



# MountAllison

UNIVERSITY

## Research Data Management (RDM) Institutional Strategy

RDM@MtA (2023-2026)

Prepared by the Mount Allison RDM Institutional Strategy Working Group

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Version 1

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## Purpose and Scope

Research can transform observations to insights. These contributions to knowledge are predicated on the responsibility of scholars to generate and interpret rigorous and reliable research data. Increasingly, it is recognized that practices that ensure the sound management of research data – from collection, through curation, to preservation – broaden the reach and impact of research outcomes. Responsible and robust research data management (RDM) is, therefore, an important component of the research life-cycle, regardless of scholarly discipline or data type.

The purpose of Mount Allison's Research Data Management (RDM) Strategy, **RDM@MtA**, is to support and strengthen the research contributions of our students, staff, and faculty. Building on an assessment of current services and researcher needs, the **RDM@MtA** Strategy (2023-2026) outlines our commitment to facilitating and supporting research data management best practices across our campus community for the next three years via a collaborative and iterative plan that centres education initiatives and responsive stakeholder engagement.

In so doing, this strategy applies to – and aims to support – all scholarship, research, and creative activity conducted by Mount Allison students, staff, and faculty. The goals and action items identified here will also directly support researchers who apply for funding or submit to academic journals with specific RDM requirements (e.g., data management plans, data deposit). Further, this strategy signals Mount Allison's alignment with the efforts of Canada's federal funding agencies (the Canadian Institute of Health Research, the Natural Sciences and Engineering Research Council, and the Social Sciences and Humanities Research Council – CIHR, NSERC, and SSHRC respectively, and collectively the Tri-Agencies) to encourage Canadian research excellence by fostering sound digital data management and data stewardship practices.

The [Tri-Agency Research Data Management Policy](#), released in March 2021, outlines a framework of shared responsibility between institutions and researchers and has three main requirements:

- 1) An institutional strategy
- 2) The development and submission of data management plans (DMPs) for certain Tri-Agency funding opportunities
- 3) The requirement for data deposit for Tri-Agency grant recipients

By drafting and implementing this strategy and by sharing it publicly in March 2023, Mount Allison's **RDM@MtA** strategy fulfils the first requirement.

## Stakeholders

Building and implementing a successful RDM strategy at Mount Allison requires collaboration of multiple divisions, offices, and committees, including:

- [Libraries and Archives](#)
- [Office of Research Services \(ORS\)](#)
- [Computing Services Department \(CSD\)](#)
- [Office of the Provost and Vice-President, Academic and Research](#)

- [Senate Research and Creative Activities Committee \(RCA\)](#)
- [Senate Academic Information Technology Committee](#)
- [Senate Research Ethics Board \(REB\)](#)
- [Faculty Council](#)

## Guiding Principles

**RDM@MtA** is guided by a commitment to two sets of principles for research data management: FAIR and CARE. The [FAIR Guiding Principles](#) are that research data should be Findable, Accessible, Interoperable, and Reusable. The [CARE Principles for Indigenous Data Governance](#) are Collective Benefit, Authority to Control, Responsibility and Ethics. Any research projects that include Indigenous data should take a distinctions-based approach approved by First Nations, Métis, or Inuit communities or organizations.

**RDM@MtA** is also an expression of Mount Allison's commitment to:

- Extraordinary education, pedagogy, and co-creation of knowledge with students
- Cross-campus collaboration
- Community engagement

## Definitions from the [Tri-Agency Research Data Management FAQ](#):

“**Data** are facts, measurements, recordings, records, or observations collected by researchers and others, with a minimum of contextual interpretation. Data may be in any format or medium taking the form of text, numbers, symbols, images, films, video, sound recordings, pictorial reproductions, drawings, designs or other graphical representations, procedural manuals, forms, diagrams, workflows, equipment descriptions, data files, data processing algorithms, software, programming languages, code, or statistical records.”

“**Research data** are data that are used as primary sources to support technical or scientific enquiry, research, scholarship, or creative practice, 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. Research data may be experimental data, observational data, operational data, third party data, public sector data, monitoring data, processed data, or repurposed data. What is considered relevant research data is often highly contextual, and determining what counts as such should be guided by disciplinary norms.”

