5: A large-scale, collaborative investigation of the Hunter & Ames model of infant looking preference. Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Benitez, V., **Zettersten, M.**, & Wojcik, E. (2021). Developmental differences in the role of temporal structure in ambiguous word learning. Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Campbell, E., **Zettersten, M.**, Lewis, M., & Bergelson, E. (2021). Early language in blind, deaf/hard-of-hearing, and typically-developing infants. Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Woodard, K., **Zettersten, M.**, & Pollak, S.D. (2021). How is emotion knowledge represented across development? Oral presentation. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Schonberg, C., Valentyn, E., Yang, R., Masters, M., & **Zettersten, M.** (2021). Characterizing the practices of reporting sex differences in infancy research. Poster. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Anderson, L., Hwang, H., Kamhout, S., Gilliat, S., Lundwall, R., Black, A., Kartushina, N., Kosie, J., Tsui, A., **Zettersten, M.**, & Bergmann, C. (2021). A fresh look at infant-directed speech preference through an updated meta-analysis. Poster. Biennial Meeting of the Society for Research in Child Development. Virtual.
- Zettersten, M.**, Black, A., Bergmann, C., Bacon, D., Weaver, H., & Saffran, J. (2020). Investigating the relationship between infant learning and measured effect size in preferential looking paradigms. Poster. Many Paths to Language (MPaL) Workshop. Virtual.
- Zettersten, M.**, Suffill, E., & Lupyan, G. (2020). Nameability predicts subjective and objective measures of visual similarity. Oral presentation. 42nd Annual Meeting of the Cognitive Science Society. Virtual.
- Woodard, K., **Zettersten, M.**, & Pollak, S.D. (2020). Developmental changes in children's knowledge of facial configurations. Poster. 42nd Annual Meeting of the Cognitive Science Society. Virtual.
- Zettersten, M.**, Black, A., Bergmann, C., Bacon, D., Weaver, H., & Saffran, J. (2020). Investigating the relationship between infant learning and measured effect size in preferential looking paradigms. Poster. Biennial International Congress of Infant Studies. Virtual.
- Schreiner, M., Lippold, M., & ManyBabies Consortium Test-Retest (2020). Assessing test-retest reliability of the infant preference measures. Poster. Biennial International Congress of Infant Studies. Virtual.
- Santolin, C., Garcia-Castro, G., **Zettersten, M.**, Sebastian-Galles, N., & Saffran, J. (2020). Prior experience with the Head-turn Preference Procedure relates to infants' direction of preference in learning studies. Poster. Biennial International Congress of Infant Studies. Virtual.
- Woodard, K., **Zettersten, M.**, & Pollak, S.D. (2020). Developmental changes in children's knowledge of facial configurations. Oral presentation. Annual Conference of the Society for Affective Science. San Francisco, CA (cancelled, COVID-19).
- Benitez, V., **Zettersten, M.**, & Saffran, J. (2019). Preschooler's remembering and learning from predictable and unpredictable events. Oral presentation. 11th Biennial Meeting of the Cognitive Development Society. Louisville, KY.
- Zettersten, M.**, Choi, K., Kirkorian, H., & Saffran, J. (2019). How does active sampling support learning new words? Poster. 11th Biennial Meeting of the Cognitive Development Society. Louisville, KY.
- Zettersten, M.**, & Saffran, J. (2019). Sampling to learn words: Adults and children sample words that reduce referential ambiguity. Oral presentation. 41st Annual Meeting of the Cognitive Science Society. Montreal, CA.
- Zettersten, M.**, Bredemann, C., Kaul, M., Vlach, H., Kirkorian, H., & Lupyan, G. (2019). Verbal labels support rule-based category learning in children. Poster. Biennial Meeting of the Society for Research in Child Development. Baltimore, MD.
- Zettersten, M.**, & Saffran, J. (2018). How do infants sample novel object-label associations? Oral presentation. XXI Biennial International Congress of Infant Studies. Philadelphia, PA.
- Koranda, M., **Zettersten, M.**, & McDonald, M. (2018). Word frequency can affect what you choose to say. Oral presentation. 40th Annual Meeting of the Cognitive Science Society. Madison, WI.

