Ryan Bowser

University of Arizona Senior

about

First year accelerated master's student currently studying cardiac protein interactions in the Gregorio lab. I enjoy going on runs, baking sourdough bread, and reading! Awarded multiple honors based on merits, expected to graduate with a B.S. in MCB from the University of Arizona in May of 2024 and a M.S in MCB in May of 2025.

contact

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EDUCATION

B.S MOLECULAR & CELLULAR BIOLOGY
MINOR IN BIOCHEMISTRY

3.93 MATH & SCIENCE GPA
(3.96 GPA)
University of Arizona

HIGH SCHOOL DIPLOMA/ 3.67 GPA
Tucson High

SKILLS

Excellent Time Management & Organization

Embryo Microinjections

Detail Oriented

Sterile Technique and PCR

Python (OpenCV, Pandas, Trackpy, SciPy, Matplotlib, and Tkinter)

In-Vitro Motility Assay

AWARDS

BRAVO! Award Recipient
U of A / Summer 2023

Highest Academic Distinction
U of A / Spring 2022

Dean's List with Distinction
U of A / Spring 2021

Dean's List
U of A / Fall 2020

relevant experience

May 2022- Current — UBRP Researcher / GREGORIO LAB (Cardiac and Skeletal Muscle Biology) / Tucson, AZ

- Studying interactions between cardiac actin and regulatory proteins including tropomyosin, leiomodin, and the troponin complex
- Learned cardiac muscle cell-culture protocol, in-vitro motility assays, and critical thinking skills for experimental design
- Designed and built an automated data analysis pipeline, to preprocess, analyze, and format experimental data (Saving $9,600 - $25,000 annually)

January - May 2022 Directed Research / NAGY LAB (Developmental and Evolutionary Biology) / Tucson, AZ

- Performed microinjections on Tribolium embryos to create transgenic organisms, to understand segmentation genes and transcription factor binding
- Imaged fluorescent protein expression in Drosophila embryos to draw conclusions about gene conservation
- Attended weekly lab meetings with paper readings, and presented findings to peers

May - July 2019 Intern / ARNOLD LAB (Ecological and Evolutionary Fungal Biology) / Tucson, AZ

- Created an independent research project based on endophytes living in *Cupressus sempervirens* (Italian Cypress)
- Collaborated with the University of Puget Sound on a research project exploring communication signals between plateau lizards
- Collected and analyzed over 1,300 data samples, while learning to phenotype fungi and bacteria

August 2018- May 2022 Associate / IN N OUT BURGER / Tucson, AZ

- Worked in an extremely fast-paced and team-work oriented environment, with a friendly and upbeat attitude
- Promoted 5 times up to the 2nd highest level, and regularly helped prepare hundreds of burgers during shifts, with high quality and low margins of error
- Focused on communicating with customers to resolve issues, and learned to be comfortable talking with anyone

outreach & volunteering

- Presented research at the 34th Annual UBRP Conference.
  - **Ryan M. Bowser**, Carol C. Gregorio, Gerrie P. Farman (January 2023). *The Impact of Leiomodin2 (Lmod2) on Actin-Myosin Interactions.*

- Volunteered in Nogales, MX at Iniciativa Kino para la Frontera (Kino Border Initiative) preparing and serving meals to migrant people.

- Gave a presentation to high school students interested in biological research, for Jeremy Jonas's Advanced Research Methods and Biotech class at Tucson High Magnet School.

- Appeared on KXCI 91.3's Thesis Thursday segment, to explain cardiac protein research concepts, project significance, and past topics researched in the Gregorio lab for a general audience.