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Preparing and Complying with the new and upcoming NIH (National Institute of Health) Data Management and Sharing (DMS) policy- What to know

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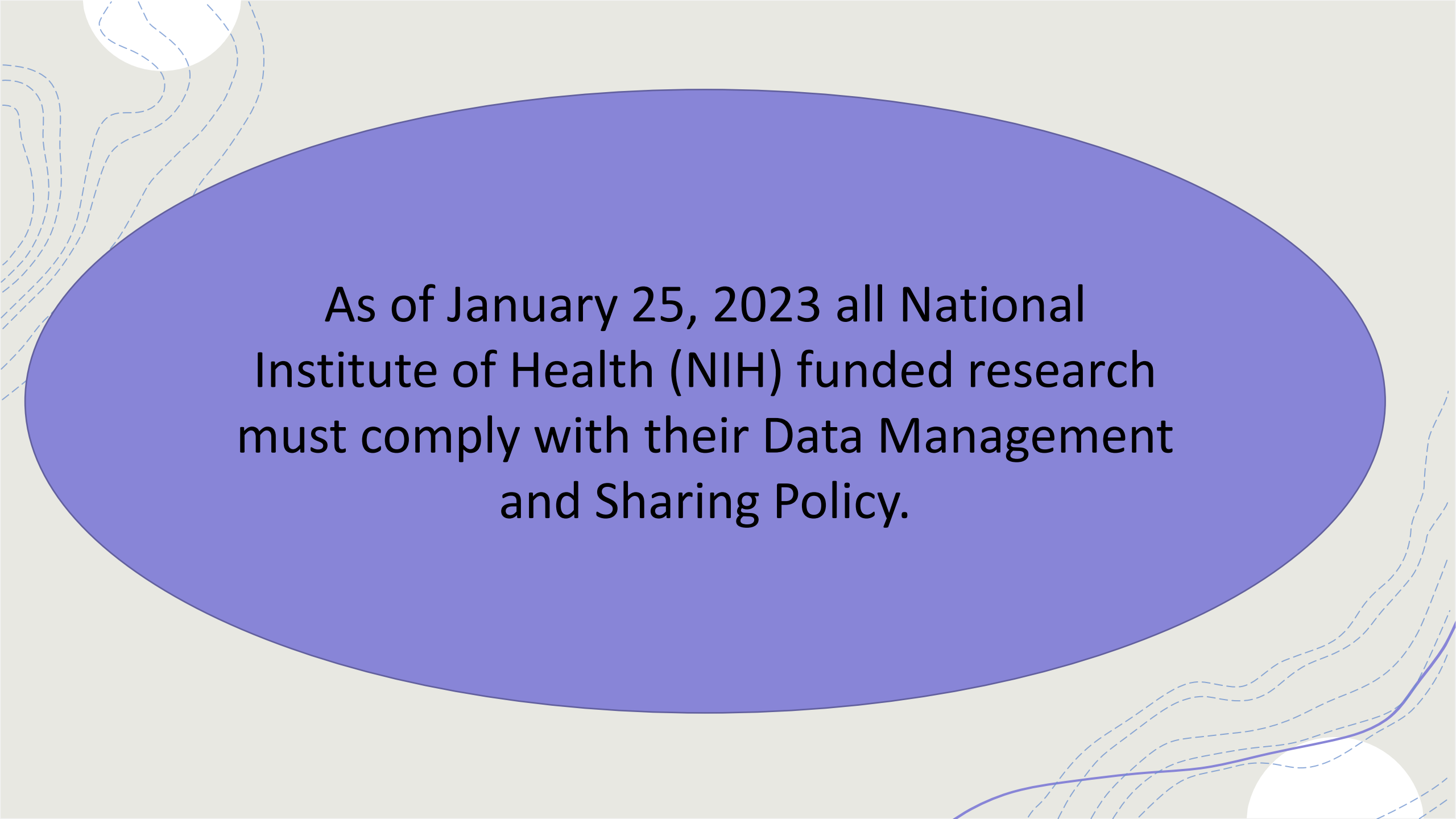
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“Preparing and Complying with the
new and upcoming NIH(National
Institute of Health) Data
Management and Sharing (DMS)
policy- what to know

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As of January 25, 2023 all National Institute of Health (NIH) funded research must comply with their Data Management and Sharing Policy.

