

# Bailey Jannuzzi

Undergraduate Bioinformatics Student  
Utah Valley University

## Education

### Utah Valley University

Bachelor of Science in Bioinformatics  
Current GPA: 3.81

Orem, UT

Expected Graduation: Spring 2026

### Utah Valley University

Associate in Science in Biology | High Honors

Orem, UT

Graduated: Spring 2025

## Research Experience

### Utah Valley University

Hjelmen Lab | Independent Student Researcher  
Research Advisor: Carl E. Hjelmen, PhD

Orem, UT

Spring 2024 - Present

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.

### Utah Valley University

Hjelmen Lab | Peer Research Collaborator  
Research Advisor: Carl E. Hjelmen, PhD

Orem, UT

Spring 2025 - Present

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

#### Entomological Society of America, Pacific Branch Meeting

2025

*Oxford Nanopore Technology Sequencing and Identification of Fly Gut Content*, \*Bailey Jannuzzi,  
Andrew Meeds, Lauren M. Weidner, and Carl E. Hjelmen

#### Entomological Society of America, Annual Meeting

2025

*From City to Canyon: A Survey of Blow Fly Biodiversity Across Utah Ecoregions*, \*Haylee Beck,  
Bailey Jannuzzi, Lauren M. Weidner, and Carl E. Hjelmen

## **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. Hjelmen*

### **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. Hjelmen*

## **Awards and Honors**

### **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**

### **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**

### **UVU Evolution and Bioinformatics Club | President**

Spring 2025 - Present

### **UVU Evolution and Bioinformatics Club | Secretary**

Spring 2024 - Spring 2025

### **Entomological Society of America**

Current

## Entomological Society of America, Pacific Branch Relevant Courses

Current

### 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

### 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)