

¿Y LOS DATOS QUÉ?

3er Encuentro OS-Repositorios.

La proyección de los repositorios institucionales

Facultad de Informática. Universidad Complutense

Madrid 10 Diciembre 2008

Luis Martinez Uribe

Luis.Martinez-Uribe@oerc.ox.ac.uk

Digital Repositories Research Coordinator



Sumario

- Antecedentes
- ¿Qué son los datos científicos?
- ¿Qué es *data management/curation*?
- Actividades en la Universidad de Oxford
- Data Audit Framework



Antecedentes

'a university-based institutional repository is a set of services that a university offers to the members of its community for the management and dissemination of digital materials created by the institution and its community members.' (Lynch, 2003)

Lynch, C. (2003). "Institutional Repositories: Essential Infrastructure for Scholarship in the Digital Age." *ARL*, 226, February 2003, 1-7. <http://www.arl.org/newsltr/226/ir.html>



Antecedentes

- Nuevas formas y métodos de investigación gracias a la aparición de herramientas e infraestructuras
- *Data deluge (Hey & Threfethen 2003)*
“more digital data will be produce in the next 5 years than in whole human history”
(Australian DEST)
- Cambios en *scholarly communication*
- *Data management* es un componente crucial de la e-Infraestructura



“From Data to Wisdom: Pathways to Successful Data Management for Australian Science ”





¿Qué son los datos científicos?

<http://www.flickr.com/photos/iscjorgegarcia/2359144636/>*

Tipología de datos

National Science Foundation

(2005) “Long Live Digital Data Collections”

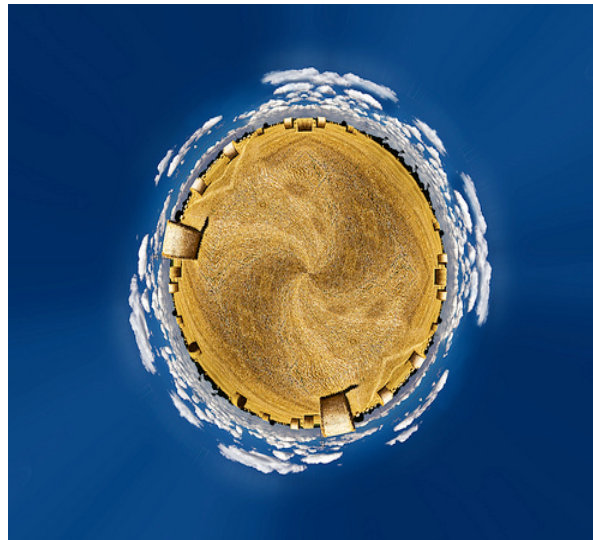


DATOS OBSERVACIONALES



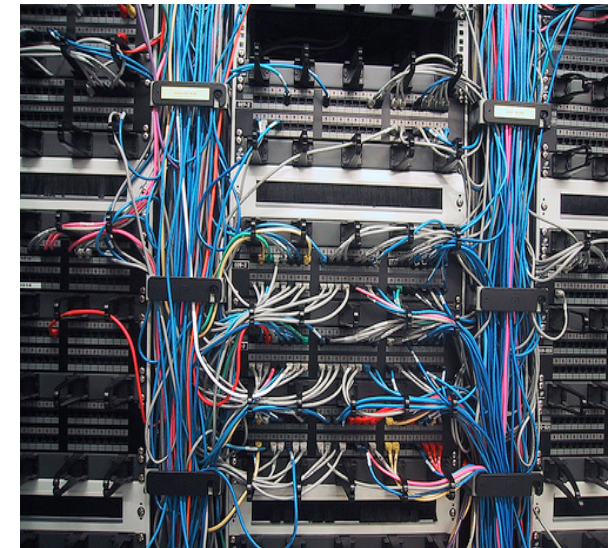
<http://www.flickr.com/photos/autowitch/5702193/>

DATOS EXPERIMENTALES



<http://www.flickr.com/photos/calixtojunior/2311207816/>

DATOS COMPUTACIONALES



<http://www.flickr.com/photos/nebneb/64058504/>



Tipología de datos

The Research Information Network (RIN)
(2007) “Stewardship of digital research data”



