Research Data Management Services in a UK Higher Education Institution: University of Edinburgh

Library Fair and Forum: Yokohama, Japan, 7 Nov. 2017

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EDINA and Data Library
University of Edinburgh
Fun facts about Scotland (UK) & Japan

- Island country, 244,110 square kilometres
- Ben Nevis, 1,343 metres
- (UK) population 64,769,452
- Life expectancy at birth: 81
- Unemployment rate: 4.8%
- GDP per capita is $42,500

- Island country, 377,837 square kilometres
- Mount Fuji, 3,776 metres
- Population 126,451,398
- Life expectancy at birth: 85
- Unemployment rate: 3.2%
- GDP per capita is $41,300

From CIA World Factbook and Project Britain
Masataka Taketsuru, founder of Nikka whiskey distillery married Scotswoman Jessie ‘Rita’ Roberta Cowan in 1920 after studying Chemistry at Glasgow University and learning the art of whisky making from Scottish distilleries.

His life and the romance were portrayed in the television show, Massan.
About University of Edinburgh

• Founded 1583
• 39,576 students
• 14,346 postgraduate students
• 6,816 academic staff
• Research income: £253.9 million (2015-16)
• Mission: the creation, dissemination and curation of knowledge
• 20 schools in 3 colleges:
  – Arts, Humanities & Social Sciences
  – Medicine & Veterinary Medicine
  – Science & Engineering

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About EDINA and Data Library

• Data Library began 1983 to provide digital Census data
• National services (EDINA) began 1995 with a competitive tender
• 51 staff: service & project managers, software engineers, support staff
• 445 subscribing institutions
• One of eight divisions in the Information Services Group, merged Library & computing
• EDINA’s tagline: *Innovation into service*
Research Data Management (RDM) at University of Edinburgh

Service milestones over ten years:
• 2007 research computing survey
• DataShare project, 2007-08
• 2008 Data Audit Framework recommendations
• Research Data MANTRA project, 2010-11
• University RDM Policy, 2011
• 1st RDM Roadmap 2012
• Steering group formed, 2012
• Half terabyte per researcher, free data storage rolled out 2014
• Research Data Service is consolidated, 2016
• Third Roadmap, 2017
Research Data Service: Tools & support for working across the data lifecycle
Before your research project begins

<table>
<thead>
<tr>
<th>Tools and Support</th>
<th>Description</th>
<th>Service provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMPOnline</td>
<td>Online tool to create a data management plan, based on funders’ templates</td>
<td>Digital Curation Centre</td>
</tr>
<tr>
<td>Support and DMP Review</td>
<td>Answer enquiries and review plans, provide advice</td>
<td>Library</td>
</tr>
<tr>
<td>Sample DMPs</td>
<td>Keep successful plans to show researchers in different disciplines</td>
<td>Library</td>
</tr>
</tbody>
</table>
During your research project

<table>
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<tr>
<th>Tools and Support</th>
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<th>Service provider</th>
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</thead>
<tbody>
<tr>
<td>Finding data</td>
<td>Finding data portal and data librarian consultancy</td>
<td>Data Library</td>
</tr>
<tr>
<td>Active data storage (DataStore)</td>
<td>Central, backed up storage for all researchers - individual and shared spaces</td>
<td>IT Infrastructure</td>
</tr>
<tr>
<td>Sensitive data (Data Safe Haven)</td>
<td>New, secure facility for working with sensitive data on remote server. We are pursuing ISO 27001 security certification</td>
<td>Library, Data Library, IT Infrastructure, Information Security</td>
</tr>
<tr>
<td>Code versioning (Subversion, Gitlab: coming soon)</td>
<td>Private or public software code storage and management. Documents all code and allows rollback to prior versions</td>
<td>IT Infrastructure</td>
</tr>
<tr>
<td>Collaboration and data sync’ing (DataSync)</td>
<td>Open source tool to allow external partners to access your research data</td>
<td>IT Infrastructure</td>
</tr>
<tr>
<td>Electronic Lab Notebook (RSpace Pilot)</td>
<td>Data management for laboratory based research</td>
<td>IT Infrastructure</td>
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### Tools and Support

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<tr>
<td>Open Access data repository (DataShare)</td>
<td>Allows you to share data publicly and preserve for long-term</td>
<td>Data Library</td>
</tr>
<tr>
<td>Long-term retention (DataVault)</td>
<td>Private storage for a specified retention period on tape (for example, 10 years)</td>
<td>Library IT Infrastructure</td>
</tr>
<tr>
<td>Data asset register (Pure for datasets)</td>
<td>Record a description of your dataset along with your publications and research projects</td>
<td>Library</td>
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## Training and support throughout your project

