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Jamie Saragossi Stony Brook University, jamie.saragossi@stonybrook.edu

Gregg A. Stevens Stony Brook University, Gregg.A.Stevens@stonybrook.edu

Laurel Scheinfeld Stony Brook University, laurel.scheinfeld@stonybrook.edu

Jessica A. Koos Stony Brook University, jessica.koos@stonybrook.edu

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Leveraging Survey Results In Support of a Library Renovation: A

Case Study

Jamie Saragossi Gregg A. Stevens Laurel Scheinfeld Jessica A. Koos

ABSTRACT

The Health Sciences Library (HSL) at Stony Brook University along with the School of Medicine were motivated to make improvements in seating and hours based on survey results from an LCME self-study. Preparation for the site visit from the Liaison Committee for Medical Education helped to garner resources and support for this initiative. To meet the evolving needs of the HSL patrons, librarians completed an overdue collection assessment project which allowed for 142 new seats, including newly designed spaces and furnishings. Ongoing assessment of the redesigned space will be conducted to evaluate success and areas for continued improvement.

KEYWORDS: Health sciences libraries, renovation, deselection, extended hours, security, collaboration, LCME

AUTHORS

Jamie Saragossi, MLS (Jamie.Saragossi@stonybrook.edu) is Head of the Stony Brook University Health Sciences Library, Stony Brook University, Health Sciences Tower, 3-136, 101 Nicolls Road, Stony Brook, NY 11794.

Gregg A. Stevens, MLS, MST, AHIP, (Gregg.Stevens@stonybrook.edu) is Senior
assistant librarian at Stony Brook University Health Sciences Library, Stony Brook
University, Health Sciences Tower, 3-136, 101 Nicolls Road, Stony Brook, NY 11794.
Laurel Scheinfeld, MLS, (laurel.scheinfeld@stonybrook.edu) is Senior assistant
librarian at Stony Brook University Health Sciences Library, Stony Brook University,
Health Sciences Tower, 3-136, 101 Nicolls Road, Stony Brook, NY 11794.
Jessica A. Koos, MLS, MSEd, AHIP, (Jessica.Koos@stonybrook.edu) is Senior
assistant librarian at Stony Brook University Health Sciences Library, Stony Brook.
University, Health Sciences Tower, 3-136, 101 Nicolls Road, Stony Brook.
University, Health Sciences Tower, 3-136, 101 Nicolls Road, Stony Brook.

ORCID ID

Jamie Saragossi, 0000-0001-8153-1791 Gregg A. Stevens, 0000-0003-4088-6742 Laurel Scheinfeld, 0000-0002-7789-3623 Jessica A. Koos, 0000-0003-4128-3791

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INTRODUCTION

The Health Sciences Library (HSL) of Stony Brook University is located in Stony Brook's Health Sciences Center. It serves five schools: Renaissance School of Medicine, School of Nursing, School of Dental Medicine, School of Health Technology and Management, and the School of Social Welfare, as well as the Program in Public Health. There are more than 3,000 students combined, with over 600 of these students enrolled in the School of Medicine. The library also serves as the information center for the Stony Brook University Hospital and the Long Island State Veterans Home. Stony Brook is part of the State University of New York (SUNY) system which is comprised of 64 campuses throughout the state. The Health Sciences Library is a member of the Association of Academic Health Sciences Libraries (AAHSL) as well as the SUNY Libraries Consortium and Northeast Research Libraries (NERL).

The Health Sciences Library is a 49,131 square foot rectangular space on one floor of the Health Sciences Center, with a small amount of additional storage on the basement level of the building. Prior to the renovation described herein, the circulating monograph collection was located on shelves situated perpendicular to the wall, along the entire length of the library. The shelves in the front half of the library were adjacent to the group study area and took up a large amount of the space in that portion of the library. The group study area held 148 chairs positioned around tables in groups of 4 or 8 seats. Study carrels were situated along the wall on the other side of the shelving units. (See Figure 1).

