Research data management

"What do I need to know?"

Jez Cope, Research Data Manager

University Library

Outline

- What is ...
  - *... research data?*
  - *... research data management?*
- Why is it important now?
- What do I need to do?

Definitions

Research data
material collected and analysed to support research conclusions

Research data management
ensuring data are safe; secure; organised; documented; preserved; appropriately shared

Why is this important?

Why now?

Fundamentally...

Academic research is about **solving problems**, **creating knowledge** and **communicating it to the world**

Drivers

Technology

Culture

Policies (funder — publisher — institution)

Legal requirements

Benefits

Impact

Raise profile/influence

Attract collaborations

Citations

Enable new types of research

Risks

Confidentiality

Getting scooped

Practical expectations

1. Write a data management plan
2. Manage data during project
3. Curate, preserve & share data

1. Write a data management plan

Each funded project should have one

University support

- <u>DMPonline</u> for templates & expert guidance
- We will comment on drafts: *<u>rdm@sheffield.ac.uk</u>*

2. Manage data during project

Documentation/metadata; organisation; backup; security

University support

- Doctoral Development Programme
- *sheffield.ac.uk/library/rdm*
- Enquiries service: *rdm@sheffield.ac.uk*
- *Online training module (forthcoming)*

3. Curate, preserve and share data

- Data underlying published conclusions
- Data of particular value to the community
- Other useful stuff (e.g. negative results)

University support

- Data Catalogue/Repository (powered by figshare)
- *sheffield.ac.uk/library/rdm*
- Enquiries service: *rdm@sheffield.ac.uk*

Data access statement

"The data underlying this publication can be obtained..."

- "...by downloading from http://dx.doi.org/10.15131/xzy"
- "...on request by contacting *research-group-name@sheffield.ac.uk*"
- "...by contacting our commercial partner *xyz*"
- "No new data were created during the course of this study"

Get your research data in ORDA

The hub for managing and sharing research data at Sheffield

Learn more about looking after your data at: sheffield.ac.uk/library/rdm

or upload your data now at: sheffield.figshare.com

Any questions? Email us: rdm@sheffield.ac.uk

Questions for you

What is standard practice in your field?

What support do you need?

Questions for me?

rdm@sheffield.ac.uk

Additional material follows...

In a browser, press <ESC> to navigate

Common metadata standards

- Dublin Core
  - Minimal but widely applicable>
- ISATab — Investigation, Study, Assay
  - Aimed at lab & computational science
- DDI — Data Documentation Initiative
  - Aimed at social science
- SDMX — Statistical Data and Metadata eXchange
  - Aimed at statistical analysis