MARISSA OHRAN

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

BIOLOGY:

• Heredity

Prehistoric Life

• College Biology 1&2

• Genetics

Vertebrate Zoology

Molecular Biology

• 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

• 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:
 - English
 - Spanish
- Problem Solving
- Pipetting
- Microscopy
- DNA Extraction
- Introductory Phylogenetics
- Experienced in Microsoft Office, including Word, Excel, and PowerPoint
- Experienced with Google Drive, including Docs, Sheets, and Slides
- Following Instructions
- Trained in coding processes including R for Statistics, Python, and Command Line Interface
- Assembling and Assessing Genomes

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. Hjelmen, 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. Hjelmen, 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

ORAL PRESENTATIONS: *Presenting Authors

2023

- Sifting through the mess of heterochromatin: An attempt at assembling heterochromatic *Drosophila* genomes. *Ohran M, Hjelmen 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**, *Hjelmen 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, Hjelmen CE
 - Utah Conference on Undergraduate Research (UCUR) 2023;
 University of Utah, Salt Lake City, UT
- Assembly of highly heterochromatic cactophilic *Drosophila* genomes. *Ohran M, Hjelmen CE
 - Utah Valley University Darwin Day; Utah Valley University,
 Orem, UT

2022

- Assembly of highly heterochromatic cactophilic *Drosophila* genomes. *Ohran M, Hjelmen 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

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

Evermore Park, Pleasant Grove, UT — Animal Life Attendant

JUNE 2020 - PRESENT

I educate 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

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 audio/video equipment
- 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