

MIT Museum

During the MIT Museum's annual retreat in September 2003, the staff of the museum identified three institutional priorities for FY2004, all with the aim of furthering the goals articulated in the museum's long-range strategic plan:

1. We acknowledged the need to collect more information regarding our primary audience—adults—in order to serve them better, and we put in place a plan for gathering it. We conducted one-on-one interviews with visitors, developed and distributed questionnaires, and worked with a team of Sloan MBA students who assisted in analyzing the needs and experiences of the MIT student audience. We are now developing programs to respond to the needs and interests of this diverse audience.
2. We recognized the limitations of our web site in terms of content, presentation, navigability, and online services, and formed a staff team composed of representatives from each area of the museum to examine these deficiencies. Working with IS's Web Communication Services, we hired iFactory to make improvements. The upgraded web site went live in April.
3. We continued to work on upgrading the quality of our museum space and moved forward on the second phase of improvements to our Collections work and storage spaces. In preparation for this, Collections staff compiled an inventory of all collections, their current location, and storage conditions. They also worked as a team to outline an RFP to develop a master plan for Collections space. We are working with Facilities to realize this project and to be ready to submit a major proposal in late 2004.

The museum welcomed 74,784 visitors to the main exhibition center and the Compton and Hart Nautical Galleries. They included 2,966 people who visited as part of a home school, K-12, college, or community agency group visit.

Collections

The museum accessioned 16 new objects and collections. Highlights include the sociable robot Cog and Allen, the first mobile robot, transferred to the museum by CSAIL; 636 slide rules and related artifacts given by InteliCoat Technologies; and over 5,000 plans of the Fore River Shipyard, Quincy, MA, given by the US Maritime Administration. Eighteen loans were processed, including six to aviation, science, maritime, and art museums in the United States.

Architecture and Design Collection

In the winter we mounted the first major exhibition in the United States of the work of Gabriele Basilico, the leading European photographer of the urban landscape. Basilico's photographs were selected from two government-sponsored photographic campaigns in

Italy and France, where his photographs served as instruments in the regional and urban planning process. The Compton Gallery exhibition, *Urban Renewal in Emilia-Romagna*, documented 27 urban redevelopment sites in that northern Italian province. The Wolk Gallery exhibition, *Bord de mer: the DATAR Project*, featured Basilico's portraits of coastal towns of France for the French regional planning authority. For the February exhibition opening, we brought Basilico to MIT from Milan, and his participation brought about a collaboration during the course of the exhibition with Turin-native Carlo Ratti, director of the MIT SENSEable City Laboratory (Department of Urban Studies and Planning (DUSP) and Media Lab) and a member of the Harvard Design School faculty. Accompanying the exhibition, and in collaboration with Professors Mark Schuster and Eran Ben-Joseph of DUSP, and Piero Orlandi of the Region Emilia-Romagna, we organized a symposium, "Visions for a New Cultural Landscape," examining issues of regional change.

During the year a collaboration was formed with the Consulate of Switzerland and its cultural and education liaison office in Cambridge, SHARE Boston. The joint project developed during the year is an exhibition opening in September, *The Art of Structural Design: A Swiss Legacy*, organized by the Princeton Art Museum. Included in the programming will be a lecture series featuring Swiss bridge designers, organized by the museum in collaboration with the Departments of Civil Engineering and Architecture.

A major step toward enhanced public access to our collections was made this year with the largest architectural collection, The Architects Collaborative (TAC). This archive of about 5,000 record groups (plus 250 cartons of files) had been uninventoried and in largely inaccessible temporary storage in Metropolitan warehouse. As a result of two initiatives, a cash gift and a collaboration with the Department of Defense (DOD), the TAC collection was reorganized, inventoried, and partially scanned. Last year's gift from PM Industries enabled us to purchase shelving for the collection, and over the summer, with the efforts of registrar Joan Whitlow and architecture interns Marlo Brown (Smith College) and Alex Castillo-Casper (Middlebury College), the collection was reorganized. A major initiative by the DOD Intelligence Agency during the autumn and winter resulted in the inventory of projects and digital scans of a third of the collection. The DOD had an interest in reviewing plans for a large number of TAC projects built in the Middle East, particularly Baghdad, and the information obtained from their research was sent to Washington.