DATOS DERIVADOS



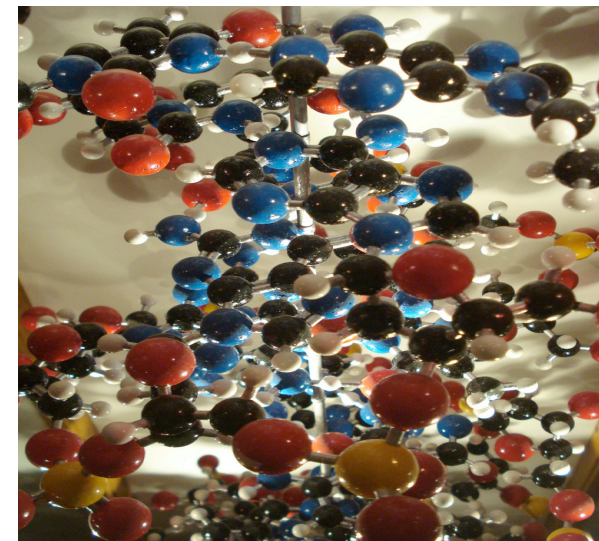
DATOS

- OBSERVACIONALES
- EXPERIMENTALES
- COMPUTACIONALES



<http://www.flickr.com/photos/wester/37660225/>

DATOS CANONICOS



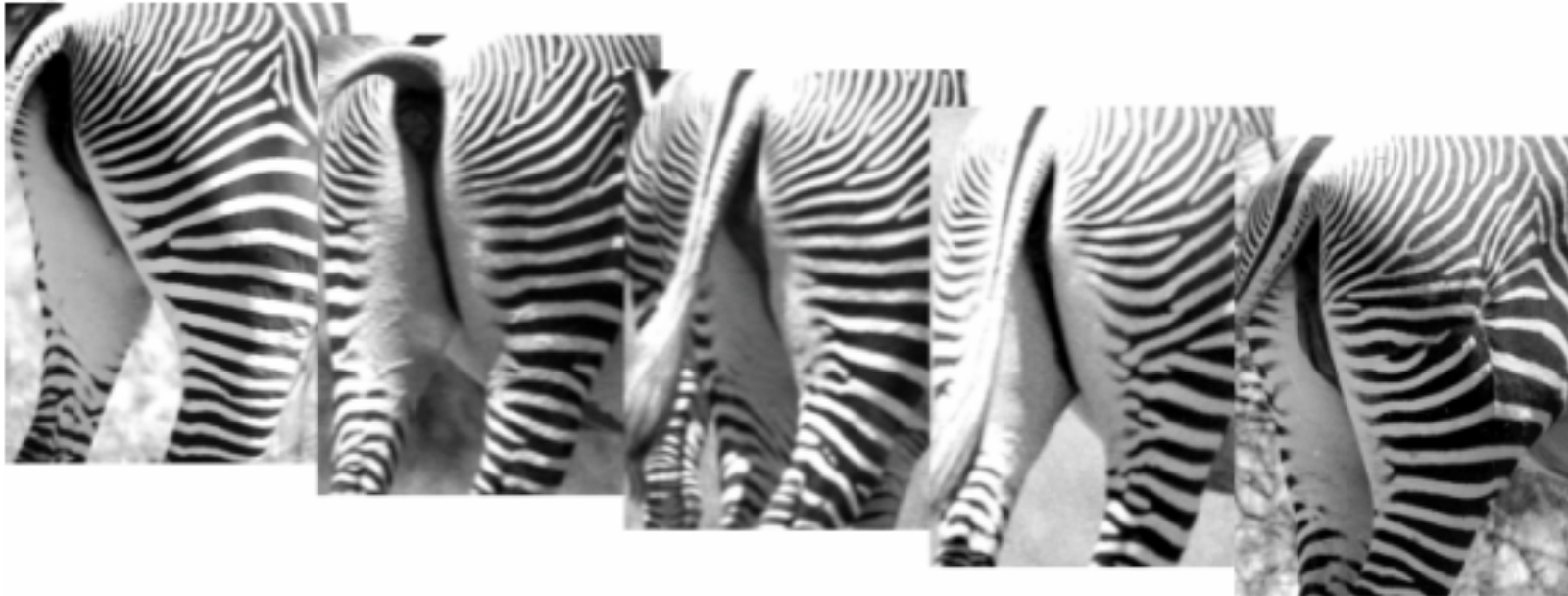
<http://www.flickr.com/photos/wheatfields/2073336603/>





