# Strategy:

#### Introduction:

This institutional strategy was developed by the University of Regina to address the Tri-Council Research Data Management policy introduced in March 2021. This document describes the work that has already been done in preparation for this policy, including institutional support and infrastructure for data management planning and data deposit. It also includes recommendations for the institution to undertake in the next five years to increase awareness, support and capacity for RDM practices on campus.

As required by the Tri-Agency, this strategy will outline how the University will:

- recognize data as an important research output;
- support researchers in their efforts to establish and implement data management
  practices that are consistent with ethical, legal and commercial obligations, as well as triagency requirements, including the <u>Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans 2nd edition</u>, the <u>Tri-Agency Framework: Responsible Conduct of Research</u>, and other relevant policies;
- promote the importance of data management to researchers, staff and students;
- guide researchers on how to properly manage data in accordance with the principles outlined in the <u>Tri-Agency Statement of Principles on Digital Data Management</u>, including the development of data management plans;
- commit to the adoption of established best practices when developing institutional standards and policies for data management plans;
- provide, or support access to, repository services or other platforms that securely preserve, curate and provide appropriate access to research data;
- recognize that data created in the context of research by and with First Nations, Métis, and Inuit communities, collectives and organizations will be managed according to principles developed and approved by those communities, collectives and organizations, and in partnership with them;
- recognize that a distinctions-based approach is needed to ensure that the unique rights, interests and circumstances of the First Nations, Métis, and Inuit are acknowledged, affirmed, and implemented.

### **Core Principles**

#### • Researcher-focused and Discipline-specific

Aligning with Strategic Area of Focus 1 (Discovery), the University of Regina is committed to excellence in teaching and research. As such, promoted RDM practices will support the diverse and discipline-specific approaches in which our researchers engage This includes committing to data management practices that enhance research excellence as defined by the <a href="Tri-Agency (2021">Tri-Agency (2021)</a>. The researcher-focused strategy will promote supportive implementation of recommended best RDM practices through access to generalized and discipline specific RDM tools, technologies and services, and

will recognize and respect agreements made between U of R researchers and community and industry partners.

### • Adhere to FAIR Data Principles

Aligning with Strategic Area of Focus 1 (Discovery) and 5 (Impact and Identity), the University of Regina recognizes that research excellence grounded in open scholarship and knowledge mobilization strengthens global impact and reflects equity and diversity. As a result, the University commits to promoting FAIR (findable, accessible, interoperable, and reusable) RDM practices which allow research results, including data to be as open as possible and as closed as necessary.

# • Protect and Support Indigenous Data Sovereignty

Aligning with Strategic Area of Focus 1 (Discovery), 2 (Truth and Reconciliation) and 5 (Impact and Identity), the University of Regina is committed to Truth and Reconciliation and acknowledges that Indigenous Peoples have the right to control their data including collection, ownership, and application of said data. This includes recognizing Indigenous perspectives during research collection and incorporating Indigenous ways of knowing into research. The University promotes the use of CARE (Collective benefit, Authority to control, Responsibility, Ethics) and OCAP (Ownership, Control, Access, Possession) principles when collecting data and supports strengthening connections with Indigenous communities through consultation about RDM. This strategy will also align with the objectives and principles laid out in the Memorandum of Understanding between First Nations University of Canada and the University of Regina, which recognizes Indigenous peoples' right to determining research.

#### • A Commitment to Equity, Diversity and Inclusion

As stated in the Strategic Plan, EDI is one of the core values of the University of Regina. As such, RDM practices must support and protect equity-deserving groups and ensure that they remain in control during every stage of the research process. As with Indigenous data sovereignty, a core principle of RDM is the community's right to determine research.

#### Scope

The RDM Institutional Strategy is intended to outline and define supports available to all researchers at the University of Regina. However, initial strategies will be focused on supporting Tri-Agency RDM Policy compliance. This means focus on developing required data management plans and facilitating data deposit.

