Lab Archives:

Best Practices for Notebook Creation & Data Management

hsc | Gibson D. Lewis Library

GIBSON D. LEWIS
LIBRARY

Digital Scholarship

Elizabeth Speer, MLS, MEd

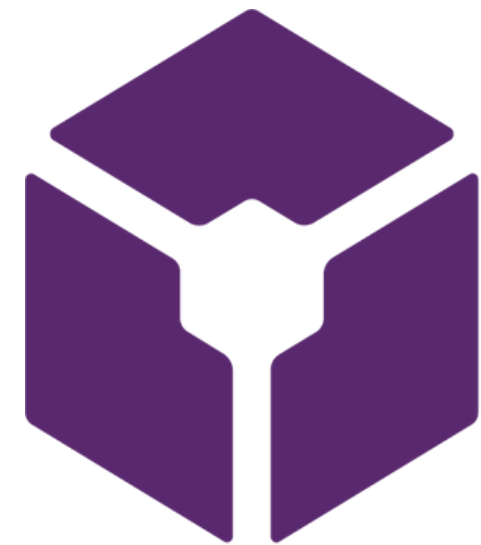Copyright & OER Strategist

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Session Topics

- What is LabArchives?
- Why use an ELN?
- Glossary of Terms
- Your Account
- Best Practices for Setting Up Your Notebook
- Data Management
- Users and Sharing Permissions
- DOIs and Research Sharing*

What is Lab Archives?

LabArchives is an Electronic Lab Notebook (ELN) that allows HSC researchers to store, organize, share, and publish their research at all stages of the research data lifecycle.

LABARCHIVES
Electronic Lab Notebook

YOUR ONLINE FILE CABINET

File Cabinet
The file cabinet is LabArchives.

Drawer
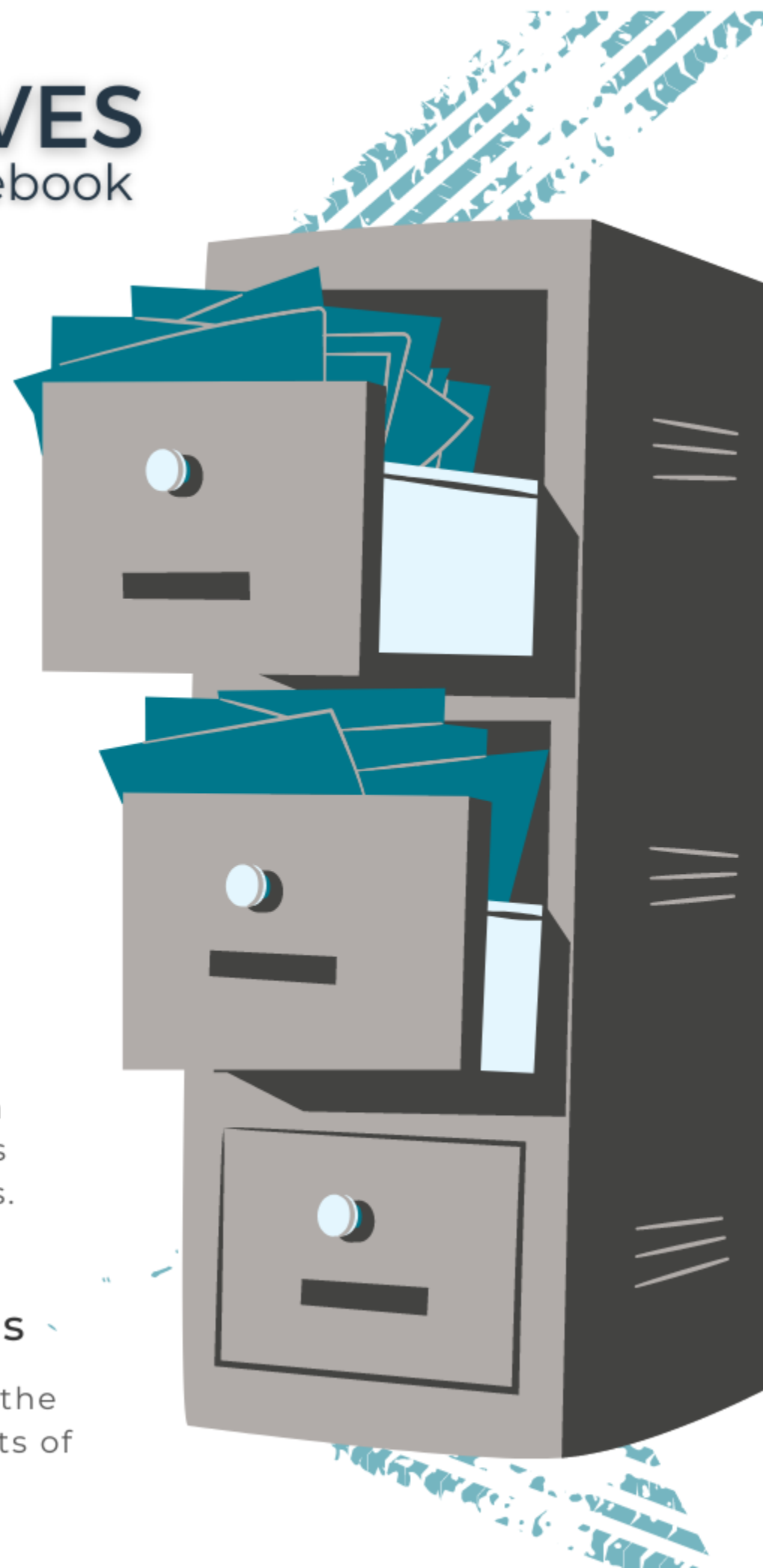Drawers are Notebooks within LabArchives.

