

# Rhiannon Cameron

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## PhD. CANDIDATE, BSc. MICROBIOLOGY

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## EDUCATION

2021-PRESENT\* **Ph.D. Faculty of Health Sciences** // SIMON FRASER UNIVERSITY (SFU), B.C.

\**Maternity/Medical Leave: January - August 2024, January - April 2025*

CGPA: 4.00/4.33 (A)

2020-2021 **M.Sc. Bioinformatics (Incomplete\*\*)** // UNIVERSITY OF BRITISH COLUMBIA, B.C.

\*\**Transferred*

CGPA: 4.33/4.33 (A+)

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

GGPA: 4.00/4.33 (A)

## AWARD HIGHLIGHTS

*Details available under "[AWARDS](#)" section.*

- CIHR CGS-D (\$115,000) [2022-2023](#)
- CIHR CGS-M (\$17,500) [2021-2022](#)
- NSERC-CREATE Bioinformatics Scholarship (\$24,300) [2020-2021](#)

## SKILLS & EXPERTISE

**Research Interests** // Ontologies, Bioinformatics, Genomics, Metabolomics, Infectious diseases, Public Health, Human microbiome, Signal transduction, Metabolism, UX design.

**Computation** // Python (Proficient), R (Proficient), Linux/Windows/MacOS Command line/Terminal (Proficient), GitHub Version control (GitHub), BASH, RegX, C++ (Basics), Bioinformatics: Protégé, BLAST, MSA, Genome Databases/Organizers, Phylogenetics, Nextflow, Conda.

**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** // Markdown, Academic Writing, Grant Writing, Graphic Design, TESL, French (Basics).

## RESEARCH EXPERIENCE

### CENTRE FOR INFECTIOUS DISEASE GENOMICS AND ONE HEALTH ([CIDGOH](#)) //

#### GRADUATE STUDENT RESEARCHER

SEP 2020 – PRESENT | DR. WILLIAM HSIAO | SIMON FRASER UNIVERSITY, B.C.

Thesis work involves ontology specification curation and development for outbreak investigation and surveillance of SARS-CoV-2 for the Canadian COVID-19 Genomics Network ([CanCOGeN](#)), and ontology modeling of risk assessment in food borne pathogen surveillance for the Canadian Antimicrobial Resistance Genomics Research and Development Initiative ([AMR-GRDI](#)).

- Ontology modeling of application schemas and risk assessment queries.
- Assist in COVID-19 DataHarmonizer tool development, quality control, user testing, as well as the development and maintenance of associated standard operating procedures.
- Collaborate with the National Microbiology Laboratory (NML) on CanCOGeN metadata initiatives.
- Contribute to, demo, and present at CanCOGeN provincial workshops/training sessions.
- Write public health reports (e.g. “CanCOGeN VirusSeq – Comparison and Analysis of Canadian Public Health SARS-CoV-2 Case Report Forms”).
- Participate in the AMR-GRDI workgroup meetings, specification management, template updates/releases, and food-borne pathogen risk assessment modeling.
- Project lead on the development of community and lab ontology training resources.
- Continuation of work pertaining to previous roles (see "Research Assistant / Database Curator") working on GenEpiO, FoodOn, and the Joint Food Ontology.

### PATHOGEN HEALTH ALLIANCE FOR GENOMIC EPIDEMIOLOGY ([PHA4GE](#)) //

#### DATA STRUCTURES WORKING GROUP MEMBER

MAR 2023 – PRESENT | DR. EMMA GRIFFITHS (CHAIR) | BELLVILLE, SOUTH AFRICA (REMOTE)

- Began collaborating with PHA4GE in 2020-2021 on the SARS-CoV-2 contextual data specification package and in 2023 on the quality control contextual data tags before joining.
- Work on contextual metadata field and term development, harmonization, and ontologizing.
- Attend monthly workgroup meetings to discuss current and prospective projects.