PLACE FIGURE 1 HERE

CAPTION FIGURE 1: Group study area prior to renovation

The remaining monograph shelving, as well as the print periodicals collection and special collections, were located in the back half of the library. This portion of the library was designated a quiet study area, though no formal barrier existed to completely separate group study from quiet study. Individual study carrels as well as some tables with chairs were interspersed throughout the shelving units in the quiet study area; however, electrical outlets were only available along the walls.

In 2017, The Renaissance School of Medicine began actively preparing for a 2019 site visit from the Liaison Committee on Medical Education (LCME). LCME is the Association of American Medical Colleges for Doctor of Medicine (MD) programs. Ongoing accreditation of a medical school program by the LCME involves a site visit every 10 years. As part of the preparation, the Renaissance School of Medicine completed a self-study which included student feedback on library services. Results from this self-study revealed that, while students were satisfied with the reference and research support provided by the library, they were largely dissatisfied in regards to space availability as well as access to the library during overnight and weekend hours.

It was apparent that these concerns would need to be addressed. However, there were several unique factors in the history of the Health Sciences Library that made a redesign of the space especially challenging. Due to staffing shortages and changes in administration over time, including a merger with the campus' main library, a complete collection assessment had not been completed in many years. The personnel issues were compounded by the fact that there were no set policies for the acceptance of donations, which led to a significant accumulation of additional material, including duplicate copies and out-of-scope materials. The primary collections format has shifted to electronic in recent years to accommodate distance students, and to allow for access to content at the point of need. It was clear that the space was not being used optimally; however, vast resources, time and labor would be required to evaluate the collection in order to prepare for a renovation. As is the case with many libraries, funding in order to complete the reallocation of space and necessary upgrades to furniture was also very limited and would require support from departments outside the library.

The library sought to utilize the negative survey results as a catalyst to obtain administrative support, including funding and personnel to accomplish the considerable

task of optimizing the space. The library was aware of the opportunities to improve in several ways: assessing and scaling back the print collection, reworking the current floor plan to reallocate space, adding more seats, updating the furniture, and creating a space that would be conducive to a service model with increased hours of access. All of which could be tied to addressing the negative survey results and the ability to demonstrate to the LCME that actions were being taken to mitigate the student concerns.

LITERATURE REVIEW

It is no secret that many health sciences libraries have been changing their physical spaces to meet the research and learning needs of their constituents. As materials become increasingly available in electronic formats and the use of technology becomes more ubiquitous, academic health sciences libraries are acquiring fewer print materials and significantly more digital content¹⁻⁵. This has allowed health sciences libraries to repurpose spaces that were once designated to hold print monographs and journals. Bennett⁶ explains that virtual storage and abundance of information has contributed to a "learning-centered paradigm," leading to the concept of the information commons. The emphasis of the physical library is no longer on storing information, but facilitating patrons' use of information technologies. With patrons' use of digital materials, many libraries have in turn reallocated space within the library to facilitate the use of technology. They have increased the number and types of technologies available as well. For example, The Eccles Health Sciences Library at the University of Utah now offers virtual reality technology, 3D printing, and various multimedia tools such as tablets.⁷

One significant reason for the shift in collections at the Health Sciences Library is that some Stony Brook University (SBU) health sciences programs and courses, such as those in graduate nursing and social welfare, have shifted to hybrid (both online and face-to-face instruction) or completely online models. In its *Standards for Distance Learning Library Services*, the Association for College and Research Libraries (ACRL) recommends that libraries serving distance learners provide library resources equivalent to those available to on-campus users.⁸ Likewise, the accrediting bodies of some health sciences programs, such as the National League for Nursing Accrediting Commission (NLNAC), recommend that distance students be provided equitable access to library resources and services.⁹⁻¹⁰

Even for students and faculty who are on campus, resources in electronic format are generally more easily accessible than those physically located in the library. The HSL provides point-of-care tools to support decision making at the patient bedside. These tools are electronic in nature, often updated on a daily basis and also integrated into the Electronic Health Record.¹¹ As the nature of the health sciences collection is changing, the emphasis on the physical collection should be re-examined to allow for optimal use of limited space.⁴

