

DATA SUPPORT SERVICES @ UVIC

MATRIX INSTITUTE SEMINAR

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University
of Victoria

UVic RDM Strategy 2023

Developed by cross-campus working group:

- Office of Research Services
- Research Ethics
- UVic Libraries
- UVic Systems
- Privacy and Access Information Office

Consultations 2021-2022:

- Research Computing Advisory Committee
- Office of the VP Research and Innovation
- General Researcher Town Hall
- Faculty Grants Officers

University of Victoria Research Data Management Strategy

Current version: February 2023

The UVic Research Data Management Strategy is mandated under the [Tri-Agency Research Data Management Policy](#) and must be finalized and publicly available by March 1, 2023.

Principles

UVic recognizes data as an important research output and is committed to fostering excellence in research data management (RDM).

UVic is committed to the highest standards of RDM through the research data lifecycle and to providing our researchers with an environment that enables and supports world-class RDM practices. These include:

- Creating a data management plan to describe how research data will be managed and documented throughout a research project
- Ensuring that the data management plan is executed or modified over the course of a research project
- Storing data in secure, reliable networks with strong back-up and redundancy
- Describing and documenting data in ways that can be understood beyond a given research team
- Understanding legal and ethical obligations related to private data, cultural data, and intellectual property
- Developing clear and comprehensive agreements regarding the ownership and sharing of data
- Publicly sharing research data for reuse, where possible

Scope

The University of Victoria (UVic) RDM Strategy acknowledges UVic's responsibility to support our researchers so that they can successfully implement good research data management practices. The strategy describes institutional supports to ensure that UVic Researchers have information and resources to develop and execute data management plans as required to meet the conditions of Tri-Agency or other research agreements, compliance requirements, cultural considerations, or retention requirements.

The UVic RDM Strategy provides a roadmap to create an environment that enables and supports research data management practices consistent with ethical, legal and commercial obligations, and as described in UVic and Tri-Agency policies and requirements, including the [Tri-Agency Research Data Management Policy](#), [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans](#), the [Tri-Agency Framework: Responsible Conduct of Research](#) and other relevant policies.

Specific researcher responsibility.

Requirement as per TriAgency RDM Policy

Data Curation

Tri-Agency Requirement: Researchers should describe, organize, and document data in ways that can be understood beyond a given research team. Data Curation is the documentation, description, and management of research data that adds value to research by optimizing datasets for current use and future discovery and reuse.

Institutional support: UVic Libraries will provide curation training for research teams, including guidance on file naming, file organization, file versioning, and discipline-specific metadata schemas. When depositing research data into Dataverse, the Data Curation Librarian will curate and review the dataset according to the [Dataverse Deposit Guidelines](#). For more information see the UVic Libraries' [RDM Guide](#).

UVic unit responsible for support.
Service description. Link to more information (where available).



RECOMMENDATIONS FOR BUILDING RDM CAPACITY

1. We recommend that the VPRI and the VP Indigenous work together to lead the implementation of structures and processes to improve support and clarity for researchers working with Indigenous data, and to forward the goals of Indigenous Data Sovereignty.



UVIC RDM SERVICE PROVIDERS

- Data Management Plans - Libraries, Research Computing
- Managing Indigenous Data - Ethics, CIRCLE
- Managing Sensitive Data - Ethics, Research Partnerships, RC
- Data Licensing Agreements - Research Partnerships
- Data Storage - Research Computing
- Data Curation - Libraries
- Data Analysis - Research Computing
- Data Deposit - Libraries
- Data Publishing & Sharing - Libraries, Research Computing



GRANTS REQUIRING DATA MANAGEMENT PLANS

- **CIHR:** Network Grants in Skin Health and Muscular Dystrophy; Data Science for Equity; Virtual Care/Digital Health Team Grants (launch fall 2022, application deadline winter 2023)
- **NSERC:** Subatomic Physics Discovery Grants (Individual and Project, 2023)
- **SSHRC:** Partnership Grants Phase 2 (2023)

ELEMENTS OF A DATA MANAGEMENT PLAN

Data Collection	Documentation and Metadata	Storage and Backup	Preservation	Sharing and Reuse	Sensitive Data and Legal Compliance	Responsibilities and Resources
what formats of data are you generating? how will you structure, name and version-control your files?	what metadata standards or tools will you use to describe your data? how will documentation be captured consistently?	where will you store and backup your data? what security elements are required?	how will you preserve your data? where will you deposit your data for long-term storage?	how will you make your data available to others?	how will you manage legal, ethical, and intellectual property issues? how does this plan respect principles of Indigenous data sovereignty?	what resources are needed to carry out these element?

