



### Writing a Data Management Plan with DMPTool

### JHU Data Services Fall 2022

Website: dataservices.library.jhu.edu Email: dataservices@jhu.edu JHU Data Archive: archive.data.jhu.edu



**Data Services** 

#### JHU DATA SERVICES

### HELPING YOU NAVIGATE DATA

#### WE HELP FACULTY, RESEARCHERS AND STUDENTS





### This workshop is about the DMPTool

We will not cover:

- All the ins and outs of writing a Data Management Plan (email us for a consultation or see our <u>self-paced online training on</u> <u>Preparing Data Management Plans</u> for that!)
- Funder-specific requirements for data management plans



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### We will cover:

- Brief introduction to Data Management Plans (DMP)
- Why you should write a DMP
- How DMPTool can help you write a DMP
- DMPTool tutorial
- Resources

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# **Data Management Plans**

### What is a DMP?

- A document describing how research data will be gathered, stored, documented and shared
- Many funders ask for DMPs to go with grant proposals
  - PIs have been asked to revise proposals due to weak DMPs
- It is still a good practice to write a DMP, even your funder does not ask for one

These documents can also be called "Data Sharing Plans" or "Data Management and Sharing Plans"

### Components of a DMP



#### Data Acquisition, Storage and Security

- What are you producing?
- Assessing risk of disclosing personal & health identifiers
- Preparing data to minimize risk for internal use
- Finding secure storage and collaboration platforms





**Data Organization and Documentation** 

• Standardize protocols for file naming, organization, documentation (focused on collaboration)

#### Data Sharing

• What data will be shared, how, and under what conditions?

### Why write a DMP?

- It's required by your funder or publisher
- Saves time at the end of the project
- Helps with creating documentation for your data
- Establishes research team procedures
- Defines roles and responsibilities
- Shareable among collaborators



# Who requires DMPs?







National Institutes of Health





BILL& MELINDA GATES foundation









### DMP Requirements: NIH

NIH



- Takes effect January 25, 2023
- All data-producing research funded by NIH will require a Data Management and Sharing Plan
- How data will be managed, which data will be shared
- Plans should address privacy of human participants, planning for data sharing in informed consent

NIH Scientific Data Sharing website: <u>https://sharing.nih.gov/</u>

### DMPTool

### What is DMPTool?



- A free, online tool that provides funder-specific templates for Data Management Plans (DMPs)
- Leads researchers through the DMP writing process
  - Breaks down DMPs into relevant sections
  - Expert guidance within the tool
  - Tailored to your funding agency
- Maintained by the University of California Curation Center
- 300+ participating institutions worldwide (including JHU!)

### Why use DMPTool?

Build your Data Management Plan

- Creates a step-by-step process for DMPs
- DMPs tailored to funder requirements
- Easy to share, export and request feedback
- Embedded guidance from JHU Data Services
- Keeps DMPs in one place



### Machine-Actionable Initiatives



Build your Data Management Plan

- Features include:
  - Create a permanent identifier for your DMP
  - Create a DMP landing page
  - Add research outputs to your DMP
- Learn more about machine-actionable DMP features
- Sample landing page: <a href="https://dmphub.cdlib.org/dmps/doi:10.48321/D1RG6W">https://dmphub.cdlib.org/dmps/doi:10.48321/D1RG6W</a>

# DMPTool Tutorial

- 1. Log in to DMPTool
- 2. Dashboard view
- 3. Create a plan
- 4. Write a plan
- 5. Guidance tabs
- 6. Request feedback
- 7. Download and export plans
- 8. Create a DMP landing page

### https://dmptool.org/



Build your Data Management Plan Funder Requirements Public DMPs Help



Language 👻

View all news



DMPTool homepage

#### 1. Log In to DMPTool



You can use your Johns Hopkins credentials to sign in to DMPTool. Use your JH email address (@jhu.edu, @jh.edu, or @jhmi.edu) to create an account that is connected to Johns Hopkins single sign-on. Once your account is created, you can use single sign-on for subsequent log-ins.

Note: You can disconnect your account from JH single sign-on if you leave the institution and want to keep your Plans.

Language 🔻

#### 2. Dashboard



Build your Data Management Plan My Dashboard

My Dashboard Create Plan Funder Requirements Public DMPs Help

Johns Hopkins University (jhu.edu) 🛛 🕀 Data Services

JHU Data Archive

Sector Contact for feedback on your plan and to archive your data in the JHU Data Archive

#### My Dashboard

The table below lists the plans that you have created, and that have been shared with you by others. You can edit, share, download, make a copy, or remove these plans at any time.

