Instructors:
Jean-Paul Courneya jpcourneya@hshsl.umaryland.edu
Amy Yarnell ayarnell@hshsl.umaryland.edu

Best Practices for Research Data Management

PLAN:

- Use your research question to think through:
  - what data you need to collect
  - who will handle it
  - how you will store it
  - where you can preserve and share it.
- DOCUMENT your choices in a data management plan.
- A tool like DMPTool.org can help!
- Taking the time to plan will save you time down the road.

DOCUMENT

- DOCUMENT your variables by creating data dictionaries or codebooks
- DOCUMENT file naming conventions by creating README files
- Be mindful that an abbreviation in a filename or variable that seems obvious now, may be incomprehensible later on
- Create forms to help standardize data input.
- Stick to standardized formats for things like dates (YYYY-MM-DD)

SECURE

- Consider HIPAA compliant storage options like OneDrive and REDcap
- Make a plan for backing up your data.
- Remember 3-2-1
  - 3 copies of your files
  - 2 different media
  - 1 copy off site
- Use trusted open file formats or well-supported proprietary formats to avoid reliance on software which may become obsolete.

SHARE

- Well-documented and organized data is a great benefit to you and the scientific community overall.
  - Increases the impact and visibility of your research.
  - Contributes to verification and reproducibility of research
  - Encourages collaboration
  - Promotes new research
- Deposit your data in a trusted repository that is well supported in your discipline.
- Create unique identifiers for yourself (ORCID) and your data (DOI).

HELPFUL LINKS

HS/HSL guide to Research Data Management: https://guides.hshsl.umaryland.edu/data
Request a consultation: https://www2.hshsl.umaryland.edu/hshsl/assistance/rdm.cfm
REDcap at UMB: https://www.umaryland.edu/ictr/investigator-resources/data-and-data-handling/data-management-/redcap/
NIH Data Sharing Plan: https://grants.nih.gov/grants/policy/data_sharing/
NIH Data Repositories:
https://www.nlm.nih.gov/NIHbmic/nih_data_sharing_repositories.html
DMPTool: https://dmptool.org/