Folders
Folders are major categories or topics of research. You can also have subfolders within larger folders.

Pages & Entries
Pages & entries are the processes and results of your research.

Why Use an ELN?

- Recommended or required best practice for HSC
- Increased clarity and organization of data and protocols.
- Secure cloud -based storage keeps data from being lost or stolen.
- Add attachments, files, photos, and data instantly.
- Store any type of data you chose.
- Store and organize in a clearly identified structure.
- Create templates for research groups to ensure consistency.
- Share and collaborate selected content with others.
- Supports grant data compliance requirements.
- Provide continuity and preservation of data from departed researchers and staff.
- Shared lab management.
- Search and preserve research data.
- Maintain notebook integrity and reproducibility.
- Notebooks store every version of every file and are time - stamped to guard against misconduct.
- Creation of DOIs for easy sharing and publishing.

Glossary of Terms
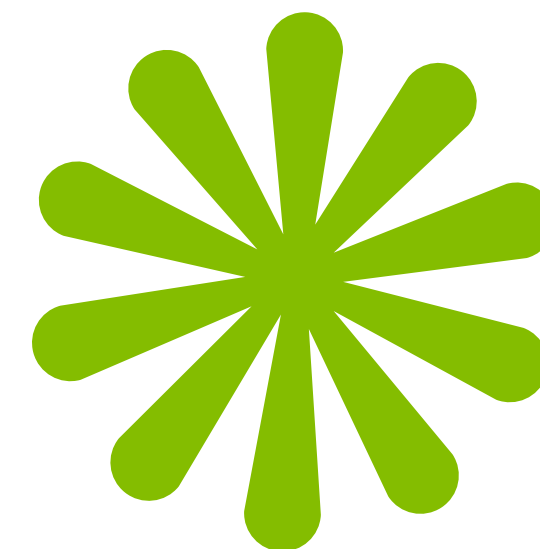
- ELN- Electronic Lab Notebook
- Notebook - Collection of folders, subfolders, & pages on a topic, research area, grant, or project
- Folder- A collection of pages within a notebook.
- Subfolder- A folder within a folder.
- Page- A collection of files, data, and entries. May be included in a folder or stand-alone.
- Files, data, and entries- Pieces of information that can only be added to LabArchives by creating or adding to a page.

Your Account

Lab Archives is provided to all UNT Health Science Center faculty, staff, and students free of charge through a university-wide contract agreement. Account access is provided through Single Sign On (SSO).

You can access LabArchives here:

https://libguides.unthsc.edu/LabArchives/home

https://www.unthsc.edu/research/electronic-laboratory-notebook/

Your Account - Logging In

labarchives
Institutional Authentication

Login Options

Select Institution

University of North Texas Health Science Center ⌄

Go to Institution's Login

LabArchives Login

Go to LabArchives' Login

UNT SYSTEM™

Login to LabArchives

Username (EUID)

EUID

› Forgot your password?

› Need Help?

Password

☐ Don't Remember Login

Login

LabArchives is the most innovative laboratory notebook software and electronic lab notebook available. Far more than an "ELN" (Electronic Laboratory Notebook), LabArchives stores and catalogs all of your research for easy retrieval and publication.

Update your LabArchives Account Information

Account

Notifications

External App Integrations

First Name

Elizabeth

Last Name

Speer

Email

Elizabeth.Speer@unthsc.edu

Confirm Email

Elizabeth.Speer@unthsc.edu

How do you use LabArchives?

☑ I'm a Researcher

☐ I'm an Instructor

☐ I'm a Student

ORCID ⓘ

https://orcid.org/0000-0001-7532-4470

Search notebook

Elizabeth Speer

User Properties

Manage My Account

External App authentication

Enable Accessibility Mode

Sign Out

Best Practices for Setting Up Your Notebook

Before You Begin

- Gather documentation for the HSC Required Folder*
- Determine the Type of Notebook   - (Grant Based/Project Based, Lab   -Based, Researcher Based)
- Determine Ownership   - (PI, Lab Manager, Researcher)
- Who Needs Access
- What Access Level   - (Administrator, User, Guest)
- Establish and document file naming conventions
- Create your glossary/set vocabulary   - (any special terms, acronyms, etc.)
- Map out the organizational structure of your notebook.

ebooks **4** >

Welcome!

+ New   Rich Text   Hea

UNT HSC Data Management & Shari

📄 Welcome!

📁 HSC Required Folder

　📄 HSC Grant/Project Information T

　📄 NIH 2023 Widget Template

　📁 IRB & IACUC Documents

　📁 File Naming

　📄 Glossary & Set Vocabulary

　+ New...

📁 Example DMP Templates

📄 Data Storage

📄 Data Collection

📄 Data Analysis

📁 Data Sharing Policies

📁 Page Structure Examples

Welcome to the UNT HSC Data Management and Sharing i

Example Notebook!

The purpose of this notebook is to provide HSC Researchers with a few examples of c
research or grant or project notebook. This site-wide notebook is available read-only
way to distribute templates, NIH 2023 guidance information, policies, and contact

Materials Included in this Notebook

Creating a Notebook

1. Log into LabArchives
2. Select the "+" next to the search box.

labarchives
UNTHSC edition

〈 Back to UNT HSC Data Management & S...

