

Kassandra R. Lee
(814)-290-9709
Center for Integrative Neuroscience
Department of Psychology / 0296
University of Nevada, Reno 89557
kassandral@nevada.unr.edu

Education

Graduate

University of Nevada, Reno 2018-present

- Ph.D 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?*

Undergraduate

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

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

- 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
- 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

Under Review

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.

In Preparation

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

Research Positions

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

July 2018-present

Aim 1) To better understand individual differences in the processing of color to find the most efficient ways to categorize an individual's color percepts. **2)** To investigate the role of individual and cultural differences in face perception through the use of visual adaptation paradigms.

Graduate Research Assistant–Plasticity Lab
2019 University of Nevada, Reno
PI: Fang Jiang, Ph.D

July 2018-Oct.

Aim: **1)** To utilize EEG with fast periodic stimulation to assist in investigation of differences in frequency-tagged response amplitude and topography between early deaf individuals and hearing controls when presented with visual and/or tactile stimuli **2)** To utilize modern technological approaches, such as VR to understand multisensory integration for individuals with normal sensory processing vs. those with deficits

Research Assistant- Active Confocal Imaging for Visual Prostheses
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

May 2016-

Aim: To improve the quality of imaging presented through visual prostheses using image processing methods such as confocal lightfield imaging and edge enhancement, and simulated prosthesis to test motion parallax for background de-cluttering

- Training of blind individuals with sensory substitution device
- Simulated visual prosthesis via Oculus Rift HMD

Graduate Research Assistant – Understanding Suspicion in Cyber Environments

Sept. 2015- May 2016

Illinois State University funded by Air Force Research Laboratory

Supervisor: Eric Wesselmann, Ph.D

Aim: To investigate the psychological aspects of suspicion about social interactions online

Graduate Research Assistant – Cognitive and Perceptual Neuroscience Lab

Aug. 2014- May 2016

Illinois State University

Supervisor: Amrita Puri, Ph.D

Aim: To evaluate mechanisms underlying our ability to gather visual information from crowded scenes

- Assisting in set-up and training with BrainVision actiCHamp EEG
- Assisting in set-up and training with Tobii eye tracker

Graduate Research Assistant – Production is Prediction Study

Aug. 2014- Dec. 2014

Illinois State University, Psycholinguistics Lab

Supervisor: John Cooper Cutting, Ph.D

Aim: To assess the effects of unexpected words/phrases on subject response production, ultimately providing insight into their predictions about sentence structure

- Voice transcription

Project Coordinator – Health Behavior Research

Aug. 2011-Apr. 2014

Lycoming College Psychology Department

Supervisors: Rebecca Gilbertson, Ph.D; Tina Norton, Ph.D

Aim: To investigate the effectiveness of a web-based alcohol prevention program on first-year students' academic performance and health behaviors

Research Assistant – Rodent Lab

Jan. 2011-Mar. 2011, & Jan. 2013-Apr. 2013

Lycoming College Psychology Department

Supervisor: Rebecca Gilbertson, Ph.D

Aim: To evaluate the effects of adolescent alcohol consumption on rodent's behavioral abilities in adulthood

