

Brandy Angeline Briones

5656 Frist Ctr, Princeton University, Princeton, NJ 08540
Phone: (310)-709-8729 E-Mail: bbriones@princeton.edu

Education

Ph.D. Student, Department of Psychology and Neuroscience, Princeton University	Fall 2014-Present
M.A. in Psychology and Neuroscience, Princeton University	Spring 2017
B.S. in Psychobiology, University of California, Los Angeles	Spring 2014

Research Experience

Graduate Student (Ph.D.) in Psychology and Neuroscience at Princeton University **September 2014-Present**

Principal Investigator: Dr. Elizabeth Gould

Design and implement studies concerning structural plasticity and behavior associated with dorsal striatal and/or hippocampal function in rodent models. Utilizing techniques in retroviral vector manipulations, immunohistochemistry, microscopy (confocal, epifluorescence, and light), as well as small animal handling, learning paradigms, craniotomies, injections, and perfusions. Trained and mentored undergraduates, as well as lab and research assistants.

Research supported by NSF GRFP Fellowship and the PNI Innovation Fund

Undergraduate Researcher, UCLA Department of Behavioral Neuroscience **March 2012-June 2014**

Principal Investigator: Dr. Thomas Minor

Supported as a: Center for Academic Research Excellence (CARE) Fellow and CARE Scholar, September 2012-June 2013. Maximizing Student Diversity (MSD) Scholar, June 2013-June 2014.

Study learning and behavior in the striatum of the brain on adenosine signaling and conservation-withdrawal implications in Post-traumatic Stress Disorder.

Mindfulness training effects on stress in Special Forces RECON warfighters. Concurrent study: Effects of post-stress glucose administration in traumatically stressed rat models.

Research supported by NSF CSAMP (CAMP), IMSD, and NIH Grants.

Graduate of the Program of Excellence in Education and Research in the Sciences **September 2010-June 2012**

Program Coordinator: Dr. Tama Hasson

A two year program on education in research, attendance of science research talks, and avid participant in all PEERS related activities such as workshops, seminars, and poster days.

CARE Science Engineering and Math (SEM), Summer 2013. Exposure to surgical techniques, lyophilizer techniques; reading and analysis of scientific literature

Publications, Conference Presentations, and Abstracts

Response learning stimulates dendritic spine growth on dorsal striatal medium spiny neurons

Brandy A. Briones, Vincent D. Tang, Amanda E. Haye, Elizabeth Gould. *Neurobiology of Learning and Memory*, (*in revisions*).

NTC Symposium: Dendritic Computation, Columbia University, May, 2018. **Poster Presentation**

Neurogenesis and Stress. Handbook of Stress vol 3: Stress, Physiology, Biochemistry and Pathology

Brandy A. Briones, Elizabeth Gould. 2018 (*in press*).

Evidence supporting a role for astrocytes in the regulation of cognitive flexibility and neuronal oscillations through the Ca²⁺ binding protein S100 β

Adam T. Brockett, Gary A. Kane, Patrick Monari, **Brandy A. Briones**, Pierre-Antoine Vigneron, Gabriela Barber, Andres Bermudez, Uma Dieffenbach, Alexander D. Kloth, Timothy J. Buschman, Elizabeth Gould. *PLOS ONE*, 2018.

Effects of response learning on medium spiny neurons and immature neurons in the dorsal striatum

Brandy A. Briones, Vincent D. Tang, Amanda E. Haye, Elizabeth Gould.

Society for Neuroscience, Washington, D.C., November, 2017. **Poster Presentation**

Disrupted cerebellar neural activity in development on neocortical dendritic structure and non-motor behaviors results in altered neocortical dendritic morphology

Jessica Verpeut, Alice Tao, Aleksandra Badura, T.D. Pereira, L. Tao, Elise C. Cope, **Brandy A. Briones**, Elizabeth Gould, Sam S.-H Wang.

Society for Neuroscience, Washington, D.C., November, 2017. **Poster Presentation**

Potential role of stress in the inhibitory effects of extended maze training on immature neurons in the dorsal striatum and hippocampus

Brandy A. Briones, Vincent D. Tang, Amanda E. Haye, Elizabeth Gould. Stress Meeting, Princeton University, June 29-30, 2017. **Poster Presentation**

Immature Neurons and Radial Glia, But Not Astrocytes or Microglia, Are Altered in Adult *Cntnap2* and *Shank3* Mice, Models of Autism

Elise C. Cope, **Brandy A. Briones**, Adam T. Brockett, Susana Martinez, Pierre-Antoine Vigneron, Maya Opendak, Samuel S.-H Wang, Elizabeth Gould. *ENEURO*, 2016.

Social Behavior, Hormones and Adult Neurogenesis

Maya Opendak, **Brandy A. Briones**, Elizabeth Gould. *Frontiers in Neuroendocrinology*, 2016.

Effects of Response Learning on Medium Spiny Neurons and Astrocytes in the Dorsal Striatum

Brandy A. Briones, Elizabeth Gould.

