Tristan Skye Yates

500 E 63rd Street Apt 4H
New York, NY 10065

Email: tsy2105@columbia.edu
Web: https://tristansyates.github.io/

Academic Appointments

2023-Present *Columbia University*
Postdoctoral Research Scientist
Advisor: Nim Tottenham

Education

2018-2023 *Yale University*
Ph.D., Cognitive Psychology
Advisor: Nicholas Turk-Browne
Thesis topic: Learning, memory, and perception in infants using fMRI

2014-2018 *Emory University*
B.S., Neuroscience and Behavioral Biology, High Honors
Thesis advisor: Patricia Bauer
Thesis topic: Transitive relations in knowledge integration in preschoolers

2016 *University of St. Andrews*
Institute of Behavioral and Neural Sciences Study Abroad

Awards and Honors

2023 2022 Cozzarelli Prize Class V Finalist (Yates et al., 2022, *PNAS*)
2023 Yale 3-Minute Thesis Competition Social Sciences Division Runner-Up
2022 Vision Sciences Society Travel Award
2021 Vision Sciences Society Travel Award
2018 NSF Graduate Research Fellowship
2018 Yale Psychology Sterling Prize Fellowship
2018 Emory University Academic Coach of the Year
2017 Emory University Independent Research Grant ($1,000)
2017 Barry Goldwater Scholarship Honorable Mention
2017 Emory University Travel Grant ($500, Cognitive Development Society)
2016 Barry Goldwater Scholarship Honorable Mention
2016 Emory Scholars Program Dean's Achievement Scholarship
2016 Phi Beta Kappa National Honors Society
2015 Phi Eta Sigma National Freshman Honors Society

Publications

*equal contribution

Yates, T. S., Yasuda, S., & Yildirim, I. (in press). Temporal segmentation and 'look ahead' simulation: Physical events structure visual perception of intuitive physics. *Journal of Experimental Psychology: Human Perception and Performance.*

Ellis, C. T., **Yates, T. S.**, Arcaro, M. J., & Turk-Browne, N. B. (2023). Movies reveal the fine-grained organization of infant visual cortex. *eLife*, *12*, RP92119.

Yates, T. S., Ellis, C. T., & Turk-Browne, N. B. (2023). Functional networks in the infant brain during sleep and wake states. *Cerebral Cortex*, bhad327.

Yates, T. S., Sherman, B. E., & Yousif, S. R. (2023). More than a moment: What does it mean to call something an 'event'? *Psychonomic Bulletin & Review.*

Ongchoco, J. D. K., **Yates, T. S.**, & Scholl, B. J. (2023). Event segmentation structures temporal experience: Simultaneous dilation and contraction in rhythmic reproductions. *Journal of Experimental Psychology: General., 152*(11), 3266–3276.

Yates, T. S., & Lewkowicz, D. J. (2023). Robust holistic face processing in early childhood during the COVID-19 pandemic. *Journal of Experimental Child Psychology, 232,* 105676.

Yates, T. S., Ellis, C. T., & Turk-Browne, N. B. (2023). Face processing in the infant brain after pandemic lockdown. *Developmental Psychobiology, 65*(1), e22346.

Yates, T. S., Skalaban, L. J., Ellis, C. T., Bracher, A. J., Baldassano, C., & Turk-Browne, N. B. (2022). Neural event segmentation of continuous experience in human infants. *Proceedings of the National Academy of Sciences, 119*(43), e2200257119.

Ellis, C. T., **Yates, T. S.**, Skalaban, L. J., Bejjanki, V. R., Arcaro, M. J., & Turk-Browne, N. B. (2021). Retinotopic organization of visual cortex in human infants. *Neuron, 109*, 1-11.

Ellis, C. T., Skalaban, L. J., **Yates, T. S.**, Bejjanki, V. R., Córdova, N. I., & Turk-Browne, N. B. (2021). Evidence of hippocampal learning in human infants. *Current Biology, 31*, 1-7.

