How should I store my data?

A quick reference guide for SBS researchers (November 2022)
Online version: https://universityofcambridgecloud.sharepoint.com/sites/SBIOS_Intranet/SitePages/RDM.aspx

Personal admin files

- OneDrive (5TB, free), or Dropbox (unlimited, £84/yr)

Group/shared admin files

- Teams or Sharepoint (unlimited, free), or Google Sheets/Docs/Drive (20GB, free)
- UIS Institutional File Store (depts have limited free quotas, then £150/TB/yr)

Small (<2TB) active research data that you need to access frequently, desktop-mounted

- UIS Institutional File Store (depts have limited free quotas, then £150/TB/yr)

Large active research data (with good safety and resilience)

- UIS Research File Share (unlimited, £116/TB/yr)

Large active research data for HPC processing (without resilience)

- UIS Research Data Store (unlimited, £54/TB/yr)
- Must also be stored safely somewhere else

Inactive data required to support/defend published work

- Publish in the university's data repository (Apollo)
- Publish in a discipline-specific repository (e.g. GEO, WormBase, CCDC)
- Publish in a cross-discipline repository (e.g. Figshare, OSF, Zenodo)
- These resources are normally free, but may be subject to dataset size limits

Inactive data relating to completed work, must be kept, but not required to support a publication

- Archive in UIS Research Cold Store (unlimited, £30/TB/yr)

Sensitive data (contains identifiable and clinically-sensitive personal information)

- UIS Category 3 Secure Storage (contact your dept IT staff for more info)

I can't afford to store my research data as recommended above

- Research data management *must* be properly resourced, for scientific, compliance and reputational reasons. Storing unique research data on unmanaged, non-resilient systems is not appropriate.
- Try to identify duplicates of files, versions that are no longer required, temporary files etc that can be deleted, and inactive data that can be archived onto Research Cold Store, to reduce costs
- If you still have insufficient resources, discuss with your PI, or your Head of Department

My group/department has its own data storage system

- To reduce costs, contracts, complexity and fragmentation, the university discourages proliferation of local storage systems. UIS storage offers high quality, performance and security, and should be the default choice.
- If local high-volume storage systems are *required* (e.g. for high-output scientific equipment and processes), they *must* be located in suitable accommodation with appropriate power and cooling, and high levels of availability, security and resilience:
- Mirrored, backed-up, UPS-protected, monitored and maintained, never more than 7yrs old

Stuff that's on my computer

- Use OneDrive
- *And* use strong passwords and consider encrypting your disk
- *And* back up your computer daily to an external HD
- *And* avoid routinely carrying your laptop and its backup HD together in the same bag

Help and further information

- Your departmental IT staff
- Cambridge Data Champions
- SBS IT Office (it@bio.cam.ac.uk)
- UIS Service Desk (servicedesk@uis.cam.ac.uk)
- University Library Office of Scholarly Communication
- https://help.uis.cam.ac.uk/individual-storage
- https://help.uis.cam.ac.uk/service/collaboration/sharepoint-online