# ROB BAIL FY

## EDUCATION

2020

## **University of Texas at Austin**

B.S. in Environmental Science, biological sciences

Austin, Texas

GPA: 3.18

Thesis: The effect of individual sexual strategy on cognition in male Xiphophorus nigrensis



## RESEARCH EXPERIENCE

## February 2018 Present

## **Undergraduate Research Assistant**

UTEX Culture Collection of Algae, University of Texas • Austin, TX

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

## June 2019 Present

## **Undergraduate Researcher**

Dr. Molly Cumming's Lab, University of Texas

• Austin, TX

- Formed and ran experiments testing cognitive functions and behavior in poecilid 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.

#### Summer 2019

## **Marine Invertebrate Taxonomy Student**

Marine Invertebrate Taxonomy Course, University of Washington, Friday Harbor Laboratories

Friday Harbor, WA

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

#### May 2018

#### **Volunteer Field Assistant to Todd Jackson**

City of Austin Watershed Protection Department

• Austin, TX

- · Collected and identified stream invertebrates for watershed quality
- · Conducted water quality sampling and habitat assessment during stream surveys
- Assistant to Undergraduate Researcher, University of Texas

## CONTACT INFO

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For more information, please contact me via email.

## **SKILLS**

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

Laboratory: DNA extraction, PCR, gel electrophoresis, DNA purification, Dissection, Microscopy, freshwater aquaria maintenance

Computer: Proficient in R, Microsoft suite, familiarity with Python, ArcGIS, EthoVision (animal tracking), Git

This resume was made with the R package pagedown.

Last updated on 2019-12-14.

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

### Volunteer Research Assistant

Dr. Jay Banner Cave Research Team, University of Texas

New Braunfels, TX

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

## COMMUNITY AND VOLUNTEER SERVICE

November 2018 & 2019

#### McKinney Falls State Park

Volunteer with UT Rock Climbing

Austin, TX

- 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.

Spring 2017

#### Yellow Bike Project

Volunteer

Austin, TX

- 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**

December 2018 | Present

### Public Relations Officer

The University of Texas Rock Climbing Team

Austin, TX

- 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).

# OTHER SKILLS

#### Computer

- · EthoVision (animal tracking)
- Git familiarity

## Laboratory

- Dissection
- Microscopy
- · Freshwater aguaria Maintenance

#### **Field**

 water quality testing of stream and river pH, dissolved oxygen, turbidity, basic water chemistry

- general habitat assessment and ecological surveying
- macroinvertebrate sampling