



# Research Data Management

## Institutional Strategy

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## OBJECTIVE

The Algoma University Research Data Management Institutional Strategy aims to support Algoma University researchers by promoting responsible **Research Data Management** and ethical data stewardship practices in accordance with the [Tri-Agency Research Data Management Policy](#) and [Tri-Agency Statement of Principles on Digital Data Management](#).

Algoma University is committed to achieving best practices in Equity, Diversity, and Inclusion in all types of research. Research applications now require consideration and plans around removing barriers in academic research to make it more accessible. Funding agencies are committed to EDI and strive to provide support and information for researchers: [Best practices in equity, diversity, and inclusion in research practice and design](#).

Our institutional strategy provides guidelines and information for the responsible management of **Indigenous Research Data** and the required information for all researchers on Data Sovereignty and the First Nations principles of Ownership, Control, Access, and Possession ([OCAP](#)) **Indigenous Data Sovereignty** “which refers to the right of Indigenous peoples to control data from and about their communities and lands, articulating both individual and collective rights to data access and to privacy” ([Raine, et al., p. 300](#)).

The Institutional Strategy will be regularly reviewed and updated on an annual basis.

## TRI-AGENCY RESEARCH DATA MANAGEMENT POLICY

The [Tri-Agency Research Data Management Policy](#) requires that each institution create a Research Data Management Plan to support all of their researchers. The Tri-Agencies consist of the following organizations:

- The Canadian Institutes of Health Research (CIHR);
- The Natural Sciences and Engineering Research Council of Canada (NSERC); and
- The Social Sciences and Humanities Research Council of Canada (SSHRC).\*

*\*The Tri-Agencies are often referred to as “the Agencies.” They are federal granting agencies that promote and support research, research training, knowledge transfer, and innovation within Canada.*

“The Agencies expect the research they fund to be conducted to the highest professional and disciplinary standards, both domestically and internationally. These standards support research excellence by ensuring that research is performed ethically and makes good use of public funds, experiments and studies are replicable, and research results are as accessible as possible. Research data management (RDM) is a necessary part of research excellence.” [Source](#)

## Brief Summary of Requirements

- Strategy must be made publicly available on the institution's website with contact information to which inquiries about the strategy can be directed.
- Each strategy will reflect the institution's size, research intensity, and existing RDM capacity.
- Tri-Agencies expect high quality strategies that outline how the institution will provide its researchers with support in the following areas:
  - Recognizing data as an important research output;
  - Ethical, legal and commercial data management practices;
  - Promoting importance to researchers, staff, and students; and
  - Guidance on how to properly manage data.

## Ethical, Legal, and Commercial Obligations

The Tri-Agencies released the Research Data Management Policy in 2021 to help guide institutions and their researchers to ensure ethical, legal, and commercial obligations are understood and achieved.

“The Agencies believe that research data collected through the use of public funds should be responsibly and securely managed and be, where ethical, legal and commercial obligations allow, available for reuse by others. To this end, the agencies support the **FAIR (Findable, Accessible, Interoperable, and Reusable)** guiding principles for research data management and stewardship” (Government of Canada, 2021-03-15, Preamble section, para. 2).

This Algoma University Research Data Management Institutional Strategy is a framework to support researchers in their efforts to achieve compliance with the requirements of the Tri-Agency.

## **RESPONSIBLE DATA MANAGEMENT**

### **Support for Algoma University Researchers**

To ensure the correct procedures of research data management, Algoma University researchers have many supports available to them. They can connect with the university's [Research Advisory Committee](#), the [Research Ethics Board](#), the [Research Office](#) staff, or [Wishart Library Librarians](#) for assistance.

There are also National Research Repositories and digital tools available for researchers. Training tools and information about repositories is available. Please reference the following information available from the [Digital Research Alliance of Canada Research Data Management](#) website.

Informational workshops will also be available during our Annual Research Week in the Winter Semester, and individual information sessions can be requested from the [Wishart Library](#). With the future addition of a Research and Scholarly Communications Librarian, Wishart Library will aim to offer informational workshops about research data management each semester. Also, with additional librarians, the library will expand workshops and training on research data management to undergraduate students, graduate students, faculty, and staff from beginning considerations about research through to publication and dissemination.

