

Shannon Burns, Ph.D.

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shannonmburns.com

EMPLOYMENT & EDUCATION

Assistant Professor	Pomona College	2022-present
Postdoctoral Scholar	Princeton University	2021-2022
Postdoctoral Scholar	Annenberg School of Communication, University of Pennsylvania	2020-2021
Ph.D., Social Psychology (minor: Quantitative Psychology)	University of California – Los Angeles	2020
M.A., Social Psychology	University of California – Los Angeles	2016
B.A., Psychology	Pomona College	2015

PUBLICATIONS

* = *undergraduate mentee*

+ = *co-senior author*

Zada, Z., Nastase, S.A., Speer, S., Mwilambwe-Tshilobo, L., Tsoi, L., **Burns, S.M.**, Falk, E., Hasson, U., & Tamir, D. (2026). Linguistic coupling between neural systems for speech production and comprehension during real-time dyadic conversations. *Neuron*, *114*, 1-14. <https://doi.org/10.1016/j.neuron.2025.11.004>

Speer, S.P.H., Mwilambwe-Tshilobo, L., Tsoi, L., **Burns, S.M.**, Weber, A.S., Falk, E.B., & Tamir, D.I. (2025). From words to bonds: The science of meaningful conversations. In K. Fujita, A. Fishbach, & N. Liberman (Eds.), *Psychological Quest for Meaning* (pp. 49-65).

Goldstein, B.M., **Burns, S.M.**, Dieffenbach, M.C., Konkoly, C., Abramowitz, S., & Liberman, M.D. (2025). Neural predictors of hidden, persistent psychological states at work. *Proceedings of the National Academy of Sciences*, *122*(42), e2504382122. <https://doi.org/10.1073/pnas.2504382122>

Ma de Sousa, A.Q., Schwyck, M.E., *Furtado Fernandes, L., *Ford, E., Babür, B.G., Lu, C., Zimmerman, J.C., Yu, H., +**Burns, S.M.**, & +Baek, E.C. (2025). Loneliness is associated with unstable and distorted emotion transition predictions. *Communications Psychology*, *3*, 132. <https://doi.org/10.1038/s44271-025-00310-w>

- Gao, S., Nash, R., **Burns, S.M.**, & Leong, Y.C. (2025). Predicting whole-brain neural dynamics from prefrontal cortex fNIRS signals during movie-watching. *Social Cognitive and Affective Neuroscience*, nsaf043. <https://doi.org/10.1093/scan/nsaf043>
- Burns, S.M.**, Tsoi, L., Falk, E.B., Speer, S.P.H., Mwilambwe-Tshilobo, L., & Tamir, D.I. (2025). Interdependent minds: Quantifying the dynamics of successful social interaction. *Current Directions in Psychological Science*. <https://doi.org/10.1177/09637214251323598>
- Speer, S.P.H., Mwilambwe-Tshilobo, L., Tsoi, L., **Burns, S.M.**, Falk, E.B., & Tamir, D.I. (2024). Hyperscanning shows friends explore and strangers converge in conversation. *Nature Communications*, 15, 7781. <https://doi.org/10.1038/s41467-024-51990-7>
- Cosme, D., Scholz, C., Chan, H.Y., Doré, B.P., Pandey, P., Carreras-Tartak, J., Cooper, N., Paul, A., **Burns, S.M.**, & Falk, E.B. (2023). Message self and social relevance increases intentions to share content: Correlational and causal evidence from six studies. *Journal of Experimental Psychology: General*, 152(1), 253-267. <https://doi.org/10.1037/xge0001270>
- Tsoi, L., **Burns, S.M.**, Falk, E.B., & Tamir, D. (2022). The promises and pitfalls of fMRI hyperscanning for social interaction research. *Social and Personality Psychology Compass*, 16(10), e12707. <https://doi.org/10.1111/spc3.12707>
- Sahi, R., Dieffenbach, M.A., Gan, S., Lee, M., Hazlett, L., **Burns, S.M.**, Lieberman, M.D., Shamay-Tsoory, S., & Eisenberger, N.I. (2021). The comfort in touch: Immediate and lasting effects of handholding on emotional pain. *PLoS One*, 16(2), e0246753. doi: <https://doi.org/10.1371/journal.pone.0246753>
- Dieffenbach, M.C., Gillespie, G.S.R., **Burns, S.M.**, McCulloh, I.A., Ames, D.L., Dagher, M.M., Falk, E.B., & Lieberman, M.D. (2021). Neural reference groups: A synchrony-based classification approach for predicting attitudes using fNIRS. *Social Cognitive and Affective Neuroscience*, 16(1), 117-128. doi: 10.1093/scan/nsaa115
- Burns, S.M.**, Barnes, L.N., McCulloh, I.A., Dagher, M.M., Falk, E.B., Storey, J.D., & Lieberman, M.D. (2019). Making social neuroscience less WEIRD: Using fNIRS to measure neural signatures of persuasive influence in a Middle East participant sample. *Journal of Personality and Social Psychology*, 116(3), e1-e11. doi: 10.1037/pspa0000144
- Burns, S.M.**, Barnes, L.N., Katzman, P.L., Ames, D.L., Falk, E.B., & Lieberman, M.D. (2018). A functional near infrared spectroscopy (fNIRS) replication of the sunscreen persuasion paradigm. *Social Cognitive and Affective Neuroscience*, 13(6), 628-636.
- Lieberman, M.D., **Burns, S.M.**, Torre, J.B., & Eisenberger, N.I. (2016). Reply to Wager et al: Pain and the dACC: The importance of hit rate-adjusted effects and posterior probabilities with fair priors. *Proceedings of the National Academy of Sciences*, 113, E2476-E2479.

