Director, MIT Libraries

Throughout fiscal year 2018, the MIT Libraries continued to evolve our services, resources, spaces, and priorities in alignment with the vision and recommendations of the Future of Libraries Task Force. Major milestones included launching the pre-design phase for the renovation of Hayden Library, reorganizations across several strategic areas of focus, significant progress on technology infrastructure upgrades, and organizing and hosting of a Grand Challenges Summit in Information Science and Scholarly Communication. Other highlights of our work this year included collaborating with the School of Humanities, Arts, and Social Sciences on the class 21H.S01/21H.S02 MIT and Slavery; expansion and innovation in library instruction; launching of a new dynamic brand for the Libraries; enhancements to the Libraries' discovery environment; and a number of new and continuing collaborations across campus and beyond.

Approximately 65 staff members (representing one-third of the total library staff) were relocated to leased space this year, bringing staff and functions that were previously spread out across campus together at Building NE36. We had slightly higher staff turnover than usual this year primarily driven by retirements. We continued to hire new staff with the skills, experience, and education that match our strategic needs and to increase the percentage of staff members from underrepresented minority groups. Finally, the Libraries had another record-breaking fundraising year, raising over $2.25 million in FY2018.

Academic Support

Library services in support of MIT's dynamic research and learning mission continue to evolve in alignment with the needs of departments, labs, and centers and in collaboration with campus partners. In FY2018, special attention was paid to development of the Libraries' strategic priorities, and their exciting implications for academic support.

The Academic and Community Engagement directorate (ACE) noted a number of important changes and activities over the past year.

- Leadership of the ACE directorate transitioned from Tracy Gabridge (now deputy director) to Patricia Flanagan (interim associate director for ACE), and a process was put into place for defining the long-term leadership needs for the ACE directorate.

- The Institute approved the start of a pre-design phase for the renovation of Hayden Library. Renovation priorities within Hayden include user and staff spaces in and around the first and second floor reading rooms. This action set in motion a broad range of planning activities to ensure that capital renewal as well as library program needs are addressed in the most impactful way possible within a defined budget.

- Extensive course instruction and workshops provided rich offerings in many disciplines reflecting new directions indicated in the task force report on the future of research libraries at MIT, growing in both number and attendance.

- A new combined space for geographic information systems (GIS) and data services is planned for the underused first floor level of the Rotch Library stacks, in Building 7A. It will come online this fall. The scope of the former GIS lab is growing with more space and software as well as partnering with research data service staff to bring more visibility to this growing portfolio of services for the MIT community.

- Librarians engaged more deeply with digital scholarship, built alignment of library teaching and learning with the strategic plan, strengthened team skills around leadership and organizational effectiveness, and engaged in research trends by supporting and participating in a wide range of outreach and community engagement. Examples include efforts to create learning opportunities outside the classroom through integration with the Engineering Activists group and student teams like UROPS, innovation, management, and others.

- Other notable ACE efforts included the following:

  - Developing a program for an active learning classroom being planned for Barker Library;

  - Collaborating with the School of Engineering on NEET (New Engineering Education Transformation) to support project- and problem-centered teaching; and

  - Planning and participation in community-driven events, including open science events; mapping, open access, and innovation ecosystem hackathons; Wikipedia edit-a-thons; and an open source software workshop.

Collections

The Collections directorate continued in FY2018 to put into place the structures and systems to advance the vision of the Future of Libraries report. From the Collections perspective, this means building the MIT Libraries' capacity for collecting, stewarding, and disseminating the research output of MIT (i.e., "inside-out" collections). Throughout the past year, we have advanced our ability to collect, preserve, and disseminate MIT's research output, and we have done so through organizational design, restructuring of the Collections budget, and in the successful recruitment of key positions.

Rethinking Key Activities

Acquisitions

In February 2018, the Libraries' acquisitions and e-resources teams were reorganized into a new department, Acquisitions and Appraisal (A&A). With the goal of establishing a holistic approach to library and archives acquisitions, A&A is poised to redefine acquisitions work in academic libraries and to help shape the future of scholarly communications.

