Kyle MacDonald

Department of Communication Phone: 860-324-7315 Contact E-mail: kemacdonald@ucla.edu Information UCLA Rolfe Hall WWW: kemacdonald.com Los Angeles, CA 90095 ACADEMIC Postdoctoral Researcher, UCLA 2018 - present Emergence of Communication Lab APPOINTMENTS Research advisor: Anne Warlaumont 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, Stinehart-Reed Graduate Fellowship, Stanford University 2017 - 2018 Fellowships, Graduate Research Fellowship, National Science Foundation 2014 - 2017 AND AWARDS 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 Quantitative Analysis Center Research Fellowship, Wesleyan University 2008 Tomasso Scholarship, Kingswood-Oxford 2006 1. MacDonald, K., LaMarr, T., Corina, D., Marchman, V.A., & Fernald, A. JOURNAL (2018). Real-time lexical comprehension in young children learning American Publications 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.

policy at the journal Cognition. Royal Society open science.

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

- 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 PROGRESS 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	$ \textbf{University of California, LA}, \ \textbf{Developmental Psychology Colloquium} $	2018
	Santa Clara University, Read Lab Meeting	2018
	Stanford University, Cognitive Science Colloquium	2018
	Rochester Institute of Technology, Workshop on Multi-modal Outcomes	2016
OUTREACH	Early Hearing Detection & Intervention Meeting, San Diego, CA	2016
ACTIVITIES	Deaf Counseling, Advocacy, and Referral Agency, San Leandro, CA	2013
	Dear Counselling, Flavocacy, and Relief Flavoracy, San Beautio, Ch	2010
	California School for the Deaf, Fremont, CA	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., LaMarr, T., Corina, D., Marchman, V.A., & Fernald, A. (2016). Development of young children's skill in real-time processing of American Sign Language. Presented at the *Early Hearing Detection & Intervention Meeting*.
- 6. **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*.
- 7. 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.
- 8. MacDonald, K., Corina, D., Marchman, V., & Fernald, A. (2013). 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*.
- 9. 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

- 10. **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
- 12. 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.
- 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. Presented at the *Biennial International Conference on Infant Studies*.
- 14. 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.
- 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*.
- 17. 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*.
- 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.
- 19. 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 2016

Teaching Assistant

2.	Introduction to Statistical Methods (Head TA, Stanford)	2017
3.	Introduction to Developmental Psychology	2016
4.	Learning and Memory	2016
5.	Introduction to Psychology	2016
6.	Introduction to Developmental Psychology	2015
7.	Introduction to Psychology	2014

Guest Lecturer

8.	Sign Language, Communication Development	2019
9.	Language, Introduction to Psychology	2018
10.	Sign Language Acquisition, Language Acquisition	2018
11.	Language, Introduction to Psychology	2017
12.	Language, Introduction to Psychology	2017
13.	Sign Language Development, Seminar on Infancy Research	2016
Other Departmental Service		

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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, 15-16

MENTORSHIP

UCLA, Emergence 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 Christiansen, 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 developing artificial intelligence conversational 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 reproducible submission to the Annual Meeting of the Cognitive Science Society [https://github.com/kemacdonald/cogsci2016]

childes-db: a flexible and reproducible interface to the Child Language Data Exchange System (CHILDES) [http://childes-db.stanford.edu/]

childesr: R package for accessing data in the childes-db system [https://langcog.github.io/childesr//index.html]

peekbank: A flexible and reproducible interface to developmental eyetracking datasets [https://peekbank.stanford.edu]

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 [https://osf.io/wn8fd/]

CARPS: An assessment of analytic reproducibility at Psychological Science [https://osf.io/n3dej/]

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

REFERENCES

Dr. Anne Warlaumont

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 $\begin{array}{l} Postdoc\ Advisor\ (2018\mbox{-}present)\\ \\ \text{Department of Communications}\\ \\ \text{UCLA} \end{array}$

Ph.D. Advisor (2013-2018)
Department of Psychology
Stanford University

Stanford University mcfrank@stanford.edu

Dr. Michael Frank

Dr. Virginia Marchman

Collaborator (2010-present)
Department of Psychology
Stanford University
marchman@stanford.edu