# Emily Kubota

PhD Candidate at Stanford University (website) 450 Jane Stanford Way, Office 424, Stanford, CA 94305

ACADEMIC

Ph.D. Student

2019-present

BACKGROUND Stanford University, Stanford, CA

• Advisor: Dr. Kalanit Grill-Spector

B.A. Cognitive Science

2017

Pomona College, Claremont, CA • Advisor: Dr. Deborah Burke

**EMPLOYMENT** PhD Researcher **HISTORY** 

2019 - Present

Stanford University, Stanford, CA

- Studies the development of the human visual system using functional and diffusion magnetic resonance imaging
- Contributes to open source software

MRI/Data Science Intern

Summer 2023

Octave Bioscience, Menlo Park, CA

- Built neuroimaging pipelines for processing patient data in order to save manual intervention time
- Conducted product interviews and implemented feedback to make product more intuitive for patients and providers
- Designed analysis pipelines for clinical insights in order to identify potential areas of growth

Lab Manager 2017 - 2019

Brain Development and Education Lab University of Washington, Seattle, WA

- Designed behavioral and functional magnetic resonance imaging experiments to better understand the neural underpinnings of developmental dyslexia
- Coordinated with participant families, neuroimaging facilities, and educators to conduct two large scale reading intervention studies
- Managed recruitment, data storage, and analysis pipelines for participant interactions

AWARDS

- Honorable Mention for the Sammy Kuo Award for best paper in Neuroscience for "White matter connections of high-level visual areas predict cytoarchitecture better than category-selectivity in childhood, but not adulthood". October, 2022.
- National Science Foundation Graduate Fellowship (NSF GRFP). 2020-present.
- Stanford Mind, Brain, Computation, and Technology Trainee. 2020-2022.
- EDGE: Enhancing Diversity in Graduate Education Doctoral Fellowship, Stanford University. September, 2019.
- University of Washington Institute for Neuroengineering (UWIN) Post-Bac Fellowship. "Task Difficulty in Ventral Temporal Cortex". Yeatman Lab, University of Washington. Fall, 2017.

### **TEACHING**

• Introduction to Perception

Fall 2022

• Introduction to Statistics

Winter 2021

• Learning and Memory

Fall 2021

• Psych One

Fall 2020, Summer 2021

### **LEADERSHIP**

• Research supervisor Winter 2022 - present Oversees two undergraduate research assistants on independent research projects

• Friday Seminar Organizer 2021-2022 Organized seminar series to facilitate discussion on new research and methods in cognitive psychology and neuroscience

• Admissions representative December 2021 Read applications for admission to the Stanford Psychology Graduate Program

## JOURNAL ARTICLES

- 5. Yablonski, M., Karipidis, I.I., **Kubota, E.**, and Yeatman, J.D. (2023). The transition from vision to language: distinct patterns of functional connectivity for sub-regions of the visual word form area. *bioRxiv*.
- 4. **Kubota**, **E.**, Grotheer, M., Finzi, D., Natu, V.S., Gomez, J., and Grill-Spector, K. (2023). White matter connections of high-level visual areas predict cytoarchitecture better than category-selectivity. *Cerebral Cortex*.
- 3. Grotheer, M., **Kubota**, **E.**, and Grill-Spector, K. (2021). Establishing the functional relevancy of white matter connections in the visual system and beyond. *Brain Structure and Function*.
- 2. **Kubota, E. C.\***, Joo, S. J.\*, Huber, E. and Yeatman, J. D. (2019). Word selectivity in high-level visual cortex and reading skill. *Dev. Cogn. Neurosci.* \*co-first authorship
- 1. O'Brien, G. E., McCloy, D. R., **Kubota, E. C.**, and Yeatman, J. D. (2018). Reading ability and phoneme categorization. *Scientific Reports*.

## CONFERENCE CONTRIBUTIONS

- Caffarra, S., Karipidis, I.I., Kruper, J., Kubota, E., Richie-Halford, A., Takada, M., Rokem, A. and Yeatman, J.D. Assessing white matter plasticity in a randomized control trial of reading training in preschoolers. Poster presentation at Flux Society, September 2023.
- Meisler, S., Kubota, E., Grotheer, M., Gabrieli, J., and Grill-Spector, K. Multimodal MRI Software for Identifying Functional Sub-Components of White Matter Bundles. Poster presentation at Organization for Human Brain Mapping, July 2023.
- Yablonski, M., Karipidis, I.I., Kubota, E., and Yeatman, J.D. Subregions of the visual word form area show distinct patterns of functional connectivity. Poster presentation at *Cognitive Neuroscience Society*, March 2023.
- Kubota, E., Grotheer, M., Gomez, J., Natu, V., Finzi, D., Rezai, A.A., Kular, H., Nordt, M., and Grill-Spector, K. White matter of ventral visual areas better predicts cytoarchitecture than category-selectivity. Poster presentation at Organization for Human Brain Mapping. June 2022.

- 8. **Kubota, E.**, Grotheer, M., Gomez, J., Natu, V., Finzi, D., Rezai, A.A., Kular, H., Nordt, M., and Grill-Spector, K. Cytoarchitecture scaffolds connectivity of high-level ventral visual areas in children and adults. Virtual poster presentation at *Society for Neuroscience*. November 2021.
- Karipidis, I.I., Kubota, E., Caffarra, S., Yablonski, M., and Yeatman, J.D.
   Short animated movies elicit text-selective neural responses in pre-reading children. Slide Slam Presentation at Society for the Neurobiology of Language.
   October 2021.
- Kubota, E., Grotheer, M., Gomez, J., Natu, V., Finzi, D., Rezai, A.A., Kular, H., Nordt, M., and Grill-Spector, K. Cytoarchitecture, not function, determines a visual regions' connectivity profile in childhood. Virtual poster presentation at Society for Neuroscience Global Connectome. January 2021.
- 5. **Kubota E.C.**, and Yeatman, J.D. Atypical topography of high-level visual cortex is associated with reading difficulty. Poster presentation at *Vision Science Society*, St. Pete Beach, FL. May 2019.
- Huber, E., Kubota, E.C., and Yeatman, J.D. Linking occipital callosal white matter to cortical responses and reading skill. Oral presentation at *Vision Science Society*, St. Pete Beach, FL. May 2019.
- Kubota, E.C., Joo, S.J., Huber, E, and Yeatman, J.D. Selectivity for words in visual cortex predicts reading skill in children. Poster presentation at the Neural Computation and Engineering Connection, Seattle, WA. January 2018.
- 2. **Kubota, E.C.**, Joo, S.J., Huber, E, and Yeatman, J.D. Word Selectivity in high-level visual cortex and reading skill. Poster presentation at *Society for Neuroscience*, San Diego, CA. November 2018.
- Zhang, H., Kubota, E., Anders, V., Burke, D., Diaz, M. and Kroll, J. The
  effect of bilingualism on age-related cognitive and language declines. Poster
  presentation at the *Meeting of the Psychonomic Society*, Boston, MA. November
  2016.