

RDM through a UK lens - New Roles for Librarians?

Stuart Macdonald

Research Data Management Service Coordinator

Research & Library Services

University of Edinburgh

Email:

stuart.macdonald@ed.ac.uk



Outline

- **Background**
- **Traditional Data Library Services**
- **RDM Programme at University of Edinburgh**
- **Drivers: Funders & Jisc**
- **Data Services and initiatives at University of Edinburgh**

Background

- EDINA and University Data Library (EDL) together are a division within Information Services (IS) of the University of Edinburgh.
- EDINA is a Jisc-designated national centre for digital expertise & online service delivery
- The Data Library assists Edinburgh University users in the discovery, access, use and management of research datasets.
- Research & Library Services, part of Library and University Collections coordinate the RDM Programme at Edinburgh

'Traditional' Data Library Services



THE UNIVERSITY *of* EDINBURGH

What is a data library?



WIKIPEDIA
The Free Encyclopedia

share your knowledge.

A **data library** refers to the services that foster use of collections of numeric and/or geospatial data sets for **secondary use** in research.

A data library is normally part of a larger institution (academic, scientific, medical, governmental, etc.) established to serve the data users of that organisation.

The data tends to be housed locally or via subscription and accessed through various means (SFTP, CD-/DVD-ROMs or server download).

A data library may also maintain subscriptions to licensed data resources.

Data Library: History

- Established out of the *Program Library Unit* in early 1980s to provide access to data on mainframes, e.g. 1981 population census data. Was part of EUCS, now Information Services
- Became a Jisc national data centre as EDINA in 1993
- Data Library continues University remit
 - celebrated 30th anniversary in 2013

Edinburgh University Data Library



THE UNIVERSITY of EDINBURGH

Schools & departments

[Q Search](#)



[Contact](#)

[Home](#) [University home](#) > [Schools & departments](#) > [Information Services](#) > [Research Support](#) > [Data Library](#)

[Students](#)

[Researchers & Teachers](#)

[Support staff](#)

[Library](#)

[Computing](#)

[Learning Technology](#)

[Research Support](#)

[Help & Consultancy](#)

[About IS](#)

[Service info](#)

[Related links](#)

[Help](#)

[Your feedback about this page](#)

Data Library

Overview

Data Library catalogue and consultancy, data management planning, guidance, training, and data repository service.



Data Library catalogue & consultancy

Finding, accessing, and using research data for analysis, teaching or coursework.

[Data Library catalogue & consultancy](#)



Data repository: Edinburgh DataShare

A service for researchers of the University of Edinburgh to publish their research data.

[Data repository: Edinburgh DataShare](#)



MANTRA: Research Data Management Training

Online training course for research students and staff with software practicals.

[MANTRA training course](#)



Edinburgh Research Data Blog

A blog with progress on the university RDM programme and other research data activities.

[Edinburgh Research Data Blog](#)

Related links

[EDINA and Data Library Division](#)

Data Library Consultancy

- finding...
- accessing ...
- using ...
- managing ...

Primarily supporting research in the social sciences but not exclusively so.

Building relationships with researchers via:

- Postgraduate teaching activities,
- Research support projects,
- IS Skills workshops,
- Research Data Management training
- Through traditional reference interviews.

Data Library Resources:

- Large-scale Government survey data
- Country and regional level time-series data
- Population and Agricultural Census data
- Financial and market data
- Geospatial data
- Resources for teaching

The screenshot shows the 'Data Library Catalogue' website. At the top, there is a navigation menu with links for 'Researchers & teachers', 'Support staff', 'About IS', 'Services', 'Library', 'Computing', 'Learning technology', and 'Research support'. Below this is a 'Research data support' header. The main content area is titled 'Finding data' and 'Data Library Catalogue'. It features a search bar with the placeholder text 'Enter your keywords' and a 'Search' button. Below the search bar, there is a brief description: 'Find data on the internet or by University subscription to re-use for your own study, research, or teaching. Browse by title, subject category, or region.' There are two main sections: 'By title' with a link to 'All data listings', and 'By subject category'. The 'By subject category' section displays a grid of ten categories, each with a representative image, a title, a brief description, and a link to the category page. The categories are: Population and Area Statistics, Socio-economic Studies, Social Attitudes and Behaviour, Elections and Public Opinion, Housing, Migration and Transport, Health and Nutrition, National and International Indicators, Finance and Markets, Geo-spatial and the Environment, and Educational Outcomes and Institutions.