Goals and learning objectives for today's presentation

This workshop will provide information on the policy

Highlight some important features of it

Introduce a few resources and tools to assist with understanding how to best comply with this new policy

Share Rowan library-specific tools and services that are available to assist with data management

What do I have to do?

As a part of all new funding applications, you must also make all scientific data generated in the course of NIH-sponsored research openly available for view and reuse. You must also submit a Data Management Plan as a part of your application for funding which outlines what steps will be taken to preserve and share your data.

Who does this apply to?

The new Data Management and Sharing Policy applies to all investigators **funded in whole or in part by the NIH.** This includes many Rowan and Cooper University Healthcare faculty and researchers.

Understand what the purpose of the data policy ?

- Per NIH this policy will provide a consistent minimum expectation for all research supported by the NIH agency

Set consistent minimum expectation



- Applies all research funded or conducted in whole or partly by NIH that results in generation of scientific data

- "

Share what the policy covers

Side note: important to share definition from NIH
What is scientific data ?

Per NIH Scientific data is “the **recorded factual material commonly accepted** in the scientific community as of sufficient quality as to validate and replicate research findings, regardless of whether the data are used to support scholarly publications

What research applies and what does not ?

Activities Subject to the DMS Policy

APPLIES TO...

All research generating scientific data, including but not limited to:

- Research Projects
- Certain Career Development Awards (Ks)
- Small Business SBIR/STTR
- Research Centers

DOES NOT APPLY TO...

research projects not generating scientific data or non-research projects, including but not limited to:

- Training (Ts)
- Fellowships (Fs)
- Certain non-research Career Awards (e.g., KM1)
- Construction (C06)
- Conference Grants (R13)
- Resources (Gs)
- Research-Related Infrastructure Programs (e.g., S06)

What is NOT considered to be scientific Data by NIH?

Exclusions from the DMS Policy

Scientific data do not include:

- Data **not** necessary for or of sufficient quality to validate and replicate research findings,
- Laboratory notebooks,
- Preliminary analyses,
- Completed case report forms,
- Drafts of scientific papers,
- Plans for future research,
- Peer reviews,
- Communications with colleagues, or
- Physical objects, (e.g., laboratory specimens)

When do I have to share my data by?

No later than **date of associated publication or end of award/support period** (whichever comes first) data must be made available online in either a subject or generalist repository.



Highlight some important features of the
policy

Learn key elements that will need to be
provided to comply with the NIH policy

Data Type

- A general summary of the types and estimated amount of scientific data to be generated and/or used in the research.

Related Tools Software Code

- An indication of whether specialized tools are needed to access or manipulate shared scientific data to support replication or reuse, and name(s) of the needed tool(s) and software.

Standards

- An indication of what standards will be applied to the scientific data and associated metadata (i.e., data formats, data dictionaries, data identifiers, definitions, unique identifiers, and other data documentation).
- While many scientific fields have developed and adopted common data standards, others have not. In such cases, the Plan may indicate that no consensus data standards exist for the scientific data and

Data Preservation , Access and Timelines

- Plans and timelines for data preservation and access, including:
- The name of the repository(ies) where scientific data and metadata arising from the project will be archived
- How the scientific data will be findable and identifiable (have a persistent identifier is best aka DOI)
- When the scientific data will be made available to other users

Access Distribution or Reuse Considerations

- Informed consent
- Privacy and confidentiality protections
- Whether access to scientific data derived from humans will be controlled
- Any restrictions imposed by federal, Tribal, or state laws, regulations, or policies, or existing or anticipated agreements. Any other considerations that may limit the extent of data sharing.