+ ⫼

LA Site Admins Notebook
Owned by Marie Linvill

My Notebook

Speer Test Site

Test Lab Notebook

UNT HSC Data Management & Sharing in

3. Name your notebook your grant number (preferred), project ID, or project name.
Examples:
NIH Grant 1R01CA 123456-01A1
PID 452
HSC Vision Research FY2023

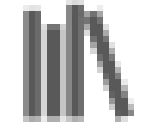4. Choose your folder layout- You will select none for a blank folder, Lab to use the lab template, or copy from another notebook. DO NOT use classroom.

5. Click "Create Notebook"

Create a New Notebook

Enter a name for your new notebook

3 NIH Grant 1R01CA 123456-01A1

Notebook name must be between 5 and 60 characters.

Choose a folder layout ⓘ

○ None

4 ○ Lab

○ Classroom

○ From another notebook

UNT HSC Data Ma

This notebook will be created in your personal accoun

5 Create Notebook   Cancel

Folder Layouts ✕

A folder layout determines the folders to create in your new notebook. Here are folders for each layout.

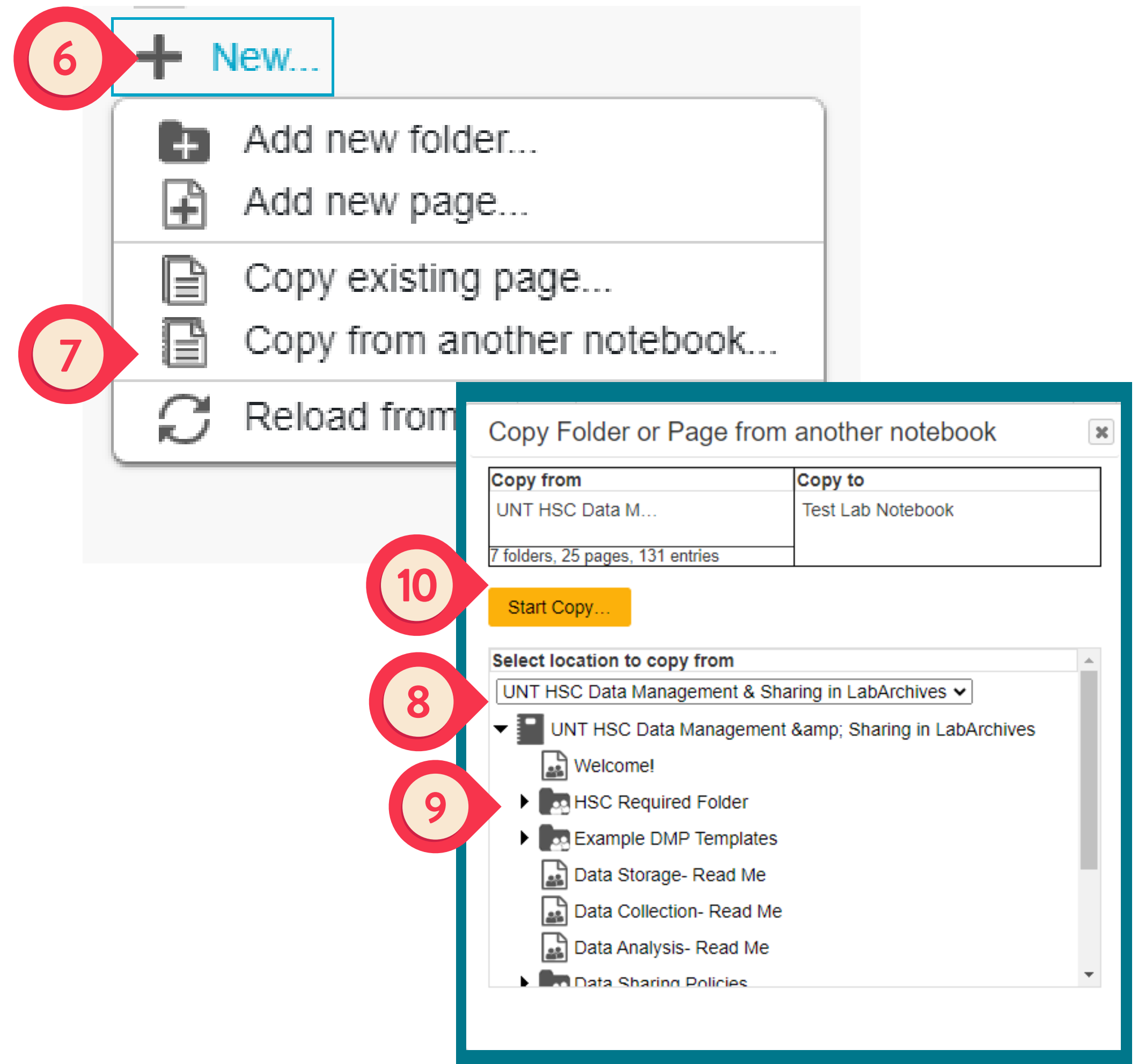| None	Lab	Classroom	From
No folders	• Protocols • SOPs • MSDS • Templates • Experimental Data • Ideas • Lab Meeting Notes • Paper Outlines • Manuscripts • Published data • Grants • Presentation • References • Project 1	• Overview • Precautions / Safety • Course Materials • Tools in the Lab • Labs • Scientific Method • Reference Materials • Calendar	another notebook Folders from the specified notebook

OK

6. In your new notebook click the "+" next to the word New on the left-hand side of the notebook to add a folder.

7. Select "Copy from another notebook".

8. From the pop-up inside the select location to copy from the dropdown menu choose "UNT HSC Data Management & Sharing in Lab Archives".

