Ten years ago Caltech and the Sherman Fairchild Foundation dedicated the Sherman Fairchild Library in a forward-looking celebration of change and transition in libraries, given the ubiquity of computers and network technology. From the very beginning, designing a building that could be flexible in myriad ways was a huge challenge. There were the obvious limitations created by bricks and mortar, the issue of incorporating the library operations of six different engineering disciplines, and, of course, accurately predicting the future. The initial vision included not only increasing digital content, but also providing tools to manipulate that content. Students and researchers were expected to be actively engaged in digital authorship.

In the early 1990s, following many years of generous contributions to the Institute, the Sherman Fairchild Foundation aimed to memorialize Sherman M. Fairchild, “scientist, businessman, inventor” at Caltech. A namesake library incorporating the anticipated innovations in libraries seemed appropriate. Fortunately, President Thomas Everhart and Professor Brad Sturtevant, Chair of the Faculty Building Committee, successfully convinced the Foundation that its benefactor’s memory would be well served by such a new library, balanced somewhere between a traditional repository of physical materials and on the cutting edge of “virtual” technologies.

In Internet terms, 1997 was an era ago. Amazon was a baby, there was no Google, no wireless access, let alone a blogosphere. Ten years later we look back and realize that we’ve migrated through a number of different operating systems, CPU boxes of different shapes, and a plethora of portable technologies. Remember the Zip drive?

In the Sherman Fairchild Library (SFL), we have responded to this evolution by offering access to more computers and software tools, always cognizant of the principle of distributing computer productivity software and network access throughout the print collection. It is important to mingle print and electronic resources to encourage integration. The innovation of check-out notebooks in the fall of 1998 added another dimension, and in 2001 wireless access came to the SFL through the generosity of the Lee Center for Advanced Networking. Macs and Linux machines have been added to the inventory, along with newer PCs, to continue the practice of adopting and extending the offerings as technology and the community’s needs and behaviors evolve.

While technology is an undeniable driver, the library’s purpose and look and feel is very much rooted in human needs. As we look over the building with the passage of time, the work of the Committee and the Moore Ruble Yudell architects has stood up well. In large part this is because the human aesthetic was not lost or supplanted by technology. Professor Brad Sturtevant (who passed away in 2000) and the architects were insistent that the interior design be conducive to study and interaction, both with other humans and with digital and print content. At one point, many remember, there was a plan for a fireplace on the third floor. While it did not come to fruition, it served as a symbol, a shorthand, of the kind of comfort and place envisioned for extended reading and study.

One of our goals at this point in time is to remain at the forefront of leveraging digital technology and the new models of publishing scientific material for the benefit of our community.
group study rooms. With support from the Friends of Caltech Libraries, wall-mounted flat screens and controllers were installed to further support group collaboration.

While one naturally focuses on the building and the physical environment to celebrate ten years, the gift of the library included the creation a whole new digital environment that has also thrived and changed the way the library serves the Caltech community and, in fact, the world-wide education and research enterprise. Not long after the Sherman Fairchild Library opened, an invitational conference on scholarly communication hosted on campus concluded that the new network-based technologies certainly allowed the distribution of research content to be decoupled from the peer-review and editorial process. While the scholarly community still struggles with a model to act on that observation globally, the Caltech Libraries implemented an open source digital repository application, Eprints, to provide the platform for Caltech scholarship to be presented via open access protocols to the open Web.

Our resulting digital repository, CODA (Collection of Open Digital Archives), contains Caltech theses, faculty research papers, technical reports, and even books. Since 2003, PhD students are required to submit electronic theses—and the library has a program to scan and mount all Caltech theses retrospectively. Already there are 2,750 PhD theses in the digital archive; of these 2,000 are openly accessible. Faculty members, particularly those in Engineering and Applied Science, have also submitted over 6,000 papers and reports, as well as 21 books in electronic format for digital archiving and reliable presentation via the Web.

This platform has also served other units on campus in bringing their content to the open web. The Caltech Archives uses the CODA to present its Finding Aids and Oral Histories; the Public Relations Office presents the archives of Engineering and Science.

Persistent URLs, digital format migration, metadata, intellectual property, cyberinfrastructure… all these have entered the lexicon of the modern librarian as we face the future of technology and access to scholarship. One of our goals at this point in time is to remain at the forefront of leveraging digital technology and the new models of publishing scientific material for the benefit of our community. All the while, of course, retaining a human touch.

Our community, it turns out, extends well beyond Caltech to anyone around the globe who has interest in the kind of scholarship Caltech generates. In this way, the Sherman Fairchild Foundation gift, combined with the vision of the original building committee, has redefined what it truly means to be a library.

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Visit the library on-line at: http://library.caltech.edu

Library staff and their families gathered at the Los Angeles Zoo, July 2006.