

Stanford

Ethan Roy

Postdoctoral Scholar, Education

Bio

STANFORD ADVISORS

- Bruce McCandliss, Postdoctoral Faculty Sponsor

Teaching

COURSES

2024-25

- Cognitive Development in Childhood and Adolescence: EDUC 368 (Win)

2022-23

- Development and Psychological Sciences (DAPS) Faculty Student Seminar: EDUC 465 (Aut, Win, Spr)

Publications

PUBLICATIONS

- **Highly replicable multisite patterns of adolescent white matter maturation.** *bioRxiv : the preprint server for biology*
Meisler, S. L., Cieslak, M., Bagautdinova, J., Hendrickson, T. J., Pandhi, T., Chen, A. A., Hillman, N., Radhakrishnan, H., Salo, T., Feczko, E., Weldon, K. B., McCollum, R., Fayzullobekova, et al
2026
- **A software ecosystem for brain tractometry processing, analysis, and insight.** *PLoS computational biology*
Kruper, J., Richie-Halford, A., Qiao, J., Gilmore, A., Chang, K., Grotheer, M., Roy, E., Caffarra, S., Gomez, T., Chou, S., Cieslak, M., Koudoro, S., Garyfallidis, et al
2025; 21 (8): e1013323
- **Mapping the development of neural structures supporting literacy.** *Proceedings of the National Academy of Sciences of the United States of America*
Roy, E.
2025; 122 (30): e2513604122
- **Tablet-based arithmetic fluency assessment reveals developments in math cognition and math achievement from childhood to adolescence.** *NPJ science of learning*
Roy, E., Guillaume, M., Van Rinsveld, A., McCandliss, B. D.
2025; 10 (1): 19
- **Development of the arcuate fasciculus is linked to learning gains in reading.** *Imaging neuroscience (Cambridge, Mass.)*
Roy, E., Harriott, E. M., Nguyen, T. Q., Richie-Halford, A., Rokem, A., Cutting, L. E., Yeatman, J. D.
2025; 3
- **Development of the arcuate fasciculus is linked to learning gains in reading** *IMAGING NEUROSCIENCE*
Roy, E., Harriott, E. M., Nguyen, T. Q., Richie-Halford, A., Rokem, A., Cutting, L. E., Yeatman, J. D.
2025; 3
- **Differences in educational opportunity predict white matter development.** *Developmental cognitive neuroscience*

Roy, E., Van Rinsveld, A., Nedelec, P., Richie-Halford, A., Rauschecker, A. M., Sugrue, L. P., Rokem, A., McCandliss, B. D., Yeatman, J. D.
2024; 67: 101386

● **White matter and literacy: A dynamic system in flux.** *Developmental cognitive neuroscience*

Roy, E., Richie-Halford, A., Kruper, J., Narayan, M., Bloom, D., Nedelec, P., Rauschecker, A. M., Sugrue, L. P., Brown, T. T., Jernigan, T. L.,
McCandliss, B. D., Rokem, A., Yeatman, et al
2024; 65: 101341

● **Development of the alpha rhythm is linked to visual white matter pathways and visual detection performance.** *The Journal of neuroscience : the official journal of the Society for Neuroscience*

Caffarra, S., Kanopka, K., Kruper, J., Richie-Halford, A., Roy, E., Rokem, A., Yeatman, J. D.
2023

● **Groupitizing reflects conceptual developments in math cognition and inequities in math achievement from childhood through adolescence.** *Child development*

Guillaume, M., Roy, E., Van Rinsveld, A., Starkey, G. S., Uncapher, M. R., McCandliss, B. D.
2022

● **An analysis-ready and quality controlled resource for pediatric brain white-matter research.** *Scientific data*

Richie-Halford, A., Cieslak, M., Ai, L., Caffarra, S., Covitz, S., Franco, A. R., Karipidis, I. I., Kruper, J., Milham, M., Avelar-Pereira, B., Roy, E., Sydnor, V. J., Yeatman, et al
2022; 9 (1): 616

● **Evaluating the Reliability of Human Brain White Matter Tractometry.** *Aperture neuro*

Kruper, J., Yeatman, J. D., Richie-Halford, A., Bloom, D., Grotheer, M., Caffarra, S., Kiar, G., Karipidis, I. I., Roy, E., Chandio, B. Q., Garyfallidis, E.,
Rokem, A.
1800; 1 (1)

● **Testosterone and Adult Neurogenesis.** *Biomolecules*

Spritzer, M. D., Roy, E. A.
2020; 10 (2)