# RDM101

**Research data management: what's it all about?**

Presented at: RDM Roadshow
October 2020
Presenters: Erin MacPherson & Melissa Rothfus

# Objectives

This session should help you obtain a basic understanding of data management planning and the resources and tools available to help you. We will cover:

- Video: How to avoid a data management nightmare
- The basics of research data management:
    - Complete the RDM101 modules
    - Review key points and additional information
- Resources and tools for data management planning including:
    - The DMP Assistant
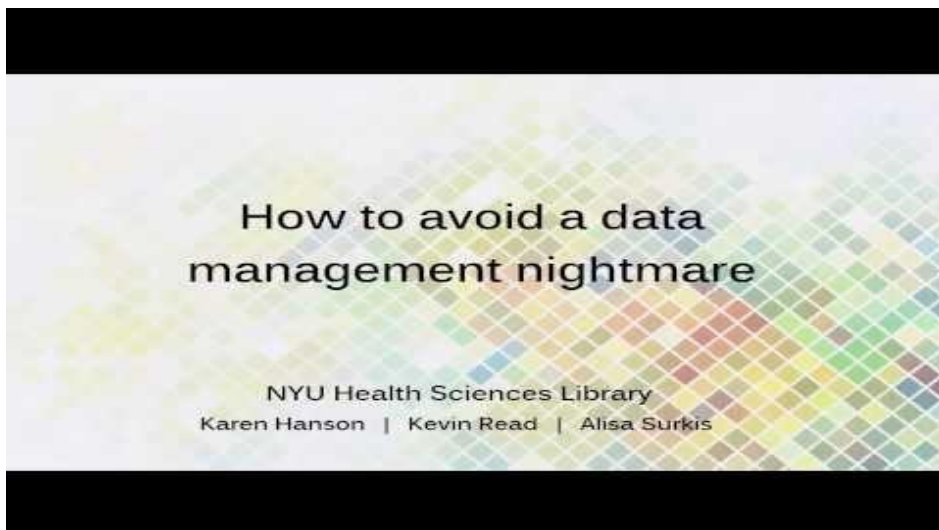    - A brief intro to data repositories

# Part 1: Video

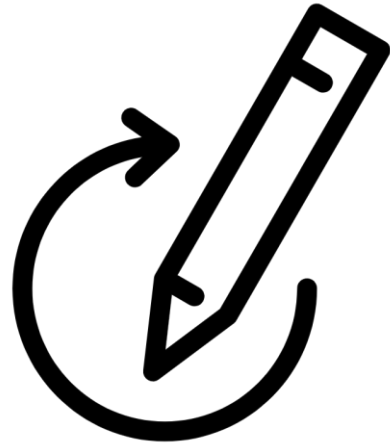## How to avoid a data management nightmare



NYU Health Sciences Library. (2014, March 16). *How to avoid a data management nightmare* [Video file]. Retrieved from https://youtu.be/nNBiCcBlwRA



NYU Health Sciences Library. (2014, March 16). *How to avoid a data management nightmare* [Video file]. Retrieved from https://youtu.be/nNBiCcBlwRA

# Part 2. Learn the basics of research data management

RDM101 Module Review

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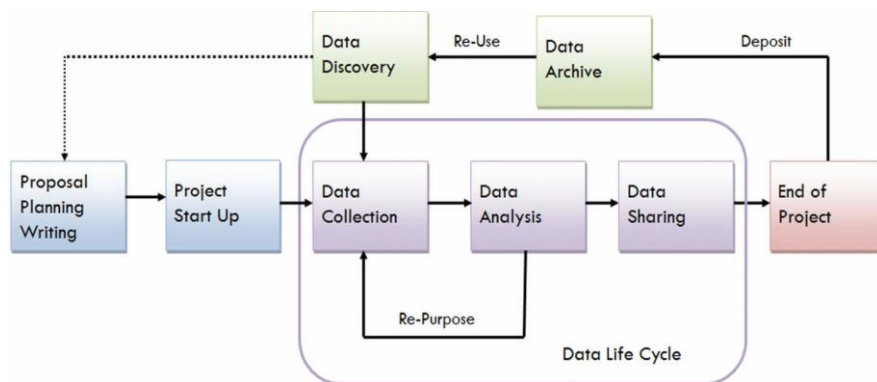
Portage Training Modules:
RDM 101

- **Module 1:** Background and Learning Objectives

- **Module 2:** What is Research Data Management (RDM?)