Ellis, C. T., Skalaban, L. J., **Yates, T. S.**, & Turk-Browne, N. B. (2021). Attention recruits frontal cortex in human infants. *Proceedings of the National Academy of Sciences*, *118*(12), e2021474118.

Yates, T. S., Ellis, C. T., Turk-Browne, N. B. (2021). The promise of awake behaving infant fMRI as a deep measure of cognition. *Current Opinion in Behavioral Sciences, 40*, 5-11.

Yates, T. S., Ellis, C. T., Turk-Browne, N. B. (2021). Emergence and organization of adult brain function throughout child development. *NeuroImage*, *226*, 117606.

Rieck, B. A.*, **Yates, T. S.***, Bock, C., Borgwardt, K., Wolf, G., Turk-Browne, N.B., & Krishnaswamy, S. (2020). Uncovering the Topology of Time-Varying fMRI Data using Cubical Persistence. *Paper and spotlight presentation at Advances in Neural Information Processing System.*

Ellis, C. T., Skalaban, L. J., **Yates, T. S.**, Bejjanki, V. R., Córdova, N. I., & Turk-Browne, N. B. (2020). How to read a baby's mind: Re-imagining fMRI for awake, behaving infants. *Nature Communications*, 11, 4523.

Manuscripts

Yates, T. S., Fel, J., Choi, D., Trach, J. E., Behm, L., Ellis, C. T., & Turk-Browne, N. B. (in prep). Hippocampal encoding of memories during human infancy.

Choi, D., **Yates, T. S.**, Trach, J. E., Behm, L., Ellis, C. T., & Turk-Browne, N. B. (in prep). Case study of neural evidence for infant memories in early but not later human childhood.

Ongchoco, J. D. K., Koller W. N., Bronstein M. V., **Yates T. S.,** Cannon, T. D., & Scholl, B. J. (in prep). Out of sync in time and thought: Disordered event segmentation in paranoia.

Posters and Presentations

Yates, T. S., Letrou, A., Trach, J. E., Choi, D., Behm, L., Ellis, C.T., & Turk-Browne, N. B. (2023, November). Larger than life: Cartoons drive infant visual cortex more than realistic movies. Poster presented at the Society for Neuroscience.

Trach, J. E., **Yates, T. S.**, Choi, D., Behm, L., Ellis, C.T., & Turk-Browne, N. B. (2023, November). Striatal involvement in reward processing in the human infant brain. Poster presented at the Society for Neuroscience.

Yates, T. S., Ellis, C.T., & Turk-Browne, N. B. (2022, November). Influence of sleep/wake state on functional networks in the infant brain. Poster presented at the Society for Neuroscience.

Fel, J., **Yates, T. S.**, Ellis, C.T., & Turk-Browne, N. B. (2022, November). Investigating episodic memory processes within the human infant hippocampus. Poster presented at the Society for Neuroscience.

Choi, D., **Yates, T. S.**, Trach, J., Ellis, C.T., & Turk-Browne, N. B. (2022, November). Neural retrieval of infant memories during childhood. Poster presented at the Society for Neuroscience.

Yates, T. S., Ellis, C. T., & Turk-Browne, N. B. (2022, September). Episodic encoding in the infant brain revealed through subsequent memory. Talk presented at the Manhattan Area Memory Meeting.

Yates, T. S., & Turk-Browne, N. B. (2022, July). Mechanisms of early cognition through awake, task-based brain imaging in infants. Talk presented during symposium on "Use of timely methods of cognitive neuroscience to understand infant cognition" at the International Congress of Infant Studies.

Yates, T. S., Ellis, C. T., & Turk-Browne, N. B. (2022, May). Neural selectivity for faces in human infants after pandemic lockdown. Talk presented at the annual meeting of the Vision Sciences Society.

Yates, T. S., Ellis, C. T., & Turk-Browne, N. B. (2021, November). Episodic encoding in the infant brain revealed through subsequent memory. Poster presented at the Society for Neuroscience.

