## RESEARCH DATA MANAGEMENT

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# RESEARCH DATA MANAGEMENT IN THE UK

## DEFINITIONS

#### Research data

materials *created or collected* to inform and validate research conclusions

### Research data management

1) looking after data *during* a project; 2) preserving and sharing data *after* a project

## RESEARCH FUNDING IN THE UK

- Research Councils UK (government funding)
- European Community (Horizon 2020)
- Charities (primarily science & medicine)
- Industrial partnerships

## RESEARCH COUNCILS UK

- Arts & Humanities Research Council
- Biotechnology & Biological Sciences Research Council
- Economic & Social Research Council
- Engineering & Physical Sciences Research Council
- Medical Research Council
- Natural Environment Research Council
- Science & Technology Facilities Council

## LEGAL CONSIDERATIONS

- Data Protection
- Freedom of Information
- Contractual obligations

## EXPECTATIONS ON INSTITUTIONS

- Policy
  - http://www.sheffield.ac.uk/ris/other/govethics/grippolicy/practices/all/rdmpolicy
- Infrastructure
- Training & guidance

## NATIONAL RESOURCES

- Jisc: national collaborations
- Digital Curation Centre: training, advice, guidance, policy, services, e.g. DMPonline
- National data centres, especially:
  - NERC data centre network
  - UK Data Archive (economic & social)
  - Archaeological Data Service

## RESEARCH SUPPORT IN THE LIBRARY

Head of Research Support and Scholarly Communications

Research Data Manager

Open Access Manager

Research Support Assistant

Research Support Librarian

## BASICS

### What we expect of researchers

- 1. Write a data management plan
- Look after their data during collection, processing & analysis
- 3. Archive and share data with others

## WRITE A DATA MANAGEMENT PLAN

Required for all funded projects (TUoS policy)
Also for *all* RCUK funding and most charities

Starting point: DMPonline

## LOOK AFTER DATA

- Organisation and documentation
  - File & folder naming
  - Metadata
- Information security: backup & confidentiality
- Quality assurance
- Rights

## ARCHIVE & SHARE DATA

- In order of preference:
  - 1. Discipline-specific repository
  - 2. ORDA
  - 3. Archive offline + metadata-only in ORDA
- Data citations/Data access statements

## OUR SERVICE OFFER

## WHAT WE DO

Develop and support ORDA (Online Research Data)
Review and feed back on data management plans
Provide training & guidance

Facilitate RDM research groups, institutes, departments and faculties

Encourage local-level processes & services where sensible

Monitoring and raising awareness of compliance needs

## WHO ELSE HELPS

- CICS (plus Faculty & Dept IT staff)
  - Active data storage (10TB free per research group)
  - Information Security & Data Protection
- RIS (plus Faculty & Dept support staff)
  - Data management planning
  - Costing
- Research Software Engineering
  - Skills for reproducible research

## CURRENT PROJECTS

University-wide ORDA rollout

EPSRC compliance stock-take

Integrating local RDM systems: Insigneo

Faculty-level guidance: DMPonline in MDH

RDM 101 online module with White Rose libraries

Digital Preservation: Rosetta ↔ figshare integration

## THE FUTURE?

Harvest metadata from external repositories

Identify and fill gaps in infrastructure

Data special collections

Software & Data Carpentry training

Adopt and scale local data management systems

Visualisation

Your ideas here...