

Data Management Planning for the Busy Researcher

What is data management?

Data management is two parts:

1. The process of making sure your research data is useable not only by you, but also your lab mates and co-workers.
2. The process of making sure that your data continues to be saved and useable even **after** you are done with the main scope of your research.

Why do we care?

Data has become an increasingly large portion of all research output. It is difficult to imagine scientific research without data. Data management allows for replication studies, checking of data, and longevity studies to be done using your information. Furthermore, beginning in January 2023, NIH requires all research (regardless of primary or subawardee) they fund to have a data management plan in place. Non-compliance with this policy could impact proposal consideration and any future funding.

Does this apply to me?

If your research uses data that is created, collated, or acquired in any way and forms a part of your research, data management should be something you consider when organizing your research. Not doing so initially will make your research and maintaining your research more difficult over time, and it may be required by certain grants.

How do we make a data management plan?

A data management plan (DMP) describes the management, preservation, and sharing of scientific data and accompanying metadata. A critical first step when developing a DMP is to determine the type of data you plan on creating (or have already made). Additionally, you should be familiar with the following information about your data:

- What kind of data is it?
- How much data do you have?
- What format is it in?
- Is the data named consistently?
- Where will the data live?
- Where and how will this data be published if it is published?
- How private is this information?
- Who needs access to the information?
- Are there laws applicable to this data?
- Does the data need to be deidentified in some way?
- Do you anticipate any costs to manage your data?

A helpful guide that can be used to think through the risk of the data environment is the Data Security and Privacy Checklist within the [Comprehensive DMP Guide](#).

Why should I use the DMPTool?

Once the data environment is understood, we encourage researchers to go to www.DMPTool.org and use the DMPTool to develop a data management plan. The DMPTool is a collaborative tool that allows users to access and create DMP's that help investigators fulfill funder requirements and university recommendations. Funders, organizations, and users can create templates and guidance for data management plans. Marquette continues to manage and update templates based on current guidance. By using the DMPTool and the corresponding funder and university templates, researchers and staff can:

- Limit time spent on translating guidance to text
- Save their plan and easily update as the project evolves
- Have easy, direct access to guidance for applicable components of their plan
- Create a workspace to collaborate with others on the development and management of plan
- Develop an implementable plan for the project team to help reduce confusion that can be caused by staff and student turnover.
- Add a layer of consistency to your data management activities, allowing for collation and analysis easier by eliminating guess work when it comes to file naming consistency, tools used, and information shared.
- Document their research process as they navigate the Research Data Life Cycle (RDLC) phases allowing funders and future researchers to understand the complete view of storing, processing, analyzing, and reporting the data.

How do I use this tool?

Researchers should go to the [DMPTool website](#) and enter their Marquette email. The website will prompt the researcher to log into the Marquette network and a researcher can then select the applicable Marquette University templates that have been established, such as the NIH template that incorporates the NIH and university specific guidance. If however, a template is not applicable, a researcher can start from scratch.

If there are any questions on accessing or using the tool, please reach out to [Danelle Orange](#), Coordinator of Digital Scholarship.