“**Research data management (RDM)** refers to the processes applied through the lifecycle of a research project to guide the collection, documentation, storage, sharing and preservation of research data.”

“**A data management plan (DMP)** is a living document, typically associated with an individual research project or program that consists of the practices, processes and strategies that pertain to a set of specified topics related to data management and curation. DMPs should be modified

throughout the course of a research project to reflect changes in project design, methods, or other considerations.”

## Building our Strategy

In 2022, the Provost and Vice-President, Academic and Research created a small working group to develop the first draft of **RDM@MtA**. This working group includes Maria Thistle (Office of Research Services), Elizabeth Stregger (Data and Digital Services Librarian), and Lisa Dawn Hamilton (Associate Professor, Psychology).

We used tools developed by national organizations such as the [Digital Research Alliance of Canada](#) to assess the current state of RDM support at Mount Allison. Representatives of the Library and Archives, Office of Research Services (ORS), and Computing Services Department (CSD) completed the RDM Maturity Assessment Model in Canada (MAMIC) to identify the current availability of, and level of support for, a standardized set of research data management services. We also surveyed faculty members using the Canadian RDM Survey created by the Canadian Research Data Management Survey Consortium to set priorities for our campus.

We participated in national and regional webinars on the development of RDM institutional strategies. This included the National Dialogue on Data Management Plans and Indigenous Data. We have also reviewed the institutional strategies published by other universities on the [Government of Canada site](#).

## Strategy Goals

The goals of **RDM@MtA** are grouped by three themes:

- Education: Building RDM Competencies and a Culture of Commitment
- RDM Systems Support: Infrastructure and System Development
- Future-proofing our RDM Commitment: Resources, Policies and Practices

### Education: Building RDM Competencies and a Culture of Commitment

Mount Allison recognizes that we are at the beginning stages of organized support for RDM and consequently will aim to provide ample and diverse educational tools to encourage RDM best practices and weave them into current research practices.

1. Create online home for training materials and resources, including collating existing resources and generating MtA specific materials (workflows, best practices, how-to infographics and guides), where appropriate.
2. Establish regular RDM education sessions on campus, including introductory workshops in the Independent Student Research Grant Program training and workshops for new and existing faculty and staff twice a year.

3. Offer individualized or disciplinary sessions on the development of data management plans using the [DMP Assistant](#), on selecting a data repository, or other research data management topics.
4. Highlight RDM training, events, and grant-funding requirements via ORS communications to research community.
5. Explore options for curricular/para-curricular integration of RDM knowledge beyond Data Science academic programs (e.g., module in 'Current Advances' Honours courses, graduate studies courses).
6. Create community of practice with Maple League colleagues and data management champions to share resources, co-develop tools, etc.
7. Support ongoing professional development for Data Services Librarian and ORS personnel to support community with RDM education.

### RDM Systems Support: Infrastructure and System Development

1. Create DMP Assistant templates with specific guidance for Mount Allison researchers, based on current resources and workflows on our campus. Additional templates are available from the [Digital Research Alliance of Canada](#).
2. Develop a semi-mediated workflow for research data deposit in Mount Allison University's Data Repository (Borealis), aiming for Level 2 data curation services as described in the [Dataverse Curation Guide](#). Additional resources and support on selecting other trusted data repository will also be made available.
3. Align Research Ethics Board (REB) applications and DMP requirements to ensure consistency – editing forms, linking forms, providing guidance and best practices to research community and REB members
4. Develop and share resources, templates, and/or sample language to help researchers successfully navigate REB review processes
5. Recommend a survey of the research community's data software use and requirements (including tools to support collection, organization, analysis/interpretation, and dissemination of research data) to inform the annual list of academic IT priorities created by the Senate Academic Information Technology Committee.
6. Seek guidance on integrations of Indigenous data sovereignty considerations in RDM and REB practices as part of institutional review on Indigenous research practices (proposed for Spring 2023).
7. Develop and communicate guidance for researchers, CSD, REB, ORS regarding sensitive data, privacy, ethical, and IP considerations, in keeping with the [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – TCPS 2 \(2022\)](#). This may lead to development of formalized policy/practice, see Goal 3.
8. ORS and library to develop process for supporting researchers to incorporate data management during grant applications, using Tri-Agency RDM resources where available

### Future-proofing our RDM Commitment: Resources, Policies and Practices

1. Evaluate need and develop a plan for providing ongoing active data management needs including training on data security practices, tech support for digital research needs including data storage/access/use/management software.

