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 / Area of study    | 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. *PsyArXiv* (2019).
- [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] 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.

- [2] 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.
- [3] MACDONALD, K., YUROVSKY, D., AND FRANK, M. C. Social cues modulate the representations underlying cross-situational learning. *Cognitive Psychology 94* (2017), 67–84.
- [4] 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.
- [5] 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/kemacdonald). 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. Guest lecturer for (1) Linguistics 140 (Sign Language Acquisition), Stanford University and (2) Psych One (Language), Stanford University.