

Creating Data Management Plans with DMPTool

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Members of the **DMPTool NIH Working Group**



DMPTool NIH Working Group

A newly formed 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.

Blog about the NIH Working Group

https://blog.dmptool.org/2022/08/18/supporting-the-upcoming-nih-data-sharing-requirements-with-the-dmptool/

- Duke University Medical Center
- George Washington University
- Iowa State University
- Johns Hopkins University
- NNLM National Center for Data Services
- Saint Louis University
- Temple University
- The Rockefeller University
- University of Arizona
- University of California, Irvine
- University of Maryland, Baltimore
- University of Pittsburgh
- Virginia Commonwealth University
- Washington University School of Medicine in St.Louis



Objectives

- 1. Understand why data management and sharing are important
- 2. Know what an NIH data management and sharing plan is
- 3. Learn about the DMPTool
 - What it is
 - How to use it
 - How to advertise it to researchers

1. Why are data management and sharing important?

Why are Data Management and Sharing Important?

Required for reproducibility

Facilitates data reuse

Helps Make Data FAIR



FAIR Principles

Findable

Q

- Descriptive keywords
- Persistent Identifier (DOI)

Accessible



- Easy to retrieve by machines and humans
- · Data in a repository



- Open formats
- Consistent vocabulary



- Clear reuse licenses
- Good documentation

St. Lawrence Global Observatory (2018) FAIR Principles. Retrieved 20190918 on https://ogsl.ca/en/fair-principles

Data Management and Sharing Mandates

- Journals PLOS, Nature, JDAP partners
- Funders NSF, NIH
- Home institutions



2. What is an NIH data management and sharing plan?

NIH Data Management and Sharing Policy:

- New policy goes into effect on January 25, 2023
- Requires Data Management and Sharing Plan (DMSP) for all NIH-funded research that results in the generation of scientific data
 - NIH requires that researchers discuss 6 elements around how they will manage and share their data
 - Expectation to maximize data sharing with caveats
 - Expectation that data are of sufficient quality to validate and replicate research finding
 - Not training grants, fellowships, conferences (<u>see specific activity codes</u>)
- NIH Program staff will assess DMS Plans, but not part of overall impact score

Go to https://sharing.nih.gov/data-management-and-sharing-policy for more information

Elements of an NIH Data Management and Sharing Plan (2023)

- Data type
- Related tools, software, and/or code
- Data standards
- Data preservation, access, and associated timelines
- Access, distribution, or reuse considerations
- Oversight of data management and sharing



U.S. Department of Health and Human Services, National Institutes of Health. (2020). Supplemental Information to the NIH Policy for Data Management and Sharing: Elements of an NIH Data Management and Sharing Plan (NIH Notice No. NOT-OD-21-014). Retrieved from https://grants.nih.gov/grants/guide/notice-files/NOT-OD-21-014.html

3. The DMPTool

DMPTool:https://dmptool.org/



- Free, online application managed by the <u>California Digital Library</u> that helps researchers create data management plans specific to their funder's requirements.
- Provides a click-through wizard for creating a DMP that complies with funder requirements.
- Used by many institutions around the world (82,235 users).
- The DMPTool has funder-specific templates for both private and public funders; current community focus is on the new NIH DMSP Policy

Why should researchers use the DMPTool

- **Guidance**: Quick links to relevant resources; both from funder and from your institution.
- Receive Feedback: from collaborators or your institution's DMPTool administrators
- View Example Public Plans: List of Plans that creators chose to make public, including featured plans
- Machine actionable DMP allows for automated exchange of information about your research. Also known as networked DMP
 - Connect to ORCID iD- has the ability to automatically add your DMP to your profile

Machine-actionable DMPs

A vehicle for reporting on the intentions and outcomes of a research project that enable automated information exchange across relevant parties and systems. They contain an inventory of key information about a project and its outputs (not just data), with a change history that stakeholders can query for updated information about the project over its lifetime.

- Ensures compliance
- Promotes research integrity
- Tracks research outputs

Machine-actionable DMPs in the DMPTool

Current features

- The use of identifiers within a DMP and for the DMP itself (DMP-ID).
- Ability to link a plan to research outputs the project has generated—such as journal articles, preprints, datasets, data papers, and software.
- Ability to export DMPs as structured JSON files complying with the RDA Common Standard Metadata Scheme for DMPs.

In development

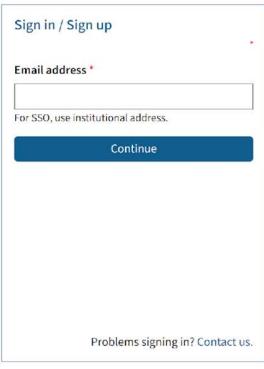
- Ability to upload externally created DMPs into the tool.
- New administrator dashboard to track research outputs associated with DMPs.
- Further developments to the API to facilitate integrations with RDM services & tools.

Funder Requirements

Public DMPs Help







DMPTool







Latest News from DMPTool

Things to know about the updated DMPTool website

View all news







NIH DMPTool template update plans

DMPTool currently has a template designed to match the NIH-supplied <u>PDF DMSP</u> <u>template</u>. This template includes:

- NIH supplied guidance & links corresponding to each question
- Additional explanatory text when necessary
- Example fill-in-the blank answers that users can modify as needed
- REMINDER: only NIH resources provided here; Additional Guidance contains related resources and definitions when necessary.

To be updated by 1/25/23:

- Additional clinical and non-clinical sample answers and guidance
- Genomic data guidance

blog.dmptool.org



Supporting the upcoming NIH data sharing requirements with the DMPTool

Posted on August 18, 2022 by mariapraetzellis



Immediately following the new NIH Policy for Data Management and Sharing (DMS) announcement, academic medical centers started to contact the DMPTool team with questions

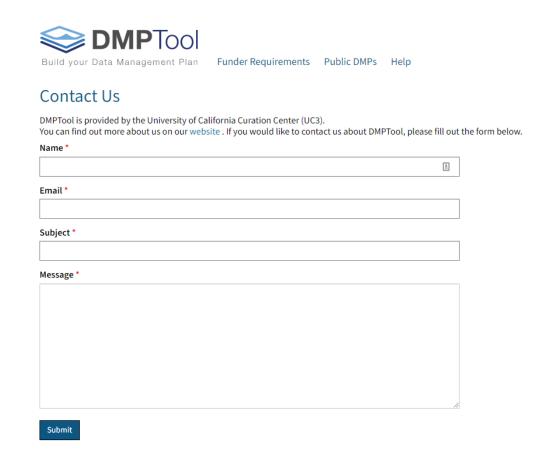
Become a Participating Institution

Why

- It is free!
- You can customize guidance
- Researchers can request feedback from the DMPTool admin
- You can join a community of other (awesome) librarians

How

It is easy. Simply email the DMPTool team at dmptool@ucop.edu or fill out the Contact Us form.



How to advertise the DMPTool to your community

- Connect with
 - o Office of Sponsored Programs Administration
 - o IRB and Office of Research Ethics
 - Grant administrative support staff (the people who help write and manage funded projects)
 - o Faculty at department faculty meetings
- Run trainings
 - New open deck for promoting the DMPTool: tinyurl.com/DMPToolSlides
- Send out flyers (coming soon)



References

- The DMPTool administrative user guide is here.
- Keep up to date with DMPTool news and announcements via the blog: https://blog.dmptool.org/.
- Reach the DMPTool team at dmptool@ucop.edu.



