MIT Museum

Highlights of the year include the opening of *Imagining New Technology: Building MIT in Cambridge*, the MIT Museum's contribution to the institute's centenary celebrations, and the successful delivery of the 10th annual Cambridge Science Festival. A new multiyear collaboration with Nord Anglia Education has secured substantial new sponsorship for the festival for a period of not less than three years. Total attendance at 265 Massachusetts Avenue for FY2016 was 125,479. Contributors to the rise in visitation were milder winter weather, the MIT Open House on April 23, 2016, the continuing popularity of the exhibition *Images of Discovery*, reviews and exposure from the changing exhibitions in the Kurtz Gallery, and increased participatory opportunities for visitors, such as the hands-on activities offered in the Idea Hub.

Collections

One of the most significant milestones for the collections team during the past year was curating *Imagining New Technology: Building MIT in Cambridge*. The collections team also supported the creative efforts of the entire Institute by contributing to six documentary videos and a feature article in *Technology Review;* providing images to schools, departments, and organizations across campus; and reviewing text for multiple publications. In addition, to mark the 25th anniversary of the fall of the Berlin Wall (November 9, 1989), the museum curated *Public and Private: East Germany in Photographs by Ulrich Wüst* (mounted in AY2016), engaging faculty and students from several area universities and the MIT School of Humanities, Arts, and Social Sciences, with whom we featured two faculty research initiatives, and organized an East German film series and a roundtable on East German photography.

The Collections team completed digitizing and cataloging the Martin Klein Collection and the Imre Halasz Collection, and has begun cataloging the Israel Lord Collection with a grant from an anonymous donor. The Hart Nautical Collections will be the primary beneficiary of a \$50,000 grant awarded to MIT Professor Jeffrey Ravel of the History Department by the National Park Service National Maritime Heritage Program. These funds will support the ongoing project to make the 4,000 engravings, drawings, paintings, and prints from the Clark and Forbes Collections accessible for teaching and general research both in person and online.

The team oversaw a major upgrade to the sprinkler systems at the Museum's off-site collections research and study facility and has begun clearing the space to permit the installation of new shelving. Through a special request from the President's Office, the team arranged the loan of six of Claude Shannon's ingenious mechanical toys to Bell Laboratories for a symposium marking the centennial of Shannon's birth (April 28 and 29, 2016). The pilot phase of the Herreshoff Legacy Project is now underway and the team is building a new imaging facility to support digital imaging of large plans, maps, and drawings. The team supported two interns, three longtime and highly skilled volunteers, and multiple consultants; provided numerous museum programs, workshops, and taught STS.050 History of MIT, as well as participated in international conferences and other collaborative professional endeavors with museums, scholars, journalists, and researchers around the world.

MIT Museum Studio and Compton Gallery

The Museum Studio continues to provide MIT students with opportunities to practice expressions of art, science, and technology. MIT students enrolled in STS.035 Exhibiting Science, were fully engaged in an installation of their creation on the theme of the Infinite Corridor. This theme was manifest through use of select data illustrating facets of student life at MIT, which was incorporated into a continuously changing display of a three-dimensional LED wave graph. Collaboration on data gathering, set design, controller development, actuator engineering, and implementation challenged the students with creative and technical problem solving. Throughout this process, they were supported by the Museum's exhibitions team. The resulting work was on display in the Compton Gallery through the summer of 2016.

Exhibitions

Highlights of the visitor exhibition experience at the Museum include:

- *Imagining New Technology: Building MIT in Cambridge,* which opened on February 29, 2016, with a community-wide celebration to launch the centennial of MIT in Cambridge, led by President Reif.
- Holography: Dimensions of Light, January 2016 and ongoing.
- *Glass: Between Liquid and Solid,* an exhibition of virtual glass software from the Glass Lab.
- Three-dimensionally printed glass prototypes from the Media Lab, that opened in February 2016.
- *Public and Private: East Germany in Photographs by of Ulrich Wüst,* which opened in the Kurtz Gallery on September 5, 2015.
- Building 10, an installation of prints of architectural drawings of the Great Dome, on display in the Compton Gallery hallway cases in Room 10-150.
- An installation of Herreshoff engineering prints and photographs graces the second floor ramp, providing insight into the range and richness of the Herreshoff Collection that will be featured in a premier exhibition of Herreshoff's pioneering legacy planned for 2018.
- A redesigned MIT student showcase, Process and Prototypes, that opened in October 2015, with 13 student projects displayed in this forum for experimentation, with new work being added on a rolling basis.
- Staff have reorganized the back-of-house exhibition preparation facilities, including exhibition maintenance, safety, and energy efficiency processes.
- Extensive planning occurred to secure exhibitions for 2017 through 2019, including contractual negotiations for a traveling exhibition on the art and technology of Polaroid.

