

## MIT Museum

Fiscal year 2007 was a very active and productive year for the MIT Museum. In particular, it brought the first significant steps toward the realization of the Museum's five-year plan (2006–2011). The goal of the plan is to develop the Museum's capacity for collections, exhibitions, and public programs in the short and medium term as a basis for an eventual transition to a larger, better situated, and better funded facility, and it identifies as a first priority the need to raise the Museum's public profile in the wider community.

Two major projects dominated the Museum's efforts in fulfillment of the plan in 2007: the Building N51 ground-floor expansion project and the first Cambridge Science Festival. The opportunity to expand the Museum on its present site at 265 Massachusetts Avenue arose when the School of Architecture and Planning decided to vacate 6,000 square feet on the ground-floor of Building N51. The Museum won approval to occupy this space, and plans were drawn up with the assistance of E. Verner Johnson and Associates for the provision of a new ground-floor entrance and admission desk, new exhibition and program spaces, and an enhanced array of visitor services (including a larger Museum store, a small café, a coatroom, and restrooms), all behind bold new windows along Massachusetts Avenue. This project has been ably led for the Museum by curator of architecture and design Gary Van Zante. Funding support was secured from a number of donors and from the Committee for the Review of Space Planning; construction began in fall 2006. Construction work was completed in spring 2007, and exhibition fit-out is continuing through summer 2007. The formal opening of the expanded Museum is scheduled for September 28, 2007.

Alongside the work on the ground-floor expansion, the Museum successfully launched the Cambridge Science Festival. This ambitious initiative brought together seven founding collaborators (the City of Cambridge, Cambridge Public Libraries, Cambridge Public Schools, Harvard University, MIT, the Museum of Science, and WGBH) under the leadership of the MIT Museum to create a nine-day celebration of science and technology in the community. The initiative was launched with a public meeting in Cambridge City Hall in June 2006; festival codirectors Kate Bernhardt and Ellen Bluestein were appointed in August 2006. The first festival was formally opened by MIT president Susan Hockfield and city manager Robert Healy in a ceremony held at Cambridge City Hall on April 21, 2007.



*MIT president Susan Hockfield opens the Cambridge Science Festival, Cambridge City Hall, April 21, 2007.*

Overall, the festival greatly exceeded expectations. Approximately 15,000 people attended more than 150 different events in 30 venues across the city, and feedback from the founding collaborators, event organizers, and sponsors—as well as from the festival's evaluators—indicate a very positive response to this initiative. As a result, MIT has now committed to funding the festival for an additional three years. The Museum is in the process of appointing a full-time director to head this flagship outreach program.

Neither of these major initiatives deflected the Museum from its core operations and services. During the year, the Museum served 82,517 visitors, a new record. Of these, 70 percent were adults and 30 percent were young people up to age 18. Given that the Museum was under construction for much of the year, this must be regarded as an excellent result. This year's attendance, which surpassed the record year FY2006, represents a consolidation of the gains of recent years and sets a benchmark against which to judge the impact of the ground-floor expansion in FY2008 and beyond.

Other highlights of the year included the acquisition of a number of very important items by the Hart Nautical and the Science and Technology collections; the opening of *Learning Lab: The Cell*, an experimental gallery in the Museum designed for use by middle and high school educational groups as well as general visitors; the mounting of two temporary exhibitions in the Compton Gallery; and the launch of a range of new publicity and marketing materials. These and other developments are discussed in more detail below.

### Collections

The Museum made more than 40 new acquisitions (many of them substantial collections of objects), with important additions to all five of its main collections. Highlights include a prototype side-scan sonar designed by Martin Klein '62 and two subsequent side-scan sonar models; Professor Claude Shannon's collection of mechanical toys and games; Professor Ernesto Blanco's collection of design models; a portrait of president emeritus Charles Vest; and two hacks—Stata Center and Fire Truck.



*Prototype side-scan sonar designed by Martin Klein '62.*

The Museum made 12 new loans. Currently, there are 84 active loans with other institutions. Among those processed in 2007 were a loan to the Department of Physics to enable Markos Hankin to demonstrate one of the early physics instruments from the department and a loan to the MIT Activities Committee for its winter Space Ball for the MIT community.

The curatorial team continued work on a major digital collections management system with support from the Institute of Museum and Library Services. This project evaluated the current collection information management system, a customized FileMaker Pro database, and the need for both information architecture and digital technology. Eight commercial systems were considered, and the collections staff determined that Willoughby Associates' Mimsy XG and Möbius were best suited for the Museum's diverse collection. Data is currently being migrated to this new system on a server housed at one of MIT's data warehouses. Kathy Burton Jones, an expert on information technology for museums and collections, is advising collections staff on the development of a five-year plan for collection information management, one of the goals of the project.