9. Choose "HSC Required Folder".

10. Click "Start Copy".

Test Lab Notebook

- Test Lab Notebook
  - HSC Required Folder
  - Protocols
  - SOPs
  - MSDS
  - Templates
  - Experimental Data
  - Ideas
  - Lab Meeting Notes
  - **11** Paper Outlines
  - Manuscripts
  - Published data
  - Grants
  - Presentation
  - Project 1
  - References
  - **12** + New...
  - Deleted Items

Speer Test Site

- Speer Test Site
  - HSC Required Folder
  - **12** + New...
  - Deleted Items

11. If you selected the Lab option when creating your notebook delete any unnecessary folders. These empty folders will go into the deleted items area. They WILL NOT be deleted from the notebook permanently.

12. If you selected NONE as the notebook option you may now create your folders, subfolders*, and documents** based on your predetermined organizational structure.

* Subfolders and documents that reside in folders or subfolder must be created within those items.

HSC Required folder

HSC Grant/Project Information Template

Information that will help others quickly understand your grant or project.

Most of this information should be found in your DMP

Data Management & Sharing Plan

The DMP which you submitted with your grant proposal and all adjusted versions.

You can choose to use the NIH widget

IRB & IACUC Documents

All correspondence, approvals, reviews, and progress reports

These documents may not apply to your research*

File Naming & Set Vocabulary

Documentation that describes file names and vocabulary necessary to understand your research.

Worksheets and information are provided

NIH Grant 1 R01 CA 123456-01A1

HSC Required Folder

- HSC Grant/Project Information Template
- NIH 2023 Widget or Copy of DMP

IRB and IACUC Documents

All documents and communication with IRB & IACUC

File Naming

All information on file naming

Glossary, Set Vocabulary, Data Dictionary

Optional Folder(s)

Can include protocols, or any additional data that will be necessary for DOI approval and IP clearance.

Data

Management

in LabArchives

Required for Research Grants

Many [funding agencies](#) have data requirements and there is federal policy regarding open data. This often requires the creation of a DMP and open publication of federally funded research.

HSC Standards

Starting July 1, 2023, the DRI began requiring NIH -funded investigators to use LabArchives to fulfill a requirement of the new NIH Data Management and Sharing Policy that took effect on January 25th, 2023.

Library Support

Lewis Library provides education and support, but not oversite for data management. The library has created several guides to help navigate data management best practices and oversees the administration and training of LabArchives.

List of helpful Library Guides:
- Research Data Management
- Data and Statistics
- Lab Archives
- Creative Commons
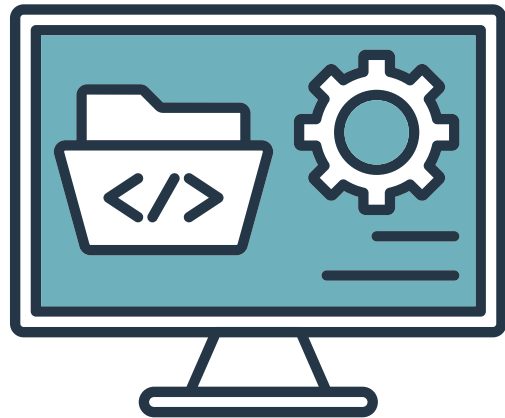
List of tools:
- Lab Archives
- Lab Archives Inventory
- REDcap (integration with Lab Archives)
- Dataverse (coming soon)
- DMP Tool

List of helpful people:
- Elizabeth Speer, Copyright & OER Strategist- Lab Archives, copyright, publishing, ORCiD
- Kayleen Lam, Librarian- Data Management
- Tom Lyons, Metadata Librarian- Dataverse, ORCiD
- Eric McNair, Tech Commercialization Analyst (HSC Next)- Intellectual Property

Users and Sharing Permissions

USERS

- **Owner** – can edit and clone an entire notebook. An Owner can control who has access to the data. There can only be one designated person for this role. This person is usually a Principle Investigator, Project/Lab Manager.

- **Administrator** – has the same rights as the owner, but they cannot delete or clone a notebook. Each Administrator occupies 1 seat.

- **User** – can be given edit or view-only rights. A User cannot share a notebook. Each User occupies 1 seat.