See the UVic DMP Template ([LINK](#)) for full list of questions

NATIONAL DATA MANAGEMENT PLANNING TOOL



Key features of the tool:

- Freely available to end users
- Shared access
- Supports cross institutional research collaborations
- Endorsed by the Tri-Agencies
- Expert guidance and examples
- “Clone” DMPs for similar projects
- Exportable (e.g. pdf, text, MS Word)
- **Institution and discipline specific templates**

Shahira's Plan

Project Details Contributors Plan overview **Write Plan** Research Outputs

Share Download

expand all | collapse all
0/25

- Data Collection (0 / 5) +
- Documentation and Metadata (0 / 3) +
- Storage and Backup (0 / 4) +
- Preservation (0 / 3) +
- Sharing and Reuse (0 / 2) +
- Indigenous Data Sovereignty (0 / 2) +
- Sensitive Data and Legal Compliance (0 / 4) +
- Responsibilities and Resources (0 / 2) +



How and where will your data be stored and backed up during your research project?

Check all UVic-supported storage infrastructure that apply. If using personal storage solutions (e.g. local laptop storage, external hard drives, etc.) or any other alternate storage infrastructure, select Other and describe below.

- UVic Microsoft 365 OneDrive: Microsoft cloud storage for Microsoft files.
- UVic Personal Home file storage
- UVic research file share: up to 2TB storage for free for a research project. Typically for users sharing files between local computers.
- UVic REDCap: Secure web-based application for surveys and databases. Hosted on UVic infrastructure. Up to 10GB in storage in a default allocation.
- UVic TSM backup storage: User managed, up to 5TB available for a research group in default allocation.
- Alliance cluster (project) storage: For up to 10TB in storage for a research team per cluster, with extra storage available upon request. Backed up nightly.
- Alliance cloud object storage: User managed, up to 10TB available for a research group in default allocation. Not backed up by default.
- Alliance cloud shared file system storage: User managed, up to 10TB available for a research group in default allocation. Backed up.
- Alliance cloud RBD storage: User managed, not backed up by default.
- Alliance NextCloud: Dropbox-like file sharing, but data is stored in Canada. Suitable for up to several hundred GB in files. Service is backed up nightly.
- Other (Specify below)

Additional Information

B I [List] [List] [Link] [Table]

Guidance | **Comments**

UVic

The risk of losing data due to human error, natural disasters, or other mishaps can be mitigated by following the 3-2-1 backup rule.

Have at least three copies of your data, Store the copies on two different media, Keep one backup copy off-site.

University Systems offers a range of services for research computing and data storage. Contact arcsupport@uvic.ca to discuss your storage needs with a support specialist, or consult their service catalogue.

UVic-specific guidance is embedded within the DMP Assistant when you login with UVic credentials.



LIBRARY SUPPORT FOR DATA MANAGEMENT PLANNING

Data Management Plans (DMP)

- [Online guide](#) that includes examples of DMPs from different disciplines
- Workshops offered twice a month, campus wide, through the Digital Scholarship Commons
- Asynchronous version available online ([LINK](#))
- Teaching DMP workshops upon invitation to faculty and department classes
- Consultations with Data Curation Librarian

ACTIVE DATA SUPPORT RESEARCH COMPUTING SERVICES

We consult on data management issues including:

- Storage
- Transferring and sharing data
- Machine learning and big data
- Versioning and updating datasets
- Complex data pipelines
- Data security requirements
- Data I/O

Scientists break world record for data transfer speeds

© 8 March 2012



Canada's Advanced Research Computing Platform



- National Host Sites
- Support Sites



STORING AND SECURING RESEARCH DATA

- Many different free storage resources available
 - National resources: cluster, cloud, platform
 - Local resources: share, cloud, and platform
- Connect with compute resources
- Secure digital and physical environments for your data





HELP WITH GRANT WRITING

Our team can advise on research project computing needs and costs.