Ellis, C. T., **Yates, T. S.**, Skalaban, L. J., Bracher, A. J., & Turk-Browne, N. B. (2021, November). Exploring the hierarchical organization of the infant visual system with model-based representational similarity. Poster presented at the Society for Neuroscience.

Yates, T. S., Skalaban, L. J., Ellis, C. T., Bracher, A. J., Baldassano, C., & Turk-Browne, N. B. (2021, August). How infants carve up continuous experience into neural events. Poster presented at the annual meeting of Flux society.

Yates, T. S., Ellis, C. T., & Turk-Browne, N. B. (2021, May). Counting sheep: Perceptual narrowing of other-species faces in infant fMRI. Poster presented at the annual meeting of the Vision Sciences Society.

Yasuda S., **Yates, T. S.**, & Yildirim, I. (2021, May). Physical event representations: Observers spontaneously impose discrete temporal structure in intuitive physical scene understanding. Poster presented at the annual meeting of the Vision Sciences Society.

Ellis, C. T., **Yates, T. S.**, Arcaro, M. J., & Turk-Browne, N. B. (2021, May). Prediction of retinotopic organization in infant visual cortex from movies. Talk presented at the annual meeting of the Vision Sciences Society.

Yates, T. S., Ongchoco, J. D. K., & Scholl, B. (2020, November). Rhythmic reproductions reveal how event segmentation structures temporal experience. Poster presented at the Object, Perception, Attention, and Memory Meeting.

Rieck, B. A., **Yates, T. S.**, Wolf, G., Turk-Browne, N. B., & Krishnaswamy, S. (2020, July). Topological Methods for fMRI Data. Poster presented at the International conference on Machine Learning Workshop on Computational Biology.

Yates, T. S., Ellis, C. T., & Turk-Browne, N. B. (2020, July). Counting sheep: Perceptual narrowing of other-species faces in infant fMRI. Poster presented at the International Congress of Infant Studies.

Ellis, C. T., Skalaban, L. J., **Yates, T. S.**, & Turk-Browne, N. B. (2020, July). Engagement of frontoparietal cortex in attention behavior from fMRI with awake infants. Poster presented at the International Congress of Infant Studies.

Ellis, C. T., Skalaban, L. J., **Yates, T. S**., Bejjanki, V. R., Cordova, N. I., & Turk-Browne, N. B. (2020, July). Hippocampal evidence of statistical learning from fMRI with awake infants. Poster presented at the International Congress of Infant Studies.

Ellis, C. T., **Yates, T. S.**, Skalaban, L. J., Bejjanki, V. R., Arcaro, M. J., & Turk-Browne, N. B. (2020, June). Retinotopic mapping with fMRI in awake, behaving infants. Poster presented at the annual meeting of the Vision Sciences Society.

Yates, T. S., Skalaban, L. J., Ellis, C. T., & Turk-Browne, N. B. (2019, October). Neural approach for understanding event segmentation in early development. Poster presented at the Society for Neuroscience.

Ellis, C. T., Skalaban, L. J., **Yates, T. S.**, & Turk-Browne, N. B. (2019, October). Attentional engagement of frontoparietal cortex in infant fMRI. Poster presented at the Society for Neuroscience.

Ellis, C. T., Skalaban, L. J., **Yates, T. S.**, Bejjanki, V. R. Turek, J. S., & Turk-Browne, N. B. (2019, May). Decoding the contents of the developing visual system with fMRI in awake infants. Talk presented at the annual meeting of the Vision Sciences Society.

Lauer J. E., **Yates T. S**, Esposito A.G., & Bauer, P.J. (2017, October). Ethnicity moderates children's implicit gender stereotypes about cognitive skills and scholastic aptitude. Poster presented at the annual meeting of the Cognitive Development Society.

Lauer J. E., **Yates T. S.**, Esposito A.G., & Bauer, P.J. (2018, March). Children's gender and ethnic biases regarding intelligence: An intersectional analysis. Paper presented at the annual meeting of the Society for Personality and Social Psychology.

