Remington R. Motte

Lab Assistant, Utah Valley University Email: remingtonribailmotte@gmail.com Website: https://remingtonrimo.github.io

Education

See page 3 for relevant courses

BS Utah Valley University, Orem

May 2023

Department of Biology

Independent Project: Investigating the relationship between DSCAM evolution and arthropod sociality. Advisor: Dr. Carl Hjelmen

Research Experience

See page 3 for relevant skills

Research Positions

Independent Researcher, Hjelmen Lab

Spring 2022-Present

Advisor: Carl Hjelmen, PhD, Hjelmen Lab, Utah Valley University

Investigating: Using comparative phylogenetics to investigate the relationship between brain development genes in neuron number in vertebrates and cephalopods, and sociality in arthropods.

- Developed and implemented independent research project
- Utilized various phylogenetic tree reconstruction methods
- Use of comparative phylogenetic analyses and programs
- Use of molecular biological software

Research Assistant, Brook Lab

Spring 2023-Present

Advisor: Lauren Brooks, PhD, Brook Lab, Utah Valley University

Investigating: Studying the evolution of biocide resistance and identifying mutated genes in antibiotic resistant bacteria

- Bacterial culturing
- ZoI and CFU testing
- Identifying mutant genes
- Bash script writing and pipelining

Laboratory Technician, Analytical Chemistry

Fall 2022-Present

Supervisor: Cory Larsen, Lab Manager, Utah Valley University

Responsibilities:

- Preparing labs and solutions
- Testing lab equipment
- Clean glassware and lab equipment

Laboratory Technician, General Chemistry

Fall 2022-Present

Supervisor: Tom Strangefeld, Lab Manager, Utah Valley University Responsibilities:

- Preparing labs and solutions
- Testing lab equipment
- Clean glassware and lab equipment

Presentations

*Presenting author, Poster presentation, Oral presentation

2023

*R. Motte, L. Brooks ^PBacteria has Thick Skin: Biocide Resistance in Members of Staphylococcus. -Spring 2023 UVU Biology Department Research Poster Day, Utah Valley University.

- *R. Motte, C. Hjelmen. ⁰Investigating the relationship between DSCAM evolution and arthropod sociality.
- -Entomology Society of America 2023 Pacific Branch Meeting Accepted Oral Presentation
- *R. Motte, C. Hjelmen. ^PSmart Animals and Social Critters: The relationship of Protocadherin evolution and neuronal diversity and the impact of DSCAM evolution on sociality.
- -Utah Conference on Undergraduate Research Poster Presentation, University of Utah.

2022

*S. Morreal, *S. Smith, *C. Monsen, *R. Motte, N. Hughes, and O. Kopp. *PEffects of Varying pH on Pisum sativum.

-Fall 2022 UVU Biology Department Research Poster Day, Utah Valley University.

Grants/Awards/Honors

<u>Grants</u>		
Scholarly and Creative Activities Council Student Dissemination (\$	1,481)	2024
Student Activities Committee Grant Dissemination Grant (\$470)		2024
Scholarly and Creative Activities Council Student Dissemination (\$	1,354)	2023
<u>Awards</u>		
Salutatorian of Pinnacle Canyon Academy Scholarship (\$500)		2018
Scholar Athlete of the Year of Pinnacle Canyon Academy Scholarsh	nip (\$300)	2018
<u>Honors</u>		
Dean's List, Utah Valley University	Fall of 2018, Spring of 2023	
Salutatorian, Pinnacle Canyon Academy		2018

Community Science Education & Outreach

	~ .	~ .		
(Community	Science	Education	

Zoology Teaching Assistant, Utah Valley University	August 2022-May 2023
Chemistry Teaching Assistant, Utah Valley University	August 2022-May 2023
Elementary Teachers Assistant, Pinnacle Canyon Academy	January 2018-May 2018

Outreach

Entomology Children's Outreach Event, Springville Library	June 2023
Entomology Children's Outreach Event, Spanish Fork Library	June 2023
Utah Valley University's Darwin Day Event	February 2023

Professional Experience

Job position

Stockroom & Lab Assistant

August 2022-Present

Chemistry Department, Utah Valley University

Description: Assisting in moving lab equipment, and setting up labs. Preparing chemical reagents, ordering chemicals, and assisting in disposing of chemicals, etc.

Direct Service Provider

May 2022-August 2022

Rise Services, Orem, UT

Description: Helping disabled kids participate in summer activities and work on their own individual goals

Retail Sales Associate

July 2018-May 2022

Big 5 Sporting Goods

Description: Assist customers in a timely and friendly manner with sporting goods needs.

Academic Affiliations/Clubs

Academic Affiliations

Entomological Society of America member Utah Valley University Evolution and Bioinformatics Club member 2023-present Fall 2022-present

Clubs

UVU Co-Ed Volleyball UVU Bachata Dance Club Fall 2022-present Spring 2023

Relevant Courses

• Cell Biology

• Molecular Biology

Microbiology

Neuroscience

• Biological Anthropology

• General Ecology

Evolution

Genetics

Genomics

• Bioinformatics, Data Skills

• Principles of Chemistry I & II

• Organic Chemistry I&II

Biochemistry

Principles of Statistics

Skills

- Usage and implementation of chemical storage databases
- Preparation of buffers and solutions
- Supercomputer familiarity
- R for statistics and data visualization
- Bayesian phylogenetic methods

- Basic bash scripting
- Culturing bacteria
- Biocide resistance testing
- Galaxy