#### **Existing Institutional Supports**

Awareness Raising

Prior to the release of the Tri-Agency RDM Policy, the University of Regina Dr. John Archer Library led RDM training sessions and information sessions open to faculties, the research office, and graduate students beginning in 2020. Once the Tri-Agency RDM Policy was released in 2021 information sessions on policy expectations, compliance, and institutional resources

were offered to all researchers, graduate students, and research office staff. As well, RDM awareness was raised during the Spring 2021 RDM Survey and the Summer 2022 RDM Environmental Scan. Information and instruction sessions on RDM will continue as more Tri-Agency funding opportunities with RDM components are announced.

#### Hiring and Training Staff

In 2019, the Data Services Librarian position was redefined to have RDM as assigned duties. Through Information Services, the Research Information Technology Support (RITS) Team was created in 2021 which provides consultation to researchers on a range of topics including data management.

# Promoting and Supporting RDM Practices

RDM Training sessions are provided by the Data Services Librarian. 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.

Providing and/or supporting access to RDM tools, resources, and infrastructure including:

# Repository storage for data deposit

The University of Regina is part of the Borealis Dataverse, an open data repository, which will meet the needs of the majority of researchers. For researchers with larger datasets, they have the opportunity to deposit in the Federated Research Data Repository (FRDR).

# Data management planning tools

Researchers have had access to the Digital Research Alliance of Canada's DMP Assistant tool with support and instruction from the Data Services Librarian.

#### • Curation support

Curation opportunities are available through Borealis Dataverse with assistance and support provided by the Data Services Librarian. Generally, curation options are self-mediated.

# Tools for discovery and access

Borealis Dataverse and FRDR generate DOIs which can be linked to researchers' publications and ORCID id. The Archer Library supports the creation of ORCID ids.

# **Funding**

The University currently funds the institutional supports listed above through existing budgets. These supports are available to researchers in all disciplines and levels to meet Tri-Agency compliance.

# The Road Ahead: Recommendations to further develop RDM Recommendation 1: Develop an institution-wide research data management policy framework

#### Components:

 Review policy to ensure RDM is represented in policy frameworks such as ethics and IT policies

- Develop guidelines for DMP development and data deposit including compliance
- Develop policy guidelines for Indigenous Data Sovereignty

### Recommendation 2: Raise institutional awareness of RDM among all researchers

- Components:
  - Hold bi-annual researcher town halls
  - Launch an institutional webpage hub
  - Hold regular presentations at faculty councils
  - Include RDM as a regular item at Council Committee on Research once a semester
  - Hold presentations on RDM at Executive of Council and Senate

# Recommendation 3: Develop a hiring strategy to support RDM services

- Components:
  - Archer Library will investigate hiring graduate students with disciplinary expertise to provide mediated data deposit assistance
  - Office of Research Services will review existing staff and assign RDM duties

# Recommendation 4: Increase promotion and training support for data management planning

- Components:
  - Develop university DMP templates and exemplars for a range of disciplines and research methods, in partnership with faculties and departments, the Research Office, the Research Ethics Board and the Library
  - Offer RDM training to graduate students in required graduate courses
  - Develop RDM Instruction Video Series that is open to all researchers
  - Include an RDM component to the FGSR Digital Research Skills Certificate program

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

- Components:
  - In collaboration with researchers, develop a five-year business plan and funding strategy to address current gaps in infrastructure and services and increase overall capacity to meet RDM needs.

#### **Governance and Assessment**

This document was written and developed by the University of Regina's Institutional Strategy Working Group. Implementation of the strategy will be overseen by the Office of Research Services under the guidance of the Associate Vice President Research with support from the 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 consisting of members from the Office of Research

Services, the Archer Library, Information Services, Office of Indigenous Engagement, Office of Vice President Research, and researcher representatives from different disciplines. 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 <u>Maturity Assessment Model in Canada</u> (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.

#### **Stakeholders**

CCR Associate Deans Research Deans' Council

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