



dkNET Data Management and Sharing Plan (DMSP) Resources

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What is dkNET?

- dkNET provides a single point of access to information about diverse research resources, including **data, information, materials, tools, funding opportunities, literature, services, events, news,** and **projects** that advance the mission of the NIDDK.
- dkNET provides tools and services in support of **rigor and reproducibility**, built around the Research Resource Identifier (**RRID**) and the **FAIR data principles** (Findable, Accessible, Interoperable, Re-usable).






<https://dknet.org>

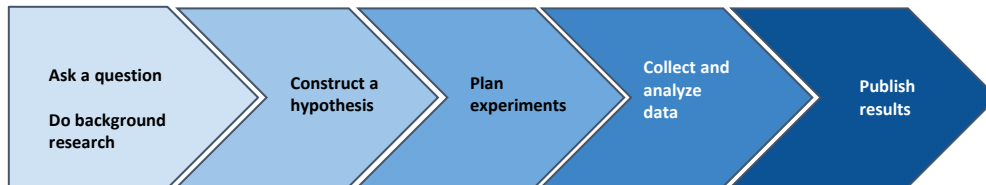
The screenshot shows the dkNET website homepage with the following content:

- dkNET: Connecting Researchers to Resources**
- Resource Reports**: Is my antibody specific? Who else is using my software tools? Answer these questions and more using Research Resource Identifiers (RRIDs) and Digital Object Identifier (DOIs).
Tools | Cell lines | Antibodies | Organisms | Plasmids | Biosamples | Protocols
- Discovery Portal**: Search across 100s of biomedical databases for...
Funding | Images | Phenotypes | Literature | and more
- Authentication Reports & FAIR Data**: View resources on how to comply with NIH's new policies on authentication of key biological resources, using our authentication reports, and making data FAIR.
Authentication reports | Research data management | Suggested data repositories
- Hypothesis Center**: Analyze diverse 'omics data to generate or test research hypotheses – powered by the Signaling Pathways Project.



5 AREAS IN THE PORTAL

-  **Resource Reports:** helps researchers find and evaluate resources
-  **Authentication Reports:** assists researchers in preparing NIH authentication plans
-  **FAIR Data Services:** assists researchers in finding data repositories and standards for preparing data management plans
-  **Discovery Portal:** connects researchers to more than 200 biomedical databases
-  **Hypothesis Center:** powerful tools for data mining and hypothesis generation of FAIR 'omics data





Access to the DMSP Resources: <https://dknet.org>



dkNET: Connecting Researchers to Resources



Find Resources to Power Your Research

Resource Reports: Tools | Cell lines | Antibodies | Organisms | Plasmids | Biosamples | Protocols



Search Across 100s of Biomedical Databases

Discovery Portal: Funding | Images | Phenotypes | Literature | and more



Get Help with NIH Data Management & Sharing Plan

Are you ready for the new January 2023 NIH mandate?

Research Data Management | Suggested Data Repositories | Request Assistance | Rigor & Reproducibility (Overview of Authentication & FAIR Data)



Hypothesis Center

Analyze and explore diverse data to generate or test research hypotheses – powered by

Hypothesis Center: Signaling Pathways Project | Mouse Metabolic Phenotyping Centers | Human Islet Research Network | Appyters | Type 1 Diabetes Knowledge Portal | GeneNetwork | MARRVEL | and more

Single Molecule Spatial Transcriptomics: Interpreting the Spatial Expression Of RNAs From FISH Images

Friday, April 21, 2023, 11 am- 12 pm (PDT)

Jing Liu, PhD, Assistant Professor, Department of Physics, Indiana University-Purdue University Indianapolis

dkNET Webinar Series

!ALERT

Are You Ready for the **New NIH Data Management & Sharing Plan** (effective Jan. 25, 2023)?

Have questions or need help?
Join dkNET Office Hour
Friday, March 3, 2023
11 am – 12 pm PT

[Learn More](#)

New NIH Data Management & Sharing Plan

!ALERT



Research Data Management Overview

Provide information about:

- What is research data management?
- Provide links to resource, such as California Digital Library data management planning tool
- Provide specificity for DK applications

The screenshot shows the DKnet website's 'Research Data Management Overview' page. At the top, there are navigation links: ABOUT, RESOURCE REPORTS, DISCOVERY PORTAL, AUTHENTICATION REPORT (highlighted in green), and HYPOTHESIS CENTER. The main heading is 'Research Data Management Overview' with a breadcrumb trail: Home / Authentication Reports & FAIR Data / Research Data Management Overview. A prominent banner asks, 'Are you ready for 2023 NIH New Data Management and Sharing Mandates (effective January 25, 2023)?' and provides office hours and a link to a blog post. Below this, the page is divided into two columns. The left column is titled 'Data Management, Sharing and Publishing' and contains a paragraph about FAIR data and a bulleted list of questions for data management planning. The right column is titled 'NIH Data Management and Sharing Policy Resources' and lists various NIH policies and a 'Contact help desk' button.



Where Can I Deposit My Data?