### SOUTHERN ALBERTA GENOME SCIENCES CENTRE ([SAGSC](#)) // NSERC-CREATE INTERN

MAY 2021 – MAY 2022\* | DR. ATHANASIOS ZOVOILIS | UNIVERSITY OF LETHBRIDGE, A.B.

\* Full-time internship finished at the end of August 2021, continued work on the project part-time.

- Updating and utilizing Liam Mitchell’s A-to-I editing nextflow pipeline on nanopore human brain tissue RNA sequence data, focusing on the identification of novel RNAs with a special interest in repetitive RNAs, ncRNAs, and SINE RNAs.
- Working remotely on high-memory high-performance CPU and GPU nodes.
- Using R to apply statistical analyses to the pipeline output.

**HSIAO PUBLIC HEALTH BIOINFORMATICS LABORATORY // RESEARCH ASSISTANT/CURATOR**

FEB 2020 – SEP 2020 | DR. WILLIAM HSIAO | CENTER FOR DISEASE CONTROL, B.C.

- Collect and curate SARS-CoV-2 and COVID-19 related metadata for the Canadian COVID Genomics Network (CanCOGeN) initiative.
- Beta tester for the CanCOGeN DataHarmonizer; test guidelines and functions, meticulously explore possible usage scenarios, and provide ideas for improvement.
- Produce sample data and quality control information for validating CanCOGeN tools.
- Content creator for the CanCOGeN metadata wiki.
- Manual curation and term edits for the FoodOn and GenEpiO ontology databases using Protégé and GitHub.
- Generate curator training materials and perform curator demo webinars.
- Systematic literature review on the accessibility of public health genomics.

**VIRAL BIOINFORMATICS RESEARCH CENTRE ([VBRC](#)) // 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 PubMed data.
- Conducted literature review and bioinformatic analysis of 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.
- 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 biosafety 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.

- Comprehensive laboratory notes used as a positive example for future lab members.

## AWARDS

Total	\$179,281.00
2026	<b>SFU FHS Graduate Fellowship (\$3,500)</b> Faculty of Health Sciences (FHS) Spring 2026.  <b>SFU TARA Research Scholarship (\$2675)</b> Travel & Research Award (TARA) Spring 2026.  <b>SFU PhD Research Scholarship (\$1,836)</b> Spring 2026.
2025	<b>SFU PhD Research Scholarship (\$3,672)</b> Summer and Fall 2025.  <b>SFU FHS Graduate Fellowship (\$3,500)</b> Faculty of Health Sciences (FHS) Summer 2025.  <b>FSCI 2025 Scholarship (\$162)</b> FORCE11 Scholarly Communication Institute (FSCI) 2025.
2024	<b>SFU FHS Graduate Fellowship (\$3,500)</b> Faculty of Health Sciences (FHS) Fall 2024.  <b>SFU PhD Research Scholarship (\$1,836)</b> Fall 2024.
2023	<b>CIHR CGS-D (\$115,000)</b> Canadian Institutes of Health Research (CIHR) Canada Graduate Scholarship – Doctoral Award (CGS-D) for <a href="#">2022-2023</a> ; \$35,000 per year for 12 months, \$40,000 per year for 24 months.  <b>SFU PhD Research Scholarship (\$1,800)</b> Fall 2023.
2022	<b>CIHR CGS-M (\$17,500)</b> CIHR Canada Graduate Scholarship – Masters Award (CGS-M) for <a href="#">2021-2022</a> .
2021	<b>NSERC-CREATE Bioinformatics Scholarship (\$24,300)</b> Natural Sciences and Engineering Research Council (NSERC) Collaborative Research and Training Experience (CREATE) Bioinformatics Graduate Training Program Grant for <a href="#">2020-2021</a> .

