## Ian Bailey

439 University Ave. #22 Missoula, MT 59801 570-903-1194 · ian.bailey@umconnect.umt.edu

**Education** 

B.S. in Biochemistry, Minor in Geography

University of Vermont (UVM), Spring 2022

High School Diploma

Forest City Regional High School, 2018

**Current position** 

Ph.D. candidate in Cellular, Molecular, and Microbial Biology

University of Montana (UM): Fall 2022 - Present

**Achievements** 

UVM Dean's List 2022

Cumulative grade-point average of not less than 3.00 who stood in the top 20 percent of each class of their college/school during the preceding semester

International Geographical Honor Society

2022

A minimum of three courses in geography with a 3.3 GPA (on the 4.0 scale) in those courses, and rank in the top 35% of their class

**UVM Presidential Scholarship** 

2018 - 2022

Merit scholarship to the highest academic performing students

Eagle Scout 2017

Highest attainable achievement in the Boy Scouts of America

**Research Experience** 

Dr. Scott Samuels's Lab UM, Fall 2022 – Present

Rotation project: Verification of an inducible glpF in Borrelia burgdorferi

DNA and RNA isolation

Quantitative PCR with SYBR Green

Dr. Brent Ryckman's Lab UM, Winter 2023

Rotation project: Genotyping and phenotyping of human cytomegalovirus (HCMV) recombinants

Restriction Fragment Length Polymorphism assays

Maintenance, inoculation, and harvesting of HCMV recombinants from human fibroblast cells

Dr. Dev Majumdar's Lab UVM, 2021 – 2022

Analysis of protein-protein interactions formed in HEK 293 T cells from co-transfection of SARS-CoV-2 non-structural proteins

Flow cytometry with FACS and MACS

Co-immunoprecipitation

Dr. Scott Morrical's Lab UVM, Fall 2019 – Winter 2020

Purification and comparison of glucose-6-phosphate dehydrogenase in a cyanophage S-RSM4 to a cyanobacteria of the genus *Synechococcus* Nickel-Affinity chromatography on an Akta Purifier station

Enzymatic activity confirmed through spectrophotometric synthesis of NADPH

## **Teaching Experience**

## Teaching Assistant

Medical Bacteriology Cellular and Molecular Biology Biochemistry

UM, Spring 2023 UM, Fall 2022 UVM, Fall 2020, 2021