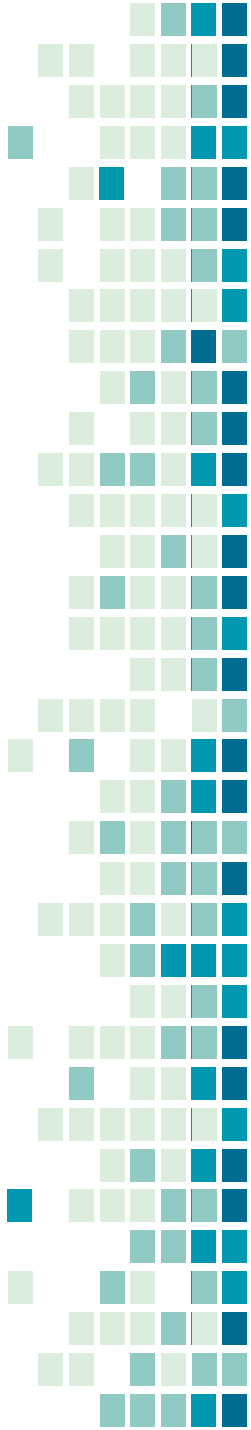
# Creating Effective Data Management Plans for Ecological Research

DataONE

NSF Arctic Data Center

# Agenda

- Creating an effective data management plan
- DMPTool overview, demo and resources



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# Why plan?

- Ensures you and others will be able to understand and use your data now and in the future

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PERSPECTIVE

# Ten Simple Rules for Creating a Good Data Management Plan

William K. Michener

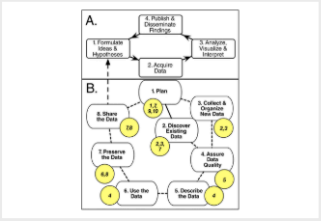
Published: October 22, 2015 • https://doi.org/10.1371/journal.pcbi.1004525







## Figures



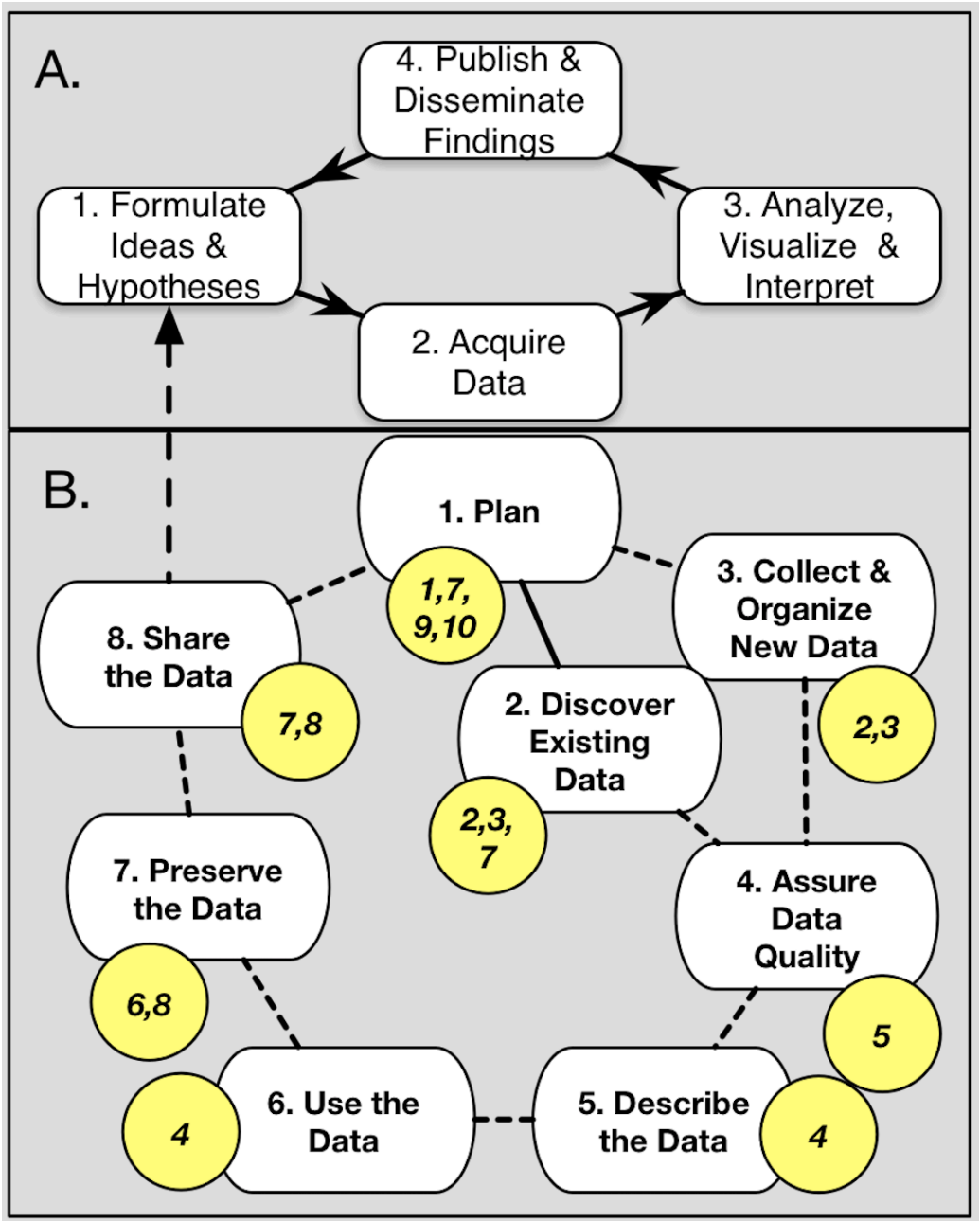
**Citation:** Michener WK (2015) Ten Simple Rules for Creating a Good Data Management Plan. PLoS Comput Biol 11(10): e1004525. https://doi.org/10.1371/journal.pcbi.1004525

**Editor:** Philip E. Bourne, National Institutes of Health, UNITED STATES

**Published:** October 22, 2015

# Research Life Cycle

# Data Life Cycle

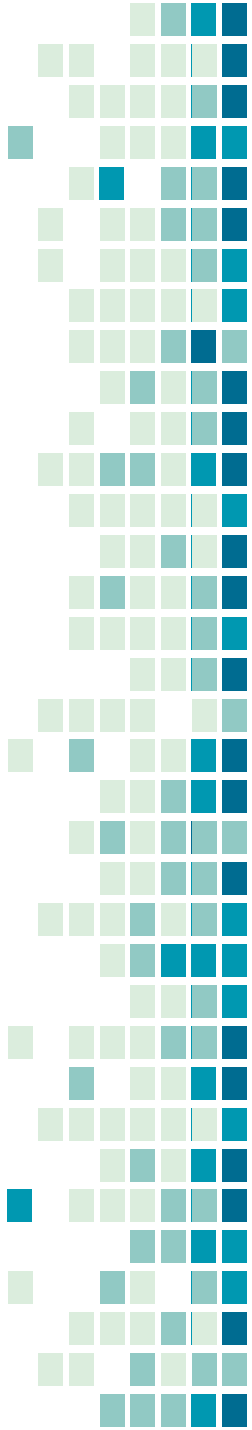



Michener 2015 PLoS Comp. Biol.

# Determine the research sponsor requirements





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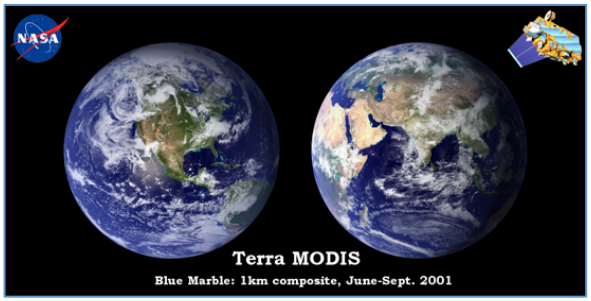
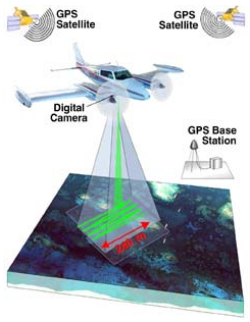
# Identify the data to be collected: types; sources; volume; and data and file formats



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# Define how the data will be organized

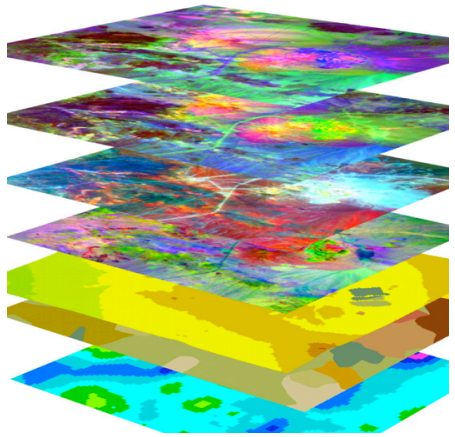


ORACLE®

data.xls

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Site | Date | Plot | Species | Weight | Acult | | Rodent Trapping 3/15/2010 | | | | | | |
| 2 | DeepWell | 2/13/2010 | 1 | DIPO | 12.1 | j | | Site | Plot | Adult | RodentSp | Weight | | |
| 3 | Deep Well | Feb-10 | 2 | Pero | 13.22 | j | | DW | 1 | y | Pero | 12 | | |
| 4 | rioSalado | 2/13/2010 | 1a | pero | 16 | N | | RS | 2 | j | PERO | escaped <15 | | |
| 5 | rioSlado | " | 1" | CleGap | 18.92 | gut away | | RS | 3 | n | Clegap | 91 | | |
| 6 | | | | Mean1 | 15.06 | | | | | | | | | |
| 7 | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | |
| 12 | Rodent Trapping | | MJK & ALN | 10-Apr-10 | | | | | | | | | | |
| 13 | Site | Plot | Adult | Species | grams | Ccmments | | | | | | | | |
| 14 | deep well | 1 | y | woodrat | 13 | | | | | | | | | |
| 15 | riosalado | 2 | y | PERO | 24.5 | | | | | | | | | |
| 16 | riosalado | 3 | y | Clegap | 91 | | | | | | | | | |
| 17 | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | |

Sheet1



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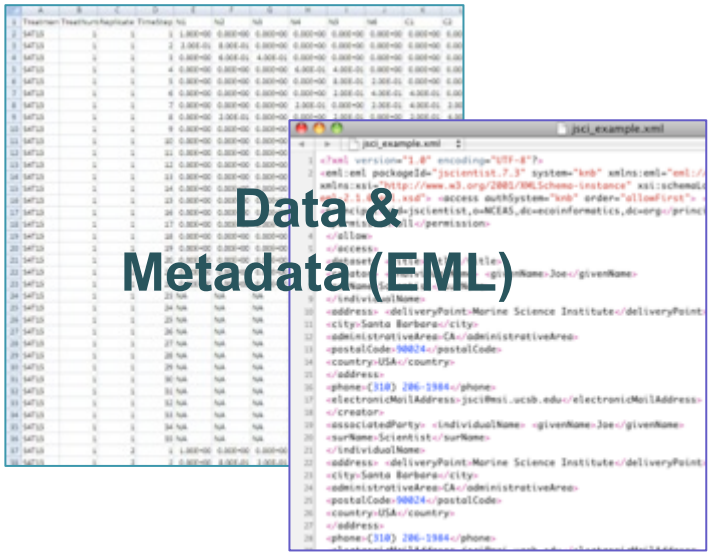
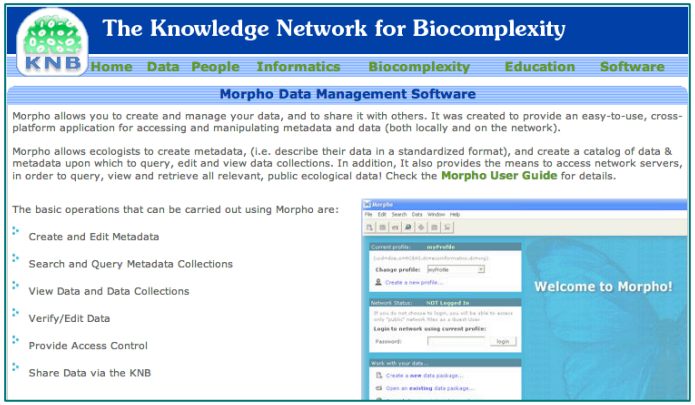
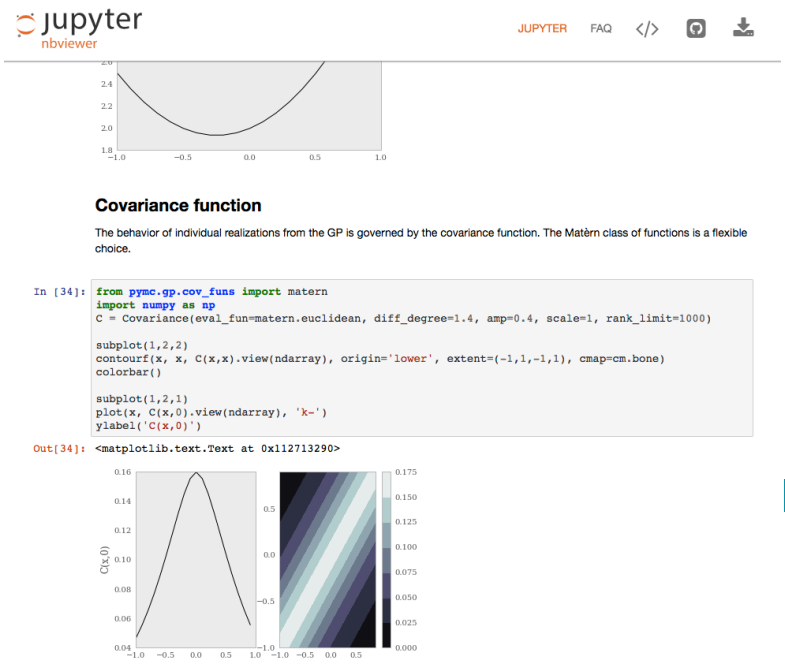
# Explain how the data will be documented

- Dublin Core, ISO 19115, EML
- Morpho, metavist, readme.txt
- Electronic notebooks

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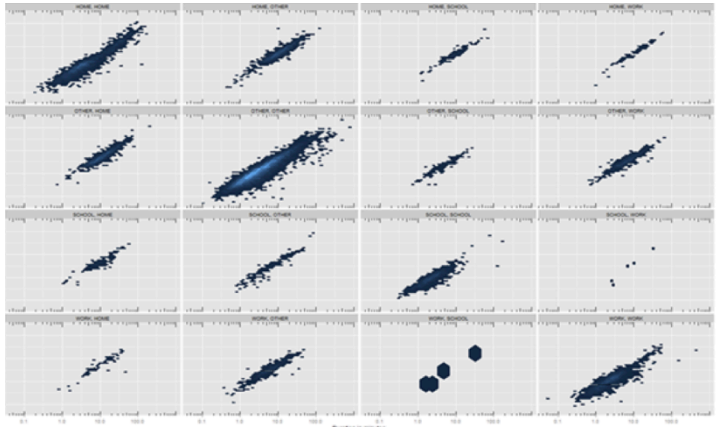
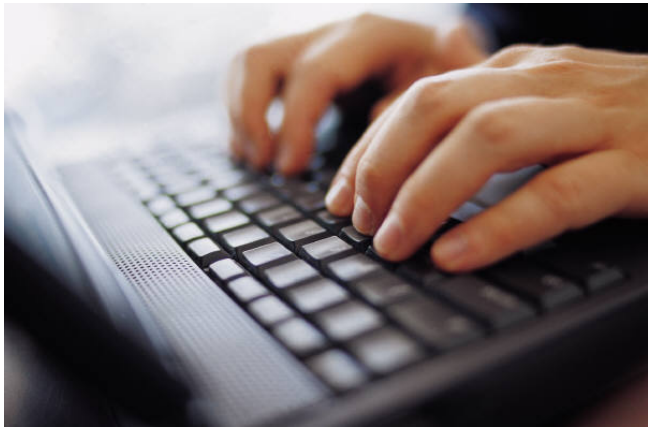
# Describe how data quality will be assured

- Training activities, instrument calibration and verification tests, double-blind data entry, and statistical and visualization approaches to error detection





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# Present a sound data storage and preservation strategy

- How long will the data be accessible?
- How will data be stored and protected during the project?
- How will data be preserved and made available for future use?

re3data.org
REGISTRY OF RESEARCH DATA REPOSITORIES

DRYAD

GitHub

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# Define the project's data policies

- Licensing and data sharing arrangements
- Human subject and other sensitive data


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# Describe how the data will be disseminated

- More active, robust and preferred approaches include: (1) publishing the data in an open repository or archive; (2) submitting the data as appendices or supplements to journal articles; and (3) publishing the data, metadata, and relevant code as a “data paper”.



