Misa Mi, Yingting Zhang, Lin Wu, and Wendy Wu

Four health science librarians' experiences

How they responded to the COVID-19 pandemic crisis

The COVID-19 pandemic has an unprecedented impact on the entire country. With exponential growth of COVID-19 cases in many areas, university administration and faculty faced mounting challenges on all fronts in meeting students' needs in transition to remote learning environments. In the face of indefinite closure of libraries and university campuses, how could academic libraries respond to emerging needs in response to the rapidly evolving situation from one day to the next?

Academic health sciences libraries have to take swift actions to provide seamless access to library services and resources to ensure students' and faculty's smooth transition to the online environment. Academic health sciences librarians are treading on uncharted territory in a variety of ways, pertaining to their work life, personal life, and social/human connections. The virtual learning environment requires intensive use of online learning or teaching resources as enablers for students' and faculty's efforts. Albeit many challenges, the launch of large-scale online learning and remote work presents academic libraries abundant opportunities to take a pivotal role in supporting and advancing their institutional goals during the COVID-19 pandemic.

In this article, four health sciences librarians from four academic libraries across the country will share their personal or library experiences in reaching out to faculty and students to meet their needs through their initiatives and continuous efforts using various technologies and

tools (see table on next page). Three of the four academic libraries are located in two COVID-19 hard-hit states, Michigan and New Jersey. The article will describe their practice of health sciences librarianship during the unprecedented time and provide examples demonstrating how each of them strives to stay relevant, proactive, and become integral to their institutional efforts in support of students and employees working remotely. These examples showcase their efforts in four main areas of library core functions: references/consultation services, library instruction, research support, and resources access.

Robert Wood Johnson Library of the Health Sciences at Rutgers University—Yingting Zhang

The library, located in central New Jersey, serves schools of medicine, public health, nursing, pharmacy, health professions, and the biomedical sciences part of the graduate school, as well as many research centers

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and institutes at Rutgers, The State University of New Jersey. Since the social distancing order was enforced in mid-March, I have been spending much of my time everyday answering reference questions, performing requested literature searches, and trouble-shooting all kinds of issues encountered by

covering many areas, such as assisting with creating biosketches for National Institute of Health (NIH) grant applications, creating data management plans using DMPTool, complying with NIH public access policy, creating and/or connecting ORCID IDs to institutional NetIDs, and consulting and/or collaborating on

Instruction	References/Consultation/ Research Support	Communication
Blackboard	Ask a Librarian via	Email
Canvas	LibAnswers	Google Hangout
e-Space	Chat	LibCal
Google Sites	Email	Message (Texting)
LibGuide	Google Handout Meet	Microsoft Teams
Moodle	Institutional Repository	Slack
Panopto	LibCal	Phone
SubjectPlus	Microsoft Teams	WebEx
WebEx	Phone	WeChat
Zoom	WebEx	Zoom
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Platforms, technologies, and tools used for reaching out to students and faculty.

online students or those working remotely. I have to be a quick adopter of technologies that enable me to provide services online efficiently and effectively. Apart from using email and phone to reach out to users, I also communicate with them via WebEx, LibChat, Zoom, Messages, Google Hangout, and WeChat.

Many library instructional sessions originally planned and scheduled for in-person sessions were quickly turned into an online format delivered via WebEx. Maintaining the schedules of the workshops and offering them online allow librarians to reach out to a wider audience of faculty and researchers across campuses. To support student learning, I promote the use of library research guides and subscribed instructional resources, such as Health Instruct, with predesigned tutorials by including these tutorials in library research guides and by informing course directors of the possibility of embedding them into their courses.

I provide extensive research support services

systematic reviews. These services remain unchanged, due to my use of various technological tools. I also serve on a regular Institutional Review Board (IRB) as well as the Executive IRB Board. During the pandemic crisis, timesensitive COVID-19-related research proposals are submitted for immediate attention and quick turnover review. I make sure to be available to attend ad-hoc meetings and regular monthly meetings to review, discuss, and make decisions on proposals in a timely fashion.

I initially created a basic COVID-19 information resources page under the Public Health research guide. Due to its popularity and increased use, I have expanded it to a standalone guide from a public health perspective. It is now listed as the first link under Research Resources on the website of the institutional Center for COVID-19 Response and Pandemic Preparedness, which "serves as an institutional hub for COVID-19 research activities and information dissemination."

Vera P. Shiffman Medical Library at Wayne State University—Wendy Wu

The library, located in Detroit, Michigan, serves a medical school and a college of pharmacy and health sciences, resident programs in affiliated hospitals, a state poison center, the university community in general, and local communities. In the wake of the library's closure, library reference phone calls for different service points were immediately configured to automatically forward incoming messages to a generic email account, which a librarian on duty regularly monitors and responds to questions in a timely manner. Librarians schedule video consultations with students or faculty using Microsoft Teams or Zoom. Students themselves can also set up a consultation session with me via LibCal on LibGuides designed for targeted user groups. I configured my cell phone to respond to inquiries by individual students or faculty members using a mock-up phone system (Clearspan Communicator and Clearspan Mobile applications provided by the university) during the pandemic. The phone system enables me to make and receive phone calls using my business identity. Librarians also use Microsoft Teams to provide instructions on literature searching, EndNote, and Covidence.

I developed videos using Camtasia on how to search PubMed and drug databases, uploaded the videos to YouTube, and embedded them in Canvas for pharmacy students. Students previewed these videos online and then participated in class activities. I am exploring LibWizard to turn these videos into interactive tutorials for pharmacy students and preparing to use Zoom/Canvas Big Blue Button for upcoming workshops in summer.

