

## MIT Museum

In FY2014 the main [MIT Museum](#) location at 265 Massachusetts Avenue attracted 123,750 visitors, a 13.6% increase over FY2013 and an all-time record. A number of factors contributed to this growth, including the popularity of the kinetic sculpture theme chosen for special exhibitions and programs and the museum's participation in the Bank of America Museums on Us program, which brought in many new visitors on the first weekend of every month. The museum also collaborated with the Highland Street Foundation to host Free Fun Friday on June 27, 2014, when more than 2,000 visitors poured through the galleries, experiencing exhibits, building paper skyscrapers and cup towers inside, and building bottle rockets outside. The museum made considerable progress on its plans to engage MIT students more closely in community outreach: the MIT Museum Studio was relocated to the Compton Gallery (10-150), from which it supported undergraduate and graduate student work that was showcased in two exhibitions opening immediately before commencement, and large numbers of graduate students were recruited as volunteers in programmatic activities. The museum's statewide outreach program, Science on the Street, took advantage of its new mobile unit to deliver 34 events with the help of more than 100 volunteers. Last but not least, following a lengthy review process, the museum was reaccredited by the American Alliance of Museums in October 2013.

### Collections

The collections team engaged in a significant number of projects, contributing to all of the museum's endeavors. The team's individual and collective goal continues to be increasing and improving accessibility to the more than one million items in the collections for the benefit of the MIT community, researchers, and the general public. The most significant achievements of the past year toward that end are highlighted below. Of particular note is the collective planning effort made by the entire team to develop a detailed vision for future space, equipment, and personnel requirements. This new vision for MIT collecting in the 21st century helped support the development of a concept plan for proposed renovations to our existing facility as well as more ambitious goals for the future.

### Exhibitions Highlights

The collections team curated or contributed to the installation of 10 different exhibitions and temporary displays in the past year. In addition, the curator of architecture and design was responsible for curating and installing four exhibitions in the School of Architecture and Planning's Wolk Gallery. A major planning effort is now under way for the development of an international traveling exhibition about the life and work of Nathaniel Herreshoff, Class of 1870, one of the world's premier yacht designers and a major American entrepreneur. *Berenice Abbott, Photography and Science: An Essential Unity*, the MIT Museum's acclaimed exhibition featuring the work of pioneering photographer Berenice Abbott, traveled to the Multimedia Art Museum in Moscow, Russia. During its two-month display, more than 60,000 visitors came to see this unique collection of images generously donated by Ronald A. '54 and Carol Kurtz.

## Acquisitions and Loans Highlights

The Collections Committee approved 32 accession recommendations in FY2014, and there were 50 new loan agreements (out of a total of 150, including 35 campus loans). The following are some of the highlights.

- The Architecture and Design Collection acquired nearly 4,000 drawings and plans from the noted Boston architecture firm Kallman McKinnell & Wood.
- Martin Klein '60 donated a major collection of archival records and artifacts documenting his career achievements as a key developer of side-scan sonar and related ocean sensing technology to the Hart Nautical Collections.
- Bartlett S. Dunbar donated 300 plans for yachts designed by his father, F. Spaulding Dunbar '26, as well as an extremely rare small single-cylinder steam engine designed by Nathaniel G. Herreshoff, Class of 1870.
- The Kavli Institute for Astrophysics and Space Research transferred five key artifacts representing each of MIT's pioneering space research instruments to the Science and Technology Collection.
- Unusual outgoing loans included the Voyager PLS instrument to the Cultural Centre for European Space Technologies in Vitanje, Slovenia; three cavity magnetrons to the Gerald R. Ford Presidential Library and Museum; professor Claude Shannon's Rubik's Cube machine to the Liberty Science Center for an international traveling exhibition; several cameras to the new Polaroid museum in Las Vegas; and a myriad of beaver-related memorabilia to the Campus Activities Complex for a display commemorating the 100th anniversary of MIT's mascot.