http://www.flickr.com/photos/piet_musterd/2231850447/

Ejemplos



From Dr David Shotton presentation



© Center for Whale Research / www.whaleresearch.com



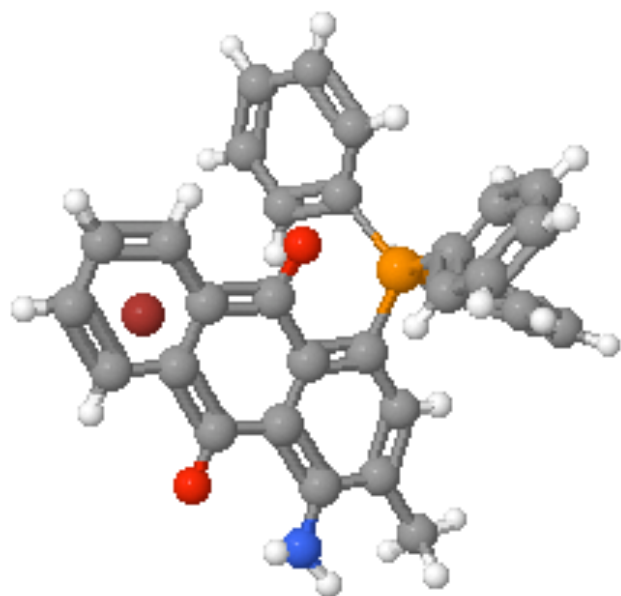


<http://www.flickr.com/photos/djmccrady/1883226927/>



<http://www.flickr.com/photos/oliastro/2987657532/>



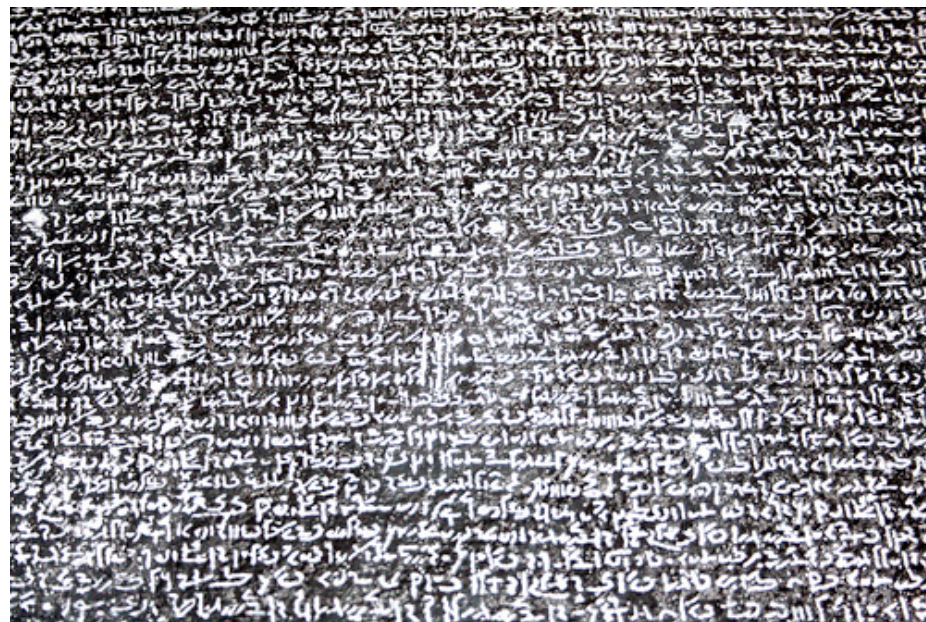
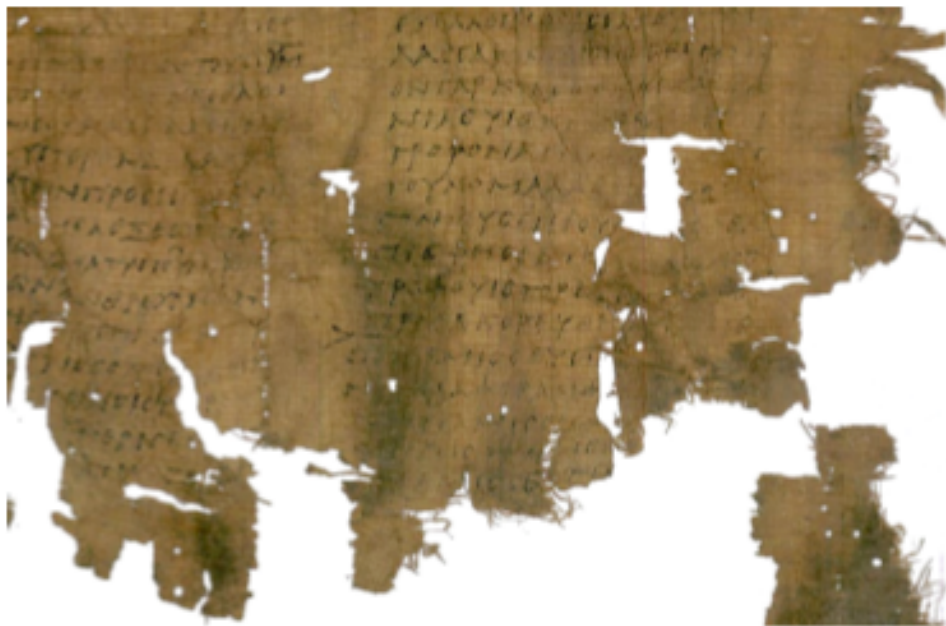


