# Kyle MacDonald

Department of Communication Phone: 860-324-7315 Contact

**UCLA** E-mail: kemacdonald@ucla.edu Information

Rolfe Hall WWW: kemacdonald.com

Los Angeles, CA 90095

ACADEMIC Postdoctoral Researcher, 2018 - present APPOINTMENTS

Emergence of Communication Lab

Department of Communications, University of California, Los Angeles

**EDUCATION** Stanford University, Stanford, CA

Ph.D. in Developmental Psychology, November 2018

• Thesis: Children's information seeking during signed and spoken language processing

• Advisor: Michael C. Frank

• Committee: Michael C. Frank (chair), Hyowon Gweon, Virginia Marchman, Jay McClelland, & Judith Degen (external chair)

Wesleyan University, Middletown, CT

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

• Thesis: Group membership disrupts preschoolers' selective learning

• Advisor: Hilary Barth

Honors. Fellowships, 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, 2018)

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)

Journal **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. Sanchez, A., Meylan, S., Braginsky, M., MacDonald, K., Yurovsky, D., & Frank, M. C. (2018). childes-db: a flexible and reproducible interface to the Child Language Data Exchange System (CHILDES). Behavior research methods.
- 3. 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. (2018). Data availability, reusability, and analytic reproducibility: Evaluating the impact of a mandatory open data policy at the journal Cognition. Royal Society open science.

- 4. **MacDonald, K.**, Yurovsky, D., & Frank, M.C. (2017). Social cues modulate the representations underlying cross-situational learning. *Cognitive Psychology*, 94, 67–84.
- 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.
- 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.

# IN PROGRESSS JOURNAL PUBLICATIONS

- 7. **MacDonald, K.**, Marchman, V.A., Fernald, A., & Frank, M.C. (under review) Children flexibly seek visual information during signed and spoken language comprehension. *Journal of Experimental Psychology: General*
- 8. MacDonald, K., Marchman, V.A., & Fernald, A. (in prep). M-o-o-s as cues: Two-year-olds expect one-to-one mappings in a non-linguistic and non-communicative domain.
- 9. Hardwicke, T. E., Bohn, M., **MacDonald, K.**, Hembacher, E., Nuijten, M. B., Peloquin, B. N., deMayo, B., Long, B., Yoon, E. J., & Frank, M. C. (in prep). An assessment of analytic reproducibility for articles with open data badges at the journal Psychological Science.
- 10. Nordmeyer, A., Yoon, E. J., **MacDonald, K.**, & Frank, M. C. (in prep) Distinguishing processing difficulties in inhibition, implicature, and negation

# PEER-REVIEWED CONFERENCE PUBLICATIONS

- 11. MacDonald, K., Swanson E. & Frank, M.C. (2019). Integration of gaze information during online language comprehension and learning. *Proceedings of the 41st Annual Meeting of the Cognitive Science Society*.
- 12. 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.*
- 13. 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*. [\* co-first authors]
- 14. 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.
- 15. 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*.
- 16. 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.*
- 17. 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.*

INVITED TALKS

University of California, LA, Developmental Psychology Colloquium (2018)

Santa Clara University, Read Lab (2018)

Stanford University, Cognitive Science Colloquium (2018)

Rochester Institute of Technology, Workshop on Multimodal Outcomes (2016)

Deaf Counseling, Advocacy, and Referral Agency, San Leandro (2013)

California School for the Deaf in Fremont (2013)

CONFERENCE ORGANIZATION **Symposium**: New Approaches to Understanding Human Language: Insights from Neuroimaging and Behavioral Studies of Visual Language Learning, 2013 Meeting of the Society for Research in Child Development, *Chair* 

Conference Talks

- 1. **MacDonald, K.**, Marchman, V.A., Fernald, A., & Frank, M.C. (2018). Adults and preschoolers seek visual information to support language comprehension in noisy environments. Presented at the 40th Annual Meeting of the Cognitive Science Society.
- 2. MacDonald, K., Marchman, V.A., Fernald, A., & Frank, M.C. (2018). An information-seeking account of eye movements during spoken and signed language processing. Presented at the *Biennial International Conference on Infant Studies*.
- 3. 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. Presented at the 39th Annual Meeting of the Cognitive Science Society.
- 4. **MacDonald, K.**, & Frank, M.C. (2016). When does passive learning improve the effectiveness of active learning? Presented at the 38th Annual Meeting of the Cognitive Science Society.
- 5. MacDonald, K., Yurovsky, D., & Frank, M.C. (2015). Social cues modulate the strength of encoding alternative referents in cross-situational word learning. Presented at the *Biennial Meeting of the Society for Research in Child Development*.
- 6. **MacDonald, K.**, Yurovsky, D., & Frank, M.C. (2015). Referential cues modulate attention and memory during cross-situational word learning. Presented at the 37th Annual Meeting of the Cognitive Science Society.
- 7. MacDonald, K., Corina, D., Marchman, V., & Fernald, A. (2015). Age-related changes in children's real-time American Sign Language sentence processing. Presented at the *Biennial Meeting of the Society for Research in Child Development*.
- 8. 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*.

