MIT Museum

Ribbon-cutting ceremony to celebrate the opening of the new ground-floor expansion of the MIT Museum.

Fiscal year 2008 was an exceptional year for the MIT Museum. The key was the opening of the new ground-floor expansion, centered around the Mark Epstein Innovation Gallery, on September 28, 2007. Attended by President Susan Hockfield and many other members of the MIT community as well as by a wide circle of the Museum's friends and supporters, the opening itself was extremely successful and since then the Museum has experienced multiple benefits: a significantly raised public profile, a 30–40%increase in general visitation, an increase in the range and number of its general visitor and education programs, and increases in several key business activities (notably, functions and the Museum store).

The renovation work was led by architects E. Verner Johnson and Associates, and the exhibition and fit-out work was led by exhibition design consultants Krent Paffett Carney. Ably overseen for the Museum by curator of architecture and design Gary Van Zante, the ground-floor expansion project was brought to a highly successful conclusion in September 2008. The contents of the new Mark Epstein Innovation Gallery provide an effective introduction to the Museum; the MIT 360 facility offers a versatile addition to the Museum's spaces for public programs; the facility is attractive to clients who wish to book functions; and the new Museum store is greatly exceeding initial sales forecasts.

Alongside the work on the ground-floor expansion, the Museum successfully led the second Cambridge Science Festival on behalf of MIT and a large coalition of festival partners. Building on the success of the launch festival in 2007, the 2008 festival included several new elements: "Lunch with a Laureate" invited the public for an informal discussion and a brown bag lunch with a different Nobel Laureate each weekday at the MIT Museum; "Banned in Boston" showcased the area's most prominent political, media, and community leaders (including both President Hockfield and Harvard President Drew Faust); and the "Curiosity Challenge Awards" honored one scientist (Dr. Eric Lander), one public school science teacher (Sarah Colby), and 117 K–12 students for their outstanding curiosity and initiative. Overall, 28,000 people attended the 2008 Cambridge Science Festival, almost twice the number as the previous year.

Neither of these major initiatives deflected the Museum from its core operations and services. During the year, the main Museum site at 265 Massachusetts Avenue served 72,814 visitors, as compared with 56,522 the previous year (an increase of 29%). This increase was largely attributable to the impact of the new ground-floor facility during just nine months of the year (interestingly, visitation during the nine-month period

October 2007 through June 2008, after the opening of the Mark Epstein Innovation Gallery, was up 38% from the same period the previous year). Including the main Museum and the Compton and Hart galleries, visitation in 2008 achieved a new record of 97,398.

Other highlights of the year included 34 new acquisitions comprising more than 260 items, including additions to the robotics, computing, and life sciences collections; the completion of the Collections Information Management System project, which now serves as the foundation for many other collections-related projects; the completion of two notable temporary exhibitions in the Compton Gallery, *Jerry Milgram: An Exceptional Ocean Engineer* (fall 2007) and *Urban Design and Civil Protest* (spring 2008); and the organization of more than 225 public and educational programs serving nearly 15,000 people—once again, a new record. These and other developments are discussed in more detail below.

Collections and Exhibitions

The Museum made 34 new acquisitions (many of them substantial collections of objects), with important additions to all five of its main collections. Highlights include Autom and MIT ROV Team Wilbot, additions to the robotics collection, the One Laptop per Child computer, an early 1970s analog music synthesizer, and other additions to the computing collection; and important additions to the slide rules, student life, and MIT history collections.

The Museum made 27 new loans. Currently, there are 130 active loans with other institutions. Among those processed in FY2008 were a loan to the Canadian Centre for Architecture (Montreal, Quebec) in support of the temporary exhibition *1973: Sorry, Out of Gas* and a loan to the Heinz Nixdorf MuseumsForum in Paderborn, Germany, in support of the temporary exhibition *Attention Please, Numbers!*

The curatorial team completed work on a major digital collections management system with support from the Institute of Museum and Library Services. Following a systematic needs analysis and the review of eight commercial systems, the project successfully implemented Willoughby Associates' Mimsy XG and Möbius, the systems deemed best suited for the Museum's diverse collection. Kathy Burton Jones, an expert on information technology for museums and collections, advised collections staff on the development of a five-year plan for collection information management, and the system is now actively in use, particularly supporting two new projects: digitization of the Edgerton photographic collection and a technology project designed to make more of the Museum's stored collections accessible to the public online.

