

Introduction to LabArchives

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Outline

- What is LabArchives?
- LabArchives & Tulane
- Benefits
- Security & backup
- Privacy & compliance
- Integrations with major lab and office applications
- Organizing your notebook
- User roles and privileges
- Demo and examples
- Tips for getting started with LabArchives
- Additional resources

What is LabArchives?

LabArchives is a secure and intuitive cloud-based electronic lab notebook (ELN) application enabling researchers to easily create, store, share and manage their research data.

- flexible platform
- easily customized to match your research workflow

Be creative, make it work for you

LabArchives & Tulane

- Supported by Dr. Giovanni Piedimonte, VP for Research
- *Professional Edition License*
- Available to all faculty, staff, graduate students, and undergraduates that do research (<https://libguides.tulane.edu/labarchives/getaccess>)
- Some reasons for implementation: *research integrity, backup (hurricanes and flooding), security, and collaboration (within and outside of Tulane)*
- We also have access to Scheduler and Inventory

LabArchives Benefits

- Legible and searchable
- Incorporate various types of media: images, videos, data, text, etc
- Backup and security provided
- Reproducibility and transparency
- Complete audit control: allows signing, file versioning, and activity tracking to support data provenance
- Cloud-based: data is accessible anywhere
- Facilitates collaboration and project member turn-over
- Funder compliance and data management plans
- Requires zero physical storage space

Security and backup

- All network traffic is logged and monitored for any suspicious activity
- Servers are kept in a *secure, primary data center with a separate disaster recovery data center*. All data stored on US servers stays within the USA
- Servers are protected by redundant, industry standard firewalls and security devices
- SSL certificates provide full-time HTTPS security interactions for all users with the application and all data is encrypted

Privacy & compliance

- Federal funding agency data management policies
- The electronic signature of notebook pages is FDA Title 21 CFR Part 11 compliant
- HIPAA compliant
- Supports FERPA compliance
- Amazon Web Services (AWS) compliant
- NIST 800-171 compliant
- ADA Compliant
- GDPR (General Data Protection Regulation) Compliant



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Notebooks 0 >

Data Management Best Practices ,.

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II introduction to LabArchives Workshor

- Folder or Notebook Structure Exan
- Date Structure
- March2020
- April2020
- May2020
- + New...
- Researcher Structure
- Jims Folder
- Ji/lis Folder
- Janes Folder
- + New...
- Project Structure
- ProjectA
- Project Grant B
- + New...
- -80 Freezer (Inventory Example
- Project Status Example
- Equipment Example
- Regulatory Binder Example
- FDA Toxicoloov Data Example r

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A Research Data Management is used to describe the storage, collection, preservation and analysis of research data.

Keep in mind, your research data management plan should follow guidance from your institution, funding agencies, and any government agencies you work with. As you make changes to your Data Management plan, be sure to review all requirements with your team.

As you use LabArchives, you may want to periodically discuss notebook policies. This can increase efficiency and promote better communication throughout th
Keep in mind, you can always change a notebook policy in the future as you find a system that works best for you.

Some things to consider as you build your data management plans using LabArchives:

- Do we have an institution policies or requirements that should be reviewed?
- Do we have any sensitive or restricted data that should be handled in a specific way?
- Do we need additional devices to access LabArchives?
- What tools in addition to LabArchives do we use?
- What systems are working and what systems have room for improvement?
- How often should we reevaluate or update our data management plan?
- How do we ensure that everyone is following the data management policy?
- How do we train new team members on these policies?
- How are you documenting hypothesis testing and hypothesis generating work?

