Data Management Plans & the DMPTool



Data Management Services @ MIT Libraries

- Workshops/Webinars
- Web guide: http://libraries.mit.edu/data-management
- Individual consultations
 - includes help with creating/reviewing data management plans



- Meet funder requirements
 - DMPs required within grant applications
 - Researchers required to share data collected
- Saves time and prevents data loss
- Makes it easy to share data later, increasing research impact



Funder Requirements

	Office of	Science	and Te	chnolog	gy Policy	
About OSTP	Pressroom	OSTP Blog	Divisions	Initiatives	R&D Budgets	Resou
Expandi	ing i ubill			DUID UI.		
Posted by Michae	Research el Stebbins on Febr Tweet	l			- cacrany	

"The Obama Administration is committed to the proposition that citizens deserve easy access to the results of scientific research their tax dollars have paid for." iple occasions and convening an nputs from scientists and scientific —over 65 thousand of whom results of taxpayer-funded research.



Funder Requirements

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Researc	ch Funder Open Access R			
	w summarizes major US Research funder open acce links to information on related journal requirement			
For questions, r	please contact:			
 For data 	ublications: Ellen Finnie, Head, Scholarly Communi lata: data-management@mit.edu also more information on the Research Funder Polic			
Agency / Entity	Publications	Data		st of major funder requirements:
White House Office of Science and Technology Policy Directive Office of Science & Technology Policy	All federal agencies over \$100M annually in R&D required to make peer-reviewed manuscripts available within 12 months. 2013, with implementation beginning October 2014 and timetable varying by agency. View the Directive	All federal agencies over \$100M annually in R&D required to make data stored and publicly accessible search, retrieve, and analyze. Scope: data necessary to validate research findings, including data se used to support scholarly publications. (Lab notebooks not included)	ht hi	ist of major funder requirements: ttp://libraries.mit.edu/scholarly/publis ing/research-funders/research- under-open-access-requirements/
DoD US Department of Defense	Public Access Plan Draft in 2015, takes effect FY16 Authors will be required to upload their final accepted peer-reviewed journal manuscripts (or the final published article, if the author has sufficient rights) to the Defense Technical Information Center (DTIC) at the time of acceptance. Articles will be available no later than 12 months following publication.	Public Access Plan Draft in 2015, compliance begins FY17 Data Management Plans (DMPs) will be required, focusing on data "necessary to validate research findings." Metadata for each data set, "including subject, characteristics, and location, will be shared via DTIC's DoD data set catalog.		
DOE US Department of	Public Access Plan October 1, 2014	Public Access Plan October 1, 2014 for Office of Science requirements.		MITLibraries

1. The What

Content of a data management plan

2. The How

The DMPTool



- 1. Project, experiment, and data description
- 2. Documentation, organization, and storage
- 3. Access, sharing, and re-use
- 4. Archiving

Always check for and follow a funder's specific requirements

Details for each of these areas can be found on our website at: http://libraries.mit.edu/data-management/plan/write/



Data description

- What is it?
- How will it be collected?
- What format is it in?
- How much data will be generated?

Secondary data

Are you using data that someone else produced? If so, where is it from?

Roles and Responsibilities

• Who is responsible for managing the data?



Documentation (aka metadata)

- What documentation will you create in order to make the data understandable by other researchers?
 - What types of information are important for describing, discovering & using the data?
 - Which mechanisms for metadata capture make sense given your research workflow?
- Are you using documentation standard to your field?
 - See Digital Curation Centre's browsable database of disciplinary metadata for examples

More information on documentation/metadata can be found on our website at: http://libraries.mit.edu/data-management/store/documentation/



Organization

• What directory and file naming conventions will you use?

More information on file organization can be found on our website at: http://libraries.mit.edu/data-management/store/organize/



Storage

- What are your local storage and backup procedures?
- Will this data require secure storage?
- What tools or software are required to read or view the data?

More information on backups & MIT resources can be found on our website at: http://libraries.mit.edu/data-management/store/backups/



- What data will be shared, when, and how?
 - Will this research be published in a journal that requires underlying data to accompany articles?
 - $\circ\,$ Will there be any embargoes on the data?
- Does sharing the data raise privacy, ethical, or confidentiality concerns?
 - $\circ\,$ Do you have a plan to protect or anonymize data, if needed?



- Who holds intellectual property rights for the data and other information created by the project?
 - Will any copyrighted or licensed material be used?
 - Do you have permission to use/disseminate this material?
- Are there any patent- or technology-licensing-related restrictions on data sharing associated with this grant?
- Will you permit re-use, redistribution, or the creation of new tools, services, data sets, or products?



4. Archiving

- Will you store the data in an archive or repository for long-term access? If not, how will you preserve access to the data?
 - Is a discipline-specific repository available?
 - Or is there a funder-mandated repository?

Resources for finding a repository

- Registry for Research Data Repositories: re3data.org
- Our website: http://libraries.mit.edu/data-management/share/find-repository/



4. Archiving

- How will you prepare data for preservation or data sharing?
 - Will the data need to be anonymized or converted to more stable file formats?
 - Are software or tools needed to use the data? Will these be archived?
- How long should the data be retained? 3-5 years, 10 years, or 'forever'?



1. The What?

Content of a data management plan

2. The How?

The DMPTool



The DMPTool



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