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-datascapes/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 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

- 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


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
- 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
- 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
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](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](https://emails.illinois.edu/newsletter/158808.html)
- Illinois Data Bank - Researcher Spotlights - [https://databank.illinois.edu/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](https://it.umn.edu/experts-communities/research-cyberinfrastructure-champion)
- Select Digital Storage Options: [https://it.umn.edu/services-technologies/comparisons/select-digital-storage-options](https://it.umn.edu/services-technologies/comparisons/select-digital-storage-options)