

Research Data Management

Lunch and Learn Series from the Office of Research Services, the Office of Commercialization and Industry Engagement, and the Office of Innovation and Entrepreneurship

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Objectives

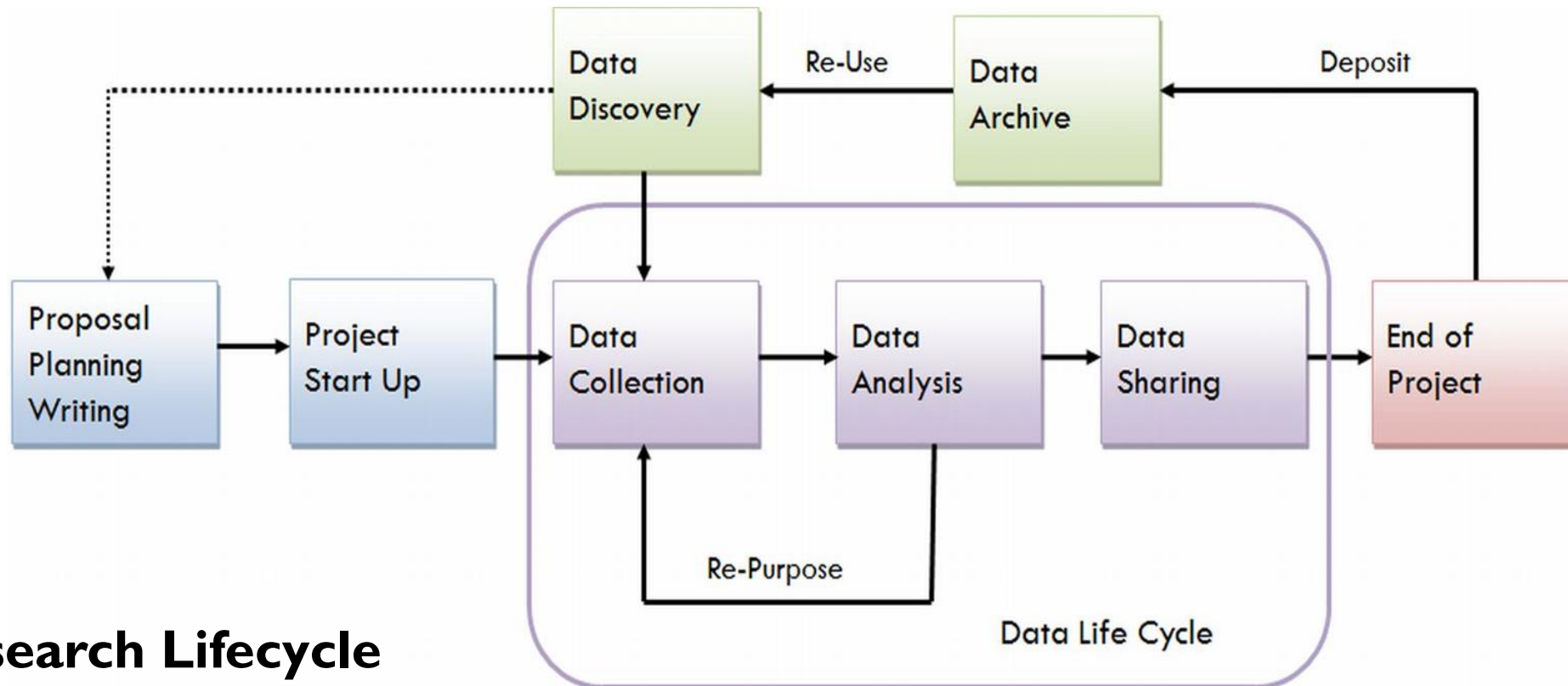
- Define research data management (RDM)
- Address the 3 pillars of the Tri-Agency RDM Policy
- Introduce Dal support services and resources





What is Research Data Management?

A broad term used to describe the structure, organization, maintenance, and overall **stewardship** of research data.



