

## MIT Museum

This has been a year of solid progress on all fronts for the [MIT Museum](#). Its collections, the heart of the museum, have been strengthened both by strong acquisitions in many areas and by the consolidation of the museum's stored collections in its off-site storage facility in Somerville; new exhibitions in the Epstein, Peterson, and Kurtz galleries have confirmed the museum's growing reputation as a venue for special exhibitions; our educational and public program offerings have been greatly strengthened by the addition, for example, of a range of new educational workshops; and our science festival work has expanded on all fronts—at home, with the statewide Science on the Street initiative, and nationally, through the flourishing of the Science Festival Alliance (SFA), now operating with the support of two major grants. Through all of these changes, the MIT Museum has continued to improve the range and quality of the services that it offers to its visitors, with 108,966 visiting the 265 Massachusetts Avenue location alone.

Highlights of the year include the publication of *Countless Connecting Threads: MIT's History Revealed Through Its Most Evocative Objects*, a remarkable volume that sets new standards for collections-based publications in the MIT Museum; the opening of *Net Works: MIT and the Internet*, a multimedia exhibition conceived, researched, written, and produced by undergraduates attending our team-taught class, STS.035 Exhibiting Science; and the first two days of the seventh annual Cambridge Science Festival, which promised to be the most successful and most visited festival to date until Patriots' Day, with the dreadful events that will forever be associated with the 2013 Boston Marathon.

### Countless Connecting Threads

MIT'S HISTORY REVEALED THROUGH ITS MOST  
EVOCATIVE OBJECTS



*Countless Connecting Threads: MIT's History Revealed Through Its Most Evocative Objects.*

While the museum's only partly renovated facilities at 265 Massachusetts Avenue continue to constrain operations in many areas, the MIT Museum is now proving itself more than capable of operating as a medium-sized university museum. With plans in place for further renovations, the prospects for the museum's continued growth over the coming years are excellent.

## Collections

Two projects took priority this year: the inventory and relocation of a significant number of collections formerly housed at the museum's main facility to the new collections storage space that the museum is leasing at 8 Tyler Street in Somerville, and preparations for reaccreditation by the American Alliance of Museums. At 8 Tyler Street, the museum installed substantial additional shelving to maximize the capacity of this 12,000-square-foot space and also moved equipment to enable safe maneuvering and placement of large or bulky items. Work in support of the reaccreditation application included updating the collections management policies and procedures manual and the plan for the information management system for the collections database, along with consolidation, proper identification, and storage of historical instruments that contain hazardous materials.

The registrar and collections manager assisted the new administration with the change of decorative arts at Gray House and the president's office.

Registration activities also included processing the return of over 80 artifacts lent for the MIT 150 Exhibition and 56 new loans, 45 of them in support of incoming exhibitions. In addition, the museum loaned objects from the collection for the *Glass at MIT: Beauty and Utility* exhibition in the MIT Libraries' Maihaugen Gallery.

There were 45 new acquisitions across all of the five collections, and many of them are described in the collections sections that follow.

Professional conservators restored several works. Thanks to funding from the Alfred P. Sloan Foundation and the MIT Sloan School of Management, the Alfred P. Sloan portrait from the museum's collection was restored and rehung in its new location in E62.

Fourteen Berenice Abbott photographs were conserved in preparation for the traveling exhibition *Berenice Abbott, Photography and Science: An Essential Unity*.

A total of 795 researchers submitted research inquiries through the museum's website, and all were assisted.

## Architecture and Design Collection

Significant acquisitions included additions to the Berenice Abbott (1898–1991) archive from Ronald A. Kurtz '54, with supplemental books and manuscripts from Lucy Dillon. These acquisitions have made the MIT Museum one of three important Abbott research collections worldwide. The museum also received additions to the Kallman McKinnell and Wood (KMW) firm archive and The Architects Collaborative (TAC) collections this year.