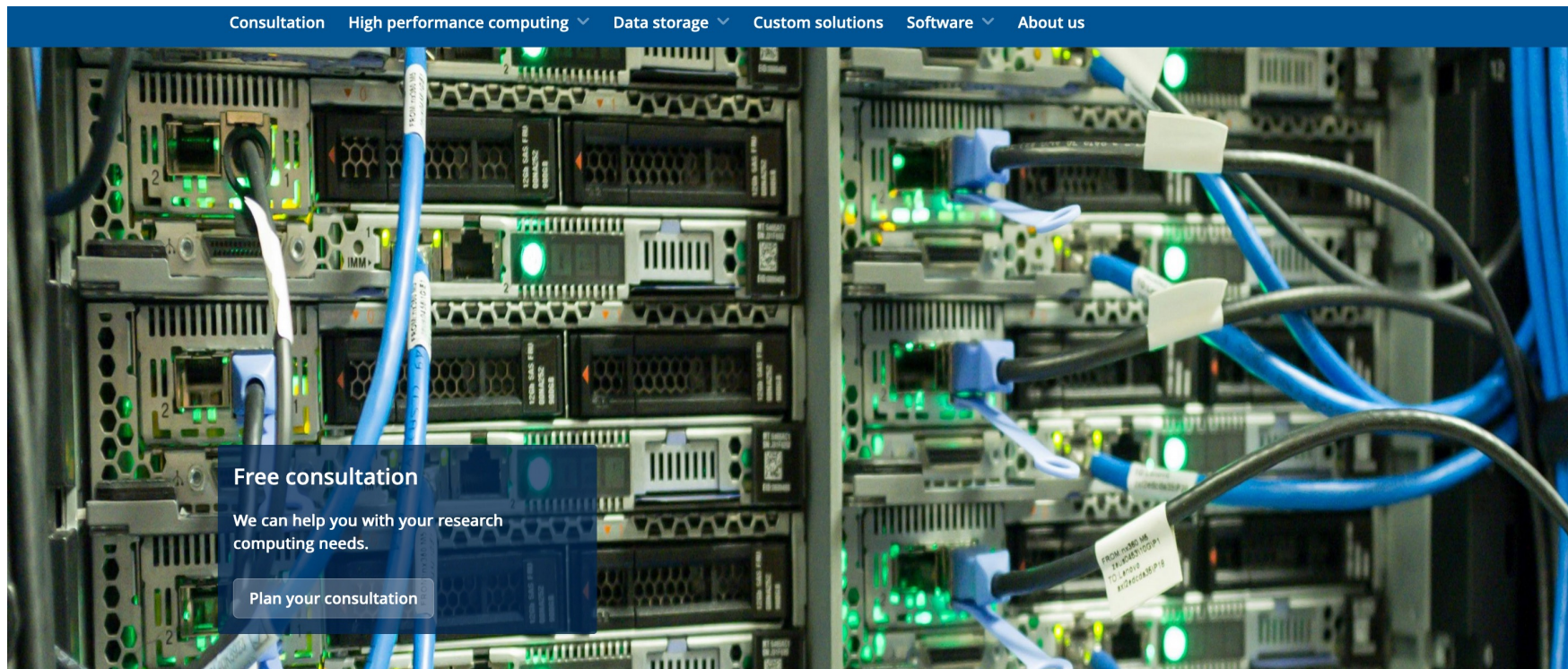
- Available in-kind contributions
- Hiring personnel (e.g. for software development)
- Anticipating research computing needs
- Computing equipment purchases
- Software choices and licensing
- Language you can copy and paste
- Help with Data Management Plans

LEARNING OPPORTUNITIES

- Summer office hours: June and July, 10am-11:30am
Wednesdays in CLE A025
- Training sessions:
 - Topics across advanced research computing
 - Getting started sessions for your research group



NEW RCS WEBSITE ([LINK](#))



Free consultation

We can help you with your research computing needs.