## TEACHING ACTIVITIES

### CANADIAN BIOINFORMATICS WORKSHOPS // VIRTUAL TEACHING ASSISTANT (TA)

APR 2023 18 – 21 | VIRTUAL, CANADA

- TA for the [2023 Infectious Disease Genomic Epidemiology](#) bioinformatics.ca workshop; implemented over ZOOM, SLACK, and gather.town apps; 60 registered participants.
- Lead TA for Module 3 “Data Curation and Data Sharing”; assisted Dr. Emma Griffiths in preparing the hands-on participant laboratory exercises and reference materials for TAs.
- User-tested, studied, and provided live student support for all modules.

### CIDGOH // INTERN MANAGER & PROJECT SUPERVISOR

MAY 2022 – AUG 2022 | VANCOUVER, B.C.

- Led the development of CIDGOH ontology training curriculum and standard operating procedures, guiding and mentoring a graduate student intern in applying and developing training material. Providing support in addition to constructive criticism.
- Met 2-4 hours weekly to coordinate tasks and provide ontology curation training and assist the intern in converting their experience into scenario-driven training exercises.
- Provided additional resources and invitations to relevant meetings/workshops/conferences.

### PRECISION HEALTH UBC BOOTCAMP WORKSHOP // VIRTUAL TEACHING ASSISTANT

AUG 8 2022 | VANCOUVER, B.C.

- Assisted with delivering the University of British Columbia (UBC) “Day 8: Genetic Association SNP Analysis” workshop by systems testing in advance of the workshop, being available for student questions, demonstrating accessing to SOCKEYE ARC workshop directories, and providing chat with links to additional resources referenced during lecture.

### FORCE11 SCHOLARLY COMMUNICATIONS INSTITUTE // COURSE DESIGNER & CO-INSTRUCTOR

JUL 26-28 2022 | VANCOUVER, B.C.

- Wrote the abstract, designed curriculum, coordinated co-instructor meetings/activities, prepared slide templates, reviewed contributions, prepared exercises, provided student feedback, presented slides/live demos, certificate design, and prepared and released Open Science Framework course page: <https://doi.org/10.17605/OSF.IO/FJ38V>

## OTHER EXPERIENCE

### CBH BIOINFORMATICS EDUCATION HACKATHON ADVISORY COMMITTEE //

#### TRAINEE REPRESENTATIVE

JAN 2026 – PRESENT | CANADA

- Invited to be a member of the Canadian Bioinformatics Hub (CBH) Bioinformatics Education Hackathon Advisory Committee whose goal is to lead and oversee the development and

implementation of hackathons for developing bioinformatic educational materials. My role specifically is to provide the trainees perspective.

**CBH EDUCATION ADVISORY COMMITTEE // TRAINEE REPRESENTATIVE**

MAR 2025 – PRESENT | CANADA

- Invited to be a member of the Canadian Bioinformatics Hub (CBH) [Education Advisory Committee](#) whose goal is to lead and oversee the CBH workshop training activities. My role specifically is to provide the trainees perspective.

**PACIFIC INSTITUTE ON PATHOGENS, PANDEMICS AND SOCIETY (PIPPS) // TRAINEE**

JAN 2025 – PRESENT | BURNABY, B.C.

**COMMUNITY ENGAGEMENT ADVISORY NETWORK (CEAN) // PATIENT PARTNER**

**PATIENT VOICES NETWORK (PVN) // PATIENT PARTNER**

NOV 2021 – PRESENT | VANCOUVER, B.C.

- Volunteer with healthcare projects that aim to improve health care services, providing my perspective and experiences within the health care system in question.

**VANCOUVER BIOINFORMATICS USER GROUP // INTERNAL MANAGEMENT COORDINATOR**

JAN 2020 – DEC 2023 | VANCOUVER, B.C.

- Assist with general event/volunteer coordination activities and data management regarding webinars, seminars and special events.
- Live webinar setup, moderating, and acting as facilitator/moderator.
- Coordinator and host/moderator of the [2021 Three Minute Lightning Talks](#) (virtual) competition and the [2022 Career Panel](#) (in-person). [2023 Lay Terms](#) Coordinator (in-person).
- Outreach, social media, webinar data management/video editing, and assisting in coordinating speakers' activities.