- **Module 3:** Canadian Policy Review

- **Module 4:** Steps Towards Good Research Data Management.

# Key points

**The next 4 slides provides more detail and highlights some of the key points from the RDM 101 modules.**

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# What is research data management?

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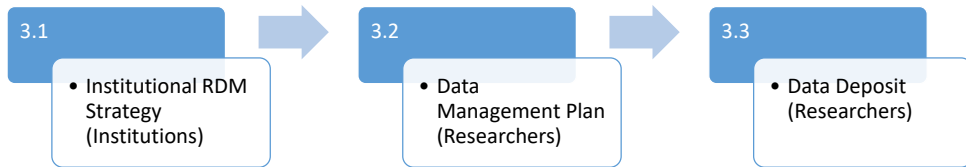
**Research Lifecycle**

http://data.library.virginia.edu/data-management/lifecycle/

# Draft Tri-agency RDM Policy

In June 2016, NSERC, SSHRC and CIHR adopted the *Tri-Agency Statement of Principles on Digital Data Management.* In 2018, the DRAFT *Tri-Agency Research Data Management Policy* was released.

Section 3 of the draft *Policy* contains important information:

| 3.1 | | 3.2 | | 3.3 |
|---|---|---|---|---|
| • Institutional RDM Strategy (Institutions) | → | • Data Management Plan (Researchers) | → | • Data Deposit (Researchers) |

Policy release in early 2020, with phased-in implementation that aligns with the state of readiness of the Canadian research community. *Please note the policy applies to grant recipients and to institutions administering tri-agency funds. It does not apply to scholarship, fellowship or Chair holders.* However, good research data management is always a good idea!

FAQS and further information :
http://science.gc.ca/eic/site/063.nsf/eng/h_547652FB.html

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# Journal requirements

**nature research**

Reporting standards and availability of data, materials, code and protocols

An inherent principle of publication is that others should be able to replicate and build upon the authors' published claims. A condition of publication in a Nature Research journal is that **authors are required to make materials, data, code, and associated protocols promptly available to readers without undue qualifications.** Any restrictions on the availability of materials or information must be disclosed to the editors at the time of submission. Any restrictions must alsobe disclosed in the submitted manuscript.

After publication, readers who encounter refusal by the authors to comply with these policies should contact the chief editor of the journal. In cases where editors are unable to resolve a complaint, the journal may refer the matter to the authors' funding institution and/or publish a formal statement of correction, attached online to the publication, stating that readers have been unable to obtain necessary materials to replicate the findings.

On this page
- Reporting requirements
- Availability of data
- Availability of materials
- Availability and peer review of computer code and algorithm
- Experimental protocols
- Pre-registration
- Replication studies
- Clinical trials
- Nature Research journals' editorials

Editorial policies
Authorship
Competing interests
Confidentiality
Plagiarism and duplicate publication
Image integrity and standards
Preprints & Conference Proceedings
Peer-review policy
Reporting standards and availability of data, materials, code and protocols
Ethics and biosecurity
Correction and retraction policy
Press and embargo policies
Self archiving and license to publish

https://www.nature.com/nature-research/editorial-policies/reporting-standards

Some journals may require you to share your data as a condition of publication. Data sharing policies can sometimes be found in the **"Instructions for Authors"** or **"Author Guidelines."**

Some journals may provide a list of repositories, but if not, contact us for assistance.

