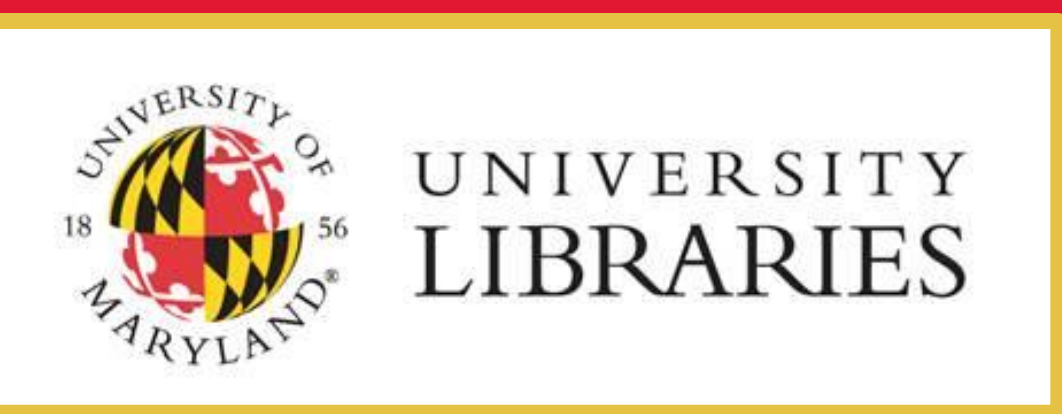




Subject Librarianship Beyond the Humanities

Exploring Science Librarianship through the MLIS Field Study

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Introduction

As part of the requirements to complete the Master of Library Science program at the University of Maryland, students must complete a field study/internship or a thesis. For my educational experience, I decided to pursue the field study option. I am currently a Research & Teaching Fellow in the Teaching and Learning Services Office of McKeldin Library; in this position, I work as a team member to lead one-shot library instruction sessions for first-year students enrolled in English 101. For my field study, I was given the opportunity to combine my Spring 2026 fellowship duties with supporting a current UMD librarian's project. I eagerly jumped on this opportunity, as it would allow me to further my understanding of librarianship, outside of instruction. After discussing with my supervisor, Lexi Kadis, what projects were available and what librarians were willing and able to support a field study, we decided that I would work with Isabella Baxter, the Agriculture and Natural Resources Librarian.

Why Science Librarianship?

As part of my time in the Fellowship, I have worked at UMD's STEM library as a part-time circulation assistant. I was somewhat familiar with what resources were available to patrons—such as the Makerspace and skeletal models—as well as the book and journals collection. I had a basic understanding of what students and faculty needs were at the circulation desk.

However, I knew nothing about the actual practice of being a STEM subject librarian. My educational experience thus far has been deeply rooted in the humanities; I have a BA in history, have completed several public history projects, and my MLIS coursework has leaned towards educational theory, instructional practice, and information communication. My experience with the sciences in higher education was quite minimal; occasionally I worked with English-101 students to help them find resources related to STEM topics, such as the impact of carbon dioxide on global warming.

Working with Isabella offered me the opportunity to gain insight into the work of a STEM-based subject liaison librarian, understand how they support reference, and engage in instruction work. This field study would offer me an unmatched opportunity to expand my librarianship, decentering it from humanities thinking, and ignite my intellectual curiosity.

Field Study Overview

1. LibGuide Remediation
2. Instruction Observation
3. Reference as a Subject Librarian

LibGuide remediation was the main focus of this internship; this was a project Isabella had been working on in order to meet the university's deadline for Title II compliance. This was the actionable and measurable portion of the field study. It is important to note that the deadline for digital accessibility has been extended and this work is still ongoing. However, I was able to ease some of the burden of LibGuide management this semester. I worked on several course guides, including introductory courses like Animal Science 101 and Introduction to Environmental Policy, as well as the capstone course Nutrition and Food Science 470: Community Nutrition. These guides needed to be updated for Title II compliance, as well as information availability, updated search strategies, and layout.

Supporting the LibGuide work, I observed several of Isabella's instruction sessions, where she guided students through the course guides. These observation sessions contributed to my understanding of the guides as teaching materials, not just lists of resources, and allowed me to denote the effectiveness of changes made to the guides. These observation sessions also showed me in real time what information I needed to revise my own edits; things like simplifying my language, understanding where I could assume knowledge/prior experience, and how I could better utilize formatting for quick information gathering.

The final portion of this field study was practice and discussion about reference interviews and requests as a subject librarian. Together we examined an archive of past questions and correspondences Isabella received from varying members of the UMD community and beyond. I learned about the differences in access to library resources that extension office faculty/staff have, as well as the basic facts of what University of Maryland Extension is and how they are supporting agricultural development. I gained insight into what the informational needs of agriculture and environmental science faculty were, something I had yet to encounter in my reference experiences. Additionally, I learned more about how to handle information requests from members outside the university, including unaffiliated researchers, government employees, and the curious public.