Metadata organization and operations

The Metadata and Digital Collections Services Program, a new administrative unit that will address longstanding needs in the MIT Libraries' metadata staffing and operations,

was established in April 2018. This program will harmonize metadata practices in the Libraries to ensure metadata interoperability, and increase the discoverability, accessibility, and impact of the research output of MIT. Its creation represents the recognition that virtually all of the systems and services provided by the MIT Libraries depend on high-quality metadata.

Collections budget structure

A new task force—the Collections Budget Optimization Group—was established early in the fiscal year to assess the collections budget and make recommendations to its structure in order to maximize workflow flexibility and efficiency, empower collections assessment and analysis, and enable better metrics for open access collection investments. Key recommendations include creating a sustainable financial model for purchasing e-book packages; improving selector access to endowed fund annual payout information; and testing a shared fund for nanoscience and technology, with the aim of expanding a fund and thus improving opportunities to purchase digital products in an interdisciplinary growth area. Further recommendations will await the implementation of a new integrated library system, expected within the next few years.

Redesigning and building capacity in the Institute Archives and Special Collections

A reorganization of current staff and positions in late 2017 split the roles of department head and Institute archivist. In addition, two key positions were successfully recruited: archivist for Collections, and program head for Special Collections. The latter will become the MIT Libraries' inaugural lead for Special Collections, which will facilitate the consolidation of several local needs into a central program. Both appointments will begin in summer 2018.

MIT and Slavery

Over the course of academic year 2018, and with encouragement and direct support from the President's Office, MIT embarked on an exploration of the Institute's relationship with slavery. Along with MIT history professor Craig Wilder, archivist Nora Murphy co-taught the course entitled 21H.S01/21H.S02 MIT and Slavery. Collaboration in this Institute-wide conversation aligns strongly with the Libraries' commitment to diversity, inclusion, and social justice; and it demonstrates how our collections can contribute toward advancing and empowering critically important conversations in our community.

Technology

Under the leadership of the new associate director, Heather Yager, the Digital Library Services directorate focused on providing technical expertise, infrastructure, tools, and services in support of the Libraries' mission, and in collaboration with our Libraries colleagues and members of the MIT community.

FY2018 work was guided by the following four priorities:

- Establish a framework for platform-focused technical architecture through development of architecture governance principles, a shift toward an API-first approach to system and service design, and an increased focus on the health and security of our metadata;

- Establish a framework for delivering a balanced set of digital library services to our internal Libraries users and our external scholarly users through the establishment of six service areas, and the development of a user persona framework and a universal user needs checklist;

- Begin addressing deferred maintenance on major enterprise systems through a multiyear series of system and infrastructure upgrades, and assess the current state of our product portfolio in order to bring tools and services into closer alignment with current and emerging scholarly needs; and

- Operationalize our values of diversity, inclusivity, and social justice in day-to-day work through the adoption of new techniques for inclusivity and implicit bias mitigation in hiring, retention, and interpersonal communication, and initial exploration of bias mitigation theory in the context of machine learning.

Highlights of FY2018 accomplishments include the following:

- Built websites to support the course 21H.S01/21H.S02 MIT and Slavery, the Mellon Foundation-funded Grand Challenges Summit, and the MIT Open Access Task Force, and completed first-pass application of the Libraries' new visual identity.

- Developed and implemented tools to support digital thesis ingest and digital archival collections transfer, added a feature to our "Bento Box" discovery environment to present a full view of object records within the Bento interface, integrated the MIT Libraries News feed with the MIT Institute Events Calendar, and implemented Open Access Digital Object Identifier (OADOI) as a content source in our e-resource link resolver, to increase visibility of open access scholarly content.

- Infrastructure upgrades and stabilization:

  - Completed planning and vendor selection for major upgrade to DSpace@MIT (including a move to cloud hosting) toward the goal of system stabilization, and increased efficiency for our metadata teams and more powerful reporting capabilities.