GRANT SUPPORT

Completed:

National Science Foundation – (PI: Burns)

9/16 – 6/19

Graduate Research Fellowship

Direct costs: \$102,000

Role: Primary Investigator

ONR – (PI: Lieberman)

8/14 – 9/18

Neural bases of persuasion and social influence in the U.S. and the Middle East

Direct costs: \$2,831,976

Role: UCLA site project coordinator

INVITED TALKS

Burns, S.M. (May 2025). Beyond synchrony: Quantifying the dynamics of interdependent minds. Invited talk presented at the UC – Irvine Cognitive Science Brown Bag.

Burns, S.M. (May 2025). Beyond synchrony: Quantifying the dynamics of interdependent minds. Invited talk at the *West Coast Neuroeconomics Symposium*. San Diego, CA.

Burns, S.M. (May 2025). Beyond synchrony: Quantifying the dynamics of interdependent minds. Invited talk at the Princeton Neuroscience Institute's Workshop on Naturalistic Conversation.

Burns, S.M. (Apr 2025). Evaluating the impact of speaking motion on intersubject correlation measurement in naturalistic fMRI. Symposium talk at the *Annual Meeting for the Social and Affective Neuroscience Society*. Chicago, IL.

Burns, S.M. (Apr 2024). Coordinated neural states during joint decision-making. Symposium talk at the *Annual Meeting for the Social and Affective Neuroscience Society*. Toronto, ON, Canada.

Burns, S.M. (Mar 2024). Synchrony vs. divergence in mental state dynamics during interpersonal conversation. Invited talk presented at University of Southern California Psychology Brown Bag.

Burns, S.M. (Feb 2024). Breadth and complexity of spoken information during conversation relates to accurate mentalizing. Data-blitz talk at the Shared Reality Virtual Mini-Conference.

Burns, S.M. (Oct 2023). Synchrony vs. divergence in mental state dynamics during interpersonal conversation. Invited talk presented at UC - Riverside Psychology Brown Bag.

- Burns, S.M.** (May 2023). Synchrony vs. divergence in mental state dynamics during interpersonal conversation. Invited talk presented at UC – Los Angeles Social Psychology Brown Bag.
- Burns, S.M.** (Apr 2021). On the same page: Dynamics of sharing perspective during communication. Invited talk presented at Dartmouth University Social Psychology Brown Bag.
- Burns, S.M.** (Sep 2020). Variations in empathic understanding as a function of personal experience and identity. Invited talk presented at Princeton University Psychology Social Seminar.
- Burns, S.M.** (Sep 2019). Dynamic neural systems in natural social interaction. Invited talk presented at University of Pennsylvania & Princeton University.
- Burns, S.M.** (Feb 2018). Cross-cultural examination of brain indicators of persuasion. Symposium talk at the *Society for Personality and Social Psychology Annual Convention*. Atlanta, GA.
- Burns, S.M.** (May 2017). Neuroscience beyond the scanner: Social brain processes in real-world contexts. Invited talk presented at UC – Los Angeles Social Psychology Brown Bag.