Researchers & teachers
Support staff
About IS
Services
Library
Computing
Learning technology
Research support

Research data support

Finding data

Data Library Catalogue

Enter your keywords

Find data on the internet or by University subscription to re-use for your own study, research, or teaching. Browse by title, subject category, or region.

By title

- [All data listings](#)

By subject category

- Population and Area Statistics**
Censuses; demography; migration.
[Population and Area Statistics](#)
- Socio-economic Studies**
Social change; living conditions; employment.
[Socio-economic Studies](#)
- Social Attitudes and Behaviour**
Public opinion; constitutional change; lifestyle; crime and justice.
[Social Attitudes and Behaviour](#)
- Elections and Public Opinion**
Electoral systems and processes; voting patterns.
[Elections and Public Opinion](#)
- Housing, Migration and Transport**
Housing conditions and trends; homelessness; neighbourhood characteristics; refugees and political asylum; travel trends; road casualties.
[Housing, Migration and Transport](#)
- Health and Nutrition**
Health indicators, determinants and rankings; healthcare systems and decision-making.
[Health and Nutrition](#)
- National and International Indicators**
Macro-level time series data for finance, trade, economic activity, energy, climate, globalization, education, health, wealth, poverty, social security and welfare.
[National and International Indicators](#)
- Finance and Markets**
Annual reports and company accounts; stock exchange and banking analysis; current and historical global information.
[Finance and Markets](#)
- Geo-spatial and the Environment**
Current and historical maps; earth sciences.
[Geo-spatial and the Environment](#)
- Agriculture and Rural Studies**
Agricultural and fisheries censuses and surveys.
[Agriculture and Rural Studies](#)
- Educational Outcomes and Institutions**
Educational systems; indicators and comparisons.
[Educational Outcomes and Institutions](#)
- History and Culture**
Historic censuses, surveys, directories, archives and atlases; educational multimedia resources.
[History and Culture](#)

Data service delivery models

3 'traditional' Data Libraries in the UK: Edinburgh University Data Library; London School of Economics; Oxford University

In Europe, model primarily is of National Data Archives in the Social Sciences (CESSDA)

In the US, data libraries at all research-intensive universities, some in research centres (e.g. Cornell), some in libraries (John Hopkins, Michigan) – broadening out to be RDM services

In Canada, data libraries are predominantly situated in University Libraries, manned mainly by librarians

Data Liberation Initiative (DLI)

- Program between Statistics Canada and Canadian Universities to provide affordable access to public data files for researchers
 - Subscription based
- Housed in academic libraries
 - Due campus-wide coverage
- Before 1996 – 9 Universities with Data Library facilities
- 1996 - 50 became members within the 1st year
- 2011 - 75 Universities with data service capability (out of a total of 98)

University of Edinburgh RDM Programme

Information Services



Research Data Management [Contact](#)

[University home](#) > [Schools & departments](#) > [Information Services](#) > [Research Support](#) > [Research Data Management](#) > **Research Data Management Home**



RESEARCH DATA MANAGEMENT
Dealing with Data

Research Data Management Programme

[Research Data Management programme](#)

Why is data management important for your research?