Cymbeline Storey, an applicant for the MA Conservation Program at University College, London, has volunteered more than 130 hours rehousing the MIT General Collections. Hannah Sears volunteered 20 hours on a long-term project with the MIT General Collections biographical files before enrolling in the Simmons College Graduate School of Library and Information Science in the fall of 2006.

### **Architecture and Design Collection**

Alongside his many responsibilities as project manager for the N51 ground-floor expansion project, curator of architecture and design Gary Van Zante continued to oversee work on the Architecture and Design Collection. Inventory, cataloguing, and conservation of collections continued throughout the year. Two major collection management projects completed this year were: the inventory of the collections of Muriel Cooper and the MIT Visible Language Workshop, which document the beginnings of electronic publishing, a field in which the MIT Media Lab and its Visible Language Workshop were early innovators; and the cataloguing and preservation of the Mary Otis Stevens Collection, a set of more than 300 drawings and project documents related to the work of one of the most important female architects of the 20th century.

The architecture and design unit hosted three interns this year, including our first full-time resident postgraduate, Katharina Tanzberger. Tanzberger came to MIT through a collaboration with the University of Vienna, which sponsored her residency with MIT Museum donor Mary Otis Stevens. The Museum also continued its five-year-long participation in the Tufts University Architectural Studies internship program by hosting two fourth-year undergraduates who assisted with collections research and cataloguing.

The architecture and design unit brought several MIT, Wellesley, and Tufts University classes into the Museum this year and continued working with students in the Beaux Arts Seminar of the Department of Architecture, a class hosted by the Museum last year and organized by Professors Mark Jarzombek and Erika Naginski of the Department of Architecture, together with the curator of architecture and design.

Gallery and collection talks were presented at the annual meeting of the Art Libraries Society of North America, members of which were given a tour of the exhibition *Front + Back*; to classes from Somerville High School; and at MIT alumni events.

Staff assisted 130 researchers working in many areas of the Architecture and Design Collection. Major collections consulted included: The Architects Collaborative (TAC) collection (research visits by TAC principals for a DVD history of the firm, and research for restoration and historic designation of TAC buildings); and the MIT Campus Plan Collection (research by the List Visual Arts Center for its website documenting campus architecture and public art and by Professor Bill Mitchell for *Imagining MIT* [MIT Press, 2007]). The Thesis Collection, Ware Study Collection, and historical collection documentation files were all heavily used by researchers.

Van Zante published two articles, in the journal *Places* and in *Preservation*, the magazine of the National Trust for Historic Preservation. Also, he presented a paper at the Photography and the City conference at University College, Dublin (July 2006).

### **Hart Nautical Collections**

The major collections management activity for Hart over the past year was the preparation of 35,000 collection records for migration into the Museum's new database. We expect all other collection records to be migrated soon and a public interface to the new system to be available in the first half of the new fiscal year.

Use of the Hart Nautical Collections set a record this year, with total earned revenue of \$16,400. This income was the result of more than 120 on-site visits and 1,200 inquiries from around the world. Plan sales and use fees for historic replica models and boat building projects accounted for most of the total.

We sponsored our popular Independent Activities Period nautical skills class for the eighth consecutive year. Subject 2.993 The Art and Science of Boat Design was offered for credit within the Department of Mechanical Engineering for the second year, and OpenCourseWare (OCW) requested permission to film the course for the OCW website (<http://tinyurl.com/yumpew/>). We believe this is the first time such a course has been available online.

Working with the Museum director, curator of the Hart Nautical Collections Kurt Hasselbalch developed an initiative to present a series of compelling and innovative multimedia exhibitions and programs related to MIT's substantial contributions to developing ocean technology for science, offshore industry, and security. *MIT and the Sea* is a broad collaboration with MIT's Center for Ocean Engineering and Sea Grant Program, the Woods Hole Oceanographic Institution, and MIT alumni pioneers in all areas of ocean technology research and development. The first exhibition (scheduled to open in the Compton Gallery on August 30, 2007) will review MIT professor Jerry Milgram's 50-year career in ocean engineering. The next exhibit (part of the Museum's new ground-floor gallery expansion) will focus on the major role of MIT engineers in developing undersea robotic technology.

