HOW ARE RESEARCHERS DOCUMENTING THEIR DAY-TO-DAY ACTIVITIES?

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INTRODUCTION

The Informatics Interest Group (IIG) at the University of Michigan undertook a pilot project to evaluate the feasibility of launching a full-scale research project to investigate the best practices of our researchers in keeping lab notebooks. Our objectives are to learn about practices already present on campus through a series of faculty interviews and analyze those practices based on their similarities or differences, their compliance with modern technology, and their ease of use and access, as well as to suggest other practices based on our review of tools reported in the literature.

METHODOLOGY

2018

- **Spring** — **Study Initiated** Selected Dept: Molecular, Cellular, & Developmental Biology
- **Summer** — Obtained IRB Clearance
- **Early Fall** — Emailed faculty, found six volunteers
- **Aug-Oct** — Conducted interviews
- **December** — Obtained funding for interview transcription

2019

- **Feb-Mar** — Transcribed interviews coded

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INTERVIEW QUESTIONS

Selected questions asked during the interviews.

1. Do you primarily use print or electronic lab notebooks?
2. Do you have notebook standards and policies that each lab member should follow?
3. How do you share notebooks in the lab?
4. How do you preserve notebook contents, and what happens when a researcher leaves?
5. What is the size of your lab/research group?
6. Are you aware that UM has a license to LabArchives?

RESULTS

- Of the six faculty members interviewed, all use print to record activities in their labs
- Two of the six faculty use both print and electronic notebooks
- Every lab also had laboratory samples of different kinds
- Paper notebooks were stored but not backed up
- All faculty had small to medium-sized labs
- No labs had rigid policies they followed
- Sharing is done with collaborators, peers, and advisors in either electronic format or with paper copies

PAPER VS. ELECTRONIC

Paper Notebooks

PROS	CONS
-Easier to jot things down quickly	-Not easily shared without making copies
-Easy to carry around & show others, bring to lab meetings, flip through pages to find results	-Fragility of research information we keep in print

Electronic Notebooks

PROS	CONS
-Easier to share information	-Company may go defunct and information could be lost
-Information is backed up	-Product might not be tailored for researcher needs
-Ease of downloading data from a lab instrument	

FUTURE PLANS

Meet with a small number of librarians on campus who have an interest in Electronic Lab Notebooks (ELN) to discuss the library's role in ELNs within the university.

If desired we will investigate further by doing a survey to generate more data.

If data shows trends we will come up with some suggested best practices for ELN use to be shared campus-wide.