Work continued in researching and cataloguing the Mary Otis Stevens collection (iPress manuscripts), Creative Photography Laboratory records and photographs, TAC drawings and office records, and the KMW collection. Retrospective cataloguing of the Student Thesis and Student Drawings collections also continued. Collections relocated to the new Tyler Street storage facility included the TAC and KMW collections, the museum's largest collections of works on paper. The TAC collection received remedial conservation treatment prior to transfer.

The Architecture and Design team organized two public programs this year. *L'Aquila After the Earthquake of 2009* (March) featured eight planners and architects from L'Aquila (Italy), Milan, London, and MIT and was held in two venues, the museum and the School of Architecture and Planning, in conjunction with the exhibition on L'Aquila in the Wolk Gallery. "Contemporary Photography of Place" (April), sponsored by swissnex Boston, featured a roundtable discussion engaging seven photographers, photographic historians, and curators from Boston University, the Boston Museum of Fine Arts, Cooper Union (New York), Simmons College, the Massachusetts College of Art, and MIT. The event was held in conjunction with the Kurtz Gallery exhibition *Compass Points: Joël Tettamanti*.

The Architecture and Design collections hosted eight interns and volunteers from several schools including Connecticut College, Simmons College, and Tufts University.

### Hart Nautical Collections

The most significant acquisition this year was the MIT Sea Grant Program's underwater test vehicle *Sea Squirt*, which was used to develop software for the first autonomous underwater vehicle during the period 1988–1990. The curator conducted an oral history video interview in the spring with vice admiral Kevin McCoy '89 (US Navy Sea Systems Command).

The museum loaned the *Gaspee II* (active circa 1765), an exceptional rigged ship model constructed by the famous modeler Erik Ronnberg Jr., to the Norman B. Leventhal Map Center at the Boston Public Library for the exhibition *Charting An Empire: The American Neptune*.

A primary effort this year has been to begin work on the Herreshoff Legacy Project, a major international traveling exhibition and online catalog based on the Herreshoff design collection. The [online prospectus](#) is currently available, and the exhibition is scheduled to open at the museum in 2015.

Hart staff worked closely with the education and programs team in developing the annual "Nautical Night" Second Friday program in March, showcasing research by MIT ocean science and engineering students and professor John Marshal of the Department of Earth, Atmospheric and Planetary Sciences. Hart also assisted in presenting programming at the museum during the Cambridge Science Festival, including ocean circulation interactive demos by Professor Marshal and his students and the Woods Hole Oceanographic Institution's display about ocean acidification. The Hart curator collaborated on a new museum educational workshop, "Fish & Ships," based on

flapping foil propulsion, hydrodynamics, and vorticity control research undertaken by the ocean science and engineering group in the Department of Mechanical Engineering.

The curator co-taught two museum/mechanical engineering Independent Activities Period (IAP) credit courses (2.S995 Traditional Drafting and 2.S973 Head of the Zesiger Cardboard Boat Regatta). In addition, the Hart Collection curator assisted an MIT architecture graduate student with aspects of his thesis related to concrete ship construction.

Ongoing retrospective cataloging and digitization efforts continue. The museum's collections database now holds approximately 47,000 records related to the Hart Nautical Collections.

### **Holography Collection and Holography and Spatial Imaging Initiative**

The exhibition of display holography, *The Jeweled Net: Views of Contemporary Holography*, has been popular with visitors. It surveys forefronts across a range of display holography applications and provides the basis for information-rich talks about contemporary holography that the museum has developed for school and alumni groups, as well as tours on special occasions such as the Cambridge Science Festival and Alumni Reunion Weekend. A new workshop offered to middle school and high school students uses the holographic method and *The Jeweled Net* as vehicles for hands-on education aligned with the Massachusetts curriculum frameworks.

