Kassandra R. Lee

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EDUCATION

University of Nevada, Reno   2018-present (ABD, grad date: May 2024)

- Ph.D Integrative Neuroscience
- PIs: Michael Webster, Ph.D, Fang Jiang, Ph.D.

Illinois State University   2014-2016

- M.S. Cognitive and Behavioral Sciences
- PI: Amrita Puri, Ph.D
- Thesis: *Ensemble Coding of Semantic Information: Are Numerical Averages Generated in Parallel?*

Lycoming College   2010-2014

- B.A. Psychology, with Honors, Dean's List, Biology Minor
- Thesis: *Alcohol Consumption and College Adjustment among College Students by Generational Status*

PUBLISHED MANUSCRIPTS

1. Richardson, A. J., **Lee, K. R**., Crognale, M. A., & Webster, M. A. (2022). Using equiluminance settings to determine the cardinal chromatic directions for individuals. Journal of the Optical Society of America A, Special Issue

2. Ilic, I., **Lee, K.R**., Mizokami, Y., Whitehead, L., & Webster, M.A. (2022). Adapting to an enhanced color gamut- implications for color vision and color deficiencies. *Optics Express, 30*(12).

3. **Lee, K.R**., Groesbeck, E., Gwinn, O.S., Webster, M.A., & Jiang, F. (2021). Enhanced Peripheral face processing in deaf individuals. Journal of Perceptual Imaging, Special Issue.

4. **Lee, K.R**., Dague, T. D., Sobel, K.V., Paternoster, N.J., & Puri, A.P. (2021). Set size and ensemble perception of numerical value. Journal of Attention, Perception, & Psychophysics, Special Issue.

5. **Lee, K. R**., Webster, M.A. (2020). Environmental influences on color vision. Encyclopedia of Color Science and Technology, Overview Essay.

6. **Lee, K. R**., Richardson, A. J., Walowit, E., Crognale, M. A., & Webster, M. A. (2020). Predicting color matches from luminance matches. Journal of the Optical Society of America A, Special Issue.

7. Qiu, C.*, **Lee, K. R**.*, Goldstein, R., Jung, J. H., & Peli, E. (2018). De-cluttering using motion parallax improves recognition of new objects in simulated prosthetic vision. *Translational Vision Science and Technology*. *equal contribution first author

8. **Lee, K. R.,** Sobel, K.V.,York, A.K., & Puri, A. M. (2018). Dissociating parallel and serial processing of numerical value. Journal of Numerical Cognition, Special Issue.

9. Han, S., Qiu, C., **Lee, K. R.**, Jung, J. H., & Peli, E. (2018). Word recognition: Re-thinking prosthetic vision evaluation. *Journal of Neural Engineering*, Special Issue. doi: 10.1088/1741-2552/aac663

10. Gilbertson, R., Norton, T. R., Beery, S., & **Lee, K. R.** (2018). Web-based alcohol intervention in first-year college students: Efficacy of full-program administration prior to second semester. *Substance Use and Misuse*, doi: 10.1080/10826084.2017.1392979

IN PREPARATION

1. **Lee, K. R**., Webster, M. A. (2022). Assessing color similarities by phase matching.

RESEARCH EXPERIENCE

Vision Scientist Intern-Snap Inc.   June 2023-Sept. 2023
Snap Inc. Boulder, Colorado; Adviser: Dr. Katie Tregillus

Graduate Research Assistant–Visual Perception Lab   July 2018-present
University of Nevada, Reno; PI: Michael A. Webster, Ph.D

Graduate Research Assistant–Plasticity Lab   July 2018-Oct. 2019
University of Nevada, Reno; PI: Fang Jiang, Ph.D

Research Assistant- Active Confocal Imaging for Visual Prostheses   May 2016- May 2018
Schepens Eye Research Institute, Mass Eye and Ear, Harvard Medical School;
PIs: Eli Peli, M.Sc., O.D., Jae-Hyun Jung, Ph.D

Graduate Research Assistant – Understanding Suspicion in Cyber Environments   Sept. 2015- May 2016
Illinois State University funded by Air Force Research Laboratory; PI: Eric Wesselmann, Ph.D

Graduate Research Assistant – Cognitive and Perceptual Neuroscience Lab   Aug. 2014- May 2016
Illinois State University; PI: Amrita Puri, Ph.D

Graduate Research Assistant – Production is Prediction Study   Aug. 2014- Dec. 2014
Illinois State University, Psycholinguistics Lab; PI: John Cooper Cutting, Ph.D

