

## EDUCATION

- 2011 – 2016 University of California, San Diego (La Jolla, CA)  
Ph.D in Neuroscience  
Dissertation: Circuits and cell-types underlying visual perception in the mouse
- 2007 – 2011 Lafayette College (Easton, PA)  
B.S. in Neuroscience with Honors, Summa Cum Laude  
Minor: Anthropology & Sociology

## GRANTS & AWARDS

- 2013 National Science Foundation Graduate Research Fellowship Program  
2012 National Science Foundation GK-12 Grant, Socrates Fellowship Program  
2011 William C. Rappolt '67 & Walter Oechsle '57 Neuroscience Prize  
2010 Amgen Foundation Scholar, Columbia University  
2010 Marshall Scholarship Finalist for the Greater New York/Pennsylvania Area  
2010 Coluccio Salutati Award, Academic Excellence Abroad  
2009 Eugene P. Chase Phi Beta Kappa Prize, Academic Excellence as a First-Year  
2009 Kathryn Wasserman Davis Projects for Peace Grant  
2008 Marquis Scholar, Lafayette College's Highest Academic Scholarship

## RESEARCH EXPERIENCE

- 2016 – present Cold Spring Harbor Laboratory (Cold Spring Harbor, NY)  
Postdoctoral fellow with Anne Churchland, investigating the circuit-level mechanisms underlying multisensory processing during naturalistic behaviors in mice.
- 2012 – 2016 The Salk Institute for Biological Studies (La Jolla, CA)  
Graduate student and postdoctoral fellow with Ed Callaway, using in vivo calcium and intrinsic signal imaging, electrophysiology, optogenetics, and anatomical tracing methods to investigate higher-order motion processing, excitatory cell types, and thalamocortical circuits in the mouse.
- 2011 – 2012 UC San Diego Department of Psychiatry (La Jolla, CA)  
Rotation with Martin Paulus studying interoception and decision-making in substance users with fMRI and behavioral measures.
- 2012 UC San Diego Dept. of Cognitive Sciences (La Jolla, CA)  
Rotation with Jaime Pineda employing EEG and behavioral measures to investigate the neural signatures of autism and schizophrenia.
- 2010 – 2011 Lafayette College (Easton, PA)  
Honors Thesis with Elaine Reynolds investigating race perception in a crime scene using eye-tracking, skin conductance, and self-report measures.
- 2010 Columbia University Motor Neuron Center (New York, NY)  
Research internship with Christopher Henderson studying facial motor neuron development using in situ hybridization and immunohistochemistry.
- 2008 Louisiana State University (Shreveport, LA)  
Research internship with Lisa Schrott investigating the role of prenatal LAAM treatment, gender, dosage, and administration route on hydrocodone antinociception in rats.

## PEER-REVIEWED PUBLICATIONS

- Juavinett, A.L., Nauhaus, I., Garrett, M.G., Callaway, E.M. (2017). Automated identification of mouse visual areas with intrinsic signal imaging. *Nature Protocols* 12(1):32-43. doi: 10.1038/nprot.2016.158.
- Kim, E.J., Juavinett, A.L., Kyubwa, E.M., Jacobs, M.W., Callaway, E.M. (2015). Three Types of Cortical Layer 5 Neurons That Differ in Brain-wide Connectivity and Function. *Neuron* 88(6): 1253-67. doi: 10.1016/j.neuron.2015.11.002.
- Juavinett, A.L., Callaway, E.M. (2015). Pattern and Component Motion Responses in Mouse Visual Cortex. *Current Biology* 25(13): 1759-64. doi: 10.1016/j.cub.2015.05.028.
- Stewart, J.L., Juavinett, A.L., May, A.C., Davenport, P.W., Paulus, M.P. (2015). Do You Feel Alright? Attenuated Neural Processing of Aversive Interoceptive Stimuli in Current Stimulant Users. *Psychophysiology* 52(2): 249-62. doi: 10.1111/psyp.12303
- Pineda, J.A., Juavinett, A.L., Datko, M. (2012). Self-regulation of brain oscillations as a treatment for aberrant brain connections in children with autism. *Medical Hypotheses* 79(6): 790-8.

## BOOK CHAPTERS

- Juavinett, A.L., Datko, M., Pineda, J. (2014). Rationale for Neurofeedback Training in Children with Autism. In *The Comprehensive Guide to Autism*, edited by Vinood B. Patel, Victor R. Preedy and Colin R. Martin.