Research Presentations

- Vision Sciences Society* May 2023
Lee, K.R., Webster, M.A. Individual differences in judging facial categories. *submitted*
- Optica Fall Vision Meeting* Oct. 2022
 Parthasarathy, M.K., **Lee, K.R.**, Abbey, C. K., Webster, M.A. A direct measure of adaptation and visual salience. *Poster Presentation*
- International Color Vision Society* July 2022
 Crognale, M. A., Richardson, A., **Lee, K.R.**, Webster, M.A. Using equiluminance to characterize individual differences in color vision. *Poster Presentation*
- Vision Sciences Society (V-VSS)* May 2021
Lee, K.R., Meza, R., Webster, M.A. Color similarities assessed by phase matching *Virtual Poster Presentation*
- Vision Sciences Society (V-VSS)* May 2021
 Richardson, A., **Lee, K.R.**, Webster, M.A., Crognale, M. A. Can variations in luminance sensitivity predict variations in the cardinal color directions? *Virtual Poster Presentation*
- University of Central Arkansas Neural Network* Dec. 3, 2020
Lee, K.R., Predicting color matches from luminance matches. *Invited Talk*
- The Optical Society* July 8, 2020
Lee, K.R., Predicting color vision from luminance matches. *Virtual Invited Talk OSA Vision and Color Data Blitz: New findings in Color Perception*
- Vision Sciences Society (V-VSS)* May 2020
Lee, K.R., Nakamura, K., Nakashima, Y., Yamaguchi, M. Y., Watanabe, K., Webster, M.A. Individual and population differences in face categories. *Virtual Poster Presentation*
- Vision Sciences Society (V-VSS)* May 2020
 Richardson, A., **Lee, K.R.**, Crognale, M.A., Webster, M.A. How to find a tritan line, without actually trying. *Virtual Poster Presentation*
- International Color Vision Society* July 2019
Lee, K.R., Richardson, A., Walowit, E., Crognale, M.A., Webster, M.A. Predicting color matches from luminance matches. *Poster Presentation*
- Vision Sciences Society* May 21, 2019
Lee, K.R., Groesbeck, E., Gwinn, O. S., Jiang, F. Deaf individuals show enhanced face processing in the periphery. *Poster Presentation*
- Vision Sciences Society* May 18, 2019
 Richardson, A., **Lee, K.R.**, Walowit, E., Crognale, M.A., Webster, M.A. Minimum (motion) measurements of human color matching functions. *Poster Presentation*

University of Nevada, Reno Neuroscience Retreat

April 6, 2019

Lee, K.R., Groesbeck, E., Gwinn, O. S., Jiang, F. Enhanced peripheral face processing for deaf individuals.

Poster Presentation

OSA Vision Meeting

Sept. 23, 2018

Lee, K.R., Qiu, C., Jung, J.H., & Peli, E. Motion parallax improves recognition of new objects presented in clutter in simulated prosthetic vision. *Poster Presentation*

Vision Sciences Society

May 19, 2018

Lee, K.R., Sobel, K. V., York, A., K., & Puri, A. M. Parallel and serial processing of numerical value in digit ensembles. *Poster Presentation*.

The Association for Research in Vision and Ophthalmology

May 1, 2018

Lee, K.R., Qiu, C., Jung, J.H., & Peli, E. Motion parallax improves recognition of stabilized object with cluttered background in simulated prosthetic vision. *Poster Presentation*.

Southwestern Psychological Association

March 31, 2017

Puri, A., & **Lee, K.R.** Estimating Numerical Averages: Ensemble Coding at the Semantic Level. *Conference Talk*.

OPAM

Nov. 17, 2016

Lee, K.R., Sobel, K., Cody, O., Puri, A. Ensemble Representations of Semantic Meaning: Are Numerical Averages Generated in Parallel? *Poster Presentation*.

Vision Sciences Society

May 13-18, 2016

Dayer, A., * **Lee, K.R.**, * Chow, S., Flynn, E., & Puri, A. Does holistic face crowding depend on task demands? *Poster Presentation*.

*equal contribution first author and co-presenter

Illinois State University Research Day Symposium

Apr. 8, 2016

Lee, K.R., Puri, A., & Sobel, K. Ensemble Coding of Semantic Information: Are Numerical Averages Generated in Parallel? *Poster Presentation*.

Schepens Eye Research Institute, Mass Eye and Ear, Harvard Medical School

March 10, 2016

Lee, K.R. Does Holistic Crowding of Faces Depend on Task Demands? *Invited Talk*.

Psychonomic Society's Annual Meeting

Nov. 19-22, 2015

Puri, A., Halladay, T., **Lee, K.R.**, Romager, J. & Caselman, E. Anxiety and Accuracy of Ensemble Representations of Emotion in a Crowd. *Poster Presentation*.

Association for Psychological Science Convention

May 23, 2015

Lee, K.R., & Puri, A. Characteristics of Visual Crowding of Faces versus Non-Face Objects. *Poster Presentation*.