## Cataloging and Conservation Projects

The Imre Halasz Trust announced a gift of \$72,000 to support the digitization of the papers, drawings, photographs, and models of late professor Imre Halasz (Architecture). With a generous gift from Karen and Greg Arenson '70 and their classmates and additional support from MIT president emeritus Paul Gray, the museum has raised nearly \$35,000 to support the conservation, digital transfer, and restoration of Richard Leacock's 1969 film *November Actions*. We are collaborating with the Zentrum für Kunst und Medientechnologie in Karlsruhe, Germany, to re-create the 1970s artistic installation *Centerbeam*, which will be displayed at the 500th-anniversary celebration of the city of Karlsruhe and at museums in Europe.

## Public Presentations and Publications

Kurt Hasselbalch, curator of the Hart Nautical Collections, collaborated with professors Jeffrey Ravel and Anne McCants to digitize approximately 150 historic marine prints for use in 21H.106 *The World: 1400 to Present*. He gave a talk about plans for the Herreshoff Legacy Project at the International Congress of Maritime Museums in Portugal, as well as special presentations to the New York Yacht Club, the Eastern Yacht Club, and

*WoodenBoat* magazine's annual boat show at the Mystic Seaport Museum. Gary Van Zante, curator of architecture and design, was a visiting professor in American studies and history of photography at the University of Paris 7 Diderot in October 2013. He hosted the biannual conference of the International Confederation of Architecture Museums, North America; served on the advisory committee for the Handel and Haydn Society Bicentennial Celebration; and gave talks at the Culture/Industry Conference in Paris and Cornell University's Johnson Museum. Deborah Douglas, curator of science and technology, presented talks related to all aspects of the Science and Technology Collection at the Society for the History of Technology, the History of Science Society, the New England Museum Association, the IEEE Boston Section, the American Institute of Aeronautics and Astronautics, and the Transportation Research Board.

### **Behind the Scenes Highlights**

The collections team responds to an average of 1,000 inquiries annually, ranging from simple requests for a portrait to accompany an obituary to complex collaborations with PhD students, boat restoration teams, and MIT spinoff entrepreneurs experimenting with using plans from the collections to make reproductions via 3D printers. Extensive support was provided to researchers from the School of Architecture and Planning for the forthcoming campus guide to be published by the Princeton Architectural Press. Special media requests included features by CNN, *BILANZ* (a German business magazine), *Nature*, *Arrive* magazine (Amtrak's Acela publication), and WETA public television.

The collections management project begun in 2012 to migrate more than half of the collections to the museum's off-site storage facility continues. The team has now completed the third year of a five-year effort.

The most recent step in the transfer of the John G. Alden plan collection (donated in 2008) was completed in January, when the Hart Nautical Collections assumed responsibility for the management of the Alden website and design and print services for Alden boat owners.

The collections team worked with 10 undergraduate or graduate student interns and four long-term volunteers on projects ranging from providing captions for more than 200 portraits of Harold Edgerton and preparing condition reports for incoming and outgoing exhibition loans to cataloging collections such as Robert Mann's biomechanics artifacts, professor Minor White's Creative Photography Lab collection, School of Architecture and Planning student thesis drawings, and Jackie Casey's posters.

### **Undergraduate and Graduate Teaching**

MIT Museum director John Durant; Seth Riskin, manager of emerging technologies and holography/spatial imaging initiatives; and Allan Doyle, director of technology, offered their project-based course STS.035 Exhibiting Science in the spring term. Also during the spring term, Deborah Douglas taught her popular class STS.050 History of MIT.