## CONFERENCE PRESENTATIONS & POSTERS

- Juavinett, A.L., Kim, E.J., Collins, H. "A precise connectivity map between the mouse thalamic nucleus LP and visual cortical areas." *Society for Neuroscience Abstract*, November 2016.
- Juavinett, A.L., Kim, E.J., Callaway, E.M. "Exploring the function of the secondary visual nucleus of the mouse in vivo." *Janelia Thalamus and Corticothalamic Interactions Conference*, April 2015.
- Juavinett, A.L., Callaway, E.M. "Plaid motion responses in mouse V1 and extrastriate areas." *Society for Neuroscience Abstract*, October 2013.
- Juavinett, A.L. "From neurons to perception: Using art to elucidate the visual system." *Society for Neuroscience Theme H Abstract*, October 2013.
- Juavinett, A.L., Stewart, J.L., May, A.C., Migliorini, R., Tapert, S.F., Paulus, M.P. "An interoceptive view of the adolescent brain." *Society for Neuroscience Abstract*, October 2012.
- Stewart, J.L., Juavinett, A.L., Shukla, A., Paulus, M.P. "Altered Interoceptive Processing during Inspiratory Breathing Load in Stimulant Users who Develop Problems versus Those who Do Not." *International Society of the Advancement of Respiratory Psychophysiology Abstract*, September 2012.
- Juavinett, A.L., Stewart, J.L., Shukla, A., Paulus, M.P. "Something feels different: Altered interoceptive processing in problem stimulant users versus Desisters." *College on Problems of Drug Dependence Abstract*, June 2012.
- Juavinett, A.L., Stewart, J.L., Shukla, A., Paulus, M.P. "Altered interoceptive processing in stimulant users who develop problems versus those that do not." *SOBP Conference Abstract*, May 2012.
- Juavinett, A.L., Reynolds, E. "Race, Crime, and the Power of Unconscious Stereotypes." Presented at *Student Research in Social Justice Conference at Muhlenberg College*, April 2011.
- Juavinett, A.L., Reynolds, E. "Race, Crime, and the Power of Unconscious Stereotypes." Presented at *Lehigh Valley Society for Neuroscience Conference*, April 2011.
- Winfield, B., Juavinett, A.L. "And then there is the women: The Truth about Women in the Justice System." Presented at *Feminism in Practice Conference at Lehigh University*, Fall 2010.

## TEACHING EXPERIENCE & TRAINING

2015	Instructor, UC San Diego Psychology Department Designed and taught Principles of Behavior (Psyc103).
2015	The College Classroom Course Completed a 10-week course on the fundamentals of teaching in a college classroom.
2015	Visiting Educator, High Tech High San Marcos Developed and taught a six-week module, "Neuroscience Tools & Societal Impacts."
2013 – 2015	UCSD Outreach Teacher Training Program Developed a neuroscience curriculum containing three full neuroscience lessons for high school classrooms.
2012 – 2013	National Science Foundation GK-12 Socrates Fellow Collaborated with high school biology teacher to develop curricula, teach classes, and design a project that translates doctoral research to students. Included a month-long summer course on pedagogy and active learning.
2012	Teaching Assistant, UC San Diego, Dept. of Neuroscience Assisted with Neuroscience 200A, Molecular & Cellular Neuroscience.
2008 – 2011	Northampton County Jail, Music Therapy Class Coordinator Created and implemented lesson plans for weekly music class meetings, organized and trained volunteers.
2009	Santa Cruz County Jail, Kathryn W. Davis Projects for Peace Fellow Taught weekly computer, book & film, and art classes with female inmates. Conducted demographic study of inmate population and compiled comprehensive report.

## WRITING EXPERIENCE \*

2016 – present	Contributor to Shmoop Online Anatomy & Physiology Course
2013 – 2016	Co-founder and Director of NeuWrite San Diego
2015	Contributor to Anatomy & Physiology Coloring Book by Quarto Publishing
2013 – 2015	Staff writer for Proteintech Blog
2013	Staff writer for "Core Concepts" at Oxbridge Biotech Roundtable
2013	Finalist in Oxbridge Biotech Roundtable Nature Writing Competition

\* *Writing samples available at [ashleyjuavinett.com/portfolio/writing/](http://ashleyjuavinett.com/portfolio/writing/)*

## COMMUNITY & UNIVERSITY INVOLVEMENT

2014 – 2016	UCSD Neurosciences Admission Committee, Student Representative
2014 – 2016	Pint of Science San Diego, Organizing Team Member
2011 – 2014	Neurosciences Outreach Program, Member
2011 – 2014	Neurosciences Social Committee, Coordinator
2012 – 2013	Graduate Student Association, Neurosciences Representative
2011	The Franklin Institute, Philadelphia Science Festival Intern
2008 – 2009	Lafayette College Student Government, President

## REFERENCES

Available upon request.