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. Altogether, the architecture and design unit organized and installed 10 exhibitions in three MIT venues (the Mark Epstein Innovation Gallery, the Compton Gallery, and the Wolk Gallery) and circulated one traveling exhibition to four venues in the United States and Europe.

The *MIT Media Laboratory City Car* exhibition (on view since September 2007) highlights the work of students in the MIT Media Lab's Smart Cities Group. The group has developed an energy-efficient smart car as part of a shared-use urban mobility system that, if implemented, could radically reduce the carbon footprints of cities. *Urban Design and Civil Protest* (February 28–June 9, 2008, Compton Gallery) examined the relationship of urban space and public protest in 10 cities worldwide. The exhibition was organized in collaboration with the MIT Department of Urban Studies and Planning and Tali Hatuka, a senior research fellow.

Urban Design and Civil Protest.

School Buildings: A New Architecture for a New Education (on view in the Compton Gallery since June 24, 2008) is a presentation of new designs for school buildings in six European countries. The exhibition was organized in collaboration with Swissnex, the Swiss Consulate of Boston, in conjunction with a daylong international symposium for educators and architects at MIT.

Van Zante also developed several small exhibitions for the Museum's ground-floor galleries: *Andrea Frank: MIT Visions* (on view since March 2008), portraits of MIT faculty by Visual Studies faculty member Frank; *Nine Forms: Photographs by Stanley Greenberg* (on view since September 2007); and, with Seth Riskin, *SandScape* (a project of the MIT Media Lab's Tangible Media Group), a tangible interface for understanding landscapes through a variety of computational simulations using sand (on view since September 2007).

Van Zante and Laura Knott organized and curated four exhibitions for the Wolk Gallery: *Between Spaces: A Project by Wendy Jacob* (September 20–December 21, 2007) featured a site-based installation by MIT Visual Studies faculty artist Jacob; *The Beijing Urban Design Studio: 20 Years of International Collaboration* (April 25–September 14, 2007) was organized in collaboration with the MIT Department of Urban Studies and Planning; *Changing Cities: 75 Years of Planning Better Futures at MIT* (February 12–April 11, 2008), in collaboration with the Department of Urban Studies and Planning, chronicled the history of the department on its 75th anniversary; and *By Way of Broadway: New York Photographs by Cervin Robinson* (April 17–August 15, 2008) presented the work of one of America's leading architectural photographers, including a symposium on photography of place organized by Van Zante and Knott.

The Architecture and Design Collection's most important acquisition was a large estate gift from Norman Fletcher, a founding partner of The Architects' Collaborative. A highlight of the gift was a presentation model for the headquarters building of the American Institute of Architects in Washington, DC, a major modernist building from the 1960s.

Van Zante lectured to classes from MIT, the Harvard Graduate School of Design, and the Massachusetts College of Art and supervised, with Laura Knott, an environmental design studio from the New England Institute of Art, working on museum wayfinding and graphics. This year the Museum again hosted an architectural studies intern from Tufts University, in spring 2008, and another Tufts intern, in museum studies, during summer 2008.

Van Zante's monograph *New Orleans 1867: Photographs by Theodore Lilienthal* was published by Merrell (London) in February 2008. The book was based on his research on a portfolio of photographs of New Orleans, now in a Swiss collection, created for the Paris Exposition of 1867. Van Zante gave several talks in New Orleans on urban photography during the year and presented a paper at the University of London in May.

Young visitors enjoy the Pioneers in Ocean Exploration *exhibition.*

View of the Compton Gallery exhibition, Jerry Milgram: An Exceptional Ocean Engineer.

Hart Nautical Collections

The "MIT and the Sea" initiative generated two key exhibitions this year: *Pioneers in Ocean Exploration* in the new Mark Epstein Innovation Gallery and *Jerry Milgram: An Exceptional Ocean Engineer* in the Compton Gallery. The first of these exhibitions represents a significant new ongoing collaboration with the Woods Hole Oceanographic Institution, which has partnered for many years with a number of MIT alumni in the development of marine robotics and oceanographic instrumentation. The Milgram exhibition provided a superb showcase for the wide impact of MIT's long history of ocean

MIT professor Jerry Milgram (left) with MIT alum Bill Koch at the opening of an exhibit honoring Milgram's contributions to ocean engineering.

engineering education. This exhibition was primarily funded by William I. Koch ’62, a yachting colleague of Jerry Milgram. These exhibitions represent an important first step toward expanding public understanding about the global impact and importance of MIT contributions to research in ocean engineering and ocean science.