Project Coordinator – Health Behavior Research   Aug. 2011-Apr. 2014
Lycoming College Psychology Department; PIs: Rebecca Gilbertson, Ph.D; Tina Norton, Ph.D

Research Assistant – Rodent Lab   Jan. 2011-Mar. 2011; Jan. 2013-Apr. 2013
Lycoming College Psychology Department; PI: Rebecca Gilbertson, Ph.D

INVITED TALKS

1. **Lee, K.R**., Predicting color matches from luminance matches (2020).
   University of Central Arkansas Neural Network

2. **Lee, K.R**., Predicting color vision from luminance matches (2020).
   Virtual OSA Vision and Color Data Blitz: New findings in Color Perception The Optical Society

3. **Lee, K**.**R.** Does Holistic Crowding of Faces Depend on Task Demands? (2016).
   Schepens Eye Research Institute, Mass Eye and Ear, Harvard Medical School

INVITED TALKS (Upcoming)

1. **Lee, K.R**., Improving recognition of cluttered objects using motion parallax in simulated prosthetic vision (2023).
   Smith-Kettlewell Eye Research Institute

RESEARCH PRESENTATIONS

Crognale, M. A., **Lee, K.R.,** Richardson, A., Webster, M.A. (September 2023). The physiology and management of individual differences in color vision. *GDC/AIC*, [Poster].

Lee, K.R., Webster, M.A. Individual differences in judging facial categories. (May 2023). *Vision Sciences Society,* [Poster].

Parthasarathy, M.K., **Lee, K.R.**, Abbey, C. K., Webster, M.A. A direct measure of adaptation and visual salience. (Oct. 2022) *Optica Fall Vision Meeting,* [Poster].

Crognale, M. A*.,* Richardson, A., **Lee, K.R.**, Webster, M.A. Using equiluminance to characterize individual differences in color vision. (July 2022). *International Color Vision Society,* [Poster].

Lee, K.R., Meza, R., Webster, M.A. Color similarities assessed by phase matching. (May 2021). *Vision Sciences Society (V-VSS),* [Virtual Poster].

Richardson, A., **Lee, K.R.**, Webster, M.A., Crognale, M. A. Can variations in luminance sensitivity predict variations in the cardinal color directions? (May 2021). *Vision Sciences Society (V-VSS),* [Virtual Poster].

Lee, K.R., Nakamura, K., Nakashima, Y.,Yamaguchi, M. Y., Watanabe, K., Webster, M.A. Individual and population differences in face categories. (May 2020). *Vision Sciences Society (V-VSS),* [Virtual Poster].

Richardson, A., **Lee, K.R**., Crognale, M.A., Webster, M.A. How to find a tritan line, without actually trying. (May 2020). *Vision Sciences Society (V-VSS),* [Virtual Poster].

Lee, K.**R**., Richardson, A., Walowit, E., Crognale, M.A., Webster, M.A. Predicting color matches from luminance matches. (July 2019). *International Color Vision Society,* [Poster].

Lee, K.R., Groesbeck, E., Gwinn, O. S., Jiang, F. Deaf individuals show enhanced face processing in the periphery. (May 2019). *Vision Sciences Society,* [Poster].

Richardson, A., **Lee, K.R**., Walowit, E., Crognale, M.A., Webster, M.A. Minimum (motion) measurements of human color matching functions. (May 2019). *Vision Sciences Society,* [Poster].

Lee, K.**R.,** Qiu, C., Jung, J.H., & Peli, E. Motion parallax improves recognition of new objects presented in clutter in simulated prosthetic vision. (Sept. 2018). *OSA Vision Meeting,* [Poster].

Lee, K.R., Sobel, K. V., York, A., K., & Puri, A. M. Parallel and serial processing of numerical value in digit ensembles. (May 2018). *Vision Sciences Society,* [Poster].

Lee, K.**R.,** Qiu, C., Jung, J.H., & Peli, E. Motion parallax improves recognition of stabilized object with cluttered background in simulated prosthetic vision. (May 2018). *The Association for Research in Vision and Ophthalmology (ARVO),* [Poster].

Puri, A., & **Lee, K.R.** Estimating Numerical Averages: Ensemble Coding at the Semantic Level. (March 2017). *Southwestern Psychological Association,* [Conference Talk].

Lee, K.R., Sobel, K., Cody, O., Puri, A. Ensemble Representations of Semantic Meaning: Are Numerical Averages Generated in Parallel? (Nov. 2016). *OPAM,* [Poster].

