

Institutional RDM Strategy for FNUniv

Introduction

The First Nations University of Canada (FNUniv) received Tri-council grant holding status in 2021/22 and is now eligible to administer funds from the Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC), and Social Sciences and Humanities Research Council (SSHRC).

According to the <u>Tri-Agency Research Data Management Policy</u>, postsecondary institutions and research hospitals eligible to administer funds from the Canadian Institutes of Health Research (CIHR), Natural Sciences and Engineering Research Council (NSERC) or Social Sciences and Humanities Research Council (SSHRC) must "create and share, with the agencies and on its website, an institutional research data management (RDM) strategy that describes how the institution will provide its researchers with an environment that enables and supports RDM."

The purpose of this strategy is to encourage and support responsible data management in research done by FNUniv faculty and research done with Indigenous communities.

Core Principles

The First Nations University of Canada (FNUniv) Research Office aspires to have a transformative impact through research by enhancing the understanding and application of Indigenous research methodologies not only throughout Canada, but also on a global scale.

The FNUniv Research Office's overall purpose is to improve the quality of life of Indigenous people through the research supports we provide to nations, communities, researchers, and students. The resources are meant to support Indigenous communities, researchers and students, both Indigenous and non-Indigenous.

Research Data Management (RDM) is considered a necessary part of research excellence and is defined by the Tri-Agency under <u>Research Data Management</u> as "the processes applied through the lifecycle of a research project to guide the collection, documentation, storage, sharing and preservation of research data." RDM supports the effective and responsible conduct of research and increases the ability to store, find and reuse research data. FNUniv believes that research data collected through FNUniv researchers should be responsibly and securely managed and available for reuse by others as long as such data is ethically managed and respectful of Indigenous data sovereignty principles such as OCAP and CARE.



Scope

The FNUniv RDM Institutional Strategy is intended to not only outline supports available to all researchers at FNUniv, but also encourage the consideration of responsible and sustainable research data management throughout the research done at FNUniv. The initial strategy will be focused on supporting Tri-Agency RDM Policy compliance., i.e. required data management plans and facilitating data deposit. This strategy will evolve as priorities, resources, and the research ecosystem evolve.

Existing Institutional Supports

Promoting and Supporting RDM Practices

As a federated college of the University of Regina, FNUniv's faculty and staff have access to the RDM Training sessions provided by the Data Services Librarian at the University of Regina (UofR). Sessions are open to all researchers and promoted by FGSR and the Research Office. The Data Services Librarian also provides one on one training sessions for any researchers who request them.

FNUniv's Indigenous Peoples' Health Research Centre (IPHRC) has also developed an Indigenous Data Sovereignty course that is accessible to faculty and staff at FNUniv, the UofR, and across the country. The course addresses certain RDM practices and provides access to RDM tools, resources, and infrastructure including:

• Repository storage for data deposit

FNUniv faculty have access to the UofR's Borealis Dataverse, an open data repository, which will meet the needs of the majority of researchers at FNUniv. For researchers with larger datasets, they have the opportunity to deposit them in the Federated Research Data Repository (FRDR). There is also the opportunity for FNUniv to create its own sub-dataverse within UofR's system.

• Data management planning tools

Researchers can access the Digital Research Alliance of Canada's DMP Assistant tool with support and instruction from the UofR Data Services Librarian. FNUniv will work on developing internal capacity to deliver this support and instruction in the future.

• Data Curation support

Data curation opportunities are available through Borealis Dataverse with assistance and support provided by the UofR Data Services Librarian. FNUniv will work on developing internal capacity to deliver this assistance and support in the future.

• Tools for discovery and access



Borealis Dataverse and FRDR generate DOIs which can be linked to researchers' publications and ORCID id. The Archer Library at the UofR supports the creation of ORCID ids. FNUniv faculty have access to support through the UofR's Archer Library.

Funding

FNUniv currently funds some of abovementioned institutional supports through existing budgets and the supports provided through the UofR are part of the federated agreement with the UofR. These supports are available to researchers in all disciplines to meet Tri-Agency compliance.

Institutional Implementation

The First Nations University of Canada will support Researchers throughout the phases of implementation of the *Tri-Agency Research Data Management Policy*.

- FNUniv will share an institutional Research Data Management (RDM) strategy. The RDM strategy will be updated and revised to reflect input from faculty and researchers.
- The institutional RDM Strategy will be accessible to the public on the First Nations University of Canada's <u>Research Office Website</u>.
- The First Nations University of Canada will help facilitate the creation and administration of a "Data Depository".

Researcher Support

- This institutional RDM strategy will help guide researchers to create their own Data Management Plans (DMPs) that will be required when applying for certain Tri-Council research grants. For more information about DMPs please see: <u>3.2 Data management plans.</u>
- The FNUniv Research Office will help support researchers to meet the requirements of Data Management Plans. For more information please see: <u>Tri-Agency Statement of Principles on Digital Data Management</u>.

