Georgina Alexandra Lean, Ph.D.

Dr. Georgina A. Lean is an experienced human factors consultant, who has worked at Huntley-Fenner Advisors since 2017. Dr. Lean supports analyses involving personal injuries resulting from pedestrian, motor vehicle and locomotive accidents. In addition to litigation-related research, Dr. Lean supports hazard identification and risk analyses projects.

Dr. Lean applies peer-reviewed findings and research to real-world situations, employing a range of techniques, including lighting measurements, photogrammetry, sound measurements, binaural recording, sightline analyses, literature reviews, incident database reviews, surveys, and human subjects testing. Dr. Lean earned her bachelor's degree in Neuroscience from the University of Southern California in 2013, and went on to obtain both her master's and Ph.D. in Cognitive Sciences from the University of California - Irvine in 2016 and 2019, respectively. During her time both at USC and UCI, Dr. Lean's research focused on neuroanatomical studies of visual processing pathways.

Dr. Lean spent approximately two years as a volunteer clinical assistant with Venice Family Clinics in Santa Monica, CA (2012-2014), as well as five years serving her community as a volunteer firefighter and emergency medical technician in Orange County, CA (2015-2020). Dr. Lean completed the California State Fire Marshal Certified Basic Fire Academy training program in the spring of 2018. This experience has provided Dr. Lean with a unique perspective in cases involving biomechanical and vehicular accidents and often contributes to her insights in a practical, as well as a scientific, manner.

Academic Credentials
- Ph.D. Cognitive Sciences, University of California – Irvine, 2019
- M.S. Cognitive Neuroscience, University of California – Irvine, 2016
- B.S. Neurosciences, University of Southern California, 2013
    - Minor studies in Spanish

Publications
Peer-Reviewed Publications
- Lean, G.A., Liu, Y.J., & Lyon, D.C. (2019). Cell type specific tracing of the subcortical input to primary visual cortex from the basal forebrain. *J. Comp. Neurol.,* 527(3).
- Foik, A.T., Lean, G.A., Scholl, L.R., McLelland, B.T., Mathur, A., Aramant, R.B., Seiler, M.J., & Lyon, D.C. (2018). Detailed visual cortical responses generated by retinal sheet transplants in rats with severe retinal degeneration. *Journal of Neuroscience,* 38(50), 10709-10724.
- Foik, A.T., Scholl, L.R., Lean, G.A., & Lyon, D.C. (2020). Visual response characteristics in lateral and medial subdivisions of the rat pulvinar. *Neuroscience 441,* 117-130.
- Foik, A.T., Lean, G.A., McLelland, B.T., Mathur, A., Aramant, R.B., Seiler, M., & Lyon, D.C. (2018). Retinal sheet transplantation in rats with retinal degeneration restores visual cortical responses. *Acta Neurbiologiae Experimentalis, 78* (Suppl. 1).

Other Publications and Presentations
- Lean, G. "Current trends in E-bike safety." ISPCE 2023. Dallas, TX, May 1-3, 2023.
- Lean G., Huntley-Fenner G., & Deak G. "Train now arriving: A study of auditory looming using naturalistic stimuli." Association for Psychological Science Convention: May 26-27, 2021.

- Lean, G. A. (2019). *The Role of Neuromodulatory Projections from the Basal Forebrain Area to the Primary Visual Cortex of the Rodent* (Doctoral dissertation, UC Irvine).
- Lean, G.A., Liu, Y.J. & Lyon, D.C. (2016, November). *Basal forebrain provides direct projections to inhibitory neurons in mouse primary visual cortex, but not to the parvalbumin-positive inhibitory subtype.* Poster presented at the Society for Neuroscience Conference, San Diego, CA.
- Lean, G.A., Liu, Y.J. & Lyon, D.C. (2015, November). *Cell-type specific tracing of the subcortical input to primary visual cortex from the hypothalamus.* Poster presented at the Society for Neuroscience Conference, Chicago, IL.

Selected Teaching Experience:
- Teaching Assistant, University of California - Irvine, 2014-2018
  - Introduction to Psychology, Psychological Fundamentals, Research Methods in Psychology, Introduction to Human Memory, Psychology of Violence, Sport Psychology, Research Computing in Social Science, Biological Anthropology, Medical Sociology
- Guest Lecturer, Introduction to Psychology, Pomona College, 2024, 2023

Professional Affiliations/Service:
- International Society of Systems Safety
- Human Factors and Ergonomics Society
- MCLE Provider for the State of California

Fire/First Responder Courses/Certifications:
- Reserve Firefighter Academy – Orange County, CA, 2015
- Reserve Officer Academy – Orange County, CA, 2017
- California State Fire Marshal accredited Fire Fighter 1 Academy – San Pasqual, CA, 2018
- Paramedic Preparation – University of California, Los Angeles, 2018