<http://ecrystals.chem.soton.ac.uk/604/>



<http://www.rcsb.org/pdb/explore.do?structureId=1BA4>

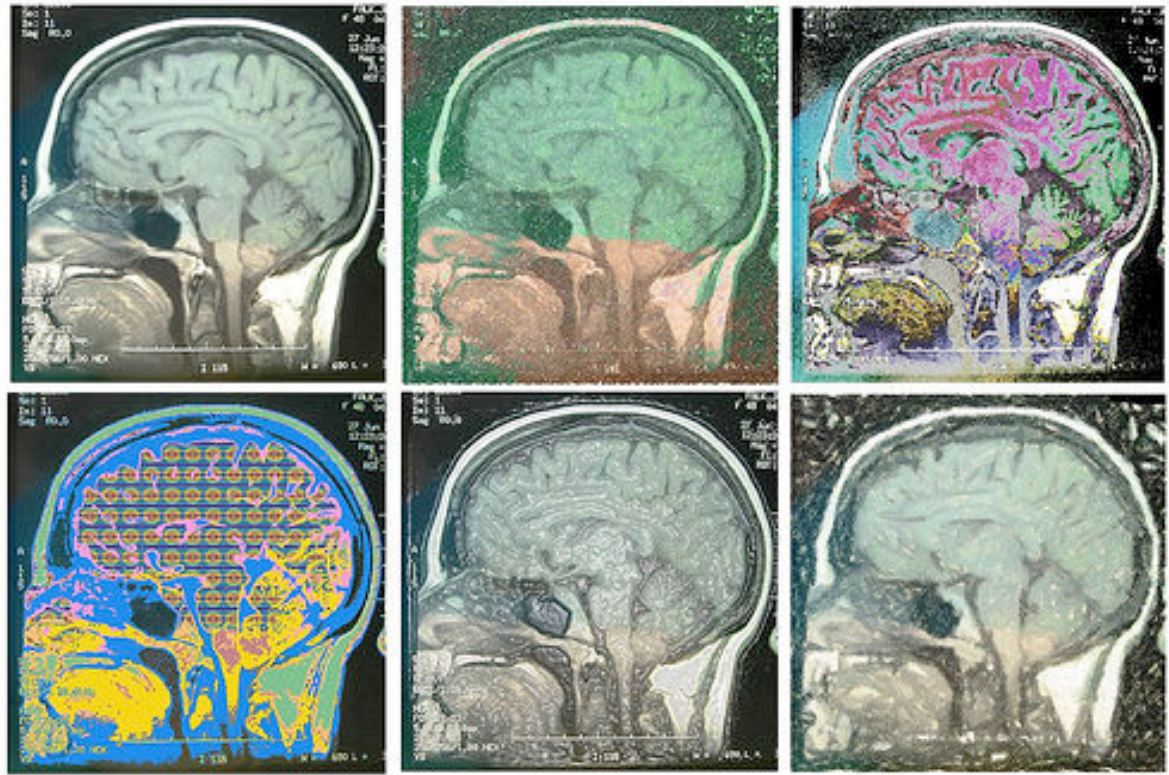




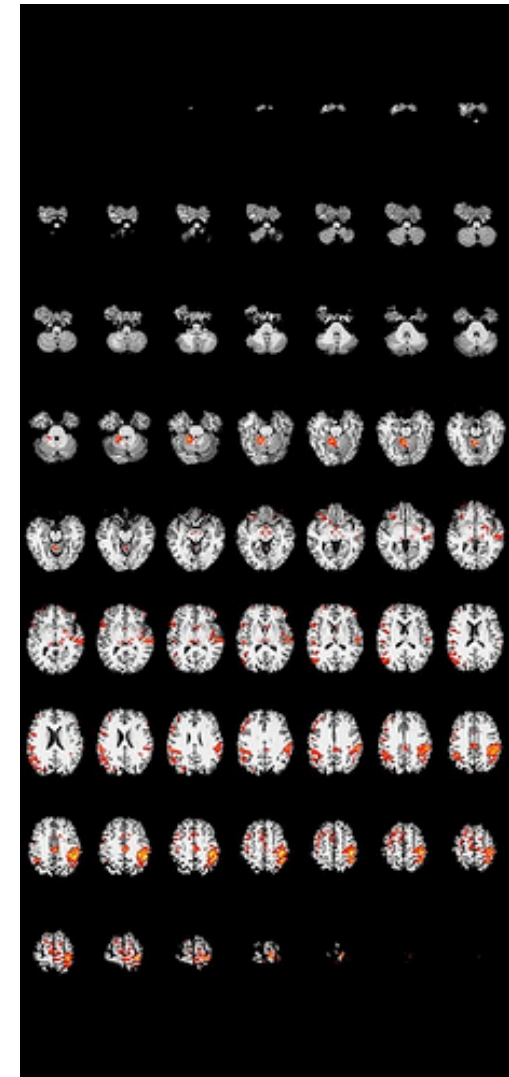
From Building a VRE for the Humanities poster
presented at All Hands Meeting 2007

<http://www.flickr.com/photos/wrowlands/2270729405/>





<http://www.flickr.com/photos/piper/22584430/>



http://www.flickr.com/photos/kiss_this/144493954/





<http://www.flickr.com/photos/edyson/59524184/>



<http://www.flickr.com/photos/alhouse/273160052/>



<http://www.flickr.com/photos/thivierr/540241947/>



Untitled - SPSS Data Editor

File Edit View Data Transform Analyze Graphs Utilities Window Help

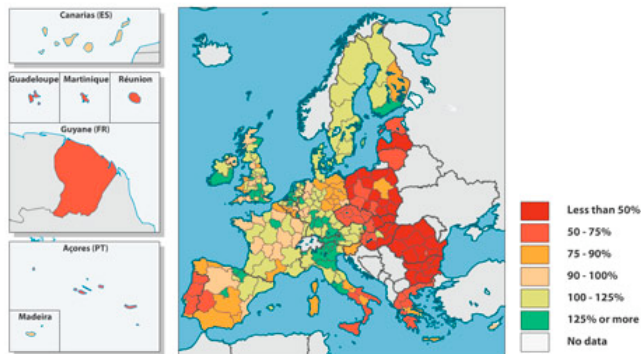
caseno intday intmon intyr inttime a1 a2 a3day a3mon a3yr

1	2068201	20	10	97	1	3	13	1	8	83
2	2087115	20	10	97	1	2	12	14	8	85
3	2001204	9	10	97	1	1	11	31	5	86
4	2001211	9	10	97	1	5	15	14	6	82
5	2001217	9	10	97	1	2	12	16	9	85
6	2001218	9	10	97	1	2	12	16	8	85
7	2001220	9	10	97	1	3	13	14	4	84
8	2001222	9	10	97	1	1	11	21	10	85
9	2001223	9	10	97	1	1	11	9	7	86
10	2001224	9	10	97	1	1	11	29	3	86
11	2001225	9	10	97	1	5	15	21	10	81
12	2002102	15	10	97	1	3	13	28	4	84
13	2002104	15	10	97	1	3	13	13	3	84
14	2002107	15	10	97	1	3	13	15	8	84
15	2002108	15	10	97	1	3	13	1	4	84
16	2002109	15	10	97	1	3	14	9	9	83
17	2002111	15	10	97	1	4	14	4	12	82
18	2002112	15	10	97	1	3	13	30	5	84
19	2002113	15	10	97	1	3	13	12	3	84
20	2002115	15	10	97	1	4	15	13	10	82
21	2002123	15	10	97	1	5	15	24	9	82
22	2002125	15	10	97	1	4	14	18	10	82

**EXPECTATIONS FOR THE NEXT TWELVE MONTHS:
CHANGE IN INDEX SPRING 2008 (EB69) – AUTUMN 2007 (EB68)**

Your life in general		The financial situation of your household		The employment situation in (OUR COUNTRY)		The economic situation in (OUR COUNTRY)	
EU27	-1	EU27	-9	EU27	-19	EU27	-28
CY	+22	CY	+10	MT	+13	CY	+12
CZ	+12	CZ	+9	CY	+5	CZ	+8
SE	+10	LT	+6	CZ	+2	MT	+8
DK	+7	NL	+4	PL	+2	:	:
NL	+6	:	:	:	:	EE	-24
MT	+5	FR	-11	FR	-28	SE	-24
SI	+5	UK	-13	PT	-28	PT	-26
SK	+5	BE	-15	DK	-29	NL	-27
:	:	PT	-21	LV	-30	DE	-29
LV	-5	EL	-22	EE	-32	IE	-32
IT	-8	ES	-23	IE	-35	DK	-34
ES	-16	:	:	EL	-38	LU	-34
PT	-20	SE	-43	ES	-43	UK	-35
				SE	-43	EL	-38
						ES	-39
						FR	-47

o GDP per inhabitant in PPS as a percentage of the EU-27 average (2004)



