Nothing has been as central to the lives of University of Missouri students as the library. Yet few academic divisions have changed as fundamentally or rapidly. From implementing the nation’s first library automation system to building a technology-driven Information Commons, University of Missouri Libraries have earned a worldwide reputation for innovation. As MU Libraries celebrate the centennial of the Elmer Ellis Library Building, librarians build the electronic databases, online classrooms and digital media labs of the future while preserving the clay tablets, government documents and rare books of the past. * By Kelsey Allen

* In fall 1915, the Library Building opened with enough space for 520,000 volumes. Today, the structure houses nearly 2 million print volumes.
More than a century ago, the University of Missouri's first professionally trained librarian, James Thayer Gerould, campaigned for a building to house the library's books. The collection was relatively small: all of the books, except the few on loan, had been destroyed in the Academic Hall fire of 1892.

By the early 1900s, most of the 67,000-volume collection was housed in one end of the ground floor of the new Academic Hall. The rest of the books were scattered throughout the building and across campus. Only 100 students could find seats in the reading room, and many stood to conduct their studies. Yet with the loan desk and the card catalog in the same room creating noise and distractions, students weren't studying much anyway.

Gerould believed the library should be not only a laboratory for students and professors but also a home to inventions and discoveries, sound scholarship, and considered conclusions.

"The library, although it has existed almost from the dawn of history, for the first time became a militant force," Gerould wrote in the December 1905 issue of the Missouri Alumni Quarterly. "No longer a mere collection of books resorted to but seldom, it became a university for those whose school days are ended and for the student a collection of tools for daily use. "Where the student of 50 or even 25 years ago used one book, today he uses a hundred."

Gerould envisioned a place where people could not only access necessary textbooks and literature but also work in comfort — a place with study rooms and reading rooms, offices and auditoriums.

It took nearly a decade, but Gerould got his library. In 1913, the General Assembly of Missouri appropriated $75,000 for the site and $200,000 for the structure. By fall 1915, the building opened with enough space for 520,000 volumes. The building was also erected for the joint use of The State Historical Society of Missouri, which is still in residence.

During the 2015-16 academic year, MU Libraries celebrate the centennial of the Library Building — renamed, in 1971, Elmer Ellis Library Building after the administrator who served as university president from 1955 to 1966 and became the first president of the University of Missouri System.

Libraries evolve at the pace of technology. The student of 50 or even 25 years ago used a hundred books, but today's student also uses online journals, digital collections and electronic databases. University of Missouri Libraries, which include Ellis Library and eight branch libraries, have more than 30 million print volumes; 1 million e-books; 53,400 journal titles; and 7.5 million microforms.

"It's hard for me to think of another profession that has been more fundamentally changed than librarianship," says Director of MU Libraries Jim Cogswell. "Librarians have always said they are trying to do the impossible, which is to try to take all of the world's recorded knowledge and information and make it available to anybody at any time. That's crazy. How could anybody ever do that? But with every iteration of technology, we get closer."

Contemporary students prefer the online availability of reference sources, accessing materials from the libraries' computer labs and their own laptop computers. Libraries help undergraduates conduct research with the help of subject librarians and specialists. Librarians also educate faculty who work in technology-driven laboratories on managing and sharing research data. In turn, professors employ the flipped-classroom strategy, using the libraries' multimedia equipment to create video lectures they share before class so they can devote more time to applying the material.

Missouri Students Association President Payton Head and Vice President Brenda Smith-Lezama made a statement in January 2015 when they became the first slate to hold their inauguration ceremony in the Grand Reading Room at Ellis Library. "The library is the center of academics at Mizzou," says Head, a senior political science and international studies major from Chicago. "It's the cornerstone of this institution."

**PRESERVING THE PAST**

Libraries must look forward. But without knowledge of the past, there is no future, says Alla Barbatarlo, head of Special Collections and Rare Books.

Tucked away on the fourth floor of Ellis Library, locked inside a humidity- and temperature-controlled vault, are clay tablets, scrolls, manuscripts, incunabula (books printed before...
MU Libraries' Special Collections and Rare Books holds more than 100,000 items. They include, clockwise from left, a leaf from a Gutenberg Bible printed circa 1454; an 1833 miniature manuscript of Charlotte Brontë's short stories *The Secret* and *Lily Hart*; and eight 4,000-year-old Mesopotamian clay tablets. Students studying in Ellis Library's Grand Reading Room use print volumes, electronic databases and online journals.

1501) and books that aren't just rare — they don't exist anywhere else in the world.