- List of DK relevant repositories, recommended by NLM and various journals
- Created in conjunction with NIDDK

Suggested data
Home / Suggested data repositories

Where can I deposit my data?

We have organized a list of data repositories that are recognized by NLM NIH Data Sharing Repositories, Science. It is generally available, or into an institutional or generalist repository.

- NIDDK-specific repositories
- NIH-supported repositories
- Institutional repository
- Other NIDDK Project-specific or consortium-specific repositories

By scientific disciplines

Functional Genomics

Repository Name	RRID	Description	Type of Data	Recommended By
ArrayExpress	RRID:SCR_002964	International functional genomics data collection generated from microarray or next-generation sequencing (NGS) platforms. Repository of functional genomics data supporting publications. Prov ...[more]	Microarray; next-generation sequencing (NGS)	NIDDK
Biological General Repository for Interaction Datasets (BioGRID)	RRID:SCR_007393	Curated protein-protein and genetic interaction repository of raw protein and genetic interactions from major model organism species, with data compiled through comprehensive curation efforts.	Molecular interaction data	NLM, NIDDK
Database of Interacting Proteins (DIP)	RRID:SCR_003167	Database to catalog experimentally determined interactions between proteins combining information from a variety of sources to create a single, consistent set of protein-protein interactions ...[more]	Protein interaction data	NLM, NIDDK
Gene Expression Omnibus (GEO)	RRID:SCR_005019	Functional genomics data repository supporting MIAME-compliant data submissions. Includes microarray-based	Microarray; next-generation sequencing	NLM, NIDDK



- FAIR Standards
- Clinical Repositories Information
- Data maintenance
- Data size limit and cost
- Dynamic database

Repository Name	RRID	Description	Type of Data	Recommended By
Dataverse Network Project	RRID:SCR_001997	Project portal for publishing, citing, sharing and discovering research data. Software, protocols, and community connections for creating research data professional ...[more]	All research data	NIDDK

Other domain-specific repositories

- Protein sequence
- Proteomics

De-identified human clinical research data

Clinical trial data is encouraged to be submitted to the ClinicalTrials.gov even if it is not required. For studies including phenotypic data, you can consider NIH database of Genotypes and Phenotypes (dbGaP). Another repository that hosts a variety of human data, including many demographic and social science studies. Information on uploading. Before uploading data, please note that the data should be de-identified, and you should follow all your institutions' approvals. For completed phase I-IV interventional studies, you can also share anonymized data at Vivli.

Harvard Dataverse

General Information

Harvard Dataverse is a research data repository running on the open source software Dataverse. Harvard Dataverse is fully open to the public, and allows upload and hosting of data from all fields of research. Dataverse allows users to share, preserve, cite, explore, and analyze research data. It facilitates making data available to others, and allows you to realize your research's next steps. Researchers, data authors, publishers, data librarians, and affiliated institutions all receive academic credit and research visibility.

Homepage: <https://dataverse.harvard.edu/>

Countries that developed this resource: United States

Created in: 2010

Knowledge Domains

Subject(s)

User-defined Tags



Repository Wizard

- Rated 80 repositories against FAIR, Open, Trustworthy, Citable principles and other criteria
- Wizard guides a user through criteria that may be important for selection
- Scheduled for release summer of 2023

Find the right repository for your data.

Explore, filter and find the best repositories for your data and needs.

Data Type: Domains:

or

Need help setting up filters?

Go through filters one by one guided by our Filtering Assistant and find the best repository for your data as possible.

[Try our Filtering Assistant](#)

Filtering Assistant

Questions

What is the data type you will be sharing?

What domain do the data belong to?

Will you be sharing human data with PHI?

Will the data be updated frequently, i.e., they are part of an ongoing study that will be uploaded in batches?

How important is data citation to you?

Is the dataset funded, at least in part, by the NIH?

Will the dataset support any published academic work?

Will you need a PID for the published dataset?

Versioning -

Metadata Level -

Color -

Size Limits -

Size -

DOI -

Datapoint -

Text -

Title -

Size Limits

none

contact Repo

yes

DOI

not Supported

supported



Will the data be updated frequently, i.e., they are part of an ongoing study that will be uploaded in batches?

Yes No I don't know yet

Next or press Enter Skip

How important is data citation to you?

Not at all Somewhat Crucial

Is the dataset funded, at least in part, by the NIH?

Yes, by an NIDDK source Yes, by an NIH institute Yes, by another NIH source



Outreach to Next Generation Researchers

The screenshot shows the dkNET Student Funding Opportunity page. At the top, it says 'DKNET.ORG Student Funding Opportunity dkNET 2021 Summer of Data Student Internship'. Below this is a large heading 'Let's make research data FAIR!' with a network diagram. The page is divided into sections: 'What is dkNET?' (explaining the portal's purpose), 'Program Description' (detailing the 6-week internship), and 'General Requirements' (listing student criteria). A sidebar on the right contains icons for 'RESOURCE REPORTS', 'DISCOVERY PORTAL', 'AUTHENTICATION & FAIR DATA', and 'HYPOTHESIS CENTER'. At the bottom, there are three boxes: 'DURATION' (6-week program from June 21 to July 30, 2021), 'AWARD' (\$1,000 awards for high school, undergraduate, master or PhD students), and 'APPLY NOW' (submit application by April 9, 2021, with contact info for Quimberly Conner). The URL <https://dknet.org/about/Summer-Internship> is at the bottom.