EUROBAROMETER 69 PUBLIC OPINION IN THE EUROPEAN UNION FIRST RESULTS



http://www.flickr.com/photos/hanan_cohen/455238557/



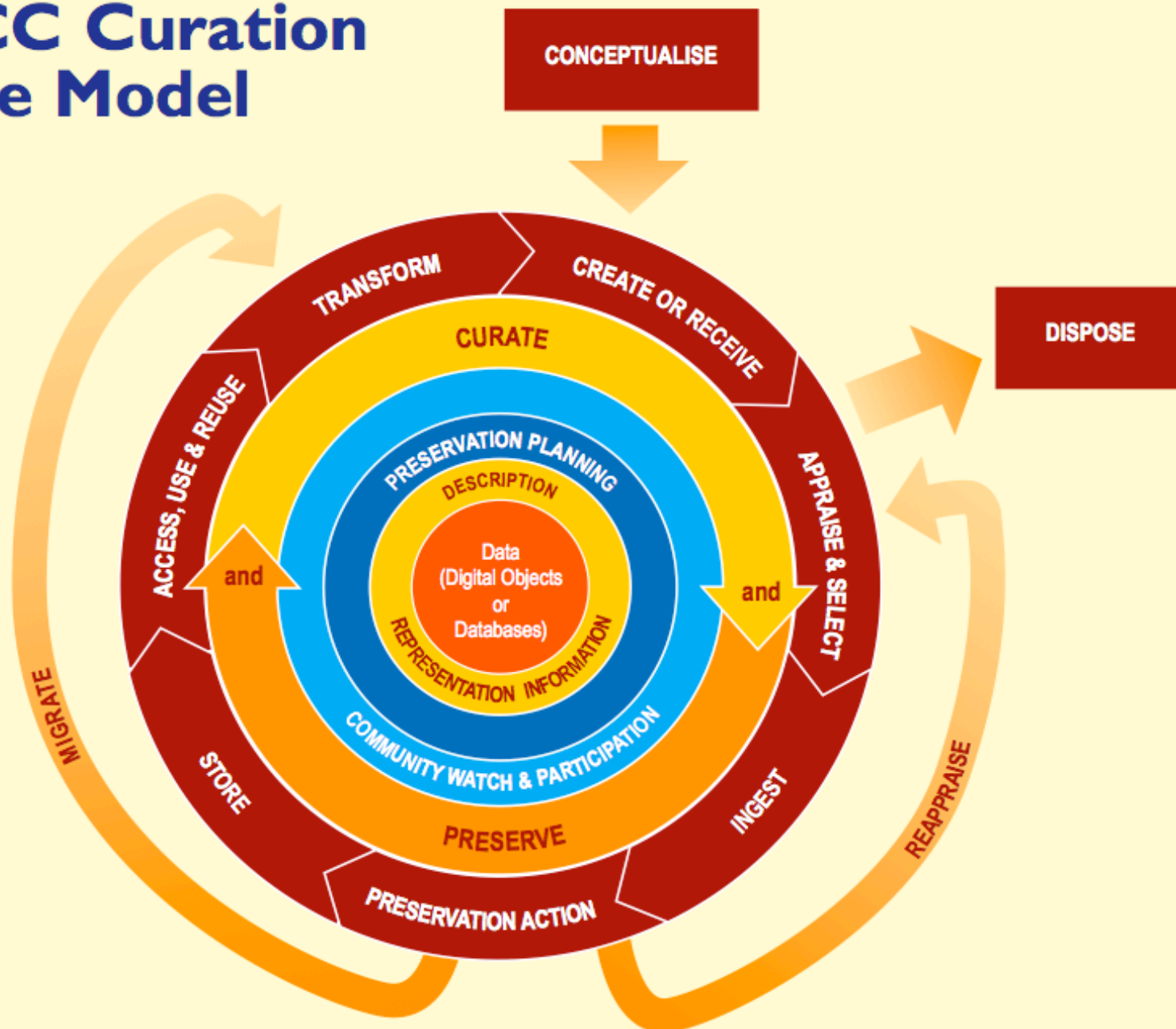
Data Management and Curation

Research data management

- De disciplinas como *knowledge/information management*
- “...es comprender las necesidades actuales y futuras”
(Departamento de Defensa de EEUU)
- Un medio para llegar a un fin
- No solo la infraestructura técnica, también políticas y procedimientos
- *Digital curation*



The DCC Curation Lifecycle Model



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Beneficios

- Calidad y autenticidad
- No re-inventar la rueda, ¡crear datos puede ser caro!
- Mejora de acceso a datos (en muchos casos financiados con fondos públicos) mejora la calidad de la investigación
- Preservación
- Cumplir con los requisitos de las agencias de financiación





La Universidad de Oxford

Federación de repositorios

Humanities →

Read more about the Humanities Division's world-class teaching and research across an unparalleled range of subjects.



Medical Sciences →

Learn more about Oxford's aim to be the best university biomedical institution in Europe and among the top five in the world.



Mathematical, Physical, & Life Sciences →

Oxford's MPLS Departments have an international reputation for excellence. Find out more.