### **Repositories and Deposit Datasets**

#### **Institutional Repository for Research Data to fulfill Research Accessibility Requirements and Dynamic Research Exhibits and Presentations**

The Algoma University Digital Repository for Research provides open access to ensure that published and unpublished research, scholarship, and other materials are available and equitably accessible locally, nationally, and internationally. The Institutional Repository will provide access to textual and multimedia content, such as theses, photos, and other file formats.

Researchers can find support on using the Institutional Repository through the [Wishart Library](#). Our librarians can assist you in answering your questions and options available for dynamic research presentations and publication of various types of research.

### *Future Shared Repository*

Algoma University Wishart Library is a member of the [Ontario Council of University Libraries](#)' (OCUL) Shared Institutional Repository Working Group, which was tasked with determining the viability of a province-wide Institutional Repository. Our eServices Librarian, Robin Isard, participated as a committee member. This is in the test pilot stage, and partnerships with CARL (Canadian Association of Research Libraries) and CRKN (Canadian Research Knowledge Network) are being considered to combine efforts on the desired outcome for an eventual shared nation-wide repository.

## **Trusted Digital Repository for Long-term Preservation of Research Scholarship and Materials**

### *Permafrost*

Algoma University researchers have access to [Permafrost](#) via our association with OCUL and [Scholars Portal](#). Permafrost is hosted by the University of Toronto and provides long-term preservation for digital content. For example, a gallery of historical images may be digitized for access and preservation. Web optimized images would be hosted in a user-friendly gallery on the Institutional Repository, while the very high-resolution original scanned images would be stored in Permafrost.

## **Datasets Deposits**

### *Borealis*

Borealis is the Canadian Dataverse Repository, implemented by [Scholars Portal](#) and hosted by the University of Toronto. As a member of the OCUL, the Wishart library provides access to Borealis for Algoma University Researchers.

Through Algoma University Wishart Library, AU researchers can deposit datasets in [Borealis](#). [The Dataverse Project](#) (not to be confused with Microsoft's Dataverse, a business data storage service) which is "an open source web application to share, preserve, cite, explore, and analyze research data." It was developed by Harvard University's Institute for Quantitative Social Science (IQSS) in collaboration with Harvard University Libraries and is [used around the world](#) to store datasets.

## QUESTION GUIDE

### What is a Data Management Plan?

A **data management plan (DMP)** is a document you create that sets out how you will organize, store, and share your research data at each stage in your project. A DMP is a living document that can be modified to accommodate changes in the course of your research. The responsible management of data is considered to be an integral duty of the researcher with support from their institution.

### How do I create a Data Management Plan?

For step-by-step guidance in creating a Data Management Plan, we recommend the following online tools. Researchers may also consult the Research Advisory Committee, the Research Office, or the Wishart Library Librarians.

- [DMP Assistant](#) – To create DMPs for Canadian funding agencies, such as CIHR, NSERC, and SSHRC
- [DMPTool](#) – To create DMPs for US funding agencies, such as the National Institutes of Health or the National Science Foundation

### What about metadata?

Before collecting data, researchers should consider the metadata they will need to provide alongside the data to make it easily understood, as well as the privacy, intellectual property, copyright, and/or licensing issues to be addressed with regard to the sharing of that data.

### Questions for researchers to consider.

- What types of data will be created?
- Which policies (funding, legal, and institution) will apply to the data?
- Who will own, have access to, and be responsible for managing the data?

- What equipment and methods will be used to capture, process, and document the data?
- How will the data be organized and documented?
- Where will the data be stored during and after the research?
- How will the data be shared and under what provisions and permissions?

## REFERENCES

### Overarching Guides and Principles

Digital Alliance of Canada. Alliance de recherche numérique du Canada.(2023). Research Data Management.

<https://alliancecan.ca/en/services/research-data-management>

Government of Canada. (2021). *Tri-Agency Research Data Management Policy*. Government of Canada Research Data Management.

[https://www.ic.gc.ca/eic/site/063.nsf/eng/h\\_97610.html](https://www.ic.gc.ca/eic/site/063.nsf/eng/h_97610.html)

### Indigenous Data Sovereignty

The First Nations principles of ownership, control, access, and possession – more commonly known as OCAP. <https://fnigc.ca/ocap-training/>

The Government of Canada's *United Nations Declaration on the Rights of Indigenous Peoples Act*, Canada's official acceptance of the UN Declaration – more commonly referred to as UNDRIP. <https://www.justice.gc.ca/eng/declaration/about-afpropos.html>;

[https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP\\_E\\_web.pdf](https://www.un.org/development/desa/indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf)

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