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

JUL 2019 – MAR 2020, MAY 2021 – DEC 2023\* | BURNABY, B.C.

\* Am on reserve for a previous client in case she decides to use the service again

- Helped adults with disabilities develop basic computer skills in weekly sessions.
- Recommended and developed resources for clients to study and reference based on their unique needs and interests.

**GLOBAL MICROBIAL IDENTIFIER CONFERENCE (GMI13) // MODERATOR VOLUNTEER**

AUG 2023 – SEP 2023 | VANCOUVER, B.C.

- Facilitating and moderating “Tool Assessment” discussions in the Breakout Session: Exploring Tools for Equitable Data Sharing. <[Event Website](#)>
- Assisting in generation of conference materials (signage, name tags, etc.) and general activities as needed throughout the live conference.

**INTEGRATED FOOD ONTOLOGY WORKSHOP // ORGANIZING COMMITTEE MEMBER**

FEB 2023 - AUG 2023 | REMOTE - SHERBROOKE, Q.C.

- Assisted in reviewing and discussing rules and abstracts, as well as helping prepare for and participating in event workshops; event date: July 17-20. <[Event Website](#)>

**SFU FHS GRADUATE STUDENT JOURNAL // CO-FOUNDER VOLUNTEER**

MAR 2022 – AUG 2022\* | BURNABY, B.C.

- Simon Fraser University (SFU) Faculty of Health Sciences (FHS) graduate student journal “Journal for Integrating Voices in Health” (JIVH) currently under development.
- Help organize meetings, prepare/review proposals, meet with faculty, attend relevant department meetings, meet with library / journal systems advisors, as well as brainstorm/draft journal organizational structure; special considerations; and graduate course integration.

\* on hiatus due to volunteer availability.

**INTEGRATED FOOD ONTOLOGY WORKSHOP // ORGANIZING COMMITTEE MEMBER**

FEB 2022 - AUG 2022 | REMOTE - JÖNKÖPING, SWEDEN

- Assisted in reviewing and discussing rules and abstracts, as well as helping prepare for and participating in event workshops; event date: July 17-20, Sept 18-20. <[Event Website](#)>

**FOIS CONFERENCE // VOLUNTEER GRAPHIC DESIGNER**

DEC 2022 - JAN 2023 | REMOTE - SHERBROOKE, QUÉBEC

- Designed, iterated, and provided posters (English, French, A4, A5) for the 13th International Conference on Formal Ontology in Information Systems (FOIS) 2023. <[Event Website](#)>

**INTEGRATED FOOD ONTOLOGY WORKSHOP // ORGANIZING COMMITTEE MEMBER**

FEB 2022 - AUG 2022 | REMOTE - JÖNKÖPING, SWEDEN

- Assisted in reviewing and discussing abstracts, as well as helped prepare for and participated in a FoodOn fermentation hackathon; event date: Aug 15-19. <[Event Website](#)>

**BIG RESEARCH DAY 2022 // ORGANIZING COMMITTEE - PROMOTIONS CO-LEAD**

NOV 2021 – APR 2022 | VANCOUVER, B.C.

- Helping prepare for and execute the 2022 BIG Research Day, an annual event that explores the research areas of Bioinformatics Interdisciplinary Oncology Genome Science + Technology. [www.bigresearchday.com](http://www.bigresearchday.com)
- Managed and created promotional material graphics (online and print), ordering materials, website, auxiliary website/virtual experience, and email correspondence.

**INTERNATIONAL FAIR CONVERGENCE SYMPOSIUM // WORKSHOP PRESENTER**

DEC 2020 | VANCOUVER, B.C.

- DataHarmonizer tool explanation and demonstration.

**BIOCHEMISTRY AND MICROBIOLOGY STUDENT SOCIETY // CO-PRESIDENT (Elected Position)**

APR 2015 – DEC 2015 | UNIVERSITY OF VICTORIA, B.C.