Project Title 🗘	Template 🗢	Edited 🚽	Role	Test	Visibility	Shared	
DMPTool demo 20220211	NIH-GEN DMSP (Forthcoming 2023)	02-11-2022	Owner	Z	N/A	No	Actions <del>-</del>
Test plan 20211210	NIH-GEN DMSP (Forthcoming 2023)	12-10-2021	Owner		N/A	No	Actions-
Test DMPTool plan 20210921	Digital Curation Centre	09-21-2021	Owner	V	N/A	No	Actions
Test DMPTool plan	NIH-GDS: Genomic Data Sharing	06-08-2021	Owner		N/A	No	Actions
test dmp plan	NIH-GEN DMSP (Forthcoming 2023)	05-19-2021	Owner	7	N/A	No	Actions
Writing a DMP Practice	NSF-SBE: Social, Behavioral, Economic Sciences	02-15-2021	Owner	Y	N/A	No	Actions
test	Digital Curation Centre	08-31-2020	Owner	V	N/A	No	Actions
Test plan	NIH-GEN: Generic	08-17-2020	Owner		N/A	No	Actions

Create plan

Project Titl

#### Johns Hopkins University (jhu.edu) Plans

The table below lists the plans that users at your organization have created and shared within your organization. This allows you to download a PDF and view their plans as samples or to discover new research data.

The Dashboard view shows the Plans you contribute to and Plans that are made visible to anyone at JHU. Click the "Create Plan" button underneath your existing Plans table to create a new DMP.

Undated

Marley Kalt 👻 Language 👻

#### 3. Create your Plan



When creating a new Plan, you can choose a primary research organization (this determines which additional guidance you will see when writing Plan, and can be changed later) and choose a funding organization, or no/unlisted funder (this determines which template you are given to write your Plan).

#### 4. Write your Plan

#### test dmp plan

is plan is based on the "NIH-GEN DMSP (Fort oand all   collapse all			1/12	(iiiii.gov) (ver. 1, pab. 2021	10 25).	
Data Type (1 / 3) Briefly describe the scientific data to be man general summary of the types and estima general terms that address the type and an channel EEG data and fMRI images from ~5 genomic, mobile, survey), level of aggregat has occurred (i.e., how raw or processed th	ted amount of scientific dat ount/size of scientific data ) research participants). De ion (e.g., individual, aggreg	a to be generated and/o expected to be collected scriptions may indicate	d and used in the data mod	the project (e.g., 256- ality (e.g., imaging,	Guidance NIH JHU DMPTool	Comments
B I I IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII				,d	The final DMS Policy defines Scien factual material commonly accept community as of sufficient quality research findings, regardless of wh support scholarly publications. Sc laboratory notebooks, preliminary report forms, drafts of scientific pa research, peer reviews, communic physical objects, such as laborator Even those scientific data not used are considered scientific data and Policy's scope. We understand tha not necessarily mean that the find however, indicating that scientific independent of publication is suffi underlying null or negative finding	ed in the scientific to validate and replicate tether the data are used to ientific data do not include v analyses, completed case upers, plans for future ations with colleagues, or ry specimens." It o support a publication within the final DMS t a lack of publication does ings are null or negative; data are defined cient to cover data

The "Write Plan" tab shows your template for writing your Plan. Each section corresponds to the data management and sharing requirements of the chosen funding agency. You can write and save each section individually.

### 5. Guidance Tabs

A description of which scientific data from the project will be preserved and shared.	Guidance		Comments
A description of which scientific data from the project will be preserved and shared. $B  I  \exists = \neg \exists = \neg  \partial \neg  \boxplus \neg$	IIH JHU DMP   expand all   collapse al Preservation   Contact us for help f for your research by   or emailing dataserv modules, Data Shari   to learn more. You may consider us	finding the I y going to th rvices@jhu.e ring and Pre using the JHU	+ best data sharing options e "request feedback" tab du. Also, view our online servation, via Blackboard U Data Archive to publicly
	share your data. Visi more about our arch (https://dataservice: do plan to archive w in your proposal: "Data and research r access will be sharer which uses an estab (Dataverse) and is su with administrative by Johns Hopkins D. standard data citatio	sit JHU Data chiving process library.jhu materials m ed through the blished reported supported by a help for pre- bata Services ions and per- d for a minin	Services website to learn ess u.edu/archiving/). If you may use the following text nade available for public he JHU Data Archive,

The Guidance tab, to the right of each section of your Plan, provides expert resources on data management planning and best practices. You will see resources from the chosen funding agency, suggestions from DMPTool, and guidance from the research institution(s) you chose. JHU-specific guidance is shown above.