This year saw significant development of the MIT Museum Studio in terms of its facility, functions, and student engagement. Key to this development was the studio's move to the Compton Gallery (10-150), expanding the function of this space to include student project works and displays. The studio's new location at the center of the campus has led to many advances in its program and resources, including the following:

- An enlarged community of students
- An enlarged network of faculty, researcher, and technical staff advisors
- 24/7 access for participating students
- Advancement of the STS.035 Exhibiting Science course
- Association with and advising of a new student club, the Engineering Design Group for Exhibitions (EDGE)
- Alliance with the Edgerton Center, sharing complementary knowledge and resources
- Increased visibility and accessibility for the MIT community and visiting public
- Expanded engagement in academic and extracurricular programs and projects

Previously operating out of a small room in the main museum with limited capacity, the studio lacked adequate resources, visibility, and accessibility for students. An alliance with the Edgerton Center formed around the new EDGE student club led to the club having a home in the studio and the studio having access to Edgerton Center facilities and technical support. With this increased support structure and the compatibility of studio activities and the Compton location, the MIT Museum committed to locating the studio in the Compton Gallery for a pilot period beginning in November 2014.

STS.035 was based in the studio during the spring semester. The course took kinetic sculpture as its theme to parallel the museum's "Year of Kinetic Art" and *5000 Moving Parts* exhibition, generously funded by the Center for Art, Science & Technology through the Visiting Artists Program. Three of the artists represented in *5000 Moving Parts*—Arthur Ganson, Ann Lilly, and John Powers—mentored the class. The coursework spanned art and engineering design and production, and eight students from varied courses of study created individual kinetic sculpture projects for exhibition at the main museum.

Also during the spring semester, the studio supported the development of 11 student projects for the museum's exhibition *Inventions: 2014 Student Showcase*. Studio staff worked with students on the conceptual, communication, and technical aspects of their projects for long-term presentation in the MIT Museum environment. The effort also drew on the expertise of the museum's exhibitions team and other departments. With generous funding provided by the Council for the Arts at MIT, *Inventions* opened on May 29 and has been very popular with visitors.

In summer 2014, the studio and the Compton Gallery will undergo renovations to make the space more fit for its purpose. Funded by MIT, and with architectural design services provided by Howeler + Yoon, the renovation aims to provide visual and functional

organization for the studio. The studio and the gallery will house a central workshop/studio space flanked by a teaching space and a gallery showcase that will be visible from the Infinite Corridor. The renovated MIT Museum Studio and Compton Gallery will reopen at the start of the 2014 fall semester.

## Exhibitions

The strategic plan for the museum sets out three high-level priorities, the first of which is to “enhance the quality of the visitor experience.” Two exhibition-related strategies fall under this priority: “incorporating more interactive exhibits into the galleries” and “increasing the involvement with the MIT student body.” Over the past year, substantial progress has been made in achieving these goals through new exhibitions now open on the museum floor as well as plans for future exhibitions.

*5000 Moving Parts*, an exhibition of contemporary kinetic art, opened in November 2013 in Peterson Gallery B, the largest museum space dedicated to changing exhibitions. At the intersection of art and engineering, the exhibition was developed by the museum working with guest curator Laura Knott. The exhibit, which contains several interactive artworks, has received considerable press and a *Yankee* magazine “Best Art for Geniuses” editors’ award. In addition, we created the complementary Process Gallery to involve visitors in the creative process of three of the artists featured in *5000 Moving Parts*. In this gallery, visitors can trace the artistic and engineering development of one of the works, build their own sculptural additions to another model, experiment with the effects of changing the speed of artworks, and engage in a variety of other hands-on activities directly connected to the artists’ work.

*Inventions: 2014 Student Showcase*, which opened in May, presents nine student projects drawn from an open call for proposals from across the Institute. The projects ranged widely in topic and department of origin and represented both graduate and undergraduate work, team efforts and individual visions, thesis and course projects, and projects undertaken out of personal interest. Working with the exhibitions team and the Museum Studio, students further developed their projects for exhibition—a learning experience in its own right. In addition to strengthening our involvement with MIT students, many of the works included in the exhibit provide interactive experiences for visitors. The projects are showcased in Peterson Gallery A along with works produced by students from STS.035. We plan to continue this student initiative in the coming year.

Other exhibition openings included *Stanley Greenberg: Time Machines* (September 13, 2013, through March 16, 2014) and *Daguerre’s American Legacy: Photographic Portraits (1840–1900) from the Wm. B. Becker Collection* (April 18, 2014, through January 4, 2015) in the Kurtz Gallery for Photography and a *Sampling MIT* exhibit kiosk featuring the student video project “MIT+K12 Videos,” a collaboration with the Office of Digital Learning.