  - Completed initial implementation of new centralized tools for system logging and monitoring so that we can more efficiently troubleshoot problems as they arise.

  - Migrated all of the Libraries' staff computing systems (including file systems and print) from the Libraries' Windows Domain to IS&T's centrally-supported WinDomain.

  - Worked with teams in Collections to respond to campus IP range changes affecting access to licensed collections, and initiated research into alternate methods of authentication so the process can be simplified in the future.

  - Worked with MIT's Audit Division to complete an audit focused on the security and privacy of the Libraries' patron data, resulting in a set of recommendations for use in FY2019 and FY2020 to bring greater security and transparency to data management practices.

- Began new collaborations with:

  - MIT Media Lab, partnering with the Learning Initiative on the Knight Foundation-funded Public Library Innovation Exchange;

  - MIT Press, partnering to evaluate and implement a suite of research tools from Digital Science, including Overleaf Pro, Symplectic, and initial exploration of Dimensions for research discovery and intelligence;

  - MIT Museum, forming a community of practice related to the use of the International Image Interoperability Framework; and

  - Johns Hopkins University, exploring initial development of Public Access Submission System—a tool focused on simplifying the manuscript submission process for publishing and depositing to repositories.

Resource Development

Libraries' fundraising in FY2018 was robust, with the year's closing total of $2.25 million significantly surpassing the $1.5 million goal. Notable gifts include $85,000 for the 24-Hour Challenge; $100,000 for the Institute Archives and Special Collections; $150,000 (three-year pledge) for the Lewis Music Library; $250,000 for the Women@MIT project; and two commitments of $450,000 and $1,000,000, designated for the Hayden renovation.

In addition to individual fundraising, grant and foundation support has increased as well with the addition of Suzanne Wallen as the Libraries' grants development officer. Working with both Libraries and Press staff to identify opportunities and submit proposals, Wallen helped secure more than a half-million dollars for the Libraries and Press. Much of this progress would not have been possible without the Libraries fundraising staff working closely with the central Resource Development office and the Foundation Relations office fundraisers who manage Libraries donors.

There are also several nonmonetary highlights to share. The MIT Libraries was featured in the fall issue of *Spectrum*; included as an exhibit at both the Boston (September) and Seattle (February) Campaign Road Show events; and participated in the Women's unConference (March) hosted by the Alumni Association. The Libraries' exhibit *China Comes to Tech: 1877–1931,* on display in the Maihaugen Gallery, received requests from more than a dozen fundraisers across the Institute seeking donor meetings with the curator, Professor Emma Teng, as cultivation and stewardship opportunities. Director of Libraries Chris Bourg continues to be highly sought after internally and externally to speak about the future of libraries.

Sponsored Research

The Libraries' Program on Information Science—led by Micah Altman, the director of research—was active in a number of areas: information privacy (Sloan Foundation, Microsoft Research, and Harvard University); transparency—open data, open government, and scientific reproducibility (University of Florida and the Instituto Tecnológico Autónomo de México Public Mapping Project); enhancing teaching and

learning (Technical Education Research Center and Landmark University); digital stewardship and preservation (National Agenda for Digital Stewardship); and accessibility and inclusion in the design of library information systems (Institute for Museum and Library Services).

Of particular note in the area of scholarly communications was the MIT-organized and hosted week-long Grand Challenges Summit in Information Science and Scholarly Communication, supported by the Andrew W. Mellon Foundation. It convened experts from across disciplines and sectors, aiming to identify critical problems in information science that are solvable within 10 years, and which have broad implications across the scholarly community.

Going forward, the program expects to transition to a new name: Center for Research in Equitable and Open Scholarship. We envision developing an interdisciplinary research center that fosters a large, thriving community of scholars, projects, and fellows; incubates a wide portfolio of research, demonstrations, and start-up-like initiatives; is globally recognized across multiple fields; and hosts a steady stream of speakers, workshops, conferences, and other events. The ultimate purpose of this work will be to promote and inform an ecosystem for research information that not only is scalable, but also supports open and equitable access to information; is based on a transparent and trustworthy platform; and supports widely inclusive participation in knowledge creation and use.