SCIENTIFIC DATA

(GIGA)n SCIENCE

GitHub

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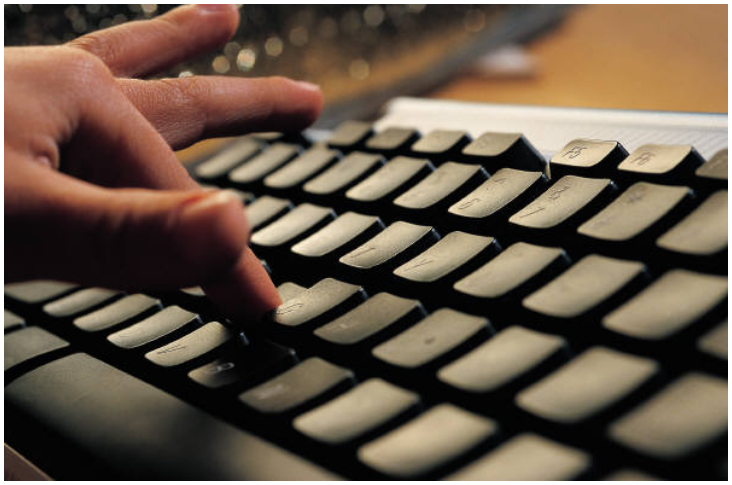
# Assign roles and responsibilities

- Roles may include data collection, data entry, QA/QC, metadata creation and management, backup, data preparation and submission to an archive, and systems administration.



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# Prepare a realistic budget

- Review your plan and make sure that there are lines in the budget to support the people that manage the data as well as pay for the requisite hardware, software


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# How does one create a good DMP ?


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# Tips & Tricks

1. Engage everyone

# Tips & Tricks

1. Engage everyone
2. Plan from the start


# Tips & Tricks

1. Engage everyone
2. Plan from the start
3. Follow good advice
    - DataONE
    - Institutional Libraries

DataONE www.dataone.org

**Primer on Data Management: What you always wanted to know***

* but were afraid to ask

**Carly Strasser, Robert Cook, William Michener, Amber Budden**

**Contents**

DataONE

www.dataone.org

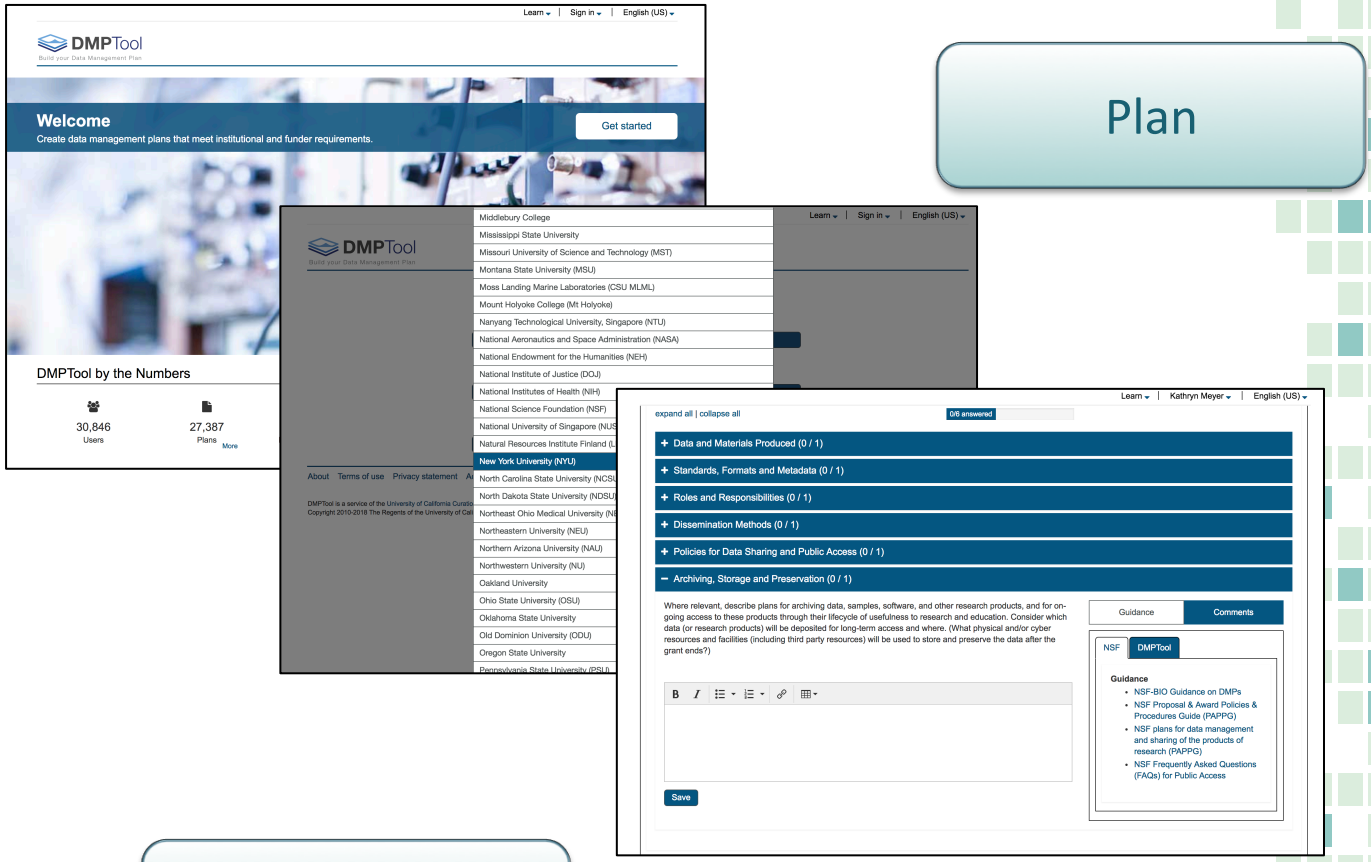
# Primer on Data Management: What you always wanted to know*

* but were afraid to ask

**Carly Strasser, Robert Cook, William Michener, Amber Budden**

## Contents

# Your university librarian




Plan

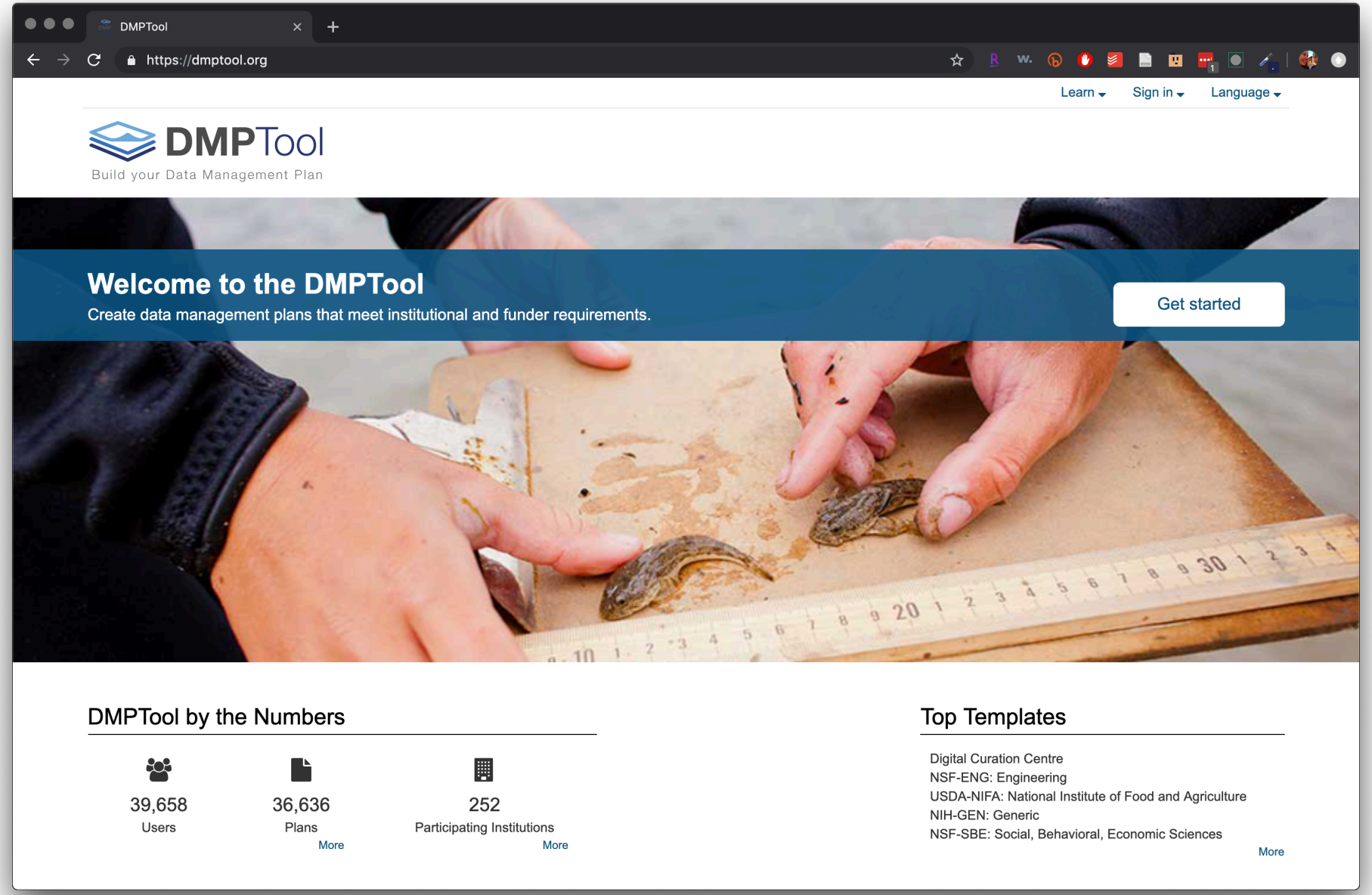
Discover

DataONE

NSF Arctic Data Center


# Tips & Tricks

1. Engage everyone
2. Plan from the start
3. Follow good advice
    - DataONE
    - Institutional Libraries
4. Use good tools
    - DMPTool
    - DMPOnline

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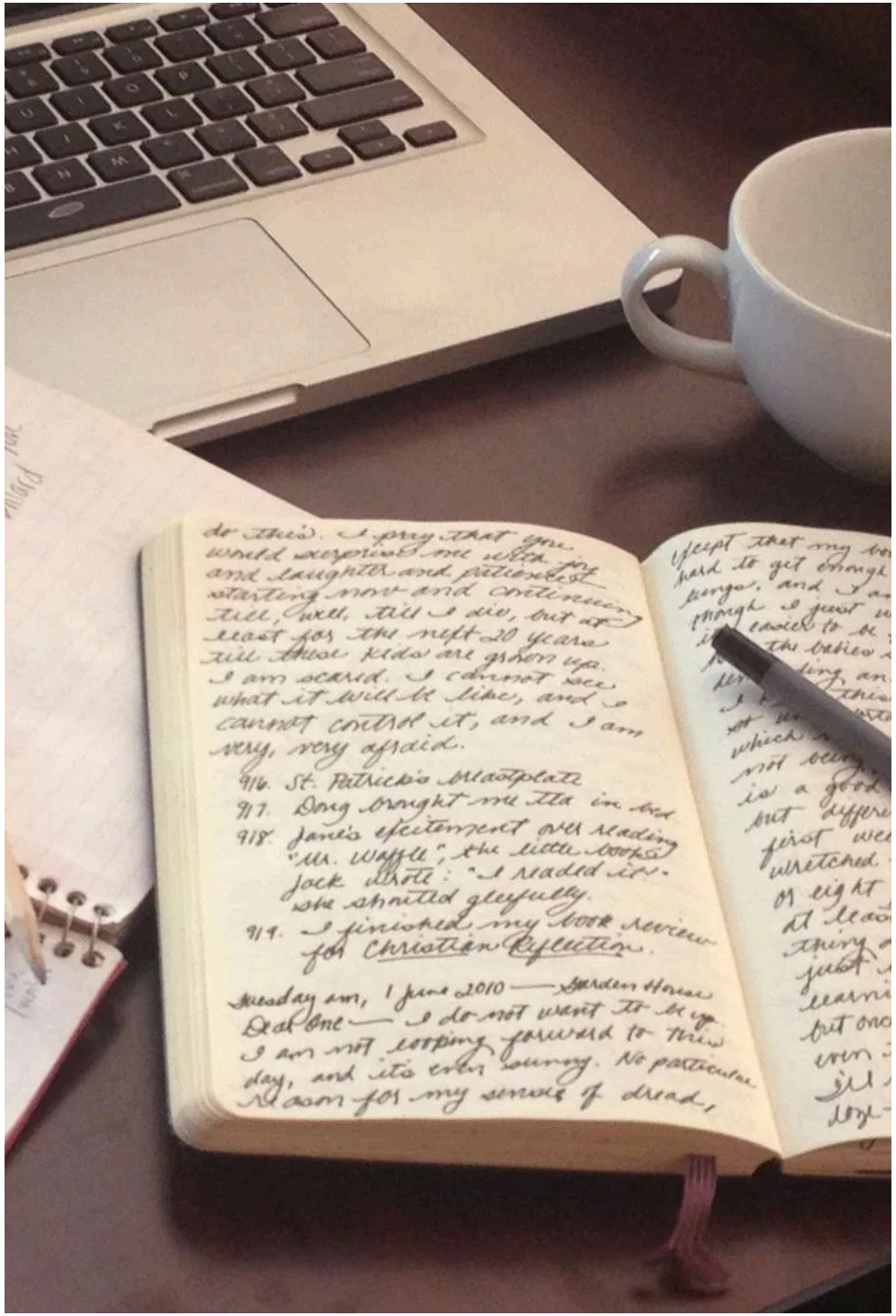
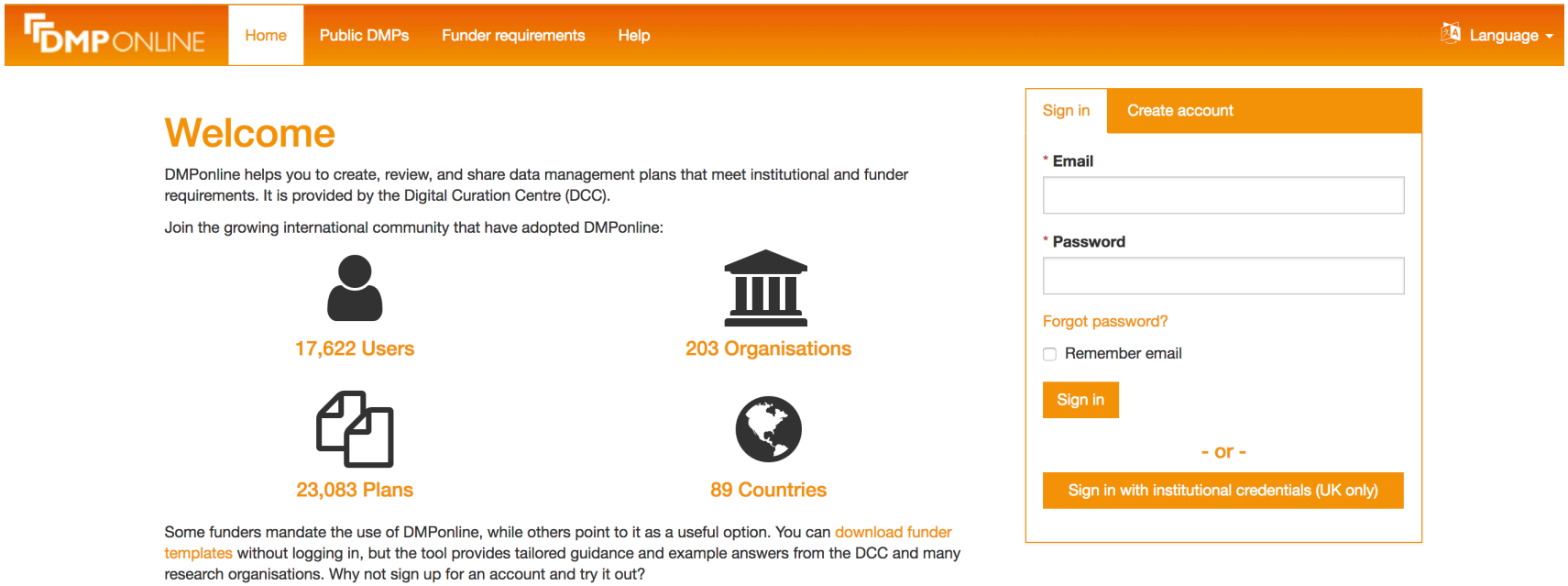