Research Lifecycle

<https://guides.lib.virginia.edu/c.php?g=515290&p=3522215>



RDM Benefits



RDM helps you, as a researcher, and a practitioner



RDM helps the community ([FAIR Principles](#), [OCAP Principles](#), [CARE Principles](#))



RDM helps fulfill legal, ethical, funder, publisher requirements



Tri-Agency RDM Policy

The Tri-Agency Research Data Management Policy will require:

- An Institutional Strategy
- Data Management Plans, phased in, [initial opportunities](#) announced spring 2022
- Data Deposit, to be phased in

Released March 2021 and available here:

http://www.science.gc.ca/eic/site/063.nsf/eng/h_97610.html



A little more about strategy





3.1 Institutional Strategy

Each postsecondary institution and research hospital eligible to administer CIHR, NSERC or SSHRC funds is required to create an institutional RDM strategy and notify the agencies when it has been completed.

The strategy must be made publicly available on the institution's website, with contact information to which inquiries about the strategy can be



Dalhousie's strategy

Dalhousie's [Institutional Research Data Management Strategy](#) documents our RDM services, supports and goals. It was prepared in advance of the [Tri-Agency Research Data Management Policy](#), which encourages responsible use of research funds and the creation of [FAIR](#) (Findable, Accessible, Interoperable, and Reusable) data.



A little more about DMPs





3.2 Data management plans

All grant proposals submitted to the agencies should include methodologies that reflect best practices in RDM. For certain funding opportunities, the agencies will require data management plans (DMPs) to be submitted to the appropriate agency at the time of application, as outlined in the call for proposals; in these cases, the DMPs will be considered in the adjudication process.



Released March 2021 and available here:

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What is a Data Management Plan?

“A formal statement describing how research data will be managed and documented throughout a research project and the terms regarding the subsequent deposit of the data with a data repository for long-term management and preservation.”

<https://codata.org/rdm-terminology/data-management-plan/>

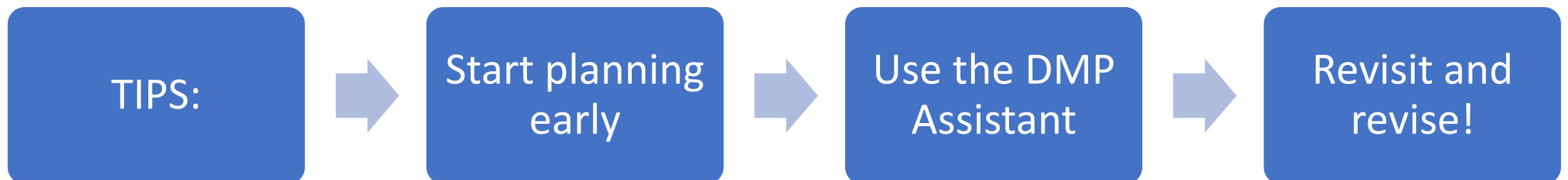
DMPs are living documents that can be modified to accommodate changes throughout the course of a research project.

http://www.science.gc.ca/eic/site/063.nsf/eng/h_97610.html



Elements of a data management plan

1. Data Collection
2. Documentation & Metadata (“data about data”)
3. Storage & Backup
4. Preservation
5. Sharing & Reuse
6. Responsibilities & Resources
7. Ethics & Legal compliance





DMP Assistant

[DMP Assistant](#) is a tool for preparing data management plans (DMPs)

- **Accessible:** online, free to use, French-English bilingual
- **Adaptable:** offers a variety of discipline and methodology specific templates
- **Easy to use:** guidance and examples are provided; users can revisit and revise as often as they like



Welcome to DMP Assistant.

The **DMP Assistant** is a national, online, bilingual data management planning tool developed by the **Digital Research Alliance of Canada (the Alliance)** in collaboration with host institution **University of Alberta** to assist researchers in preparing **data management plans (DMPs)**. This tool is freely available to all researchers, and develops a DMP through a series of key data management questions, supported by best-practice guidance and examples.

DMPs are one of the foundations of good research data management (RDM), an international best practice, and increasingly required by institutions and funders, including the Canadian Tri-Agencies as outlined in their Research Data Management Policy.

Getting started:

- Brief Guide – Data Management Plans
- Brief Guide – Create an Effective Data Management Plan
- Primer – Data Management Plan
- How to Manage Your Data
- Tutorial Videos:
 - Introduction to Data Management Plans (DMPs)
 - Introduction to DMP Assistant
 - Managing DMPs with DMP Assistant
- Webinars:
 - Support Your Research with DMP Assistant 2.0
 - Support Your Research with Data Management Planning

A screenshot of the DMP Assistant login and registration interface. At the top, there are two buttons: 'Sign in' and 'Create account'. The 'Create account' button is highlighted with a red oval. Below the buttons are two input fields: '* Email' and '* Password'. Below the password field is a link for 'Forgot password?' and a checkbox for 'Remember email'. At the bottom, there is a 'Sign in' button.