#### 6. Request Feedback from Data Services

See DMPToo						Marley Kalt 👻 Language 🕚
Build your Data Management Pla	n My Das	hboard Create Pla	an Funder Requirem	nents Publ	ic DMPs Help	
Johns Hopkins University (jhu.edu)	🌐 JHU Da	ata Archive	plan and to archive you	r data in the Jł	IU Data Archive	
test dmp plan		_				
Project Details Collaborators	Write Plan	Research outputs	Request feedback	Download	Finalize / Publish	
Request expert feedbar Click below to give data management Your draft data management plan Thank you, JHU Data Services (https://dataservices.library.jhu.edu	ent staff at Joh n (DMP) has be		•	-		 š.
You can continue to edit and down Request feedback	iload the plan i	n the interim.				

The Request Feedback tab lets you send an email to Data Services asking for feedback on your drafted DMP. You can also request feedback using the Contact button at the top, which opens an email window to email JHU Data Services.

### 7. Download and Export Plan

#### test dmp plan

Project Details	Collaborators	Write Plan	Research outputs	Request feedback	Download	Finalize / Pu	ıblish			
Format	v			•	_					
Download s	settings									
Optional plan cor project details question text a unanswered q	coversheet and section heading	gs								
PDF format	ting									
Font					I	Margin (mi	m)			
Face				Size (pt)	-	Тор	Bottom	Left	Right	
Arial, Helvetica, S	Sans-Serif		~	11	~	25 🗸	25 🗸	25 🗸	25	~
Download Plan										

The Download tab allows you to export your Plan out of the tool into multiple formats, including PDF, Microsoft Word and plain text files.

### 8. Create a DMP Landing Page

#### test dmp plan



The Finalize/Publish tab lets you choose your plan visibility and register your Plan with a DMP ID and landing page. See a sample DMP landing page here.

# Wrap Up

### **DMPTool Overview**



- Free, online tool for writing Data Management Plans
- Choose a template for your funder
- Breaks DMPs into individual sections
- Extra guidance provided by data management experts
- Share with collaborators to work together on DMPs
- Request feedback from JHU Data Services



# How to get help with a DMP

Use DMPTool to request a review from Data Services or share DMPs with colleagues

 Email Data Services for a consultation at <u>dataservices@jhu.edu</u>

- Take Data Services online, self-paced trainings on DMPs and de-identification: <u>https://dataservices.library.jhu.edu/training-</u> workshops/
- Take Data Services live webinars on best practices, de-identification and reproducible research: <u>https://dataservices.library.jhu.edu/training-</u> workshops/calendar/



#### Additional Resources





Data Services

#### DMPTool:

- https://dmptool.org/faq
- https://dmptool.org/public\_templates
- https://dmptool.org/general\_guidance

#### **Data Management Plans:**

- JHM Data Management Resources and Examples (intranet link, must be logged into JH account)
- USGS Data Management Plan Guidance

#### Data Services research guides:

- Data Management
- Protecting Identifiers in Human Subjects Data

#### **Online**, self-paced trainings:

- <u>Preparing Data Management Plans</u>
- De-identifying Human Subjects Data for Sharing
- <u>Documenting Your Research Data</u> (new!)

### Resources: Discipline-Specific Data Repositories



- A data repository for research in the social, behavioral sciences and public health data
- With the options of Open or Restricted data repositories <u>https://www.icpsr.umich.edu/icpsrweb/ICPSR/</u>

NI	H

- A list of NIH-supported data repositories
- Most accept data from NIH-funded projects (and others), with some exceptions

https://www.nlm.nih.gov/NIHbmic/nih\_data\_sharing\_repositories.html



Development Data Library (DDL)

Your gateway to USAID-funded, machine-readable data.

 For USAID-funded projects <u>https://data.usaid.gov/</u>

### Resources: General Data Repositories

# REGISTRY OF RESEARCH DATA REPOSITORIES

- A registry of research data repositories
- Use re3data.org to search a data repository appropriate to host your data

https://www.re3data.org/



Data Services

- JHU Data Archive: <u>https://archive.data.jhu.edu</u>
- Available for JHU researchers
- Free for data smaller than 1 TB

Need help sharing your data?dataservices@jhu.eduJust ask us at JHU Data Services!dataservices.library.jhu.edu/



# Questions?

Please fill out our survey to help us improve our workshops!

https://www.surveymonkey.com/r/dmptool

#### JHU DATA SERVICES



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