Student learning behaviors have also changed over time, coinciding with advancements in technology. Gone are the days of students coming to the library primarily to study quietly by themselves. While students still desire quiet study spaces, they now also desire collaborative spaces where they can engage with their peers without fear of being "shushed." Kronenfeld² and Ludwig⁴ found that there is an increasing demand for group study spaces among health sciences libraries as well as a desire to develop a sense of "community" in order to encourage collaboration. Libraries have addressed these needs in various ways, including increasing open spaces as well as

adding more group seating. A recent library renovation by another SUNY health sciences library, the Harold Kohn Vision Science Library at the SUNY College of Optometry, was initiated through a library administered survey and a focus group that documented a need for more study space.¹²

PLANNING TO MEET STUDENTS' NEEDS

As mentioned previously, the HSL did not receive favorable comments in the LCME self-study survey in regard to access to the space and seating availability. In response, the HSL and the School of Medicine administrators met with student senators to discuss these issues in more detail. Students reported difficulty finding a place to study at the existing capacity of 284 seats, especially seating with access to electrical outlets and during testing periods. Students also requested early morning access and extended weekend hours especially to accommodate testing schedules.

PLACE TABLE 1 HERE CAPTION TABLE 1. LCME Survey Results

As the Health Sciences Library serves several schools, totalling more than 3,000 students combined, the scheduling needs of all programs can be difficult to meet because testing can take place during different points of the semester. The School of Medicine and the HSL were both motivated to make improvements in seating and hours despite many constraints. A feasible plan needed to take into account the issues of space, budget, and time. Time was especially important during this initiative because it was imperative to show progress prior to the LCME site visit. There was no additional space in the building for the library to expand soany increase in seating would need to

be found by reallocating space within the existing footprint. The library budget did not allocate funds for any space improvements or additional staff to extend service hours. The School of Medicine offered financial support for minor renovations and new furniture, but not for additional personnel or a complete overhaul. Creative solutions were needed to meet the needs of students while considering these factors. One obvious solution to create more study space was to reduce the size of the print collection.

EVALUATING THE COLLECTION

Prior to the survey results providing a catalyst for reallocating library space, attempts had been made to address the outdated nature of the physical collection in the HSL. Historical objections by faculty to the removal of materials and low levels of staffing were impediments causing the projects to stall. The LCME survey results documented a need from the student body and provided a justification for the project, garnering buyin from librarians, library administration, teaching faculty, and other campus partners.

In a health sciences library, there is a greater emphasis on currency than in a general academic collection. It can be dangerous to keep outdated clinical material, potentially providing clinicians and students access to information about treatments and procedures that are no longer deemed safe or acceptable by current standards. The Medical Library Association Guide to Managing Health Care Libraries affirms that "keeping the collection current and relevant, particularly in a clinical setting, is critical to quality care and, subsequently, risk management."¹³ Investigation of circulation statistics showed that the majority of items had not circulated in several years. There were also multiple editions of many titles and outdated clinical content. Many other items were found that were not within the scope of the HSL collection, most likely due to legacy collections and donations. The shelves were packed to capacity and it was

difficult for patrons to locate specific items.

A weeding project was initiated. The publication date of 1995 was selected as a benchmark date for the age of materials to be retained. This date was decided based on the availability of space and the number of volumes determined to be retained in the collection if using that range. Health sciences librarians determined what should be kept from remaining older items, such as classics, history of medicine, medical illustrations, and atlasesItems marked for retention were again checked for duplicates and superseded editions.

The entire collection management process, from shifting the newer books to removal of the unretained materials, took more than four months (November 2018 to March 2019). The weeding process ultimately relocated material from 840 shelves, allowing the removal of more than 20 shelving units.

