



Penn Medicine

National Institutes of Health (NIH) Policy for Data Management & Sharing 2023

Dean's Meeting

Danielle Mowery PhD, Chief Research Information Officer

Sept 21, 2022



NIH Data Management & Sharing Policy

An official website of the United States government [Here's how you know](#) ▾

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Data Management and Sharing Policy

NIH has a longstanding commitment to making the results of NIH-funded research available. Responsible data management and sharing has many benefits, including accelerating the pace of biomedical research, enabling validation of research results, and providing accessibility to high-value datasets.

[About the Data Management and Sharing Policy](#) →



Planning and Budgeting for Data Management & Sharing

Find out what NIH expects in a Data Management & Sharing plan and what costs are allowed in a request.



Data Management

Proper data management is crucial for maintaining scientific rigor and research integrity. Learn about best practices for scientific data management.



Sharing Scientific Data

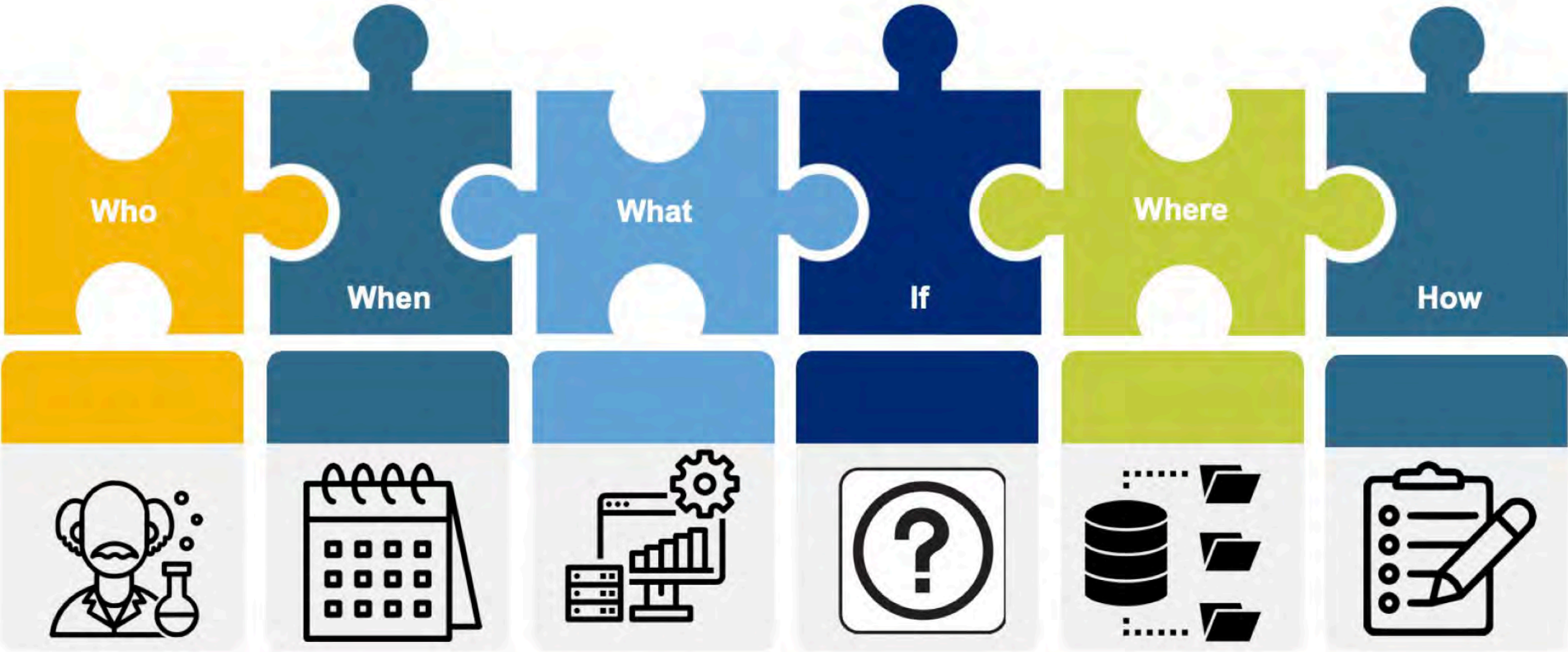
Under the NIH Data Management & Sharing Policy, investigators are empowered to choose the most appropriate methods for sharing scientific data. Learn more about methods for data sharing and selecting data repositories.