Reflection

I learned a lot about science librarianship and the information needs of STEM students at different levels of their educational journey. Through editing the LibGuides and discussing information needs with Isabella, I was able to better understand how to adjust resources for different levels of education/experience and better discuss and utilize databases. I was able to utilize some of my training in developing instructional materials, as well as drawing on my experience using library resources as a student, to articulate the sometimes convoluted but necessary steps of using different federal, as well as library databases. I learned a lot about accessing court and law information, for the environmental policy classes, as well as understanding the available AI tools now attached to databases like Scopus.

Instruction observation gave me insight into how a STEM library instruction session differs from a humanities session. I have both taught and been a part of English and history library instruction sessions, so it was interesting to see how the dynamics were similar, rather than drastically different. This was especially true when it came to working with an instructor. Both humanities and the STEM instructors I have observed in library sessions were engaged in the classroom, actively asking questions and echoing thoughts about certain tools. They also shared their syllabi with Isabella beforehand, keeping her up-to-date about changes to the course from years past, and any relevant information she might need. I had preconceived notions about how engaged STEM instructors would be, especially in the library instruction session planning phase, but was pleasantly delighted to be proved wrong.

Altogether this was an invaluable experience unmatched by MLIS my course. I became familiar and confident in using websites and databases I had rarely navigated prior, like regulations.gov and Nexis Uni. I learned how to code in HTML to edit LibGuides and received vital information about communicating information concisely. This field study was successful in decentering my librarian practices from the humanities and expanding my interests beyond the familiar.

Search Strategies Before

Your topic is..

How **cucumber** **waxing** effects **Salmonella**

Concept 1Concept 2Concept 3

Identify concepts and synonyms

Concept 1	AND	Concept 2	AND	Concept 3
cucumber		waxing		Salmonella
OR		OR		OR
cucumbers		wax coatings		Salmonella enterica
Cucumis sativus		edible films		Bacillus cholerae-suis
gherkins		edible coatings		Salmonella choleraesuis

Steps:

1. Divide your research question into concepts and connect them with the Boolean operator **AND**.

- cucumber **AND** waxing **AND** Salmonella

2. Brainstorm some synonyms and connect them with the Boolean operator **OR**:

- cucumber" **OR** "Cucumis sativus" **OR** "gherkins", etc.
- Species identifiers?
 - Use **USDA Plants**, **ITIS** - Integrated Taxonomic Information System, or **IPNI** - International Plant Names Index
- Similar technical terms?
 - Look them up in **NALT** - National Agricultural Library Thesaurus

The "Search Strategies" page was an inherited LibGuide section mapped across several of Isabella's course guides. It has some immediate digital accessibility issues, such as the contrast between the blue background and the dark blue, black, and red letter. The use of a table as formatting is also a problem for screen readers. However, the information itself is helpful; it demonstrates how to effectively breakdown a research question into concepts and then generate keywords for database searching.

Search Strategies After

Developing a Search

Break down your topic into main ideas

The first step to creating an effective, database ready search is to translate your search question into main ideas! Then you can use the search operator **AND** to combine your main ideas into an effective search.

Main Ideas Example

1. Research Question: How does cucumber waxing effect the spread of Salmonella?

2. Identify main ideas: **cucumber**, **waxing**, **salmonella**

Hot tip! Databases don't search for information in the same way that search engines like Google do. Most are not designed to work with full sentences, so breaking down a search into main ideas will save you time and a headache!

Identify Synonyms

Authors may refer to the same subject in many different ways, therefore it is important to search with this in mind. Spend some time identifying synonyms or related words to your main ideas.

Synonym Example

1. **cucumber**: cucumbers, gherkins, *cucumis sativus*

2. **waxing**: wax, waxes, wax coating, edible films, edible coatings

3. **Salmonella**: *Salmonella enterica*, *bacillus cholerae-suis*, *Salmonella choleraesuis*

Stuck finding synonyms? Use these thesauri!

I kept the information embedded in the blue and red infographics largely the same. I took a less visual approach to demarking the key concepts in the research question, as well as identifying the synonyms. Choosing to bold text draws both the viewer's eyes to main ideas and allows screen reader software to identify them as important. Removing the table as formatting and using the built in format headings allows screen reading tools more logically share information to users.

Acknowledgements

Thank you to Isabella Baxter for taking me on as an intern this semester and having endless patiences while I asked endless questions about industrial agriculture, resource navigation and academic librarianship in general.

Thank you to Lexi Kadis for coordinating this field study and connecting me to a STEM librarian.

Included images are screen captures taken while working on the "Agriculture and Natural Resources: Search Strategies" LibGuide page, available at <https://lib.guides.umd.edu/agnr/search>.