

Logan Bennett

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EDUCATION

Temple University

B.S. in Neuroscience, Summa Cum Laude

Philadelphia, PA

May 2023

- Departmental Honors; Distinction in Neuroscience

RESEARCH EXPERIENCE

Research Coordinator

Stanford University (in [Poldrack Lab](#))

Spring 2023 – Present

Stanford, CA

- Primary analyst for two precision fMRI datasets (~60 participants × 12–16.5 hrs each), among the largest dense-sampling acquisitions in cognitive neuroscience.
- Refactored end-to-end fMRI analysis pipeline: BIDS conversion, preprocessing orchestration (fMRIPrep, MRIQC, QSIPrep), and reproducible GLM specification (Nilearn, FitLins).
- Coded 50+ behavioral and MRI-compatible cognitive tasks in jsPsych; built mobile application in React Native for longitudinal health tracking.
- Built CI/CD infrastructure integrating DataLad for complete data provenance across fMRI data.
- Applied exploratory factor analysis to fMRI contrast maps to test whether RDoC cognitive constructs correspond to separable neural circuits.
- Implemented multivoxel pattern analysis and hierarchical Bayesian parcellation methods to characterize individual differences in functional architecture.

Research Assistant

University of Pennsylvania (in [Social Action Lab](#))

Fall 2021 – Spring 2023

Philadelphia, PA

- Established new EEG laboratory: configured hardware/software, developed acquisition protocols in CURRY 9, and trained lab members on data collection.
- Designed bilateral change-detection paradigm leveraging contralateral organization to isolate visual working memory responses; analyzed N400 and P3b components as predictors of behavioral intentions.
- Managed memberships of Appalachia-based counties for the University of Pennsylvania's Community Advisory Board.

Research Assistant

University of Pennsylvania (in [Addiction, Health, and Adolescence](#))

Spring 2020 – Spring 2021

Philadelphia, PA

- Built multilevel models in R examining within-person temporal associations between sleep, well-being, and physical activity; contributed to published paper in *Psychosomatic Medicine*.

Research Assistant

Temple University (in [Center for Applied Research in Decision Making](#))

Fall 2019 – Fall 2021

Philadelphia, PA

- Developed jsPsych tasks with eye- and mouse-tracking to study emotion recognition and prosocial decision-making.
- Applied drift-diffusion models to quantify how face masks affect evidence accumulation for facial emotion processing.

Research Assistant

Temple University (in [Center for Hybrid Intelligence](#))

Spring 2021

Philadelphia, PA

- Built software in React.js analyzing communication patterns of neurodivergent individuals.

TECHNICAL SKILLS

Neuroimaging: fMRI (acquisition, preprocessing, GLM), EEG/ERP, precision functional mapping

Analysis: Python, R, MATLAB, Nilearn, statsmodels, scikit-learn, mixed-effects modeling

Scientific Software: fMRIPrep, MRIQC, QSIPrep, FitLins, DataLad, BIDS

Infrastructure: HPC (Slurm), Docker/Apptainer, CI/CD, Git/GitHub

Programming: jsPsych, React Native, Next.js, React.js, Django, Bash

Other: Qualtrics, REDCap

AWARDS

NSF-funded INTERSECT Bootcamp, Princeton University Spring 2025

- Research software engineering program: software design, testing, distribution

President's Scholar Award, Temple University Fall 2019 – Spring 2023

- Full-tuition merit scholarship

Goldwater Fellowship Nominee, Temple University Fall 2022

- Institutional nomination for national undergraduate research award

Merit Scholar Stipend, Temple University Spring 2022

- \$4,000 award to support independent research

Science Scholars Stipend, Temple University Spring 2020 & Spring 2021

- \$4,000 awards for demonstrated excellence in STEM research

SERVICE

Maintainer and Contributor, OpenSource@Stanford Fall 2024 – Present

- Maintain neuroimaging software packages in Stanford's open-source ecosystem; develop HPC Open OnDemand Applications

Founder and Presenter, Methods Garage, Stanford Psychology Spring 2024 – Present

- Lead technical workshops on containerization, software testing, and HPC for neuroimaging

Organizer, US-RSE Fall 2023 – Present

- Coordinate Bay Area meetups on building sustainable research software

PUBLICATIONS

Preprints

[1] Bissett, P., Achyutuni, K., Rios, J. H., Jones, H. M., **Bennett, L.**, & Poldrack, R. (2025, March 18). Sharing control with a machine impairs human response inhibition.

Published

[1] Bissett, P. G., Achyutuni, K. G., Li, J. K., Jones, H. M., Shim, S., Rios, J. A. H., **Bennett, L. J.**, Mitchell, M., Jackson, J., Bar Or, M., Roll, D., Meidan, N., Saliy-Grigoryan, A., LePage Drummond, T. M., Pokala, S. S., Cohen, J. R., Schonberg, T., & Poldrack, R. A. (2025). Arbitrary stimuli are not devalued by stopping action: A registered replication of Wessel et al. (2014). *Journal of Experimental Psychology: General*, 154(11), 2935–2943. <https://doi.org/10.1037/xge0000964>.

[2] McGowan, A. L., Boyd, Z. M., Kang, Y., **Bennett, L.**, Mucha, P. J., Ochsner, K. N., Bassett, D. S., Falk, E. B., & Lydon-Staley, D. M. (2023). Within-Person Temporal Associations Among Self-Reported Physical Activity, Sleep, and Well-Being in College Students. *Psychosomatic medicine*, 85(2), 141–153.

CONFERENCE PRESENTATIONS

[1] Bissett, P., Achyutuni, K.G., Rios, J. H., Jones, H. M., **Bennett, L.**, & Poldrack, R. (July 2025). Shared control impairs cognitive control: Human responses inhibition slows when machines fail to inhibit. The Cognitive Science Society, San Francisco, CA.

[2] Bissett, P. G., Shim, S., **Bennett, L.**, J., Rios, J. A. H., Jones, H. M., Hagen, M. P., Achyutuni, K. G., Demidenko, M. I., Mumford, J. A., Shine, J. M., Poldrack, R. A. (2025). Characterizing cognitive control networks using a precision neuroscience approach. Abstract accepted for presentation at the annual meeting of the Organization for Human Brain Mapping.

[3] Bissett, P. G., **Bennett, L.**, Rios, J. A. H., Shim, S., McKee, P. C., Iyer, C. S., Ram, N., Poldrack, R. A. (2024). Mapping task measures to latent constructs: An expert survey of the NIMH RDoC cognitive domain. Abstract accepted for presentation at the annual meeting of the Organization for Human Brain Mapping.

[4] Beard, E. C., Henninger, N. M., **Bennett, L.**, Nicholson, J., Sposit, C., Goldsmith, M., Venkatraman, V. (2021). Neural patterns of positive and negatively valenced social media charity appeals. Abstract accepted for virtual presentation at the annual meeting of the Social and Affective Neuroscience Society.

[5] McGowan, A.L., **Bennett, L.**, Bassett, D.S., Lydon-Staley, D.M. (2021). Naturalistic fluctuations in night-to-night sleep duration and quality and their associations with next day perceived stress and negative mood. Abstract accepted for virtual presentation at the annual meeting of the Medicine and Science in Sport and Exercise.