## Kick starting use of electronic lab notebooks at IU School of Medicine

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2020-08-14



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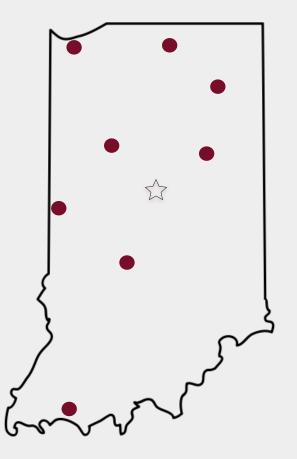
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IU School of Medicine (IUSM) consists of **9** regional campuses and **1** medical library.

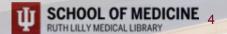
Incoming MD class (Fall 2020) has **365** students.

As of Jan 2020, IUSM ranked **14th** (out of 92) public medical schools that receive NIH funding.



#### Background (1)

**IUSM Office of Research Affairs was** interested in providing institutional access to an electronic lab notebook (ELN) system to tackle issues related to space, discoverability, and intellectual property.

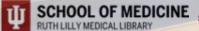


#### Background (2)

See 2019 MLA presentation for backstory

Identified LabArchives as the ELN of choice and a pilot was conducted between September 2018 - March 2019.

The pilot included 15 labs across
12 departments/divisions in IUSM.



Officially launched LabArchives in April 2019 with **136** users across IU campuses.

#### Electronic lab notebook (ELN) support

#### Trainings.

Hour long and include ELN best practices with a demo of LabArchives.

Scaled down from holding twice a month to once a month.

#### Consults.

One on one with researchers or with a particular lab.

Mostly meet with lab leadership (PIs, lab managers).

#### Guidance.

Have an ELN Toolkit guide that addresses best practice & access FAQs.

Maintain an <u>IU</u>

<u>KnowledgeBase page</u>

with access information.



#### Setting up for success

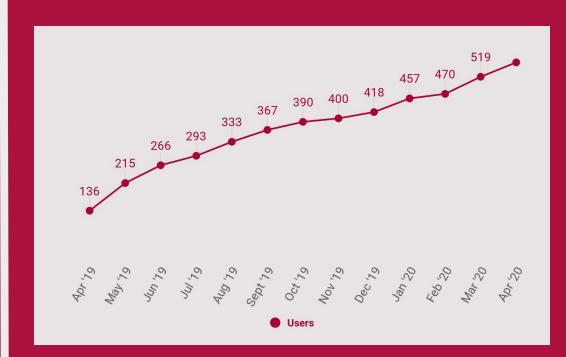
Our approach with trainings and consults is to provide research groups/labs/individuals a "heads-up" on what they need to consider before jumping into use of an ELN.

Four areas of guidance we focus on:

- Notebook structure
- Notebook access
- Templates & documentation standards
- What belongs in an ELN

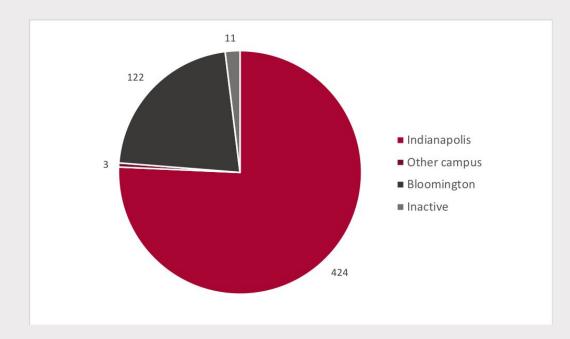


# And then there were 560 users





#### User highlights



Most LabArchives users are in basic science departments at IU School of Medicine.

Non-IUSM users tend to be out of the biology and chemistry departments.

#### What are users saying?

Highlights from a survey distributed in October 2019:

- Half of respondents (n=30) currently used LabArchives more often than an alternative (e.g., paper notebook)
- Over half (i.e., 53%) indicated that use of LabArchives improved lab efficiency
- Forty responded that use of an ELN encouraged at least one of these information/data management best practices:
  - Shared protocols
  - Templates for consistently documenting activities like experiments
  - Naming conventions



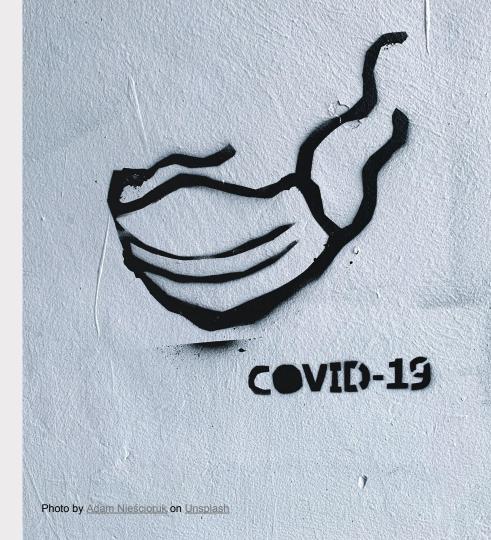
#### Strengthening the process through policy

Beyond the basics of the ELN service, there are multiple areas where this service overlaps with School policy and guidance around handling of research data.

Some questions to be addressed:

- How long should research data be retained?
- What if someone wants to use another ELN?
- What happens to research data/ELN when people leave IUSM?

How does this align with restart research efforts?



#### Getting started locally

Before starting a local service, here are some tips to consider:

- 1. What is the institutional incentive?
- 2. Who will "own" the service?
- 3. How will you build a community of practice?

Ideally, employ a top down and grassroots approach.



### Thank you

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#### Questions?

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