The number of requests for the library systematic review service has increased since the outbreak of the pandemic. We took the opportunity to send out email blasts on library research consultations on systematic reviews and mediated literature searches, and provided assistance with uploading search results to Covidence, research data sharing, and manuscript citation formatting.

I updated NAPLEX board exam electronic resources to help students prepare for their board examination. The library system created a guide "COVID-19: Updates from the Library System," which contains all relevant information related to the Library System's current operations and response to the CO-VID-19 outbreak.³ Another health sciences librarian created a COVID-19 page, which has been accessed more than 4,000 times within one month. The guide links to general information, scientific research, clinical resources, case tracking and news, teaching and learning resources, and useful information for the public.⁴

Health Sciences Library at the University of Tennessee Health Science Center—Lin Wu

Situated in Southwest Tennessee, the University of Tennessee Health Science Center Library serves six colleges of medicine, nursing, pharmacy, dentistry, health professions, graduate health sciences, as well as research centers and institutes. Our librarians provide office hours via Zoom to the College of Medicine, College of Pharmacy, and College of Dentistry. We offer EndNote Drop-In sessions on troubleshooting and advanced questions via Zoom. Faculty and students can make an appointment with liaison librarians using LibCal for research consultations. The library uses different technology applications (e.g., Twitter, Facebook, Instagram, and campus Daily Digest) to promote library services and to encourage users to contact the library for any need or assistance.

Embedded librarians maintain their roles in credit-based courses by collaborating with faculty members to support student online learning. The librarians use Zoom to interact with students in completing their course assignments and research projects. A liaison librarian developed an online systematic search mini-crash course to build pharmacy students' advanced searching and research skills (e.g., harvesting search terms and using EndNote to manage references). The library has been using

Zoom to offer library workshops on an array of topics. Users can register for any workshop using their NetID, which allows librarians to know beforehand the status and number of participants enrolled, so they can better prepare for the workshop. Individual librarians who presents these one-hour workshops find it more feasible and effective to reach out to students and faculty across campus in the context of social distancing and remote work.

A centralized COVID-19 resource guide was also created to respond to emerging needs during the pandemic. The guide includes information for both researchers and health consumers/patients, covering content from the Center for Disease Control, World Health Organization, and latest publications from PubMed. The guide also includes resources such as electronic textbooks, board exam, and test preparation resources, made available freely through major vendors such as Elsevier, Lippincott Williams & Wilkins, and McGraw-Hill, during this extraordinary time.

Oakland University William Beaumont School of Medicine Medical Library— Misa Mi

Based on the main campus of Oakland University in Southeastern Michigan, the library primarily serves the medical school affiliated with the Beaumont Health system, which provides a workforce of more than 1,000 clinical faculty. The library takes pride in its Personal Librarian Program, which helps librarians better connect with medical students and provide personalized library services. Individual librarians work and keep in touch with assigned groups of medical students. Upon the shutdown of the campus, I sent personalized email messages to my groups of students to instruct them how to locate library course resources guides, to contact librarians, and to access online library services and resources remotely.

During the pandemic, basic sciences faculty on campus used Slack to create a virtual community to interact with one another and post news and useful resources. Librarians stay in touch with all faculty in the virtual space, where different channels are created to address various emerging needs in working remotely, transitioning to online teaching, or collaborative research. My active participation in the space allows me to rapidly identify these needs and offer library references and consultation at the point of needs. In response to some of the needs, we are offering an online biweekly virtual Coffee Hour with a Librarian program for faculty to engage in conversations about online resources and various research tools. My presence in Slack facilitates faculty's access to and use of library services and teaching/learning resources. The virtual environment helps break down any physical barriers that we would otherwise face as the library is located at a separate building.

Like the other three libraries, my library also experiences increased requests for systematic review or research synthesis services from both faculty and students. The research synthesis projects provide great opportunities for faculty to collaborate and stay productive while working remotely. Faculty seek me out to serve as a systematic review expert and collaborator in research synthesis projects. In collaborating with research groups in conducting systematic reviews, I take advantage of any opportunity to present on-demand faculty development sessions or tutorials by introducing and orienting group members to the process of conducting systematic/scoping reviews, walking them through every phase of the review process, and demonstrating how to use the Covidence systematic review management software.

Librarian liaisons have created new library resources guides for online teaching in rapid response to emerging needs of faculty in developing online learning experiences for medical students. We also work with clerkship directors to develop and update much-needed online resources guides to support clinical teaching and students' clinical experience in clinical settings where faculty were overburdened with patient care responsibilities in the face of an influx of COVID-19 patients.

Conclusion

The COVID-19 pandemic crisis may lead to a new normal that will challenge aca-

demic libraries to make timely and critical decisions in support of student online learning. These challenges may present health sciences librarians greater opportunities to promote their value and to become integral to their institutional goals. At the four academic health sciences libraries, transition to online learning and remote work has served as a catalyst for increased access to and use of library online resources by students, faculty, and researchers who are striving to retain normalcy in their daily routine. It is vital for librarians to stay proactive, flexible, and nimble in providing library services and handling library processes, procedures, and policies to meet emerging needs in the rapidly evolving situation. To stay well, productive, and creative, the ability to quickly adapt to new technologies and the new normal is as important as the ability to practice good self-care and to attend to one's own emotional, social, and physical health needs.

Notes

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- 21. Many food banks allow for large group volunteering. These are excellent opportunities for team-building, while also making food insecurity more visible. Each year I organize a faculty cohort volunteering session at the local food bank for us to catch up, sort produce, and talk about student basic needs initiatives.