- **Guest** – can be given edit rights for 60 days. After 60 days, the Guest access will become read-only. There isn't a limit on the number of Guests.
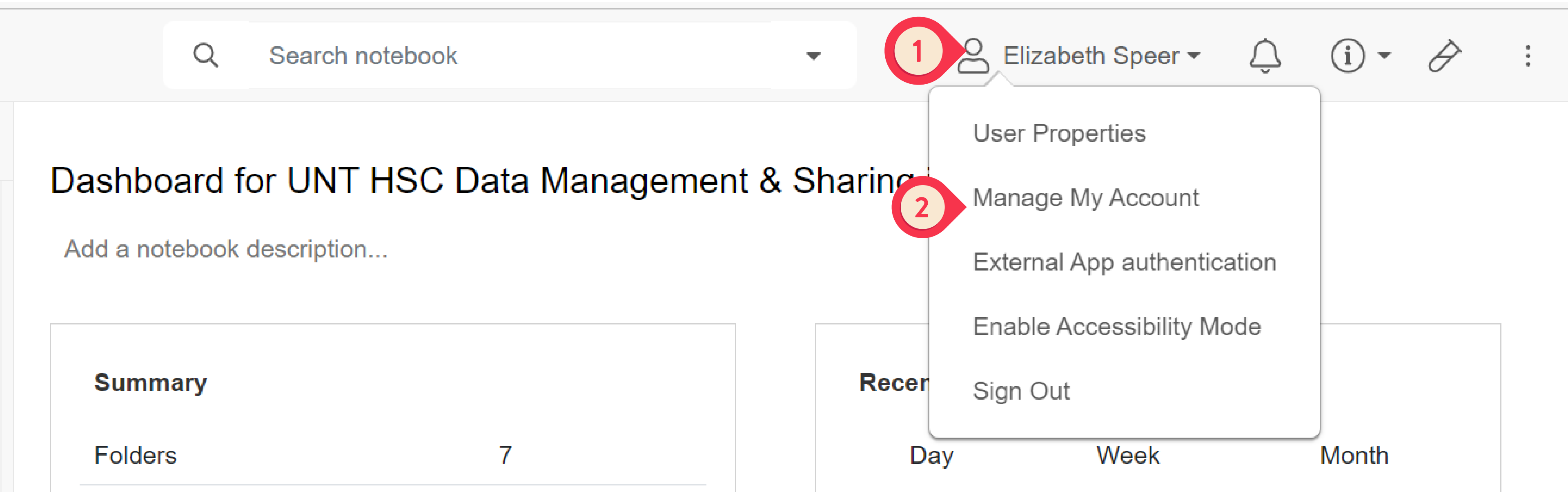
HSC DOES NOT ALLOW DELETION OF CONTENT

Role	Owner	Administrator	User	Guest
Read/Edit?	Yes	Yes	Yes	Edit access can only be given for 60 days
Can Comment?	Yes	Yes	Yes	Only with Owner/Admin approval
~~Can Delete Comments?~~	~~Yes~~	~~Yes~~	~~Only if it is the Users' Comment~~	~~Only if it is the Guests' Comment~~
Allow Commenting Privileges?	Yes	Yes	No	No
Can be part of a Group?	No	Yes	Yes	No
Can Share?	Yes	Yes	No	No
Can Modify Permissions?	Yes	Yes	No	No
Can Clone a Notebook?	Yes	No	No	No
~~Can Delete a Notebook?~~	~~Yes~~	~~No~~	~~No~~	~~No~~
Can Transfer Ownership of a Notebook?	Yes	No	No	No
Can Access "Manage My Account"?	Yes	No	No	No
Can Access "Notebook Settings"?	Yes	Yes	No	No
Allow Markdown in Plain Text Entries?	Yes	Yes	No	No
Specify Adding New Entries to Top/Bottom of Page	Yes	No	No	No
Can use "Rearrange Entries" Page Tool?	Yes	No	No	No
~~Allow Signing/Witnessing in Notebook?~~	~~Yes~~	~~No~~	~~No~~	~~No~~
Can restrict use of "Copy from another notebook"?	Yes	No	No	No

Adding Users To a Notebook

1. Inside Lab Archives click on your name in the upper right   -hand area to view the drop   -down menu.
2. Select "Manage My Account". This will open a new window.

🔍 Search notebook   ▼   **①** 👤 Elizabeth Speer ▼   🔔   ⓘ ▼   ✎   ⋮

Dashboard for UNT HSC Data Management & Sharing

Add a notebook description...

	User Properties
②	Manage My Account
	External App authentication
	Enable Accessibility Mode
	Sign Out

| **Summary** | | **Recer** | | |
| Folders | 7 | Day | Week | Month |

labarchives
Account Administrator Tool

(Elizabeth.Speer@unthsc.edu) ✏️

Users

Users

Settings

All People ④   Members ①   Guests ③   Search   ③

User

3. In the new window Users should be selected. On the right, you will see a person icon with a plus sign next to it. Select that icon.

4. Add the email(s) associated with the new user's LabArchives account(s). Please verify this information with the person before sending the invitation.

