## DATA & RESEARCH DATA MANAGEMENT

### WHAT IS DATA?

**Data is anything you perform analysis on.** Most researchers work with data but sometimes use different terms to describe their data such as research assets or research output. Data varies widely by academic discipline and research project.

#### A few types of data include:

Experimental measurements

Research notes or lab notebooks

Physical samples

Images

Audio or video

Survey responses

Data can be both digital and physical. For example, you may have online survey responses (digital data) and paper research notes (physical data).

## WHAT IS RESEARCH DATA MANAGEMENT (RDM)?

Research data management (RDM) is the compilation of small practices that make your data easier to find, easier to understand, less likely to be lost, and more likely to be usable during a project or ten years later. Additionally, many funding agencies have research data mandates for funded projects.

#### RDM STEPS & EXAMPLES OF BEST PRACTICES

While RDM is rapidly developing, the individual steps of RDM are well defined (see below). Each step has many best practices, one of which is listed below.

Storing Sharing **Planning** Documenting Preserving Back up your Retain data that Write Deposit your Write a data data regularly supports documentation data into a data management and test that publications or to describe how repository for plan (DMP) and you can access can't easily be the data is long-term share it with your backed up reproduced organized preservation collaborators data

RDM practices are highly dependent on the research project and discipline. Some disciplines have well defined RDM standards and community practices (such as using disciplinary data repositories) while others are still developing theirs. OU Libraries are here to help you design, develop and implement RDM practices into your research workflows.

Source: Data Management for Researchers by Kristin Briney

#### WHY IS RDM IMPORTANT?

YOU DON'T WANT TO LOSE YOUR DATA! SAVE VALUABLE TIME AND RESOURCES SUPPORT OPEN ACCESS AND OPEN DATA COMPLY WITH FUNDING AGENCY GUIDELINES

#### **FUNDING AGENCY MANDATES**

Most federal funding agencies mandate RDM for funded projects

- Federal funding agencies with RDM mandates include: NIH, NSF, DOD, and DOE
- Their mandates can vary widely so always check their website for the latest guidelines
- The most common mandate is the inclusion of a data management plan (DMP) with new grant proposals

Other research funders are starting to mandate data management

- Examples include The Alfred P. Sloan Foundation and The Bill and Melinda Gates Foundation
- Some academic journals also have data management mandates (such as Science and Nature)

# OU LIBRARIES CAN HELP YOU WITH RDM

We can help you with every stage of RDM, from data management planning to preserving your data. We offer RDM consultations (individual or small group) and workshops of RDM topics.

Contact <u>Joanna Thielen</u>, <u>Research Data Librarian</u>, for more information jthielen@oakland.edu | 248-370-2477