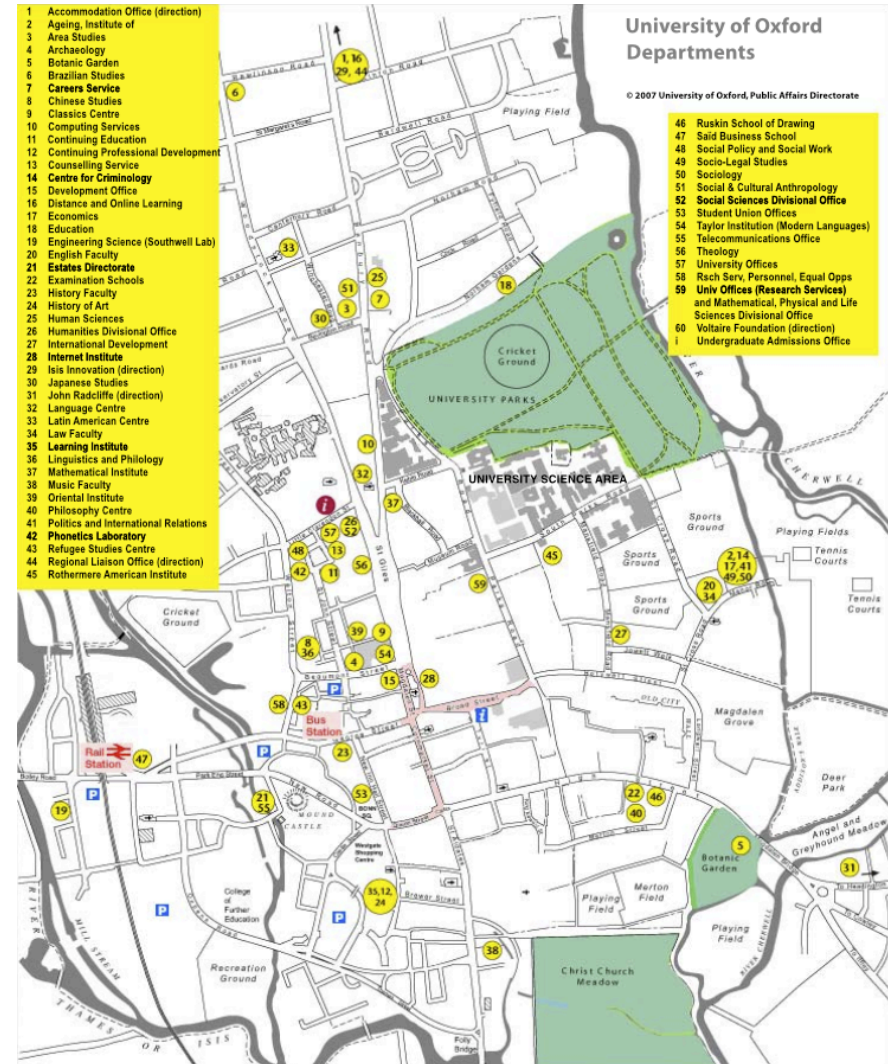
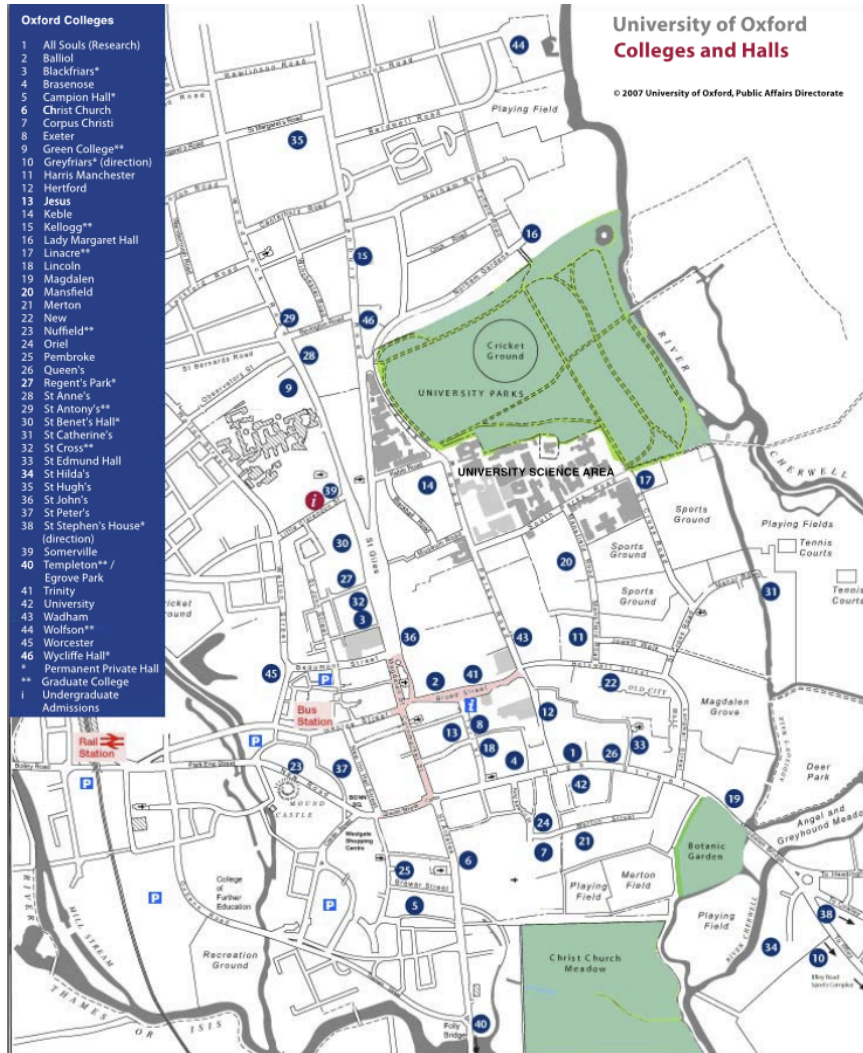


Social Sciences →

Take a look at the largest grouping of social sciences in the UK, including the internationally ranked Law Faculty.



Federación de repositorios



Federación de repositorios

Libraries



Oxford meets the needs of its students, academics and the international research community with a wide range of library services provided by **more than 100 libraries**, making it the largest university library system in the UK.

- ✦ **Oxford University Library Services.** OULS is the integrated library service of the University of Oxford. Established in 2000, it comprises nearly 40 libraries. There are major research libraries as well as libraries attached to faculties, departments and other institutions of the University. The combined collections of OULS number more than 11 million printed items, in addition to vast quantities of materials in many other formats.
- ✦ **Bodleian Library.** This is the University's main research library and is the second largest in the UK after the British Library. It has 120 miles of occupied shelving, 29 reading rooms and 2,490 places for readers.
- ✦ **College Libraries.** Every College has its own library, often consisting of a modern, working library and older collections. Further information can be found on individual college websites.



