

# Managing Your Research Data

## IN THE UNIVERSITY LIBRARIES

### S E R V I C E S

#### SUPPORT FOR WRITING DMPs



We provide templates and one-on-one consultation when writing your **data management plan** (DMP), now required by some grant funding agencies (e.g., NSF and NIH)

Use the **DMP Tool** to create a template-based data management plan that you can submit to funders ([dmp.cdlib.org](http://dmp.cdlib.org))

#### DATA MANAGEMENT



Learn about **best practices** for file naming, campus storage solutions, privacy/protection considerations, and data management and sharing options on our website

Our **data management consultants** can provide consultation on your research data management needs and referrals to other campus services

#### DATA SHARING AND REUSE



Talk to us about available options you have for **sharing your research data** and meeting funder requirements

Our data experts can help you with questions about disciplinary repositories, publisher platforms, copyright, and how to **maximize the discoverability and reuse** of your data

#### CURATION AND PRESERVATION



Deposit your data in the **Data Repository for the University of Minnesota** (DRUM)

Data are **curated** by Libraries experts, and depositing in DRUM includes benefits like flexible access options, persistent URLs for data citations, data download statistics, and bit-level preservation/archival storage for at least 10 years

### TRAINING & WORKSHOPS

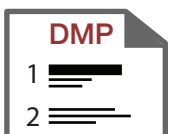
Our online **Data Management Course** and in-person **workshop series** provide hands-on, practical training in relevant topics.

#### Data Management Course



Learn about best practices for data storage, backup, documentation, sharing, and long-term preservation. The series includes online modules complemented by one-hour hands-on sessions.

#### Creating a Data Management Plan



This discussion-based 1.5-hour workshop is taught by library staff and guides researchers through best practices on writing and executing data management plans.



UNIVERSITY OF MINNESOTA

**LIBRARIES**

<http://www.lib.umn.edu/datamanagement>

[datarepo@umn.edu](mailto:datarepo@umn.edu)

# QUICK TIPS

Here are some quick tips to help you manage your research data.  
Curious to learn more? Talk to a librarian today!

**Rule of Three.** Store your data in three different locations to avoid losing it: **1)** local copy with easy access (e.g., hard drive), **2)** local but separate copy (e.g., external hard drive), and **3)** remote copy outside of your building (e.g., cloud storage)

**Document your methods!** Only you will know how the data has changed over time or what your abbreviations and codes mean (e.g., column headings in spreadsheets), so keep track in a lab notebook, a data dictionary, or a readme.txt file

Establish a **descriptive, version-controlling filename convention** before you begin and be consistent

Use **non-proprietary file formats** that maintain the quality of your data and increase their readability across time (e.g., .rtf, .csv, .tiff)

Add **metadata** to your Excel tables using the free Colectica plug-in for Windows Excel (<http://www.colectica.com/software/colecticaforexcel>)

Manage files with **descriptive tags** using the built in tags in OS X Mavericks or a free tagging software like Tagit (<http://www.ironic-software.com/tagit/>)

**Need more storage?** Not a problem with tons of free storage server space available from the Office of Information Technology ([storage.umn.edu](http://storage.umn.edu))



Learn more about how the University Libraries can help you before, during, and after your research

<http://www.lib.umn.edu/datamanagement>

# CAMPUS RESOURCES

The Libraries are not the only place to find help on managing your research data.  
Explore these other campus resources for more answers to your questions.

## Office of Information Technology

<http://www.oit.umn.edu/services-category/index.htm>

**Computing and network services**, including storage, backup, server support, and database administration

**Tutorials and workshops** available throughout the semester

**Security tools and guidance**  
(<http://www.oit.umn.edu/security>)

## College of Liberal Arts Research Support

<http://researchsupport.cla.umn.edu/>

Offers services for **survey and experiment design, research computing, data collection, data management, and data analysis**

Provides support on **digital arts and humanities** projects, such as depositing to the **CLA Digital Content Library**  
(<http://dcl.umn.edu>)

## Academic Health Center Information Systems

<http://www.health.umn.edu/facultystaff/ahcis>

Provides secure, on-site **data storage** and **anonymization** services

Offers tools and data analysis through the **CTSI Portal**  
(<http://www.ctsi.umn.edu/research/tools-software/index.htm>)

## Office for Technology Commercialization

<http://www.license.umn.edu/>

Provides advising on keeping records and lab notebooks and **support for patentable research**

## Office of the Vice President for Research

<http://www.research.umn.edu>

Offers **online workshops** on research data management and intellectual property

Provides tools and training through the **Minnesota Supercomputing Institute**  
(<http://www.msi.umn.edu>)