Managing research data is becoming increasingly important. Find out how you can benefit from managing your data effectively

[Why is data management important?](#)



DMP ONLINE

Data management planning

Guide on how to develop data management plans

[Data management planning](#)



Storage & backup solutions

Information on storing and backing up your data

[Storage & backup solutions](#)



Sharing & publishing data

Find out about how to share and publish your data

[Sharing & publishing data](#)



RDM training
Further details on the Research Data Management training across the University

[RDM training](#)



Help & support
Contact details for Information Services staff who can help you with any RDM questions

[Help & support](#)

Quick links

- [Research Data MANTRA](#)
- [Research Data Blog](#)
- [PURE](#)
- [ERI: Research Support and Development](#)

RDM Services and Support

RDM Roadmap – sets out a high-level programme of RDM infrastructure, service and support deliverables to implement Edinburgh's RDM Policy

3 phases: August 2012 – May 2015

- **Services already in place:**
 - **Data management planning (F-2-F, DMPonline)**
 - **Active working file space = DataStore**
 - **Data publication repository = DataShare**
- **Services in development:**
 - **Long term data archive = DataVault**
 - **Data Asset Register (DAR)**
- **RDM support: Awareness raising, training & consultancy**

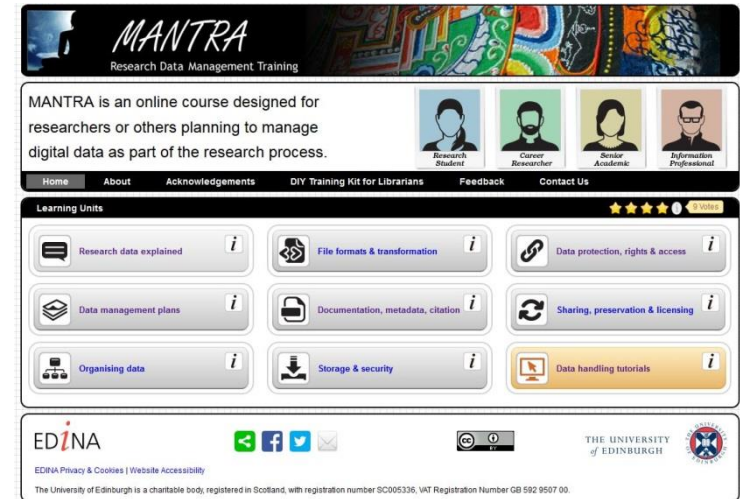
Data Library & RDM

- **Research data management training:**
 - Research Data MANTRA
- **Institutional data repository provision**
 - Edinburgh Datashare
- **Assistance with deposit in national archives to comply with funder requirements**
- **Assistance with Data Management Plans (DMPs)**

Research Data MANTRA

Open online course aimed at researchers managing digital data as part of the research process

Units map on the research data lifecycle



The screenshot shows the MANTRA website interface. At the top, there is a banner with the text "MANTRA Research Data Management Training" and a colorful abstract graphic. Below the banner, a navigation menu includes "Home", "About", "Acknowledgements", "DIY Training Kit for Librarians", "Feedback", and "Contact Us". A central text block states: "MANTRA is an online course designed for researchers or others planning to manage digital data as part of the research process." To the right of this text are four profile icons labeled "Research Student", "Career Researcher", "Senior Academic", and "Information Professional". Below the navigation menu is a "Learning Units" section with a star rating of 4.5. The units are arranged in a grid:

- Research data explained
- File formats & transformation
- Data protection, rights & access
- Data management plans
- Documentation, metadata, citation
- Sharing, preservation & licensing
- Organising data
- Storage & security
- Data handling tutorials

At the bottom of the page, there is a footer with the EDINA logo, social media icons for Facebook, Twitter, and YouTube, and the University of Edinburgh logo. The footer also contains the text: "EDINA Privacy & Cookies | Website Accessibility" and "The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336, VAT Registration Number GB 592 9507 00."

- *PLUS* software-specific data handling practicals
- Open online, self-paced course for researchers
- RDM DIY Training Kit for Librarians
- CC licences


Edinburgh DataShare

Edinburgh DataShare is an online multi-disciplinary data repository for Edinburgh researchers who want to publish and openly share their data .

Citation
ODC Attribution licences
Persistent Identifiers
OAI-PMH

Information Services

Edinburgh DataShare



Search Edinburgh DataShare

Advanced Search

Browse

- Edinburgh DataShare
- Research Communities
- Date Issued
- Data Creators
- Titles
- Subjects

My Account

- Login
- Register

RSS Feeds

- RSS 1.0
- RSS 2.0
- Atom

What is Edinburgh DataShare?