Oversight of Data Management and Sharing

- Indicate how compliance with the Plan will be monitored and managed, frequency of oversight, and by whom (e.g., titles, roles).



FINDABLE

Data has rich metadata and unique identifier



ACCESSIBLE

Data can be easily downloaded or used by using standard protocols



INTEROPERABLE

Metadata use an accessible and standard language




REUSABLE

Data is well-described and provides clear usage of licences

Whenever possible, consider the FAIR principles when making these decisions about your data, software, and storage. More information at:

<https://www.go-fair.org/>





Learn about tools and Resources to
assist with how to prepare and
submit a data management plan to
NIH.





What is the DMPTool?

“The DMPTool helps researchers create data management plans (DMPs). It provides guidance from specific funders who require DMPs, but the tool can be used by anyone interested in developing generic DMPs to help facilitate their research.”

<https://dmptool.org/>



What is the DMPTool?

Selection of funding agencies with templates and guidance in the DMPTool:

Funder

Alfred P. Sloan Foundation
Gordon and Betty Moore Foundation (GBMF)
Gulf of Mexico Research Initiative (GoMRI)
Institute of Education Sciences (US Dept of Education IES)
Institute of Museum and Library Services (IMLS)
Joint Fire Science Program (JFSP)
National Aeronautics and Space Administration (NASA)
National Endowment for the Humanities (NEH)
National Institute of Justice (DOJ)
National Institute of Standards and Technology (NIST)
National Institutes of Health (NIH)
National Oceanic and Atmospheric Administration (NOAA)
National Science Foundation (NSF)
Tetiaroa Society
U.S. Department of Agriculture (USDA)
United States Department of Defense (DOD)
United States Department of Energy (DOE)
United States Department of Transportation (DOT)
United States Geological Survey (USGS)
University Corporation for Atmospheric Research (UCAR)





Who can use the DMPTool and who would benefit from using it?

- DMPTool is free for anyone to create data management plans. As a user, you can:
 - Create your own plans.
 - Co-author a plan with collaborators within or outside of Rowan University
 - As a researcher at Rowan University, you can log in using your Rowan institutional credentials. You may then be presented with institution-specific guidance and have the option to get feedback from local data experts.





Guidance for creating DMP's

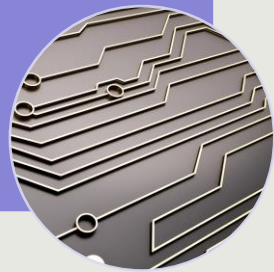
- Research Data Management Libguide
 - Best Practices for Managing research data
 - Data Literacy
 - Data Sharing and Publishing
 - Data Ownership

<https://libguides.rowan.edu/researchdatamanagement/home>



Format help for data management and sharing plans

- Data management and sharing templates
- Rowan subscribes to DMPTool.org



- Data Management and Sharing Checklist from DMSP working Group
- OSF

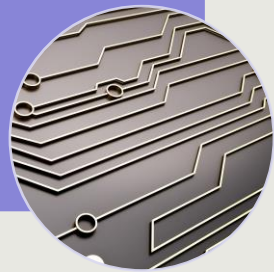


https://www.oir.nih.gov/system/files/media/file/2022-11/template-data_management_plan.pdf



Help for choosing repository

- Use a specialized data repositories related to your discipline



- If not appropriate discipline or data type specific repository can get help choosing one from NIH tool :



Examples of specialized repositories

+ Search data repositories

- [re3data.org: Registry of Research Data Repositories](https://re3data.org/) - re3data.org is a global registry of research data repositories that covers research data repositories from different academic disciplines. It presents repositories for the permanent storage and access of data sets to researchers, funding bodies, publishers and scholarly institutions. re3data.org promotes a culture of sharing, increased access and better visibility of research data.
- [Open Access Directory of Data Repositories](https://www.openaccesslibrary.com/) - Listed by discipline.