<https://sharing.nih.gov/data-management-and-sharing-policy>



Penn Medicine

NIH Data Management & Sharing Policy

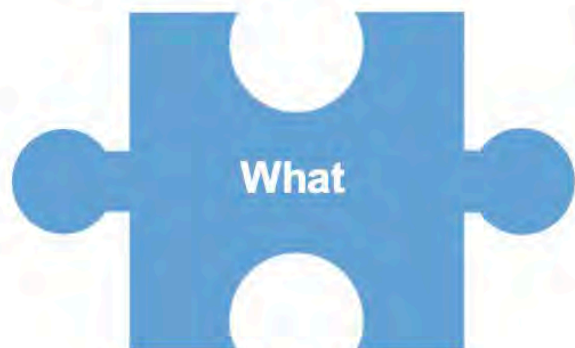


NIH Data Management & Sharing Policy



- Competing grant applications that are submitted to NIH for the January 25, 2023 and subsequent receipt dates;
 - Proposals for contracts that are submitted to NIH on or after January 25, 2023;
 - NIH Intramural Research Projects conducted on or after January 25, 2023; and
 - Other funding agreements (e.g., Other Transactions) that are executed on or after January 25, 2023, unless otherwise stipulated by NIH.
-
- On January 25, 2023, the new policy will come into effect and replace the 2003 NIH Data Sharing Policy currently in effect.

NIH Data Management & Sharing Plan



- ▶ **Submit a Data Management & Sharing Plan for all NIH-funded research that will generate scientific data**
 - Write 2 pages or less
 - Include scientific data to share, relevant standards, repository selection, timelines

F indable

1. Data and metadata are assigned a globally unique, eternally persistent identifier.
2. Data are described with rich metadata.
3. (Meta)data are registered or indexed in a searchable resource.
4. Metadata specify the data identifier.

A ccessible

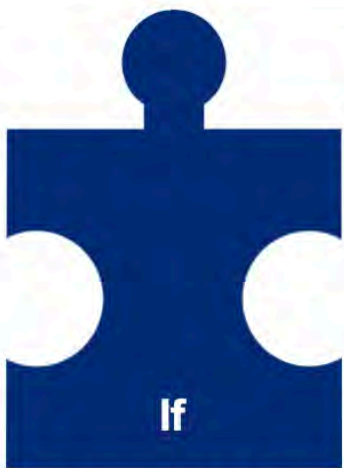
1. (Meta)data are retrievable by their identifier using a standardized communications protocol.
 - The protocol is open, free, and universally implementable.
 - The protocol allows for an authentication and authorization procedure, where necessary.
2. Metadata are accessible, even when data are no longer available.

I nteroperable

1. (Meta)data use a formal, accessible, shared, and broadly applicable language for knowledge representation.
2. (Meta)data use vocabularies that follow FAIR principles.
3. (Meta)data include qualified references to other (meta)data.

R eusable

1. Meta(data) have a plurality of accurate and relevant attributes.
 - (Meta)data are released with a clear and accessible data usage license.
 - (Meta)data are associated with their provenance.
 - (Meta)data meet domain-relevant community standards.



“All data must be managed, not all data should be shared!”

- National Institutes of Health



▶ Researchers should decide which scientific data to preserve and share based on **ethical, legal, and technical factors** that may affect the extent to which scientific data are preserved and shared. Provide the rationale for these decisions:

- informed & existing consent precludes or limits the extent of sharing and future research use
- privacy or safety of research participants would place them at greater risk of re-identification or suffering harm; protective measures such as de-identification and Certificates of Confidentiality would be insufficient
- explicit federal, state, local, or Tribal law, regulation, or policy prohibits disclosure
- restrictions imposed by existing or anticipated agreements (e.g., with third party funders, with partners, with repositories)
- datasets cannot practically be digitized with reasonable efforts

FAQs for the NIH Policy for Data Management and Sharing (DMS Policy)

The following FAQs are intended to help clarify implementation of the NIH Policy for Data Management and Sharing (DMS Policy) and will be updated on an ongoing basis.