Federación de repositorios

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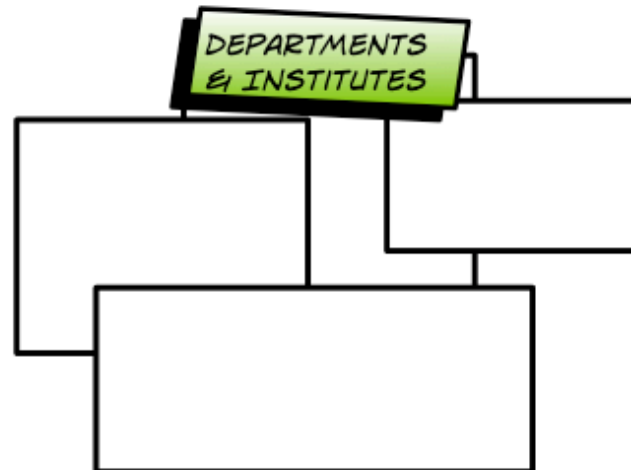
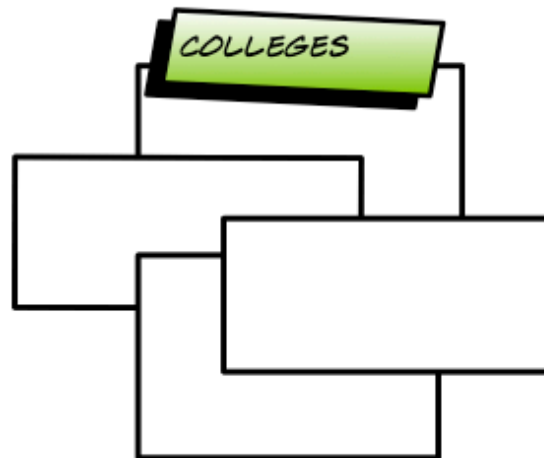
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Oxford University Computing Services

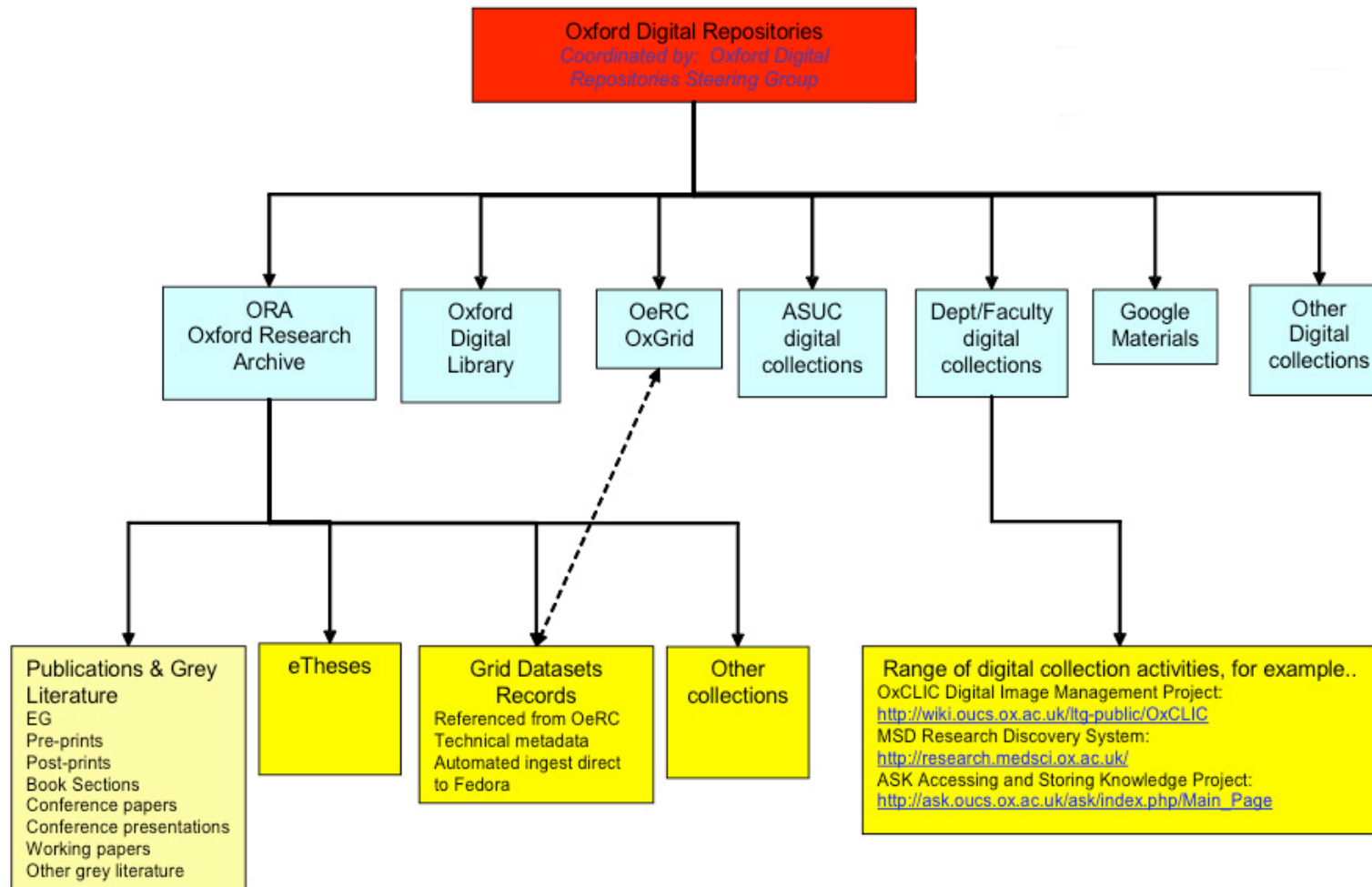


Oxford University Library Services



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Scoping digital repository services for research data management







Project Aims

The Scoping Digital Repository Service for Research Data Management project overall aim is to scope the requirements, including underlying infrastructure and interoperability, for digital repositories services to store, disseminate and preserve research data generated at Oxford.