#### Conference Posters

- 9. MacDonald, K., Swanson E. & Frank, M.C. (2019). Integration of gaze information during online language comprehension and learning. Presented at the 41st Annual Meeting of the Cognitive Science Society.
- 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. Presented at the Biennial International Conference on Infant Studies, New Orleans, LA
- 11. MacDonald, K., Corina, D., Marchman, V., & Fernald, A. (2013). Real Time Processing of ASL in Deaf and Hearing Native-Signing Infants. Presented at the Biennial Meeting of the Society for Research in Child Development.
- 12. **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. Presented at the *Biennial International Conference on Infant Studies*.
- 13. MacDonald, K., Schug, M., & Barth, H. (2011). My people, right or wrong? Minimal group membership disrupts children's selective trust in testimony. Presented at the *Biennial Meeting of the Society for Research in Child Development*
- Slusser, E., Garcia, J., MacDonald, K., Acheampong, A., Kanjlia, T., & Barth H. (2011). Evidence that proportion-judgment models explicate children's performance on number-line estimation tasks. Presented at the Meeting of the Eastern Psychological Association
- 15. Barth, H., Garcia, J., Slusser, E., **MacDonald, K.**, Acheampong, A., Kanjlia, S., & Santiago, R. (2011). Proportional reasoning shapes children's number-line estimates. Presented at the *Biennial meeting of the Society for Research in Child Development*.
- Sullivan, J., MacDonald, K., Paladino, A., & Barth, H. (2009). Children's mappings of number words to large numerosities. Presented at the *Biennial* meeting of the Society for Research in Child Development.
- 17. Schug, M., Patalano, A., Barth, H., Shusterman, A., Herrig, E., & MacDonald, K. (2009). Group bias, statistical reasoning, and social judgments. Presented at the *Biennial meeting of the Cognitive Development Society*.
- 18. MacDonald, K. & Barth, H. (2008). Learning the meaning of large number words. Presented at the *Quantitative Analysis Center Research Symposium*.

# TEACHING AND DEPARTMENTAL SERVICE

#### Co-instructor

1. PSYCH 113S: Developmental Psychology (Summer 2016)

# Teaching Assistant

- 2. STATS 60: Introduction to Statistical Methods (Head TA, 2017)
- 3. PSYCH 60: Introduction to Developmental Psychology (Fall 2016)
- 4. PSYCH 45: Learning and Memory (Winter 2016)
- 5. PSYCH 1: Introduction to Psychology (Spring 2015)
- 6. PSYCH 60: Introduction to Developmental Psychology (Winter 2015)
- 7. PSYCH ONE: Introduction to Psychology (Fall 2014)

## **Guest Lecturer**

- 8. Sign Language, COMM 141: Communication Development (Fall 2019)
- 9. Language, PSYCH 1: Introduction to Psychology (Spring 2018)
- 10. Sign Language Acquisition, LING 140: Language Acquisition (Spring 2018)
- 11. Language, PSYCH 1: Introduction to Psychology (Winter 2017)
- 12. Language, PSYCH 1: Introduction to Psychology (Fall 2017)
- 13. Sign Language Development, Seminar on Infancy Research (Fall 2016)

## Other Departmental Service

- 14. Graduate Program Committee member (2016-2018)
- 15. Developmental area graduate admissions committee member (2016, 2017)
- 16. Co-organizer for Prospective Students Weekend (2016)
- 17. Co-organizer for Developmental Area Brownbag talk series (2014-15, 2015-16)

#### Mentorship

## UCLA, Emmergence of Communication Lab

Curt Chang, Research Intern (2019-present) Vicky Chen, Research Intern (2019)

## Stanford University, Department of Psychology

Elizabeth Swanson, Psychology Research Intern (2018-2019) Kayla Constandse - Symbolic Systems Research Intern (2018) Melina Wailing, Psychology Research Intern (2016-2017) Tami Alade, HumBio Research Intern (2017) Hannah Slater, HumBio Research Intern (2017) Aviva Blonder, CSLI Research Intern (2016) Allison Dods, Symbolic Systems honors student (2015-2016)

#### Stanford University, Language Learning Lab (2010-2013)

Brittany Margot, Sara Rodriguez, Mofeda Dababo, Alberto Lalama, Tiana Moore, Rupa Mahajan, Stacey Christiansent, Samara Nichols, Amanda Rost, Mary Kate Smith, Lucy Martinez, Ron Pomper, Sazan Ghafur, Erica Carillo, Ximena Apuero, George Bridges, Monica Ellwood-Lowe, Vivian Chen, Armince Garcia Barker, Kelly Ann Conley, Juan Flores, Riel LaPlant, Nandita Kumar, Chierika Ukogu, Alex Ritchie, McKenzie Culler, Guadalupe Ramirez

# PROFESSIONAL MEMBERSHIPS AND SERVICE

Co-organizer and Pre-Pi Representative on the DARCLE board (2019-present)

Cognitive Science Society, Member, 2015—present International Society for Infant Studies, Member, 2012-present Society for Research in Child Development, Member, 2012-present

Ad-hoc reviewer for: 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

Additional Research Experience

**Apprente** 2018 - 2019

Scientific consultant for projects developing artificial intelligence dialog agents

Department of Psychology, Stanford University

2010 - 2013

Scientific consultant, Senegal Tostan Evaluation, (PI: Anne Fernald) Lab Manager, Language Learning Lab (PI: Anne Fernald)

Department of Psychology, Wesleyan University

2008 - 2010

Research assistant, Cognitive Development Lab (PI: Hilary Barth)

OPEN &
REPRODUCIBLE
SCIENCE
PROJECTS

cogsci2016: R-package for writing a fully reproducible conference submission to the Annual Meeting of the Cognitive Science Society [R package]

**childes-db**: a flexible and reproducible interface to the Child Language Data Exchange System (CHILDES) [website]

childesr: R package for accessing data in the childes-db system [R package]

**peekbank**: A flexible and reproducible interface to developmental eyetracking datasets [website]

 ${f homebank-db}$ : A flexible and reproducible interface to naturalistic, daylong audio recordings

Cognition Open Data Project: Data availability, reusability, and analytic reproducibility: Evaluating the impact of a mandatory open data policy at the journal Cognition [osf page]

**CARPS**: An assessment of analytic reproducibility at Psychological Science [osf page]

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, git, github