RACHEL BOZADJIAN

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EDUCATION

Boston UniversityBoston, MAM.S. BIOINFORMATICSExpected Jun 2025

University of California Santa Barbara B.S. BIOPSYCHOLOGY Santa Barbara, CA Mar 2016

SKILLS

Molecular Biology: Python, Statistical analysis in R, Bash, Snakemake, High performance computer cluster experience **Molecular Biology:** Illumina Next Generation Plasmid Library Prep and Sequencing, Molecular Cloning, DNA and RNA Extraction

EXPERIENCE

ASSOCIATE SCIENTIST I

RESEARCH ASSOCIATE II

RESEARCH ASSOCIATE I

Asimov

Apr 2023 - Aug 2023

Dec 2021 - Apr 2023

May 2019 - Nov 2021

Boston, MA

- Utilized EGF CUBA Python libraries (Primavera and BandWitch) to automate Sanger Sequencing primer and restriction enzyme selection for plasmid verification, reducing hands-on time for team
- Developed and implemented sample tracking script with Pandas, connecting sample metadata at every stage of cloning workflow which minimized sample loss and streamlined troubleshooting
- Prepared Next Generation Sequencing libraries for whole plasmid sequencing and ran on MiSeq to quality control plasmids used in downstream molecular cloning workflow
- Optimized, automated, and deployed fluorescence-based DNA quantification assay on Echo acoustic liquid handler resulting over 7-fold increase in team's concentration measurement throughput

RESEARCH ASSISTANT

Aug 2018 - May 2019

Ocean State Research Institute | Brown University

Providence, RI

LABORATORY TECHNICIAN

Aug 2016 - Aug 2018

UCSB Neuroscience Research Institute

Santa Barbara, CA

• Searched bioinformatics databases such as UCSC Genome Browser to rank candidate genes

LABORATORY TECHNICIAN

Aug 2016 - Jun 2017

UCSB Center for Stem Cell Biology and Engineering

Santa Barbara, CA

LABORATORY TECHNICIAN

Sep 2014 - May 2016

UCSB Psychological and Brain Sciences

Santa Barbara, CA

PUBLICATIONS

Kulesh B, **Bozadjian R**, Parisi RJ, Leong SA, Kautzman AG, Reese BE, Keeley PW. Quantitative trait loci on chromosomes 9 and 19 modulate AII amacrine cell number in the mouse retina. Front Neurosci. 2023 Feb 2;17:1078168. doi: 10.3389/fnins.2023.1078168. PMID: 36816119; PMCID: PMC9932814

Bagley JR, Adams J, **Bozadjian RV**, Bubalo L, Kippin TE. Strain differences in maternal neuroendocrine and behavioral responses to stress and the relation to offspring cocaine responsiveness. Int J Dev Neurosci. 2019 Nov;78:130-138. doi: 10.1016/j.ijdevneu.2019.06.009. Epub 2019 Jun 22. PMID: 31238105; PMCID: PMC6824979

Toh H, Smolentsev A, **Bozadjian RV**, Keeley PW, Lockwood MD, Sadjadi R, Clegg DO, Blodi BA, Coffey PJ, Reese BE, Thomson JA. Vascular changes in diabetic retinopathy-a longitudinal study in the Nile rat. Lab Invest. 2019 Oct;99(10):1547-1560. doi: 10.1038/s41374-019-0264-3. Epub 2019 May 17. PMID: 31101854; PMCID: PMC6788790

Bagley JR, Adams J, **Bozadjian RV**, Bubalo L, Ploense KL, Kippin TE. Estradiol increases choice of cocaine over food in male rats. Physiol Behav. 2019 May 1;203:18-24. doi: 10.1016/j.physbeh.2017.10.018. Epub 2017 Oct 19. PMID: 29056351; PMCID: PMC5908759