



AAU-APLU Accelerating Public Access to Research Data Conversation Series

Session 3: Building Capacity and Buy-in
Thursday, May 20, 2021

RESOURCES

Building Capacity

Carnegie Mellon University

- Undergraduate data training course – Discovering the Data Universe:
<https://www.library.cmu.edu/blog/tartan-datascapas/12132019>

Cornell University

- Data Management Best Practices: <https://data.research.cornell.edu/content/best-practices>
- Sharing Jupyter Notebooks: <https://guides.library.cornell.edu/c.php?g=898087&p=6473005>
- Cornell Data Storage Finder, including options for public sharing:
<https://finder.research.cornell.edu/storage>

Duke University

- Research Data Management Library Guide: <https://guides.library.duke.edu/research-data-management>
- Research Data Management Workshops: <https://library.duke.edu/data/workshops/past-workshops#datamanagement>
- Responsible Conduct of Research Programs: <https://dosi.duke.edu/advancing-scientific-integrity-services-and-training/responsible-conduct-research-programs>
 - [Faculty and staff engaged in research \(including postdocs\)](#): administered by Duke Office of Scientific Integrity-ASIST
 - Note that [NIH trainees \(including junior faculty, residents, clinical fellows, postdocs on specific NIH training fellowships\)](#) are required to complete additional RCR education, including at least 8hr of in-person RCR education. RCR education programs that fulfill this specific NIH RCR training requirement are offered by the [Trent Center for Bioethics](#) and [Office of Postdoctoral Services](#))
 - [PhD graduate students \(non-biomedical\)](#): administered by the Duke Graduate School
 - [PhD graduate students \(including MSTP students\) \(biomedical\)](#): administered by the Office of Biomedical Graduate Education
 - [Masters students](#): administered by the Duke Graduate School
 - [MD students- 3rd year research](#): administered by the Third Year Program
 - [Undergraduates students engaged in research](#): administered by Duke Office of Scientific Integrity-ASIST

The Ohio State University

- Research Data Management – Best Practices: <http://guides.osu.edu/c.php?g=707751&p=5027400>
- Writing a data management plan: <http://guides.osu.edu/c.php?g=711955>
- Intro to Data Management: <http://guides.osu.edu/IntroDataManagement>

University of Minnesota

- Graduate Student Boot Camp: Managing Data and Research Materials (2019): https://learning.umn.edu/search/publicCourseSearchDetails.do?method=load&courseId=13212573#courseSectionDetails_18017362

Data Management Tools

- **Go-Fair.org** - Research Data Management Starter Kit: <https://www.go-fair.org/resources/rdm-starter-kit/>
- **Open Science Framework (OSF)**
 - Manage projects and collaborations or register studies: osf.io/registries
 - OSF for Institutions to provide researchers with a free, open source scholarly commons: osf.io/institutions
- **Dat** - open-source, decentralized data sharing tool for versioning and syncing changes to data: <http://dat-data.com/>
- **EZID** - creates and manages long-term, globally unique identifiers for data and sources: <https://ezid.cdlib.org/>
- **ORCID** (Open Researcher and Contributor ID) - is a nonproprietary alphanumeric code to uniquely identify scientific and other academic authors and contributors: <http://orcid.org/>
- **DataCite** - not-for-profit organization which assigns persistent identifiers, such as digital object identifiers (DOIs), to data sets: <https://www.datacite.org/>

Data Management Good Practice Guidance (source: ICPSR)

- Australia National University - [ANU Data Management Manual, September 2010](#)
- Charles Beagrie Limited - [User Guide for Keeping Research Data Safe](#)
- Columbia University, Center for International Earth Science Information Network (CIESIN) - [Guide to Managing Geospatial Electronic Records, June 2005](#)
- Council of European Social Science Data Archives (CESSDA) - [Sharing Data Website](#)
- DataONE - [Best Practice Primer](#)
- Finnish Social Science Data Archive (FSSDA) - [Data Management Planning Website](#)
- Gary King - [Data Sharing and Replication](#)
- Inter-university Consortium for Political and Social Research (ICPSR) - [Guide to Social Science Data Preparation and Archiving, 2012](#)
- Mark Mosley, Data Management Association - [DAMA-DMBOK Functional Framework Version 3.02, September 10, 2008](#)
- National Academy of Sciences - [Ensuring the Integrity, Accessibility, and Stewardship of Research Data in the Digital Age](#)
- National Science Board (NSB) - [Long-Lived Digital Data Collections Enabling Research and Education in the 21st Century](#)

- New South Wales Natural Resources Information Management Strategy - [Guiding Principles for Data Management](#)
- UK Data Archive - [Managing and Sharing Data: A Best Practice Guide for Researchers, May 2011](#)
- UK Data Archive - [Data Management Practices in the Social Sciences, August 10, 2010](#)
- UK Data Archive - [Create and Manage Data Website](#)

Training Resources

Thank you to [Utah State University](#) for this list.

- [MANTRA: Research Data Management Training](#) - a free online course for those who manage digital data as part of their research project. It is managed by the University of Edinburgh.
- [Data Management Short Course for Scientists](#) - ESIP (Earth Science Information Partners) in cooperation with NOAA and the Data Conservancy have compiled the resources for this course.
- [Coursera: Research Data management and Sharing](#) - A five-week course designed to provide an introduction to research data management and sharing.
- [Disciplinary RDM Training](#) - This site lists Research Data Management materials specific to five areas (performing arts, archeology and social anthropology, health studies, psychology, and geosciences, social sciences & clinical psychology).
- [DataONE Education Modules](#) DataONE provides several lessons in PowerPoint format available for download that can be incorporated into teaching materials. Also available are webinars and screencast tutorials.
- [Educopia ETD+ Toolkit](#) - Designed for training Graduate Students in how to manage research for Thesis/Dissertations, but the curriculum can be used by anyone involved in research.
- [The Carpentries](#) The Carpentries teach foundational coding, and data science skills to researchers worldwide. [Software Carpentry](#) workshops are domain-agnostic, and teach the Unix shell, coding in R or Python, and version control using Git. [Data Carpentry](#) workshops are domain-specific, and focus on teaching skills for working with data effectively and reproducibly. [Library Carpentry](#) develops lessons and teaches workshops for and with people working in library- and information-related roles.
- [Collaborative Institutional Training Initiative \(CITI Program\)](#) - serving the training needs of colleges and universities, healthcare institutions, technology and research organizations, and governmental agencies, as they foster integrity and professional advancement of their learners.

Achieving Researcher Buy-In

University of Cambridge

- Data Champions: <https://www.data.cam.ac.uk/intro-data-champions>

University of Illinois at Urbana-Champaign

- Data Nudge Newsletter: <https://emails.illinois.edu/newsletter/158808.html>
- Illinois Data Bank - Researcher Spotlights - https://databank.illinois.edu/researcher_spotlights

University of Minnesota

- Research Cyberinfrastructure Champion Network (RCC): <https://it.umn.edu/experts-communities/research-cyberinfrastructure-champion>
- Select Digital Storage Options: <https://it.umn.edu/services-technologies/comparisons/select-digital-storage-options>