# Tips & Tricks

1. Engage everyone
2. Plan from the start
3. Follow good advice
    - DataONE
    - Institutional Libraries
4. Use good tools
    - DMPTool
    - DMPOnline
5. Review and revise

# Current DMP Tools

# DMPonline: dmponline.dcc.ac.uk




Step-by-step wizard for generating DMP

Create | edit | re-use | share | save | generate

Open to community

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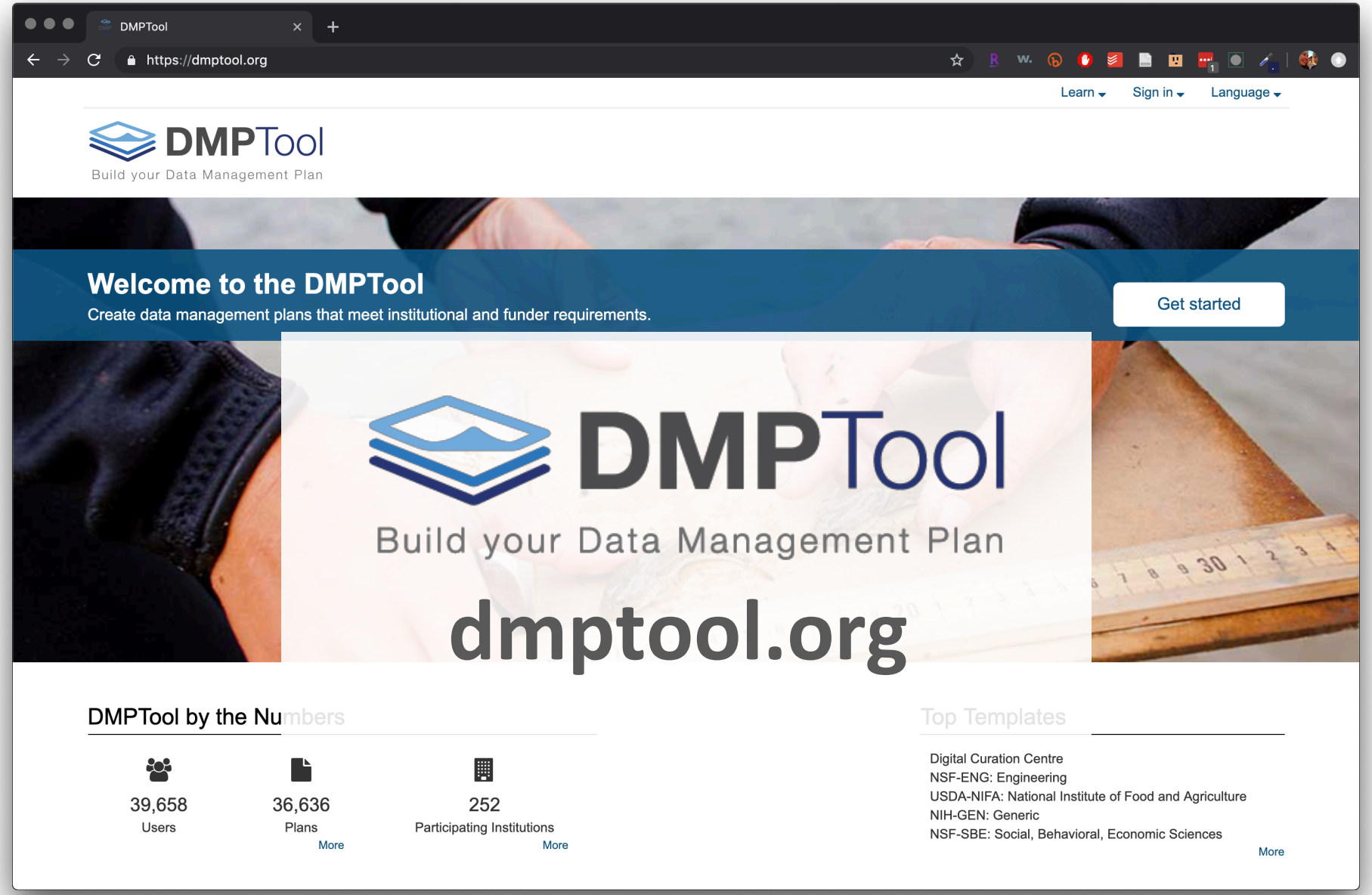


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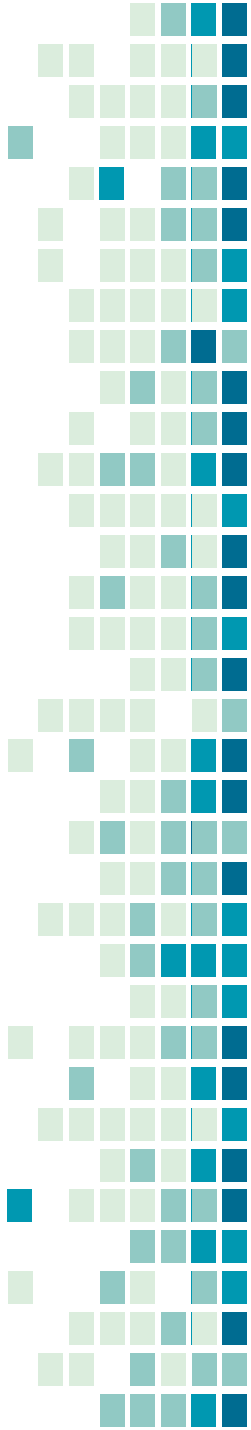
# Data Management Planning Tool
# Guided Walk-Through



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DMPTool
Build your Data Management Plan


# Welcome

Create data management plans that meet institutional and funder requirements.

Get started

## DMPTool by the Numbers

31,111
Users

27,622
Plans
More

236
Participating Institutions
More

## Top 5 Templates

Digital Curation Centre
NSF-BIO: Biological Sciences
NSF-SBE: Social, Behavioral, Economic Sciences
USDA-NIFA: National Institute of Food and Agriculture
NIH-GEN: Generic

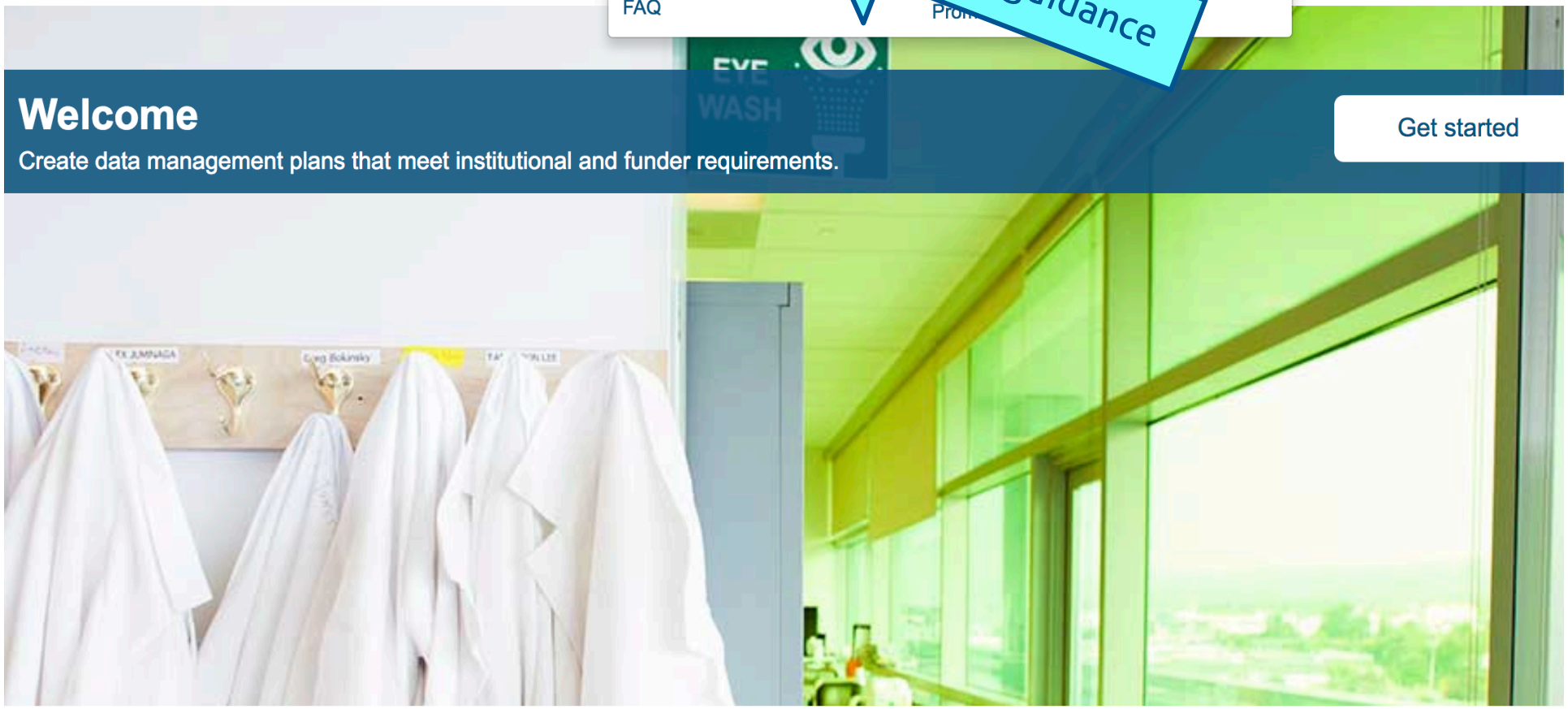
More

Learn | Sign in | English (US)

DMPTool
Build your Data Management Plan

Funder Requirements
Public Plans
Participating Institutions
FAQ
Researchers
Start Guide
General Guidance

Funder guidance



# Welcome

Create data management plans that meet institutional and funder requirements.

Get started

## DMPTool by the Numbers

30,852
Users

27,394
Plans More

236
Participating Institutions More

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NSF-BIO: Biological Sciences
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NIH-GEN: Generic

DMPTool
Build your Data Management Plan

# Funder Requirements

Templates for data management plans are based on the specific requirements listed in funder policy documents. The DMPTool maintains these templates, however, researchers should always consult the program officers and policy documents directly for authoritative guidance. Sample plans are provided by a funder or another trusted party.

Search

| Template | Download | Funder | Last Updated | Funder Links | Sample Plans (if available) |
|---|---|---|---|---|---|
| Alfred P. Sloan Foundation | DOCX PDF | Alfred P. Sloan Foundation | 04-18-2018 | Sloan Grant Proposal Guidelines | |
| Arctic Data Center: NSF Polar Programs [DRAFT] | DOCX PDF | National Science Foundation (NSF) | 07-19-2018 | NSF Arctic Data Center DMP Resources | |
| BCO-DMO NSF OCE: Biological and Chemical Oceanography | DOCX PDF | National Science Foundation (NSF) | 04-24-2018 | NSF OCE Sample and Data Policy<br>NSF GEO DIrectorate Guidance | |
| Department of Defense (DOD) | DOCX PDF | Department of Defense (DOD) | 04-11-2018 | DOD Public Access Plan | |
| Department of Energy (DOE): Generic | DOCX PDF | Department of Energy (DOE) | 04-25-2018 | DOE Policy for Digital Research Data Management<br>DOE Suggested Elements for a Data Management Plan | |
| Department of Energy (DOE): Office of Science | DOCX PDF | Department of Energy (DOE) | 04-10-2018 | DOE Office of Science Statement on Digital Data Management<br>DOE Suggested Elements for a Data Management Plan | |
| Digital Curation Centre | DOCX PDF | Digital Curation Centre (DCC) | 05-29-2018 | | |
| Digital Curation Centre (português) | DOCX PDF | Digital Curation Centre (DCC) | 07-11-2018 | | |

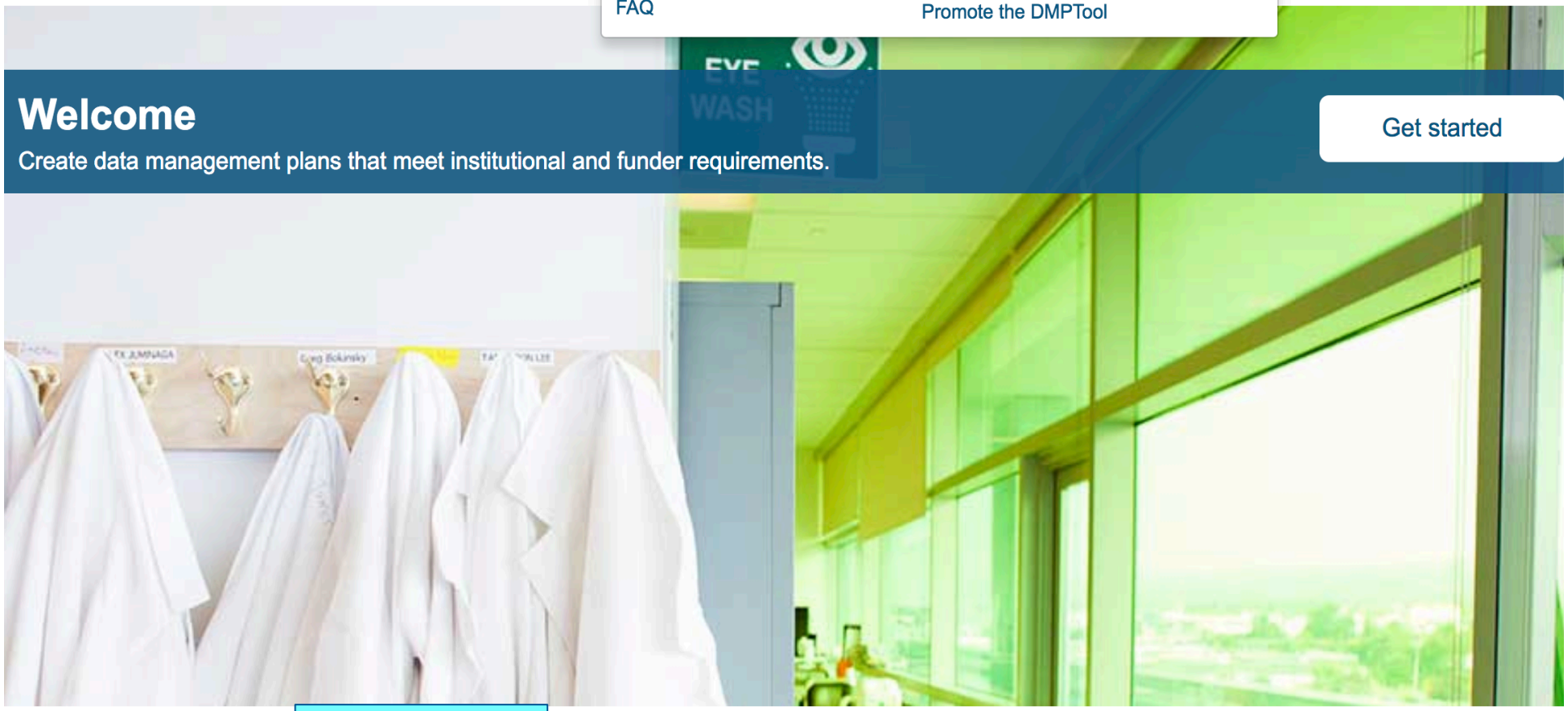
Learn | Sign in | English (US)

DMPTool
Build your Data Management Plan

- Funder Requirements
- Public Plans
- Participating Institutions
- FAQ

For Researchers
- Quick Start Guide
- Data Management General Guidance

For Administrators
- Promote the DMPTool



# Welcome

Create data management plans that meet institutional and funder requirements.

