Post-doctoral Researcher, Department of Communications, University of California, Los Angeles *e-mail:* kemacdonald@ucla.edu, *site*: https://kemacdonald.com

### (a) Professional Preparation

Institute	Major	Degree, Year
Wesleyan University, Middletown, CT	Psychology	Bachelors, 2010
Stanford University, Stanford, CA	Developmental Psychology	Masters, 2016
Stanford University, Stanford, CA	Developmental Psychology	Doctoral, 2018
University of California, Los Angeles, CA	Communications	Post-doctoral, 2019

## (b) Appointments

2018-present	Post-doc research scientist, Emergence of Communication Lab, UCLA
2016-2017	Instructor, Developmental Psychology, Stanford University, CA
2013-2018	Teaching Assistant, Psychology department, Stanford University, CA
2010-2013	Research Associate, Language Learning Lab, Stanford University, CA

#### (c) Products

# Related to project

- [1] MACDONALD, K., BLONDER, A., MARCHMAN, A. V., FERNALD, A., AND FRANK, C. M. An information-seeking account of eye movements during spoken and signed language comprehension. In *Proceedings of the 39th Annual Conference of the Cognitive Science Society* (2017).
- [2] MACDONALD, K., LAMARR, T., CORINA, D., MARCHMAN, V. A., AND FERNALD, A. Real-time lexical comprehension in young children learning american sign language. *Developmental science* 21, 6 (2018), e12672.
- [3] MACDONALD, K., MARCHMAN, V., FERNALD, A., AND FRANK, M. C. Adults and preschoolers seek visual information to support language comprehension in noisy environments. In *Proceedings of the 40th Annual Conference of the Cognitive Science Society* (2018).
- [4] MACDONALD, K., MARCHMAN, V. A., FERNALD, A., AND FRANK, M. C. Children flexibly seek visual information during signed and spoken language comprehension.
- [5] MACDONALD, K., SWANSON, E., AND FRANK, M. C. Integration of gaze information during online language comprehension and learning. In *Proceedings of the 41th Annual Meeting of the Cognitive Science Society.* (2019).

### Others of significance

[1] BARTH, H., BHANDARI, K., GARCIA, J., MACDONALD, K., AND CHASE, E. Preschoolers trust novel members of accurate speakers' groups and judge them favourably. *The Quarterly Journal of Experimental Psychology* 67, 5 (2014), 872–883.

- [2] HARDWICKE, T. E., MATHUR, M. B., MACDONALD, K., NILSONNE, G., BANKS, G. C., KIDWELL, M. C., HOFELICH MOHR, A., CLAYTON, E., YOON, E. J., HENRY TESSLER, M., LENNE, R., ALTMAN, S., LONG, B., AND FRANK, M. C. Data availability, reusability, and analytic reproducibility: Evaluating the impact of a mandatory open data policy at the journal cognition. *Royal Society open science* 5, 8 (2018), 180448.
- [3] MACDONALD, K., SCHUG, M., CHASE, E., AND BARTH, H. My people, right or wrong? minimal group membership disrupts preschoolers' selective trust. *Cognitive Development* 28, 3 (2013), 247–259.
- [4] MACDONALD, K., YUROVSKY, D., AND FRANK, M. C. Social cues modulate the representations underlying cross-situational learning. *Cognitive Psychology 94* (2017), 67–84.
- [5] SANCHEZ, A., MEYLAN, S. C., BRAGINSKY, M., MACDONALD, K. E., YUROVSKY, D., AND FRANK, M. C. childes-db: a flexible and reproducible interface to the child language data exchange system. *Behavior research methods* 51, 4 (2019), 1928–1941.
- [6] YOON, E. J., MACDONALD, K., ASABA, M., GWEON, H., AND FRANK, M. C. Balancing informational and social goals in active learning. In *Proceedings of the 40th Annual Meeting of the Cognitive Science Society* (2018).

### (d) Synergistic Activities

- 1. Publicly available eye tracking analyses and software development (https://github.com/kemaconald). Some examples include:
  - Rtobii: R Package with utility functions for reading and parsing Tobii eyetracking data [link].
  - <u>iChartAnalyzeR</u>: R-package with utility functions for analyzing eyetracking studies in the style of the Language Learning Lab at Stanford University [link].
  - cluster-based permutation analysis of eye tracking data in R [link]
- 2. Presented research at a 3-day mini-conference in Stockholm (Sweden) on Multimodal Multilingual Outcomes in Deaf and Hard-of-Hearing Children (link). Work showed how eye movements can be used to measure language abilities in early-identified deaf infants.
- Organized a symposium at the Society for Research in Child Development on New Approaches to Understanding Human Language: Insights from Neuroimaging and Behavioral Studies of Visual Language Learners.
- 4. Presented research on sign language processing at the annual Early Hearing Detection and Intervention Meeting. Discussed with clinicians the evidence that the development of visual language processing follows a similar trajectory as spoken language processing.
- 5. Publicly available tutorial on Bayesian Linear Mixed Model analyses in the R programming language [link].
- 6. Guest lecturer for (1) Linguistics 140 (Sign Language Acquisition), Stanford University and (2) Psych One (Language), Stanford University.
- 7. Head Teaching Assistant for Stats 60: Intro to Statistical Methods, Stanford University: Developed teaching materials, including an interactive tutorial on exploratory data visualization skills [link].