

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
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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.

Utah Valley University Hjelmen Lab Peer Research Collaborator 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

Entomological Society of America, Pacific Branch Meeting <i>Oxford Nanopore Technology Sequencing and Identification of Fly Gut Content</i> , *Bailey Jannuzzi, Andrew Meeds, Lauren M. Weidner, and Carl E. Hjelmen	2025
Entomological Society of America, Annual Meeting <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

Awards and Funding

- Undergraduate 10-Minute Presentation: SysEB, Behavior and Biodiversity | 2nd 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** 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)