Data and Script Management

2021

Description & Instructions for Trainers

If needed, provide an advertisement for what data management is, why it is important and how it applies in a particular setting.

- Use general language or tailor for a specific audience
- Integrate into training session (beginning or middle)
- Keep it to 1-2 minutes
- Point out people should talk to their PI /department about standard practices in their field before moving forward with generalities
- Highlight links to the website and complete slides more information
    - Resources to get people started: Onboarding Checklist, Lifecycle Checklist, etc.

Data Management

1. **Planning: Plan ahead**

2. **Active Research: Document**

3. **Dissemination: Share confidently**

Note: be sure to ask your PI and your department about standard practices in your field!

Harvard Biomedical Data Management Website: https://datamanagement.hms.harvard.edu

Resources: https://datamanagement.hms.harvard.edu/about/what-research-data-management/rdm-resources

Planning

- Document the activities for the entire lifecycle in a Data Management Plan

- Determine if you need a Data Use Agreement to acquire or share data

- Adopt a community-based metadata standard if applicable

- Consider how the data will be stored and protected over the duration of the project and beyond

- Assign roles & responsibilities for managing data

Active Research

- Determine how the data will be organized including folder structure & file naming

- Consider versioning control for changes for both software and data products

- Create a README file to record the metadata that will be associated with data

- Link related code and algorithms

- Use tools & software to work with collaborators during the project
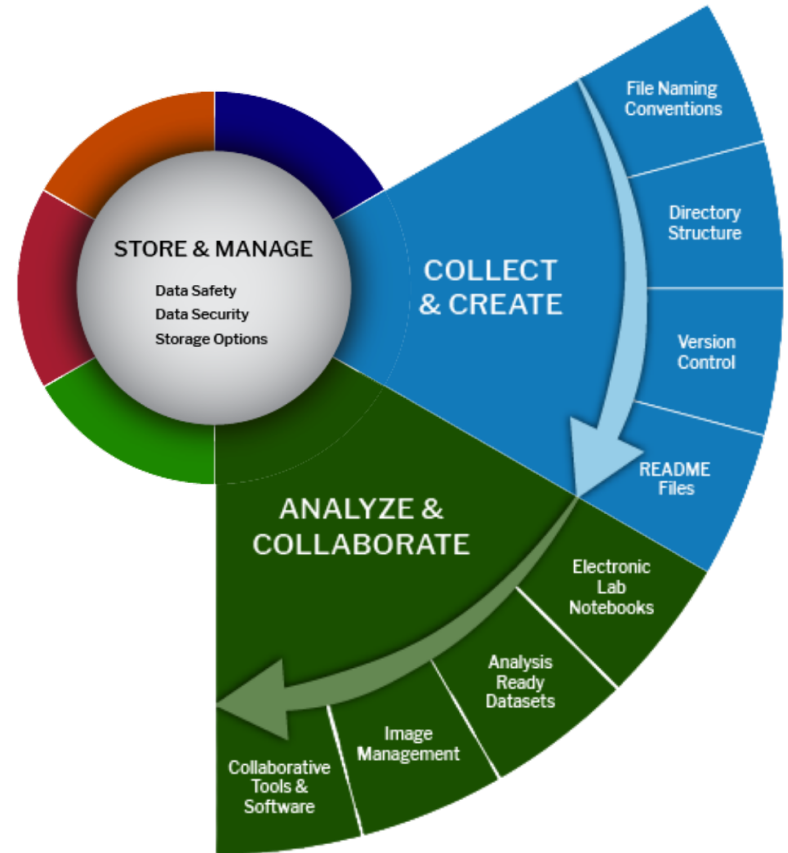
Dissemination

- Determine what data will be disseminated, to who, when, and where

- Publish data in an open repository to receive a DOI and citation for your work

- Use standard, nonproprietary approaches and provide accompanying metadata

- Think about your preservation strategy and adhere to your lab's standard practices

- Research records should generally be retained no fewer than seven (7) years after the end of a research project or activity