dkNET Summer of Data Student Program

Program Duration: 6 weeks

After this program, students will be able to:

- Utilize dkNET tools and resources in research projects
- Gain familiarity with additional tools to help their research, e.g., protocols.io, ORCID, Slack
- Understand best practices for robust and reproducible research
- Understand the basics of good data management for FAIR data

<https://dknet.org/about/Summer-Program>



Highlight Repositories at Webinar Series

Human Biomolecular Atlas Program (HuBMAP)

Katy Börner Indiana University (HIVE-IU)

COMMON METABOLIC DISEASES KNOWLEDGE PORTAL

Common Metabolic Diseases Genome Atlas

UC San Diego
SCHOOL OF PUBLIC HEALTH
EMBL-EBI

The Common Metabolic Disease Knowledge Portal

dkNET Webinar
November 17, 2022
cmdkp.org

National Institute of Diabetes and Digestive and Kidney Diseases

Office of Clinical Research Support
NIH

Submitting Resources to the NIDDK Central Repository

dkNET Office Hour- March 3, 2023

National Institute of Diabetes and Digestive and Kidney Diseases

FAIR Data Curation of Antibody/B-cell and T-cell Receptor Sequences in the AIRR Data Commons

Felix Breden, Brian Corrie, Kira Neller
iReceptor

dkNET Webinar
January 27, 2023



Office Hours



dkNET Office Hours

Are You Ready for 2023?

New NIH Data Management and Sharing Mandates

Dr. Jeffrey Grethe



dkNET Services

- Support Rigor & Reproducibility
- Discover useful research resources
- Explore the Hypothesis Center
- Make your data FAIR and more



Follow us @dknet_info



Sign up newsletter
<https://dknet.org/about>

An NIDDK Resource

dkn



dkNET Office Hours

Are You Ready for 2023?

New NIH Data Management and Sharing Mandates

Dr. Jeffrey Grethe, dkNET Co-PI

Dr. Rebecca Rodriguez, Repository Program Director, NIDDK

Ms. Reaya Reuss, Chief of Staff to the Deputy Director, NIDDK

The support team members, NIDDK Central Repository



dkNET Services

- Support Rigor & Reproducibility
- Discover useful research resources
- Explore the Hypothesis Center
- Make your data FAIR and more



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An NIDDK Resource

dknet.org



Data Repository Inquiry Form

Looking for data repository for your data management or data sharing plan? dkNET can help. Simply fill in some basic information below to get started!



Frequently Asked Questions from Office Hours



Office Hours FAQ

Home / [Office Hours FAQ](#)

Frequently Asked Questions

Q1: Where can I find resources about data management and sharing plans?

A: You can go to [dkNET's data management and sharing webpage](#). We list resources including policies, webinar recordings, slides, and samples. NIDDK also has [a resource related to data management of sharing](#).

Q2: Where can I see the slides and recording of the presentation in dkNET's data management and sharing office hours?

A: You can find slide and recording information here: <https://dknet.org/about/blog/2535>. Slides are [shared via Slideshare](#) and videos are [shared via Youtube](#).

Q3: If we publish data such as in a paper or pre-print (e.g. bioRxiv), does this count as having shared the data? Does the data need to be in a repository?

A: A table or figure included in a manuscript does not count as sharing the data. You still need to share the underlying data (e.g. spreadsheet) and the appropriate metadata and data dictionary. If there is original data that leads to a table or figure (e.g. data extracted from images), this data would also need to be shared in an appropriate repository.

Q4: If we collect clinical data in our institution-level repositories, does this count as having shared the data?

A: This depends on what you mean by your institutional-level repository. For clinical data many institutes provide an institutional access to tools to collect clinical data (e.g. RedCap). The data in these institutional repositories are not typically used for data publication and sharing and the data would need to be exported and transferred to an appropriate repository.



Resources Summary

- dkNET portal: <https://dknet.org>

- **Data Management and Sharing Plan resources**
 - Research Data Management webpage: <https://dknet.org/rin/research-data-management>
 - Suggested Data Repositories: <https://dknet.org/rin/suggested-data-repositories>
 - FAQ webpage: <https://dknet.org/about/office-hours-faq>

- **Training resources**
 - Summer of Data Student Program: <https://dknet.org/about/Summer-Program>
 - dkNET Webinar Series: <https://dknet.org/about/webinar>
 - On-demand webinar: <https://dknet.org/about/webinar1>
 - YouTube channel: <https://www.youtube.com/channel/UCwukSrB8L61Fhwjv3x20IOQ>
 - Slideshare: <https://www.slideshare.net/dkNET/presentations>

- **Join the community and keep up with the latest**
 - Newsletter <https://dknet.org/about/maillist>
 - Twitter https://twitter.com/dkNET_Info
 - Facebook <https://www.facebook.com/dkNET.org>