## U-Spatial

<https://uspatial.umn.edu/>

Provides support for **spatial and GIS data**, including creation, sharing, discovery, and reuse

# CONTACT US!

Contact Libraries staff today to get answers to your research data questions.  
[datarepo@umn.edu](mailto:datarepo@umn.edu) | <http://lib.umn.edu/datamanagement>



UNIVERSITY OF MINNESOTA

**LIBRARIES**

## Selected Sources for Data & Summary Statistics

Resource	What is it?
CDC Surveys and Data Collection Systems <a href="http://www.cdc.gov/nchs/surveys.htm">http://www.cdc.gov/nchs/surveys.htm</a>	Includes National Health and Nutrition Examination Survey, National Health Care Survey, National Health Interview Survey, and National Vital Statistics System
Community Health Status Indicators (CDC) <a href="http://wwwn.cdc.gov/communityhealth">http://wwwn.cdc.gov/communityhealth</a>	Health profiles for all counties, including key indicators of health outcomes and potential factors influencing those outcomes
Data Repository for the University of Minnesota (DRUM) <a href="http://z.umn.edu/drum">http://z.umn.edu/drum</a>	Institutional data repository which includes support for embargos, DOIs, and preservation activities for datasets submitted by U of M affiliated researchers
Figshare <a href="http://figshare.com/">http://figshare.com/</a>	Open repository accepting data in a wide range of scientific disciplines
Health and Medical Care Archive (Robert Wood Johnson Foundation)* <a href="http://www.icpsr.umich.edu/icpsrweb/HMCA/index.jsp">http://www.icpsr.umich.edu/icpsrweb/HMCA/index.jsp</a>	Data on chronic health conditions, substance abuse, cost and access to health care, and other health-related issues
Health Indicators Warehouse (HHS/CDC) <a href="http://www.healthindicators.gov/">http://www.healthindicators.gov/</a>	Over 1,200 indicators available at national, state, and/or county levels
Integrated Fertility Survey Series (NICHD)* <a href="http://www.icpsr.umich.edu/icpsrweb/IFSS/">http://www.icpsr.umich.edu/icpsrweb/IFSS/</a>	Includes the Growth of American Families, National Fertility Surveys, and National Surveys of Family Growth. Includes over five decades of data.
Minnesota Department of Health Data & Statistics <a href="http://www.health.state.mn.us/macros/topics/stats.html">http://www.health.state.mn.us/macros/topics/stats.html</a>	Reports and statistics on diseases and conditions in the state of Minnesota, including statewide summaries and assessments

National Addiction & HIV Data Archive Program (NIDA)* <a href="http://www.icpsr.umich.edu/icpsrweb/NAHDAP/">http://www.icpsr.umich.edu/icpsrweb/NAHDAP/</a>	Datasets and documentation focusing on substance use (including tobacco and alcohol), chronic and communicable diseases
National Archive of Computerized Data on Aging (NACDA)* <a href="http://www.icpsr.umich.edu/icpsrweb/NACDA/">http://www.icpsr.umich.edu/icpsrweb/NACDA/</a>	Sponsored by the National Institute on Aging, contains datasets pertaining to gerontological research
National Data Archive on Child Abuse and Neglect (NDACAN) <a href="http://www.ndacan.cornell.edu/">http://www.ndacan.cornell.edu/</a>	Supported by the Children’s Bureau and US Department of Health and Human Services, accepts datasets related to child abuse and neglect
NIH Data Sharing Repositories <a href="https://www.nlm.nih.gov/NIHbmic/nih_data_sharing_repositories.html">https://www.nlm.nih.gov/NIHbmic/nih_data_sharing_repositories.html</a>	NIH currently supports over 65 data sharing repositories, mainly focused on genomics, genetics, and basic sciences
Population Research in Sexual Minority Health (PRISM) Data Archive* <a href="http://www.icpsr.umich.edu/icpsrweb/content/ICPSR/fenway.html">http://www.icpsr.umich.edu/icpsrweb/content/ICPSR/fenway.html</a>	Data on issues affected sexual and gender minority populations in the US

\* These resources fall under the umbrella of ICPSR, The Inter-University Consortium for Political and Social Research. U of M is a member organization. Signing up for an ICPSR account allows you to access additional data not available to members of the public.

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For additional resources or assistance using these resources, please contact Caitlin Bakker at 612-301-1353 or [cjbakker@umn.edu](mailto:cjbakker@umn.edu) or Liz Fine Weinfurter at 612-624-6492 or [eweinfur@umn.edu](mailto:eweinfur@umn.edu)