Dayer, A., * **Lee, K.R.**, * Chow, S., Flynn, E., & Puri, A. Does holistic face crowding depend on task demands? (May 2016). *Vision Sciences Society,* [Poster].
　　　*equal contribution first author and co-presenter

Puri, A., Halladay, T., **Lee, K.R.**, Romager, J. & Casalman, E. Anxiety and Accuracy of Ensemble Representations of Emotion in a Crowd. (Nov. 2015). *Psychonomic Society's Annual Meeting,* [Poster].

Lee, K.R., & Puri, A. Characteristics of Visual Crowding of Faces versus Non-Face Objects. (May 2015). *Association for Psychological Science Convention,* [Poster].

Gilbertson, R., Norton, T., **Lee, K.R.**, Watsula, A., & Beery, S. The Effectiveness of Personalized Web-Based Alcohol Prevention: A Longitudinal Perspective. (June 2013). *Research Society on Alcoholism National Conference,* [Poster].

Zaman, A., **Lee, K.R.,** & Gilbertson, R. Predictors of At-Risk Drinking. (April 2012). *Eastern Colleges Science Conference,* [Poster].

PROFESSIONAL DEVELOPMENT

Nevada Bioinformatics Center's Machine Learning Bootcamp   Jan. 2023
Covering fundamentals of Python for data science and supervised learning
University of Nevada, Reno

Reviewer   July 2022
Optics Express

Neuroscience Student Committee   Aug. 2019-present
University of Nevada, Reno

Frontiers for Young Minds Review Editor   Oct. 2018-2020
University of Nevada, Reno

Workshop in EEG Frequency-tagging in Visual Neuroscience   Sept. 24-27, 2018
University of Nevada, Reno

International Colour Vision Society Summer School 2018   July 30-Aug. 3, 2018
Pembroke College, Oxford, UK

TEACHING EXPERIENCE

Teacher PSY/NS Perception 405   July-Aug. 2020
University of Nevada, Reno

Teaching Assistant PSY/NS Perception 405   Aug. 2019-present
University of Nevada, Reno

Research Mentor PSY 395   Jan. 2019-May 2023
University of Nevada, Reno

Teacher PSY 392 Senior Seminar   Jan. 2016-May 2016
Illinois State University
1. Topic: Unique psychological disorders: Ramachandran's *Phantoms in the Brain*
2. Topic: Perception of morality in media: Marvel's *Civil War*, Sebald's *The Rings of Saturn*

Teaching Assistant PSY 331 Research Methods   Jan. 2015- May 2016
Illinois State University

Teaching Assistant PSY 101 intro   Aug. 2011-Apr. 2014
Lycoming College

TECHNICAL PROFICIENCY

Programming	Matlab, Python, R, Overleaf
EEG	Biosemi activeTwo, BrainVision actiCHamp
Psychophysics	Psychtoolbox, SPSS
Virtual Reality	Oculus Rift
Eye Tracking	Eyelink 1,000, Tobii
Camera Systems	Lytro Illum Light Field, Wicab's BrainPort V100, V200, VisionPro, and Workstation Systems
Survey design	Qualtrics, SurveyMonkey

LEADERSHIP AND SCHOLASTIC HONORS

Rick M. Gardner Scholarship   2021
University of Nevada, Reno Psychology Department

Elsevier/Vision Research Virtual Travel Award for VSS   2021
Vision Sciences Society

Big sister volunteer   2019-2022
Big Brothers Big Sisters of Northern Nevada

ICVS Student Travel Award   2019
International Colour Vision Society

Graduate Dean's Merit Scholarship   2018-2019
University of Nevada, Reno

Massachusetts State Science Olympiad   2017, 2018
Framingham State University

J. Milton Skeath Award in Psychology   2014
Lycoming College

REFERENCES
Michael A. Webster, Ph.D.
Foundation Professor

University of Nevada, Reno
Psychology Department
1664 N. Virginia St (0296), Reno, NV 89557, USA
contact: mwebster@unr.edu

Eli Peli, MSc, OD
Professor of Ophthalmology
Mass Eye and Ear, Schepens Eye Research Institute
Ophthalmology Department
20 Staniford Street, Boston, MA 02114, USA
contact: eli_peli@meei.harvard.edu

Katie Tregillus, Ph.D.
Vision Scientist
Snap, Inc. Boulder, CO 80301, USA
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