OTHER INTELLECTUAL PRODUCTS

- Burns, S.M.** (2023). PreprocessingfNIRS [computer software]. Retrieved from <https://github.com/smburns47/preprocessingfNIRS>
- Automated preprocessing package for fNIRS data, in Matlab & Python
- Burns, S.M.** (2022). *Introduction to Statistics for Psychological Science*. Retrieved from <https://shannonmburns.com/Psyc158>
- Online interactive textbook on introductory statistics for psychological & cognitive science students. Emphasizes the use of R and building statistical models.
- Burns, S.M.** (2019). UCLA fNIRS Bootcamp [Video series]. Retrieved from <https://www.youtube.com/watch?v=TEMNe5ROsw4>
- 3-day workshop on fNIRS study design, data collection, preprocessing, and analysis. Videos from original workshop at UCLA in January 2019.

AWARDS & HONORS

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| Shelley Taylor Dissertation Award – for an outstanding doctoral dissertation in social psychology – UCLA Psychology Department | 2020 |
| UCLA Dissertation Year Fellowship (\$20,000) | 2019 |

Collegium of University Teaching Fellowship – one of 20 graduate students across UCLA selected for teaching merit, awarded opportunity to design and teach own class	2019
Harold H. Kelley Award – for a meritorious research paper addressing basic issues or theory - UCLA Psychology Department	2018
Society for Personality and Social Psychology Student Travel Award (\$500)	2017
National Science Foundation Graduate Research Fellowship (\$34,000/year for 3 years)	2016

TEACHING

Instructor of Record	Emotion & Motivation w/ Lab (Pomona College)
	Neuroimaging with fMRI w/ Lab (Pomona College)
	Seminar in Group Dynamics (Pomona College)
	Introduction to Psychological Statistics (Pomona College)
	Psychology of the Mob (UCLA)
Teaching Assistant	Neuroscience of Social Perception (UCLA)
	Social Influence (UCLA)
	Intimate Relationships (UCLA)
	Social Psychology (UCLA)
	Human Brain Laboratory (Pomona College)
	Introduction to Psychology (Pomona College)

SPECIALIZED TRAINING & SKILLS

Brain Imaging: Functional near infrared spectroscopy; functional magnetic resonance imaging
Programming Languages: Matlab, Python, R

Complexity Science Summer School at the Santa Fe Institute	2025
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Curriculum Vitae - Shannon Burns

Summer School in Social Neuroscience and Neuroeconomics – Duke University	2019
São Paulo School of Advanced Science on Social and Affective Neuroscience - Universidade Presbiteriana Mackenzie – São Paulo, Brazil	2018
Methods in Neuroscience at Dartmouth Training Course - Dartmouth University	2017
Summer Training Course in fMRI - University of Michigan	2016
Functional Near Infrared Spectroscopy Intensive Course - MGH/HST Athinoula A. Martinos Center for Biomedical Imaging Massachusetts General Hospital	2015

CONSULTING

Lotic.ai	Advised on evidence-based product development, designed and executed research and analysis on how to predict well-being from text	2021-2024
Resonance, Inc.	Create cognitive and neural tests for predicting optimal employee workgroup compositions	2018-2020
ORB International & IIACSS	Use neural indicators of persuasion to develop personalized public health messaging in Amman, Jordan	2016-2017

SERVICE & PROFESSIONAL ACTIVITIES

Guest editor of special issue on fNIRS for social neuroscience at <i>Social, Cognitive, & Affective Neuroscience</i>	2024-2025
Degree planning committee member & faculty advisor Pomona College Data Science Minor	2022-present
Ad-hoc reviewer for <i>Journal of Neuroscience; Social, Cognitive, & Affective Neuroscience; Social Neuroscience; Emotion; IEEE; Psychosomatic Medicine; eLife; Society for Personality and Social Psychology Annual Conference; Social and Affective Neuroscience Society Annual Meeting</i>	2016-present
Trainee Mentor	2020-present

Curriculum Vitae - Shannon Burns

Society for Functional Near-Infrared Spectroscopy

Writing & Reviewing Mentor 2018-2020
Undergraduate Research Journal of Psychology
UCLA

Social Area Speaker Event Coordinator 2017
UCLA Department of Psychology

Social Area Student Representative 2016-2017
UCLA Department of Psychology

Speaker Event Coordinator 2015-2016
Association for Underrepresented Graduate Students in Psychology
UCLA

AFFILIATIONS

Social & Affective Neuroscience Society (SANS)
Society for Affective Science (SAS)
Society for Personality and Social Psychology (SPSP)

REFERENCES

Dr. Matthew Lieberman – lieber@ucla.edu
Dr. Diana Tamir – dtamir@princeton.edu
Dr. Emily Falk – emily.falk@asc.upenn.edu