Policy Scope

- + 1. How does the DMS Policy fit in with other NIH data sharing policies and requirements (e.g., individual NIH Institute/Center or Office (ICO) funding policies, the NIH Genomic Data Sharing (GDS) Policy, the NIH Policy on Dissemination of NIH-Funded Clinical Trial Information)? *updated 1/25/22*
- + 2. How does the DMS Policy interact with the data sharing expectations of other research partners (e.g., other funding agencies, collaborators)? *updated 1/25/22*
- + 3. Are projects establishing repositories or creating data infrastructure subject to the DMS Policy (i.e., establishing a data coordinating center with no research question proposed)? *updated 1/25/22*

Managing and Sharing Scientific Data

- + 4. Does the timeline for sharing scientific data change in the event of a no cost extension? *updated 1/25/22*
- + 5. What are justifiable reasons for limiting sharing of data? *updated 1/25/22*
- + 6. Do SBIR/STTR projects have to share scientific data under the DMS Policy? *updated 1/25/22*

Considerations for Scientific Data Derived from Human Participants

- + 7. What steps does the DMS Policy take to ensure institutions and researchers protect research participants? *updated 1/25/22*
- + 8. Does the DMS Policy expect that when consent is obtained for research involving human participants, it must be for broad sharing and the future use of data? *updated 1/25/22*

Compliance and Enforcement

- + 9. How will noncompliance with the NIH DMS Policy be handled? *updated 1/25/22*

Scientific Data Sharing

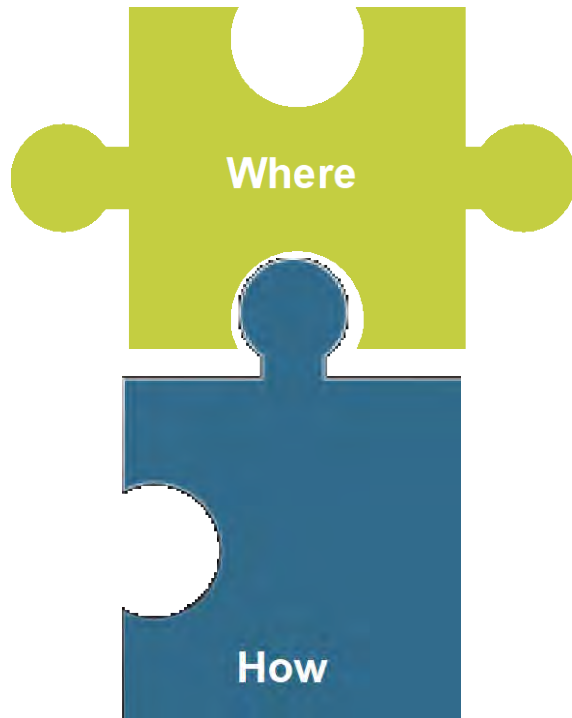
- > [Genomics and Health](#)
- > [Scientific Data Management](#)

Penn Libraries Support for Research Data & the NIH Mandate



- **Nicky Agate, PhD** Snyder-Granader Assistant University Librarian for Research Data & Digital Scholarship
- **Lynda Kellam**, Head of Research Data Services, RDDS

Overview of Library Services



- Data management planning
- Data sharing
- Researcher identifiers

Data management planning

- Data Management Resources:
guides.library.upenn.edu/datamgmt
- NIH: guides.library.upenn.edu/NIH
- DMPTool: guides.library.upenn.edu/dmp/dmptool

Services:

- Provide guidance on writing Data Management Plans (DMPs) and the new NIH DMSP
- Support for using DMPTool and feedback on DMPs
- Guides and workshops on data management best practices

Upcoming workshops:

Sept 20 at 11am: Data Management 101

Sept 27 at 11am: Writing a Data Management Plan

Oct 4 at 11am: Complying with the new NIH DMSP

[Register Online](#)



Data management plan writing

- DMPTool: [guides.library.upenn.edu/
dmp/dmptool](https://guides.library.upenn.edu/dmp/dmptool)

Services:

- Support for using DMPTool and feedback on DMPs

What is DMPTool?