The museum received a significant donation from Reverend Rosemary (Posy) Jackson, the former director of the Museum of Holography in New York City. In the period of her influential work in the field, she amassed a personal collection of significant pieces. The 72 holograms given to the MIT Museum represent the cutting edge of art and portrait holography through the 1970s and 1980s, advanced by leading practitioners Rudie Berkhout, Margaret Benyon, Dan Schweitzer, and others.

### **Science and Technology Collection**

The publication of *Countless Connecting Threads: MIT's History Revealed Through Its Most Evocative Objects* in May represents the culmination of a two-year project to produce a major new historical overview of the Institute. Inspired by the [MIT 150 Exhibition](#) and with generous funding from Thomas F. Peterson Jr. '57, the lavishly illustrated volume is also the first major catalog showcasing the collections and curatorial expertise of the MIT Museum.

Behind the scenes, work focused on the migration of some 20,000 artifacts in the Science and Technology Collection to the new off-site storage facility. One of the most important new acquisitions this year was a gift from the Eli and Edythe Broad Institute of Harvard and MIT of pioneering instruments and apparatus used by researchers at MIT and the Whitehead Institute to sequence the human genome.

The Science and Technology staff collaborated with Lincoln Laboratory to create a new exhibit on the remarkable air safety research done at the laboratory. The display opened in December 2012 with a full program of Lincoln Lab research highlights.

The curator, Dr. Deborah Douglas, worked with several MIT classes, including a major collaboration with professor Gediminas Urbonas' 4.301 Introduction to Visual Arts. She contributed the new foreword for the 25th-anniversary reprint edition of the seminal volume *The Social Construction of Technological Systems* (MIT Press) and was named an associate fellow of the American Institute of Aeronautics and Astronautics. With her assistant Ariel Weinberg, she responded to more than 250 inquiries, gave dozens of tours (gallery and behind the scenes), and supervised two interns, one Undergraduate Research Opportunities Program student, and one volunteer.

### Undergraduate and Graduate Teaching

The main focus of the Sidney Silber 1939 MIT Studio this academic year was undergraduate teaching. The studio offered an IAP activity, "Creating from Both Sides of the Brain," in collaboration with the Rhode Island School of Design (RISD). In this activity, MIT students and staff members collaborated with students from a RISD Perception Lab winter session course. Using the MIT Museum as a resource, students explored the rich history of art, science, and engineering collaborations at MIT. Works in the museum by Harold Edgerton, Edwin Land (Polaroid), Berenice Abbott, Stephen Benton, and Aude Oliva served as examples. Cultivating individual and group methods for cross-disciplinary collaboration, the group selected a topic, generated ideas, and constructed prototypes. The goal was the creation of an artwork that would offer museum visitors a novel and meaningful perceptual experience, further revealed and informed by surrounding exhibit information. The project resulted in an exhibit, *Substance/Semblance* (February–April 2013), with multimedia interactive artworks that provided a wide variety of experiences to visitors.

The course STS.035 Exhibiting Science was offered by the studio in spring 2013, co-taught by John Durant, Seth Riskin, and Allan Doyle. The course was a project-based seminar covering key topics in museum communication, including science learning in informal settings, the role of artifacts and interactives, and exhibit evaluation. Students worked on a term-long project organized around the design, fabrication, and installation of an original multimedia exhibit titled *Net Works: MIT and the Internet*. The exhibit was supported by a generous gift from professor Tom Leighton.

Work continued on the Robotic Light Ballet, a collaboration with professor emeritus Otto Piene focused on developing a moving, robotic platform to carry one of Piene's *Lichtballet* pieces. The goal is to complete the project for display at the National Gallery of Art in Berlin in 2014.

The studio also attracted a postdoctoral fellow, Marco Mason, supported by a Marie Curie Fellowship funded by the European Commission. Dr. Mason's work is in the area of design methodologies in digital media for heritage institutions.