- Directed and delegated to a group of my peers, developed and operated within budgets, managerial accounting, demonstrated communication and dispute resolution skills, and organized and managed Biochemistry And Microbiology Student Society (BMSS) events on and off-campus and conducted team building and training activities.

## RELEVANT TRAINING & CERTIFICATIONS

- 2026 **MobilizeU at SFU** // MobilizeU at SFU is an adaptation of the Research Impact Canada (RIC) MobilizeU national summer program <[Details](#), In-Progress>
- 2025 **The Carpentries** // Carpentries Instructor Certification <[Details](#), Credential Upon Request>  
**The Carpentries** // Online Instructor Training - December 2-5 <[Details](#)>  
**FSCI 2025 Course** // AI-Assisted Literature Review on Open Access Repositories: Including Image and Object Detection <[Details](#)>  
**FSCI 2025 Course** // The Butterfly Effect – How Understanding The Big Picture Research Ecosystem Will Help Open Practice <[Details](#)>  
**TCPS 2: CORE-2022** // Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics <[Credential Upon Request](#)>
- 2023 **W3ID Community** // Inaugural Workshop on Change Languages in Ontologies and Knowledge Graphs <[Workshop](#)>  
**Red Cross Certification** // CPR/AED Level C (Adult/Child/Infant) - Expires 2026-08-18 <[Credential Upon Request](#)>
- 2022 **International Conference on Biomedical Ontology** // Workshop on Ontology Tools and Workflows <[Workshop](#)>  
**International Conference on Biomedical Ontology** // FAIR ontology harmonization and TRUST data interoperability <[Workshop](#)>  
**International Conference on Biomedical Ontology** // Food Process Ontology Hackathon <[Workshop](#)>  
**FSCI 2022 Course** // Applying Strategic Doing, an Agile Strategy Discipline, to Build Collaborations Across Diverse Teams <[Details](#)>  
**BC Core Health Training** // San'yas Anti-Racism Indigenous Cultural Safety Training – CORE ICS Health <[Credential Upon Request](#)>  
**SFU Library** // Unlock your research impact: Using graphic novels to share research stories <[Workshop](#)>  
**National Institutes of Health - National Human Genome Research Institute** // Mini Hackathon: COVID-19 Ontology Harmonization <[Hackathon](#)>  
**Ontology for Biomedical Investigations (OBI)** // How to represent specific elements in scientific investigations in OBI <[Workshop](#)>

- 2021 **CIHR IRSC** // Core Competency Module for Sex and Gender in Biomedical Research <*Credential Upon Request*>  
**CIHR IRSC** // Core Competency Module for Sex and Gender in Primary Data Collection with Human Participants <*Credential Upon Request*>  
**CIHR IRSC** // Core Competency Module for Sex and Gender in the Analysis of Secondary Data from Human Participants <*Credential Upon Request*>  
**SAGSC & BioNet Alberta** // Introduction to Bioinformatics  
**ISCB Student Council Symposium** // Attendee <*Credential Upon Request*>  
**Student Biotechnology Network** // Industry Ready Workshop Series: Effective Communications
- 2020 **EPI-interactive** // R Shiny Masterclass Series <*Credential Upon Request*>  
**TCPS 2: CORE** // Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans Course on Research Ethics <*Credential Upon Request*>  
**FSCI 2020 Course** // Advancing FAIR Data Stewardship: Fostering Institutional Planning and Service Development <[Details](#)>  
**FSCI 2020 Course** // Looking Beyond the Journal Article: A Guide to Building Your Biomedical Research Toolkit <[Details](#)>
- 2019 **MITx (edX) 6.00.1x** // Introduction to Computer Science and Programming Using Python <[Credential](#)>  
**MITx (edX) 6.00.2x** // Introduction to Computational Thinking and Data Science <[Credential](#)>  
**Ladies Learning Code** // JavaScript for Beginners: An Introduction to the Fundamentals of Web Programming <[Workshop](#)>

