Kyle MacDonald

CONTACT INFORMATION

Department of Psychology
Stanford University
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Stanford, CA 94305

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EMPLOYMENT

Scientific Consultant 2018 - present
Apprente
Artificial Intelligence for dialogue agents

Lab Manager 2010 - 2013
Language Learning Lab,
Department of Psychology, Stanford University
Anne Fernald, Ph.D

Research Assistant 2008 - 2010
Cognitive Development Lab,
Department of Psychology, Wesleyan University
Hilary Barth, Ph.D and Anna Shusterman, Ph.D

EDUCATION

Stanford University, Stanford, CA

Ph.D., Developmental Psychology, 2013 - present

- Thesis Topic: *Integrating social and statistical information during language comprehension and learning*
- Advisor: Michael C. Frank
- Committee: Hyo Gweon, Virginia Marchman, & Jay McClelland

Wesleyan University, Middletown, CT

B.A., with high honors in Psychology, May 2010

- Thesis Topic: *Group membership disrupts preschoolers' selective learning*
- Advisor: Hilary Barth

HONORS AND AWARDS

Stinehart-Reed Graduate Fellowship, Stanford University (2017 - 2018)

Graduate Research Fellowship, National Science Foundation (2014 - 2017)

Norman H. Anderson Travel Award, Stanford University (2016, 2018bui)

High Honors in Psychology, Wesleyan University (2010)

Walkley Prize for Excellence in Psychological Research, Wesleyan University (2010)

Quantiative Analysis Center Research Fellowship, Wesleyan University (2008)

Tomasso Scholarship, Kingswood-Oxford (2006)

Publications

1. **MacDonald, K.**, LaMarr, T., Corina, D., Marchman, V.A., & Fernald, A. (2018). Real-time lexical comprehension in young children learning American Sign Language. *Developmental Science.*

2. **MacDonald, K.**, Marchman, V.A., & Fernald, A. (in prep). M-o-o-s as cues: Young children map novel animal vocalizations to unfamiliar animals. Manuscript in preparation.

3. Sanchez, A., Meylan, S., Braginsky, M., **MacDonald, K.**, Yurovsky, D., & Frank, M. C. (under review). childes-db: a flexible and reproducible interface to the Child Language Data Exchange System (CHILDES).

4. Hardwicke, T. E., Mathur, M. B., **MacDonald, K.**, Nilsonne, G., Banks, G. C., Kidwell, M.C., Hofelich-Mohr, A., Clayton, E., Yoon, E.J., Tessler, M.H., Lenne, R., Altman, S., Long, B., & Frank, M.C. (under review). Data availability, reusability, and analytic reproducibility: Evaluating the impact of a mandatory open data policy at the journal Cognition.

5. **MacDonald, K.**, Marchman, V.A., Fernald, A., & Frank, M.C. (2018). Adults and preschoolers seek visual information to support language comprehension in noisy environments. *Proceedings of the 40th Annual Meeting of the Cognitive Science Society.*

6. Yoon, E.J.*, **MacDonald, K.***, Asaba M., Gweon, H., & Frank, M.C. (2018). Balancing informational and social goals in active learning. *Proceedings of the 40th Annual Meeting of the Cognitive Science Society.*

7. **MacDonald, K.**, Blonder, A., Marchman, V.A., Fernald, A., & Frank, M.C. (2017). An information-seeking account of eye movements during spoken and signed language processing. *Proceedings of the 39th Annual Meeting of the Cognitive Science Society.*

8. **MacDonald, K.**, Yurovsky, D., & Frank, M.C. (2017). Social cues modulate the representations underlying cross-situational learning. *Cognitive Psychology*, 94, 6784.

9. Frank, M.C., Lewis, M.L., & **MacDonald, K.**, (2016). A performance model for early word learning. *Proceedings of the 38th Annual Meeting of the Cognitive Science Society.*

10. **MacDonald, K.**, & Frank, M.C. (2016). When does passive learning improve the effectiveness of active learning? *Proceedings of the 38th Annual Meeting of the Cognitive Science Society.*

11. **MacDonald, K.**, Yurovsky, D., & Frank, M.C. (2015). Referential cues modulate attention and memory during cross-situational word learning. *Proceedings of the 37th Annual Meeting of the Cognitive Science Society.*

12. Barth, H., Bhandari, K., Garcia, J., **MacDonald, K.**, & Chase, E. (2014). Preschoolers trust novel members of accurate speakers? groups and judge them favorably. *Quarterly Journal of Experimental Psychology*, 67, 872-883.

13. **MacDonald, K.**, Schug, M., Chase, E. & Barth, H. (2013). My People, Right or Wrong? Minimal Group Membership Disrupts Children's Selective Trust in Testimony. *Cognitive Development* 28, 247-259.