Illinois State University Research Day Symposium

Apr. 10, 2015

Lee, K.R., & Puri, A. Interference Between Part-Based and Holistic Representations In The Peripheral Visual Field. *Poster Presentation.*

Illinois State University Psi Chi Research Colloquium

Apr. 17, 2015

Lee, K.R., & Puri, A. The Role of Part-Based and Holistic Representations in Visual Crowding. *Colloquium Talk.*

Illinois State University Phi Sigma Research Symposium

Feb. 27, 2015

School of Biological Sciences

Lee, K.R., & Puri, A. Visual Crowding: Contributions of Part-Based vs. Holistic Representations. *Poster Presentation.*

Lycoming College Independent Study/ Honors Project

Aug. 2013-Apr. 2014

Psychology Department

Lee, K.R. Alcohol Consumption and College Adjustment among College Students by Generational Status.

- Presented as research paper, oral proposal and defense

Research Society on Alcoholism National Conference

June 22-26, 2013

Gilbertson, R., Norton, T., **Lee, K.R.**, Watsula, A., & Beery, S. The Effectiveness of Personalized Web-Based Alcohol Prevention: A Longitudinal Perspective. *Poster Presentation.*

Eastern Colleges Science Conference

Apr. 13-14, 2012

Zaman, A., **Lee, K.R.**, & Gilbertson, R. Predictors of At-Risk Drinking. *Poster Presentation.*

Lycoming College

Fall 2012

Lee, K.R., Miller, K., & Poorman, J. Assessment of Group versus Individual Problem Completion: Effects of Cellphone Use and Social Loafing. *Poster Presentation.*

Professional Development

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 University of Nevada, Reno	July-Aug. 2020
Teaching Assistant PSY/NS Perception 405 University of Nevada, Reno	Aug. 2019-present
Teaching Assistant PSY 392 Senior Seminar Illinois State University	Jan. 2016-May 2016
Teaching Assistant PSY 331 Research Methods Illinois State University	Jan. 2015- May 2016
Teaching Assistant PSY 101 intro Lycoming College	Aug. 2011-Apr. 2014

Leadership and Scholastic Honors

Rick M. Gardner Scholarship University of Nevada, Reno Psychology Department	2021
Elsevier/Vision Research Virtual Travel Award for VSS Vision Sciences Society	2021
Big sister volunteer Big Brothers Big Sisters of Northern Nevada	2019-2022
ICVS Student Travel Award International Colour Vision Society	2019
Graduate Dean's Merit Scholarship, \$10,000 University of Nevada, Reno	2018-2019
Massachusetts State Science Olympiad Framingham State University <ul style="list-style-type: none">• Volunteered preparation and at event	2017, 2018
J. Milton Skeath Award in Psychology Lycoming College <ul style="list-style-type: none">• Presented for superior undergraduate achievement that shows the most potential for future work in psychology	2014

Gamma Sigma Alpha National Greek Academic Honor Society
2013 Lycoming College

Sigma Tau Delta English Honor Society
2012 Lycoming College

Research Skills/Training

- SPSS
- R statistical programming (introductory-level experience)
- Presentation (Neurobehavioral Systems)
- MATLAB/PTB
- Oculus Rift
- Biosemi activeTwo EEG System
- BrainVision actiCHamp EEG
- Tobii eye tracker
- Eyelink 1,000 eye tracker (introductory-level experience)
- Lytro Illum Light Field Camera
- Minolta Luminance Meter LS100
- Wicab's BrainPort V100, V200, VisionPro, and Workstation systems
- Topcon CL-100 lensmeter
- Amazon Business Account creation and management
- Visual acuity measurement
- Designing and distributing online surveys (Qualtrics, SurveyMonkey)
- Overleaf

References

<i>Name</i>	<i>Institution, Position</i>	<i>Email</i>	<i>Phone</i>
Michael Webster	University of Nevada, Reno, Foundation Prof.	mwebster@unr.edu	(775) 682-8691
Eli Peli	Schepens, Harvard Med. School, Senior Scientist	eli_peli@meei.harvard.edu	(617) 912-2597
Amrita Puri	University of Central Arkansas, Assistant Prof.	apuri@uca.edu	(530) 220-5038