# 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, C. Hjelmen <sup>0</sup>The evolution of an undergraduate independent research project: Literature searches, data mining, and open-source programs to investigate a gene related to sociality.

- -Entomology Society of America 2023 National Conference Invited Oral Presentation
- \*R. Motte, L. Brooks <sup>P</sup>Bacteria has Thick Skin: Biocide Resistance in Members of Staphylococcus.
- -Spring 2023 UVU Biology Department Research Poster Day, Utah Valley University.
- \*R. Motte, C. Hjelmen. <sup>0</sup>Investigating 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)		
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 Scholarship (\$300)	2018	
<u>Honors</u>		
Dean's List, Utah Valley University Fall of 2018, S	Fall of 2018, Spring of 2023	
Salutatorian, Pinnacle Canyon Academy	2018	

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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
<u>Outreach</u>	
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