### **Holography Collection**

In the absence of a curator of holography, registrar and collections manager Joan Whitlow responded to more than 40 research requests. Two holograms, *Microscope* (Walter Spierings, 1987) and *Yuri Denisjuk* (portrait; Anna Maria Nicholson, 1987),



loaned for the exhibition *In Light of Einstein 1905–2005* were returned from Portugal's Museu Nacional da Ciência e da Técnica.

No progress was made on the plan to raise endowment funding in support of the appointment of a curator of holography and spatial imaging. However, during the year the Advisory Board approved a plan for endowment fundraising that incorporates this objective.

### **Science and Technology Collection**

During the year, curator of science and technology Deborah Douglas made the signal acquisition of the mechanical toy collection of the late professor Claude E. Shannon. Shannon's ingenious machines—including self-juggling contraptions, mazes, and a Roman numeral calculator—give vivid testimony to the creative genius of one of the 20th century's leading pioneers of information theory. Other major acquisitions included two departmental gifts. The Department of Physics transferred 21 rare pieces of 19th-century acoustical apparatus, including some of the Institute's oldest instruments. The Computer Science and Artificial Intelligence Laboratory transferred approximately 100 original films documenting artificial intelligence research at MIT. These acquisitions were among the more than 100 items added to the Science and Technology Collection that document the history of science and technology through the lens of MIT.

Douglas and her new assistant, Ariel Weinberg, made extensive progress with their initial review of the Science and Technology Collection. This included inventorying more than 4,500 items, scanning more than 2,300 high-resolution images from the Keuffel & Esser Slide Rule Collection, creating nearly 200 new object records, digitally converting 340 records, and adding new biographical materials for 200 MIT alumni (the first such additions since the 1970s). They also responded to more than 200 research inquiries (made by telephone, email, and on-site visit).

Douglas presented talks, lectures, and programs reaching 340 people. A particularly important project initiated in the past year was a partnership with Harvard University to host the 2007 Scientific Instrument Commission annual meeting, to take place in September 2007.

Volunteer archivist Denise Wernikoff completed the processing of the Ralph M. Eastman Collection, one of the most significant archival and artifact collections documenting the history of aviation in New England.

Last but not least, Douglas continued to lead the important MIT Museum Without Walls (MWOW) project. Support from the Lord Foundation; the President's Office; the Office of the Dean of the School of Humanities, Arts, and Social Sciences; and the MIT Program in Science, Technology, and Society, as well as equipment donations from the Nokia Cambridge Research Center, made possible the development of a prototype handheld device. Allan Doyle, the project's chief technology consultant, developed unique MWOW application software and a user interface design, and the project conducted two experiments in user-contributed content development. MWOW has just received a second follow-on grant of \$50,000 from the Lord Foundation to continue the

project's technical development. Durant presented the project to the planning committee for MIT's 150th anniversary, and it is anticipated that MWOW will become one of the Institute's major anniversary-related projects.

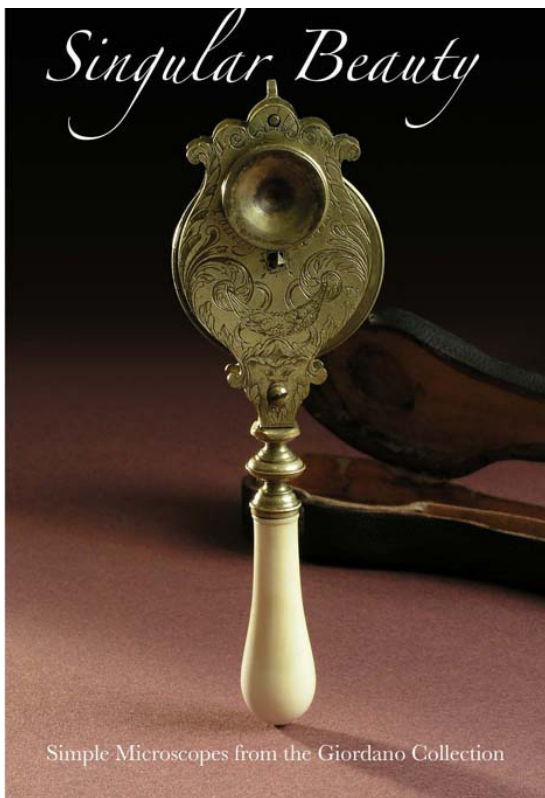
## Exhibitions

During the year, the Museum created new permanent and temporary exhibitions and prepared for the installation of a suite of new exhibitions and program areas on the ground floor.