Yates T. S., Hogan, A., & Roberts, J.E. (2016, July). Physiological responses to social fear in infants in high-risk anxiety groups. Presentation at the annual Neurodevelopmental Disorders Lab Undergraduate Research Symposium.

Yates T. S., Scherr J., & Roberts, J.E. (2015, July). Cardiovascular arousal levels for infants in high- risk autism groups. Presentation at the annual Neurodevelopmental Disorders Lab Undergraduate Research Symposium.

Invited Talks

Jan 2024	Budapest CEU Conference on Cognitive Development, Infant Neuroscience Workshop
Sept 2023	Scaffolding of Cognition Team, Stanford University
Dec 2022	Developmental Affective Neuroscience Lab, Columbia University
Nov 2022	MRes in Developmental Neuroscience and Psychopathology Lecture, Yale University
Jul 2022	Summer Springboard in Psychology and Neuroscience, Yale University
Sept 2019	Intel Labs and Princeton University

Teaching Experience

Spring 2021	Computational Methods in Human Neuroscience (Dr. Nick Turk-Browne), Teaching Fellow
Fall 2020	Developmental Psychology (Dr. Frank Keil), Teaching Fellow
Spring 2020	Research Methods in Human Neuroscience (Dr. Greg McCarthy), Teaching Fellow
Fall 2019	The Human Brain (Dr. Greg McCarthy), Teaching Fellow
Spring 2018	Advanced Neurophysiology Lab (Dr. Bob Wyttenbach), Lab Assistant
2017-2018	Academic Coach for Emory Office of Undergraduate Education
2015-2016	Quantitative Theory and Methods (Fall 2015 - Fall 2016), Lab Assistant

Mentoring Experience

Yuechen Sun (Barnard College undergraduate, September 2023-present)
James Cross (Yale undergraduate and honors thesis student, January 2021-present)
Now: Postgraduate research associate at Yale University
Jared Fel (Yale undergraduate and honors thesis student, January 2021-May 2023)
Now: PhD student in clinical psychology at The New School (PI: Wendy D'Andrea)
Asha Dukkipati (High school student, May 2021-December 2021)
Now: Undergraduate student at University of Southern California
Winnie Chen (High school student, May 2021-August 2021)
Now: Undergraduate student at Stanford University
Shannon Yasuda (Yale undergraduate and honors thesis student, January 2020 - May 2021)
Now: PhD student in cognition and perception at New York University (PI: Moira Dillon)
Reagan Blohowiak (Yale undergraduate, July 2020-December 2020)

Service and Outreach

Spring 2024	Yale Neuroscience and Wu Tsai Institute Integrated Career Panelist
2022-2023	Diversity Committee Sneak Peek Program Mentor
2022-2023	Yale Wu Tsai Institute Student-Postdoc Committee Social Co-Chair
2021-2022	Emory University Alumni Interviewer
Fall 2021	fMRI Workshop Presenter/Organizer for CNCL lab at Yale
Summer 2021	Panelist for Yale Diversity Committee Sneak Peek Program

Spring 2021	Yale Brain Education Week Volunteer
2020-2022	Yale Undergraduate Research Journal Reviewer
2020-2022	Yale Psychology Department Colloquium Committee
2020-2021	Diversity Committee Sneak Peek Program Mentor
Spring 2019	New Haven Science Fair Judge
2019-2020	Emory University Alumni Interviewer
2019-2020	Yale Psychology Cognitive and Developmental Current Works Committee
2018-2019	Yale Psychology Department Interview Day Committee

Ad Hoc Reviewing

Current Opinions in Behavioral Sciences; The Journal of Neuroscience; Psychological Science; Developmental Science; Developmental Cognitive Neuroscience; NeuroImage; Journal of Experimental Child Psychology; Open Mind: Discoveries in Cognitive Science; Human Brain Mapping; Psychonomic Bulletin & Review; eNeuro; Developmental Psychology