# **Rhiannon Cameron**

## **BACHELOR OF SCIENCE MICROBIOLOGY**

[Address: Omitted]

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cmrn-rhi.github.io
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#### **EDUCATION**

2019 B.Sc. Microbiology // UNIVERSITY OF VICTORIA, B.C.

Graduating GPA: 8 (A) UVIC Grade Scale 4.00/4.33

## **SKILLS & EXPERTISE**

**Research Interests** // Genomics, Antimicrobial peptides, Human microbiome, De novo assembly, Microbial ecology, Metabolism, Signal transduction pathways, UX design.

**Computation** // Python (Basics), C++ (Basics), R (Basics), Markdown, Linux/Windows/MacOS Command line/Terminal, Version control, BASH (RegX), Bioinformatics: BLAST, MSA, Genome Databases/Organizers (VOCS, VGO), Phylogenetics (e.g. MEGA, Dendroscope, Geneious).

**Math/Statistics** // Calculus, Linear Algebra, Statistics (e.g. Binomial, Poisson, and Normal distribution; ANOVA; Regression and Correlation).

**Laboratory\*** // Fundamental biochemical, microbiological and molecular biological laboratory techniques including but not limited to: SDS-PAGE, Protein Purification, ELISA, Culturing Hybridomas, Gel Electrophoresis, Molecular Cloning, Transposon Mutagenesis, and PCR.

Other // Graphic Design, TESL, French (Conversational).

## RESEARCH EXPERIENCE

# **VIRAL BIOINFORMATICS RESEARCH CENTRE // DIRECTED STUDIES STUDENT**

SEP 2017 - APR 2018 | DR. CHRIS UPTON | UNIVERSITY OF VICTORIA, B.C.

- Produced specifications for, and managed implementation of, bioinformatics tools and interfaces developed at Dr. Chris Upton's Viral Bioinformatics Research Centre (VBRC), while performing analyses of laboratory generated data and unprocessed published data (obtained from PubMed).
- Conducted a literature review and bioinformatic analysis of the novel influenza A virus gene NEG8.
- Developed a theoretical phylogenetic Tree GUI for virus selection in Viral Orthologous Clusters (VOCs) database, and proposed solutions for tools that visualized data in a manner inaccessible to colour blind individuals.

<sup>\*</sup>my ability to perform laboratory bench work is severely impacted by my disability.

- Studied and reviewed bioinformatics tools for the analysis of virus genomes
- Coached VBRC programmers on the functions of the bioinformatics tools from the perspective of a researcher and regularly made optimization recommendations.
- Presented detailed reports on progress and results, as well as updated VBRC online guides and documentation.

## **UNIVERSITY OF REGINA // RESEARCH ASSISTANT**

MAY 2014 - AUG 2014 | DR. ANDREW CAMERON | REGINA, S.K.

- Generated significant and well-controlled scientific research results on Sxy toxicity in *Salmonella enterica typhimurium* in a level 2 bio-safety laboratory supervised by Dr. Andrew Cameron and Dr. Ebtihal Al-shabib. Research results added to a manuscript being prepared for peer-reviewed publication.
- Performed laboratory tasks including but not limited to: aseptic pipette technique, PCR
  amplification and plasmid modification, cell separation, preparation of LB growth media,
  poured plates, inoculation of agar plates and broths, growth on selective media, colony
  isolation, serial dilution, plate counts, identification and characterizing of colonies, and
  gel electrophoresis preparation and application.
- Investigated and identified a source of contamination in the laboratory by testing all available laboratory equipment, surfaces, and media, while keeping thorough documentation of the process.
- Took accurate and comprehensive laboratory notes, now used as a positive example for future members of the laboratory, as well as provided regular slideshow presentations on progress and results.

## OTHER EXPERIENCE

BIOCHEMISTRY AND MICROBIOLOGY STUDENT SOCIETY // CO-PRESIDENT (Elected Position) APR 2015 – DEC 2015 | UNIVERSITY OF VICTORIA, B.C.

- Directed and delegating to a group of my peers.
- Demonstrated communication and dispute resolution skills.
- Developed and operated within budgets, managerial accounting.
- Organized and managed BMSS events on and off campus.
- Conducted team building and training activities.
- Managed marketing and social media accounts.

## **NEIL SQUIRE SOCIETY // COMPUTER COMFORT VOLUNTEER**

JUL 2019 - PRESENT | BURNABY, B.C.

- Help adults with disabilities develop basic computer skills in weekly sessions.
- Recommend and develop resources for client to study and reference.

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## REFERENCES

**Dr. Chris Upton** | Associate Professor & VBRC Principal Investigator Department of Biochemistry and Microbiology & Viral Bioinformatics Research Centre University of Victoria Victoria, B.C.

[Contact Information: Omitted]

**Dr. Perry Howard** | Associate Professor and Department Chair Department of Biochemistry and Microbiology University of Victoria Victoria, B.C.

[Contact Information: Omitted]

**Dr. Ebtihal Al-shabib** | Postdoctoral Fellow Institute for Microbial Systems and Society University of Regina Regina, S.K.

[Contact Information: Omitted]

Dr. Andrew Cameron | Associate Professor & IMSS Co-Principal Investigator
Department of Biology
& Institute for Microbiology Systems and Society
University of Regina,
Regina, S.K.

[Contact Information: Omitted]