

“ Good data management is not a goal in itself, but rather is a key conduit leading to knowledge discovery and innovation. ”

Wilkinson, M. D. et al. 2016. "The FAIR Guiding Principles for scientific data management and stewardship." *Sci. Data* 3:160018. <http://doi.org/10.1038/sdata.2016.18>

SMITHSONIAN RESOURCES

RESEARCH TECHNOLOGIES

bit.ly/ResearchTech

Hydra high performance computing cluster
Research software
GIS
DMPTool

COLLABORATION & SHARING TOOLS

bit.ly/SIDataTools

Confluence wiki
Institutional Github
Dropbox

TRAINING

bit.ly/SIDataTraining

Best practices – planning, working with data, filenaming, etc.
Data Carpentry
OSP compliance training

POLICIES

Public access requirement bit.ly/SIPublicAccess
Archiving research records bit.ly/ResearchRecords

OFFICE OF SPONSORED PROJECTS (OSP)

bit.ly/SponsoredProjects

PI Portal, finding funding, proposal development, compliance, award management

OCIO OFFICE OF RESEARCH COMPUTING (ORC)

bit.ly/ResearchTech

High performance computing, data visualization, SIdora repository

SMITHSONIAN LIBRARIES

staff.research.si.edu

DOIs, publication & data deposit, impact reports

SMITHSONIAN ARCHIVES

siarchives.si.edu

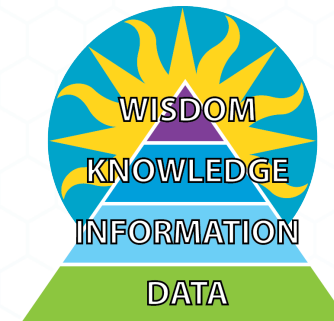
Records management, SI disposition schedules, SI history

CONTACTS

SIRESEARCHCOMPUTING@SI-LISTSERV.SI.EDU

Contact: AskALibrarian@si.edu
bit.ly/ResearchOutput

DATA MANAGEMENT PLAN CHECKLIST



Smithsonian Institution

QUESTIONS FOR THE PLANNING STAGE

- ☐ What type of data is being collected/generated?
- ☐ Who is involved in data collection?
- ☐ Who “owns” the rights to the data?
- ☐ Are there restrictions on sharing and reuse?
- ☐ Are there applicable institutional policies on how the data is handled, shared, or archived?

Tips: For collaborative research projects, ensure there are MOUs that define roles and responsibilities for data for all parties involved.

Contact the Office of Sponsored Projects (OSP) well in advance of proposal submission. bit.ly/SponsoredProjects

QUESTIONS FOR THE COLLECTION STAGE

- ☐ How will data be acquired/collected?
- ☐ What descriptive metadata standards and schema will be used?
- ☐ What are the file and data field naming conventions?
- ☐ What are the temporary storage requirements (size, cost, media)?
- ☐ How, where, and how frequently will data be backed up?

Tips: SI Libraries staff can help in selecting metadata standards. Email askalibrarian@si.edu

For safe backup follow the 3-2-1 rule: 3 copies on 2 different types of media with at least 1 off-site or in cloud-storage.

QUESTIONS FOR THE PUBLISHING STAGE

- ☐ What repository or platform will be used to share the data?
- ☐ Who will be responsible for deposit and archiving after the project ends?
- ☐ If the data is to be shared publicly, what license should be applied? Are there any use restrictions?

Tips: SI requires that peer-reviewed publications and related data from Federally funded research be publicly available. bit.ly/SIPublicAccess

SRO can provide a DOI for your data if deposited locally. A list of recommended external, as well as internal SI repositories on bit.ly/SILRepos

QUESTIONS FOR THE ARCHIVING STAGE

- ☐ Who is responsible for maintaining and preserving the data?
- ☐ What data should be retained?
- ☐ Where will the data be archived?
- ☐ How much storage will be needed?
- ☐ How long should the data be maintained, and why?
- ☐ What are the risks for future access to the data, i.e., proprietary software or file formats, password-protected systems?

Tips: Choose non-proprietary, commonly used, open formats when possible.

Always include sufficient metadata with your data files. Without metadata your files can't be found or interpreted!