- Free tool that serves as a dashboard for the DMP writing process.
- Guides researchers through process of creating a DMP
- Provides current DMP templates for a variety of federal funders as well as some private foundations
- Integrates access to specialized guidance from funders and resources specific to Penn's campus
- Allows for collaborative writing of your DMP

Funder Requirements

Templates for data management plans are based on the specific requirements listed in funder policy documents. The DMPTool maintains these templates, however, researchers should always consult the program officers and policy documents directly for authoritative guidance. Sample plans are provided by a funder or another trusted party.

Template Name	Download	Organization name	Last Updated	Funder Links	Create a new plan	Sample Plans (if available)
Alfred P. Sloan Foundation		Alfred P. Sloan Foundation (sloan.org)	10-25-2021	Sloan Grant Proposal Guidelines	Requires login	
Arctic Data Center: NSF Polar Programs		National Science Foundation (nsf.gov)	10-25-2021	NSF Arctic Data Center DMP Resources NSF Proposal & Award Policies & Procedures Guide (PAPPG)	Requires login	
BCO-DMO NSF OCE: Biological and Chemical Oceanography		National Science Foundation (nsf.gov)	10-25-2021	NSF OCE Sample and Data Policy NSF GEO Directorate Guidance	Requires login	
DataWorks! Data Management and Sharing Plan Challenge		Federation of American Societies for Experimental Biology (faseb.org)	12-09-2021	Call for Submissions to the DataWorks! Data Management and Sharing Plan Challenge Final NIH Policy for Data Management and Sharing Elements of an NIH Data Management and Sharing Plan Selecting a Repository for Data Resulting from NIH-Supported Research Allowable Costs for Data Management and Sharing	Requires login	
Department of Defense (DOD)		United States Department of Defense (DOD) (defense.gov)	10-25-2021	DOD Public Access Plan Data Archiving Plans for NIJ Funding Applicants	Requires login	
Department of Energy (DOE): Generic		United States Department of Energy (DOE) (energy.gov)	10-25-2021	DOE Policy for Digital Research Data Management DOE Suggested Elements for a Data Management Plan DOE Office of Science Statement on Digital Management	Requires login	

Data sharing

[guides.library.upenn.edu/data
mgmt/sharing](https://guides.library.upenn.edu/data-mgmt/sharing)

Services:

- Provide guidance on appropriate domain, generalist, governmental, and institutional repository options
- Provide guidance for FAIR-ifying data for sharing (Findable, Accessible, Interoperable, Reusable)
- Offer option of sharing and archiving data in ScholarlyCommons, Penn's institutional repository
- In 2023: new ScholarlyCommons with built-in NIH mandate-compliant data repository

guides.library.upenn.edu/datamgmt/sharing

Upcoming workshop:

Oct 5 at 12pm: Data Ethics & Data Sharing
libcal.library.upenn.edu/calendar/rdds/dataethics



Researcher Identifiers (ORCID iDs)

guides.library.upenn.edu/orcid

ORCID iDs:

- Unique identifiers for researchers
- Connect to NIH Biosketch
- Required by funders and publishers (integrates with existing systems)
- Highly recommended in both OSTP memo on open access and NPSM-33 on research security

Services:

- Help researchers obtain an ORCID iD and connect it to Penn's systems to ease administrative burden
- Webinar (w/Office of Research) **Sept 28** register: libcal.library.upenn.edu/calendar/rdds/orcid

guides.library.upenn.edu/orcid

How can we help you?

www.library.upenn.edu/rdds

www.library.upenn.edu/biotech-commons

Email us: libraryrdds@pobox.upenn.edu

Our newsletter: <http://eepurl.com/hUEDx9>

Schedule presentation for your department, center, or institute?

Email: dlmowery@pennmedicine.upenn.edu