

MARISSA OHRAN

OREM, UT

marissa.ohran@gmail.com

<https://m-ohran.github.io>

EDUCATION

Bachelor of Science – *Utah Valley University, Orem, UT, May 2023*

MAJOR: **BIOINFORMATICS**

MINOR: **BIOLOGY**

Relevant Courses:

COMPUTATIONAL:

- Molecular Evolution and Bioinformatics
- Fundamentals of Programming
- Data Analysis for Biologists
- Genomics
- Bioinformatics Capstone
- Object Oriented Programming
- Global Social and Ethical Issues in Computing
- Database Fundamentals

- Bioinformatics Data Skills
- Introduction to Bioinformatics
- Principles of Statistics
- Guided Research Experience
- Microbiome Bootcamp
- Discrete Math Structures I
- Intro to Data Structures and Algorithms
- Intro to Sys Admin Linux/UNIX

BIOLOGY:

- Heredity
- Prehistoric Life
- College Biology 1&2
- Genetics
- Vertebrate Zoology
- Molecular Biology

- Principles of Chemistry 1&2
- Microbiology
- General Ecology
- Cell Biology
- Principles of Evolution
- Mycology

Associate of Science – *Utah Valley University, Orem, UT, April 2015*

MAJOR: **UNIVERSITY STUDIES**

SKILLS

- | | | |
|--|--|--|
| • Bilingual: <ul style="list-style-type: none">◦ English◦ Spanish | • DNA Extraction | • Following Instructions |
| • Problem Solving | • Experienced in Microsoft Office, including Word, Excel, and PowerPoint | • Animal Handling |
| • Troubleshooting | | • Trained in coding processes including R for Statistics, Python, and Command Line Interface |
| • Adaptable | • Experienced with Google Drive, including Docs, Sheets, and Slides | • Assembling and Assessing Genomes |
| • Pipetting | | |
| • Microscopy | | |
| • Introductory Phylogenetics | | |

RESEARCH EXPERIENCE

“*Bacillus cereus* tolerance to hand soaps”

Utah Valley University, Orem, UT

Supervising Mentor: Lauren Brooks, PhD

JANUARY 2023 – MAY 2023

- Selection of bacteria and biocides
- Zone of Inhibition testing
- Data comparison in R

“Assembly of highly heterochromatic cactophilic *Drosophila* genomes”

Utah Valley University, Orem, UT

Supervising Mentor: Carl E. Hjelman, PhD

JUNE 2022 – PRESENT

- *Drosophila* genome assembly using Flye and Canu assembly programs
- BUSCO assessment of assemblies
- Comparison of statistics in R

“Potential relationship between sex chromosome size and lifespan”

Utah Valley University, Orem, UT

Supervising Mentor: Carl E. Hjelman, PhD

NOVEMBER 2021 – JUNE 2022

- Data mining for genome size data for several species
- Data mining for lifespan data for several species
- Performing comparative analyses in R

“Aquatic fungal population of Utah Lake”

Utah Valley University; Orem, UT

Supervising Mentor: Geoffrey L. Zahn, PhD

AUGUST 2021 – DECEMBER 2021

- Assisted with sample collection
- Assisted with extraction of DNA
- Assisted with pipetting in preparation for PCR

PUBLICATIONS

- Wainwright, B. J., Leon, J., Vilela, E., Hickman, K. J. E., Caldwell, J., Aimone, B., Bischoff, P., **Ohran, M.**, Morelli, M. W., Arlyza, I. S., Marwayana, O. N., & Zahn, G. (2024). Wallace's line structures seagrass microbiota and is a potential barrier to the dispersal of marine bacteria. *Environmental Microbiome*, 19(1), 23. <https://doi.org/10.1186/s40793-024-00568-3>

ORAL PRESENTATIONS: *Presenting Authors

2023

- Sifting through the mess of heterochromatin: An attempt at assembling heterochromatic *Drosophila* genomes. ***Ohran M**, Hjelman CE
 - Utah Valley University Showcase; Utah Valley University, Orem, UT
- Sifting through the mess of heterochromatin: An attempt at assembling heterochromatic *Drosophila* genomes. **Ohran M**, ***Hjelman CE**
 - Entomological Society of America 2023 Pacific Branch Meeting; Seattle, WA