5. Select the Role and notebook(s) that the new user will have access to.

6. Click "Add User"

Add user   ✕

Email

④

Role ℹ️

⑤
User ⌄

Select notebook to add person

☐ Select All

☐   My Notebook

☐   Speer Test Site

☐   Test Lab Notebook

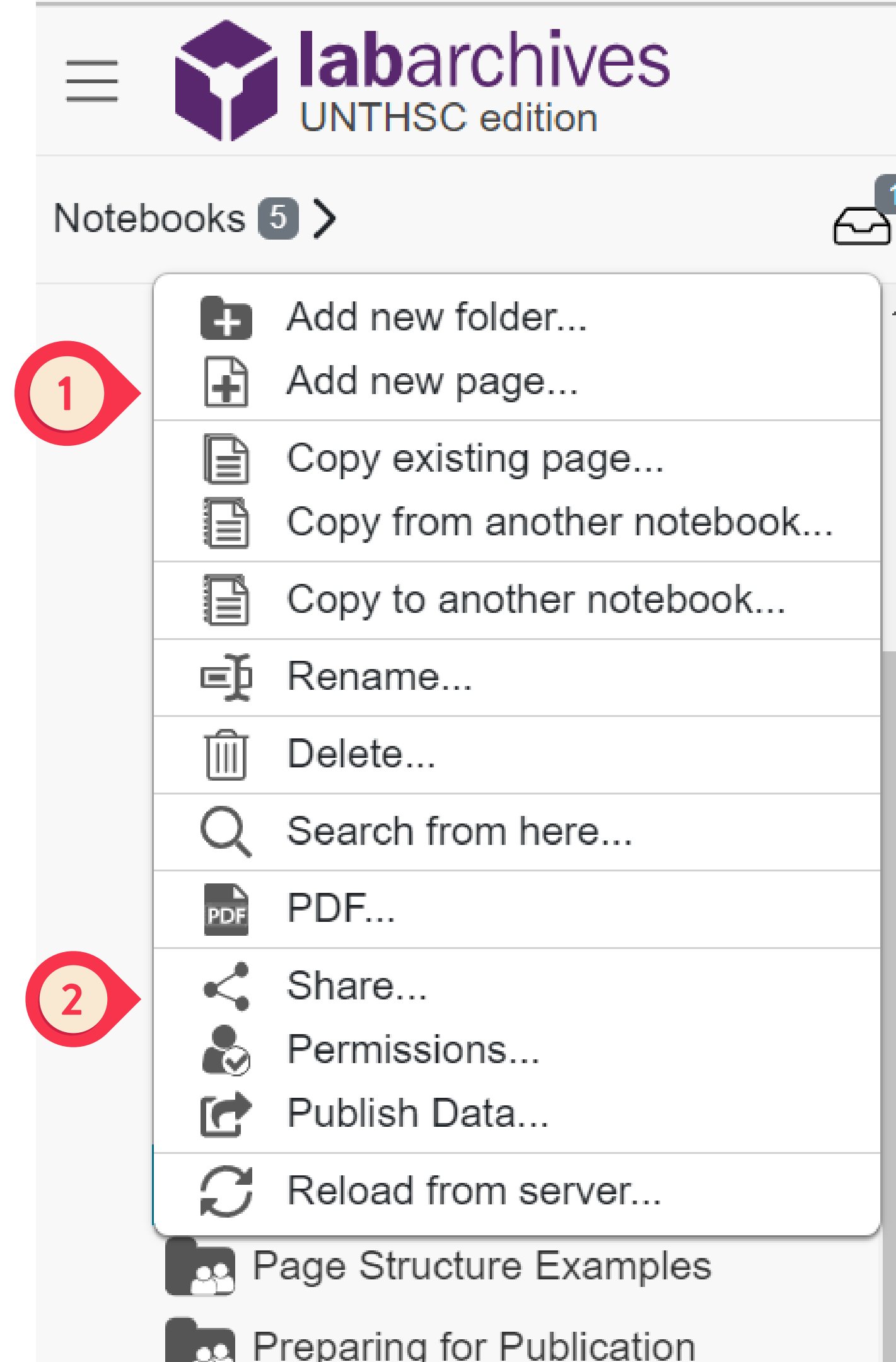☐   UNT HSC Data Management & Sharing in LabArchives

⑥   Add user   Cancel

Adding Users To a Folder or Page within a Notebook

1. Inside your LabArchives Notebook, right click on any folder or page to bring up a menu of options.
2. Click "share" to open a pop-up box.

Notebooks 5 ›

① Add new folder...
   Add new page...
   Copy existing page...
   Copy from another notebook...
   Copy to another notebook...
   Rename...
   Delete...
   Search from here...
   PDF...
② Share...
   Permissions...
   Publish Data...
   Reload from server...

Page Structure Examples
Preparing for Publication

3. Select the "Invite People" tab.

4. Add the email(s) associated with the new user's LabArchives account(s). Please verify this information with the person before sending the invitation.

5. Select the ability to view or edit. Enter a subject and message for the invitation email.

6. Click "Send".

Share "Data Sharing Policies"   ×

3 | Invite People | Groups or People With Access | URL to share | Publish Data

Invite: (Any email address will work)

4 | Enter an email and press enter

○ To edit   ● To view

Subject

5

Message

☐ Send a copy to myself

6   Send

Adding Users To a Section of a Page within a Notebook

1. Inside your LabArchives Notebook page, hover over the top of the section you wish to share to bring up the taskbar. Click the "share" icon to open the sharing pop   -up box which is identical to the one to add a user to a folder.

Elizabeth Speer - Jun 20, 2023, 11:35 AM CDT
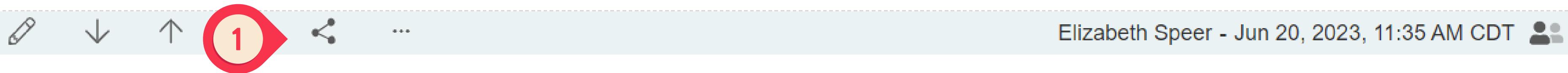
Welcome letter (This page)

HSC Required Folder (This folder will need to be copied into each notebook)

HSC Required Grant/Project Information Template

NIH 2023 DMP Widget (You can use this Widget or upload your DMP to a page)

DOIs and Research Sharing

HSC Services to Help With Grant Compliance

DOI Request

A LabArchives Feature

Researchers at UNT Health Science Center have access to free digital object identifier (DOI) feature in LabArchives. A growing number of funding agencies (NSF, NIH, RCUK, ERC, etc) require grant recipients to present a data management plan (DMP) and share portions of their research data publicly. The LabArchives DOI tool is an easy and free way to help with compliance with new data-sharing requirements.

