Data Collection Tips and Tricks

**Feeling daunted by data collection?
Here are some handy tips and tricks to help you get started.**

Collection

- Have a clear protocol in place from the beginning of your project, outlining how you will save both your data and metadata, to ensure you will be able to quickly and easily access any portion of your work that you might need at a later point for further analysis or consultation.

- Use the cloud storage offered by your institution, and keep hard-drives for physical backups of your work.

- Consider using an electronic laboratory notebook.

- Encrypt or use codes when saving sensitive data and keep a log of each step.

- Check ethical requirements if acquiring data from patients as soon as possible.

Ensuring reproducibility

- Make sure you continually update your outputs management plan, taking into account any changes in the direction of your research and the outputs you anticipate generating.

- Keep a log outlining how your data were created, how they are structured, and what they mean.

- Make sure you use metadata and data standards appropriate for your field.

- When creating new versions of your data, record what changes have been made and give the new files a unique name.

Collaboration

- Use software like Github, Labkey, or Jupiterlab to facilitate collaboration and data sharing.

- Early planning of how best to manage research data, including data sharing, is best done using a data management plan involving all collaborators. Using a data management plan will help make it clear who has the rights to share data, as well as how and when.

- Consider using an online platform like Slack or Teams to enable collaboration and communication.

Data re-use

- Check to see if complementary data, related to your project, exists using search engines such as **Google Dataset Search**, **re3data** and **Datacite**, which harvest information from publicly available digital repositories.

- Data providers are another valuable source of UK and international data. Examples include: **UK Data Service**, **Office for National Statistics**, **World Bank Open Data** and **UNdata**.

- Check the license associated with the data to to verify how you can use it.

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