### Exhibitions

The museum installed six new temporary exhibitions in fiscal year 2013; another six temporary exhibitions installed in FY2012 continued on view during part or all of the year. In the new Kurtz Gallery for Photography, the inaugural exhibition *Berenice Abbott, Photography and Science: An Essential Unity* continued through early January 2013. It was

replaced by another exhibition organized and curated by the museum, *Compass Points: Joël Tettamanti* (February–September 2013), featuring the work of the African-born, Swiss landscape photographer. The exhibition was supported by Pro Helvetia, the Swiss Arts Council, and swissnex Boston.

In the Peterson Gallery, the exhibition *Rivers of Ice: Vanishing Glaciers of the Greater Himalaya* (April 2012–March 2013) continued well into the year. In April we installed *Hidden Heroes: The Genius of Everyday Things* (organized by the Vitra Museum in Germany), which highlights the invention and evolution of several dozen commonplace objects such as the paper clip, ballpoint pen, tin can, and adhesive bandage. This was the exhibition's first venue in the United States.

Continuing throughout the year was *The Jeweled Net: Views of Contemporary Holography*, a selection of 26 holograms from a juried competition on the occasion of the 9th International Symposium on Display Holography at MIT in June 2012. During the year, the exhibition of Arthur Ganson's kinetic sculptures was reconfigured and reinstalled; in our corridor gallery, *Dark Machines, Photographs by Daniel Jackson* (May–December 2012), commissioned by the museum, documented large machines used to explore the frontiers of science. Jackson is a faculty member in the Computer Science and Artificial Intelligence Laboratory.

In the Epstein Innovation Gallery, the museum's continuing program of Sampling MIT exhibits included *The Effects of a Warming World on Ice Sheets and Oceans* (April 2012–May 2013), based on research into Greenland ice sheet melt by the Woods Hole Oceanographic Institution; *Air Traffic Safety: Lincoln Lab* (installed in November), which examines 40 years of research into air traffic efficiencies and safety at MIT's Lincoln Laboratory; and *Net Works: MIT and the Internet*, which opened in May and was curated by students in the STS.035 Exhibiting Science course. The *Net Works* exhibit investigates questions such as "How does the Internet really work?" and "How have MIT and the Internet evolved together?"

In the Compton Gallery, *The Poster Art of Jacqueline Casey* (June–September 2012) documented Casey's pioneering graphics for the MIT Office of Design Services from the mid-1950s through the mid-1980s. *MIT is...36 (of Many) Pictures and Stories* (October 2012–April 2013) featured photographs of 36 of the 150 artifacts originally selected for the MIT 150 Exhibition. *After Katrina: MIT's Department of Urban Studies + Planning Takes on Big Questions About Rebuilding* (installed in May and continuing), developed with faculty and students in the Department of Urban Studies and Planning (DUSP), documents dozens of projects organized by DUSP in New Orleans in the wake of Hurricane Katrina.

## Education and Public Programs

The programs team has built a significant following for existing public programs such as Second Fridays, the Friday After Thanksgiving Chain Reaction, Soap Box, and vacation week activities. This year, significant effort was put into increasing the visibility of these programs, creating opportunities for visitors to return to the museum for related activities, and expanding programmatic connections to current museum exhibitions. The team has identified February vacation week in Massachusetts, nationally known as

Engineers Week, as an opportunity to create a niche for the museum as a local site where visitors can engage in family-friendly, hands-on engineering design experiences and also learn about new designs and creative inventions at MIT by meeting undergraduate and graduate students in person. Engineers Week and the Cambridge Science Festival (during April vacation week) were highlighted as opportunities to engage visitors in the design and development of links for mini-Rube Goldberg chain reactions as well as the large Friday After Thanksgiving event held annually in Rockwell Cage. As in previous years, the programs team produced over 30 different events for the Cambridge Science Festival, engaging almost 3,000 people of all ages. The team continued to expand, train, and mentor the museum's fledgling volunteer corps, who in turn interacted with over 4,500 weekend visitors throughout the year. In fiscal year 2013, the education and public programs team produced 480 different programs for almost 24,000 visitors, including daily in-gallery interactions to accommodate heavy summer attendance.