Edinburgh DataShare is an online digital repository of multi-disciplinary research datasets produced at the University of Edinburgh, hosted by the [Data Library](#) in Information Services.

Edinburgh University researchers who have produced research data associated with an existing or forthcoming publication, or which has potential use for other researchers, are invited to upload their dataset for sharing and safekeeping. A persistent identifier and suggested citation will be provided.

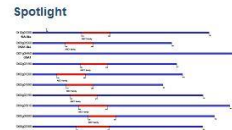
Deposit Your Data

Research Communities

Select a community to browse

- Business School
- Edinburgh College of
- Edinburgh Law School
- Information Services
- Moray House School
- Royal (Dick) School of
- School of Biological
- School of Biomedical
- School of Chemistry
- School of Clinical Sci
- School of Divinity
- School of Economics
- School of Engineering
- School of GeoScience
- School of Health In S
- School of History, Cla
- School of Informatics
- School of Literatures,
- School of Mathematic
- School of Molecular
- School of Philosophy,
- School of Physics and
- School of Social and

Spotlight



Phosphorylation sites of O₂ taurin protein domains
New to Edinburgh DataShare - The reduced
kinome of *Ostreococcus tauri*: core
eukaryotic signalling components in a
tractable model species : School of
Biological Sciences.

Information for Depositors

- About Edinburgh DataShare
- Checklist for deposit

Item submission

Describe → Upload → Review → Librarian → Deposit Agreement → Complete

Describe Item

Title:
Enter the main title of the dataset.

Type:
Image
Interactive Resource
Moving Image
Service
Software

Select the type(s) of content of the item. To select more than one value in the list, you may have to hold down the 'CTRL' or 'Shift' key. Please select 'Dataset' if in doubt.

Depositor:
Surname First name(s)
Enter the name of the person entering this record.

Data Creator:
Surname First name(s)
Enter the names of the data creators / principal investigators of this item below. If the name of the data creator is unknown please be sure to fill out the Publisher field.

Data Publisher:
Enter the name of the organisation or service responsible for making the data available.
Example: University of Edinburgh, School of GeoSciences, Institute of Geography. Note:
Publisher is a mandatory field if no Creator is specified.

Funder:
BBSRC - Biotechnology and Biological Sciences Research Council
Carnegie Trust for the Universities of Scotland
EPSRC - Engineering and Physical Sciences Research Council
ERC - European Research Council
ESA - European Space Agency
Select each agency that funded the creation of the dataset.

Optimise the "findability" of your submission via search engines and link to published papers by adding supplementary information.

- Provide an abstract and attach keywords.
- Link to publications and other versions of data item.
- Acknowledge sources, place an embargo, describe file structure.
- Add geography dates, and language information.

Entries marked with a * are mandatory

Institutional RDM Infrastructure Drivers: Funders & Jisc



DRIVERS



Organisation for Economic Co-operation and Development describes data as a public good that should be made available

Research Councils UK in its 2009 code of good research conduct says data should be preserved and accessible for 10 years +



Research Funder data policies increasingly demanding of institutional commitment and provisions...

Jisc-funded MRD Programmes (UK)

- Jisc is ‘a registered charity [.. that ..] champions the use of digital technologies in UK education and research.’ It is funded by UK HE and FE funding bodies (and from 2014-15 membership subscription)
- **Strand 1 Projects (Oct. 2009 - Sept. 2011):**
 - Piloting RDM infrastructures within institutions
 - Developing RDM Training materials
- **Strand 2 Projects (Oct. 2011 - Jul. 2013):**
 - To help universities develop RDM support infrastructure & build capacity
 - To customize DCC’s DMP Online tool for institutional use
- Strand 2 activities were complemented by work to develop disciplinary-focused RDM training materials for liaison librarians and research officers etc

DCC RDM 2014 Survey

- National picture of institutional progress in RDM (post-Jisc MRD)
- Understand barriers, perceived gaps in RDM support
- Pro-VC's for Research & Heads of Library, IT, Research Support & Commercialisation
- Institutions with at least 10% income from research
- 87 responses from 61 institutions (incl. all 24 Russell Group* institutions)

* The Russell Group is an association of 24 British public research universities whose objective is to lead the research efforts of the UK. They receive approximately two-thirds of all university research grant and contract income in the United Kingdom.