In addition, significant behind the scenes planning work is in progress for future exhibitions. The Herreshoff Legacy Project is in the conceptual design phase. Planning is under way for the next presentation in Peterson Gallery B, which will bring together the work of three MIT-affiliated photographers—Harold Edgerton, Berenice Abbott,

and Felice Frankel—in a unique and interactive exhibition that challenges visitors to compose their own photographs. Planning is also ongoing for additional *Sampling MIT* and Kurtz Gallery exhibitions and for longer-range projects including gallery upgrades, architectural renovations, and a collections gallery. We began offering two semester-long internship opportunities, one focused on exhibit development and one on visitor evaluation, and to date we have hosted interns from Brown University, Boston University, and Bentley University.

In all, more than 6,200 square feet of exhibitions opened this year, representing changes to well over half of the museum's second floor galleries. These changes offer a refreshed and dramatically more interactive visitor experience and a new focus on student work. We are increasing the capacity of the exhibitions team and are well under way on exhibition planning that will sustain this momentum in the coming year.

### **Education and Public Programs**

Over the past fiscal year, the programs team focused on increasing the number of educational offerings and public programs in the museum, attracting new visitors, and broadening our audience. In addition to our popular annual programs including the Second Fridays series, the Friday After Thanksgiving Chain Reaction, Soap Box discussions, and public school vacation week activities, the team created new in-gallery programs for adults and families, began development of two new educational workshops for middle and high school students and their teachers, reached into the Cambridge and Boston communities to grow our STEAM (science, technology, engineering, art, math) connections, and more broadly connected with MIT community members regarding their on-campus education, outreach, and design activities.

During FY2014, the programs team offered 189 educational workshops to over 4,000 middle and high school students, guided more than 900 visitors on 39 tours of the museum, and reached an additional 4,850 weekend visitors through volunteers trained in hands-on, in-gallery science and technology demonstrations. In total, the programs team produced 490 education and public programs for almost 23,000 people.

To support our programmatic efforts, we initiated a new public space—the Idea Hub—for visitors to explore MIT-based creative technologies such as MaKey MaKey, 3Doodler, sewable and paper circuits, and LEGO Mindstorm EV3s. We anticipate that this new workspace will provide us with many more opportunities to collaborate with members of the MIT community.

We continue to expand the museum's suite of educational workshops and are well under way in creating an advanced robotics workshop to complement our very popular Mindstorms NXT program. In addition, in support of the annual Friday After Thanksgiving Chain Reaction, which we firmly believe is an accessible way for students and families to design, prototype, and present their creations in a supportive environment, we are developing a kinetic art and engineering workshop for middle and high school students to explore STEAM connections in the museum classroom as well as in galleries. We received a two-year grant from the Brabson Library and Educational Foundation to enable us to do so. Our new initiative to offer public programs leading

up to the Chain Reaction likely produced the largest number of participating teams and greatest audience yet, with 30 teams and over 2,000 people in attendance on November 29, 2013.

Programs team members are excited about their capacity and potential to reach an ever-widening audience. We look forward to continuing to develop innovative programs such as Breathing Movement Into Art, Science of Soccer, and American Sci-dol and collaborating with an even greater number of MIT partners in the future.

### **Cambridge Science Festival and Science Festival Alliance**

The Cambridge Science Festival and Science on the Street continued to experience significant momentum in FY2014. In addition, the festival team took on a new program. The Office of Engineering Outreach Programs transferred the MIT Science of Baseball Program to the Cambridge Science Festival staff to capitalize on the festival's extensive networks in underserved communities and experience delivering exciting, unexpected science, technology, engineering, math (STEM) activities to non-STEM-inclined audiences. This program will build on the festival's contacts with MIT students and alumni by using them as coaches and instructors. It also has a synergy with one of the festival's biggest sponsors, the Biogen Idec Foundation, which underwrites a television show for middle school baseball fans and uses the MIT Science of Baseball Program staff for content and demonstrations on the show.