Teaching and Mentorship

Teaching

Intro to Psychology, Stanford University (Guest Lecturer, 2016-2018)
Language Acquisition, Stanford University (Guest Lecturer, 2018)
Intro to Statistical Methods, Stanford University (Head TA, 2017)
Developmental Psychology, Stanford University (Instructor, 2016)
Learning and Memory, Stanford University (Teaching Assistant, 2016)
Developmental Psychology, Stanford University (Teaching Assistant, 2015)
Intro to Psychology, Stanford University (Teaching Assistant, 2014-2015)

Undergraduate Research Assistants

Aviva Blonder - CSLI Research Intern
Allison Dods - Symbolic Systems BS, honors thesis
Melina Wailing - Psychology Research Intern
Tami Alade - HumBio Research Intern
Hannah Slater - HumBio Research Intern
Elizabeth Swanson - Psychology Research Intern

Presentations

1. **MacDonald, K.**, Marchman, V.A., Fernald, A., & Frank, M.C. (2018). Seeking visual information from social partners during language comprehension. Invited talk at Santa Clara University.
2. **MacDonald, K.**, Marchman, V.A., Fernald, A., & Frank, M.C. (2018). Adults and preschoolers seek visual information to support language comprehension in noisy environments. Oral presentation at the 40th Annual Meeting of the Cognitive Science Society.
3. **MacDonald, K.**, Marchman, V.A., Fernald, A., & Frank, M.C. (2018). An information-seeking account of eye movements during spoken and signed language processing. Symposium talk presented at the biennial International Conference on Infant Studies, Philadelphia, PA.
4. **MacDonald, K.**, Marchman, V.A., Fernald, A., & Frank, M.C. (2018). An information-seeking account of eye movements during spoken and signed language processing. Frisem presentation, Stanford University.
5. **MacDonald, K.**, Blonder, A., Marchman, V.A., Fernald, A., & Frank, M.C. (2017). An information-seeking account of eye movements during spoken and signed language processing. Oral presentation at the 39th Annual Meeting of the Cognitive Science Society, London, Eng.
6. **MacDonald, K.**, Corina, D., Marchman, V., & Fernald, A. (2016). Real-time language comprehension in American Sign Language. Workshop on Multimodal Multilingual Outcomes in Deaf and Hard-of-Hearing children, Stockholm, Sweden.
7. **MacDonald, K.**, & Frank, M.C. (2016). When does passive learning improve the effectiveness of active learning? Oral presentation at the 38th Annual Meeting of the Cognitive Science Society, Pasadena, CA.
8. **MacDonald, K.**, Blonder, A., Marchman, V.A., Fernald, A., & Frank, M.C. (2016). Speed-accuracy tradeoffs during real-time language comprehension in children learning English and American Sign Language. Poster presented at the biennial International Conference on Infant Studies, New Orleans, LA.
9. **MacDonald, K.**, Yurovsky, D., & Frank, M.C. (2015). Social cues modulate the strength of encoding alternative referents in cross-situational word learning. Conference talk submitted to the biennial meeting of the Society for Research in Child Development, Philadelphia, PA.

10. **MacDonald, K.**, Corina, D., Marchman, V., & Fernald, A. (2015). Age-related changes in children's real-time American Sign Language sentence processing. Conference talk submitted to the biennial meeting of the Society for Research in Child Development, Philadelphia, PA.

11. Bion, R., **MacDonald, K.**, & Fernald, A. (2013). M-o-o-s as cues: Young children map novel animal vocalizations to unfamiliar animals. Symposium submitted to the biennial meeting of the Society for Research in Child Development, Seattle, WA.

12. **MacDonald, K.**, Corina, D., Marchman, V., & Fernald, A. (2013). Real Time Processing of ASL in Deaf and Hearing Native-Signing Infants. Poster submitted to the biennial meeting of the Society for Research in Child Development, Seattle, WA.

13. **MacDonald, K.**, Bion, R., Adams, K., Marchman, V., Hurtado, N., & Fernald, A. (2012). M-o-o-s as cues: Young children map novel animal vocalizations to unfamiliar animals. Poster presented at the biennial International Conference on Infant Studies, Minneapolis, MN.

14. **MacDonald, K.**, Schug, M., & Barth, H. (2011). My people, right or wrong? Minimal group membership disrupts children's selective trust in testimony. Poster presented at the biennial meeting of the Society for Research in Child Development, Montreal, Canada.

15. Barth, H., Garcia, J., Slusser, E., **MacDonald, K.**, Acheampong, A., Kanjlia, S., & Santiago, R. (2011). Proportional reasoning shapes children's number-line estimates. Conference abstract. Biennial meeting of the Society for Research in Child Development, Montreal, Canada.

16. Sullivan, J., **MacDonald, K.**, Paladino, A., & Barth, H. (2009). Children's mappings of number words to large numerosities. Conference abstract. Biennial meeting of the Society for Research in Child Development, Denver, CO.

17. Schug, M., Patalano, A., Barth, H., Shusterman, A., Herrig, E., & **MacDonald, K.** (2009). Group bias, statistical reasoning, and social judgments. Conference abstract. Biennial meeting of the Cognitive Development Society, San Antonio, TX.

18. **MacDonald, K.** & Barth, H. (2008). Learning the meaning of large number words. Poster presented at the Quantitative Analysis Center Poster Session, Wesleyan University, CT.

Professional Service

Student Representative: Graduate Program Committee, Stanford University

Continuing professional memberships in: Cognitive Science Society, International Society for Infant Studies, Society for Research in Child Development

Ad-hoc reviewer: Journal of Experimental Child Psychology, Cognitive Development, Cognition, Developmental Psychology, Proceedings of the Cognitive Science Society, IEEE Transactions on Cognitive and Developmental Systems, Infant Behavior and Development

Technical Skills

Natural languages: English, American Sign Language

Programming languages: R, Python, Javascript, HTML/CSS

Data science: data visualization, statistics (bayesian and frequentist approaches), experimental design, eye-tracking methods, natural language processing