+

Data repositories (general)

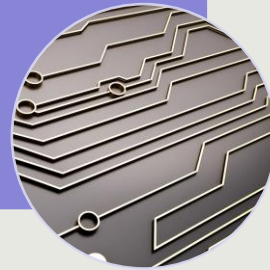
- [Zenodo](https://zenodo.org/) - is a free cloud-based service based on CERN's data repository platform
- [FigShare](https://www.figshare.com/) - is a free cloud-based service run by Nature Publishing Group
- [Mendeley Data](https://www.mendeley.com/data/)

- + Many more discipline specific repositories are available on the Rowan Libraries Research Data Management Research Guide here: https://libguides.rowan.edu/researchdatamanagement/data_sharing



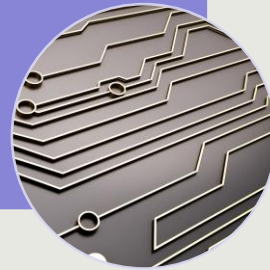
Need help understanding which sharing policy to follow ?

- Which data sharing policy applies to me ?
- [Which Policies Apply to My Research? | Data Sharing \(nih.gov\)](#)



Resources for planning and budgeting

- Budgeting for data management help document
- [Budgeting for Data Management & Sharing | Data Sharing \(nih.gov\)](#)



Additional tools help with Data

DMP Self Assessment Tool

[PURR - Resources: DMP
Self-Assessment Tool:
About \(purdue.edu\)](#)



Additional Resources

- + Supplemental information a framework to how to address privacy issues
- + [NOT-OD-22-213: Supplemental Information to the NIH Policy for Data Management and Sharing: Protecting Privacy When Sharing Human Research Participant Data](#)
- +
- +
- + Working with tribal data specific information ?
- + [NOT-OD-22-214: Supplemental Information to the NIH Policy for Data Management and Sharing: Responsible Management and Sharing of American Indian/Alaska Native Participant Data](#)
- +
- + NIH sharing FAQ
- + [Frequently Asked Questions \(FAQ\) | Data Sharing \(nih.gov\)](#)
- +
- + Genomic data
- + The NIH Genomic Data Sharing (GDS) Policy will remain in effect. However, **after January 25, 2023, NIH will no longer be collecting separate GDS Plans.**
- + [Data Management and Sharing Policies \(nih.gov\)](#)



Rowan library-specific tools and services that are available to assist with data management



Library Guides

[Campbell Library](#) / [Research Guides](#) / [Research Data Management](#) / [Home](#)

Research Data Management

This guide contains information about research data management and best practices for faculty, researchers and graduate students

Home

[Data Management Plans](#)

[DMPTool](#)

[Best Practices to Managing Research Data](#)


[Literature/Guides for RDM Best Practices](#)

[Data Information Literacy](#)

[Publishing and Sharing Your Data](#)

[Funding Agency Requirements](#)

[Ownership of Data](#)

[Scholarly Communication Libguide](#) 

[Research Data Management Working Group](#)

What is Research Data Management?

Research in science and technology fields today generates large quantities of data. This data not only needs to be processed and analyzed, it needs to be managed.

Funding agencies such as the NSF now require **Data Management Plans** to be submitted with grant proposals. These plans must explain how the researcher plans to manage the data generated by the research, addressing issues like security, version control, documentation, ownership and access, preservation, and sharing. If long term preservation and sharing is desired, the researcher must choose an appropriate repository to host it.

Why is it important?

- It helps you be organized and find your files in the future
- It allows better reproducibility of research and data It helps you be organized about your research by documenting your processes for your own recollection, accountability, and re-use (by yourself or others)
- It allows for better version control of data
- Preserving your data is important, so planning ahead for any eventuality will not hinder your research project or sharing your data
- External funding agencies may require you to share your data and publications

Why is well managed data important?