In the main Museum, *Learning Lab: The Cell* opened in March 2007. Developed by Beryl Rosenthal, director of education and public programs, in collaboration with Kathy Vandiver of the Center for Environmental Health Sciences, *Learning Lab: The Cell* is an innovative facility designed for use by middle and high school student groups and general visitors. It features two main activity areas, one based on LegoDNA (an instructional kit developed by Vandiver) and the other based on high-quality computer animations.

In the main Museum, several temporary exhibitions were also created. *MIT Professor George Owen: An Eminent Designer and Yachtsman* (July 2006–June 2007), organized by Hasselbalch, featured plans and models from the Owen Collection, including those of the original Tech Dinghy. Owen was professor of naval architecture from 1915 to 1941 and established a legacy of training aspiring yacht designers that continues to

this day. Also during the year, Douglas curated *Singular Beauty: Simple Microscopes from the Giordano Collection* (September 2006–present), the first comprehensive exhibition of the single lens microscope by an American museum.



Promotional material for the exhibition *Singular Beauty: Simple Microscopes from the Giordano Collection*. Photo by Spartan Giordano.

Emerging technologies coordinator Seth Riskin produced two exhibitions during the year. *Tech'ing It to the Next Level: Highlights from iCampus, the MIT-Microsoft Alliance* (May–December 2006) provided an opportunity for educators and the general public to experience how cutting-edge MIT technologies are changing the classroom and other learning environments. *A System of Coordinates: Invention and Sustainability* (January 2007–present) explores three MIT inventions that represent progress toward sustainability. Sponsored by the Lemelson-MIT Program, this exhibit delineates efforts to apply nano-engineering to solve global problems. Other emerging technologies initiatives included an MIT student rebuild of Pulse, a student-created, all-electric

concept car; the Pulse car Museum driving program; the Alternative Fuel Car Show, a feature of the Cambridge Science Festival opening-day carnival; and the Meet the Inventors event, part of the Lemelson-MIT Program's EurekaFest.

Two temporary exhibitions opened in the Compton Gallery: *FRONT + BACK: Investigating a Renaissance Drawing* (September–December 2006), curated by Van Zante, and *The Heart of MIT: Photographs by Donna Coveney* (January–present), curated by Douglas. *FRONT + BACK* provided an in-depth analysis of a treasured example of Italian Renaissance architectural drawing recently donated to the Museum by architect Hugh Shepley '59. The exhibition contextualized the 500-year-old drawing using a range of investigative tools, including laboratory analysis of paper-and-ink and digital 3D modeling. Faithful to the history of the drawing itself, MIT students used the exhibition as a laboratory for their own investigation of architectural composition and form, confirming the value of the historical object for contemporary practice.

Several other temporary exhibitions were curated by Van Zante during the year: *Robert R. Taylor from MIT to Tuskegee: A Black Architect's Journey* (Architecture Race Academe conference, MIT, March 16–17, 2007) and the Wolk Gallery exhibitions *Policy & Design for Housing: Lessons of the Urban Development Corporation 1968–1975*, *DEVELOP: The Architecture of Yung Ho Chang/Atelier FCJZ*, and *The Beijing Urban Design Studio: 20 Years of International Collaboration*.

### **Education and Public Programs**

Education and public programs initiatives continued to focus on the Museum's key audiences: middle and high school students and their teachers, adult audiences, and the MIT community. The Museum served 5,000 students in 250 visits (2,044 in 98 booked classes). In addition, the Museum Institute for Teaching Science served 40 teachers through professional development offerings in summer 2006. We continued our collaboration with the Fay School on the annual Rube Goldberg Machine Contest. The 2007 contest, the third, was funded by EMC2, General Electric, and the Fay School Grandparents' Fund. MIT students were recruited and trained as team mentors, and the event attracted more than 200 individual participants. For this program, the Museum was a corecipient of a Leading Edge Award from the National Association of Independent Schools in the Innovative and Sustainable Programs category.

In FY2007, Soap Box established itself as the flagship of the Museum's adult programs, serving 898 adults through 10 events. During the year, Soap Box added the capacity for live webcasts, and in several events comments and questions were taken online. Particularly successful was the Soap Box series in October that was organized in collaboration with the MIT Energy Initiative. Soap Box has been nominated for a Leading Edge Award from the Association of Science and Technology Centers, and a number of Soap Box events were chosen for inclusion in a collaboration with iTunes as representative of MIT. For family and general audiences, the Museum also offered six FAST (Family Adventures in Science and Technology) events, which served 397 individuals, and the very successful Friday After Thanksgiving Chain Reaction, which attracted 1,700 participants and spectators.

