The NIH Data Management and Sharing Requirements and the DMPTool

for the Novice (or Non-!) Data Librarian

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Objectives

By the end of this presentation, you will:

1. define research data management and sharing plans
2. identify the carrots and sticks of integrating research data management practices with research
3. define the two requirements of the new NIH Data Management and Sharing Policy (effective NOW!)
4. outline the [current!] parameters of the NIH required plan
5. access and utilize a helpful template tool to create your plan
What is a Data Management [& Sharing] Plan?

“What Data Management and Sharing Plan: A plan describing the data management, preservation, and sharing of scientific data and accompanying metadata.”

A DMSP basically describes what researchers will do with data during the project as well as after the project is completed.

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Why are Data Management & Sharing Important?

- Required for reproducibility
- Facilitates data reuse
- Helps make data FAIR

Image from https://osimap.org/fair-data-principles/
AND THIS AFFECTS ME

HOW?
The Carrots:

A well-managed project outlined by a data management and sharing plan benefits the researcher and can help to make the research more efficient, effective, and impactful by:

- keeping the team organized and on schedule
- helping to prevent data and/or file disorganization, loss, or corruption
- avoiding data duplication
- ensuring that the research meets legal and ethical requirements
- increasing research impact and visibility by facilitating reproducibility and sharing
- saving the researcher time and resources!

https://www.neogaf.com/threads/vault-boy-and-his-thumbs-up.1121776/
The Sticks:

• Journals—PLOS, Nature, JDAP Partners
• Funders—NSF, NIH
• Home Institutions...
01/25/2023

NIH DMSP

WINTER IS HERE!

https://www.meme-arsenal.com/memes/5806b5169e043a76b1555f1a601c0bf8.jpg
Before we get started...

**Purpose**

"...reinforces NIH's longstanding commitment to making the results and outputs of NIH-funded research available to the public through effective and efficient data management and data sharing practices."

**Scope**

"...applies to all research, funded or conducted in whole or in part by NIH, that results in the generation of scientific data... [it] does not apply to research and other activities that do not generate scientific data, including training, infrastructure development, and non-research activities."

NOT-OD-21-013, Section I, Purpose

NOT-OD-21-013, Section III, Scope
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https://osf.io/uadxr/
**Is my grant application subject to the new NIH DMS Policy?**

- **Yes**
  - Will your research generate scientific data?
    - **Yes**
      - **You must comply with the NIH DMS Policy beginning 25 Jan. 2023!**
    - **No**
      - **No**
  
- **No**
  - The Policy does not apply to research and other activities that do not generate scientific data*, including training, infrastructure development, and non-research activities.

**What is meant by scientific data***?

- **Yes**
  - **Scientific data** includes any data needed to validate and/or replicate research findings.
- **No**
  - **Scientific data** do not include laboratory notebooks, preliminary analyses, completed case report forms, drafts of scientific papers, plans for future research, peer reviews, communications with colleagues, or physical objects, such as laboratory specimens.
  
  *Such information should NOT be included in a DMS plan.

**How do I comply with the new NIH DMS Policy?**

- **Yes**
  - **You must comply with the NIH DMS Policy beginning 25 Jan. 2023!**
- **No**
  - **Maybe?**
    - **Yes**
      - **Maybe?**
      - **No**
        - **No**

How do I comply with the new NIH DMS Policy?

There are 2 Requirements

#1 Submit a DMS Plan

#2 Comply with approved Plan.

#2 Follow your Plan and provide regular progress reports.

2 Page Limit

DMS Plan must be 2 pages (or less)

Living Document

Plan must be updated as research evolves and/or changes

Parameters

6 Elements

#1 The application for funding must include a plan to process, preserve, and make accessible the scientific data generated by the research, as well as any additional information about it that explains or facilitates its use, interpretation, and/or reproduction. Some data cannot be shared due to legal or privacy issues—when applicable, the plan must still address such material and explain why it cannot be shared.

Supplemental Information provides additional parameters that the plan must follow. Individual ICOs may add separate requirements.
6 Elements

Data Type
What data/metadata will be generated; how will it be processed, managed, preserved, and shared? Will any data not be shared? Why?

Related Tools, Software, and/or Code
What tools/software are needed to support reproducibility? How can they be accessed? How long will they be available?

Standards
What standards will be applied to data/associated metadata? If no discipline consensus data standards exist, consider committing to general or interdisciplinary standards or simply state that no consensus data standards exist.

Data Preservation, Access and Associated Timelines
• What repository will be used? • How will data be findable/identifiable? • When will what be made available and for how long?
NOTE: NIH requires data be shared as soon as possible: no later than time of publication or end of grant period, whichever comes first.

Access, Distribution, or Reuse Considerations
Are there any limitations or restrictions to data sharing?

Oversight of Data Management and Sharing
How will the Plan be monitored and by whom?

HINT: use the DMPTool templates for the plan and all six elements!

Need Assistance?
Contact the Librarians

View the Data Management Guide

Access the DMPTool Guide

Generalized Overview of the NIH Data Management and Sharing Policy effective 2023.01.25 by Katy Smith, Medical Center Library, Saint Louis University is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. Based on a work at https://www.canva.com/design/DAFbKqpezL/9z-g-5kH1Lview?utm_content=DAFbKqpezL&utm_campaign=designshare&utm_medium=link&utm_source=sharebutton&mode=preview.
https://www.theverge.com/2016/5/5/11592622/this-is-fine-meme-comic
“...working group consisting of data librarians from across the US. The main focus of this WG is to build and update the NIH DMSP templates. Additional work is being done by an education sub-committee that is producing associated educational resources.”
Swim downstream with the
I didn't always write data management & sharing plans but now that I know better (and it's required), I use DMPTool!

The DMPTool!

- Includes customized templates that comply with funder mandates.
- Leads you through writing your plan by breaking it down by the NIH required elements.
- Provides links to useful guidance from NIH, suggested responses, and additional resources.
- Is Free!

Let's Check it Out! https://dmptool.org/
Objectives

By the end of this presentation, you now can:

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By the end of this presentation, you can:

hold your head high and confidently converse with PIs, data scientists, and data librarians because you know just about as much about how to comply with the NIH Data Management and Sharing Policy as well as what effects it will have as they do!
Thank you!

Questions?

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