Get started

Library of public DMPs

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30,852
Users

27,394
Plans
More

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Participating Institutions
More

## Top 5 Templates

- Digital Curation Centre
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- NSF-SBE: Social, Behavioral, Economic Sciences
- USDA-NIFA: National Institute of Food and Agriculture
- NIH-GEN: Generic

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DMPTool
Build your Data Management Plan

Funder Requirements
Public Plans
Participating Institutions
FAQ

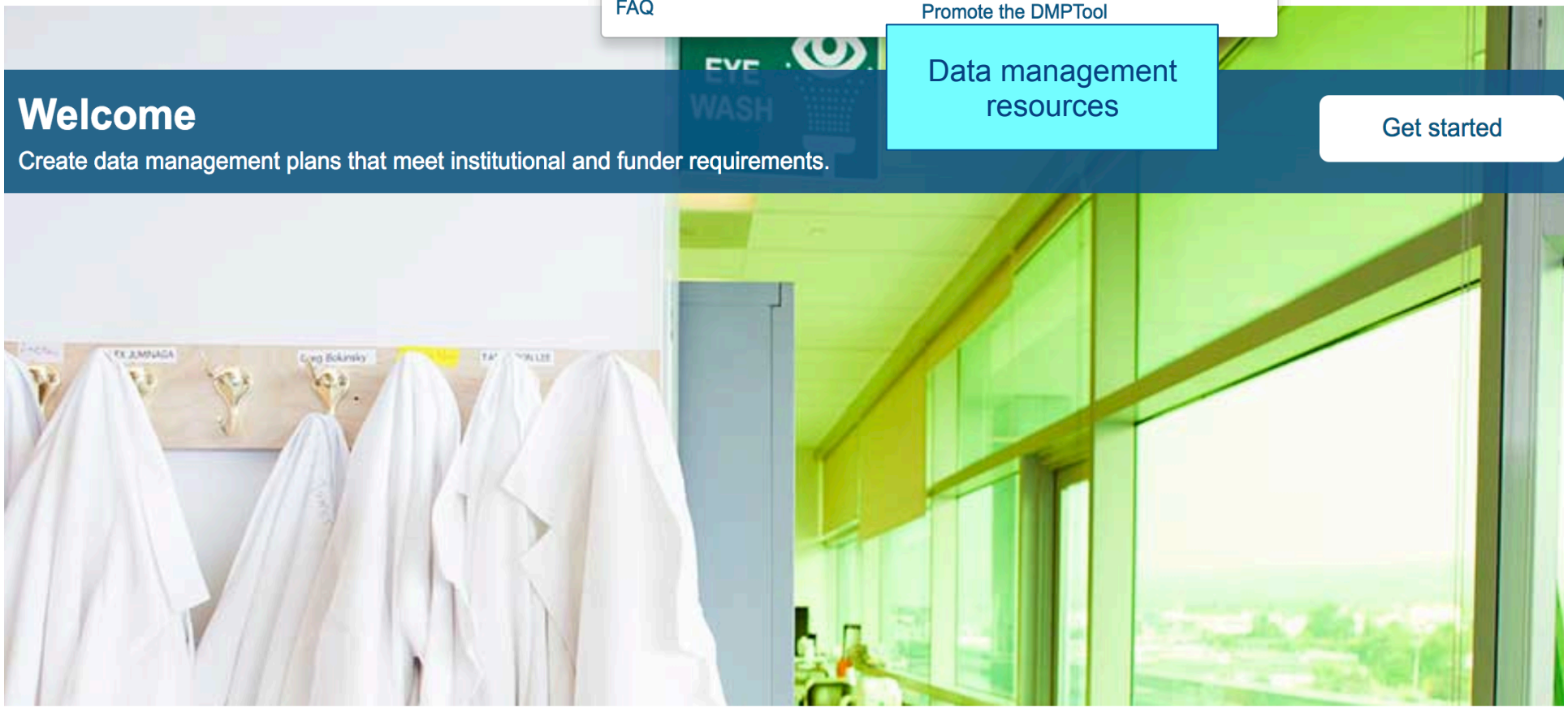
For Researchers
Quick Start Guide
Data Management General Guidance
For Administrators
Promote the DMPTool

Data management resources

# Welcome

Create data management plans that meet institutional and funder requirements.

Get started



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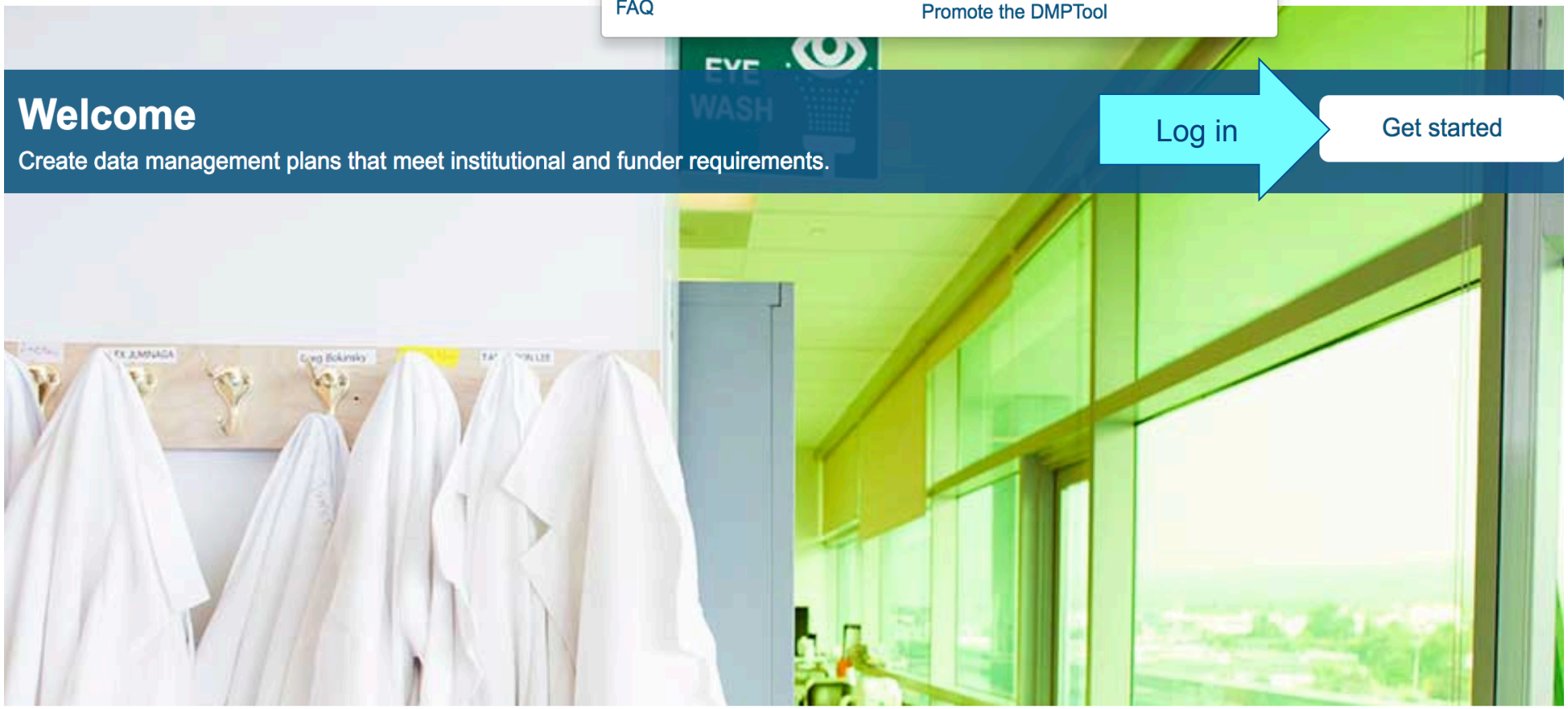
DMPTool
Build your Data Management Plan



# Welcome

Create data management plans that meet institutional and funder requirements.

Log in

Get started

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USDA-NIFA: National Institute of Food and Agriculture
NIH-GEN: Generic

DMPTool
Build your Data Management Plan

# Sign in options

Option 1: If your institution is affiliated with DMPTool.

Your institution

Select Institution

- or -

Option 2: If your institution is not affiliated with DMPTool.

Email address

- or -

Option 3: If not affiliated and you need an account.

Create account with email address

## Sign in options

Option 1: If your institution is affiliated with DMPTool.

Your institution

- or -

Option 2: If your institution is not affiliated with DMPTool.

Email address

- or -

Option 3: If not affiliated and you need an account.

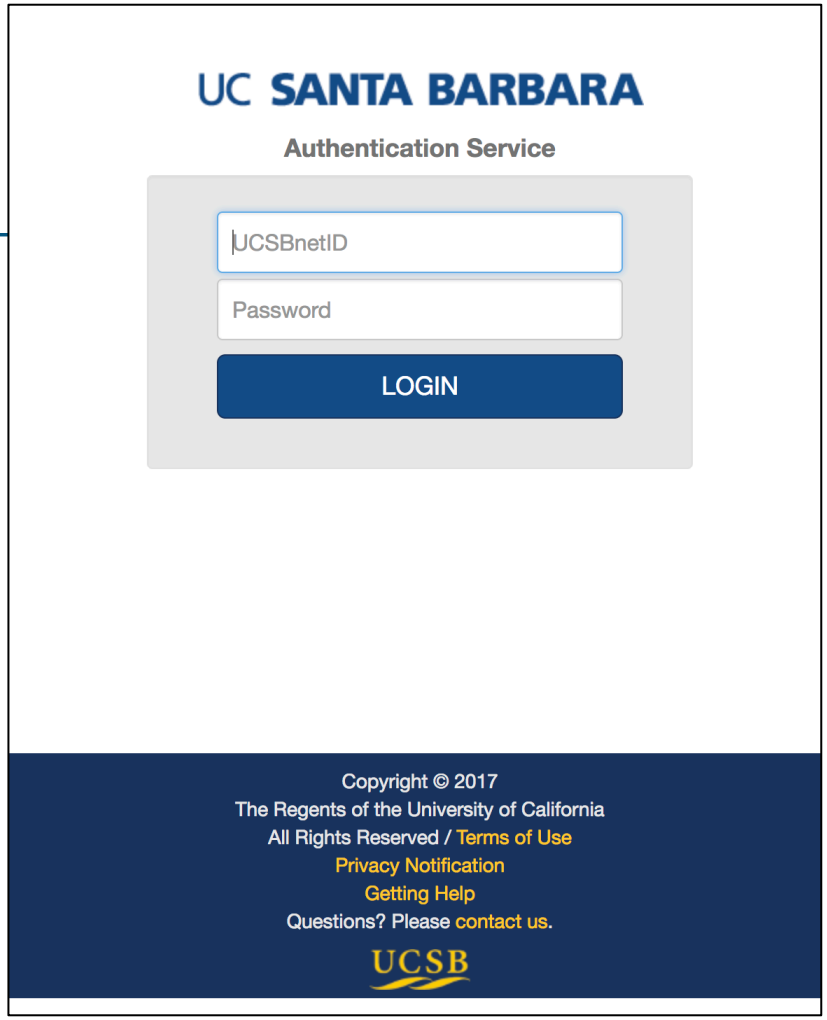
Create account with email address

Select Institution

atement Accessibility Github Contact us

alifornia Curation Center of the California Digital Library
Jniversity of California

If your institution is a partner, you will be redirected to their login page



DMPTool
Build your Data Management Plan

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Option 1: If your institution is affiliated with DMPTool.

Your institution

- or -

Option 2: If your institution is not affiliated with DMPTool.

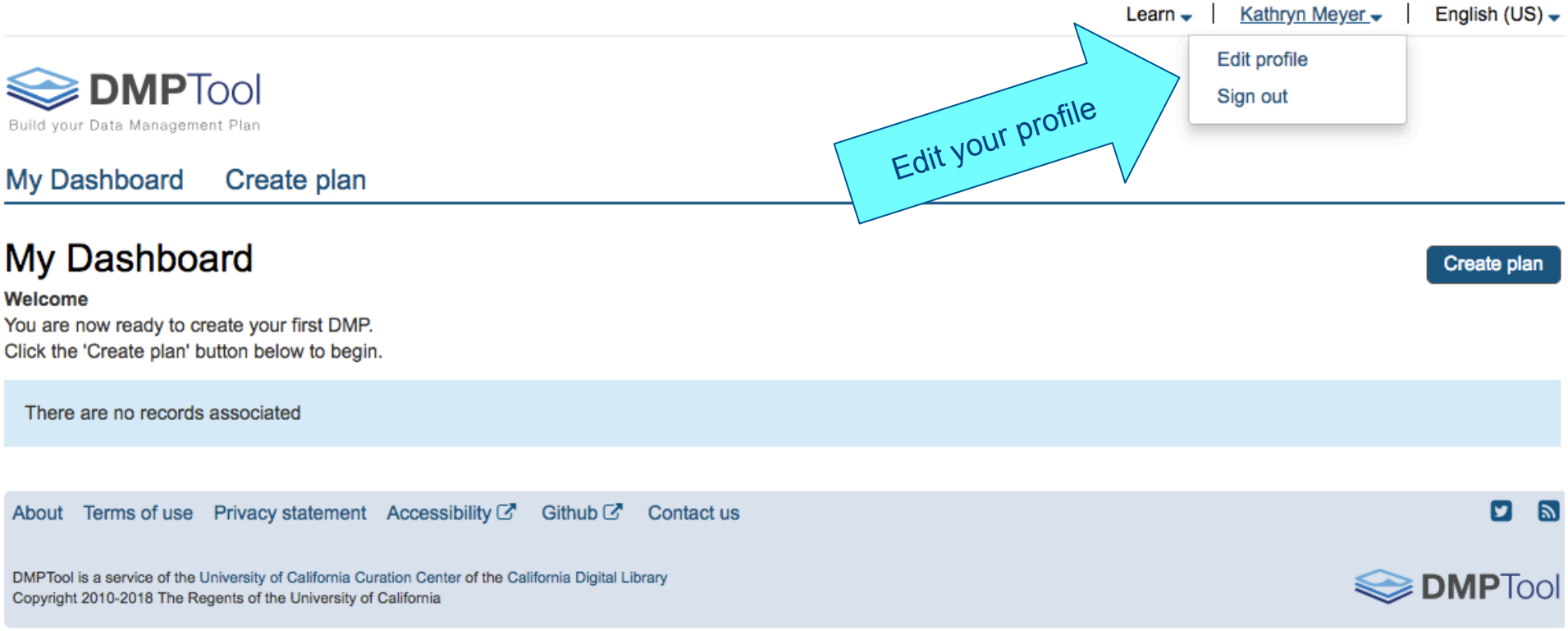
Email address

- or -

Option 3: If not affiliated and you need an account.