Research on our major recent acquisition—a drawing attributed to Italian Renaissance architect Baldassare Peruzzi, c. 1530—intensified this year in preparation for exhibition of the drawing in 2005. The museum hosted seminars based on the drawing by MIT architecture faculty members Henry Millon and Mark Jarzombek, and, during several collaborative sessions throughout the year, brought architectural historians into the museum to study the drawing and advise in exhibition preparation, including James Ackerman of Harvard, John Pinto of Princeton, James O'Gorman and Alice Friedman of Wellesley College, and David Friedman of MIT. Also consulted were the Boston Athenaeum's paper conservator and research scientists at MIT concerning a forensic investigation of the 16th-century paper support. The project team includes Larry Sass of the Department of Architecture, MIT research scientist Felice Frankel, Richard Tuttle, a

Renaissance architectural historian at Tulane University, and Department of Architecture graduate student Svea Heinemann.

In September, in collaboration with the Harvard Design School, we hosted the conference of the International Confederation of Architecture Museums, North America. For this biannual meeting of architecture curators, the museum organized discussions with Kent Larson of the House-n research group and Bill Mitchell of the Media Lab, and tours of local architecture as well as lectures and papers.

In January, Taryn Zarrillo joined the staff as assistant to the curator of architecture and design. The museum organized an internship with the Architectural Studies program at Tufts University in 2002 and again recruited a Tufts student this year. Vera Tatel, a senior, completed an internship in the spring, working with the TAC collection. A volunteer, Heather Mitchell, began working with architecture collections this summer.

Hart Nautical Collections

The major collections management activity over the past year was completion of a database inventory and preservation processing of the Fore River Shipyard–MARAD Collection acquired last year. This work was accomplished in part with the first funding from the Burroughs endowment for Hart Nautical Collections. The other key collections work involved information science planning to consolidate Hart databases with the museum’s evolving central collections database, and the preparation of two major online finding aids for major collections.

Overall use of the collections increased significantly. Over 1,200 inquiries resulted in \$9,342 in gross revenue. Of this total, \$2,680 was received for use fees and \$748 for sales of collections guides. Plans, photographs, marine art and historical materials were requested for historic vessel restoration, replica vessels, models, design study, personal display, publication and loans to other museums.

John Lednicky '44 again made a generous gift for Hart Nautical projects that will be used for a clipper ship exhibition that will open in September.

We renewed the Department of Ocean Engineering exhibition in the Hart Nautical Gallery with two new exhibits. A very successful collaboration with a student iCampus project resulted in the February launch of *iQuarium* – an interactive exhibit that depicts ongoing MIT ocean engineering research. We also worked with students and faculty to renew the Ocean Engineering Teaching Lab exhibit.

We completed a fifth year of our IAP “nautical skills” program. MIT undergraduate Greg R. Williams had the following to say about his experience, “Thanks for all you did to make this class possible. It was awesome to see the result of all our work today! Definitely one of my top highlights at MIT so far.” The curator participated in architecture Professor Paul Lukez’s design studio in the fall and also provided a substantial number of plans for his students’ design project.

Holography Collection

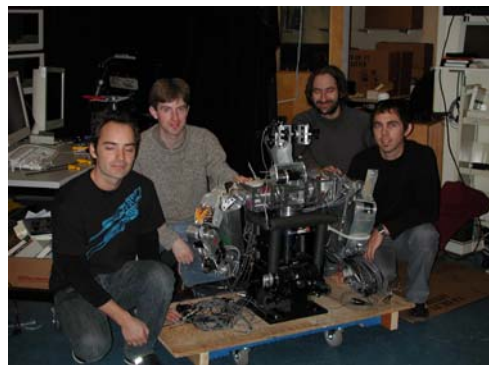
The museum lost a longtime friend with the passing of Professor Stephen Benton last fall. Steve was a dedicated member of the MIT Museum's Advisory Board, served on the Collections Subcommittee, and was an invaluable advisor to us in developing our Holography Collection and Education Program. Thanks to his dedication and determination, the museum was able to acquire the Museum of Holography's collection when it closed in the early 1990s; develop and present a series of acclaimed exhibitions to promote public understanding of the scientific and artistic applications of holography; build and equip a holography education laboratory and develop and present courses for students ranging in age from middle school to adult; and expand our collection through the acquisition of the work of important holographers.

