

# Olivia Frary

BIOINFORMATICS STUDENT

UTAH VALLEY UNIVERSITY, OREM, UT

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## Education

### Bachelor of Science in Bioinformatics

Utah Valley University

Expected to Graduate Spring 2025

GPA: 4.0

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## 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
  - Performing 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*

2020 - 2023

Science Sterling Scholar, *Provo High School*

2021

Top First Year Chemistry Student, *American Chemical Society*

2019

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## 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* Bioinformatics Data Skills

- 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

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## Membership

Women in the Physical Sciences

Fall 2022 – Present

Women in Science Affinity Group

Spring 2023 – Present

LGBTQ+ in Science Affinity Group

Spring 2023 - Present

Agnostics and Atheists in Science Affinity Group

Spring 2023 - Present

Evolution and Bioinformatics Club

Fall 2023 - Present

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## Relevant Courses

### Computational

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

### Biology

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

- R for statistics and data analysis
- Python basics
- Microsoft Office Suite
- Phylogenetic methods
- Using and maintaining lab instruments