

# Remington R. Motte

PhD Student  
Department of Biological Sciences  
University of Arkansas

SCEN 716  
850 W Dickson St.  
Fayetteville, AR 72701  
[remingtonribailmotte@gmail.com](mailto:remingtonribailmotte@gmail.com)  
<https://remingtonrimo.github.io>

## Education

<b>PhD</b>	University of Arkansas, Fayetteville Department of Biological Sciences Dissertation Title: TBD Advisor: Dr. Jeremy M. Beaulieu	August 2024-Present
<b>BS</b>	Utah Valley University, Orem Department of Biology Independent Project: Investigating the relationship between DSCAM evolution and arthropod sociality. Advisor: Dr. Carl E. Hjelman	May 2023

## Employment

*See page 2 for teaching experience*

### Job position

<b>Lab Instructor/Teaching Assistant</b>	University of Arkansas, Department of Biological Sciences	August 2024-Present
<b>Adjunct Instructor</b>	Utah Valley University, Chemistry Department	January 2024-March 2024
<b>Lab Assistant/Technician</b>	Rocky Mountain Laboratories, Chemistry Department	January 2024-March 2024
<b>Stockroom &amp; Lab Assistant</b>	Utah Valley University, Chemistry Department	August 2022-December 2023
<b>Teaching Assistant</b>	Utah Valley University, Biology & Chemistry Department	August 2022-May 2023

## Publications

\*Lead author, <sup>§</sup>Student author

### 2025

\***Motte, RR**, Hjelman, CE. (2025) DSCAM1 evolution and its relationship to sociality: Hymenopteran DSCAM1 exhibits accelerated evolution in variable exon regions - **Accepted June 9th**

## Presentations

\*Presenting author, <sup>§</sup>Student author <sup>P</sup>Poster presentation, <sup>O</sup>Oral presentation

### 2025

<sup>§</sup>Jennings, L, \***Motte, RR**, Beaulieu, JM. <sup>P</sup>Gill slit number evolution in sharks  
-Evolution 2025 National Conference Poster Presentation

### 2024

\***Motte, RR**, Hjelman, CE. <sup>O</sup>Accelerated Rates of Evolution in hymenopteran DSCAM genes  
-Utah Conference on Undergraduate Research Poster Presentation, Utah Valley University

### 2023

**\*Motte, RR**, Hjelman, CE. <sup>o</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

**\*Motte, RR**, Brooks, L. <sup>p</sup>Bacteria has Thick Skin: Biocide Resistance in Members of Staphylococcus.  
-Spring 2023 UVU Biology Department Research Poster Day, Utah Valley University.

**\*Motte, RR**, Hjelman, CE. <sup>o</sup>Investigating the relationship between DSCAM evolution and arthropod sociality.  
-Entomology Society of America 2023 Pacific Branch Meeting Accepted Oral Presentation

**\*Motte, RR**, Hjelman, CE. <sup>p</sup>Smart 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**

**\*Morreal, S**, **\*Smith, S**, **\*Monsen, C**, **\*Motte, RR**, Hughes, N., and Kopp, O. <sup>p</sup>Effects of Varying pH on *Pisum sativum*.  
-Fall 2022 UVU Biology Department Research Poster Day, Utah Valley University.

## **Grants/Awards/Honors**

### **Grants**

Doctoral Student Presentation Travel Grant (\$1,100)	2025
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

### **Awards**

Salutatorian of Pinnacle Canyon Academy Scholarship (\$500)	2018
Scholar Athlete of the Year of Pinnacle Canyon Academy Scholarship (\$300)	2018

### **Honors**

Dean's List, Utah Valley University	Fall of 2018, Spring of 2023
Salutatorian, Pinnacle Canyon Academy	2018

## **Research Experience**

*See page 3 for relevant skills*

### **Research Positions**

<b>Independent Researcher</b> , Hjelman Lab	Spring 2022-Summer 2024
Advisor: Carl Hjelman, PhD, Hjelman 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.	
<b>Research Assistant</b> , Brook Lab	Spring 2023-Summer 2024
Advisor: Lauren Brooks, PhD, Brook Lab, Utah Valley University	
Investigating: Studying the evolution of biocide resistance and identifying mutated genes in antibiotic resistant bacteria	

## **Teaching Experience & Outreach**

## **Teaching Experience**

### **Principles of Evolution Teaching Assistant, University of Arkansas**

- Provide instruction to upper-level students in the principles and mechanisms of evolution.
  - Spring 2024 - 2 sections, 30-32 students each

### **Principles of Biology Lab Instructor, University of Arkansas**

- Instruct undergraduate non-biology major students in intro biology principles and laboratory techniques.
  - Fall 2024 - 2 sections, 24 students each

### **Principles of Chemistry Adjunct Instructor, Utah Valley University**

- Instruct undergraduate non-chemistry major students in intro chemistry principles and laboratory techniques.
  - Spring 2024 - 1 section, 22 students

### **Zoology Teaching Assistant, Utah Valley University**

- Grade undergraduate student assignments and answer questions related to intro zoology
  - Fall 2022
  - Spring 2023

### **Principles of Chemistry Teaching Assistant, Utah Valley University**

- Grade undergraduate student assignments and answer questions related to intro chemistry
  - Fall 2022
  - Spring 2023

### **Elementary Teachers Assistant, Pinnacle Canyon Academy**

- Assist instructor with teaching elementary students math, reading and science
  - 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

## **Students Mentored - (Current Position)**

- Lillian Jennings - (Undergraduate)

## **Committees/Academic Affiliations**

### **Committees**

UARK Honors and Awards Committee	October 2024-Present
----------------------------------	----------------------

### **Academic Affiliations**

Society for the Study of Evolution member	Spring 2025-present
Entomological Society of America member	Fall 2023-Spring 2024
Utah Valley University Evolution and Bioinformatics Club member	Fall 2022-Fall 2023

## **Skills**

- |   |                              |
|---|------------------------------|
| ● Supercomputer familiarity               | ● Julia language familiarity |
| ● R for statistics and data visualization | ● Bash scripting             |

- Phylogenetic reconstruction methods -  
Maximum Likelihood and Bayesian
- Phylogenetic comparative methods
- Phylogenetic network reconstruction
- Galaxy familiarity