

# Bailey Jannuzzi

Undergraduate Bioinformatics Student  
Utah Valley University

## Education

<b>Utah Valley University</b> Bachelor of Science in Bioinformatics Current GPA: 3.81	Orem, UT Expected Graduation: Spring 2026
<b>Utah Valley University</b> Associate in Science in Biology   High Honors	Orem, UT Graduated: Spring 2025

## Research Experience

<b>Utah Valley University</b> <b>Hjelmen Lab   Independent Student Researcher</b> Research Advisor: Carl E. Hjelmen, PhD	Orem, UT Spring 2024 - Present
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Investigating the diet of forensically relevant blow flies (Diptera: Calliphoridae) to determine their effectiveness as wildlife monitors.

- Constructing reproducible bioinformatic pipelines to identify environmental DNA from blow fly gut content samples.

<b>Utah Valley University</b> <b>Hjelmen Lab   Peer Research Collaborator</b> Research Advisor: Carl E. Hjelmen, PhD	Orem, UT Spring 2025 - Present
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Assisting with gathering data on blow fly (Diptera: Calliphoridae) diversity and distribution in Utah.

- Conducting field collections.
- Preparing collected specimens through pinning and labeling to be identified.

## Presentations

\*Presenting Authors

### Poster Presentations

<b>Entomological Society of America, Pacific Branch Meeting</b> <i>Oxford Nanopore Technology Sequencing and Identification of Fly Gut Content</i> , *Bailey Jannuzzi, Andrew Meeds, Lauren M. Weidner, and Carl E. Hjelmen	2025
<b>Entomological Society of America, Annual Meeting</b> <i>From City to Canyon: A Survey of Blow Fly Biodiversity Across Utah Ecoregions</i> , *Haylee Beck, Bailey Jannuzzi, Lauren M. Weidner, and Carl E. Hjelmen	2025

## **Oral Presentations**

- Entomological Society of America, Annual Meeting** 2025  
*Optimizing a Bioinformatic Pipeline for Profiling Blow Fly Diets*, \*Bailey Jannuzzi, Andrew Meeds, Lauren M. Weidner, and Carl E. Hjelman
- Entomological Society of America, Annual Meeting** 2025  
*What flies eat and excrete: Insights from puke, poop, and gut contents of blow flies for wildlife and forensic applications*, \*Lauren M. Weidner, Bailey Jannuzzi, Yeilee Perez Ortiz, Gabrielle Meza, Andrew Meeds, and Carl E. Hjelman

## **Awards and Honors**

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### **Awards and Funding**

- Undergraduate 10-Minute Presentation: SysEB, Behavior and Biodiversity | 2<sup>nd</sup> Place Award** 2025
- Undergraduate Research, Scholarly, and Creative Activity Dissemination Grant** 2025  
Amount Awarded: \$1,093
- Scholarly Activities Committee Grant** 2025  
Amount Awarded: \$1198.00
- Undergraduate Research, Scholarly, and Creative Activity Grant** 2025  
Amount Awarded: \$1428.00

### **Honors**

- Dean's List — Utah Valley University** Spring 2023 - Present

## **Experience**

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- Utah Valley University** Orem, UT  
**General Biology Teaching Assistant** Fall 2025 - Present
- Grading assignments and exams.
  - Hosting weekly study and review sessions.
  - Assisting with in-class activities.
- Utah Valley University** Orem, UT  
**Genetics Teaching Assistant** Spring 2025
- Supporting students in applying class concepts to solve practical problems.

## **Membership**

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- UVU Evolution and Bioinformatics Club | President** Spring 2025 - Present
- UVU Evolution and Bioinformatics Club | Secretary** Spring 2024 - Spring 2025
- Entomological Society of America** Current

## Relevant Courses

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### Computational

- Fundamentals of Programming
- Object Oriented Programming
- Database Fundamentals
- Calculus I
- Principles of Statistics
- Data Analysis for Biologists
- Introduction to Systems Administration-Linux/UNIX
- Intro to Data Analytics
- Bioinformatics Data Skills
- Discrete Mathematical Structures I
- Introduction to Algorithms and Data Structures

### Biology

- Introduction to Biotechnology
- Principles of Chemistry I & II
- College Biology I & II
- Introduction to Bioinformatics
- Molecular Biology
- Genetics
- Principles of Evolution
- General Ecology
- Genomics
- Phylogenetics

## Skills

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### Computational Skills

- SQL
- Statistics and Data Analysis in R and Python
- BASH Scripting/Linux

### Laboratory Skills

- Pipetting
- DNA Extraction
- PCR
- Gel Electrophoresis
- DNA Purification

### Other

- Microsoft Office Suite (Word, Excel, PowerPoint, Outlook)