The content and number of events in the 2014 Cambridge Science Festival were the strongest of the eight annual festivals to date. The 2014 festival featured 167 events over 10 days in April and attracted more than 50,000 visitors. On April 23, during the spring public school vacation week, MIT labs, centers, and departments opened their doors to the public for a new event, Across MIT, and families flocked to the campus. Tours included the Wright Brothers Wind Tunnel, the nuclear reactor, D-Lab (Development through Dialogue, Design, and Dissemination), and the solar car shop and were capped off with a Koch Institute for Integrative Cancer Research flash mob, an MIT Club of Boston science trivia challenge, and a standing-room-only science comedy event at the MIT Museum. The 2014 festival also attracted 29 sponsors, the most ever, and raised the most funding for a single festival, \$525,533. Four of the funders were new to the festival in 2014. Also new was an official media sponsor, public radio station WBUR.

This year, Science on the Street reached 70,866 people at 34 events with the help of 111 volunteers. A full-time coordinator was hired early in the year and began building presentation equipment, a portfolio of activities, a network of collaborators, and a robust calendar of events and appearances across Massachusetts.

The Science Festival Alliance (SFA) continued its rapid growth trajectory, aided by the hiring of a full-time coordinator at the end of FY2013 to work with the manager of the project. SFA's membership grew to include nearly four dozen independently organized festival initiatives in the United States and Canada, many of which are debuting in 2014. Thirty of these members launched in 2013, cumulatively reaching almost one million people at nearly 2,700 events. SFA's major programmatic activities included organizing the third International Public Science Conference (a pre-conference at the

annual meeting of the American Association for the Advancement of Science in Chicago) and working with other MIT departments to organize the Evolving Culture of Science Engagement workshop (which drew many of the top names in science communication to MIT).

## **Administration**

### **Development**

The museum's capacity for fundraising increased with the arrival of MIT's new arts development officer, Erin Genereux, in August 2013. Her work focuses on engaging individuals with MIT's arts programs, and in her first year she worked with the museum to prepare for its role in the MIT capital campaign; she also achieved some early successes with new gifts and grants.

The Patrons Program, recognizing individuals who contribute \$10,000 or more annually, received gifts totaling \$203,875. We thank Gregory and Karen Arenson '70, Cooper Perkins Inc., Mark Epstein '63, Dan '82 and Elaine Grunberg, Ulf '60 and Elizabeth Heide, Martin Klein '62, Tom Leighton '81, Thomas Peterson Jr. '57, Phillip and Ann Sharp, Harvey Steinberg '54, and an anonymous donor for their most generous support. Our annual Friends Program numbered 31 loyal donors who gave a total of \$24,175 in unrestricted funds.

In addition to the gifts and grants reported above, we received \$61,595 in gifts from individuals designated for education and public programs, exhibitions, and the Hart Nautical, Historical, and Holography collections. Also, Pro Helvetia provided a \$16,000 grant in support of a photography exhibition.

### **Retail and Functions**

The MIT Museum Store continues to operate as a highly successful business, with FY2014 gross revenues increasing by 13% over the previous year. The store provides a carefully selected range of high-quality merchandise focusing on science, technology, engineering, and math, both on site at the main museum galleries and via the new [online store](#). Store sales are strong across several categories, including apparel, decorative and gift items, and souvenirs and novelties. The store also serves as an outlet for a variety of consumer merchandise developed by MIT alumni.

The online store had a soft launch in mid-December with a selection of 100 products. The average sale of \$48 is substantially higher than the in-store average of \$27. A variety of measures are in progress to increase online sales. We have hired a consultant to develop branding for the various consumer products developed by individuals associated with MIT (current students, alumni, staff, etc.). Currently the store stocks about a dozen products developed by this group, ranging from jewelry to technology toys and household products. Because visitors often ask for products developed at or by MIT, we believe that having a branded section in the online store will be a marketing hook that drives additional customers who want to purchase a "piece of MIT." We also will develop a robust social media plan that will amplify our efforts to optimize our search engine.