Policy

This Research Data Management Strategy is to be implemented in addition to established research policy with FNUniv. The FNUniv <u>research policy</u> outlines the manner in which all research is to be conducted by researchers utilizing university or any Tri-council research funds.

Research Data Management Survey

The FNUniv Research office conducted a survey of the FNUniv Faculty to gauge the current familiarity with RDM practices, Indigenous research frameworks, and data storage needs.



The RDM Survey that was distributed explored:

- The academic programs and disciplines of Faculty and Staff;
- The types of funding agencies staff have worked with and will be working with to access funds over the timeframe of the RDM Strategy;
- The hardware and software that Faculty are using to store Research Data;
- The storage and data management training/support required by Faculty;
- Faculty's familiarity with Indigenous Data Sovereignty frameworks and principles; and
- Faculty's use of their own Research Data in their teaching practice.

Research Data Management Survey Results

The data collected from the Research Data Management Survey will help the Research Office identify what researchers need to implement RDM best practices. The survey identified the following information from Faculty have about their Research Data:

- Respondents identified current RDM practices that they are using;
- Respondents identified current storage needs and applications used;
- Respondents identified their methods of sharing research data and methods they would consider in the future;
- Respondents identified privacy/security concerns they have with regard to sharing research data;
- Respondents identified the current application of and interests in learning more about Indigenous Data Sovereignty frameworks and principles; and
- Respondents identified the storage and data management training/support required;

The survey results will help to provide the FNUniv Research Office and IT Services with a better understanding of the needs and future capacity required related to research data storage and sharing.

Recommendations and implementation:

Recommendation 1: Increase institutional awareness of Indigenous Sovereignty frameworks

- The majority of respondents expressed that they were already incorporating Indigenous Data Sovereignty frameworks when conducting research with Indigenous Communities.
- The majority of respondents also expressed that they would like to learn more about Indigenous Data Sovereignty frameworks/principles.

Implementation:



- The First Nations University of Canada will support researchers to find and incorporate Data frameworks (e.g. **OCAP**[®]) that reflect the needs of First Nations, Métis, and Inuit communities and people involved with the research.
- The FNUniv Research Office and the Indigenous Continuing Education Centre (ICEC) will provide workshops and training opportunities that relate to Indigenous Data Sovereignty. These resources will be available to Researchers online with self-directed offerings.
- The FNUniv Research Office will encourage faculty and make them aware of UofR data management training opportunities.

Recommendation 2: Increase institutional awareness of RDM practices

• Create awareness of RDM Practices.

Implementation:

- The FNUniv Research Office will support researchers who are applying to access Tri-Council grants and meet the application requirements by sharing RDM and ethics requirements in funding applications and recommended RDM practices.
- The FNUniv Research Office will hold regular presentations on RDM practices at FNUniv Academic Council meetings.
- The FNUniv Research Office will share RDM resources on the FNUniv Research Office website.

Recommendation 3: Develop internal capacity to support RDM services

• The FNUniv Research Office will meet with HR and the FNUniv IT Academic Committee to develop a capacity development strategy to support RDM services.

Recommendation 4: Increase promotion and training support for data management

planning

- A majority of respondents identified that they would like support from the FNUniv Research Office in drafting data management plans if they are required in grant applications.
- There is also an interest in greater training support for those who are wanting to learn more about research data management.

Implementation:

• Launch an RDM page on the Research Office website with training resources for researchers and students.



• The FNUniv Research Office will provide individualized support to Students and Researchers who would like to incorporate RDM practices throughout the research process.

Recommendation 5: Develop a business plan to continue to sustainably build out digital infrastructure and services for RDM

• The FNUniv Research Office will collaborate with researchers and other stakeholders to develop a five-year business plan to address current gaps in infrastructure and services and increase overall capacity to meet RDM needs.

Implementation:

- The business plan will create a timeline and framework of meeting the institution requirements in the *Tri-Agency Research Data Management Policy*.
- The plan will also address how the FNUniv Research Office will implement changes requested by Researchers.

Governance and Assessment

This document was written and developed by the FNUniv Research Office with support from Kaetlyn Phillips, Data Services Librarian at the University of Regina's Dr. John Archer Library and Information Services.

The review and assessment of the recommendations outlined in this strategy will be conducted by a forthcoming RDM Steering Committee led by the FNUniv Research Office. Recommendations will be implemented over a five year timeline, with annual review and assessment. If necessary, recommendations will be revised to better reflect the current state of RDM and the path forward.

The RDM Steering Committee will continue to use the Maturity Assessment Model in Canada (MAMIC) to assess RDM progress over the next five years. Within one year of implementation, the committee will provide metrics and an updated score card on the recommendations listed in the strategy.

Related Information

- Canadian Institutes of Health Research (CIHR)
- Natural Sciences and Engineering Research Council of Canada (NSERC)
- Social Sciences and Humanities Research Council of Canada (SSHRC)