The major collections management activity this past year was preparation of digital images for the new collections database. Approximately 7,000 Hart photographs, plans, and models have been digitized. More than 1,000 images are now online, and all 7,000 will be publicly available before the end of 2008. Funding for 40 percent of this work was donated to support reproduction of unique historic photographs for permanent outdoor display panels in a new real estate development at the site of the former World War II shipyard in Hingham, MA.

Holography Collection

In the absence of a curator of holography, registrar and collections manager Joan Whitlow continued to respond to research requests; also, emerging technologies coordinator Seth Riskin took a lead in preparing the ground for the Museum’s Holography and Spatial Imaging Initiative. On May 27, 2008, the MIT Museum hosted a reception to celebrate publication of *Holographic Imaging* (John Wiley & Sons). The book has special significance for the holography community. Begun through the work and teaching of the late Professor Stephen Benton and completed by MIT Professor Michael Bove as a forward-looking, practical volume, *Holographic Imaging* marks an important step in the reinstatement of holography and spatial imaging as an important focus for research, teaching, and outreach at MIT. The MIT Museum initiated and hosted the book launch, together with a smaller brainstorming meeting at which a group of more than a dozen invited guests assisted in planning the next stages of the Museum’s Holography and Spatial Imaging Initiative.

Science and Technology Collection

The Science and Technology Collection made 23 new accessions in 2008, including an XO laptop from the One Laptop per Child project; two important new robots, Professor Thomas Sheridan’s teleoperator robotic arms and Cory Kidd’s (PhD ’07) sociable robot Autom; and a major collection of calculating machines.

Exhibition projects completed during the year included *Zebrafish and Cancer Research: Hopkins Laboratory, MIT Center for Cancer Research*, an exhibition in the Mark Epstein Innovation Gallery; *Risks and Rewards: Whitehead Institute for Biomedical Research at 25*, an exhibition on the second floor of the Museum that celebrates the Whitehead Institute’s 25th anniversary; and *Claude Shannon’s Ingenious Machines*, the first display in the new recent acquisitions showcase on the ground floor of the Museum. The Zebrafish and Whitehead exhibitions are the MIT Museum’s first major exhibitions in the life sciences, and they represent significant new collaborations with two of the Institute’s most prominent research centers.

Curator of science and technology Dr. Deborah Douglas gave talks, lectures, and programs reaching more than 1,000 people during the year. The Museum jointly hosted

the 2007 Scientific Instrument Commission annual meeting with Harvard University. More than 100 curators and specialists from around the world participated in sessions, lab tours, and special programs on campus in September 2007.

The Edgerton Foundation has provided major funding to digitize one of the Museum's most important historical collections: the collections of the late Professor Harold E. Edgerton. The MIT Museum is cataloging and digitizing more than 20,000 images and films that will be made accessible to the general public in late 2008. (This grant was a joint effort in collaboration with the Edgerton Center, the Institute Archives and Special Collections, and MIT Libraries.) Highlights include the conservation work of Marilyn Farnell to process almost 350 films and Dr. Claire Calcagno's cataloging of 3,000 color slides.

Douglas and her assistant Ariel Weinberg continued to make major progress cataloging the Science and Technology Collection in the Museum's new collections database. Together with two interns from Simmons College's Graduate School of Library Science, they cleaned, photographed, and bar-coded more than a third of the collection. As part of a collections storage renovation project, nearly 100 uncatalogued items were properly processed.

The Museum made a major loan of a World War II radar set to the Lyndon Baines Johnson Presidential Library and Museum, as well as special loans to the Heinz Nixdorf MuseumsForum in Germany and the Bruce Museum in Connecticut. Douglas and Weinberg assisted reporters from *ABC Primetime*, the *New York Times*, the *Boston Globe*, the *Chronicle of Higher Education*, and *Technology Review*, as well as documentary filmmakers from England, Australia, and Mexico, and they responded to more than 200 research inquiries (telephone, email, and onsite).