Administrative

Community Support and Staff Development

- MIT Reads continued in its second year as a very popular program aimed at the MIT community. The support team of library staff volunteers was expanded to provide greater structure around several aspects of the program, including soliciting book choices, author events, discussion groups, and marketing. Community discussions were held in conjunction with each of the two titles.

- Staff development activities continued to focus on the theme of creating a culture of learning, in which learning is continuous, decentralized, shared, and focused on impacts. Notable specifics include the following:

    - Staff training workshops and events increased by 34%, with 27 staff members serving as organizers or presenters. Key themes that dominated many of these activities included managing change and transition; and embedding diversity, inclusion, and social justice values in the organization;

    - An internal staff mentoring program was launched;

    - Staff sharing events grew by more than 50%; and

    - The theme of our Around the Institute series was disability services.

Human Resources

- The overall percentage of underrepresented minority library staff members rose again in FY2018, from 16% to 17%. The steady rise began in FY2015, when the figure stood at 13%.

- Staff departures more than doubled in FY2018 over FY2017, increasing from eight to 19, representing 11.5% of the total staff.

- The FlexWork Pilot Project begun last summer in the Technology directorate extended through the first half of the fiscal year, and was completed successfully early in 2018. Many library staff throughout the organization whose jobs are suited to remote work have taken advantage of this option, on either an occasional or regular basis.

- Christine Moulen '94 library systems manager since 1997, passed away in November, following a long illness. A generous and beloved colleague to a whole generation of library staff, her presence is sorely missed. The Libraries created an Infinite Mile Award in her name to honor her memory—the Christine Moulen "Good Citizen" Award.

Marketing and Communications

- The rebranding project, begun in 2017 with the design consultancy Pentagram to create a new visual and verbal identity for the MIT Libraries, was largely completed in FY2018. The result is a truly dynamic brand—algorithmically generated by code—that showcases the Libraries as an open, connected, and participatory network. The new identity was first revealed to the public in January 2018, and proceeded to be implemented throughout the Libraries' virtual and physical spaces and assets for the remainder of the fiscal year.

- As a follow-on to the rebranding project, the Libraries also redesigned its semiannual print newsletter, Bibliotech, using Pentagram to incorporate the new branding.

- Two video interns were hired over the course of the year to produce more than 15 short videos or video assets.

- The Libraries' social media presence continues to grow on Facebook, Twitter, Instagram, and YouTube.

Facilities

There was a great deal of space change activity in the Libraries over the course of FY2018. The most significant projects include the following:

- As mentioned above under Academic Support, the Hayden Renovation Project moved forward, progressing to the pre-design stage as of this writing. The architectural firm KVA has been chosen for the renovation project. There are a number of approval gates in the months ahead, and more fundraising to be completed, but we are encouraged to see this project reactivated.

- Approximately 65 staff moved this summer to an MIT-leased property in Kendall Square (105 Broadway, now MIT Building NE36), vacating Building E25 (CubeSpace), Building 14E-210 (Big Room in the Hayden Library), as well as a few additional staff from other library locations around campus. This represents an enormous improvement of workspace for these staff, as well as critical enabling for future renovation plans in Building 14, Hayden Library.

- Also referred to above, Building 7A (the first floor stacks of Rotch Library), is being transformed into a GIS and research data lab, which will include teaching space as well as office space for the five staff who serve those programs. It will also include a virtual reality alcove.

- The Music Audio Lab was completed in the Lewis Music Library, and is available for use by all members of the MIT community.

- Hayden mezzanines on both the first and second floors were cleared of empty book stacks, upgraded with paint and carpeting, and furnished with a broad range of desks and seating options. They have become very popular study spaces.

- Barker Reading Room acoustics were improved by the installation of acoustical panels and a sophisticated audio system, the result of a generous donor gift.

- Windows in Building 10 are being replaced as part of a large capital renewal project in central campus. This has impacted both public and staff spaces in Barker Library.

Chris Bourg
Director of Libraries