Plan your consultation

Research computing at UVic

Our team provides advanced research computing (ARC) services and infrastructure to UVic researchers across all disciplines. We also support researchers at institutions across the country and through international collaboration.



Research Computing Services

[Consultation](#) [High performance computing](#) [Data storage](#) [Custom solutions](#) [Software](#) [About us](#)

[Systems](#) / [Research Computing Services](#) / [Data storage](#)

Storage overview

Storage overview

[Storage options](#)

[Protecting sensitive data](#)

[Data management planning](#)

Finding storage for your research data can be overwhelming. You have so many things to consider and the options all vary. Don't worry, we can help!

The best storage location for your research data depends on several factors, including:

- Size
- Sensitivity
- Access requirements
- Who it's shared with

[Plan a consultation](#) to help you choose data storage solutions best suited for your research project.

Storage options

We partner with the [Digital Research Alliance of Canada](#) (the Alliance) to support research computing. Many services we offer are through the Alliance.

Here are some options available for UVic researchers to store their research data:

- [UVic Research file shares](#) are ideal for storing sensitive information and day-to-day work, up to 2TB.
- [Nextcloud](#) is great for sharing data with colleagues outside of UVic, up to 100GB.
- [Research backup service](#) lets you create archives of your valuable data.

Consultation

Consultation

Consultation topics

[Preparing for your consultation](#)

[Book a consultation](#)

A consultation is the best starting point for anyone looking for research computing options. Whether you're just looking for data storage or you need custom research solutions, we can help. Consultation is **free** for UVic researchers across all disciplines.

How it works:

- You contact us and explain the computing needs for your research project.
- We meet with you and ask any follow-up questions necessary to determine the best available options.
- We explore these and return to you with our recommendations.

Consultation topics

Our team provides consultation on anything related to research computing. Some of our more common consultation topics are outlined below, but feel free to get in touch if you have different questions.

[Grant application review and in-kind contributions](#)



[Research data management](#)



[Recommending equipment and software](#)



[Custom software development](#)



[Sensitive data and security](#)





About us

Contact us

Our infrastructure

Our partners

Acknowledgements

Grant support language

across Canada.

Acknowledgements

We appreciate acknowledgement from projects that have received support from **Research Computing Services** when research is published. This includes support in the form of:

- Access to computing or storage infrastructure
- Software
- Consultation services

If you've published a paper or given a presentation that acknowledges RCS, please let us know! This helps us get funding to support your future research.

Statement of acknowledgement

"This research was enabled in part by support provided by Research Computing Services at the University of Victoria."

If you've used Alliance resources, please include them in the acknowledgement as well. You can find [acknowledgement information](#) on the Alliance website.

Grant support language

The following language is recommended for describing UVic's research computing infrastructure and resources:

UVic Research Computing Services (RCS) assists researchers with their advanced research computing needs and complex computational workflows. In addition to managing and maintaining ARC systems including HPC clusters and clouds, research software, and ARC platforms and tools, the RCS unit supports, guides, mentors, and collaborates with researchers to excel at their research and push the boundaries of ARC computing. More specifically, RCS assists researchers with their hardware specifications and solutions architecture, data management plans, grant applications, survey and data collection designs, software development, ARC mentoring, and training and support for local, regional, and national digital research infrastructure. RCS also offers consultation services, with topics including data privacy, security, and sharing requirements.



