

ALEJANDRO M. SCAFFA

70 Ship St. Room 413 • Providence, RI 02903 • Phone: +1.641.629.0926 • alejandro_scaffa@brown.edu
www.alejandroscaffa.com • www.linkedin.com/in/alejandroscaffa

Education:

Ph.D. in Molecular Pharmacology and Physiology (MPP) – Brown U. – Providence, RI	(exp) May 2019
M.A. in Molecular Pharmacology and Physiology (MPP) – Brown U. – Providence, RI	May 2016
Adviser: Dr. William Fairbrother	Classes GPA: 4.00
Bachelor of Arts in Biochemistry with Honors – Grinnell College – Grinnell, IA	May 2014
Adviser: Dr. Elizabeth Trimmer	GPA: 3.53
Medical Biotechnology and Drug Development Semester Abroad	Aug – Dec 2012
Danish Institute for Study Abroad (DIS) – Copenhagen, Denmark	GPA: 3.74

Research Experience:

PhD Candidate, Brown University, Providence, RI **Sept 2014 – Present**

Current PhD Project: “Understanding the effect of Splicing in Autism Spectrum Disorders – P.I.: Dr. William Fairbrother

- Pre-mRNA splicing abnormalities have been seen in Autism Spectrum Disorder. I aim to characterize all the genetic abnormalities through computational biology techniques, high throughput splicing assays, and CRISPR.

Previous PhD Projects: “Optimizing expression, purification, and refolding of the MqsR toxin from *Yersinia pestis* in *E. Coli*” - P.I.: Dr. Rebecca Page. -- “Elucidating the structure of mutant Protein Tyrosine Phosphatase 1B (PTP1B) using X-Ray Crystallography and NMR” - P.I.: Dr. Wolfgang Peti. -- “Determining the structure of the N-terminal domain (NTD) of TDP-43 and the effect of phosphorylation on its assembly” - P.I.: Dr. Nicolas Lux Fawzi

Undergraduate Researcher, Grinnell College, Grinnell, IA **Jan 2012 – May 2014**

Project: “Characterization of Neuronal and Torpedo Nicotinic Acetylcholine Receptor (nAChR) via Liquid Chromatography Mass Spectrometry (LC-MS)” - P.I.: Dr. Mark Levandoski, and Dr. Elaine Marzluff.

Teaching Experience:

Brown University: Sheridan Teaching Certificate I. Grinnell College: Brazilian Portuguese I and II Curriculum Developer and instructor, Biochemistry (BCM 262) Teaching Assistant, General Chemistry (CHM 129) Laboratory Assistant.

Leadership Experience:

Department Representative for MPP (Brown University), Class Representative of Psychopharmacology (Danish Institute of Study Abroad), Team Leader for International Pre-Orientation Program (Grinnell College)

Honors and Awards:

Best Aging in Place Hack, MIT Hacking Medicine Grand Hack, Cambridge, MA (2016) - Pharmacology Pre-Doctoral Fellow, Brown University, Providence, RI (2015) - Bachelor of Arts with Honors (2014) - Dean’s List (2012) - Intel® International Science and Engineering Fair (ISEF) co-hosted by Google, San Jose, CA (2010 - 1st Prize in Biochemistry, Best in Category Award (Biochemistry), Naming rights of a minor planet)

Abstracts and Presentations:

Engineering splicing mutations in HEK 293 cells using CRISPR/Cas9, CSHL, Cold Spring Harbor, NY	Sept 2015
Elucidating the structure of Protein Tyrosine Phosphatase 1B YAYA, Brown University	May 2015
Elucidating the allosteric binding site of NAChRs via LC/MS, University of Chicago	Oct 2013

Skills:

Programming: Working knowledge of Python, Julia, Unix, R, and Matlab. **Computer skills:** Working knowledge of scientific software such as TopSpin, ChemDraw, and Swiss-PdbViewer. **Laboratory:** Experience with NMR, X-Ray Crystallography, LC-MS, protein purification, DNA manipulation, E. Coli expression, voltage-clamp, frog surgery, and scientific writing. **Languages:** Native or bilingual prof.: Spanish, English and Portuguese. Elementary prof.: Danish and Bulgarian.