- It increases the impact and visibility of research



Rowan Research Department Resources

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ORCID ID

ORCID stands for **O**pen **R**esearcher and **C**ontributor **I**dentifier. It is a unique, open digital identifier that distinguishes you from every other researcher with the same or similar name to you. Anyone who participates in research, scholarship, or innovation can register an ORCID for themselves free of charge, and you can use the same ID throughout your whole career -- even if your name changes or you move to a different organization, discipline, or country.

Commitment to requiring ORCID IDs in the publishing process for their journal(s)

Funding Agencies Requiring ORCID

Requirement for ORCID IDs for Individuals Supported by Research Training, Fellowship, Research Education, and Career Development Awards Beginning in FY 2020 (Notice Number: NOT-OD-19-109)
<https://grants.nih.gov/grants/guide/notice-files/NOT-OD-19-109.html>

By way of this Notice, NIH, AHRQ, and CDC announce that individuals supported by research training, fellowship, research education, and career development awards will be required to have ORCID IDs (Open Researcher and Contributor Identifiers) beginning in FY 2020.

Video: What is ORCID?



What is ORCID? from ORCID on Vimeo.

Workshop Slides: Manage Your Researcher Profile with ORCID

Rowan University would like you to link your ORCID to Rowan University so that published works can be easily identified as belonging to Rowan University Faculty and Staff. This allows the University to have more accurate



Quick review of Rowan-specific Best Practices for RDM

The screenshot shows the Rowan University Campbell Library website. At the top left is the Rowan University logo and 'CAMPBELL LIBRARY'. Below this is a breadcrumb trail: 'Campbell Library / Research Guides / Research Data Management / Best Practices to Managing Research Data'. The main heading is 'Research Data Management' with a search box to its right. A sub-heading states: 'This guide contains information about research data management and best practices for faculty, researchers and graduate students'. On the left is a navigation menu with items like 'Home', 'Data Management Plans', 'DMPTool', 'Best Practices to Managing Research Data' (highlighted in yellow), 'Literature/Guides for RDM Best Practices', 'Data Information Literacy', 'Publishing and Sharing Your Data', 'Funding Agency Requirements', 'Ownership of Data', 'Scholarly Communication Libguide', 'Research Data Management Working Group', and 'Manage Your Researcher Profile with ORCID'. The main content area is titled 'Types of Research Data' and lists 'Examples of Research Data include:' followed by a bulleted list of data types.

Rowan University | CAMPBELL LIBRARY

Campbell Library / Research Guides / Research Data Management / Best Practices to Managing Research Data

Research Data Management

This guide contains information about research data management and best practices for faculty, researchers and graduate students

Home

Data Management Plans

DMPTool

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Publishing and Sharing Your Data

Funding Agency Requirements

Ownership of Data

Scholarly Communication Libguide

Research Data Management Working Group

Manage Your Researcher Profile with ORCID

Types of Research Data

Examples of Research Data include:

- Documents (text, Word), spreadsheets, print outs
- Laboratory notebooks, field notebooks, diaries
- Questionnaires, transcripts, codebooks
- Audio, video
- Photographs, films, x-rays, negatives,
- Protein or genetic sequences
- Spectra, spectroscope data
- Test responses
- Slides, artifacts, specimens, samples
- Collection of digital objects acquired and generated during the process of research
- Database contents (video, audio, text, images)
- Models, algorithms, scripts, code, software
- Contents of an application (input, output, logfiles for analysis software, simulation software, schemas)
- Methodologies and workflows
- Standard operating procedures and protocols
- Computers and computer data storage devices
- Synthetic compounds
- Organisms, cell lines, viruses, cell products
- Cloned coordinates, plants animals

https://libguides.rowan.edu/researchdatamanagement/best_practices





Thank you !

- + Please contact with questions :
- + Bogino@rowan.edu or Saracco@rowan.edu