Exponent®
Engineering & Scientific Consulting

Lauren Wagner, Ph.D.
Scientist | Human Factors
Los Angeles
+1-310-754 2771 | lwagner@exponent.com

Professional Profile

Dr. Wagner is a neuroscientist with extensive experience in human subjects research, quantitative analysis, and scientific communication. She uses her expertise to understand how humans interact with their world and applies this knowledge to evaluate complex scenarios including on-road accidents involving automobiles, trucks, motorcycles and pedestrians. Additionally, she evaluates human factors contributions to trip/slip-and-fall incidents, industrial accidents, and product-related injuries, including warning comprehension and compliance.

Before joining Exponent, Dr. Wagner was a postdoctoral scientist at UCLA where she integrated MRI, genomic, and behavioral datasets in order to understand human development in infancy and toddlerhood. She received her Ph.D.[DC1] in Neuroscience from UCLA, where she led preclinical brain mapping studies to investigate language acquisition and early-emerging symptoms of autism in infants.

Prior to her doctoral work, Dr. Wagner studied psycholinguistics at the University of Texas at Austin, where she developed a deep understanding of how humans learn and behave. As a consultant with Exponent, Dr. Wagner's complementary backgrounds in behavioral psychology and computational neuroscience give her the ability to deliver rigorous insights about complex situations.

Academic Credentials & Professional Honors

Ph.D., Neuroscience, University of California, Los Angeles (UCLA), 2025

B.A., Linguistics, University of Texas, Austin, 2019

B.S., Neuroscience, University of Texas, Austin, 2019

NIH Postdoctoral Fellowship in Precision Medicine (T15), 2025–2026

William Orr Dingwall Foundation Dissertation Fellowship on the Neural Foundations of Language, 2024–2025

Achievement Rewards for College Scientists (ARCS) Foundation Fellowship, 2023

NIH Predoctoral Fellowship (NRSA F31), 2023–2025

Journal of Science Policy & Governance Policy Paper Competition 1st Place Winner, 2022

Prior Experience

Postdoctoral Researcher, UCLA, 2025–2026

Graduate Student Researcher, UCLA, 2019–2025

Research Assistant, University of Texas at Austin, 2017–2019

Professional Affiliations

Human Factors and Ergonomics Society (HFES)

Organization for Human Brain Mapping

Flux Society

Fetal, Infant, Toddler Neuroimaging Group

International Society for Autism Research

Society for Neuroscience

Publications

Chiem E, Wagner L, Hernandez LM, Green S, Dapretto M. Salience network connectivity relates to sleep and sensory over-responsivity in infants at high and low likelihood for autism. medRxiv 2026.

Wagner L, Ceballos J, Chiem E, Dapretto M. Language network functional connectivity in infancy predicts developmental language trajectories. bioRxiv 2025.

Olson HA, Camacho MC, Abdurokhmonova G, Ahmad S, Chen EM, Chung H, ... Madsen KS. Measuring and interpreting individual differences in fetal, infant, and toddler neurodevelopment. Developmental Cognitive Neuroscience 2025; 73:101539.

Wagner L, Cakar ME, Banchik M, Chiem E, Glynn SS, Than AH, ... Dapretto M. Beyond motor learning: insights from infant magnetic resonance imaging on the critical role of the cerebellum in behavioral development. Developmental Cognitive Neuroscience 2025; 72:101514.

Wagner L, Banchik M, Tsang T, Okada NJ, Altshuler R, McDonald N, ... Dapretto M. Atypical early neural responses to native and non-native language in infants at high likelihood for developing autism. Molecular Autism 2025; 16(6).

LeBel A, Wagner L, Jain S, Adhikari-Desai A, Gupta B, Morgenthal A, ... Huth AG. A natural language fMRI dataset for voxelwise encoding models. Scientific Data 2023; 10(555).

Spann MN, Wisnowski JL, Ahtam B, Gao W, Huang H, Nebel MB, ... Dean III DC. The art, science, and secrets of scanning young children. Biological Psychiatry 2023; 93(10):858–860.

Wagner L, Banchik M, Okada NJ, McDonald N, Jeste S S, Bookheimer SY, ... Dapretto M. Associations between thalamocortical functional connectivity and sensory over-responsivity in infants at high likelihood for ASD. Cerebral Cortex 2023; 33(12):8075–8086.

Wagner L, Yu KMJ, Dunn F. Rising seas and uncertainties: establishing static maritime borders to ensure equity in the face of sea level rise. Journal of Science Policy & Governance 2022; 20(3).

Philson CS, Wagner L, Nawathe R. Mitigating California wildfire impact through zoning and housing

policy. Journal of Science Policy and Governance 2021; 18(1).

Wagner L, Guttman Z, Hebner Y, Philson CS. A proposal for FDA oversight of tear gas. J. Sci. Policy Govern 2021; 18(1).

Presentations

Wagner L, Hernandez LM. Genetic correlates of neural excitation-inhibition balance in infancy. Conference presentation, UCLA Computational Genomics Summer Institute, Los Angeles, CA, 2025.

Wagner L. Science diplomacy 101: fundamentals and training opportunities in an emerging field. Conference presentation, National Science Policy Symposium, Riverside, CA, 2024.

Wagner L, Banchik M, Okada NJ, McDonald N, Jeste SJ, Bookheimer SY, Dapretto M. Atypical neural responses to language at 9 months of age predict delayed language trajectories in infants at high any typical likelihood for autism. Conference presentation, International Society for Autism Research, Stockholm, 2023.

Wagner L, Banchik M, Okada NJ, McDonald N, Jeste SJ, Bookheimer SY, Green SA, Dapretto M. Atypicalities in salience network connectivity at 9 months relate to sensory sensitivity in infants with a family history of autism. Conference presentation, International Society for Autism Research, Austin, TX, 2022.

Editorships & Editorial Review Boards

Journal of Science Policy & Governance, Associate Editor, 2022–2025

Knowing Neurons, Editor-in-Chief, 2022–2023

Peer Reviews

Imaging Neuroscience

Biological Psychiatry

Brain Imaging and Behavior

European Journal of Neuroscience

Journal of Science Policy & Governance