

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

Accepted for November, 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

Accepted for November, 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

Accepted for November, 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 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

Current

Relevant Courses

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)