Remington R. Motte

Lab Assistant, Utah Valley University
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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, [P]Poster presentation, [O]Oral presentation

2023

*R. Motte, C. Hjelmen [O]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 [P]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. [O]Investigating the relationship between DSCAM evolution and arthropod sociality.
-Entomology Society of America 2023 Pacific Branch Meeting Accepted Oral Presentation

*R. Motte, C. Hjelmen. [P]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
*S. Morreal, *S. Smith, *C. Monsen, *R. Motte, N. Hughes, and O. Kopp. [P]Effects of Varying pH on *Pisum sativum*.
-Fall 2022 UVU Biology Department Research Poster Day, Utah Valley University.

Grants/Awards/Honors

Grants
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

Teaching Experience & Outreach

Teaching Experience
Principles of Chemistry Adjunct Instructor, Utah Valley University   Spring 2024
- Instruct undergraduate non-chemistry major students in intro chemistry principles and laboratory techniques.

Zoology Teaching Assistant, Utah Valley University   August 2022-May 2023
- Grade undergraduate student assignments and answer questions related to intro zoology

Chemistry Teaching Assistant, Utah Valley University   August 2022-May 2023
- Grade undergraduate student assignments and answer questions related to intro chemistry

Elementary Teachers Assistant, Pinnacle Canyon Academy   January 2018-May 2018
- Assist instructor with teaching elementary students math, reading and science

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

Lab Assistant   January 2024-Present

Chemistry Department, Rocky Mountain Laboratories

Description: Help lab technicians run tests to determine ion concentration, blood cell count, type and shape as well as resulting.

Stockroom & Lab Assistant   August 2022-December 2023

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   2023-present

Utah Valley University Evolution and Bioinformatics Club member   Fall 2022-present

Clubs

UVU Co-Ed Volleyball   Fall 2022-present

UVU Bachata Dance Club   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