Create account with email address

Your institution not listed? Use your email address to create an account


Learn
Kathryn Meyer
English (US)
Edit profile
Sign out
Edit your profile
DMPTool
Build your Data Management Plan
My Dashboard
Create plan
My Dashboard
Create plan
Welcome
You are now ready to create your first DMP.
Click the 'Create plan' button below to begin.
There are no records associated
About
Terms of use
Privacy statement
Accessibility
Github
Contact us
DMPTool is a service of the University of California Curation Center of the California Digital Library
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DMPTool

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DMPTool
Build your Data Management Plan

My Dashboard Create plan

# Edit profile

Personal Details | Notification Preferences

Please note that your email address is also your username. If you change this remember to use your new email address on sign in. If your account is created with your institutional credentials you must contact us to change your email or organization.

* **Email**

meyer@nceas.ucsb.edu

* **First name**

Kathryn

* **Last name**

Meyer

**Organization**

**Language**

English (US)

**ORCID**

Create or connect your ORCID iD

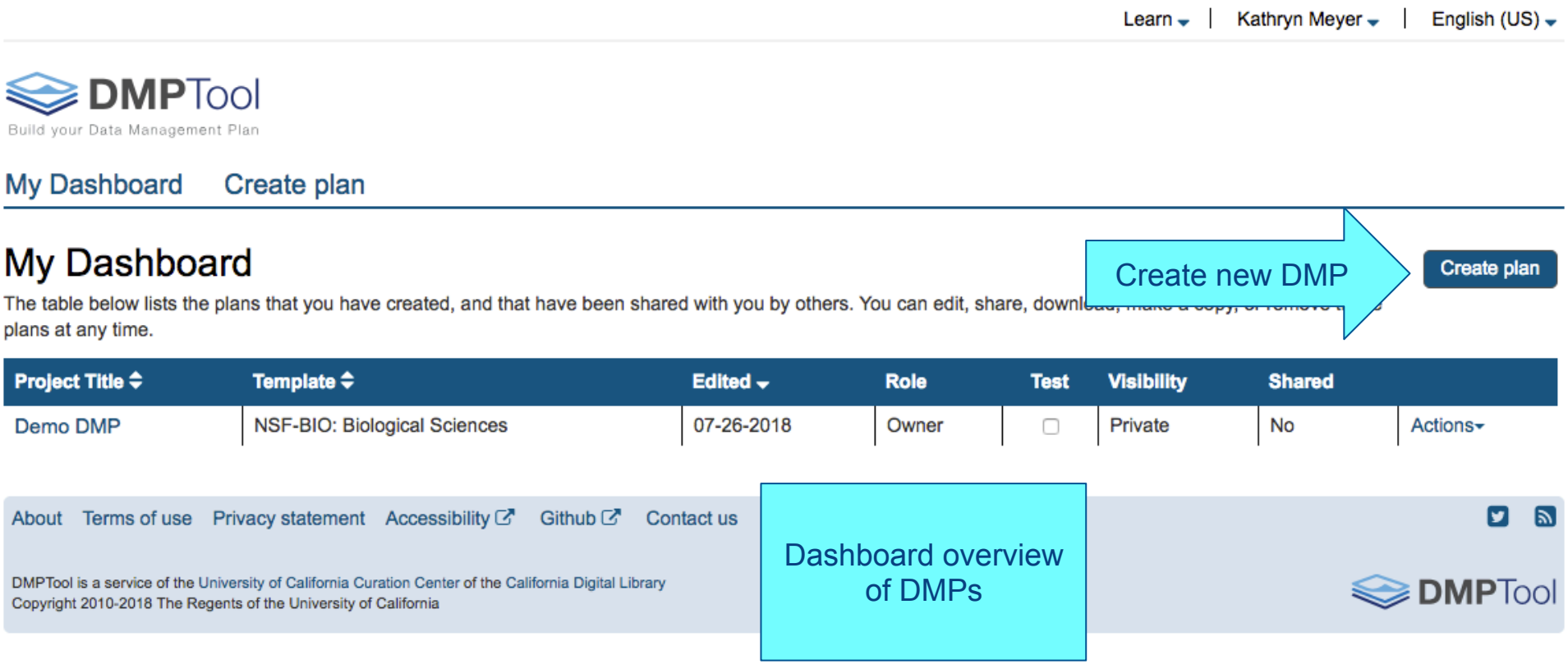
Save

Set up your profile & notification preferences





DMPTool


Learn | Kathryn Meyer | English (US)
DMPTool
Build your Data Management Plan
My Dashboard
Create plan
My Dashboard
The table below lists the plans that you have created, and that have been shared with you by others. You can edit, share, download, make a copy, or remove these plans at any time.
Create new DMP
Create plan
Project Title
Template
Edited
Role
Test
Visibility
Shared
Demo DMP
NSF-BIO: Biological Sciences
07-26-2018
Owner
Private
No
Actions
About
Terms of use
Privacy statement
Accessibility
Github
Contact us
DMPTool is a service of the University of California Curation Center of the California Digital Library
Copyright 2010-2018 The Regents of the University of California
DMPTool
Dashboard overview of DMPs

DMPTool

Build your Data Management Plan

My Dashboard Create plan

# Create a new plan

Before you get started, we need some information about your research project to set you up with the best DMP template for your needs.

## * What research project are you planning?

Mock project for testing, practice, or educational purposes

## * Select the primary research organization

Begin typing to see a filtered list

- or -

No research organization associated with this plan or my research organization is not listed

## * Select the primary funding organization

Begin typing to see a filtered list

- or -

No funder associated with this plan or my funder is not listed

Create plan Cancel





DMPTool

DMPTool

Build your Data Management Plan

My Dashboard  Create plan

# Create a new plan

Before you get started, we need some information about your research project to set you up with the best DMP tem… your needs.

## * What research project are you planning?

Provide title for plan

☐ Mock project for testing, practice, or educational purposes

## * Select the primary research organization

Begin typing to see a filtered list

- or -

☐ No research organization associated with this plan or my research organization is not listed

## * Select the primary funding organization

Begin typing to see a filtered list

- or -

☐ No funder associated with this plan or my funder is not listed

Create plan  Cancel





DMPTool

DMPTool
Build your Data Management Plan

My Dashboard  Create plan

# Create a new plan

Before you get started, we need some information about your research project to set you up with the best DMP template for your needs.

* What research project are you planning?

or educational purposes

* Select the primary research organization

Begin typing to see a filtered list

esearch organization associated with this plan or my research organization is not listed

Select primary research organization, if available

* Select the primary funding organization

Begin typing to see a filtered list

- or -  No funder associated with this plan or my funder is not listed

Create plan  Cancel





DMPTool

DMPTool

Build your Data Management Plan

My Dashboard  Create plan

# Create a new plan

Before you get started, we need some information about your research project to set you up with the best DMP template for your needs.

## * What research project are you planning?

Demonstration DMP

☐ Mock project for testing, practice, or educational purposes

## * Select the primary research organization

Begin typing to see a filtered list

- or -

☑ No research organization associated with this plan or my research organization is not listed

## * Select the primary funding organization

N

Please select a valid funding organization from the list.

or my funder is not listed

- Alfred P. Sloan Foundation
- Department of Defense (DOD)
- Department of Energy (DOE)
- Department of Transportation (DOT)
- Digital Curation Centre (DCC)
- Gordon and Betty Moore Foundation (GBMF)
- Gulf of Mexico Research Initiative (GoMRI)
- Institute of Education Sciences (US Dept of Education IES)
- Institute of Museum and Library Services (IMLS)
- Joint Fire Science Program (JFSP)
- National Aeronautics and Space Administration (NASA)
- National Endowment for the Humanities (NEH)
- National Institute of Justice (DOJ)
- National Institutes of Health (NIH)
- National Oceanic and Atmospheric Administration (NOAA)
- National Science Foundation (NSF)
- U.S. Department of Agriculture (USDA)
- University Corporation for Atmospheric Research (UCAR)

Select Funder

DMPTool

DMPTool
Build your Data Management Plan

My Dashboard  Create plan

# Create a new plan

Before you get started, we need some information about your research project to set you up with the best DMP template for your needs.

## * What research project are you planning?

Demonstration DMP

☐ Mock project for testing, practice, or educational purposes

## * Select the primary research organization

Begin typing to see a filtered list

- or -

☑ No research organization associated with this plan or my research organization is not listed

## * Select the primary funding organization

National Science Foundation (NSF)

- or -

☐ No funder associated with this plan or my funder is not listed

## Which DMP template would you like to use?

We found multiple DMP templates corresponding to your funder.

- ✓ Arctic Data Center: NSF Polar Programs [DRAFT]
- BCO-DMO NSF OCE: Biological and Chemical Oceanography
- NSF-AGS: Atmospheric and Geospace Sciences
- NSF-AST: Astronomical Sciences
- NSF-BIO: Biological Sciences
- NSF-CHE: Chemistry Division
- NSF-CISE: Computer and Information Science and Engineering
- NSF-DMR: Materials Research
- NSF-DMS: Mathematical Sciences
- NSF-EAR: Earth Sciences
- NSF-EHR: Education and Human Resources
- NSF-ENG: Engineering
- NSF-GEN: Generic
- NSF-PHY: Physics
- NSF-SBE: Social, Behavioral, Economic Sciences

Select DMP template, based on funder

DMPTool

My Dashboard  Create plan

Notice: Successfully created your plan.
This plan is based on the National Science Foundation (NSF): 'NSF-BIO: Biological Sciences' template.

# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

Provide Project Information for the DMP

* **Project title**
Demonstration DMP

mock project for testing, practice, or educational purposes

**Funder**
National Science Foundation (NSF)

**Grant number (optional)**

**Project abstract**

**Principal Investigator**

**Name**
Kathryn Meyer

**ORCID iD**

**Email**
meyer@nceas.ucsb.edu

**Data Contact Person**

Same as Principal Investigator

Submit  Cancel

## Plan Guidance Configuration

To help you write your plan, DMPTool can show you guidance from a variety of organizations.

Select up to 6 organizations to see their guidance.

DMPTool

Find guidance from additional organizations below

See the full list

Submit

Add Data Contact, if different from PI

My Dashboard  Create plan

Notice: Successfully created your plan.
This plan is based on the National Science Foundation (NSF): 'NSF-BIO: Biological Sciences' template.

# Demonstration DMP

Get Support

Project Details | Plan overview | Write Plan | Share | Download

* **Project title**

Demonstration DMP

mock project for testing, practice, or educational purposes

**Funder**

National Science Foundation (NSF)

**Grant number (optional)**

**Project abstract**

**Principal Investigator**

**Name**

Kathryn Meyer

**ORCID iD**

**Email**

meyer@nceas.ucsb.edu

**Data Contact Person**

Same as Principal Investigator

Submit  Cancel

## Plan Guidance Configuration

To help you write your plan, DMPTool can show you guidance from a variety of organizations.

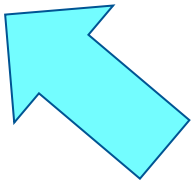
Select up to 6 organizations to see their guidance.

DMPTool

Find guidance from additional organizations below

See the full list

Submit



# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

Template Overview

## NSF-BIO: Biological Sciences

This plan is based on the "NSF-BIO: Biological Sciences" template provided by National Science Foundation (NSF).

### Instructions

Write plan

Data and Materials Produced

- Describe the types of data, physical samples or collections, software, curriculum materials, and other materials to be produced in the course of the project. (For collaborative proposals, the DMP must cover all the various data types being collected by each collaborator.)

Standards, Formats and Metadata

- Describe the standards to be used for all the data types anticipated, including data or file format and metadata.

Roles and Responsibilities

- Describe the roles and responsibilities of all parties with respect to the management of the data (including contingency plans for the departure of key personnel from the project).

Dissemination Methods

- Describe the dissemination methods that will be used to make data and metadata available to others during the period of the award, and any modifications or additional technical information regarding data access after the grant ends.

Policies for Data Sharing and Public Access

- Describe the PI's policies for data sharing, public access and re-use, including re-distribution by others and the production of derivatives. Where appropriate, include provisions for protection of privacy, confidentiality, security, intellectual property rights and other rights.

Archiving, Storage and Preservation

- Where relevant, describe plans for archiving data, samples, software, and other research products, and for on-going access to these products through their lifecycle of usefulness to research and education. Consider which data (or research products) will be deposited for long-term access and where. (What physical and/or cyber resources and facilities (including third party resources) will be used to store and preserve the data after the grant ends?)

DMPTool
Build your Data Management Plan

My Dashboard  Create plan

# Demonstration DMP

Template Sections

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

+ Data and Materials Produced (0 / 1)

+ Standards, Formats and Metadata (0 / 1)

+ Roles and Responsibilities (0 / 1)

+ Dissemination Methods (0 / 1)

+ Policies for Data Sharing and Public Access (0 / 1)

+ Archiving, Storage and Preservation (0 / 1)





DMPTool

Expand Sections

# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

## − Data and Materials Produced (0 / 1)

Describe the types of data, physical samples or collections, software, curriculum materials, and other materials to be produced in the course of the project. (For collaborative proposals, the DMP must cover all the various data types being collected by each collaborator.)

Guidance | Comments

NSF | DMPTool

**Guidance**

- NSF-BIO Guidance on DMPs
- NSF Proposal & Award Policies & Procedures Guide (PAPPG)
- NSF plans for data management and sharing of the products of research (PAPPG)
- NSF Frequently Asked Questions (FAQs) for Public Access

Save

## + Standards, Formats and Metadata (0 / 1)

## + Roles and Responsibilities (0 / 1)

# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

## − Data and Materials Produced (0 / 1)

Describe the types of data, physical samples or collections, software, curriculum materials, and other materials to be produced in the course of the project. (For collaborative proposals, the DMP must cover all the various data types being collected by each collaborator.)

Save

Guidance | Comments

NSF | DMPTool

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- NSF plans for data management and sharing of the products of research (PAPPG)
- NSF Frequently Asked Questions (FAQs) for Public Access

Information to Include

## + Standards, Formats and Metadata (0 / 1)

## + Roles and Responsibilities (0 / 1)

# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

## − Data and Materials Produced (0 / 1)

Describe the types of data, physical samples or collections, software, curriculum materials, and other materials to be produced in the course of the project. (For collaborative proposals, the DMP must cover all the various data types being collected by each collaborator.)

Guidance | Comments

NSF | DMPTool

**Guidance**

- NSF-BIO Guidance on DMPs
- ies &
- nent and sharing of the products of research (PAPPG)
- NSF Frequently Asked Questions (FAQs) for Public Access

Fill in Information

Save

## + Standards, Formats and Metadata (0 / 1)

## + Roles and Responsibilities (0 / 1)

# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

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Describe the types of data, physical samples or collections, software, curriculum materials, and other materials to be produced in the course of the project. (For collaborative proposals, the DMP must cover all the various data types being collected by each collaborator.)

Guidance | Comments

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- NSF plans for data management and sharing of the products of research (PAPPG)
- NSF Frequently Asked Questions (FAQs) for Public Access

Save

Save as you go along

## + Standards, Formats and Metadata (0 / 1)

## + Roles and Responsibilities (0 / 1)

# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

## − Data and Materials Produced (0 / 1)

Describe the types of data, physical samples or collections, software, curriculum materials, and other materials to be produced in the course of the project. (For collaborative proposals, the DMP must cover all the various data types being collected by each collaborator.)