Hannah Clark - Nov 21, 2019, 10:26A

Data Organization

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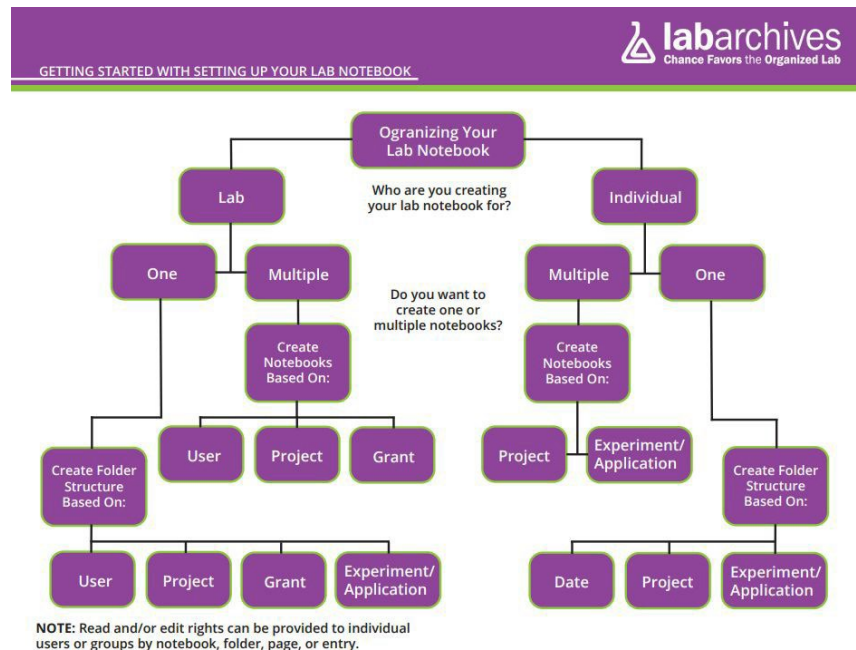
Organizing your notebook

There are several options for setting up a notebook, including:

by **project** (or grant): Create a notebook for each project (grant), add lab members working on that project (grant)

by **researcher**: Useful for smaller labs where lab members are each working on individual projects

by **lab**: Create one notebook for an entire lab; designate folders and subfolders for specific projects



User roles and privileges

- **Owner** - can edit and clone the 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.
- **User** - can be given edit or view only rights. A User cannot share a notebook.
- **Guest** - can be given edit rights for 60 days. After 60 days, the Guest access will become read only.

User Roles and Privileges

<u>Role</u>	<u>Owner</u>	<u>Administrator</u>	<u>User</u>	<u>Guest</u>
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 Share?	Yes	Yes	No	No
Can Modify Permissions?	Yes	Yes	No	No
Can Clone a Notebook?	Yes	No	No	No
Can Delete a Notebook?	No	No	No	No
Can Transfer Ownership of a Notebook?	Yes	No	No	No
Can Access "Notebook Settings"?	Yes	Yes	No	No

Questions so far?

Let's try it out

<https://www.labarchives.com/>

Tips for getting started:

- Determine who will be in charge of rolling out the transition: PI, lab manager, graduate student, lab assistant, other
- Start small - Create an administrative notebook with policies, meeting minutes, protocols, templates, etc. (Read Only)
- Create a transition plan from paper notebooks to LabArchives that allows for a manageable and effective transition, include attainable goals and deadlines
- Talk with your team about Notebook Policies
- Promote data provenance and reproducibility
- Incorporate data management best practices from the start (e.g. folder and file naming convention)

Questions?

- LabArchives Support Team provides technical support:
<https://www.labarchives.com/online-support/>
- Tulane University Libraries (TUL) provides Tulane specific support: how to integrate into your research workflow, how to get started, etc.
- Tulane IT provides access support:
https://tulane.service-now.com/tulaneit?id=sc_cat_item&sys_id=c96eeb7cdb30545096d1540adc96191c

Additional useful guides

- Data curation guide: <https://libguides.tulane.edu/datacuration>
- Data management guide: <https://libguides.tulane.edu/datamanagement>
- How to digitize your sources (DIY): https://libguides.tulane.edu/diy_digital/ocr

Thank you

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