This year the programs team greatly expanded the museum's educational offerings for middle and high school student groups by adding four new workshops to our existing three. The new workshops, on holography, nature-inspired nautical engineering, physics and photography, and current research from MIT laboratories, are pointedly connected to the museum's collections, exhibits, or newly published science. Pre- and post-workshop resources for educators were developed for many of the workshops, and three MIT graduate students were hired on a part-time basis to teach many of the school year programs. This new informal science collaboration between graduate student instructors and the museum has been a wonderful endeavor and has blossomed into a new opportunity to connect young minds with MIT's young researchers. This year, the programs team taught 194 workshops involving more than 4,000 students and guided more than 800 people on 50 tours through the museum, an increase of 55% from fiscal year 2012. The museum has actively solicited support to endow its educational programs and subsidize workshops for underserved student groups and will continue this effort.

The end of this fiscal year brought new staffing opportunities to the programs team, with MIT support to create a full-time public programs coordinator position and the occasion to clearly define roles and goals for this post and the existing education coordinator position. The next year holds much promise for enhanced educational and public programs, in terms of number, size, and scope, at the MIT Museum.

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

Significant progress was made in 2013 with respect to the Cambridge Science Festival and Science on the Street. The Biogen Idec Foundation awarded a three-year \$250,000 grant to support Science on the Street, allowing the team to hire a coordinator to organize science, technology, engineering, and math outreach across Massachusetts all year long. To date, our small team, accompanied by an army of enthusiastic volunteer science presenters, has inspired and engaged roughly 35,000 people at 48 different events, from Cape Cod to western Massachusetts.

Crowds flocked to the 7th annual Cambridge Science Festival in record numbers this year as well. The festival's Science Carnival attracted 15,000 people—double our previous six annual carnivals—in large part because we brought 40 robotics

organizations together to create a “robot zoo.” For the first time, tickets were sold to select events, including “Big Ideas for Busy People.” Despite a fee being charged for the event and a cold rain pouring down, the event sold out more than an hour before its start. The success of the festival is not limited to the 140-plus standing-room-only events. Fortunately, in 2013 it extended to funding as well. A total of 28 sponsors supported the festival, six more than last year, representing broader interest in and awareness of the festival.

The Science Festival Alliance made significant advances, particularly with two major fundraising successes. In September 2012, the MIT Museum/SFA received a three-year National Science Foundation (NSF) award of \$1,047,712 for a collaborative project with Philadelphia’s Franklin Institute; the University of California, San Francisco; and the University of North Carolina at Chapel Hill. In December 2012, SFA received a \$399,545 two-year grant from the Alfred P. Sloan Foundation. These two awards provide for the short-term financial stability of SFA and the addition of a full-time SFA coordinator (hired by the MIT Museum in May 2012). SFA’s major programmatic activities this year included the organization of the second International Public Science Events Conference in Columbus, OH, and continued support for the rapidly growing US science festival sector.

## **Administration**

### **Development**

We launched the Patrons Program this year to recognize individuals who contribute \$10,000 or more annually, and are pleased to recognize nine generous donors in this category who have given a total of \$232,000: Rodney Brooks, Brit d’Arbeloff, Mark Epstein, Daniel Grunberg, Martin Klein, F. Thomsen Leighton, Thomas F. Peterson Jr., Philip and Ann Sharp, and Harvey Steinberg. Our annual Friends Program continues to thrive with 28 donors, many of them longtime, providing \$22,370 in unrestricted support. Claude Brenner made an additional gift to the endowed Claude W. Brenner ’47 MIT Collections Fund that provides much-needed ongoing support for collections activities, including cataloging, conservation, storage, and research.

As reported above, the Cambridge Science Festival had a very successful year in raising new funds and continuing established sponsorships, as did the Science Festival Alliance.