B *I*

Save

Guidance | Comments

NSF | DMPTool

**Guidance**

- NSF-BIO Guidance on DMPs
- NSF Proposal & Award Policies & Procedures Guide (PAPPG)
- NSF plans for data management and sharing of the products of research (PAPPG)
- NSF Frequently Asked Questions (FAQs) for Public Access

Funder Guidance Resources

## + Standards, Formats and Metadata (0 / 1)

## + Roles and Responsibilities (0 / 1)

# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

## − Data and Materials Produced (0 / 1)

Describe the types of data, physical samples or collections, software, curriculum materials, and other materials to be produced in the course of the project. (For collaborative proposals, the DMP must cover all the various data types being collected by each collaborator.)

B *I*

Save

DMPTool Guidance

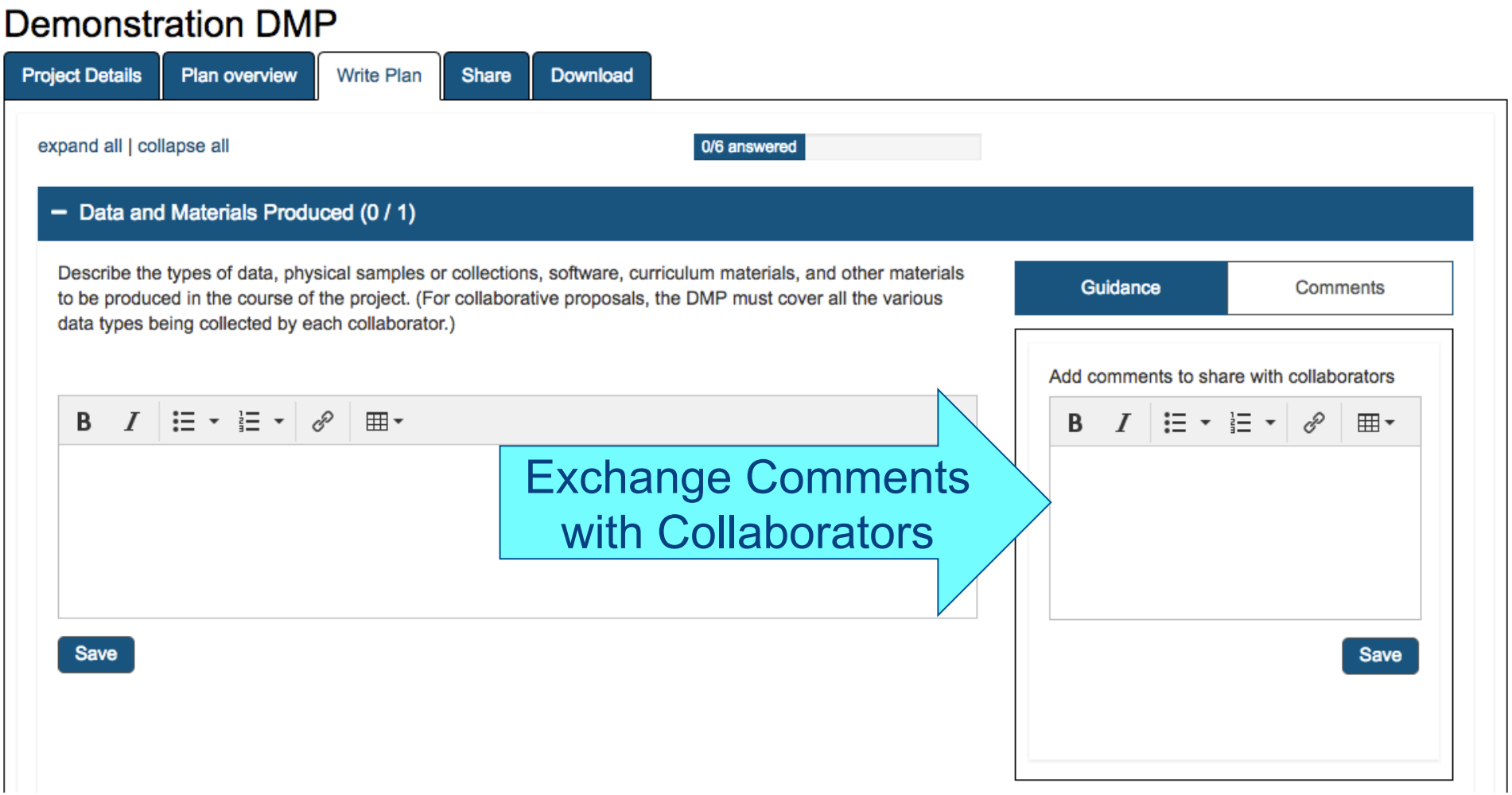
Guidance | Comments

NSF | DMPTool

expand all | collapse all

### − Data collection

- Outline how the data will be collected and processed. This should cover relevant standards or methods, quality assurance, and data organisation.
- Indicate how the data will be organized during the project, mentioning, e.g., naming conventions, version control, and folder structures. Consistent, well-ordered research data will be easier to find, understand, and reuse.
- Explain how the consistency and quality of data collection will be controlled and documented. This may include processes such as calibration, repeat samples, or measurements, standardized data capture,


Demonstration DMP
Project Details
Plan overview
Write Plan
Share
Download
expand all | collapse all
0/6 answered
Data and Materials Produced (0 / 1)
Describe the types of data, physical samples or collections, software, curriculum materials, and other materials to be produced in the course of the project. (For collaborative proposals, the DMP must cover all the various data types being collected by each collaborator.)
Guidance
Comments
Add comments to share with collaborators
Exchange Comments with Collaborators
Save
Save

# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

+ Data and Materials Produced (0 / 1)

− Standards, Formats and Metadata (0 / 1)

Describe the standards to be used for all the data types anticipated, including data or file format and metadata.

Guidance | Comments

NSF | DMPTool

**Guidance**

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Save

# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

+ Data and Materials Produced (0 / 1)

+ Standards, Formats and Metadata (0 / 1)

− Roles and Responsibilities (0 / 1)

Describe the roles and responsibilities of all parties with respect to the management of the data (including contingency plans for the departure of key personnel from the project).

B *I*

Save

Guidance | Comments

NSF | DMPTool

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# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

+ Data and Materials Produced (0 / 1)

+ Standards, Formats and Metadata (0 / 1)

+ Roles and Responsibilities (0 / 1)

− Dissemination Methods (0 / 1)

Describe the dissemination methods that will be used to make data and metadata available to others during the period of the award, and any modifications or additional technical information regarding data access after the grant ends.

B *I*

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# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

+ Data and Materials Produced (0 / 1)

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+ Roles and Responsibilities (0 / 1)

+ Dissemination Methods (0 / 1)

− Policies for Data Sharing and Public Access (0 / 1)

Describe the PI's policies for data sharing, public access and re-use, including re-distribution by others and the production of derivatives. Where appropriate, include provisions for protection of privacy, confidentiality, security, intellectual property rights and other rights.

B *I*

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# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

expand all | collapse all

0/6 answered

+ Data and Materials Produced (0 / 1)

+ Standards, Formats and Metadata (0 / 1)

+ Roles and Responsibilities (0 / 1)

+ Dissemination Methods (0 / 1)

+ Policies for Data Sharing and Public Access (0 / 1)

− Archiving, Storage and Preservation (0 / 1)

Where relevant, describe plans for archiving data, samples, software, and other research products, and for on-going access to these products through their lifecycle of usefulness to research and education. Consider which data (or research products) will be deposited for long-term access and where. (What physical and/or cyber resources and facilities (including third party resources) will be used to store and preserve the data after the grant ends?)

B *I*

Save

Guidance | Comments

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# Demonstration DMP

Project Details | Plan overview | Write Plan | Share | Download

## Set plan visibility

Public or organizational visibility is intended for finished plans. You must answer at least 50% of the questions to enable these options. Note: test plans are set to private visibility by default.

- (•) Private: visible to me, specified collaborators and administrators at my organization
- ( ) Organization: anyone at my organization can view
- ( ) Public: anyone can view

Choose Plan Visibility

## Manage collaborators

Invite specific people to read, edit, or administer your plan. Invitees will receive an email notification that they have access to this plan.

| Email address | Permissions |
|---|---|
| meyer@nceas.ucsb.edu | Owner |

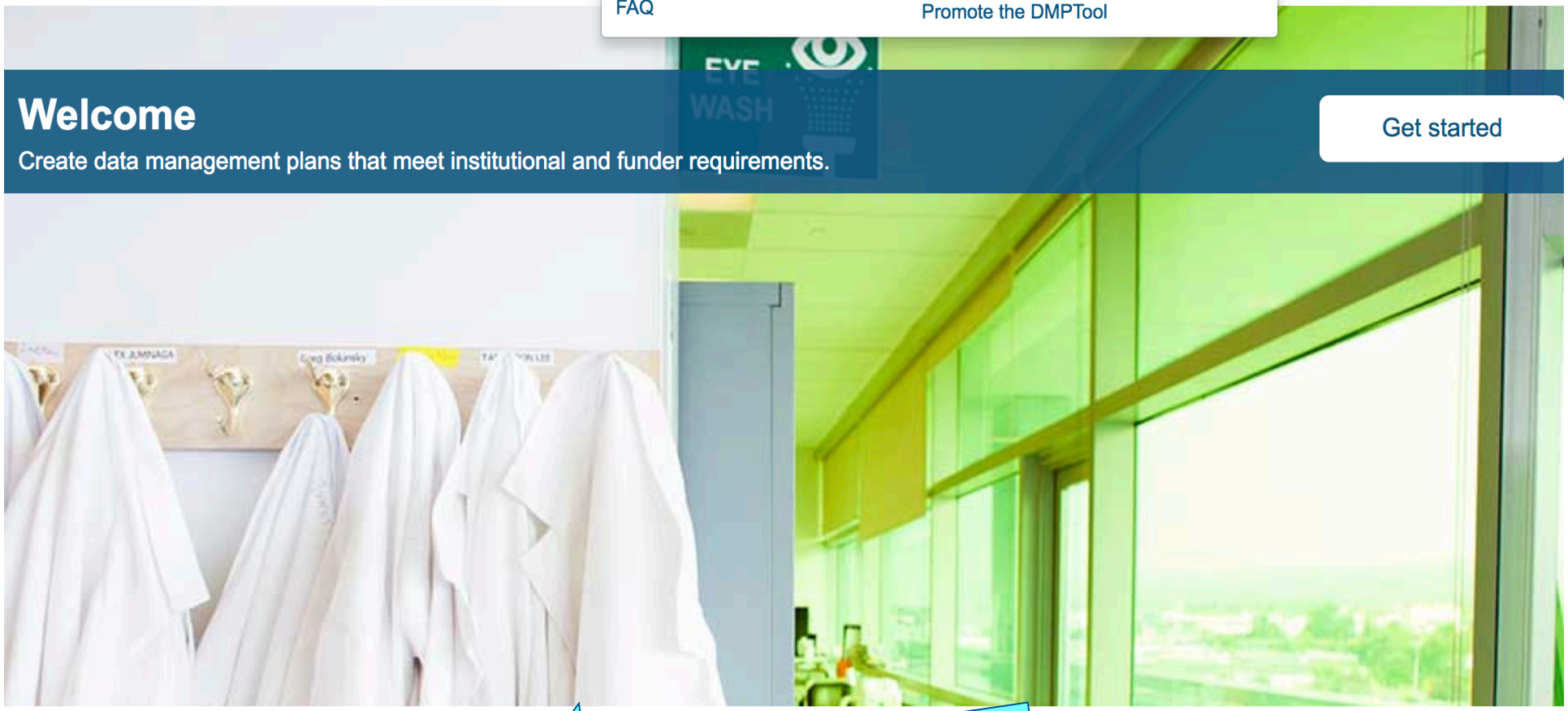
## Invite collaborators

* **Email**

* **Permissions**

- ( ) Co-owner: can edit project details, change visibility, and add collaborators
- ( ) Editor: can comment and make changes
- ( ) Read only: can view and comment, but not make changes

Send invitation



# Welcome

Create data management plans that meet institutional and funder requirements.

Get started

## DMPTool by the Numbers

30,852
Users

27,394
Plans
More

236
Participating Institutions
More

Public plans will be visible here

## Top 5 Templates

Digital Curation Centre
NSF-BIO: Biological Sciences
NSF-SBE: Social, Behavioral, Economic Sciences
USDA-NIFA: National Institute of Food and Agriculture
NIH-GEN: Generic

# Demonstration DMP

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## Manage collaborators

Invite specific people to read, edit, or administer your plan. Invitees will receive an email notification that they have access to this plan.