REFURNISHING THE SPACE

The health sciences librarians worked with the architect from the School of Medicine and the Health Sciences Center facilities manager to identify a new seating arrangement that would work within the existing space. A rendering was then sent out to multiple vendors for bids. Two separate vendors were selected, one for the group study area furniture and another for additional study carrels to be located in the quiet study area. Once the vendors were selected, the health sciences librarians were given the opportunity to make selections on fabrics and finishes for the new furniture. Since the School of Medicine was the funding source for this project, the recommendations were made and ultimate approval was required by the architect.

The Health Sciences Center facilities department assisted with the removal of existing furniture. In some cases, items were ultimately repurposed for other units on

campus. For those items that could not be salvaged, recycling and proper disposal was secured. As the library remained fully functional during this renovation, the removal of items needed to be carefully coordinated with the delivery of replacement furniture to ensure the safety of patrons and to continue providing services with minimal disruption. The delivery and installation of new furniture was coordinated between the health sciences librarians, facilities, and the vendor. The installation was also completed in phases in order to remain operational during the upgrade. In total the vendor was on site for 6 days to install all new furniture in the group study, collaboration, and new computer lab areas. After the full reopening of the group study area was completed, the vendor selected for the carrels in the quiet study area was on site for 4 days for installation.

Based on the survey results and a follow up meeting with student representatives, it was clear that additional seating with access to power was one of the top priorities for any upgrades to the library space. Therefore, additional study carrels wired for electricity were installed in the quiet study area.

Removal of shelving units after the weeding project and reallocation of an office previously occupied by an external department allowed for 142 new seats, including a designated computer area and eight collaborative huddle tables manufactured by Logiflex, with display screens and conferencing capabilities. Older tables and worn furniture were also replaced, which allowed for more seating per table. The additional seats came in various forms: study carrels with power, comfortable seating areas for more relaxed conversations, large tables for study, and huddle stations with collaborative technologies to meet the disparate needs of HSL patrons. These changes provided space efficiency and defined the space for use as a group study and

collaborative work area.

The library has received frequent requests from graduate students and residents for small conference rooms or private study rooms. While there was no room in the budget for the addition of dedicated rooms, semi-private areas were created around the huddle tables with the use of oversized white boards as dividers.

Staffing and Security

In order to provide extended service hours with no increase in staff, a Lenel swipe card system was put in place for access to the library when staff are not present. During these extended hours, patrons affiliated with SBU (students, faculty, and staff) use their SBU ID card to unlock the doors to the library. The majority of health sciences students are graduate level students who want a place to study and collaborate. It was decided that staffing of the service desk would not be required overnight. Reference and circulation services were not requested by patrons in regard to extended hours. Previous staffing patterns, including librarians scheduled during traditional business hours, continue to be maintained. This model is used at peer libraries such as the University of Arizona Health Sciences Library¹⁴, the Spencer S. Eccles Health Sciences Library at the University of Utah¹⁵, the Harvey Cushing/John Hay Whitney Medical Library at Yale University¹⁶, and others. Despite using the swipe card system as a security measure, the library also worked with campus security on risk assessment and space access policies. Regular security walk-throughs were scheduled and space was allocated for security personnel to have a presence within the library by reassigning a previously vacant office within the group study area. Signs were posted with contact information for emergency situations. Facilities support including increased trash removal was also secured, with additional night and weekend rounds added to maintain the space.

After-hours access is provided only for study space, public computers, and printers. A metal, accordion-style curtain was installed around the circulation desk via a track system in the ceiling in order to secure this area. Locks were also installed on any doors to staff-only areas that did not previously have them in order to secure scanners, and circulation equipment used for interlibrary loan and circulation operations. The library administration worked closely with the professional and student staff in the Access and User Services department to communicate any anticipated changes so that new opening and closing procedures.

A glass dividing wall with a lockable door was also installed, and the entire print collection is now contained behind it (see figure 2). During staffed hours, the doors remain unlocked and the collection is accessible. The installation of the glass wall has also enhanced the quiet study area by further reducing the noise level from the collaborative work areas of the library.

PLACE FIGURE 2 HERE

CAPTION FIGURE 2. Wall to separate group study from quiet study

PROMOTING THE PROJECT

Once all of the monographs and periodicals were removed or relocated, and the remaining shelving units were dismantled, a large open space was created, and it was anticipated that patrons would have questions about future plans. A poster was positioned in the middle of the empty area to provide information about the renovation.

