MHC RDM Strategy

Background

In March 2021, the Tri-Agency launched a Research Data Management (RDM) Policy with the objectives of promoting RDM and data stewardship practices amongst Canadian researchers. The Tri-Agency RDM Policy will be implemented with an incremental approach, in step with continuing development of RDM practices and capacities in Canada and internationally.

Recognizing research data as an asset is an important steppingstone in the pursuit of academic excellence. Research activities in many domains create increasingly larger volumes of data that are challenging to manage and analyze effectively. Making research outputs discoverable, reproducible, and reusable, are foundations and principles of modern scholarship. Properly managed data have both practical and financial benefits to research, it reduces research duplication, lowers the repetitive sampling burden on participants, increases accountability and transparency, allows for the replication of research results, fosters collaborations, and accelerates new discoveries. While not all research data are suited to be shared broadly, for ethical, legal, cultural, or commercial reasons, adopting best practices in research data management is crucial to maintain and maximize public trust in academic research.

Medicine Hat College (MHC) is committed to meeting these Tri-Agency RDM requirements and supporting its researchers in adopting these practices. MHC therefore aims to provide researchers with the best possible support in terms of project planning, guidelines, policies, and infrastructure, to foster research excellence across the institution.

Tri-Agency Research Data Management Policy as stated on their [website](#):

The agencies plan to implement the policy incrementally, as determined through ongoing engagement with the research community and other stakeholders, and in step with the continuing development of research data practices and capacity in Canada and internationally.

- **Institutional strategies:** By March 1, 2023, research institutions subject to this requirement must post their RDM strategies and notify the agencies when they have been completed.

- **Data management plans:** By spring 2022, the agencies will identify the initial set of funding opportunities subject to the DMP requirement. The agencies will pilot the DMP requirement in targeted funding opportunities before this date.

- **Data deposit:** After reviewing the institutional strategies and in line with the readiness of the Canadian research community, the agencies will phase in the deposit requirement.

Definitions

Abbreviations and terms used in this strategy:

FAIR: data which meets the principles of Findability, Accessibility, Interoperability, and Reusability.

CARE: principles for Indigenous data governance stands for Collective Benefit, Authority to Control, Responsibility, and Ethics.

OCAP: First Nations principles of Ownership, Control, Access, and Possession.

Data Repository: preserve, manage, and provide access to various types of digital materials in a variety of formats.

DMP: data management plan

Research Data: data used to support technical or scientific enquiry, research, scholarship, or artistic activity, and that are used as evidence in the research process and/or are commonly accepted in the research community as necessary to validate research findings and results. May be experimental, observational, operational, third party, public sector, monitory, processed or repurposed data.

RDM: refers to the storage, access and preservation of data produced from a given research project. Data management practices cover the entire lifecycle of the data, from planning the investigation to conducting it, and from backing up data as it is created and used to long-term preservation of data deliverables after the research has concluded.

Policies

MHC Policies applicable to this strategy:

- Academic Freedom and Responsibilities (AC-02)
- Freedom of Information and Protection of Privacy (GA-04)
- Ethical Conduct for Research Involving Human Participants (9.7)
- Integrity in Research and Scholarship (9.2)
- Research Conflict of Interest and Mandatory Disclosure (9.3)
- Applied Research (9.4)
- Intellectual Property and Copyright (9.5)
- Copyright Compliance (9.6)
- Policies (GA-01)
- Procedures (GA-02)
- Policy and Procedure Development and Approval (PR-GA-01-01)
- Records and Information Management (GA-05)

- Survey (RE-01)
- Code of Conduct (HR-10)
- Electronic Information Storage, Access and Transport (IT-02)
- Information Technology Acceptable Use (8.6)
- IT System Account Passwords (8.10)
- Information Technology Access and Protection 8.11)
- Video Surveillance and Use of Recorded Images (8.13)
- Purchasing (FN-02)

Oversight

Responsible for overseeing the RDM include representatives from:

- Office of Vice President Academic and Provost
- Centre for Innovation
- Vera Bracken Library
- Research Ethics board
- IT Services
- Executive management
- Faculty
- Senior Academic Leadership Team

Looking Ahead: Strategy and Roadmap for first five years

Medicine Hat College is in the early stages of assessing and creating policies, processes, services, and resources to enable researchers to manage their research data to the highest standards and to ensure the college meets the requirements set forth by the Tri-Agency Research Data Management Policy. Development of an RDM Strategy is connected to the MHC Strategic Plan 2020-2030 where collaboration on relevant research and innovation in the region is a high-level goal.

The present strategy does not mandate RDM requirements nor policies at MHC, but it outlines the high-level approach MHC will take over the next 5 years to equip its research community with the knowledge, tools, and support to adopt meaningful and robust RDM practices. The RDM Strategy is intended to be a living document that will evolve based on Tri-Agency requirements, feedback from researchers, and future innovations in RDM practices.

1. Raise Awareness

- Identify stakeholder communities on campus
- Recruit local champions to help promote the value of RDM

- Determine and apply the appropriate delivery mechanisms for outreach to involve stakeholders
- Participate in any future Tri-Agency consultations around RDM
- Participate in national RDM consultations and events

2. Assess Institutional Readiness and define the ideal state for RDM

- Evaluate existing RDM practices
- Expand RDM support and training
- Work with the research community and key stakeholders (e.g., Research Ethics Board, IT services) to improve DMPs, data sharing, deposit, and preservation.
- Provide forums for feedback to advance RDM efforts
- Develop RDM practices through partnerships

3. Formalize RDM practices

- Create detailed data management plans (DMP) and create plans with an understanding of current practices: FAIR, CARE, and OCAP
- Decide on a data repository or repositories
- Organize institutional support and training
- Create institutional policies, guidelines, and/or procedures related directly to RDM
- Continue to identify gaps in the existing RDM environment through institutional assessment and connection to stakeholders
- Ensure that the development and maintenance of our RDM-related support services keep up with the implementation of RDM policies and requirements by funders, publishers, and legislative bodies.
- Finalize recommended procedures for data preservation for both active data and data retained in repositories for long-term storage.
- Ensure that RDM-related support practices are appropriately resourced, in terms of both funding and personnel