Education and Public Programs

The Programs team offered 600 high quality, engaging programs for more than 27,000 visitors. A number of these programs took place during Massachusetts public school vacation periods, overlapping with National Engineers Week and the Cambridge Science Festival. The Museum's growing pool of volunteers, which includes MIT graduate students and alumni, provided 60 of the year-round offerings for visitors that include weekend demonstrations and gallery conversations, and teams of skilled summer interns provided 40 engineering challenge opportunities for families and student groups. This year, a new Saturday series of programs was initiated ("Fall into Science Saturdays" and "Spring into Science Saturdays") and proved a useful platform for MIT student groups, including the RocketTeam, Biology Undergraduate Student Association, Beekeepers, ClubChem, and Undergraduate Women in Physics, to offer hands-on learning experiences to visitors and to share their enthusiasm for the content. Also new this year, the Programs team produced a weekend celebration of mathematics and art— Math MoSAIC Fest—in collaboration with the Bridges Foundation and the Mathematical Sciences Research Institute. Additional extended learning experiences for more than 7,000 families and general Museum visitors were provided through the Idea Hub, which continues to be a successful, MIT-centric "maker space."

The museum created many programs specifically for adult audiences, including gallery talks and tours, a science writing workshop, movie nights, science-based speed-geeking events (e.g., Fright Factors, Bacterial Bonanza, and Dimensions of Doctor Who), topical explorations such as the process of biomedical innovations or building communities through social media, and evening discussions about synthetic biology (e.g., Re: Making Life). Experimenting with different program formats has helped the team attract new young adult audiences to the Museum, which is a primary goal.

Middle and high school students were another high target audience and in FY2016, more than 4,200 students participated in our interactive, on-site workshops. Recognizing that many local groups have difficulty gaining access to our educational programs, the Museum waived fees for a number of Cambridge and Boston student groups to provide 14 workshops free of charge. Admission to the Museum was waived or discounted for a number of additional groups, enabling over 800 students from underserved groups to explore the galleries.

The Museum's annual, large-scale programs continue to expand in content and attract larger audiences. The biannual Girls Day programs—this year focused on materials science and chemistry (November 2015), and mechanical engineering and design (March 2016)—attracted over 800 attendees for each and highlighted the work of numerous MIT professors and students who participated in short talks, demonstrations, and workshops. Our giant Rube Goldberg event, the Friday After Thanksgiving Chain Reaction, drew 26 teams with unique contraptions and 1,533 enthusiastic spectators to Rockwell Cage for the 18th year of this program.

This year, the Programs team has put an emphasis on developing new connections with groups within MIT and the greater Boston area, and strengthening the collaborations established over the past four years. The team has worked to expand the breadth of the

Museum's audience and is confident that these efforts will produce long-lasting benefits to MIT and the Museum.

Cambridge Science Festival and Science Festival Alliance

The Cambridge Science Festival celebrated its 10th anniversary in 2016 by welcoming nearly 90,000 people to more than 180 events over ten days in April. In recognition of the festival's first event 10 years earlier—a huge chain reaction contraption built by MIT students—a statewide chain reaction was built by 10 teams in 10 communities from the Berkshires to Cape Cod. The reaction flowed into a standing-room-only event that featured governor Charlie Baker, MIT dean of engineering Ian Waitz, and several other highly talented scientists. The festival's 10 years of growth was honored at several events and was evident by the fact that 82 different venues hosted events and a record \$740,000 was raised.

In January, the Biogen Foundation renewed its three-year funding for Science on the Street, enabling the mobile unit to continue to deliver science activities to community groups throughout Massachusetts. In May, Nord Anglia Education entered into an agreement whereby the Cambridge Science Festival team provides science and math enrichment to Nord Anglia's 42 schools worldwide and invites 50 Nord Anglia teachers to MIT for a week of professional development each summer.

In FY2016 the Science Festival Alliance (SFA) reported on the activity of its member festivals, with a total of 45 celebrating in 2015, collectively reaching almost two million people at 4,250 events. The SFA concluded work on phase one of the Science Live project with the publication of a landscape study of live public science events in the United States and the United Kingdom. Phase one of Science Live was funded with a one-year planning grant from the Wellcome Trust. The SFA continued to manage the Just Add Science program, supporting new festival activity throughout the United States that "reaches people where they are." Just Add Science is funded by a gift from the Simons Foundation. The SFA organized the fifth International Public Science Events Conference in June 2016, drawing more than 125 attendees to MIT. At the conference the SFA announced the launch of the Science Festival Accelerator, funded by a \$350,000 grant from the Alfred P. Sloan Foundation.