A DOI is permanently indexed by the International DOI Foundation. Unlike URLs that may change or disappear, a DOI is a permanent way to share your data. For example, if you are publishing a paper and need to include a supplemental data set as part of a grant requirement, a DOI would be the preferred method.

Requesting a DOI

1. Inside your LabArchives Notebook, right -click on any folder or page to bring up a menu of options.
2. Click "share" to open a pop -up box.
3. Select the "Publish Data" tab.
4. Select the "this entry as it exists now" option under Links to.
5. Select your CC license.
6. Add all author names and ORCiD .
7. Add title.
8. Add DMP and Grant ID
9. Click "Request Permission to Publish".

*1 & 2 not depicted in image

Available DOI Licenses

CC0 - Public domain license. Used for raw or unstructured datasets. Others can use these for any purpose. Many grants or journals require this designation when publishing.

CC BY- Attribution license. Used for any data that has been manipulated for expression(IE- graphs, charts, etc). Others can use these for any purpose as long as they cite you and the license.
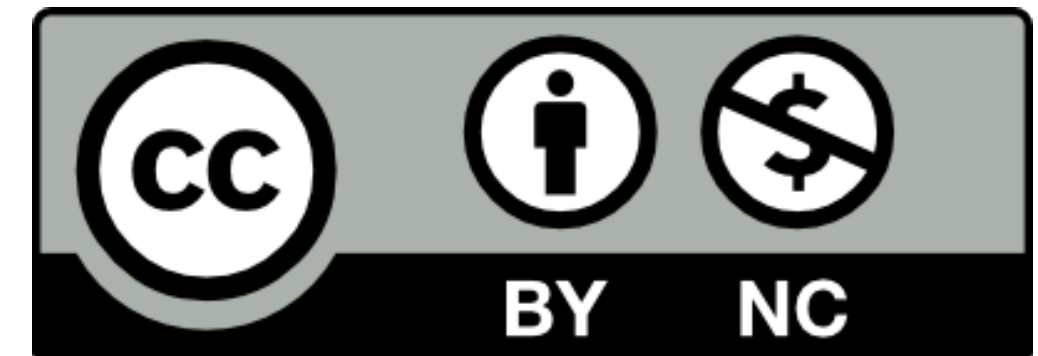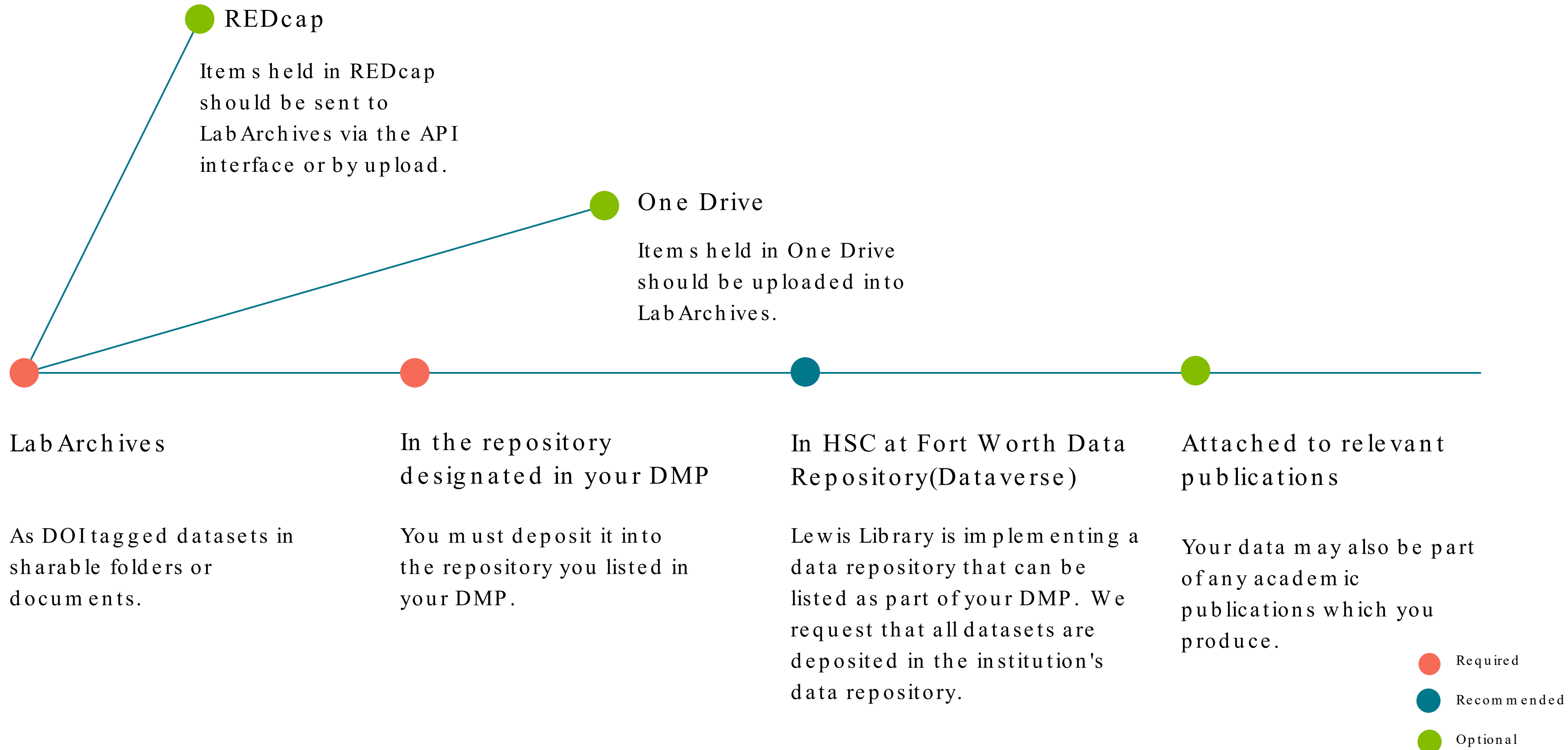
CC BY NC- Attribution non-commercial license. Used for any data that has been manipulated for expression(IE-graphs, charts, etc). This is a more restrictive license that we may ask you to use if IP is involved. Others can use these for any non-commercial purpose as long as they cite you and the license.