The oldest items in the collection are eight 4,000-year-old Mesopotamian clay tablets. On one, written in Sumerian, is an ancient receipt of sorts: 5 sila of high-quality beer, 3 sila of bread, 2 shekels of oil, 2 shekels of naga, 1 fish, 1 bundle of onions. (A sila is about 1 liter, and naga is a generic term for sodium carbonite.)

"This is tangible proof of the existence of this civilization," Barabtarlo says. "This cuneiform was how they communicated what was important. It's what we do today. We are trying to write down what is important to us in the moment — for posterity, for proof that this is what we did."

One of Barabtarlo's favorite items in the collection is the Nuremberg Chronicle, or Liber Chronicarum. Written in 1493...
by Hartmann Schedel, the Latin text starts with Genesis and concludes with predictions of how the world will end. The author even left a few blank pages for those who survive the Armageddon to complete. The chronicle has 1,809 illustrations, making it one of the most illustrated incunabula.

"Just imagine Nuremberg of the 15th century, bursting with money," Barabtarlo says. "They decided to make something for history, for posterity, for eternity. What will it be? It will be a book. The history of the universe according to Nurembergians."

But the book that takes Barabtarlo's breath away every time she carefully removes it from its brown leather slipcase and crimson trifold leather folder appears far more modest and unassuming. "The first time I opened it, I saw this brown paper, and it was like [the grocery store]: paper or plastic?"

It is the original manuscript of Charlotte Brontë's short stories The Secret and Lily Hart. The 19,000 tiny handwritten words (to read them requires a magnifying glass) cover 16 pages of delicate brown paper measuring 4.5-by-3.6 inches. The manuscript is signed and dated Nov. 27, 1833. MU is one of only a handful of institutions that own an original Brontë manuscript.

The department also has a single leaf of a Gutenberg Bible, a promotional charter of Catherine the Great that carries her signature, an extensive comic art collection, and one of the largest microform collections in the U.S., ranking in the top 10 nationwide. The entire 100,000-item collection fills about 10 rooms.

“You come and you don’t have a chance to exhale because of the things we have here," Barabtarlo says.

HONORING THE INNOVATORS

No one ushered the libraries to national prominence more than Ralph H. Parker, who became director in 1947. By then, the collection had surpassed 500,000 volumes. Whereas his predecessors were interested in amassing a substantial collection, Parker hoped to elevate the role of the librarian and to better serve the campus community.

In a 1936 Library Journal article, Parker introduced his punch-card technology for library automation, which he expected to lead to "a new day of no mistakes, no nervous strain and much less manual labor for the library worker," who until then wrote on blank slips of paper to record each book issued and its borrower.

But it wasn’t until university President Elmer Ellis increased the libraries’ budget in 1957 that Parker was able to install his punch-card system for processing acquisitions at MU. By 1964, Parker had installed the nation’s first automated library circulation system. Moving from a manual library to a machine-assisted library allowed librarians to be more effective and to increase patrons’ access to collections, writes C. Sean Burns in a paper published in 2014 in the journal portal: Libraries and the Academy. As a result, annual lending increased by 20 percent and card catalog production by 25 percent.

Parker’s innovations earned MU Libraries worldwide recognition and Parker the title “the father of library automation in the United States.”

As the libraries’ collection continued to grow, so did the main library building itself. The northwest wing addition opened in 1936 and the northeast wing in 1960. By 1987, when the south addition opened, the collection had exceeded 2 million volumes.

In 2004, a $1 million gift from James B. Nutter Sr., BS BA ’49, a Kansas City businessman, helped move Ellis Library into the 21st century. The collection had surpassed 3 million volumes, and the online databases available were growing rapidly. Solitary students still could be found studying in the stacks, but more often they were collaborating, using experimental software tools and digital research sources. The gift helped fund the establishment of the James B. Nutter Family Information Commons, a 22,000-square-foot study area featuring more than 100 computer workstations, casual seating and enclosed study rooms.

“We created a learning environment on par with classrooms, laboratories and lecture halls elsewhere on campus,” Cogswell said at the gift announcement. For example, during finals week in May 2015, students gathered in a group study alcove to compile data on predicting automobile traffic flow and speed for construction work zones. At a computer workstation nearby, another student put the finishing touches on his presentation on the Zousim Bicycle Simulator, a bicycle-route-finding project.

**BY THE NUMBERS**

Holdings at University of Missouri Libraries, including Ellis Library and eight branch libraries

- **3.9 million** print volumes
- **1 million** e-books
- **53,400** journal titles
- **7.5 million** microforms

See more photographs of Ellis Library throughout its 100-year history. mizzoumagazine.com/fall2015

† MU Assistant Professor of History Keona Ervin uses Ellis Library resources to do research for a book she is writing about female African-American civil rights leaders in St. Louis.
"This is a space where collaborative learning takes place, where active minds share ideas and explore new outlooks, and where information becomes knowledge," Cogswell says.