| Email address | Permissions |
|---|---|
| meyer@nceas.ucsb.edu | Owner |

## Invite collaborators

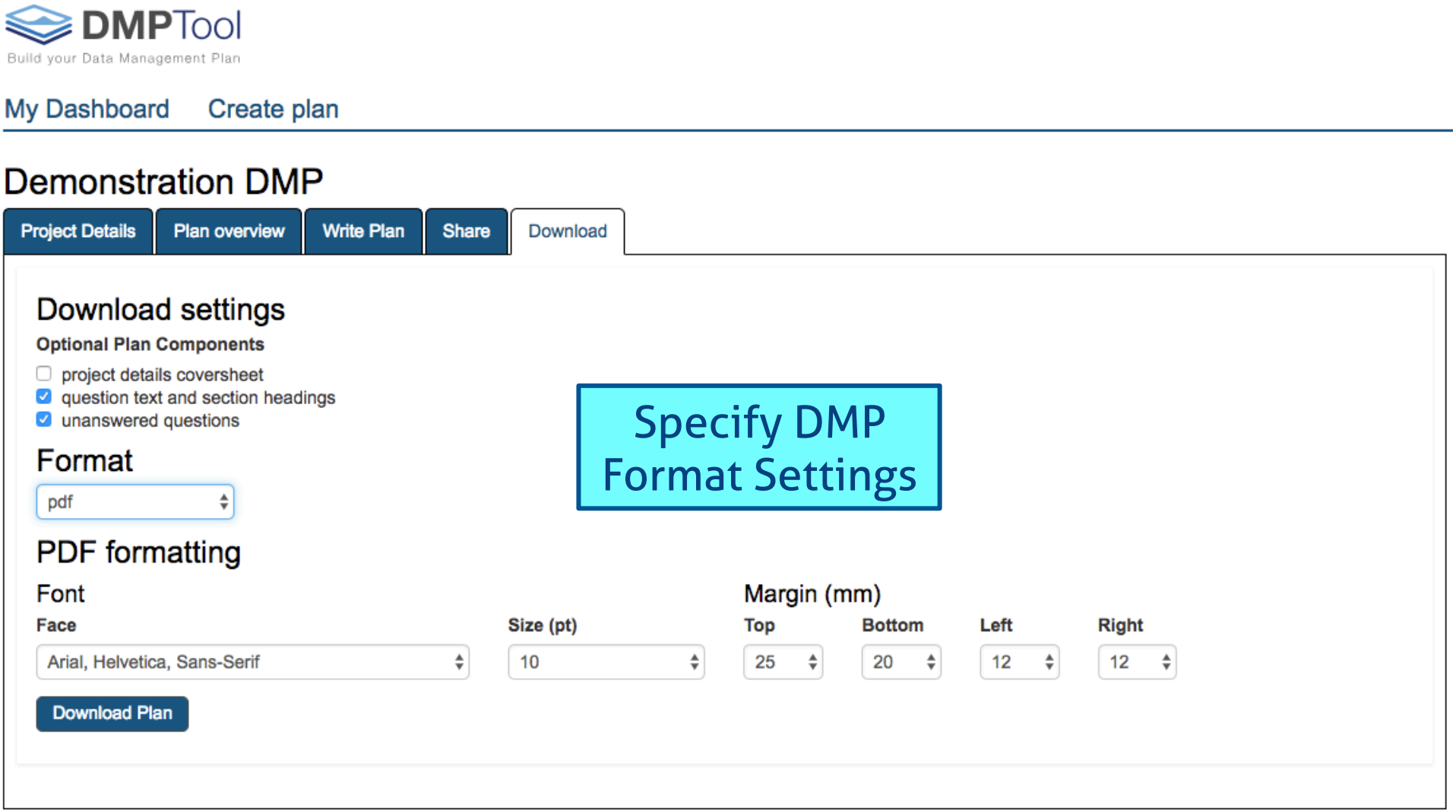
* **Email**

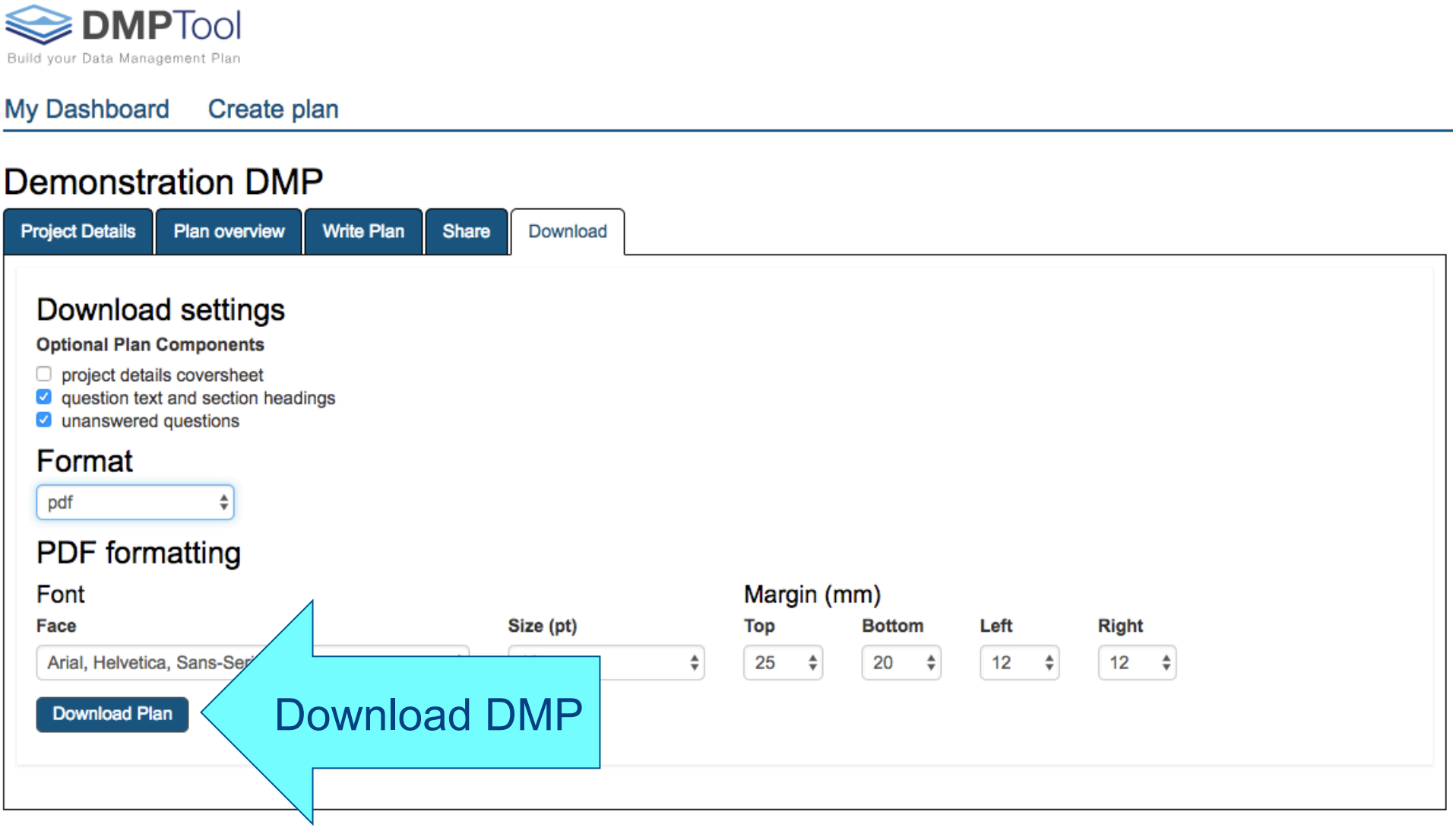
* **Permissions**

- ( ) Co-owner: can edit project details, change visibility, and add collaborators
- ( ) Editor: can comment and make changes
- ( ) Read only: can view and comment, but not make changes

Send invitation

Add Collaborators and Specify Permissions


DMPTool
Build your Data Management Plan
My Dashboard
Create plan
Demonstration DMP
Project Details
Plan overview
Write Plan
Share
Download
Download settings
Optional Plan Components
project details coversheet
question text and section headings
unanswered questions
Format
pdf
Specify DMP Format Settings
PDF formatting
Font
Face
Arial, Helvetica, Sans-Serif
Size (pt)
10
Margin (mm)
Top
25
Bottom
20
Left
12
Right
12
Download Plan


DMPTool
Build your Data Management Plan
My Dashboard
Create plan
Demonstration DMP
Project Details
Plan overview
Write Plan
Share
Download
Download settings
Optional Plan Components
project details coversheet
question text and section headings
unanswered questions
Format
pdf
PDF formatting
Font
Face
Size (pt)
Margin (mm)
Top
Bottom
Left
Right
25
20
12
12
Download Plan
Download DMP

DMPTool
Build your Data Management Plan

My Dashboard  Create plan

DMP added to your Dashboard for continued editing, sharing, downloading or copying

# My Dashboard

Create plan

The table below lists the plans that you have created, and that have been shared with you by others. You can edit, share, download, make a copy, or remove these plans at any time.

| Project Title | Template | Edited | Role | Test | Visibility | Shared | |
|---|---|---|---|---|---|---|---|
| Demonstration DMP | NSF-BIO: Biological Sciences | 07-26-2018 | Owner | ☐ | Private | No | Actions |
| Demo DMP | NSF-BIO: Biological Sciences | 07-26-2018 | Owner | ☐ | Private | No | Actions |





DMPTool

# Public Plans

Public plans are plans created using the DMPTool service and shared publicly by their owners. They are not vetted for quality, completeness, or adherence to funder guidelines.

Search

| Project Title | Template | Organization | Owner | Download |
|---|---|---|---|---|
| Enhancing Stress Tolerance in Cereal Crops using Transgenerational Epigenetic Memory | USDA-NIFA: National Institute of Food and Agriculture | Pennsylvania State University (PSU) | Christopher Benson | PDF |
| Science and Management of Magpie Goose NT | Digital Curation Centre | Non Partner Institution | Timothy Clancy | PDF |
| Interrogating Anti-Tumor T-Cells To Develop Adoptive Cell Transfer Immunotherapy for Pediatric High-Grade Glioma | Digital Curation Centre | University of Pittsburgh | Kohanbash, Gary | PDF |
| Brazilian aquatic plant data managemen | Digital Curation Centre | Non Partner Institution | Pablo Hendrigo Alves de Melo | PDF |
| Data management plan for: Structural, Geochemical, and Permeability Measurements of the Basement Interface Contact and Associated Fault Zones Using Outcrop and Core Analog Studies: Implications for Injection Induced Seismicity in the Midcontinent Region | U.S. Geological Survey DMP Guidance | Utah State University (USU) | James Evans | PDF |
| ITB university level RDMP | Digital Curation Centre | Non Partner Institution | Dasapta Erwin Irawan | PDF |
| DMPRoadmap: Making Data Management Plans Actionable | NSF-GEN: Generic | University of California, Office of the President (UCOP) | Stephanie Simms | PDF |
| DMP 5024 Final Project | NSF-GEN: Generic | Virginia Tech (VT) | Alina Rojas | PDF |
| Characterization and Shaping of the IPF Secondary-Neutron Spectrum | Department of Energy (DOE): Office of Science | Los Alamos National Laboratory (LANL) | Adam Davis | PDF |
| Complete Information on Nuclear Reaction Mechanism for Nuclear Applications | Department of Energy (DOE): Office of Science | Los Alamos National Laboratory (LANL) | Hye Young Lee | PDF |
| Traffic Sign Detection and Recognition | Digital Curation Centre | Non Partner Institution | Deepak Reddy Danda | PDF |
| Micro-biosensor devices for Biochemical Analysis Applications | NSF-ENG: Engineering | Utah State University (USU) | Han Zhang | PDF |
| Development and Intercomparison of Methodologies to Measure Ferrous Iron in Seawater | BCO-DMO NSF OCE: Biological and Chemical Oceanography | Non Partner Institution | James Moffett | PDF |

# Late Season Productivity, Carbon, and Nutrient Dynamics in a Changing Arctic

**Types of data**

Our project will yield extensive data sets of water chemistry as well as a large number of water/filter samples. Underway and hydrographic cast data include salinity, temperature, location, water depth, optical properties collected by sensors (e.g. chlorophyll fluorescence, CDOM, beam-attenuation). Analyses of waters samples will yield data on dissolved gases (O2, Ar, CO2), dissolved nutrients, dissolved inorganic carbon, total alkalinity, particulate and dissolved organic carbon, stable carbon isotopes and pigments. All water/filter samples will be given an ISGN number for tracking. All compositional data will be new and will be collected in spreadsheets.

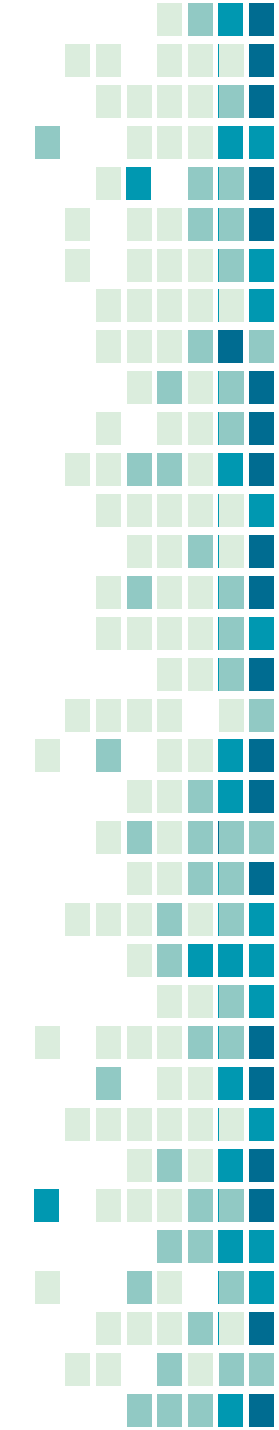
**Data and metadata standards**

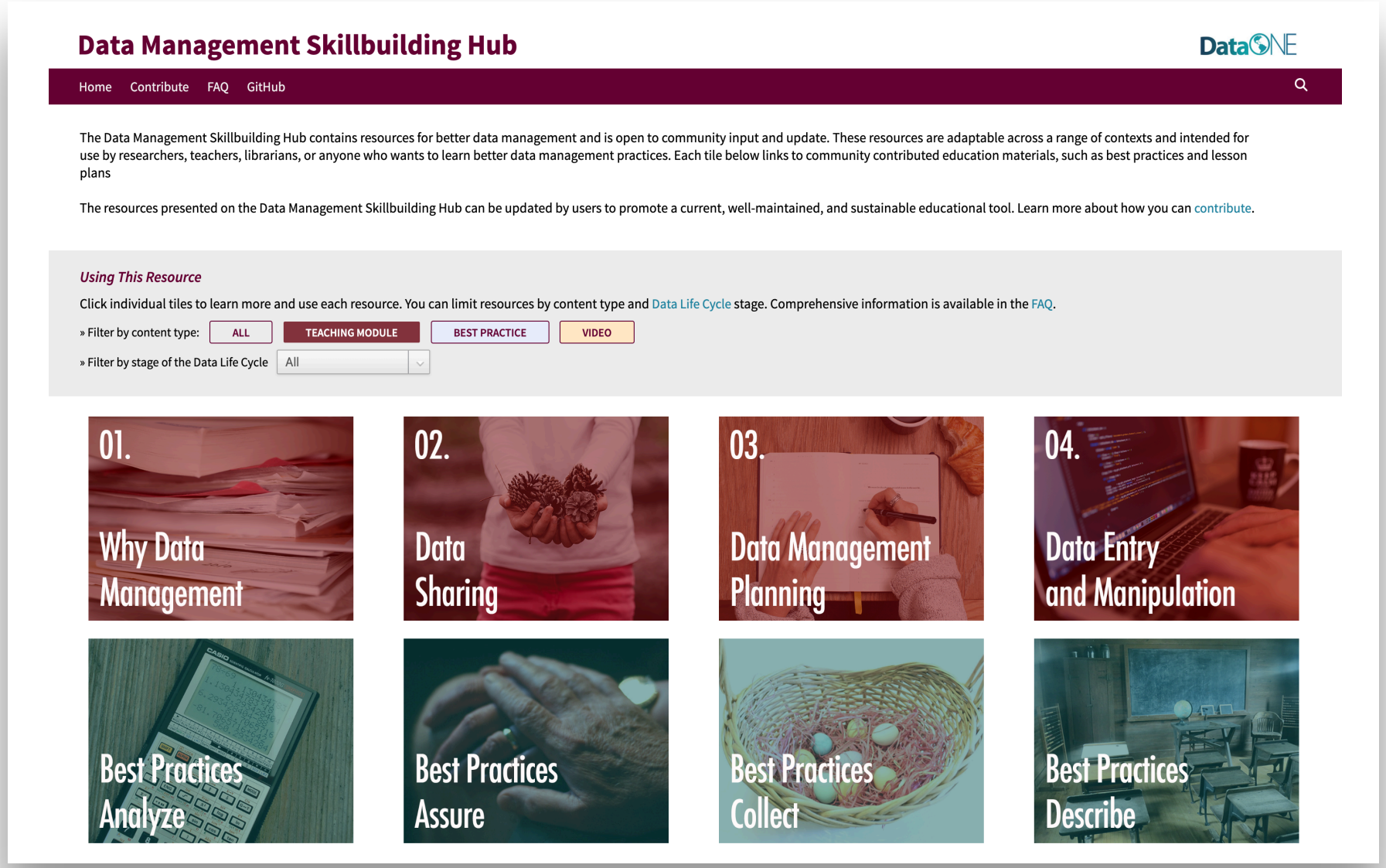
Metadata will include date/time of collection, location (latitude, longitude, water depth) and description (e.g., type sample). The metadata will allow users to identify the location and collection history of each sample and provide the tools to map them.