Research Sharing
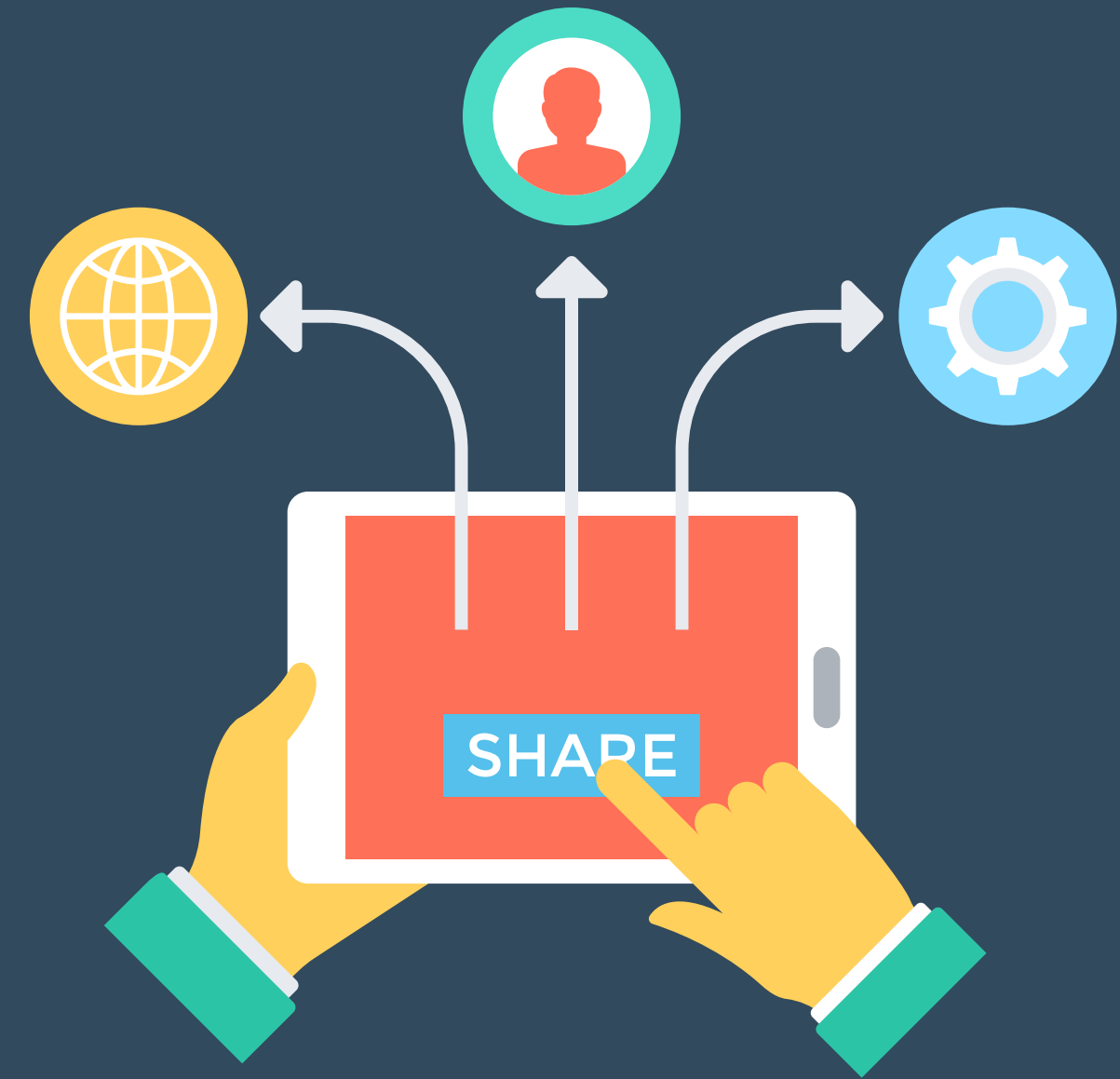
Where does your research data live?

REDcap

Items held in REDcap should be sent to LabArchives via the API interface or by upload.

One Drive

Items held in One Drive should be uploaded into LabArchives.

LabArchives

As DOI tagged datasets in sharable folders or documents.

In the repository designated in your DMP

You must deposit it into the repository you listed in your DMP.

In HSC at Fort Worth Data Repository(Dataverse)

Lewis Library is implementing a data repository that can be listed as part of your DMP. We request that all datasets are deposited in the institution's data repository.

Attached to relevant publications

Your data may also be part of any academic publications which you produce.

Required

Recommended

Optional

Suggested Trainings

North America: Introduction to LabArchives - Research Edition

North America: Introduction to LabArchives Inventory

Questions?