The poster included a photo of library staff holding construction tools and read "We're busy building you a better Health Sciences Library! Updated seating area and new hours coming soon." The same image was also posted to the library's social media sites (See Figure 3).

PLACE FIGURE 3 HERE

CAPTION FIGURE 3. Promotional poster

The social media campaign resulted in 18 engagements (Twitter, Facebook, and Instagram). There was a soft roll-out of 24/7 access in May 2019. An email was sent from the Interim Dean of Libraries to all of the health sciences schools, making everyone aware of the change in hours. In addition to social media postings, signage including posters and digital displays were visible throughout the library space to inform patrons of the upcoming change in hours. Student senators from each class in the School of Medicine distributed informational emails to their classmates. Librarians were encouraged to make announcements in any of their instructional sessions or meetings with departmental faculty.

When the change in hours was initiated, signage was added at the library entrance to provide directions for accessing the library after service hours using the Lenel swipe card system. A 10-second instructional video on the use of the swipe card system was also posted on social media. As new furniture and technology arrived and was installed over the course of the following months, digital signage and social media were regularly used to share photos and progress. The library renovation updates to furniture and staffing policies were fully implemented by the start of the fall 2019 semester (See Figure 4 .

PLACE FIGURE 4 HERE

CAPTION FIGURE 4. Group study area after renovation

LESSONS LEARNED

The renovation project was sponsored by the School of Medicine and was initiated in response to concerns surrounding the LCME survey. Therefore, it is important to maintain ongoing documentation of any sustained improvements in hours and seating availability to report back to the LCME. This may also serve to justify support for future improvements by the School of Medicine or another entity. The library will conduct a survey in 2020 in order to gauge medical students' satisfaction with the increased hours and additional seating. Partnering with the School of Medicine, the library will ask the student senate to distribute the survey to the same groups who had participated in the initial LCME survey.

In order to carry out an assessment of the number of visitors to the library, a digital counter was installed at the front entrance to track the activity during the newly expanded hours. The focus is primarily on hours specifically cited as concerns: after midnight on weekdays, early morning hours on weekends, and during exam periods. During the fall 2019 semester, a total of 2,724 patrons used the library between the hours of 12am - 8am, times when the library would have previously been closed. A preliminary assessment was carried out to gauge usage trends on weekends.

PLACE TABLE 2 HERE

CAPTION TABLE 2. Weekend library use

Even after the reallocation of space, there are still approximately 40,000 monographs, and 5,000 serials titles available on the shelves at the HSL. Prior to this project, there were approximately 95,000 monographs on the shelves (serials were not included in the deselection process). New collection development policies are being developed in order to maintain the recently assessed collection. To assess any impact of the collection changes, librarians will carefully monitor interlibrary loan fulfilment for significant increases in monograph requests. If a particular subject area is lacking, new monograph purchases will supplement that area of the collection. The librarians will each be assigned a subject area call number range to investigate further. Current review services such as Doody's Reviews will be used to ensure representation of the titles deemed essential for each of the medical specialties. Additionally, in order to ensure that the collection supports the curriculum of the schools served by the HSL, regular collection maintenance will be incorporated into each of the librarians' duties. As selectors, they will maintain the currency of the collection, and ensure future librarians do not find themselves in a similar situation. A patron-driven acquisition (PDA) model has also been put into place, which will help to ensure that faculty and students will be able to access the monographs that they need in a timely manner.

The library's social media campaign surrounding the changes to the HSL hours and layout created an opportunity for engagement with patrons. Various platforms were used to reach constituents and proved to be successful in spreading the word about the work being done in the library, demonstrating that this can be an effective way to disseminate information to users. Twenty-five social media posts were launched between April and October 2019: eight Tweets totalling 319 engagements, six Facebook posts with 52 clicks including one video receiving 58 views, and 11 Instagram posts

receiving 345 likes, and 794 views of the three video posts.

