# Research Data Management Strategy

## March 2023 - March 2025

## Introduction

Loyalist College (Loyalist) stewards data derived from a wide range of sources including applied research partnerships, scholarly research projects and personal and academic data about our past, current, and potential students, staff, faculty and partners. It is our responsibility to ensure that this data is fully governed, ethically managed, and well understood. In addition, as a research partner in Canada's public education system, it is important that we contribute to the broader knowledge ecosystem, which will include research findings and data. To do so, we must take every measure to implement and maintain a robust data governance strategy for all types of data in our care.

In a directive acknowledging the value of well governed data, Canada's Research Tri-Agency has mandated any institution conducting research eligible for Tri-Agency funding must first develop and publish clear Research Data Management (RDM) strategies. This is meant to acknowledge and foster an appreciation for the value of well-governed data. This document represents the first two-year strategy and is a roadmap for RDM development at Loyalist, articulating our vision for RDM, the scope of the project, and a proposed timeline.

## Importance of Research Data and Research Data Management

Loyalist College is increasingly involved in collaborative applied research, scholarly research and scholarship in teaching and learning activities with both internal and external partners. According to the Tri-Agency Research Data Management Policy (2021), RDM practices are a key pillar to support research excellence because they "ensure that research is performed ethically and makes good use of public funds, that experiments and studies are replicable, and research results are as accessible as possible."

Loyalist will build upon existing RDM practices within the college and create new data governance structures where required to ensure delivery of equitably conducted and scientifically rigorous research and reporting that continues to strive for excellence at all times. In so doing, we continue to build and strengthen our relationships with our partners, leading the way for excellence in data stewardship and reporting.

# Indigenous Data Governance and Indigenous Data Sovereignty

Loyalist acknowledges the rights of Indigenous peoples with respect to the ownership, control, access and possession of Indigenous data. As per the Tri-Agency Policy, "data related to research by and with the First Nations, Métis, or Inuit whose traditional and ancestral territories are in Canada must be managed in accordance with data management principles developed and approved by these communities, and on the basis of free, prior and informed consent. This includes, but is not limited to, considerations of Indigenous data sovereignty, as well as data collection, ownership, protection, use, and sharing." Loyalist will use the principles of Ownership, Control, Access and Possession (OCAP) and CARE to guide RDM plans.

# **Guiding Principles for Research Data Management**

#### **Research Excellence**

Research Excellence is achieved when data is gathered, examined, and reported ethically and equitably. Implementing RDM strategies, with clearly defined and accessible guidelines, will contribute to the ongoing culture of Research Excellence at Loyalist.

### **Institutional Support for Researchers**

Loyalist will deliver guidance and support to our internal researchers with respect to best practices around the management of data. This may include supporting researchers as they build their own tools and storage, or integrating work into already existing data storage repositories, while continuously striving to ensure best practices are being followed at all times.

#### **Strong Collaborations**

Loyalist is engaged in a wide range of research projects with external collaborators, including many private sector partners who own their confidential research data and intellectual property. An RDM policy will include guidelines for implementing best practices where such research partnerships exist – ensuring that the ethical use and practice of gathering and reporting data is observed from beginning to end, and external partners are protected.

## **Open Dissemination of Results**

As a partner in the post-secondary research community in Canada, eligible to receive funding from the Tri-Agency, RDM planning for public dissemination of research results, where appropriate, is a central component of a strong RDM practices. In implementing this component, Loyalist College will be guided by the FAIR Guiding Principles, which seek to make data Findable, Accessible, Interoperable, and Reusable.

## Scope

This RDM strategy will focus on research data for applied, scholarly and institutional research. The strategy will apply to faculty, staff, and students across all disciplines and Centres at the college.

## **Oversight and Review**

Loyalist will implement an RDM Oversight Committee with regularly scheduled meetings to review any inquiries, update any identified gaps, and review progress toward objectives, adoption of policies and adherence across the college. Roles and degree of accountability will be clearly articulated and assigned. This strategy will be a living document and the priorities and deliverables contained within are subject to change.

## **Institutional Priorities**

As Loyalist implements this institutional RDM strategy, adoption will be supported by various approaches, including (but not limited to):

- Regularly delivering awareness-raising and training activities
- Building out supporting tools and infrastructure as required
- Creating internal documentation and support materials

## **Stakeholders**

Key stakeholders will be included in executing on this strategy and building Loyalist's RDM capacity at various stages of development. Currently stakeholders include:

- The Applied Research and Innovation Office
- Infrastructure Technology Systems
- Library Services
- Institutional Research
- Faculty Deans
- Privacy Officer
- Loyalist Research Ethics Board
- The Indigenous Resource Centre
- The Registrar
- CLLAE
- External research partners
- Loyalist students

## **Ethical, Legal and Commercial Considerations**

The RDM Oversight committee will be the primary point of contact for institutional support of this type as required by researchers. The committee will prepare and maintain a checklist of RDM requirements that need to be addressed by any member of the Loyalist College community using data to ensure compliance

with its ethical, legal, and commercial obligations.

## Other Relevant Internal and External Policies

Loyalist College is undertaking a full data governance implementation project, of which RDM infrastructure will be a key component. Alignment with the following policies will be maintained:

- AOP 235- Intellectual Property Policy
- AOP 220- Integrity in Research and Scholarship
- ADMIN 123- Commercialization Policy
- Tri-Agency Research Data Management Policy (2021)
- Loyalist Library Digital Repositories Policy

# **Strategic Priorities and Goals**

This is a two-year strategy to develop data governance and RDM infrastructure as well as a strong data management culture at Loyalist College.

### 1. Develop RDM Practices Tools and Infrastructure

- > Form a RDM committee with representation from the stakeholder groups
- Create policies and procedures specific to research data management
- Develop a data governance infrastructure

#### 2. Raise Awareness of RDM internally

- develop or adopt resources and training materials
- provide training sessions and workshops
- provide support to departments for implementation of policies and procedures and adherence to them

# **Strategic Priorities and Goals**

#### FY 2023-24

Q1 Form RDM committee and develop detailed action plan and assign tasks

Q2-Q4 Create policies and procedures specific to RDM

Provide training on RDM as a whole

Q1	Develop and/or adopt resources and training materials
Q2 -Q3	Provide training sessions and workshops on policies, procedures, and systems
Q4	Roll out and ongoing support

## **Strategic Priorities and Goals**

- Tri-Agency Research Data Management Policy (2021)
- > Tri- Agency Research Data Management Policy- Frequently Asked Questions (2021)

# **Appendix A**

# Definitions to be defined in Data Governance and RDM Policy

This is a preliminary glossary of terms to be clearly defined in the policies and procedures as they are developed. This is not a complete list and will expand as the RDM policies and processes are developed.

- Data Management Plan
- Research Data
- Applied Research and Innovation Office
- > Applied Research
- Institutional Research
- Scholarly Research
- Metadata
- Research
- Research Data Management
- Research Data Lifecycle
- Archiving
- Data
- Data Deposit
- Data Stewardship
- Digital Research Infrastructure
- Indigenous Research
- Industry Partner Organization
- Intellectual Property
- Preservation

> Researcher