Entrevistas con investigadores

Social Sciences → 	Mathematical, Physical, & Life Sciences → 
International Development	Astrophysics ⊕
Politics ⊕	Biochemistry ⊕
Sociology ⊕	Computing Laboratory ⊕
Economics ⊕	Engineering ⊕
Archaeology ⊕	Materials ⊕
School of Interdisciplinary Area Studies ⊕	Plant Sciences ⊕
Social Policy and Social Work ⊕	Zoology ⊕
Humanities → 	Medical Sciences → 
Classics ⊕	Diabetes Trials Unit ⊕
English ⊕	Cardiovascular Medicine ⊕
Oriental Studies ⊕	Clinical Pharmacology ⊕
Music ⊕	Pathology ⊕
Ashmolean Museum ⊕	Physiology Anatomy and Genetics ⊕
	Psychiatry ⊕
	National Perinatal Epidemiology Unit ⊕
	Wellcome Trust Centre for Human Genetics ⊕



Entrevistas con investigadores

Respondents Distribution



Workshop

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projects: scoping digital repository services for research data management - events

Research Data Management Workshop - Friday 13th June 2008

Venue - [Oxford Said Business School](#)

Abstract

The workshop is organised under the umbrella of the Scoping Digital Repository Services for Research Data Management project. The overall aim of the workshop is to hear examples of good and interesting practice, from Oxford and elsewhere, with respect to the use of digital repository services at various points in the research lifecycle, and from the perspective of various discipline areas. The event is designed for Oxford researchers to learn about best practice in research data management across disciplines and to encourage discussion.

Aims and Objectives

- Raise awareness of the benefits and importance of actively managing research data
- Communicate significant developments in data repositories in order to stimulate the adoption of best practice
- Complement the findings of the scoping study interviews with Oxford researchers



Resultados

FUNDING DATA COLLECTION PROCESSING PUBLICATION

-NO DETAIL PLANNING
-VARIETY OF SOURCES
-GENERIC PLANS
-AWARENESS OF NEED TO MAKE DATA AVAILABLE

-STORED ON DEPARTMENTAL SERVERS OR DESKTOPS
- SOME HORROR STORIES
-POOR ANNOTATION
-SHARING BY EMAIL OR PORTABLE MEDIA
- STORAGE AND SHARING PROBLEMS WITH BIG DATASETS

-VARIED ORIGINS, FORMATS, SIZES, USEFULNESS TO OTHERS
- DATA COLLECTION FROM PRINTED

- FEW DEPOSITS IN NATIONAL ARCHIVES
-PUBLICATION ON THE WEB
- USEFULNESS OF LINKING DATA AND PUBLICATIONS

SUPPORT

-LITTLE AND MAINLY FROM IT OFFICERS

Problemas para gestionar sus datos

NO PUDE ENCONTRAR EL SENTIDO A LOS DATOS PRODUCIDOS DURANTE MI DOCTORADO HACE 5 AÑOS



QUIERO PUBLICAR MIS DATOS COMO UN RECURSO ADICIONAL A MI ARTICULO



CUANDO LOS INVESTIGADORES CAMBIAN DE TRABAJO PERDEMOS SUS DATOS

TUVIMOS QUE MIGRAR LOS FORMATOS DE TODOS NUESTROS DATOS Y TARDAMOS MESES

PARA COMPARTIR NUESTROS DATOS TENEMOS QUE TRANSPORTAR EL SERVIDOR

DATOS DE ESTUDIOS CLINICOS REALIZADOS HACE TREINTA AÑOS PERMITEN IDENTIFICAR A LAS HIJAS DE LAS MUJERES A LAS CUALES LES ADMINISTRO UNA DROGA QUE PUEDE SER LA CAUSA DE CANCER EN SUS HIJAS



CREAMOS UNOS DATOS EN UN PROYECTO INTERNACIONAL Y NO SABEMOS A QUIEN LE PERTENECEN



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Servicios requeridos

- Soporte en cuestiones practicas de la gestión de datos a lo largo del ciclo de vida
- Una solución segura y fácil de usar que permita almacenar y compartir datos de gran tamaño utilizando sistemas de control de acceso
- Una infraestructura sostenible para publicar y preservar los datos



Consulta con proveedores de servicios

- Para validar los servicios requeridos
- Para determinar que servicios hay disponibles para los investigadores
- Para identificar aquellos servicios que no se proveen

Proveedores de servicios

- **Library Services**
- **Computing Services**
- **Oxford e-Research Centre**
- **Research Services**
- **Other Services**
 - Social Sciences Data Library – Nuffield College
 - Software Engineering Research Group - Computing Lab
 - ISIS Innovation
 - Central University Research Ethics Committee
 - Legal Services



Workshop

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projects: scoping digital repository services for research data management - events

Institutional and National Services for Research Data Management Workshop - Monday 20th October 2008

Venue - [Oxford Said Business School](#)

Abstract

This workshop is the second event organised under the umbrella of the Scoping Digital Repository Services for Research Data Management project. The overall aim of the workshop is to hear about examples of support services for research data management in relation to the requirements for services gathered through the interviews with researchers. The event is designed for Oxford researchers to learn about different types of data management services that could potentially be delivered in Oxford as well as for Oxford service providers to discuss those services and their role to support researchers with their data management.

Aims and Objectives

- Raise awareness of best practice in institutional and national support data services
- Complement the findings of the scoping study consultation with Oxford support services
- Help to identify gaps in the provision of services available to researchers to assist with their data management duties
- Stimulate discussion amongst service providers about collaborative ways to address data management needs of Oxford researchers



Research data management services



Metodología alternativa



<http://www.data-audit.eu>

- Averiguar que recursos existen
- Averiguar como se gestionan
- Decidir que hacer con ellos
- Implementar los cambios



Conclusión

- Conoce los datos a sus creadores y posibles usuarios
- Empieza a gestionar los datos lo antes posible en el ciclo de vida investigativo
- Colabora (bibliotecarios, informáticos, investigadores, etc)





**YES
WE
CAN**

Gracias



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