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

Paths2Phd Organizer
 Grganized 6th annual Paths2PhD event which demystifies the graduate admissions process for over 600 prospective applicants. Secured funding, organized panelists, and coordinated volunteers.

• 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

- 6. **Kubota**, **E.**, Grill-Spector, K., and Nordt, M. (2023). Rethinking cortical recycling in high-level visual cortex. *Trends in Cognitive Sciences*.
- 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.
- 11. 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.
- 10. 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.

- 9. **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.
- 4. 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.
- 3. **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.
- 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.