

ROBERT J. BAILEY

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EDUCATION

The University of Texas at Austin

May 2020

B.S., Environmental science, biological sciences- GPA: 3.18

RESEARCH EXPERIENCE

UTEX Culture Collection of Algae – UT Austin, Austin, TX

February 2018 - Present

Undergraduate Research Assistant

- Experience making many different types of algal medias and sterile transfers
- Experience with DNA extraction and analysis of algal strains
- Conducted lab maintenance of over 3000 algal samples and cryogenic samples, and conducted extensive cleaning of environment, glassware, etc.

Dr. Molly Cumming's Lab – UT Austin, Austin, TX

June 2019-Present

Undergraduate Researcher

- Formed and ran experiments testing cognitive functions and behavior in poeciliid fish with a team
- Wet lab experience with fish health upkeep and general aquarium upkeep
- Experience working with animal tracking software, as well as tracking behaviors by hand
- Experience working on scientific reports and effectively communicating the results

Marine Invertebrate Taxonomy – UW, Friday Harbor Labs, WA

Summer 2019

Marine Invertebrate Taxonomy Course (FHL 432) Student

- Extensive field collection of marine invertebrate samples
- Wet lab experience with organism care and upkeep
- Dissection work with and without microscopy

City of Austin Watershed Protection Department – Austin, TX

May 2018

Volunteer Field Assistant to Todd Jackson

- Collected and identified stream invertebrates for watershed quality analysis
- Conducted water quality sampling and habitat assessment during stream surveys

Assistant to Undergraduate Researcher- University of Texas, Austin, TX

November 2017

Volunteer Field Assistant

- Diatom sampling and data collection along the coast of Port Aransas
- Field preparation and initial laboratory preparation of diatom samples

Dr. Jay Banner Cave Research Team- Austin, TX

November 2017

Field Assistant

- Assisting in stalactite drip data collection at Natural Bridge Caverns
- Assisting in initial chemical preparation of samples

COMMUNITY AND VOLUNTEER SERVICE

McKinney Falls State Park with UT Rock Climbing, Austin, TX

November 2018 & 2019

Volunteer

- Worked to clear overgrowth out of trails and build up existing trails for better access
- Helped lead climbing classes demonstrating technique and basic skill for local climbing group

Yellow Bike Project- Austin, TX

Spring 2017

Volunteer

- Provide assistance with bike building in a low-income community in order to provide alternative transportation
- Assist in sorting through and organizing donated bike parts

LEADERSHIP

University of Texas Rock Climbing Team – UT Austin, *Public Relations Officer*

December 2018 - Present

- Contact and maintain relationships with various sponsors and coordinate sponsor involvement in events
- Guide a collegiate sports team of 80 members during practices, meetings, and events
- Ran social media accounts for the team to bring in more sponsors and publicity for fundraising
- Put on 3 climbing competitions with an officer team (~140 participants per competition)

SKILLS

Computer: RStudio proficiency, Microsoft Excel proficiency, ArcGIS, EthoVision (animal tracking), Python, Git familiarity

Laboratory: DNA extraction, PCR, gel electrophoresis, DNA purification, dissection, microscopy, aquarium maintenance

Field: water quality testing of stream and river pH, dissolved oxygen, turbidity, basic water chemistry; general habitat assessment and ecological surveying, macroinvertebrate sampling