NEWS AND CONTACT

- Events calendar: <https://events.uvic.ca/systems/>
- [RCS mailing list](#)
- arcsupport@uvic.ca

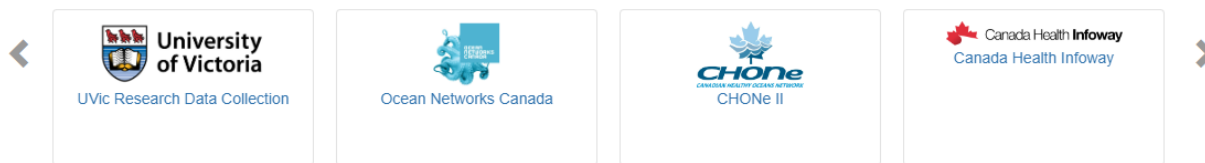


DATA DEPOSIT

- Support researchers with dataset curation
 - File naming, metadata standards, curation of specific file types
- Identify the right data repository for their research
- [UVic Dataverse/Borealis](#) - research data, metadata and code



(University of Victoria)



Search this dataverse... [Advanced Search](#)

- Dataverses (13)**
- Datasets (121)**
- Files (1,806)**

- Dataverse Category**
- Organization or Institution (4)
 - Research Project (4)
 - Laboratory (2)
 - Researcher (2)
 - Research Group (1)

- Publication Year**
- 2023 (3)
 - 2022 (21)
 - 2021 (35)
 - 2020 (20)
 - 2019 (24)

[More...](#)

- Publication Status**
- Published (111)
 - Draft (20)
 - Unpublished (18)
 - Deaccessioned (1)

1 to 10 of 134 Results

Sort

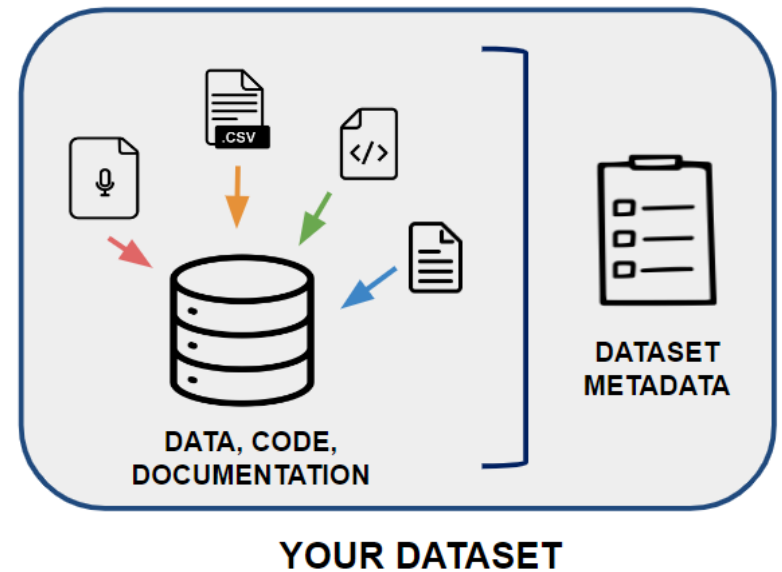
- FishSounds Website Data Repository**
Apr 11, 2023 - UVic Research Data Collection
 Looby, Audrey; Riera, Amalis; Vela, Sarah; Cox, Kieran; Bravo, Santiago; Rountree, Rodney; Juanes, Francis; Reynolds, Laura K.; Martin, Charles W., 2021, "FishSounds Website Data Repository", <https://doi.org/10.5683/SP2/TACOUX>, Borealis, V5, UNF:6:agtYNoINXrrT12ecvZYsCA== [fileUNF]
FishSounds presents a compilation of acoustic recordings and published information on sound production across all extant fish species globally. We hope this information can be used to advance research into fish behavior, passive acoustic monitoring, and human impacts on underwate...
- Search strategies for "Street-Involved Youth"** Draft Unpublished
Apr 6, 2023 - UVic Research Data Collection
 Premji, Zahra; Mellor, Andrea; Benoit, Cecilia; Vetrone, Laura, 2023, "Search strategies for "Street-Involved Youth"", <https://doi.org/10.5683/SP3/GA103M>, Borealis, DRAFT VERSION
Search strategies for database searches for APA PsycInfo (EBSCO), Medline (Ovid), Scopus (Elsevier), and Sociological Abstracts (ProQuest) to accompany the publication titled "Street-involved youth" which incorporated a scoping review methodology. The search strategies contained...
- Material decomposition with a prototype photon-counting detector CT system**
Mar 29, 2023 - UVic Research Data Collection
 Richtsmeier, Devon; Rodesch, Pierre-Antoine; Iniewski, Kris; Bazalova-Carter, Magdalena, 2023, "Material decomposition with a prototype photon-counting detector CT system", <https://doi.org/10.5683/SP3/GE6YLE>, Borealis, V1
This dataset contains raw projection and flat field scan data for CT reconstruction, as well as the fully normalized and reconstructed CT data for the manuscript: "Material decomposition with a prototype photon-counting detector CT system: expanding a stoichiometric dual-energy C...