**SECURING THE FUTURE**

In an era of unprecedented change, MU Libraries have continued to invest in new learning spaces, innovative programs and enhanced digital resources.

Navadeep Khanal, the libraries’ first e-learning librarian, serves Mizzou Online students as well as on-campus students, faculty and researchers who are using digital resources, services and programming. Khanal works in the newly created e-learning production studio, funded by the Dave Dugan Journalism Endowment, to record workshops and training sessions provided by librarians and other content experts for library users to view online.

Edward McCain, BJ ’79, a digital curator of journalism, is developing new technologies and methods for preserving digital content.

“Although there has been some attention given to preserving print or other analog news content by digitizing it, very little has been done to preserve the born-digital resources, and there is strong evidence that this ‘first rough draft of history’ is disappearing,” McCain says.

McCain collaborates with colleagues at the Reynolds Journalism Institute and MU Libraries, along with a growing number of decision-makers and technologists from the news industry and libraries around the world, to preserve digital collections, data from research and other valuable electronic resources.

“I haven’t met anyone else with the title or function of digital curator of journalism,” McCain says. “This speaks to MU’s strength as a center of interdisciplinary thinking and action.”

**CENTENNIAL CELEBRATION**

The MU Libraries’ centennial celebration kicks off from 11 a.m. to 2 p.m. Sept. 23, 2015, on Lowry Mall. It’s an opportunity to celebrate the entire library system, which includes the Columbia Missourian Newspaper Library, Engineering Library and Technology Commons, Geological Sciences Library, Health Sciences Library, Journalism Library, Mathematical Sciences Library, University Archives, Veterinary Medical Library, and two University of Missouri System Depository facilities.

The celebration will continue throughout the academic year, with an Ellis Library rededication from 3:30 to 5:30 p.m. Jan. 28, 2016, in the Grand Reading Room. The celebration will focus on the accomplishments of librarians throughout history, and Steve Weinberg, BJ ’70, MA ’75, professor emeritus of journalism, will discuss his new book, *A Place of Visions* (University of Missouri Press, 2016), which looks at the history of MU Libraries as well as Missouri authors and books about Missouri.

“In the heart of campus in the center of learning, the MU Libraries are part and parcel of every program, every curriculum, every individual student and faculty and staff member who’s here,” Cogswell says. “The library is the heart of the university.”

**MU Libraries’ Funding Proposal**

Just as James Thayer Gerould recognized the importance of the library and the need for additional resources, Director of MU Libraries Jim Cogswell is issuing a call for more funding. The MU Libraries’ total operating budget of $17.6 million is well below the $32.7 million average of fellow public university members of the Association of American Universities.

“At the moment, we’re unable to do many things our peer institutions are doing just because of that dollar difference,” Cogswell says.

In Cogswell’s first meeting with Chancellor R. Bowen Loftin in 2014, Loftin encouraged the libraries to propose a student fee. Texas A&M University, where Loftin was president from 2010 to 2014, had a longstanding student fee for the libraries, and Loftin told Cogswell the increase in funds transformed the libraries and the institution. Of the 11 SEC university libraries that are members of the Association of Research Libraries (ARL), only two (Louisiana State University and Auburn University) rank below MU in the ARL investment index.

In an effort to better serve students and remain a competitive research library system for the next 100 years, the MU Libraries are asking students to vote for a proposed student fee in November 2015. Students want 24/7 library access and spaces for individual and small-group study.

“The most important resources Mizzou has are its libraries,” says Missouri Students Association President Payton Head. “This isn’t a movement we’re starting only for the students at Mizzou now. This is Missouri’s school. This is for the state. This is for everybody who chooses to come here after I’m here. This is an investment we have to make to secure the future of the university.”

The proposal calls for a student fee of $5 per credit hour in the first year followed by $2 annual increases for five years, which would bring in just under $13 million a year once it reaches its target in 2022. Funding could help address gaps in the available scholarly resources and collections, especially digital collections. It could renovate space and facilities, add two electronic classrooms, establish a digital media lab, and open the first floor for 24/7 access. It could even create new positions and services that support teaching, independent learning and research.

“We’re the only academic division on campus that doesn’t have a fee of any kind,” Cogswell says. “The student library fee will be a game changer for the libraries. But it’s not for the libraries. It’s for what the libraries can’t do now and would be able to do with a fee.”