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</tr>
</thead>
<tbody>
<tr>
<td>General RDM support</td>
<td>Answer enquiries by email, phone or appointment</td>
<td>Library, Data Library</td>
</tr>
<tr>
<td>Online training (MANTRA and RDMS MOOC)</td>
<td>Awareness raising and learning at your own pace online through our open educational resources</td>
<td>Data Library</td>
</tr>
<tr>
<td>Scheduled and bespoke training</td>
<td>Sign up for a scheduled workshop or request a special training session for your research group</td>
<td>Library, Data Library, IT Infrastructure</td>
</tr>
<tr>
<td>Research Data Service website</td>
<td>Find all the tools and support in one place</td>
<td>Library, Data Library</td>
</tr>
<tr>
<td>Blog and promotional materials</td>
<td>Keep up with new developments on our blog. Handouts and videos</td>
<td>Library, Data Library</td>
</tr>
<tr>
<td>RDM Forum &amp; Sharepoint site</td>
<td>Attend quarterly meetings for school support staff or get access to shared resources</td>
<td>Library</td>
</tr>
<tr>
<td>Dealing with Data event</td>
<td>Attend an annual conference of researchers talking about their data problems and solutions</td>
<td>Library</td>
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New video portraying a simplified user journey through the services

THE RESEARCH DATA SERVICE IS HERE TO HELP YOU

https://youtu.be/cuaAVum9mZk
What is Edinburgh DataShare?

Edinburgh DataShare is a digital repository of research data produced at the University of Edinburgh, hosted by 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

Correspondence Analysis of Old English texts
Lubbers, Thijs
This dataset includes correspondence plots, based on 10 most frequent POS-tag + lexical complementizer unigrams, to accompany Los, B., & Lubbers, T. (submitted). Syntax, text-type, genre and authorial voice in Old English.

The Edinburgh Computed tomography and genetic diagnostic criteria for lobar intracerebral haemorrhage associated with cerebral amyloid angiopathy: model development, internal validation and diagnostic test accuracy study
Rodrigues, Mark; Al-Shahi Salman, Rustam
Background: Spontaneous intracerebral haemorrhage (ICH) is usually diagnosed by computed tomography (CT). Case series have described CT features of lobar ICH accompanied by cerebral amyloid angiopathy (CAA) on pathological.

Persistent three- and four-atom orbital molecules in the spinel Al2V2O4
Atfield, John Paul
Electronic instabilities in transition metal compounds may lead to ground states containing orbital molecules when direct metal-metal orbital interactions occur. The spinel Al2V2O4 was reported to contain V717+ orbital...
MANTRA is a free online course for those who manage digital data as part of their research project.

Learning Units: Select one to start

- Research data explained
- File formats & transformation
- Data protection, rights & access
- Data management plans
- Documentation, metadata, citation
- Sharing, preservation & licensing
- Good practice and responsible research
- Checklists & planning tools
- Funder compliance
- Storage & security
- Organising data
- Data handling tutorials
Research Data Management and Sharing

About this course: This course will provide learners with an introduction to research data management and sharing. After completing this course, learners will understand the diversity of data and their management needs across the research data lifecycle, be able to identify the components of good data management plans, and be familiar with best practices for working with data including the organization.

Created by: The University of North Carolina at Chapel Hill, The University of Edinburgh

Ratings and Reviews

Rated 4.5 out of 5 of 113 ratings

Good overview on the topic of research management and sharing.
Thanks!  
YW

Great foundation course  
LA

I took this course having no prior knowledge of the subject area. The course was informative, and well done. I have gained a good introduction, and consider the time well spent. The content presentation and instructor engagement are a plus.  
MP
Reflections as a service provider

- An institutional RDM policy helps to establish the basis of a service and its scope.
- A data lifecycle can help show where service gaps exist.
- By working with IT services, librarians can provide a more holistic service (advice and infrastructure).
- By partnering with academics (such as a steering group), service providers can get more buy-in.
- Data management planning is the only way to ensure RDM is done properly. Errors in data management can lead to data loss or inability to share / re-use data.
- Funder mandates help to persuade researchers to share data, as do journal policies.
- Researchers will welcome RDM services that help them be more productive and impactful. (They will avoid difficult, time-consuming or confusing services.) Usability is key.
Thank you

www.ed.ac.uk/is/research-data-service

http://datablog.is.ed.ac.uk

http://edina.ac.uk

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