The Museum continued its hugely popular GradNight@theMuseum program for the MIT community, as well as its well-established collaborations with Minority Introduction to Engineering and Science, the Saturday Engineering Enrichment and Discovery Academy, Keys to Empowering Youth, iMATH, the Cambridge Science Expo, and programming for Family and Tech/Alumni weekends.

Undoubtedly, the largest programming initiative of the year—indeed, the largest such initiative in the Museum’s history—was the Cambridge Science Festival. Held over nine days in April, the festival attracted 15,000 people to 150 different events in 30 venues across the city. In addition to its organizational role, the Museum offered several festival events, including “The Science of Wine,” a Soap Box special on climate change in eastern Massachusetts, and a number of campus tours. Further details on the festival, including the full program, are available at <http://cambridgesciencefestival.org/>.

## **Administration**

### **Development**

The Museum added substantially to the funding of the ground-floor expansion by securing a gift of \$1 million from Dr. Mark Epstein ’63 toward the cost of exhibition fit-out. In recognition of this generous gift, the Museum has agreed to name the ground-floor space the Mark Epstein (Class of 1963) Innovation Gallery. Apart from the ground-floor project, the Museum raised a total of \$223,887 in gifts, grants, and MIT support for other new exhibitions and public programs, the MIT Museum Without Walls initiative, and collection projects, including \$59,000 in much appreciated unrestricted support from Friends of the MIT Museum. In addition, the Museum secured \$500,480 in funding for the Cambridge Science Festival through sponsorships, grants, and gifts.

### **Retail and Functions**

The Museum generates revenue to support operations through two commercial ventures: an event rental business and a small store. In FY2007 the combined gross income for the store and events rental will exceed \$110,000, which continues the steady upward course of income over the past five years. FY2007 is the second consecutive year in which store revenues increased by approximately 25 percent.

Substantially increased space has been allocated to the Museum store in the new ground-floor galleries. While not extensive, the 120 square feet of space will permit continued expansion into desirable product lines such as games, gadgets, and gift items related to exhibitions, public programs, and Museum collections.

The total number of event rentals at the Museum was similar to FY2006 (70 vs. 73), while revenues increased by 9.6 percent. In January we hired Allison Drescher as sales and marketing manager, on a contract basis, to produce a business plan, create a marketing plan and marketing materials, and promote the Museum as a unique event venue. The Museum is planning to retain Drescher’s services to ensure a regular flow of event rentals into the Museum.



## Public Relations and Marketing

Marketing and public relations director Josie Patterson continued to implement the new marketing and public relations strategy in 2007. Key steps taken include the creation of a new identity system and logo for the Museum, designed by Hecht Design; the production of a range of new print and radio advertisements; and the development of a new print mail campaign, with four-color quarterly brochures mailed to 5,000 people and distributed to information sites on campus, in Cambridge, and in area libraries. The newly designed quarterly brochure won first place in the New England Museum Association's publication awards competition, in the newsletter category.

Other marketing initiatives include: the production, with Academic Media Production Services, of an eight-minute movie about the Museum that is being distributed locally on cable television, on websites, and for use by the Institute; new window panels for the Museum highlighting with photographs the importance of people interacting with one another in the Museum; and participation for the first time in the Museums of Boston Logan Airport Promotion (a large-format poster about the MIT Museum will hang for several years in the customs area of the airport).

The Museum garnered strong local coverage for its Soap Box speaker series (attracting 75–150 people per event) and for the Friday After Thanksgiving Chain Reaction.

Marketing and public relations staff reviewed more than 1,000 promotional photographs taken at events and introduced new project management and photo cataloging software.

Separate marketing and publicity were arranged for the Cambridge Science Festival, employing the services of an experienced marketing and press relations consultant.

## Personnel

Seth Riskin, an MIT visual studies alumnus and light artist, was hired in July 2006 as emerging technologies coordinator.

## Interns and Volunteers

Several interns and volunteers provided valuable assistance to the Museum. Last summer we hosted our fourth intern from the International Yacht Restoration School, who worked on scanning projects for the Hart Nautical Collections. A Tufts University graduate student in museum studies interned with the director of public relations and marketing, helping to promote the Cambridge Science Festival. The education and public programs staff benefited from the work of 10 dedicated volunteers and interns, including a science teacher on sabbatical who spent 2.5 days per week helping to prepare and present school programs and two families who provided regular support for school programs and special events.

**John Durant**  
Director

*More information about the MIT Museum can be found at <http://web.mit.edu/museum/>.*