Administration

The New MIT Museum at Kendall

During the summer and fall of 2015, we hosted consultation meetings that convened a mix of stakeholders for the new MIT Museum in Kendall Square, including members of the MIT community as well as the Cambridge community. They provided good insights about the aspirations and needs that the new Museum could address. Museum staff have visited three museums that are newly built or significantly expanded to learn from colleagues at each about their experiences with these projects. Staff are now working intensively with MIT Facilities and our architects Höweler + Yoon to plan all aspects of the new Museum, which has a projected occupancy date of late 2020.

Development

Fundraising activities have focused on the new Museum as well as our current work. In all of this we have been expertly assisted by Erin Genereux, MIT arts development officer. Some gifts to note include \$1 million for the new Museum from a family foundation, and \$175,000 from three individuals for the Herreshoff Legacy Project.

The Patrons Program recognizing those who give \$10,000 or more annually grew to 15 donors, and we thank each of them for their generosity: Steven Cherny '87, Ronald '64 and Barbara Cordover, Brit d'Arbeloff '61, Mark Epstein '63, Gregory Foundation Trust, Daniel Grunberg '82, Ulf '60 and Elizabeth Heide, Martin Klein '62, F. Thomson Leighton '81, Elizabeth Goldring Piene, Amar and Deepika Sawhney, Phillip and Ann Sharp, Harvey Steinberg '54, Anne Street '69, and one anonymous.

The AY2016 Science on Saturday program presented at Kresge Auditorium by Todd Rider in collaboration with the Museum received a \$25 thousand grant from Akamai and a \$25 thousand gift from an individual donor.

Retail and Functions

The MIT Museum Store continues to operate as a highly successful business at 265 Massachusetts Avenue, seeing only a slight decrease from FY2015 sales despite lengthy vacancies in key positions during FY2016. The Museum Store has initiated a corporate gifts program, marketing gift opportunities to event clients at the MIT Museum and other departments within MIT. This new program has been profitable, and the Museum Store will continue to explore additional untapped revenue opportunities.

The Functions business served 69 clients, 75% of them were MIT affiliated and 25% external, including local partners such as the Cambridge Historical Commission and the Central Square Business Association.

Public Relations and Marketing

Several initiatives were spearheaded this past year in acknowledgement of changes in communication, and of data about museum visitors. A new website with a content management system will permit visitors easier and better access to the information they need on a variety of devices. With input from all departments, the revised website (launched in July 2016) will better showcase collections and exhibitions, in addition to the many programs, research, and other services offered by the museum to the public and the MIT community. The Museum published a graphically illustrated guide which recently won honorable mention from the New England Museum Association, and it created three new yellow chairs embedded with lights that will continue to draw attention to the sculpture of Arthur Ganson, as a complement to his mesmerizing sculpture "Cory's Yellow Chair."

Personnel

Jesse Billingham resigned in August 2015 as Science on the Street coordinator to move to Colorado. Susan Timberlake was hired in September 2015 for the new position of exhibit developer. Her experience includes nine years at the Boston Museum of Science as an

exhibit and content developer and project manager; and three years at the Education Development Center as a curriculum developer. Claudia Majetich, store manager since 2001, retired in November 2015. Claudia grew the store into the successful operation it is today, and she planned and launched the online store. Vanessa Muskie was hired in January 2016 to succeed her. Vanessa previously worked for 10 years at the John F. Kennedy Library and Museum, where she launched and managed their e-commerce site, alongside managerial responsibilities for the MIT Museum Store. Terri Robertson resigned in August 2015 as assistant to the store manager to take a new retail position. Julia Trogani was hired as the new assistant to the store manager in May 2016. Julia has a number of years of specialty retail experience that includes e-commerce. Allan Doyle, director of technology since 2007, resigned in December 2015. Allan planned and oversaw the growth and development of technology in the Museum, from interactives in exhibitions, to the many websites we have for discrete projects. Emma Westling joined the staff in April 2016 as manager of exhibitions. She previously worked at the Boston Museum of Science for seven years in various exhibitions roles, and also has collections and conservation experience.

Very sadly, our longtime manager of exhibitions and longest serving staff member, Donald Stidsen, died suddenly in October 2015. Don carried out his work with flair and distinction for 33 years. He installed or supervised over 300 MIT Museum exhibitions and displays, many illuminating the work of renowned artists, engineers, and designers, as well as MIT faculty and students. A fine tribute to Don was published by the MIT News Office.

John Durant Director