- Zettersten, M., Potter, C., & Saffran, J. (2018).** Tuning in to non-adjacent dependencies. Poster. 40th Annual Meeting of the Cognitive Science Society. Madison, WI.
- Hopman, E. & **Zettersten, M. (2018).** Immediate feedback is critical for learning from your own productions. Poster. Psycholinguistics in Flanders. Ghent, Belgium.
- Zettersten, M., & Lupyan, G. (2018).** Using language to discover categories: More nameable features improve category learning. Poster. EvoLang XII. Torun, Poland.
- Zettersten, M., & Saffran, J. (2017).** Choosing words wisely: How infants strategically seek information when learning novel words. Poster. 10th Biennial Meeting of the Cognitive Development Society. Portland, OR.
- Zettersten, M., Potter, C., & Saffran, J. (2017).** Tuning in to non-adjacent dependencies. Poster. International Conference on Interdisciplinary Advances in Statistical Learning. Bilbao, Spain.
- Zettersten, M., Benitez, V., & Saffran, J. (2017).** When prediction violation boosts memory: 5-year-olds remember images involved in unexpected events better. Poster. Biennial Meeting of the Society for Research in Child Development. Austin, TX.
- Zettersten, M., & Saffran, J. (2016).** Choosing words wisely: How infants strategically seek information when learning novel words. Oral presentation. XX Biennial International Congress of Infant Studies. New Orleans, LA.
- Zettersten, M., & Lupyan, G. (2015).** The role of language in categorical statistical learning. Poster. 56th Annual Meeting of the Psychonomic Society. Chicago, IL.
- Zettersten, M., Paul, J., & Lupyan, G. (2015).** Language augments relational reasoning. Oral presentation. 9th Biennial Meeting of the Cognitive Development Society. Columbus, OH.
- Zettersten, M., Wojcik, E., Benitez, V., & Saffran, J. (2015).** Learning multiple kinds of associations during cross-situational word learning. Poster. 37th Annual Meeting of the Cognitive Science Society. Pasadena, CA.
- Zettersten, M., Paul, J., & Lupyan, G. (2015).** Language augments relational reasoning: The effect of late exposure to a standardized language. Poster. Biennial Meeting of the Society for Research in Child Development. Philadelphia, PA.
- Schleihauf, H., **Zettersten, M., Pauen, S., & Hoehl, S. (2015).** Both causal and social reasoning underlies overimitation in five-year-olds. Poster. Biennial Meeting of the Society for Research in Child Development. Philadelphia, PA.
- Pleyer, M. & **Zettersten, M. (2012).** From cognition to corpus, from corpus to cognition: How corpus research in child language can benefit from research in developmental psychology, and vice versa. Poster. 11th Biannual Meeting of the German Cognitive Science Society. Bamberg, Germany.

## Teaching

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2021	<b>Programming experiments in PsychoPy</b> , /L+/ Summer/ Winter School, Instructor, <a href="https://osf.io/7kfbu/">https://osf.io/7kfbu/</a>
2019	<b>Psychology 601: Developing babies, building robots</b> , Instructor, UW-Madison
2019	<b>Psychology 460: Child Development</b> , Guest Lecturer, UW-Madison
2019	<b>Psychology 711: Language Acquisition in Infancy and Early Childhood</b> , Guest Instructor, UW-Madison
2019	<b>Psychology 710: Design &amp; Analysis of Psychological Experiments II</b> , Guest Instructor, UW-Madison
2018	<b>Psychology 601: Language Development</b> , Guest Lecturer, UW-Madison
2017	<b>Psychology 710: Design &amp; Analysis of Psychological Experiments II</b> , Teaching Assistant, UW-Madison
2016	<b>Psychology 610: Design &amp; Analysis of Psychological Experiments I</b> , Teaching Assistant, UW-Madison
2015	<b>Psychology 521: The Structure of Human Thought</b> , Guest Lecturer, UW-Madison
2014-2015	<b>Adult Role Models in Science</b> , Instructor, Sandburg Elementary School, weekly science classes
2012-2013	<b>English Department: Introduction to Linguistics</b> , Teaching Assistant, Heidelberg University
2010-2012	<b>English Department: Introduction to English Literature</b> , Teaching Assistant, Heidelberg University
2010-2011	<b>Mathematics Department: Linear Algebra I</b> , Teaching Assistant, Heidelberg University

## Mentoring

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### UNDERGRADUATE RESEARCH

2021- **Molly Cutler**, ReMatch+ mentee and undergraduate, Princeton University  
2021- **Kunal Handa**, summer research intern, Peekbank project  
2020- **Annie Jain**, undergraduate, Princeton University  
2018 **Andrew Kressin**, Welton Summer Research Apprenticeship, UW-Madison  
2017-2018 **Maddie Cincebeaux**, undergraduate, UW-Madison  
2017-2018 **Michaela McCabe**, undergraduate, UW-Madison  
2016-2017 **Ellen Breen**, undergraduate, UW-Madison  
2016-2017 **Lizzie Hoff**, undergraduate, UW-Madison  
2015 **Nicholas Baird**, NSF-funded PREP summer research program, UW-Madison

### OTHER ACTIVITIES

2021- **Mentor**, Next-Gen Psych Scholars Program  
2020- **Mentor**, Científico Latino, Graduate Student Mentorship Initiative (GSMI)  
2020- **Mentor**, ManyBabies5 mentoring network

## Service

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### PROFESSIONAL ACTIVITIES

2021 **Young Women's Conference in STEM**, session organizer, Princeton, NJ  
2018 **40th Annual Meeting of the Cognitive Science Society**, Local Arrangements Chair, UW-Madison  
2016 **Psychology Department Writing Workshop**, co-creator and session organizer, UW-Madison  
2013-2018 **Psychology Colloquium Series Committee**, President (2016-2017), committee member, UW-Madison  
2013-2015 **Expanding Your Horizons**, presenter, workshop for young women exploring science careers, UW-Madison  
2013 **3rd Linguistic Conference for Doctoral Students**, organizing committee, Heidelberg, Germany

### REVIEWING

**Ad-Hoc Reviewer.** Cognition; Current Directions in Psychological Science; Frontiers in Psychology; Journal of Experimental Child Psychology; Journal of Experimental Psychology: General; Language Acquisition; PLOS One; Quarterly Journal of Experimental Psychology; Scientific Reports

**Conferences.** Annual Conference of the Cognitive Science Society; Boston University Conference on Language Development; Evolang; Multiple Paths to Language Workshop

**Grants.** NSF Developmental Sciences Program (CAREER)