Use of the new spaces are being informally monitored to inform plans for continued enhancements to the space in the future. Use of the huddle stations by single users has been observed, perhaps denoting the need for more individual study spaces in the open area that was deemed as a group study area, not only in the quiet study room. Librarians and AUS staff are encouraged to share comments and requests from patrons. Patrons have commented positively about the additional power supplies, the new furniture, and the increased access to the library. These comments will be captured in a shared document to ensure that future plans include this feedback and ideas from all library staff and faculty.

The removal of a significant number of records from the catalog was also something that required collaboration from multiple departments within the library, including library IT and cataloging. Although a test batch of scanned barcodes had been sent to ensure the necessary data for the withdrawal of records were being captured, the volume of records from the actual project turned out to require more manual processing. This in turn meant that records remained in the catalog while the items were no longer on the shelves. This needed to be carefully communicated to AUS and interlibrary loan staff to minimize disruption to normal service. As librarians were reviewing the collection more closely, items were discovered such as theses, faculty publications, and books signed by the authors. This necessitated a meeting with the Director of Special Collections for the library to ensure that there was consistent handling of these types of materials across multiple libraries within the organization.

DISCUSSION

Funding support from another department (in this case, the School of Medicine) is often

essential to carry out a project of this scale in an academic library. It is imperative to continue to advocate for the needs of the library in addition to the functionality of the space alone. Although student responses from the LCME self-study were the ultimate driver for this renovation, as experts in our field with knowledge of current and forthcoming technologies and trends in health sciences libraries, librarians' input is essential to the provision of successful service regardless of the funding source. Ensuring that the space was equipped not only for the current needs of students (such as additional seating and hours) but also preparing for future accommodations in the space was a priority for the librarians in the renovation planning meetings. Thinking toward the future, it is important to use the success of this renovation to provide the momentum needed for further improvements such as small group instruction, presentation space, and areas to explore new technologies.

Balancing budget with functionality is always delicate but it is important for accomplishing goals. While remaining economical in selections, it is important not to sacrifice quality. Vendors were reminded that durability of the new furniture was paramount, as most libraries will see high traffic and are unable to replace furniture on a regular basis. It was helpful to use the LCME survey comments as a justification for quality fabrics and finishes as well. As seating wears down and has to be removed from the floor, our ability to serve the quantity of students in our physical spaces diminishes. Going with the most economical choice may provide an immediate solution, however it may hasten the return to a status that would leave students dissatisfied with the availability of seats.

While it is important to communicate deadlines to vendors and project managers at the outset, it is beneficial to remain flexible because timelines can unexpectedly change. It is recommended to build in extra time to account for vendor delays and

changes in student employee schedules. Plans may need to be updated as the project is progressing and creative solutions are often needed as you go. As is the case with a pending accreditation visit, it was imperative to be able to show plans and renderings for updates that may not have been completed for the on-site portion of the review. Follow-up documentation after the site visit is acceptable and, as was the case for this project, professional quality photos of students using the fully completed spaces were submitted to the LCME review committee for their final report.

Addressing the concerns made apparent through the survey requires buy-in from external stakeholders and those helping to fund the projects. However, there needs to be input from all areas of the library as well. All departments within the library should be aware that a project of this size is taking place. Clear communication will allow for input from various entities. This will also establish a framework for the project should the need arise for contributions from other areas of the library, especially those that are not physically located in the Health Sciences Center. Success is dependent on individuals with various expertise, and participation from multiple departments coming together to work on a common goal, improving the service and space of the library for students and faculty. Communicating the changes, some subtle, others more apparent and maintaining an open dialogue with the students that helped to spark this much needed renovation is essential for gauging success and continuing to meet the evolving needs of our patrons. As was the case here, the LCME survey results were the ultimate catalyst for improvement, providing the impetus for solicitation of continual feedback from our primary user groups to guide future directions of the library and garner support from campus partners.