POSTER PRESENTATIONS: *Presenting Authors

2023

- Comparing highly heterochromatic cactophilic *Drosophila* genome assemblies. ***Ohran M**, Hjelman CE
 - Utah Conference on Undergraduate Research (UCUR) 2023; University of Utah, Salt Lake City, UT
- Assembly of highly heterochromatic cactophilic *Drosophila* genomes. ***Ohran M**, Hjelman CE
 - Utah Valley University Darwin Day; Utah Valley University, Orem, UT

2022

- Assembly of highly heterochromatic cactophilic *Drosophila* genomes. ***Ohran M**, Hjelman CE
 - Entomological Society of America 2022 Joint Annual Meeting; Vancouver, BC, Canada (2nd place)
- Fishing for Fungi in Utah Lake. ***Ohran M**, West B, De La Vega PJ, Simmons R, ***Tidwell A**, Zahn GL
 - Utah Valley University Showcase; Utah Valley University, Orem, UT
- Effects of Aquatic Fungi in Utah Lake. ***Ohran M**, West B, De La Vega PJ, ***Simmons R**, Tidwell A, Zahn GL
 - Utah Conference on Undergraduate Research (UCUR) 2022; St. George, UT

2021

- Fishing for Fungi in Utah Lake. ***Ohran M**, West B, De La Vega PJ, ***Simmons R**, ***Tidwell A**, Zahn GL
 - Utah Valley University Undergraduate Poster Session; Utah Valley University, Orem, UT
- Primate Tail Evolution. Bowen L, Dodge R, ***Navratil M**, ***Ohran M**, Rowberry R
 - Utah Valley University Undergraduate Poster Session; Utah Valley University, Orem, UT

COMMUNITY OUTREACH

- Feb 2023 Darwin Day, UVU Evolution & Bioinformatics Club
- March 2022 “SHEroes in STEM” Thanksgiving Point Event
- Feb 2022 Darwin Day, UVU Evolution & Bioinformatics Club
- March 2024 Central Utah STEM Fair
- June 2024 “Nature Cat Adventure” Girl Scouts and PBS Kids Event

MEMBERSHIPS

- UVU Evolution & Bioinformatics Club (Club Secretary Fall 2022)
- Entomological Society of America
- Pacific Branch of ESA

AWARDS

- 2022 Entomological Society of America 2nd place undergraduate student competition poster

EMPLOYMENT

Thanksgiving Point, Lehi, UT – Curiosity Guide

DECEMBER 2023 – PRESENT

I educate patrons about the natural world and encourage them to implement curiosity in their day to day interactions.

- Run early childhood programs that implement reading, art, and music
- Give presentations and teach classes at schools and outreach centers
- Use inquiry to find answers to questions asked by patrons
- Answer questions about the venues

Christa McAuliffe Space Center, Pleasant Grove, UT – Supervisor

NOVEMBER 2015 – PRESENT

I help run immersive spaceship simulators, telling stories set in a fictional universe where our patrons become the ship’s crew and heroes of the story.

- Assist with the spaceship simulations
- Greet patrons as they arrive
- Respond to calls and emails, answering questions from patrons
- Organize and train volunteer actors

- Operate and troubleshoot audio/video equipment
- Effectively use Google Docs and Google Sheets
- Maintain a clean and safe learning environment
- Ensure that patrons have the best experience possible

Next Gen HR, Orem, UT – *Dragonsteel Nexus Squire*

SEPTEMBER 2024 – DECEMBER 2024

Assisted with the Dragonsteel Nexus 2024 convention. Worked at checkout in the store and helped with distribution and the convention game when needed.

- Operate Point of Sale machine
- Bag merchandise
- Interact with guests and answer questions

Evermore Park, Pleasant Grove, UT – *Animal Life Attendant*

JUNE 2020 – OCTOBER 2023

I educated patrons about a variety of animals, handling and presenting the animals during wildlife programs, as well as answering questions about them outside of the shows.

- Clean cages
- Safely handle the animals
- Present animals in shows
- Answer questions and share interesting facts outside of shows