

APPLIED RESEARCH & INNOVATION

# **Research Data Management Strategy**

Last Updated January 2023

#### Introduction

In March 2021, the Canadian Tri-Agency (NSERC, SSHRC, and CIHR) adopted the <u>Tri-Agency Research Data</u> <u>Management (RDM) Policy</u>. This policy requires each post-secondary institution and research hospital eligible to administer Tri-Agency funds to create an institutional RDM strategy, publicly post the strategy and notify the abovementioned agencies when completed. In response, Confederation College, in consultation of key stakeholders, created this draft strategy to support researchers and research staff and promote the use of wise and responsible research data management practices.

The purpose of the Institutional Research Data Management (RDM) Strategy is to foster a culture and develop capacity that supports researchers in adopting responsible RDM practices, aligned with the requirements of the Tri-Agency RDM Policy and following the internationally recognized FAIR Data Principles to make research data findable, accessible, interoperable, and reusable.

For the most part, funded research is usually undertaken in partnership with external industry/community partners who often own the resulting intellectual property. Confederation College upholds the importance of supporting researchers' capacity to securely preserve and use their research data throughout their research projects, to reuse their data over the course of their careers and, when appropriate, to share their data. In instances of research undertaken with external partners, Confederation College supports researchers with advice and resources for safeguarding research, including data sharing, non-disclosure, and other research agreements.

#### Scope

This strategy applies to all Confederation College researchers, including students, staff, and faculty in all disciplines, at the College. Our initial focus will be to ensure that our Tri-Council-funded researchers have the tools, technologies and service supports in place to aid their work and to demonstrate wise data management practices.

## **Oversight and Review**

Progress in this Strategy will be monitored regularly by Confederation College's Applied Research and Innovation staff. The Strategy will be updated on an annual basis, and an annual report on progress will be provided to senior leadership.

## Institutional Support

To support the adoption of our institutional strategy and to enhance the use of wise practices in RDM among researchers, Confederation College will continue to build on the work already completed or in process as we move to achieving our desired RDM state.

Over the next two years we have committed to the following strategic priorities and activities:

## 1. Raise Awareness of RDM

- Develop and implement a communications plan centered on RDM to the College, including a faculty and student engagement strategy.
- Develop and disseminate RDM resources (tip sheets, FAQs, best practice guidelines, etc.).

# 2. Promote RDM Wise Practices and Capacity-Building for Faculty and Staff

- Create and disseminate an RDM tool for wise practices for researchers.
- Provide education and training opportunities for the Confederation College community including:
  - o Workshops
  - Lunch-and-learns
  - Other education and training modalities (asynchronous modules, for example)
- Explore external professional development options for researchers
  - OCAP Training to enhance understanding and competency for participation in research and data collection with Indigenous peoples.

## 3. Provide or Support Access to RDM Tools, Resources, and Infrastructure

- Identify repository storage options for Confederation College faculty and staff for data deposit use.
- Implement data management planning, discovery, and access tools, including offering training on the Data Management Plan (DMP) Assistant Tool offered by the Digital Research Alliance of Canada
- Support Confederation College's Research Ethics Board to update application form and other tools to capture RDM practice details.

## **Ethics Considerations**

All researchers must adhere to Confederation College's policies, notably those found in Chapter 12: Research Administration. Research projects involving human participants are reviewed by the Confederation College's Research Ethics Board which also includes an ethical review of RDM strategies as part of the REB submission. In addition, the Tri-Agency's Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans - TCPS2 (2018) is a resource for researchers as they consider ethical conduct in research involving human participants.

## **Relevant Resources, Standards, and Policies**

- <u>Bill C-15: An Act respecting the United Nations Declaration on the Rights of Indigenous Peoples</u>, Government of Canada
- CARE Principles for Indigenous Data Governance, Global Indigenous Data Alliance
- <u>CIHR Research Data Management Learning Module</u>, Government of Canada
- SSHRC Research Data Archiving Policy, Government of Canada
- <u>Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2)</u>, Government of Canada
- Tri-Agency Framework: Responsible Conduct of Research, Government of Canada
- <u>Tri-Agency Research Data Management Policy</u>, Government of Canada
- <u>Tri-Agency Statement of Principles on Digital Data Management</u>, Government of Canada

# Definitions

*Data management plan* - A "data management plan" 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. DMPs guide researchers in articulating their plans for managing data; they do not necessarily compel researchers to manage data differently" (Tri-Agency Research Data Management Policy, *Frequently Asked Questions*, Government of Canada 2021).

*Research data* – "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." (Tri-Agency Research Data Management Policy, <u>Frequently Asked Questions</u>, Government of Canada 2021).

*Research Data Management* – "Research data management" is "the storage of, access to and preservation of data produced from one or more investigations, or from a program of research. Research 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 preserving data for the long term after the research has concluded. It also includes data-sharing, where applicable" (Social Sciences and Humanities Research Council *Definition of Terms*, Government of Canada 2021).

## **Looking Ahead**

It is important to note that Confederation College's journey towards an ideal state with respect to RDM has just begun. We recognize that RDM is new within the College context, and it will take several years for our college community to establish a level of staff expertise, researcher understanding, internal capacity, and infrastructure to meet our end goals. As we move forward, we will continue to address areas based on evolving requirements from Tri-Agency and the needs of Confederation College researchers.