2. Discuss and develop staffing plans in units responsible for RDM support (including Library, ORS, CSD) to ensure dedicated service to supporting data management and data literacy needs of the University community.
3. Identify resources to support shared student intern (full-time summer, part-time fall and winter) between the library and ORS to support shared priorities and initiatives, including RDM and research communication.
4. Develop a consistent and transparent approach to licensing software for research and teaching purposes. Create and maintain a catalogue of this software.
5. Evaluate draft strategy in light of Mount Allison's developing strategic research plan in Spring 2023
6. Conduct an environmental scan of institutional policies and practices related to research to assess gaps in guidance regarding data ownership, data sharing agreements, conflict of interest, information security, and related areas. Following the scan, prioritize revision, where necessary, or develop processes and policies in consultation with stakeholders.
7. Identify institutional mechanism to best coordinate RDM needs/ensure research IT priorities are championed, e.g., by development of RDM steering group or via inclusion in other existing committees

## Timeline

**RDM@MtA** will be introduced to faculty members at Faculty Council in Spring 2023. Additional town hall presentations for the university may be presented as needed. Faculty and staff are invited to complete the RDM Survey if they have not already done so. Other stakeholder committees and departments will also be invited to provide feedback on the draft. An official version 1 will be published in late Spring 2023.

**RDM@MtA** will be reviewed annually for the next three years. Additional gaps and resources identified through annual consultation with stakeholders will be used to refine the goals described in **RDM@MtA**. Feedback on the effectiveness of RDM tools and education will guide future service developments. **RDM@MtA** will be aligned with new plans and projects such as the Strategic Research Plan and library renovation project.

## Relationship to other relevant policies

**RDM@MtA** is intended to support and respond to existing strategies and policies that intersect RDM and sound data management ethics. These may include both standards developed by Mount Allison as well as those developed by external bodies, agencies, and governments. In addition to those listed and linked in the above strategy, the following is a list of relevant internal and external policies and guidelines.

### Internal

- [Policy 2200: Personal Information Protection Policy — PIPEDA](#)
- [Policy 7002: Computing Services - Password Policy and Procedures](#)

- [Mount Allison Cybersecurity Awareness](#)
- [Policy 5201: Policy on Conflicts of Interest in Research](#)
- [Policy 5202: Policy Statement on Integrity in Research, Scholarly and Creative Activity](#)
- [Strategic Academic Plan – Liberal Arts for the 21<sup>st</sup> century 2022-2025](#) (2021)
- [Strategic Research and Creative Activities Plan](#) (2021)

## External

- [Bill C-15: An Act respecting the United Nations Declaration on the Rights of Indigenous Peoples](#) (2020), Government of Canada
- [Guidance on Depositing Existing Data in Public Repositories](#) (2021), Government of Canada
- [National Inuit Strategy on Research](#) (2018), Inuit Tapiriit Kanatami
- [National Security Guidelines for Research Partnerships](#) (2021), Government of Canada
- [Principles of Ethical Métis Research](#) (2010), Métis Centre @ NAHO
- [Right to Information and Protection of Privacy Act \(RTIPPA\)](#) (2009), Government of New Brunswick
- [SSHRC Research Data Archiving Policy](#) (1990), Government of Canada
- [The First Nations Principles of OCAP](#), First Nations Information Governance Centre
- [Tri-Agency Research Data Management Policy](#) (2021), Government of Canada
- [Tri-Agency Framework: Responsible Conduct of Research](#) (2021), Government of Canada
- [Tri-Agency Statement of Principles on Digital Data Management](#) (2021), Government of Canada
- [Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans – TCPS 2](#) (2022), Government of Canada

## Institutional Resources

Office of Research Services: [Research Data Management](#)

Library & Archives: [Research Data Management](#)

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