In addition, both on-site and online stores will feature an expanding range of products designated as MIT Museum Store “exclusives.” Currently we offer a few of these products, including all-metal, RFID-blocking wallets with the MIT logo and high-quality reproductions of Harold Edgerton images on glass. We are working with the Koch Institute Image Awards organizers to use their images on a variety of consumer-related products.

The functions business served 72 clients this year, 76% of them MIT affiliated and 24% external, generating the highest income from functions to date.

### **Public Relations and Marketing**

The primary goals of the marketing team this year were to ensure continued visitor growth and to participate in accurate and systematic dissemination of information about the museum. We attained our goal in terms of numbers of visitors by creating communication, promotional, and marketing materials that encourage the participation of the general public as well as the MIT community in research, programs, exhibitions, events, receptions, ribbon cuttings, festivals, hack-a-thons, prototyping, and celebrations hosted by the museum for both private and public purposes.

As always, the marketing team worked to ensure that our advertising for all of these activities is interesting, our website accurate, and our exterior appealing. We want people to feel welcome at the museum, and we want to encourage exploration of the ideas and education that take place at MIT.

The marketing team benefited from a new part-time employee whose expertise in designing and developing digital media has improved the visual aspect of our digital communications. We redesigned our digital newsletter, created a digital interface for gathering email addresses from visitors, created a few short videos to supplement exhibitions, and doubled the amount of digitally based visual communications supporting museum programs. With new skills on board, the team was also able to develop new advertising for our local and tourist visitors as well as retail shoppers at our store (online and physical). In addition, after a year’s hiatus, we created several print mailings informing people about the museum’s functions business and one that promoted the museum’s spring programs and Cambridge Science Festival offerings.

Throughout the year, the team also managed media relations for the new exhibitions *5000 Moving Parts*; *Stanley Greenberg: Time Machines*; *Daguerre’s American Legacy*; and *Inventions: 2014 MIT Student Showcase* as well as for the major family events and weekly programs produced at the museum. In general, journalists enjoy the [exhibitions](#), and in fall 2013 Boston.com posted [videos](#) from *5000 Moving Parts*.

Reviewers and visitors alike are interested and positive about what they find in the museum. The Museum is easily accessible online and has 157,546 Twitter followers as well as a smaller group of followers on Instagram.

## Personnel

The museum made organizational changes at the start of FY2014 in recognition of its growth over the last several years. The collections team was reorganized, with Deborah Douglas, curator of science and technology, assuming additional responsibilities as director of collections. Rachael Robinson succeeded Robert Doane (who resigned in November 2013 to become the collections manager at the Naval War College Museum) as the new curatorial associate for the Hart Nautical Collections and reference assistant for the MIT general collections. Rachael comes to the museum from the Northeast Document Conservation Center, where she worked as an imaging specialist and client service representative.

The education and public programs team is now fully staffed with the arrival of Andrew Hong in the new position of programs coordinator (July 2013) and the arrival of Dr. Faith Dukes as education coordinator (September 2013). Andrew is a 2013 graduate of Pomona College with a degree in neuroscience. Faith completed a doctorate in physical chemistry from Tufts University in 2013. Jesse Billingham joined the Cambridge Science Festival team, assuming the new position of Science on the Street coordinator. He has several years of experience on projects involving science and public education.

Our administrative and enterprise activities were strengthened by the addition of several new positions. Tina McCarthy was hired as digital media communications assistant in September 2013, working alongside our director of public relations and marketing. She brings a depth of experience in web management and communications from her work at the MIT Sloan School of Management and her freelance assignments. Karen Costello also arrived in September to assume the part-time post of event rentals manager. She has 10 years of professional experience in visitor services and event management in a museum setting. Terri Robertson was hired in October 2013 to fill the newly created position of assistant to the store manager. She has 10 years of experience in a variety of specialty retail settings.

**John Durant**  
Director