Education and Public Programs

The MIT Museum offered more than 225 public and educational programs serving nearly 15,000 people in 2008. There was significant growth in all four core audiences: middle and high school students, families, adults, and the MIT community. Opened in September 2007 as part of the Mark Epstein Innovation Gallery, the new MIT 360 arena has provided an innovative programmatic space for lectures, discussions, workshops, demonstrations, and performances. In addition to enhancing the Museum's traditional workshops, lectures, and discussions, this new facility supported films, science theater, and technology demonstrations during the year.

To celebrate the opening of the Mark Epstein Innovation Gallery, the programs department planned a two-day schedule of ceremonies, activities, and performances introducing the new museum to the community and serving 2,600 individuals. An equally significant effort was made to mount a large program of events as the Museum's contribution to the 2008 Cambridge Science Festival. Thirty-five events over nine days, including "Lunch with a Laureate," the SHARE Climate Change Walk, the Art/Science/Technology Mixer, behind-the-scenes tours, and hands-on engineering activities, served 1,750 students, parents, and community members.

Soap Box, the Museum's flagship public engagement program, moved to the MIT 360 arena. Incorporating an innovative tablet PC-based audience communication system, Soap Box continued to draw large audiences, both to the live events themselves and to the webcasts, which were archived on MIT World (where Soap Box videos are now among the most popular of all offerings). Four of the eight Soap Box programs offered in 2008 centered on the theme of creativity and innovation, linking ideas from across the Institute in a discussion culminating in the Cambridge Science Festival. A total of 455 live and approximately 3,000 online viewers benefited from Soap Box programs and their online videos. Adult and MIT community programs also included the hugely popular Grad Night program, and the 2007 Energy Night attracted 1,300 graduate students, faculty, and members of the general public.

In total, the programs department provided 71 workshops and tours to 2,280 students, an attendance increase of 10 percent over FY2007. The Middle School Rube Goldberg Contest, a collaboration with the Fay School, expanded from 20 to 24 participating teams. FY2008 saw the 10th anniversary of the Friday After Thanksgiving Chain Reaction, attracting a record number of participants and 1,300 spectators. New programs included the prototype High School Lab Link, which connected high school students with graduate students, staff, and faculty in the Bowring Lab for Geochronology Research through video, live conversation, and lab activities.

The programs department greatly expanded its use of volunteers in 2008. More than 30 volunteers were recruited from organized groups such as Camp Kaleidoscope and the MIT Club of Boston as well as from among MIT alumni, MIT students, undergraduates at neighboring institutions, adults, and home school families. Volunteers facilitated 2008 Cambridge Science Festival events, daily activities and demonstrations in both 2007 and 2008, and monthly weekend activities throughout the academic year.

Administration

Development

The Museum raised $465,800 in cash gifts and grants this year. Our most significant fundraising achievement was the $500,000 challenge grant commitment made by an anonymous local foundation in support of the new Public Engagement with Research at MIT initiative. We have received a first installment of $200,000 and are working to raise the balance by February 2009.

The money that we have raised includes $59,000 in much appreciated unrestricted support from the Friends of the MIT Museum as well as gifts designated for education and public programs; exhibitions; the Architecture and Design, Hart Nautical, Holography, and Science and Technology collections; the Slide Rule Project; the Museum Without Walls initiative; and the celebration of Otto Piene's career and 80th birthday. We are completing a two-year Museums for America grant from the Institute of Museum and Library Services in support of the new collections information management system and a three-year organizational support grant from the Massachusetts Cultural Council. The Council for the Arts at MIT has continued its support with a generous grant to fund new exhibitions and our Friday After Thanksgiving Chain Reaction with artist Arthur

Ganson. Several MIT collaborators have provided funding for joint projects, including the School of Architecture and Planning; the Center for Advanced Visual Studies; the School of Humanities, Arts, and Social Sciences; the Technology and Culture Forum; and Professor Samuel Bowring.

We are most appreciative of the new endowed fund established by Claude W. Brenner '47, a life member of our Advisory Board and chair of the Collections Committee, to benefit our collections. This gift helps address the Museum's goal to build its endowment.