REFERENCES

- Christy Jarvis, Joan M. Gregory, and Jean P. Shipman, "Books to Bytes at the Speed of Light: A Rapid Health Sciences Collection Transformation," *Collection Management* 39, no. 2–3 (2014): 60–76, doi: 10.1080/01462679.2014.910150.
- Michael R. Kronenfeld, "Trends in Academic Health Sciences Libraries and Their Emergence as the "Knowledge Nexus" for Their Academic Health Centers," *Journal of the Medical Library Association*, 93, no. 8 (2005): 32-39.
- Donald A.B. Lindberg and Betsy L. Humphreys, "2015 The Future of Medical Libraries," *New England Journal of Medicine* 352, no. 11 (2005): 1067–70, doi: 10.1056/NEJMp048190.
- Logan Ludwig, "Health Sciences Libraries Building Survey, 1999–2009," *Journal of the Medical Library Association* 98, no. 2 (2010): 105–34, doi: 10.3163/1536-5050.98.2.004.
- Jeannette Murphy, "Trend Spotting Whither Health Science Librarianship?," *Health Information & Libraries Journal* 28, no. 4 (2011): 321–25, doi: 10.1111/j.1471-1842.2011.00958.x.
- Scott Bennett, "Libraries and Learning: A History of Paradigm Change," *portal: Libraries and the Academy* 9, no. 2 (2009): 181–97, doi: 10.1353/pla.0.0049.
- Brandon Patterson, Tallie Casucci, Bryan Elias Hull, and Nancy T. Lombardo, "Library as the Technology Hub for the Health Sciences," *Medical Reference Services Quarterly* 37, no. 4 (2018): 341–56, doi: 10.1080/02763869.2018.1514899.
- 8. American Library Association, "Standards for Distance Learning Library Services," Text, Association of College & Research Libraries (ACRL),

September 1, 2006,

http://www.ala.org/acrl/standards/guidelinesdistancelearning (Accessed on July 25, 2019).

- Barton M. Lessin, Barbara K. Redman, and Nancy A. Wilmes, "A Usage Survey of Standards and Guidelines Affecting Library Services to Distance Education Nursing Programs," *Journal of Library & Information Services in Distance Learning* 1, no. 1 (2004): 55–78, https://doi.org/10.1300/J192v01n01_04.
- Gregg A. Stevens, Elizabeth G. Hinton, and Roy E. Brown, "Research and Instruction Services for Online Advanced Practice Nursing Programs: A Survey of North American Academic Librarians," *Journal of the Medical Library Association* 107, no. 4 (2019): 508–14, doi:10.5195/jmla.2019.689.
- 11. Joanne Gard Marshall, Julia Sollenberger, Sharon Easterby-Gannett, Lynn Kasner Morgan, Mary Lou Klem, Susan K. Cavanaugh, Kathleen Burr Oliver, Cheryl A. Thompson, Neil Romanosky, and Sue Hunter, "The Value of Library and Information Services in Patient Care: Results of a Multisite Study," *Journal of the Medical Library Association 101*, no. 1 (2013): 38–46, doi: 10.3163/1536-5050.101.1.007.
- 12. Elaine Wells, "Library Renovation: From Setbacks to Success", *Hypothesis: Journal of the Research Section of MLA 31*, no. 1 (2019): 1-10.
- Craig C. Haynes, "Collection Planning Management," in *The Medical Library* Association Guide to Managing Health Care Libraries, ed. Margaret Moylan Bandy and Rosalind Farnam Dudden, 2nd ed. (New York: Neal-Schuman Publishers, 2011), 135–155.

- 14. University of Arizona Health Sciences Library, "Access the Library 24/7," July
 16, 2018, http://ahsl.arizona.edu/feature/access-library-247 (Accessed on August 18, 2019).
- Spencer S. Eccles Health Sciences Library, University of Utah, "Library Hours," August 5, 2019, https://library.med.utah.edu/lib/hours.php (Accessed on August 18, 2019).
- 16. Yale University, "Hours," Harvey Cushing/John Hay Whitney Medical Library, 2019, https://library.medicine.yale.edu/about/hours (Accessed on August 18, 2019).