



Cameron Ellis

Assistant Professor of Psychology

Bio

BIO

Dr. Cameron Ellis is an Assistant Professor in the Department of Psychology. He leads the Scaffolding of Cognition Team, which focuses on the question: What is it like to be an infant? His team uses methods from neuroscience and cognitive science to assess the basic building blocks of the developing mind and answer this question. They are particularly interested in questions about how infants perceive, attend, learn, and remember. One prominent approach they use is fMRI with awake behaving infants. This provides unprecedented ways to access the cognitive mechanisms underlying the infant mind.

Dr. Ellis received his Ph.D. from Yale University in 2021. Before that, he received a Masters from Princeton University (2017) and a Bachelor of Science from Auckland University, New Zealand (2013). He was awarded the FLUX Dissertation Prize (2021) and the James Grossman Dissertation Prize (2021), as well as the William Kessen Teaching Award (2019).

ACADEMIC APPOINTMENTS

- Assistant Professor, Psychology
- Member, Maternal & Child Health Research Institute (MCHRI)

PROFESSIONAL EDUCATION

- PhD, Yale University (2021)
- Master of Arts, Princeton University (2017)
- B.S. (Hons), Auckland University (2013)

LINKS

- SoC Team website: <https://soc.stanford.edu/>

Teaching

COURSES

2023-24

- Big Questions About Small Brains: PSYCH 240 (Spr)
- Introduction to Developmental Psychology: PSYCH 60 (Win)
- Mind Reading with Movies and Neuroimaging: PSYCH 236 (Aut)

2022-23

- Introduction to Developmental Psychology: PSYCH 60 (Spr)

STANFORD ADVISEES

Doctoral Dissertation Reader (AC)

Jamie Mitchell

Doctoral (Program)

Emily Chen, Sarah Tung

Publications

PUBLICATIONS

- **Retinotopic organization of visual cortex in human infants** *NEURON*
Ellis, C. T., Yates, T. S., Skalaban, L. J., Bejjanki, V. R., Arcaro, M. J., Turk-Browne, N. B.
2021; 109 (16): 2616–+
- **Evidence of hippocampal learning in human infants** *CURRENT BIOLOGY*
Ellis, C. T., Skalaban, L. J., Yates, T. S., Bejjanki, V. R., Cordova, N., Turk-Browne, N. B.
2021; 31 (15): 3358–+
- **Attention recruits frontal cortex in human infants** *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*
Ellis, C. T., Skalaban, L. J., Yates, T. S., Turk-Browne, N. B.
2021; 118 (12)
- **Infant fMRI: A Model System for Cognitive Neuroscience** *TRENDS IN COGNITIVE SCIENCES*
Ellis, C. T., Turk-Browne, N. B.
2018; 22 (5): 375-387
- **Functional networks in the infant brain during sleep and wake states.** *Cerebral cortex (New York, N.Y. : 1991)*
Yates, T. S., Ellis, C. T., Turk-Browne, N. B.
2023
- **A longitudinal resource for population neuroscience of school-age children and adolescents in China.** *Scientific data*
Fan, X., Wang, Y., Chang, D., Yang, N., Rong, M., Zhang, Z., He, Y., Hou, X., Zhou, Q., Gong, Z., Cao, L., Dong, H., Nie, et al
2023; 10 (1): 545
- **Face processing in the infant brain after pandemic lockdown** *DEVELOPMENTAL PSYCHOBIOLOGY*
Yates, T. S., Ellis, C. T., Turk-Browne, N. B.
2023; 65 (1): e22346
- **Brain charts for the human lifespan** *NATURE*
Bethlehem, R. I., Seidlitz, J., White, S. R., Vogel, J. W., Anderson, K. M., Adamson, C., Adler, S., Alexopoulos, G. S., Anagnostou, E., Areces-Gonzalez, A., Astle, D. E., Auyeung, B., Ayub, et al
2022; 604 (7906): 525–+
- **Context Matters: Recovering Human Semantic Structure from Machine Learning Analysis of Large-Scale Text Corpora** *COGNITIVE SCIENCE*
Jordan, M., Giallanza, T., Ellis, C. T., Beckage, N. M., Cohen, J. D.
2022; 46 (2): e13085
- **Neural effects of controllability as a key dimension of stress exposure** *DEVELOPMENT AND PSYCHOPATHOLOGY*
Cohodes, E. M., Odriozola, P., Mandell, J. D., Caballero, C., McCauley, S., Zacharek, S. J., Hodges, H. R., Haberman, J. T., Smith, M., Thomas, J., Meisner, O. C., Ellis, C. T., Hartley, et al
2022: 218-227
- **Neural event segmentation of continuous experience in human infants.** *Proceedings of the National Academy of Sciences of the United States of America*
Yates, T. S., Skalaban, L. J., Ellis, C. T., Bracher, A. J., Baldassano, C., Turk-Browne, N. B.
2022; 119 (43): e2200257119
- **The promise of awake behaving infant fMRI as a deep measure of cognition** *CURRENT OPINION IN BEHAVIORAL SCIENCES*