## PUBLICATIONS

- Poopalarajah, R., Flewelling, A.J., Afroj, S., Rowley, B., Sule, K.C., McCartney, N.K., Geppert, A.J., Adams, V., Yanqi, L., Thomas, C., Pyke, S., Griffiths, E.J., John, N.S., Barclay, C., **Cameron, R.**, et al. (TBD). Antibiotic potentiators from the natural products of microbiota. <[Manuscript under review, 2025](#)>
- Griffiths, E., **Cameron, R.**, Barclay, C., John, N.S., Dooley, D., Gill, I., et al. (2026). The Mpxo Contextual Data Specification Package: A Data Curation Toolkit to Support Collaborative Pathogen Genomic Surveillance. *Microbial Genomics* 12:1. Available from: <https://doi.org/10.1099/mgen.0.001614>
- **Cameron, R.**, Savić Kallesøe, S., Griffiths, E.J., Dooley, D., Sridar, A., Sehar, A., et al. (2025). SARS-CoV-2 genomic contextual data harmonization: recommendations from a mixed methods analysis of COVID-19 case report forms across Canada. *Arch Public Health* 83, 117. Available from: <https://doi.org/10.1186/s13690-025-01604-5>

- Griffiths, E., Jurga, E., Wajnberg, G., Shay J.A., **Cameron, R.**, Barclay, C., *et al.* (2025). Crossing the streams: Improving data quality and integration across the One Health genomics continuum with data standards and implementation strategies. *Can J Microbiol* 71:1-14. Available from: <https://doi.org/10.1139/cjm-2024-0203> <CJM Editor's Choice Paper>
- Toro, S.T., Anagnostopoulos, A.V., Bello, S., Blumberg, K., **Cameron, R.**, Carmody, L., *et al.* (2024). Dynamic Retrieval Augmented Generation of Ontologies using Artificial Intelligence (DRAGON-AI). *J Biomed Semant* 15, 19. Available from: <https://doi.org/10.1186/s13326-024-00320-3>
- Griffiths, E., Mendes, C.I., Maguire, F., Guthrie, J., Wee, B.A., Schmedes, S., Holt, K., Yadav, C., **Cameron, R.**, *et al.* (2024). PHA4GE quality control contextual data tags: standardized annotations for sharing public health sequence datasets with known quality issues to facilitate testing and training. *Microbial Genomics* 10:6. Available from: <https://doi.org/10.1099/mgen.0.001260>
- Gargano, M.A., Matentzoglu, N., Coleman, B., Addo-Lartey, E.B.O; Anderton, J., Avillach, P., Bagley, A.M., Balhoff, J., Bakstein, E., Baynam, G., Bello, M.S., Berk, M., Bertram, H., Bishop, S., Blau, H., Bodenstein, D.F., Botas, P., Boztug, K., Cady, J., Callahan, T.J., Carbon, S.J., **Cameron, R.**, *et al.* (2023). The Human Phenotype Ontology in 2024: Phenotypes Around the World. *Nucleic Acids Research* 52:D1, D1333-D1346. Available from: <https://doi.org/10.1093/nar/gkad1005>
- Gill, I.S., Griffiths, E.J., Dooley, D., **Cameron, R.**, Savić Kallesøe, S., Gosal, G., *et al.* (2023). The DataHarmonizer: a tool for faster data harmonization, validation, aggregation, and analysis of pathogen genomics contextual information. *Microbial Genomics* 9:1, 2057-5858. Available from: <https://doi.org/10.1099/mgen.0.000908>
- Griffiths, E. J., Timme, R. E., Mendes, C. I., Page, A. J., Alikhan, N. F., Fornika, D., Maguire, F., Campos, J., Park, D., Olawoye, I.B., Anderson, D., Christoffels, A., Goncalves da Silva, A., **Cameron, R.**, *et al.* (2022). Future-proofing and maximizing the utility of metadata: The PHA4GE SARS-CoV-2 contextual data specification package. *GigaScience* 11, giac003. Available from: <https://doi.org/10.1093/gigascience/giac003>