Sign in Create account

* Email

* Password

Forgot password?

Remember email

Sign in

Project Details Plan overview Write Plan Share Download

expand all | collapse all 1/20

Data Collection (1 / 3)

This section addresses data collection issues such as data types, file formats, naming conventions, and data organisation factors that will improve usability of your data and contribute to the success of your project.

What types of data will you collect, create, link to, acquire and/or record?

B *I* [List] [Table] [Link] [Grid]

Tabular data

Save

Answered less than a minute ago by [Redacted]

What file formats will your data be collected in? Will these formats allow for data re-use, sharing and long-term access to the data?

B *I* [List] [Table] [Link] [Grid]

Save

Guidance Comments

DAL [Redacted]

Examples: numeric, images, audio, video, text, tabular data, modeling data, spatial data, instrumentation data.

Guidance Comments

DAL [Redacted]

Proprietary file formats requiring specialized software or hardware to use are not recommended, but may be necessary for certain data collection or analysis methods. Using open file formats or industry-standard formats (e.g. those widely used by a given community) is preferred whenever possible.

Read more about file formats: [UBC Library](#)

Questions are accompanied by prompts, and you can toggle to leave comments for colleagues (collaborators).

You can also add links, tables and format the text.



A little more about data deposit





3.3 Data Deposit

Grant recipients are required to deposit into a digital repository all digital research data, metadata and code that directly support the research conclusions in journal publications and pre-prints that arise from agency-supported research. Determining what counts as relevant research data, and which data should be preserved, is often highly contextual and should be guided by disciplinary norms.

Grant recipients are not required to share their data. However, the agencies expect researchers to provide appropriate access to the data where ethical, cultural, legal and commercial requirements allow, and in accordance with the FAIR principles and the standards of their disciplines. Whenever possible, these data, metadata and code should be linked to the publication with a persistent digital identifier.



Data Repositories

- A repository is an online database service, an archive that manages the long-term storage and preservation of digital resources and provides a catalogue for discovery and access.
- Stores, curates, enables discovery, access and reuse.

<https://learn.scholarsportal.info/modules/portage/research-data-repositories-101-module-2/>



- [Dalhousie University Dataverse at Borealis](#) is a Canadian hosted, publicly accessible data repository platform
- Dalhousie affiliated researchers can publish and share data with anyone in the world
- Handles a variety of file types and formats
- Allows users to create custom use and access terms
- Assigns DOIs

Research Data Management

This guide is intended to assist researchers with data management and provide access to data management tools and services.

Home

[Dalhousie's Research Data Management Strategy](#)

[Tri-Agency Policies and Guidelines](#)

[The Digital Research Alliance of Canada](#)

[For Further Assistance](#)

Plan

Secure

Organize

Store

Publish

Archive

Training and Events

Dalhousie's Research Data Management Strategy

"Data Management refers to the storage, access and preservation of data produced from a given investigation. 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 investigation has concluded..."

Source: CASRAI. (n.d.). [Research Data Management Glossary](#).

Dalhousie's [Institutional Research Data Management Strategy](#) documents our RDM services, supports and goals. It was prepared in advance of the [Tri-Agency Research Data Management Policy](#), which encourages responsible use of research funds and the creation of [FAIR](#) (Findable, Accessible, Interoperable, and Reusable) data.

Tri-Agency Policies and Guidelines

- [Tri-Agency Research Data Management Policy](#)
Released March 15, 2021.
- [Tri-Agency Statement of Principles on Digital Data Management](#)
Released June 15, 2016.
- [Tri-Agency Open Access Policy on Publications](#)
Last modified December 21, 2016.



Recommended Resources

[DMP Assistant](#) (online tool to help create a plan)

[Digital Research Alliance of Canada:](#)

- DMP Exemplars and templates
- Learning Modules
- Sensitive Data Toolkit
- And much more

[Tri-Agency Research Data Management Policy](#)





Contact Us

We offer workshops, webinars, small group and one-on-one consultations on DMPs, data repositories and more

Research Data Management Team
data.management@dal.ca

RDM Guide
<https://dal.ca.libguides.com/rdm>

News and Events: Follow the library blog and events section for announcements on workshops and training:
<https://libraries.dal.ca/>