### **Retail and Functions**

The MIT Museum Store provides a carefully selected range of high-quality merchandise focusing on science, technology, engineering, and math. Store sales were 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.

In response to requests from customers for the ability to shop online, we put a development team in place to create an online store. The team consists of three MIT Museum staff members (store manager, director of technology, and financial assistant), a consultant who will handle the technical aspects of website development, and an MIT



communications specialist who will oversee usability. The online store is scheduled to be operational by fall 2013 and will offer selected merchandise from the store's current inventory as well as merchandise that will be available exclusively online.

The functions business served 65 clients this year, and 70% of them were MIT affiliated. The Compton Gallery was added as a venue that can be booked by MIT clients.

### **Public Relations and Marketing**

The museum's current strategic plan prioritizes enhancing the visitor experience and continuing to improve communication and outreach efforts while staying abreast of the ever-evolving world of online communications. Understanding that marketing begins long before a visitor enters the museum or visits our website, the marketing department strives to ensure that our advertising is interesting, our website accurate, and our exterior appealing. Once in the door, we want people to feel welcome and we encourage admission and exploration.

With assistants and vendors from a variety of backgrounds creating online and print collaterals, the public relations/marketing department informs the international and local media and fulfills a myriad of requests from the academic and popular media. We created a number of advertisements for MIT publications and the tourism industry, and also bought print, radio, and online space to reach the WGBH audience. Our newsletters and website are designed and managed with an eye to welcoming visitors from around the world and from a variety of backgrounds. With 40% more people following us on Twitter (the MIT Museum now has 136,000 followers), we know that the public enjoys learning and hearing about MIT Museum-based activities.

During the fall, we collaborated with the MIT News Office in launching the lunchtime program *News At Noon*. We used a variety of media to increase participation in key events such as the Friday After Thanksgiving family engineering event, Engineers Week in February, and the many programs that take place at the museum during the Cambridge Science Festival. We bought space for the entire year on the Infinite Corridor monitors to better inform the Institute about the variety of talks, activities, and demonstrations that take place here—most of which involve MIT students, professors, and/or projects and initiatives. We are completing an initiative to improve signs and wayfinding at the museum.

Reviewers and visitors alike are interested and positive about what they find in the museum. With the new Kurtz Gallery for Photography and Peterson Gallery for temporary shows, people are coming not just to see the MIT Museum but also to see specific exhibitions.

### **Personnel**

Robert Doane was hired in October 2012 as curatorial associate for the Hart Nautical Collections. Rob came to the museum from the US Naval Academy Museum, where he was curator of the Beverley R. Robinson Print Collection.

Laura Knott, architecture and design curatorial associate and interim exhibitions coordinator, resigned in March after eight years of distinguished work at the museum. In April, Amber Sinicrope joined the staff as curatorial associate to succeed her. Amber, a 2012 graduate of Smith College, served as a project assistant for the Architecture and Design Collection in 2010 and 2012.

Thanks to grants from the National Science Foundation and the Alfred P. Sloan Foundation, we were able to hire Julie Fooshee in May as Science Festival Alliance coordinator. Julie had worked for the last five years on an NSF-funded project at the Museum of Science & Industry in Tampa, FL.

Erika Reinfeld resigned as education coordinator in May to become the public outreach coordinator at the David H. Koch Institute for Integrative Cancer Research at MIT. Erika did excellent work in the education and public programs department over the last three years, including serving as the sole staff member for several months during a period of transition.

Dr. Alexander Goldowsky was hired in June to the new position of director of exhibitions. Alexander had been director of exhibits and education at the EcoTarium in Worcester for the last 11 years.

### **Volunteers and Interns**

The museum recruited a record number of volunteers and interns this year who generously gave their time, shared their expertise, and helped us to accomplish several projects. Twelve worked in visitor services, five in education and public programs, and six in collections. In addition, 240 worked on delivering the new Science on the Street initiative, and 160 assisted with all aspects of the Cambridge Science Festival.

**John Durant**  
**Director**