

Olivia Frary

BIOINFORMATICS STUDENT

UTAH VALLEY UNIVERSITY, OREM, UT

Education

Bachelor of Science in Bioinformatics

Utah Valley University

Expected to Graduate Spring 2025

GPA: 4.0

Research Experience

Independent Researcher Hjelman Lab, Utah Valley University Fall 2023 – Present

Advisor: Carl E. Hjelman, PhD

Investigating: The relationship between heteromorphic sex chromosome size and organism longevity

- Data mining genome size and lifespan data for several species
 - Working to produce a pipeline for large-scale phylogenies in R
 - Perform statistical and phylogenetic analyses in R
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Presentations

*Presenting Authors

Poster Presentations

- 2023 *Ancient Genomics: An Overview on the History and the Future of the Field*,
*O. Frary, *R. Motte, *J. Prescott
- Fall Biology Department Research Poster Session, Utah Valley University
- 2024 *Do the differences in size between heteromorphic sex chromosomes influence organism longevity?* *O. Frary, C. Hjelman
- Utah Conference on Undergraduate Research, Utah Valley University
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Awards & Honors

Scholarships

Presidential Merit Scholarship	2022-2026
Utah New Century Scholarship	2022-2026

Awards

Utah Valley University Study Abroad Grant	2023
Ohio Rural Letter Carriers Book Grant	2023

Honors

Dean's List, Utah Valley University	Fall 2022, Spring 2022
Science Sterling Scholar, Provo High School	2021
Top First Year Chemistry Student, American Chemical Society	2019

Experience

Biology Study Abroad

Summer 2023

Aeolian Islands, Italy

- Immersed in culturally rich environment to learn about the biology and geology of the Aeolian Islands
- Learned how locals and endemic plants and animals coexist with active volcanoes
- Researched and presented on population genetics of the islands

General Biology Teaching Assistant

Spring 2023

Utah Valley University, Orem, UT

- Worked with students to answer questions and provide support
- Reviewed and graded college-level work and provided constructive feedback
- Gave insights into ways to improve class material

Stability Intern

Jan 2022 – Dec 2022

doTERRA Quality Control, Pleasant Grove, UT

- Worked with and maintained lab equipment
- Regulated various reports through Microsoft Office Suite and Information Management Software
- Managed numerous studies and samples
- Increased department efficiency by implementing automated formulas into regular use documents

Membership

Women in the Physical Sciences

Fall 2022 – Present

Women in Science Affinity Group

Spring 2023 - Present

Agnostics and Atheists in Science Affinity Group

Spring 2023 - Present

Evolution and Bioinformatics Club

Fall 2023 - Present

Relevant Courses

Computational

- Fundamentals of Programming
- Object Oriented Programming
- Database Fundamentals
- Calculus I & II
- Principles of Statistics
- Design of Experiment

Biology

- Molecular Biology
- Genetics
- Genomics
- Principles of Chemistry I & II
- Data Analysis for Biologists
- Intro to Bioinformatics

Skills

- R for statistics and data analysis
- Python familiarity
- Microsoft Office Suite
- Bayesian Phylogenetic Methods
- Familiar with using and managing lab instruments