- Yates, T. S., Ellis, C., Turk-Browne, N. B.
2021; 40: 5-11
- **Emergence and organization of adult brain function throughout child development** *NEUROIMAGE*
Yates, T. S., Ellis, C. T., Turk-Browne, N. B.
2021; 226: 117606
 - **BrainIAK: The Brain Imaging Analysis Kit.** *Aperture neuro*
Kumar, M., Anderson, M. J., Antony, J. W., Baldassano, C., Brooks, P. P., Cai, M. B., Chen, P. C., Ellis, C. T., Henselman-Petrusek, G., Huberdeau, D., Hutchinson, J. B., Li, Y. P., Lu, et al
2021; 1 (4)
 - **Searching through functional space reveals distributed visual, auditory, and semantic coding in the human brain** *PLOS COMPUTATIONAL BIOLOGY*
Kumar, S., Ellis, C. T., O'Connell, T. P., Chun, M. M., Turk-Browne, N. B.
2020; 16 (12): e1008457
 - **Re-imagining fMRI for awake behaving infants** *NATURE COMMUNICATIONS*
Ellis, C. T., Skalaban, L. J., Yates, T. S., Bejjanki, V. R., Cordova, N. I., Turk-Browne, N. B.
2020; 11 (1): 4523
 - **Facilitating open-science with realistic fMRI simulation: validation and application** *PEERJ*
Ellis, C. T., Baldassano, C., Schapiro, A. C., Cai, M., Cohen, J. D.
2020; 8: e8564
 - **BrainIAK tutorials: User-friendly learning materials for advanced fMRI analysis** *PLOS COMPUTATIONAL BIOLOGY*
Kumar, M., Ellis, C. T., Lu, Q., Zhang, H., Capota, M., Willke, T. L., Ramadge, P. J., Turk-Browne, N. B., Norman, K. A.
2020; 16 (1): e1007549
 - **Complexity Can Facilitate Visual and Auditory Perception** *JOURNAL OF EXPERIMENTAL PSYCHOLOGY-HUMAN PERCEPTION AND PERFORMANCE*
Ellis, C. T., Turk-Browne, N. B.
2019; 45 (9): 1271-1284
 - **Feasibility of topological data analysis for event-related fMRI** *NETWORK NEUROSCIENCE*
Ellis, C. T., Lesnick, M., Henselman-Petrusek, G., Keller, B., Cohen, J. D.
2019; 3 (3): 695-706
 - **CAPTURING SHARED AND INDIVIDUAL INFORMATION IN FMRI DATA**
Turek, J. S., Ellis, C. T., Skalaban, L. J., Turk-Browne, N. B., Willke, T. L., IEEE
IEEE.2018: 826-830