**Examples of some data-sharing policies:**
- **PLOS:** Data availability policy
- **SAGE Publishing:** Research Data Sharing Policies
- **Springer Nature:** Research Data Policies
- **Taylor & Francis:** Understanding our data sharing policies
- **Wiley:** Sharing and Citing your Research Data

Portage Training Modules:
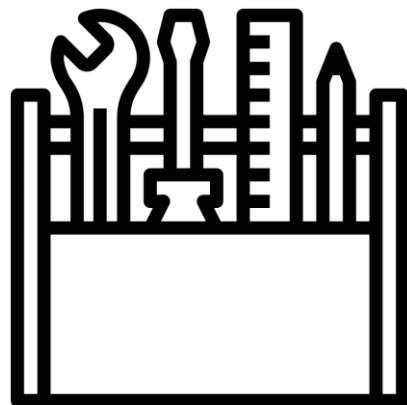RDM 101

https://portagenetwork.ca/training-resources/portage-training-resources/rdm-101/

- **Module 1:** Background and Learning Objectives

- **Module 2:** What is Research Data Management (RDM?)

- **Module 3:** Canadian Policy Review

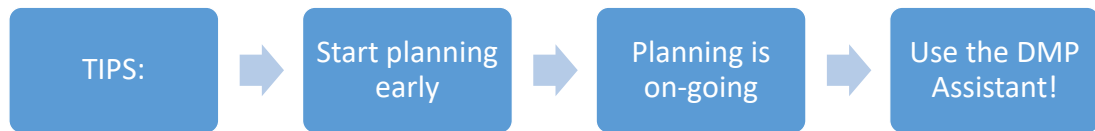- **Module 4:** Steps Towards Good Research Data Management.

# Part 3:
Resources and tools for data management planning

# 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

| TIPS: | → | Start planning early | → | Planning is on-going | → | Use the DMP Assistant! |

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# Exemplar plans

The Portage Network recently released 3 exemplar data management plans!

- Digital humanities
- Digital humanities and secondary data
- Mixed methods

You can find these resources and more guidance on data management planning under the Training Resources section of the Portage website.: https://portagenetwork.ca/portage-training-resources/

More exemplar plans will be developed in the future!



https://portagenetwork.ca/portage-training-resources/

# DMP Assistant

**The Portage Network:**
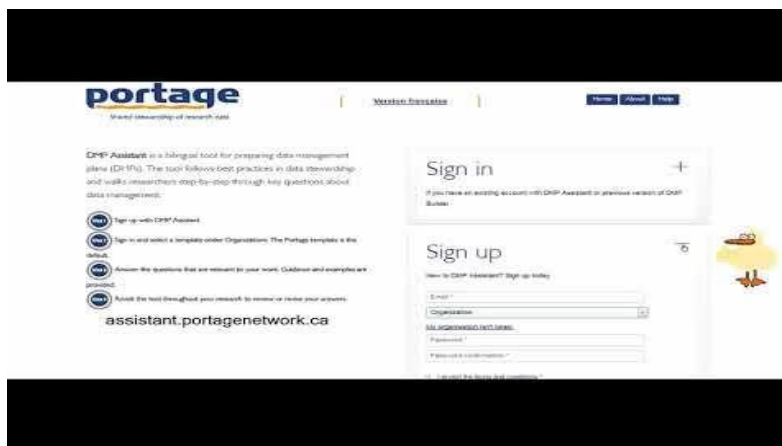https://portagenetwork.ca/ | https://reseauportage.ca

**Tool:**

DMP Assistant is an all-purpose tool for preparing data management plans (DMPs).

- takes researchers step-by-step through a number of key questions about data management.
- Guidance and examples are provided.
- Not all questions will apply to all research projects. Researchers are encouraged to answer the questions relevant to their work.
- Researchers should revisit the tool throughout their research to review or complete their responses.

# Video: DMP Assistant



Dalhousie Libraries. (2019, March 12). *DMP Assistant* [Video file]. Retrieved from https://youtu.be/uOh2XmF6XTs

The transcript for this video is located here: https://cdn.dal.ca/content/dam/dalhousie/pdf/library/Transcripts/DMP_Assistant.pdf

# Thank you!

Images: The Noun Project:
https://thenounproject.com/
(Premium account)