[LINK](#)

DATA CURATION SUPPORT

When You Submit Dataset for Review:

- Check files, code, documentation
- Review file naming, organization
- Augment documentation and metadata description
- Transformation of file formats
- Review or create terms of use





LIBRARY INSTRUCTION

Data Management Plans (DMP)

- Offered twice a month, campus wide, through the Digital Scholarship Commons
- Teaching DMP workshops upon invitation to faculty and department classes
- Asynchronous version available online ([LINK](#))

Other RDM-Related Workshops:

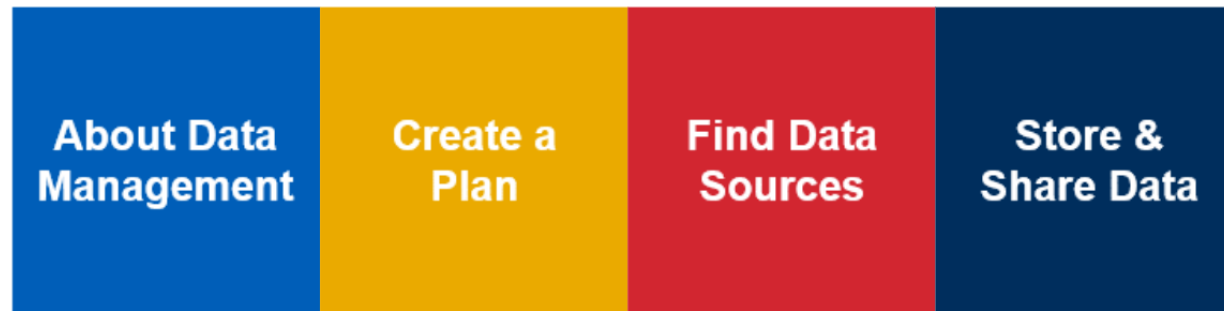
- Curating Datasets for Reproducibility
- Find a Home for Your Data (Data Repository Introduction)
- Managing Projects with Open Science Framework (OSF)
- NVIVO for Qualitative Research
- OpenRefine for Cleaning Data
- TidyData Workshop



<https://libguides.uvic.ca/researchdata>

Research Data Services

Guidance, tools, and training to support faculty and students working with research data.



Click the tiles for quick access to find what you need.

UVic Libraries can support your research data needs. Consult with our team to:

- Learn about best practices for managing research data
- Create a data management plan
- Find and access data sources
- Document data so that it is discoverable and reusable
- Store data in a suitable repository
- Share and promote data with DOIs

Please contact askus@uvic.ca with any questions.



ITHAKA S·R

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[Pec](#)

March 22, 2023

Campus Strategies for Data Support Services

Welcoming the Second Cohort

Ruby MacDougall

What research data services do campuses currently offer and are researchers aware of them? What funding models can support the costs of centralized data services? Where in the larger organizational structure should these services reside? How can institutions make informed staffing decisions to ensure the expertise needed to support current and future services?

As the need for robust, effective, and coordinated research data services on college campuses grows increasingly acute, these are some of the key questions members in our latest cohort project, [Building Campus Strategies for Data Support Services](#), are currently exploring. The two-year research and consulting project, undertaken in collaboration with 30 higher education institutions, tackles the decentralized nature of current data service offerings and the economic inefficiencies, duplication of services, and programming gaps that emerge as a result. Combining action-oriented research with individualized consulting, the project will develop strategies for coordinating campus data support services to better meet the current and future needs of researchers.

UVic Group Members

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Shahira Khair

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TBA

Research Officer, UVic Research Office



Thank you!