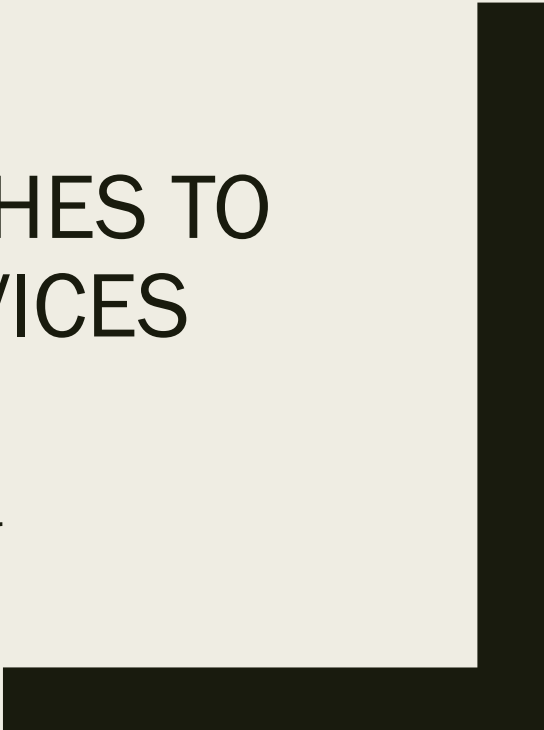




COOPERATIVE APPROACHES TO RESEARCH DATA SERVICES

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Framing

- Active data – focus on services for researchers engaged in the research cycle
- Action leaders seeking both structural and process solutions to improve access and use of data within constrained budgets
- Faculty are interested – or at least willing – to learn about the trade offs and participate in planning around their needs, supported by
 - *people who's role it is to help train, facilitate the planning process, deliver services*
 - *transparency around costs and trade-offs*
- Sustainability requires some commitment from unit leaders or campus admin

Linked facilitators	Research Unit	All-campus Coordination	Institutional Investment
Continuum of service	Sustainable, flexible shared cost models	Reduce stress across units, improves trust	Data lifecycle as driver
Campus IT and SDSC provide info, “hand-off,” and consulting	Storage & compute - 100% access only during award - Dept. pool / shared - Campus pool / 50%	- Formalized Storage Council - Reps from all units that provide storage - Awareness of policy changes	All faculty, staff, students - 100GB private - 3 yrs - Publish 1GB – 10 yrs Funded projects - 1 TB private – 10 yrs - Publish 10GB – 10 yrs
- Range of “free” options on campus - Consulting - Infrastructure at scale	- Consultation - Genbank submissions	- Storage Campus Champions to id. best solutions	- DMP support - Publishing support
Unfunded	Fee-for-service	Unit staff time	Administration funds

Data Storage Finder

Evaluate options for data storage at Cornell

- ☀ All services presented on this finder tool are vetted and supported by Cornell University.
- 🎯 To explore data options available to Weill Cornell Medicine Cornellians please visit the [WCMC storage wizard](#).
- 💬 We welcome [feedback](#) on this tool.

Describe your data

Answer these questions to help identify data storage services that are suitable for your needs. Checking these boxes will change the list of available services. If you are uncertain how to answer, leave the question blank to maximize your resulting options.

Clear Answers

1. What is the classification of your data? ⓘ

- ☐ Public
- ☐ Sensitive / Moderate Risk
- ☐ Confidential or Restricted / High Risk
- ☐ HIPAA-Regulated

2. Do you need backups, snapshots or replication of your data? ⓘ

- ☐ I need one or more backup/snapshot copies of the data,

➔ Select data storage services you would like to compare.

Select All

Clear Selections

Amazon Web Services Elastic Block Store

Storage for use with Amazon EC2

Amazon Web Services Elastic File System

Storage for use with multiple Amazon EC2 instances

Amazon Web Services Glacier

Cloud based archival storage

Amazon Web Services S3

Flexible, scalable object storage

BioHPC Cloud

Storage for BioHPC lab computing services

CAC Archival Storage

Single copy, non-mountable storage

CAC Red Cloud Storage

Storage for Red Cloud compute instances

CISER Research Servers

Storage for CISER computing environment

CUGIR

Publicly shared geospatial data storage

CUL eCommons

Publicly shared data repository

Cornell Box

Online file sharing and collaboration

Cornell Restricted Access Data Center

Storage for CRADC (confidential) computing environment



UC San Diego Research Data Storage Explorer

Explore options for research data storage at UC San Diego

Describe your data

Identify research data storage services by answering the questions below.

Need help? Contact [Research IT Services](#).

Clear Answers

1. Which storage need would you like to explore? ⓘ

- ☐ Backups
- ☐ Working Data
- ☐ Sharing/publication
- ☐ Long-term preservation/archiving

2. What is the UC protection level classification of your data? ⓘ

- ☐ P1 - Public

➔ Which storage need would you like to explore?

Select All Storage

Clear Storage Needs

Amazon Web Services



A variety of cloud storage and compute services

Amazon Web Services Glacier



Cloud based archival storage

CTRI Storage



Clinical Health Storage

Chronopolis



A dark preservation quality archive

Code42 CrashPlan



Easy to use backup and sync software

Consult CTRI



Contact Clinical and Translational Research Institute

Consult Research IT Services



Ask Research IT Services

Consult local department/division IT



Ask about departmental/divisional options

Druva InSync



Backup and sync software

GitHub.com



Public instance of GitHub

GitLab.com



UC San Diego GitLab

Google Drive



UC San Diego G-Suite file storage and sharing

Health ITSS for AWS Glacier



Long term compliant and secure storage

Library Digital Collections



Archival-quality digital asset management server

Library Staging Data



Working and Staging Storage at the Library

Microsoft Azure



A variety of cloud storage and compute services

Some additional thoughts

■ Affordances:

- *Campus-based cooperative arrangements are on the upswing*
- *Access to expertise*
 - *Trend toward professionalization of research staff roles*
- *Increased numbers of people and projects are being supported while managing costs*
- *Data as university asset – faculty recruitment*

■ Challenges:

- *Variation (institutional) of kinds and extent of services (e.g. no overhead for grant-funded commercial cloud cycles)*
- *Hidden costs for data services across the lifecycle and service groups*
- *Differences in procurement processes for multi-institution infrastructure projects increases costs and necessitates much higher management overhead*
- *Lack of published empirical data on emergent trends and models*
 - *decision processes to develop and run these*

Acknowledgements

- Brian Balderston - Research Data Services, SDSC (UCSD)
- Lisa Johnston - Data Curation Network (UMN Libraries)
- Wendy Kozlowski - Research Data Management Services Group (Cornell Libraries)
- Brett Tyler - Center for Genome Research and Biocomputing (Oregon State University)
- Jim Wilgenbusch - Minnesota Supercomputing Institute (UMN)
- Michael Witt - Distributed Data Curation Center (D2C2) (Purdue Libraries)