**Policies for access and sharing**

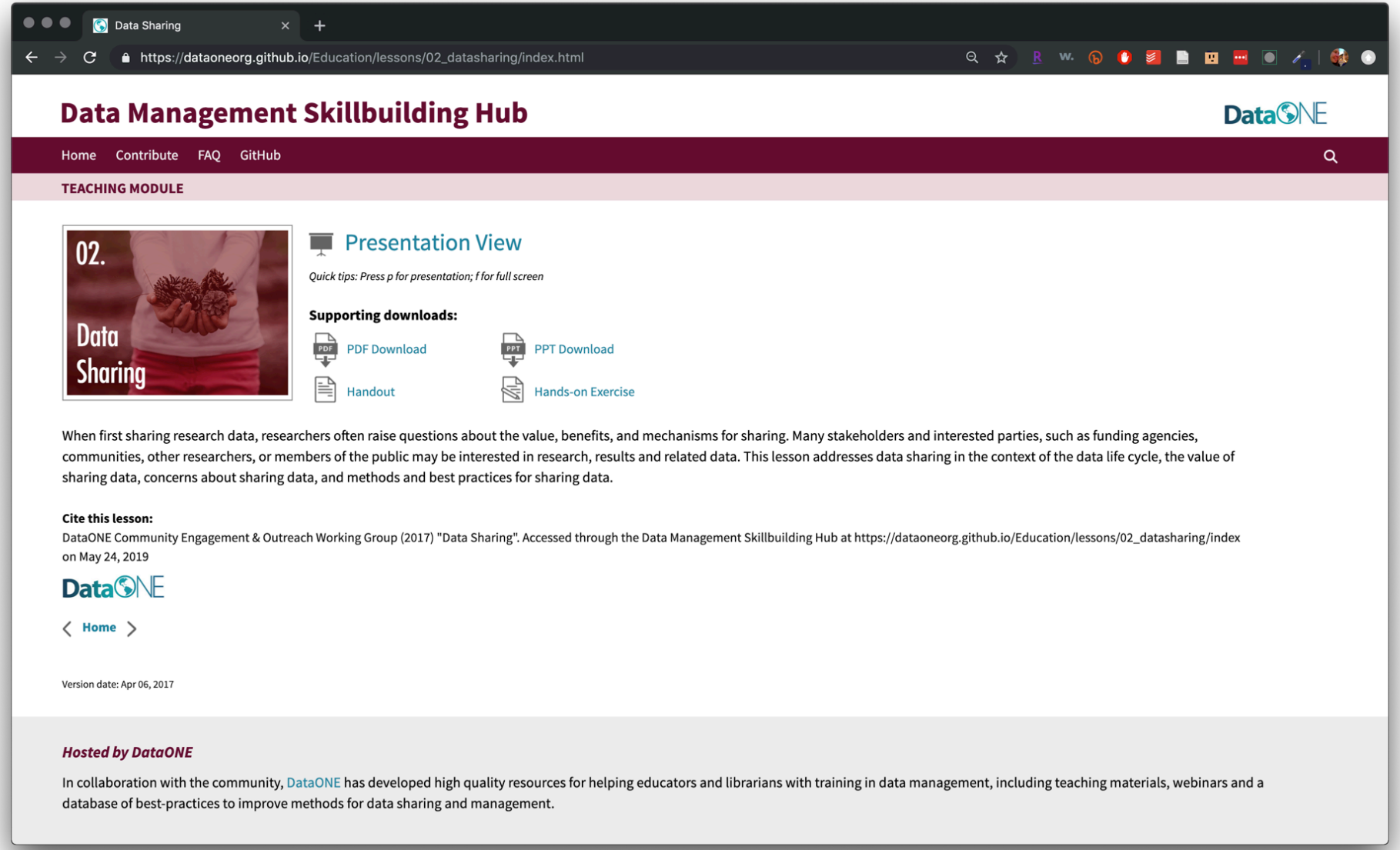
Data collected will be archived using the archival services provided by the Oregon State University Libraries. The OSU Libraries Research Data Services group is housed within the Center for Digital Scholarship and Services and provides guidance and support for all aspects of the data lifecycle, from planning data management strategy through preserving data at the conclusion of the project. Services are free of charge, and if funded we will partner with OSU Research Data services to archive our data and make it publically accessible before the end of the award or two years after collection, whichever comes first.
We plan to use OSU's digital repository (or "institutional repository") ScholarsArchive@OSU (SA@OSU) as a suitable archive and sharing mechanism for data. All items deposited into SA@OSU receive a persistent identifier (DOI or ARK), are freely available to anyone, and are full-text searchable, making them discoverable through Google, Google Scholar and other large search engines. We will work closely with OSU Resarch Data services to insure this process includes appropriate documentation and requirments for data integrity. Regarding the latter, we will follow the recommendations of the OSU Research Data services group and archive the final version of the datasets using open, non-proprietary formats such as text-based formats (e.g., ASCII), HDF and NetCDF) and multimedia formats such as JPEG 2000, MNG and PNG.
In addition, final data products from this project will be published in peer-reviewed scientific papers by the PIs, associated researchers, and the students involved with this project. Preliminary results will be presented at relevant national and international meetings as posters and/or talks. Data will be distributed to a variety of national databases including, the Advance Cooperative Arctic Data and Information Service (ACADIS) gateway (http://www.aoncadis.org/home.htm) to archive and preserve hydrographic and water sample data.

# DataONE Resources

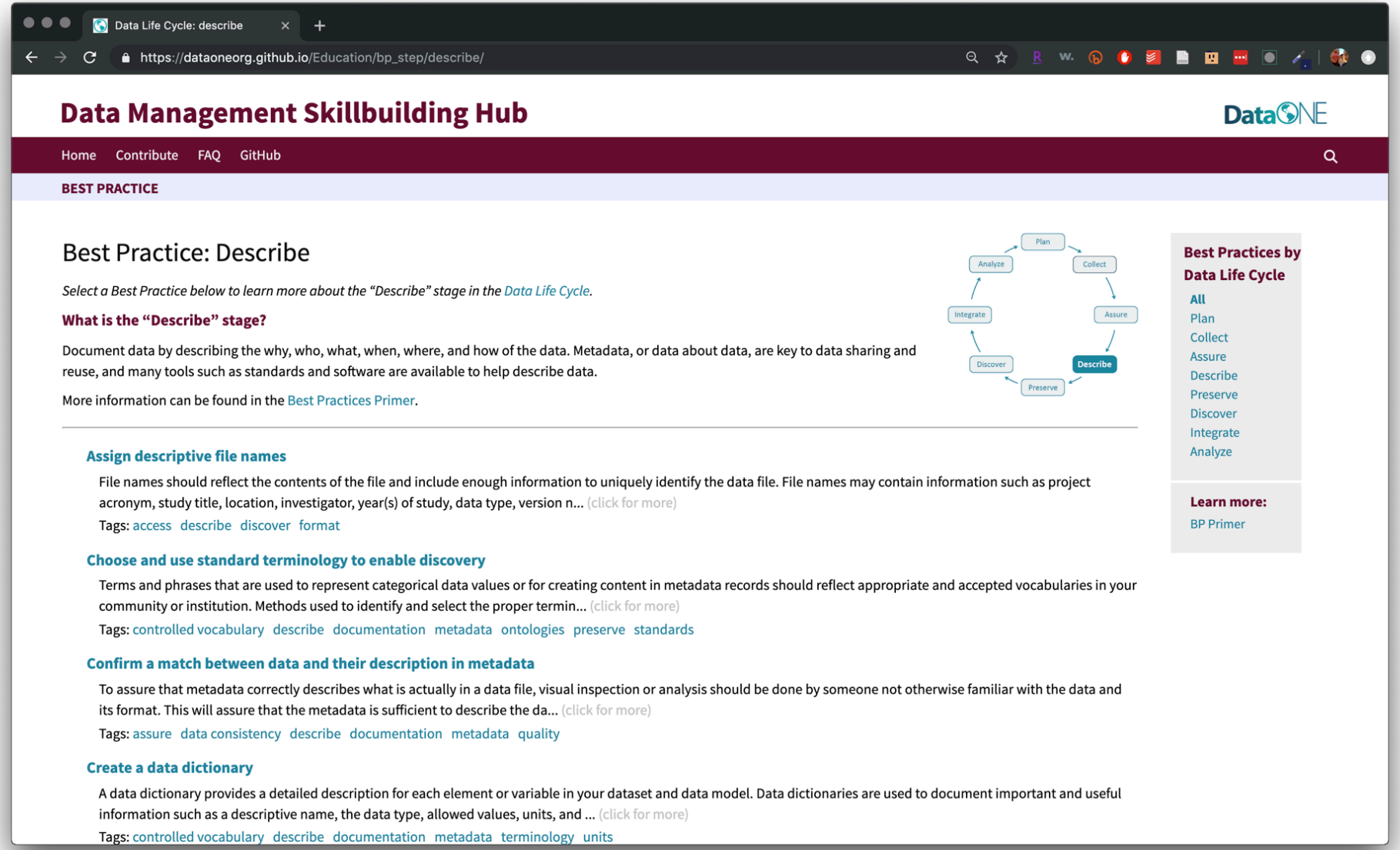




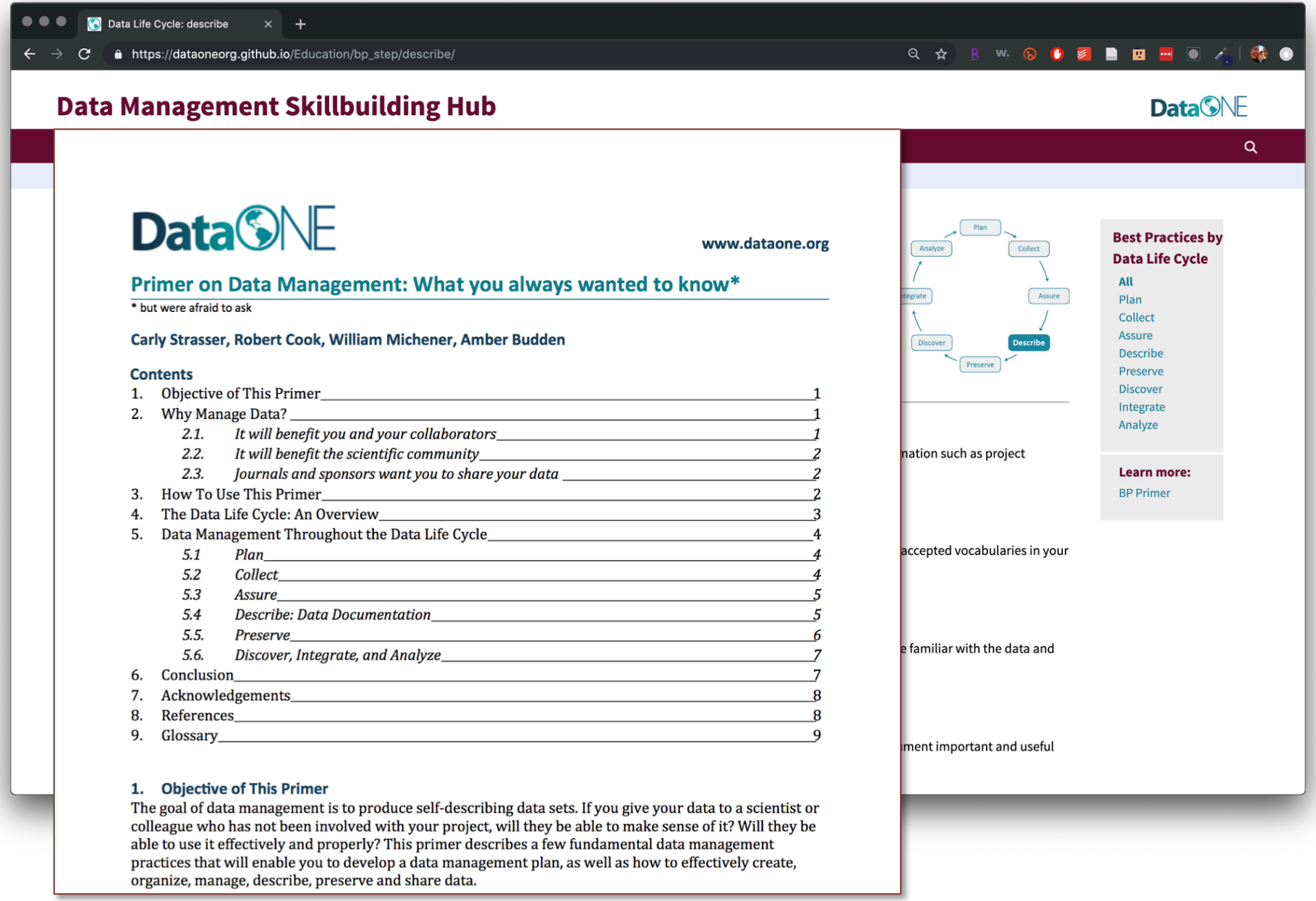

https://dataoneorg.github.io/Education/




https://dataoneorg.github.io/Education/




https://dataoneorg.github.io/Education/

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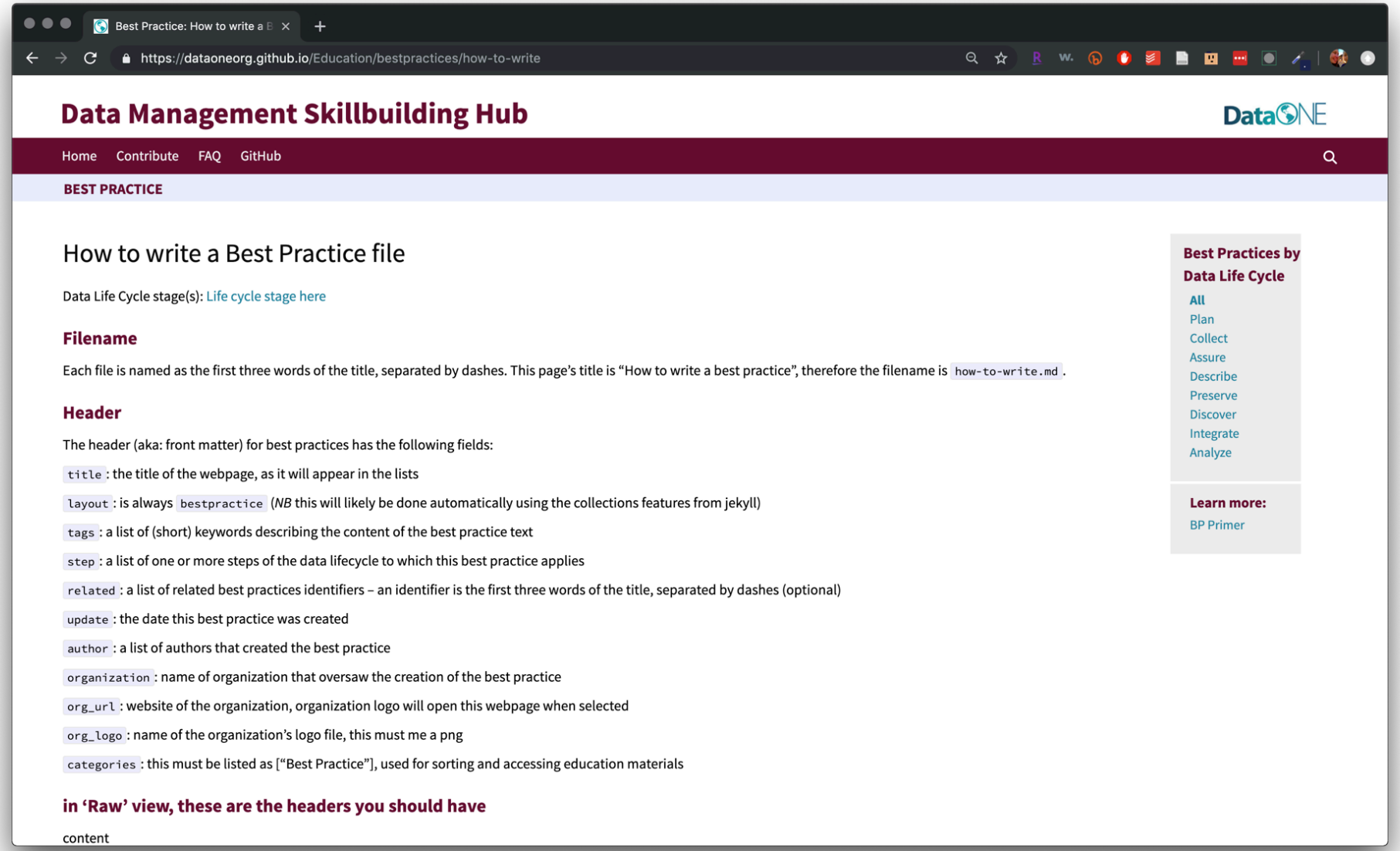



https://dataoneorg.github.io/Education/

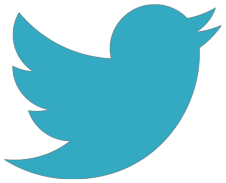
# Resources

DataONE Education Materials

https://dataoneorg.github.io/Education/

DataONE Best Practices

https://dataoneorg.github.io/Education/



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# Data Help Desk

## Get Answers to Your Data Management Questions: Workshops, Demos and More ...


## Booth 219-223 http://bit.ly/DHDESA19 #datahelpdesk

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