Research Data Management Tools: When Talking to Faculty/Students

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Current Issues

Recent activity, June 2016

- Tri-Agency (SSHRC, NSERC, CIHR): Statement of Principles on Digital Data Management

Source:
http://www.science.gc.ca/default.asp?lang=En&n=83F7624E-1
Current Issues

Tri-Agency Statement of Principles on Digital Data Management

- Data Management Plans
  
  “Data management plans are key elements of the data management process”
Current Issues

Tri-Agency Statement of Principles on Digital Data Management

- Data Sharing
  
  “Research data resulting from agency funding should normally be preserved in a publicly accessible, secure and curated repository”
Current Issues

Tri-Agency Statement of Principles on Digital Data Management

- Metadata
  “All research data should be accompanied by metadata that accords...best practices”
Tools: Data Management Plans

- Website: onesearch.library.utoronto.ca/researchdata

Organizing your Data

Organizing Files

Using version control, a consistent file system and file naming structure makes your data easier to understand, share and preserve. Some advice for naming files:

- Avoid special characters
- Capitals or underscores instead of periods or spaces; try CamelCase
- Use 32 or fewer characters
- Use date format ISO 8601:YYYYMMDD
- Include version information (if applicable)
- Use meaningful names
Tools: Data Management Plans

Data Management Plans

A Data Management Plan (DMP) documents your data organization decisions. A DMP is a short document created at the start of your research which addresses how you will work with your data.

Common topics addressed in a DMP include:

- Types of data that will be created
- Policies (funding, legal and institution) that 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 the data will be organized and documented
- Where the data will be stored during and after the research
- How the data will be shared and under what provisions

There are free tools available to help draft a DMP:

- DMPonline
- DMPTool
- DMP Assistant

These tools have templates that reflect criteria to meet funding requirements, and can help design a plan that is relevant to data in your research domain. You can also draft your own DMP rather than relying on a template.
Tools: Data Sharing

- Website: oneresearch.library.utoronto.ca/researchdata

Sharing your Data

Sharing Requirements

Funding Bodies

Research funding bodies may require data to be shared. Of the Tri-Agencies, only the CIHR currently requires certain types of data to be shared:

"CIHR will now require grant recipients to deposit bioinformatics, atomic, and molecular coordinate data into the appropriate public database, as already required by most journals, immediately upon publication of research results". The public database/archive requirements are as follows:
Tools: Data Sharing

Topics covered:

- **Sharing requirements:**
  - Funding agencies
  - Publishers

- **Preparing Data to Share**
  - Metadata
  - Intellectual Property
Tools: Data Sharing

Topics covered:

- Publishing Data
  - Data repositories
  - Citing data
Tools: Metadata

Metadata

Metadata is used to describe data so that other researchers can find it and use it appropriately. There are many metadata standards available for specific research disciplines or types of data. Since the universe of research data is so diverse, it is impossible to create one standard set of metadata that will be relevant to all datasets. Consider if someone were to present you with a dataset you had never seen before, what questions would you have? Instrumentation used, sampling methodologies, geographical or temporal extent are all potential pieces of information that a data repository might wish you to include in the metadata, to help provide context for future generations of researchers. Your chosen repository should be able to assist with determining what metadata to record. With your metadata you will also include any data documentation you have created while you built your dataset.
Tools: Faculty & Students

- Website:
  onesearch.library.utoronto.ca/researchdata

Research Data Management

Welcome to the University of Toronto Libraries' Research Data Management resources! Good data management is an important part of the research process and is increasingly emphasized by institutions and funding agencies. University of Toronto Libraries has data management expertise and can assist you in the following areas:

- Organizing your data
- Sharing your data
- Preserving your data
- Contact us
Workshop

Workshop: Research Data Management

Date: Monday November 14, 2016
Time: 2:00 – 4:00 PM
Place: Alice Moulton Room, Gerstein
Questions

- Send in questions:
  rdm@utoronto.ca
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