## PREPRINTS

*published = preprint paper has undergone peer-review publication (see "PUBLICATIONS" above). Citation text is gray to emphasise the status.*

- **Cameron, R.** Griffiths, E., Dooley, D., Hsiao, W. (2025). 10 Simple Rules for Improving Your Standardized Fields and Terms. *arXiv*. Available from: <https://doi.org/10.48550/arXiv.2510.21825>
- Paull, J.S., Barclay, C., **Cameron, R.**, Dooley, D., Gill, I., Abraham, D., *et al.* (2025). Fixing the plumbing: Building interoperability between wastewater genomic surveillance datasets and systems using the PHA4GE contextual data specification. *OSF Preprints*. Available from: [https://osf.io/preprints/osf/z79vk\\_v1](https://osf.io/preprints/osf/z79vk_v1)
- Griffiths, E.J., Shay, J.A., **Cameron, R.**, Barclay, C., Sehar, A., Dooley, D., *et al.* (2024). The broom of the system: a harmonized contextual data specification for One Health AMR

pathogen genomic surveillance. *OSF Preprints*. Available from:  
<https://osf.io/preprints/osf/xbf4t>

- Griffiths, E.J., **Cameron, R.**, Barclay, C., John, N.S., Dooley, D., Gill, I., et al. (2025). The Mpox Contextual Data Specification Package: A Data Curation Toolkit to Support Collaborative Pathogen Genomic Surveillance. *OSF Preprints*. Available from:  
[https://osf.io/preprints/osf/4h7b2\\_v1 <published>](https://osf.io/preprints/osf/4h7b2_v1)
- Toro, S.T., Anagnostopoulos, A.V., Bello, S., Blumberg, K., **Cameron, R.**, Carmody, L., et al. (2024). Dynamic Retrieval Augmented Generation of Ontologies using Artificial Intelligence (DRAGON-AI). *arXiv*. Available from: [https://doi.org/10.48550/arXiv.2312.10904 <published>](https://doi.org/10.48550/arXiv.2312.10904)
- Griffiths, E., Mendes, C.I., Maguire, F., Guthrie, J., Chindelevitch, L., Karsch-Mizrachi, I., Waheed, Z., **Cameron, R.**, et al. (2023). PHA4GE Quality Control Contextual Data Tags: Standardized annotations for sharing public health sequence datasets with known quality issues to facilitate testing and training. *Preprints*. Available from:  
[https://www.preprints.org/manuscript/202303.0037/v1 <published, 2023 Most Popular Preprints Award>](https://www.preprints.org/manuscript/202303.0037/v1)
- **Cameron, R.**, Savić Kallesøe, S., Griffiths, E.J., Dooley, D., Sridhar, A., Sehar, A., Tindale, L.C., Hsiao, W. (2022). SARS-CoV-2 Genomic Contextual Data Harmonization: Recommendations from a Mixed Methods Analysis of COVID-19 Case Report Forms Across Canada. *Research Square*. Available from: [https://doi.org/10.21203/rs.3.rs-1871614/v1 <published>](https://doi.org/10.21203/rs.3.rs-1871614/v1)
- Gill, I., Griffiths, E., Dooley, D., **Cameron, R.**, Savić Kallesøe, S., Gosal, G., et al. (2022). The DataHarmonizer: a tool for faster data harmonization, validation, aggregation, and analysis of pathogen genomics contextual information. *Preprints*. Available from:  
[https://doi.org/10.20944/preprints202206.0335.v1 <published>](https://doi.org/10.20944/preprints202206.0335.v1)
- Alshabib, E.Y., Fitzgerald, S.F., Chao, T.C., **Cameron, R.**, Redfield, R.J., Sinha, S., Cameron, A.D.S. (2018). Finding reliable phenotypes and detecting artefacts among in vivo and in vitro assays to characterize the refractory transcriptional activator Sxy (TfoX) in *Escherichia coli*. *bioRxiv*. Available from: <https://www.biorxiv.org/content/10.1101/284836v1>

