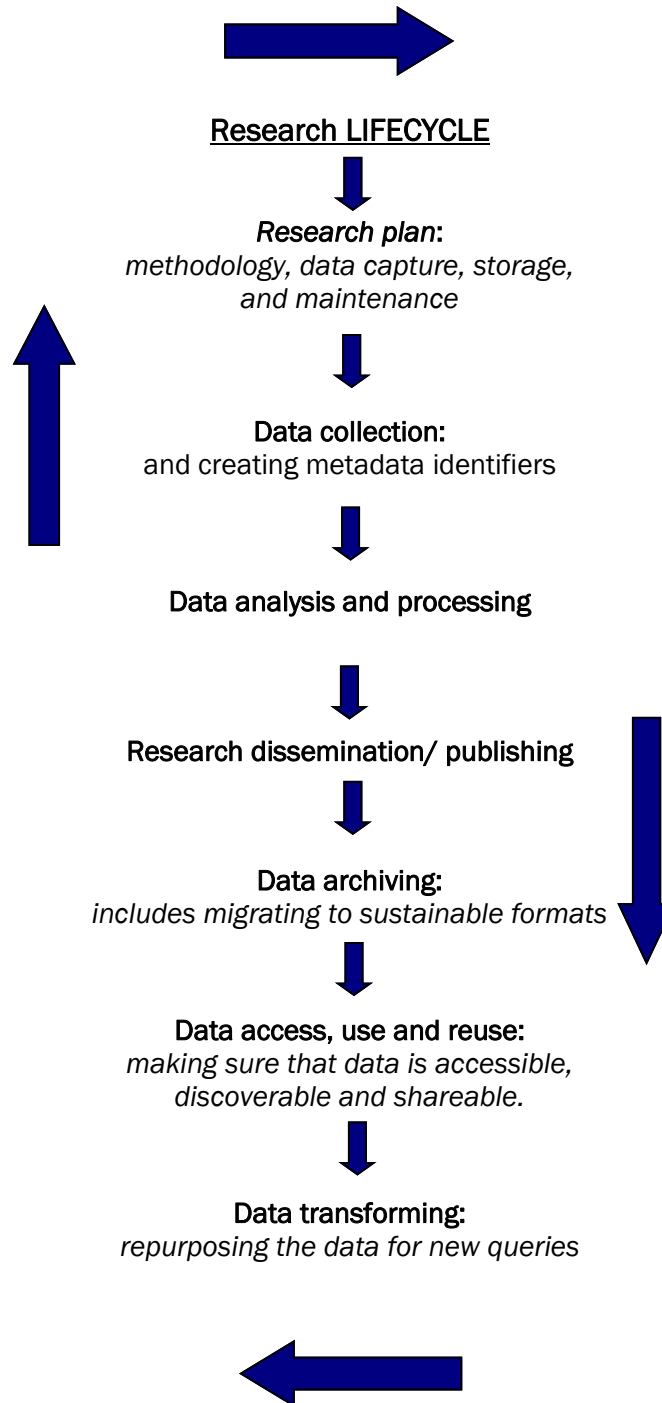


Data sharing is vital to ensuring the scholarly record for many reasons:

- It is required by NSF and NIH and likely to be adopted by other funders.
- It fosters the reuse of data: Allowing researchers access to your data opens up possibilities for new readings, new interpretations, and new discoveries.
- It benefits research: Being open about data can lead to sharing of process, workflows, and tools, all of which enhance the potential for replicating the research results.
- It is good science: Sharing data frames them as a public good, promoting community, collaboration, and conscientiousness.



Research Data Management Services Team (RDMST)

at the University Libraries



The Research Data Management Services Team (RDMST) at the University Libraries offers consultation services for data management planning to researchers applying for grant funding from agencies requiring a data management plan (DMP).

All data management inquiries should be addressed to RDMST at: UL-RDMST@lists.psu.edu

Things to think about before a consultation ...

Data Description

What are your data about? Who is the audience of users, or community types, for the data?

Access and Sharing

How will you archive and share your data and why have you chosen this method? What are the terms of use, if any?

Metadata

Describe the metadata that will go with the data. Discuss the metadata standards used.

Intellectual Property Rights

Who owns the data? Who is responsible for personnel with access to data? Any copyright restrictions must be noted. Are there any legal requirements?

Ethics and Privacy

How are the data being protected during the project?

Format

How will the data be generated, maintained and shared?

Archiving and Preservation

What are the procedures in place, or envisioned, for long-term archiving and preservation including succession plans if transfer is needed?

Storage and Backup

How will data be managed during the project? Provide information about version control and naming conventions.

We ask for a minimum of two weeks to help you develop a DMP. This will allow adequate time to schedule a face-to-face consultation and to discuss the nature of the research data, policies for sharing and access, expectations for use and re-use, and other relevant issues.

Links and Resources

At Penn State University

Research Data Management Toolkit

Penn State University Libraries

<http://www.libraries.psu.edu/psul/scholar/datamanagement.html>

Penn State DMP Guidelines

http://www.libraries.psu.edu/content/dam/psul/up/scholarlycomm/images/psu_dmp_guidance_final_oct2011.pdf

Strategic Interdisciplinary Research Office

<http://www.research.psu.edu/offices/siro>

Other Repositories

ChemXSeer - chemistry data

<http://chemxseer.ist.psu.edu/>

Dataverse <http://thedata.org/home>

Dryad - basic and applied bioscience

<http://www.datadryad.org/>

GenBank

<http://www.ncbi.nlm.nih.gov/genbank/index.html>

ICPSR - Inter-University Consortium for Political and Social Research

<http://www.icpsr.umich.edu/icpsrweb/ICPSR/>

NeON - National Ecological Observatory Network

<http://www.neoninc.org/>

Oak Ridge National Laboratory Distributed Active Archive Center for Biogeochemical Dynamics

<http://daac.ornl.gov/index.shtml>

OpenDOAR - Directory of Open Access Repositories

http://www.open_doar.org/

OpenEI - Open Energy Information

http://en.openei.org/wiki/Main_Page

PASDA - Pennsylvania Spatial Data Access

<http://www.pasda.psu.edu/>

Open Context and Digital Archaeological Record

<http://opencontext.org/>

See also: http://oad.simmons.edu/oadwiki/Data_repositories

Terms to get familiar with...

Data

Research data often take physical and digital formats: numerical datasets, observational information, maps, texts, images, and time-dependent media, etc. The National Science Foundation states "data are any and all complex data entities from observations, experiments, simulations, models, and higher order assemblies, along with the associated documentation needed to describe and interpret the data." ~ (Cyberinfrastructure Vision for 21st Century Discovery)

Metadata

Metadata give context to your research data by providing descriptive detail about it. They offer standardized, structured information explaining data in terms of, for example, purpose, origin, time references, geographic location, creator, access conditions, and terms of use of your data collection. Used to enable resource discovery, metadata can provide pathways for searching existing data, facilitate online browsing of data or provide a bibliographic record for citation.

Data curation

Data curation is a means to collect, organize, validate, and preserve data so that scientists can find new ways to address the grand research challenges that face society (Data Conservancy).



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