The Science Libraries at Carnegie Mellon University: A Profile

G. Lynn Berard
Diane Covington
Melissa Harvey
Matthew Marsteller
Lisa McCartney

Follow this and additional works at: https://jdc.jefferson.edu/scitechnews

Let us know how access to this document benefits you

Recommended Citation
Available at: https://jdc.jefferson.edu/scitechnews/vol55/iss4/5

This Article is brought to you for free and open access by the Jefferson Digital Commons. The Jefferson Digital Commons is a service of Thomas Jefferson University's Center for Teaching and Learning (CTL). The Commons is a showcase for Jefferson books and journals, peer-reviewed scholarly publications, unique historical collections from the University archives, and teaching tools. The Jefferson Digital Commons allows researchers and interested readers anywhere in the world to learn about and keep up to date with Jefferson scholarship. This article has been accepted for inclusion in Sci-Tech News by an authorized administrator of the Jefferson Digital Commons. For more information, please contact: JeffersonDigitalCommons@jefferson.edu.
Library Profile:
The Science Libraries at Carnegie Mellon University

The Professional Staff:
G. Lynn Berard, Head, Science Libraries
Diane Covington, Chemistry and Biology Librarian
Melissa J. Harvey, Computer Science Librarian
Matthew R. Marsteller, Physics and Math Librarian
Lisa M. McCartney, Engineering and Science Librarian

Carnegie Mellon is a national research university of about 7,500 students and 3,000 faculty, research and administrative staff. The institution was founded in 1900 in Pittsburgh by industrialist and philanthropist Andrew Carnegie. The University today consists of seven colleges and schools and the Science Libraries mainly serve two, the Mellon College of Science and the Carnegie Institute of Technology (the Engineering School). The Engineering & Science Library and The Mellon Institute Library officially joined forces in 2000 to create a cooperative unit known as the Science Libraries.

Recently rated the “Most Wired University” for a second year in a row, Carnegie Mellon truly is a place that has incorporated network technologies into campus life. As can be expected, the University Library System’s mission is to “go digital” in the building of our collections and to lead in the development of tools and techniques needed to achieve the digital future. In this profile of our science libraries, we would like to introduce you to the physical facilities and to highlight some of the special services that we offer.

The Engineering & Science Library is situated in Wean Hall, centrally located for most of its clientele (see photo). The collection supports study and research in computer science; chemical, civil, computer, electrical, and mechanical engineering; environmental topics; mathematics; physics; and materials science engineering; robotics; and related fields including astronomy, pure chemistry, and medicine. The paper based collection numbers approximately 300,000 items which include books, journals, and technical reports and we have a growing digital collection as well (http://www.library.cmu.edu).

We are a full service library and provide reference assistance most days from 9 a.m. to 9 p.m., with email reference service 24/7. While undergraduates come here to study and to utilize reserve materials, graduate students and researchers keep us busy at the reference desk. We often go into the classroom to do library instruction, and we are always on the look out for new digital resources to explore.

The Mellon Institute Library resides in the Mellon Institute located at 4400 Fifth Avenue in Pittsburgh, Pennsylvania. This building was erected in 1937. The library was established in 1913 as the Mellon Research Institute Library, supporting industrial researchers in chemistry, with an appropriation of $20,000 to invest in chemical reference books and chemical and technical journals. In 1967, Mellon Institute merged with Carnegie Institute of Technology to form Carnegie Mellon University, making the library a part of the University Library System. Mellon Institute is best known for its air pollution and industrial hygiene collection. This “special” library’s main clientele today are the Chemistry and Biology departments of the Mellon College of Science, supporting the University’s curriculum in the areas of study and research in chemistry, biochemistry, biology, physics, and biological sciences. The library stacks, consisting of three floors, hold the pre-1992 bound issues of journals and the book collection, for a total of more than 92,000 items.

The Main Reading Room (see photo on p. 14) of the library maintains its original décor and the university strives to maintain it. Computers and carpeting are the only changes to the original setting. This room houses the current bound volumes of the periodical collection from 1992-present and serves as the reference and public service area for patrons.
Digital Initiatives

The Carnegie Mellon University Libraries, including the Science Libraries, are forging ahead with the vision of a digital environment for library services. The directive to ‘go digital,’ handed down by Carnegie Mellon president, Jared Cohen, presently takes many forms, ensuring the libraries are moving toward a strong digital environment.

One project currently in development is the Universal Library, the vision of which is “access to all human knowledge - anytime, anywhere.” It reminds one of the ancient Alexandria Library only in electronic format. This is certainly no small undertaking and will be an ongoing endeavor. The Million Book Project is one of the initiatives within the Universal Library. Even now there are approximately 1,000 books available digitally through the Universal Library. Feel free to visit the Universal Library at http://www.ul.cs.cmu.edu and catch a glimpse of the digital age of library collections.