## PUBLISHED REPORTS AND PROTOCOLS

- **Cameron, R.**, Rabbani, T., Prieto, M.D., Yee, M., Duan, J., Barclay, B., et al. Contextual Data Collection Form Development & Extraction Protocol (Scoping Review). Protocols.io, 2025. Available from: [dx.doi.org/10.17504/protocols.io.eq2lywrzevx9/v1](https://dx.doi.org/10.17504/protocols.io.eq2lywrzevx9/v1)
- **Cameron, R.**, Savić Kallesøe, S., Griffiths, E., Hsiao, W. CanCOGeN VirusSeq Comparison and analysis of Canadian public health SARS-CoV-2 case report forms. CanCOGeN VirusSeq, 2020. Available from:  
[https://genomcanada.ca/wp-content/uploads/2022/01/2020-12-10\\_crfr\\_report\\_.pdf](https://genomcanada.ca/wp-content/uploads/2022/01/2020-12-10_crfr_report_.pdf)

## POSTERS, PRESENTATIONS, AND ABSTRACTS

- **Cameron, R.** (presenter), Griffiths, E. (abstract), Dooley, D. FAIR public health pathogen genomics contextual data sharing during the COVID-19 pandemic: Using the

DataHarmonizer for data curation, harmonization, validation, and transformation. **Talk** presented to: International Society for Biocuration (ISB) 15<sup>th</sup> Annual Conference; June 7, 2022. Virtual. Available from: <https://youtu.be/Rhk6yHziUDY?t=5618>

- Hsiao, W., Griffiths, E., Dooley, D., **Cameron, R.**, Savić Kallesøe, S., Rabbani, T. Infectious Disease Genomics in Public Health: Interdisciplinary approaches to investigating public health questions. **Talk** presented to Clinical Research Professionals of BC (CRPBC); May 18, 2022. Virtual.
- **Cameron, R.**, Dooley, D., Griffiths, E., Hsiao, W. Knowing your values - modeling fields and picklists for the PHA4GE SARS-CoV-2 data specification. **Poster** presented at: The B.I.G. Research Day Conference; Mar 23, 2022. Virtual. <[Available Upon Request](#)>
- **Cameron, R.**, Dooley, D., Griffiths, E., Savić Kallesøe, S., Hsiao, W. Putting standards into practice – ontologizing the Canadian COVID genomics network specification. **Poster** presented at: The Bioinformatics Open Source Conference (BOSC); Jul 27-29, 2021. Virtual. <[Available Upon Request](#)>
- **Cameron, R.**, Dooley, D. DataHarmonizer: a template-driven spreadsheet application utilizing ontologies to implement the Canadian COVID Genomics Network (CanCOGeN) specification. **Talk** presented at: The Canadian Research Software Conference (CRSC); Jul 7, 2021. Virtual. Available from: [https://www.youtube.com/watch?v=rdN2\\_Vhwb8E](https://www.youtube.com/watch?v=rdN2_Vhwb8E)
- Dooley, D., Griffiths, E., **Cameron, R.**, Gosal, G., Naravane, T., Walls, R.L., Buttigieg, P., Hsiao, W. FoodOn evolution in the food ontology ecosystem. **Abstract** for: The Integrated Food Ontology Workshop (IFOW); Sep-Oct, 2020. Virtual. Available from: [https://github.com/FoodOntology/joint-food-ontology-wg/blob/master/presentation/IFOW\\_2020\\_sep\\_16\\_in\\_the\\_field/IFOW\\_2020\\_17\\_FoodOn\\_Evolution\\_in\\_the\\_Food\\_Ontology\\_Ecosystem.pdf](https://github.com/FoodOntology/joint-food-ontology-wg/blob/master/presentation/IFOW_2020_sep_16_in_the_field/IFOW_2020_17_FoodOn_Evolution_in_the_Food_Ontology_Ecosystem.pdf)

- References available upon request -