Funding & staffing

- c. 90% of institutions used internal funding for new appointments in RDM, for training and development of researchers and support staff, and for infrastructure.
- Almost half of institutions (48%) expect that 'most' staffing of RDM roles in future will be resourced by restructuring existing roles
- Overall provision for RDM is currently 4.4 FTE on average
- 4.7 FTE being the average in Russell Group institutions and 2.6FTE the average in other target group institutions.
- Library roles are prevalent, supporting 1 fixed term and 1 permanent staff member on average.

- **RDM staffing is expected to double to 9.5 FTE in Russell Group institutions in next year, split roughly equally between Library, IT and Research Office staff.**
- **For others institutions in target group RDM staffing is expected to rise only slightly to 3 FTE**
- **Overall, the picture that emerged is of substantial investment by institutions in staff and infrastructure for RDM, but much of it concentrated In Russell Group institutions.**
- **There is a strong appetite for collaborative solutions through regional consortia of institutions**

How does University of Edinburgh measure up?

RDM Programme:

Funded internally (c. 1.5 Million Euros)

75% - infrastructure / storage

25% - staffing (recurrent for 3 years)

MANTRA and DataShare – originally Jisc project funding

Staffing:

Data Library: 2.5 FTE equivalent core funding + 1.75 FTE from RDM Programme (fixed term)

Research & Library Services: 2 FTE equivalent

Following RDM training (including training on writing DMPs) the job description of all Academic Support Librarians have been restructured to incorporate RDM as part of their role.

Data Services and initiatives at University of Edinburgh



THE UNIVERSITY *of* EDINBURGH



Administrative Data Research Centre Scotland

ESRC-funded to provide trusted researchers access to de-identified administrative data in a secure environment. Based at the University of Edinburgh

Digital Curation Centre (DCC)

A renowned centre of expertise in digital curation with a focus on building capacity, capability and skills for RDM across the UK's higher education research community.

DCC provides expert advice and practical help to anyone in UK higher education and research wanting to store, manage, protect and share digital research data

EDINA – a Jisc-designated national centre of expertise in digital innovation and data service delivery

Centre for Doctoral Training in Data Science

- **EPSRC Centre for Doctoral Training (CDT) in Data Science will be hosted by the School of Informatics**
- **The CDT in Data Science will train a new generation of data scientists with the technical skills and interdisciplinary awareness necessary to become research leaders in Data Science.**
- **Comprising 50 PhDs over five intake years - the first cohort will start in the programme in September 2014**
- **CDT applications will automatically be considered for the full 1 year MSc by Research + 3 year PhD programme.**

Aitäh!

Links

- Data Library Services: <http://www.ed.ac.uk/is/data-library>
- EDINA: <http://edina.ac.uk/>
- IASSIST: <http://www.iassistdata.org/>
- Univ.of Edinburgh RDM Programme: <http://www.ed.ac.uk/is/data-management>
- RDM Roadmap: <http://edin.ac/1u3sKqy>
- Edinburgh DataShare - <http://datashare.is.ed.ac.uk/>
- MANTRA - <http://datalib.edina.ac.uk/mantra>
- RDM Guidance: <http://tinyurl.com/pq3szvf>
- Jisc Managing Research Data Strand 1:
<http://www.jisc.ac.uk/whatwedo/programmes/mrd.aspx>
- Jisc Managing Research Data Strand 2: <http://tinyurl.com/6w6g6qx>
- Final Results from the DCC RDM Survey 2014 -
https://www.zotero.org/groups/jhu_dms/items/itemKey/BNRG25T3
- ADRC Scotland - - <http://adrn.ac.uk/centres/scotland>
- EPSRC Centre for Doctoral Training (CDT) in Data Science: <http://datascience.inf.ed.ac.uk/>
- Digital Curation Centre: <http://www.dcc.ac.uk/>