The Science Libraries also are consciously acquiring greater amounts of materials in electronic format to build our digital holdings. Though we still have CD-ROM tools, some 'permanently' on public computers and others available for circulation, we now actively opting to build our journal and, to a lesser extent, reference collections with Internet tools. For instance, just this year, we shifted to digital format for all of our IEEE subscriptions with IEEEExplor and cancelled the print. It has been very well received (and, so far, preferred) by our patrons. Also, links on the University Libraries home page give patrons the option of a Virtual Reference Shelf with online dictionaries, encyclopedias, etc. or Subject Research Guides listing subject specific links to materials for such things as patents and trademarks or standards.

Digital initiatives have transformed our interlibrary loan service as well. Patrons now submit requests for items via ILLiad, the InterLibrary Loan Internet accessible database. This means more accurate tracking of our requests and processing time as well as elimination of paper request submissions! In addition, Ariel software allows us to electronically send and receive journal articles in PDF format that quickly land in a patron’s email account. This software is very beneficial for the Science Libraries as they receive a high volume of requests for journal and conference proceeding articles for both lending and borrowing purposes. Certainly, relying on digital formats hits a snag when equipment is out of commission, but the benefits of a digital environment far outweigh the alternatives. Our patrons seem to agree.

Chat Service

The librarians of the Science Libraries staff seven of the twenty hours per week of a chat reference service offered Monday through Friday from 1pm to 5pm. Carnegie Mellon began providing this service on October 2, 2000. We currently use LivePerson’s Web contact center software for providing chat reference service, but a Chat Reference Task Force is reviewing other possibilities. The impact on us has been an additional one to two hours per week of reference duty. We have each stepped forward to provide a scheduled hour of chat reference per week, with two of the librarians providing a second hour on a temporary basis. Two temporary graduate student employees from the nearby University of Pittsburgh School of Information Sciences will staff the two extra hours when we feel they are ready.

Providing the chat reference service has brought additional challenges. Because the person providing the chat reference service is the sole provider during their hour, we have to field questions from any subject area. This has caused the University Libraries as a whole to consider cross-training. Currently the librarians of the Science Libraries are preparing the first of the reference cross-training sessions. We intend to let our colleagues in the other libraries know about the more heavily used reference tools, the basic databases, and the new digital reference tools we’ve been acquiring.

Technical Report Collection

Carnegie Mellon Libraries have developed a reputation for our outstanding technical report collection. These reports are housed in the Engineering & Science Library. We have the second largest computer science technical report col-
lection in the nation. Our collection currently includes approximately 68,000 reports (66,000 individual titles)

Our technical report collection dates back to 1966, covering the history of modern computer science. Our collection is especially distinct for two major reasons:
- We have the largest nationwide collection of international computer science reports, totaling about 60 percent of our collection.
- We provide the greatest degree of access to our reports. We are the only library system to provide full cataloging of technical reports, including subject headings, in a nationwide catalog such as OCLC.

The international computer science community has been especially grateful for the ability to locate and borrow reports through interlibrary loan from Carnegie Mellon that cannot be located electronically or by other means. We hope you will visit our library catalog at: http://www.library.cmu.edu. You can limit your search to technical reports by performing a “complex search” and choosing “TECH-REPT” as the location. If you have any questions, feel free to contact: Missy Harvey, Computer Science Librarian, harvey@andrew.cmu.edu.

Papers of the Co-Founders of Artificial Intelligence Now Online

The Allen Newell Collection and the Herbert Simon Collection represent the work of pioneers in the fields of artificial intelligence and cognitive science. It’s a rare opportunity to browse through the papers of renowned scientists whose work has had such a major influence on the state of the field today. The University Libraries now offers electronic access to portions of the research and teaching papers of Allen Newell and Herbert Simon. You can search, browse and view more than 200,000 digital images from the collections.

Newell and Simon played a pivotal role in creating Carnegie Mellon’s School of Computer Science and elevating it to world-class status. The fields of artificial intelligence and cognitive science emerged in part from their idea that computers could process symbols as well as numbers and solve problems in the same way humans do if programmed properly. In the 1960s Newell and Simon created computer models of human problem solving which became significant in shaping the “cognitive revolution” in psychology. So take a few minutes and have a look at the collections at http://heinz1.library.cmu.edu/Newell/ and http://heinz1.library.cmu.edu/Simon/. We hope you find the collections to be noteworthy, interesting, and helpful with your research. We also hope you will develop an appreciation for two men who left an important mark on our institution and whose influence continues today.

The 21st century is an exciting time to be an information professional. The staff of the Science Libraries invite you to come visit us, in person or electronically, and share with us our dream of providing information digitally. Our door is always open.