MacOdrum Library

Research Data Management

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Outline

- Why the Library?
- What is research data management?
  - Its benefits
  - Its key components
- Research data management plans
- Tools
Acronyms

- **Research data management**
  - aka RDM
  - aka data management
    - *aka DM*

- **Research data management plan**
  - aka RDMP
  - aka data management plan
    - *aka DMP*
Preamble

- Why the Library?*
  - Research partner
  - Support the research endeavor
  - RDM expert
  - Partner with CU Research Office
  - The scholarly life-cycle
  - Discipline-agnostic

Source: Shorish, November 2015
Why the Library (cont’d)

- **Our role***
  - Information
  - Consultation

- **Challenge***
  - Determine how we can help researchers advance their research

*Source: Rambo, October 2015
Research data

- Why are research data important?
- Sharing research data
What is it?

Includes
- Sound practices
- Data curation
- Data stewardship
Creating data
- design research
- plan data management (formats, storage etc)
- plan consent for sharing
- locate existing data
- collect data (experiment, observe, measure, simulate)
- capture and create metadata

http://www.data-archive.ac.uk/create-manage/life-cycle
Creating data

- design research
- plan data management (formats, storage etc)
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http://www.data-archive.ac.uk/create-manage/life-cycle
Processing data

- enter data, digitise, transcribe, translate
- check, validate, clean data
- anonymise data where necessary
- describe data
- manage and store data

http://www.data-archive.ac.uk/create-manage/life-cycle
Research data lifecycle (cont’d)

Analysing data

- interpret data
- derive data
- produce research outputs
- author publications
- prepare data for preservation

http://www.data-archive.ac.uk/create-manage/life-cycle
Preserving data

- migrate data to best format
- migrate data to suitable medium
- back-up and store data
- create metadata and documentation
- archive data
Giving access to data

- distribute data
- share data
- control access
- establish copyright
- promote data
Research data lifecycle (cont’d)

Re-using data

- follow-up research
- new research
- undertake research reviews
- scrutinise findings
- teach and learn

http://www.data-archive.ac.uk/create-manage/life-cycle
Benefits of RDM
- Confirmation of original findings
  - Essential if defending your research
- Further research
- Teaching
- Planning follow-up studies

Why is it important now?
Starting research

- Need an RDMP
- Why an RDMP
  - Safety
  - Efficiency
  - Quality
- If no RDMP?
  - Potential problems
Key components of RDM

- Elements of an RDMP*
  - Funder and data description
  - Data collection
  - Documentation and metadata
  - Storage and backup
  - Preservation
  - Data sharing and re-use
  - Responsibilities and resources
  - Ethics and legal compliance

*Source: Portage: DMP Assistant
Some tips

- Mark it down!
- It is not written in stone!
- Easy!
Tools

- **Help with RDM**
  - [https://library.carleton.ca/services/research-data-management](https://library.carleton.ca/services/research-data-management)
  - Consultations

- **Help with RDMPs**
  - Portage, [https://assistant.portagenetwork.ca/](https://assistant.portagenetwork.ca/)
  - Word template, [https://library.carleton.ca/services/research-data-management#how](https://library.carleton.ca/services/research-data-management#how)

- **Where to put your data**
  - Dataverse
Still don’t believe me?

- What could happen if you don’t practice good RDM?

https://www.youtube.com/watch?v=N2zK3sAtr-4#t=17
In summary …

- Hopefully, you now know
  - Why the Library is here to help you
  - What RDM and RDMPs are
    - Their benefits
    - Their key components
    - Some helpful tools
Resources

- DMP Assistant: Portage network
  https://portagenetwork.ca/

- Our webpage
  https://library.carleton.ca/services/research-data-management

- UK Data Archive Research Life Cycle
  http://www.data-archive.ac.uk/create-manage/life-cycle
http://www sr ithaka org/publications/research data management/

http://acrl ala org/techconnect/post/the library as research partner
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