Society for Neuroscience, San Diego, November 15, 2016. **Poster Presentation**

Federation of European Neurosciences Societies, Copenhagen, July 3, 2016. **Poster Presentation**

Pharmacogenetic manipulation of astrocyte Ca²⁺ signaling enhances astrocyte size and cognitive flexibility

Adam T. Brockett, **Brandy A. Briones**, Elizabeth Gould.

Federation of European Neurosciences Societies, Copenhagen, July 3, 2016. **Poster Presentation**

Astrocytes are involved in cognitive flexibility

Adam T. Brockett, **Brandy A. Briones**, Elizabeth A. LaMarca, Elizabeth Gould.

Society for Neuroscience, Chicago, October, 2015. **Poster Presentation**

Effects of disrupted cerebellar activity on dendritic development at distal neocortical sites

Jessica Verpeut, Alice Tao, C. Hildreth, Elise C. Cope, **Brandy A. Briones**, Elizabeth Gould, Sam S.-H Wang.
Society for Neuroscience, San Diego, November, 2016. **Poster Presentation**

Adenosine's autacoid function in the central nervous system and the behavioral state of conservation-withdrawal

Brandy A. Briones, Traci N. Plumb, Thomas R. Minor. *Journal of Autacoids and Hormones*, 2014.

The Prevention of learned helplessness by post-stress glucose consumption

Brandy A. Briones, Shelby Stegal, Anisa Joseph, Thomas R. Minor.
UCLA Psychology Undergraduate Research Conference, UCLA, May 10, 2013. **Poster Presentation**

Effects of blocking adenosine in the dorsal striatum on behavioral impairment

Brandy A. Briones, Traci N. Plumb, Thomas R. Minor.
UCLA CARE Summer Programs for Undergraduate Research, UCLA, August 28, 2013. **Poster Presentation**
SACNAS National Conference, San Antonio, October 3-6, 2013. **Poster Presentation**
PEERS Poster Session, UCLA, October 29, 2013. **Poster Presentation**
UCLA Science Poster Day, May 13, 2014. **Poster Presentation**

Student Researcher Panel Presentation

UCLA EEB 97X Seminar for Freshmen PEERS students, November 12, 2013. **Oral Presentation**

Teaching, Leadership, and Work Experience

Resident Graduate Student Fellow, Wilson College, Princeton University, 2017-2018

Resident graduate student living in the Wilson College dorms, active in generating and participating in college activities such as instructing art sessions, organizing trips to professional events, hosting study breaks, to name a few. Serve as an academic mentor to primarily freshmen and sophomores, Wilson students are encouraged to contact RGS' with questions related to their areas of study.

Assistant-in-Instruction, WWS340 Psychology of Decision Making & Judgement, Princeton University, Fall 2015

Taught three precepts of approximately 25 students each as an AI for the 2015 Fall semester with Professor Eldar Shafir. Precepts were mandatory for students and treated as separate classes from main lecture to teach, discuss, and review studies and papers relevant to the topic discussed in lecture, in addition to grading assignments and holding office hours.

Executive Secretary, Latino/Latina Graduate Student Association, Princeton University, September 2014-2015

Member of the executive board. Involved in constructing outreach events in the Princeton community to bring students of all ethnic backgrounds together. Educate the community in Latino culture and reduce stigma and biases towards minority groups.

Director, Active Minds 2013-2014, UCLA "Five Star" Chapter

Former Assistant Director (2012-1013), Internal Vice President (2011-2012), and member since January 2011. Presenter at the Active Minds non-profit organization national conference in 2012 at the University of Central Florida. Liaison between UCLA students and the Counseling and Psychological Services center. Presented educational mental health information at UCLA. Uniting Voice Award 2012. Co-programmed with local Los Angeles Elementary Schools to help educate parents and students on healthy (both mental and physical) life style choices.

Public Relations Director and Instructor, *UCLA Student Wellness Commission CPR/FA*. October 2012-June 2014

Liaison between the program and UCLA students, community members, and other interested participants. Distinguished teaching CPR-First Aid Instructor of the Quarter. Teacher for the American Heart Association CPR and First Aid after training through the AHA. Focused on teaching the science behind cardiopulmonary resuscitation techniques. Also trained in AHA BLS for Healthcare Providers in CPR and AED.

Biology and Mathematics Tutor, *Devon Review, LLC*. February 2014-June 2014

One-on-one tutoring sessions with high school students looking to improve in biology and math classes. Tutoring sessions composed of mini-lessons, quizzes, homework help, and included teaching good study and learning techniques.

Achievements and Memberships

National Science Foundation Graduate Research Fellowship Program (GRFP) Fellow, *awarded 2015*

Dean's Honors List, *UCLA College of Letters and Sciences, 2010*

Robert C. Byrd Scholarship Recipient, *2010*

Honors Society - *Alpha Lambda Delta | Phi Eta Sigma*

Society for Neuroscience (SfN) member

Synapse Women NYC member

Graduate Women in Science and Engineering (GWISE) member

Latinx Graduate Student Association (LGSA) member

Society for Advancement of Chicanos and Native Americans in Science (SACNAS) member