Retail and Functions

As part of the Museum's expansion into the ground floor of N51, the Museum store was relocated and enlarged to approximately 150 square feet immediately adjacent to the admissions desk. This very successful move produced fiscal year gross sales of $195,000 and a positive cash flow that helps to fund staff positions and core programmatic activities.

The Museum store offers merchandise that focuses on science, technology, and engineering. Items are chosen for informative and stimulating content and cleverness of presentation. The goal is to provide visitors with an array of items not typically found elsewhere. Core merchandise includes highly popular T-shirts and gift and household items. Books are an expanding part of the product mix, with a variety of titles geared to lay readers with a particular interest in science. The youth market is served through high-quality kits and games related to engineering and the sciences.

The functions business was highly successful in FY2008, exceeding projected revenue goals. The number of functions (71) was the same as the previous year, but the client mix shifted to 65 percent MIT and 35 percent outside corporate clients as a result of increased marketing to the Boston/Cambridge and metropolitan business communities. Thanks to the new large and open ground-floor space, the Museum can now accommodate seated dinners for 150 people and, combined with the second-floor galleries, can now serve as a venue for larger events.

Public Relations and Marketing

With the opening of the Mark Epstein Innovation Gallery, the marketing department concentrated efforts on raising awareness of the MIT Museum and the new gallery. Much time and funding was spent on attracting people to special events and programs, including the free admission weekend in September 2007 to celebrate the Museum's expansion.

Through a variety of media promotions and partnerships with organizations such as WGBH, YELP, and local schools, the marketing department was able to attract large audiences to the following key events: the Mark Epstein Innovation Gallery reception and opening weekend; the Friday After Thanksgiving Chain Reaction; eight free Soap Box programs; *Re:Design*, a series of three performances of a play based on the correspondence between Charles Darwin and Cambridge botanist Asa Gray; the

Museum's ambitious program for the 2008 Cambridge Science Festival; and a range of family-oriented educational programs throughout the year.

Through its use of proven marketing techniques such as brand consistency, positioning, and messaging; its provision of excellent and timely service to news organizations requesting information and/or photography; and its use of an appropriate variety of media, the MIT Museum now has a solid promotion and publicity foundation for future growth.

Key communication projects in 2008 included the launch of a new graphic identity system (including a new logo and stationery and training on integrating elements into Museum promotions), the launch and management of a newly designed and organized website, the creation and distribution of four brochures and a range of other print materials, the circulation of a monthly email newsletter, advertising in campus booklets and on public radio, a Chinese-language translation of the Museum brochure, the production of display posters for the Cambridge Science Festival headquarters, and new photography of programs and interiors of the Museum.

Technology

Increasingly, the Museum relies on technology for its internal operations and in its exhibitions. In light of this, the Museum established the position of director of technology and hired Allan Doyle '80. During the past year, the focus has been largely on enhancing the internal computing infrastructure with the addition of staff file and web servers, a staff wiki, and a staff blog.

In the area of exhibit technology, the Museum has started a project called the Museum Technologies Initiative and just received a grant for use in FY2009. The funding will allow us to experiment with technology for exhibits such as directional audio, visitor interaction, and visitor exploration of our collections database.

Personnel

Five new positions were created and filled to adequately and effectively staff the expanded Museum and the annual Cambridge Science Festival. At the beginning of the fiscal year, we hired Katie Porter as receptionist, Matt Rochon as weekend visitor services attendant, Allan Doyle as director of technology, P.A. d'Arbeloff as director of the Cambridge Science Festival, and Brenda Blais as administrative assistant for the festival.

Two staff members went on to new career opportunities. Beryl Rosenthal, our colleague of six years and director of public programs, left in August to become director of the Tsongas Industrial History Center in Lowell. Beth Nakamura, who served as our administrative assistant for two years, joined the staff of the MIT Alumni Association Student Programs group in August. Courtney Freeman was hired in November to succeed her.

Volunteers and Interns

Volunteers and interns are critical to the success of nonprofit organizations, helping to augment staff and achieve annual goals. This summer alone we have 17 people working with us on collections and technology projects, exhibition preparation, and the creation and presentation of demonstrations, activities, and mini-tours for our visitors. They range in background from high school students to graduate students in library and information science and museum studies to recent college graduates seeking to gain additional experience in museum and archival work.

John Durant
Director

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