A special project undertaken this year focused on the poster collection from the Museum of Holography archives. Volunteer Peter Hughes, a recent graduate of the University of Leicester, England, assisted in cataloging and rehousing this material. These posters provide vital information about the history of holography, documenting exhibitions and collaborations that existed at one of the most exciting moments of the holographic art movement.

Science and Technology Collection

In conjunction with the national Centennial of Flight anniversary, aerospace was a major focus of work in the Science and Technology Collection. The curator developed an important new exhibition, *Hub of the Air Universe: A Century of Flight in Massachusetts*, which highlighted the aerospace collections, and helped organize numerous programs. A particular highlight was a series of events held on December 17 that included the hosting of the Massachusetts Aeronautics Commission and governor's proclamation, as well as a noontime curatorial lecture on the Wright Brothers, now viewable online at MIT World (<http://mitworld.mit.edu/video/177/>). Support and participation from the MIT Department of Aeronautics and Astronautics as well as numerous regional aerospace organizations created vital new collaborations and emphasized to a new audience the strength and quality of the collections in this area.

The curator made two exceptional acquisitions of international interest. First, the humanoid robot Cog, created by Professor Rodney Brooks and the Humanoid Robotics Group of the Computer Science and Artificial Intelligence Laboratory, was accessioned in late January 2004 and was immediately prepared for loan to the Science Museum of Minnesota as the centerpiece of a national traveling exhibition, *Robots+Us*. Second, in April we received from InteliCoat Technologies the Keuffel & Esser Company Slide Rule Collection, comprising more than 600 slide rules and related artifacts. In conjunction with



"Bon Voyage Cog!" The last students to work on Cog helped disconnect the robot and transfer it to the MIT Museum in January 2004.

our existing collection of some 300 slide rules, the MIT Museum now holds one of the largest and most important public collections and has begun plans for a major traveling exhibition.

The curator helped manage as well as curate the new Building 20 memorial *Magical Incubator*, a permanent exhibition installed in the Alexander Dreyfoos Lobby of the new Ray and Maria Stata Center. A particular highlight of this project was the restoration and installation of the SCR-615B radar antenna, designed by the Rad Lab and used by the Meteorology Department of MIT as part of its pioneering work in weather radar technology. The MIT Museum is grateful for the support of Lincoln Laboratory that enabled this display of one of our most valuable artifacts.



The Magical Incubator exhibition commemorating Building 20, installed in the Alexander Dreyfoos Lobby of the Stata Center.

With support from the Research Laboratory of Electronics, the MIT Radiation Laboratory Negative cataloging and rehousing project (which includes the early years of the RLE) has now processed 15,000 images. Other important conservation projects included the cleaning and cataloging of all artifacts from the Charles Stark Draper Laboratory Historical Collection; the inventory of all Harold E. Edgerton films with the support of the Edgerton Center; and the restoration of an unusual banner from MIT's antiwar protests of 1970, thanks to the generous support of Lawrence Linden, SM '70.



Newly acquired and restored banner that hung in Lobby 7 during the nationwide campus strike in May 1970.

The curator responded to nearly 200 separate inquiries and gave talks, lectures, and programs serving 1,800 people. She worked with 11 interns and volunteers.

MIT General Collection

Jenny O'Neill, the curatorial assistant, responded to 200 research requests and 99 requests for photographs. The photograph and film collections were used extensively for several notable projects, including two publications in process, *Designing MIT: Bosworth's New Tech* and a history of MIT in the 19th century. Documentary filmmakers also drew on the collections for a history of video games; *Breaking Vegas*, a film about the MIT blackjack team; and *Tactical to Practical*, exploring innovations developed for combat that have evolved into useful tools for civilian life. To better preserve and access these unique materials, Ms. O'Neill initiated a project to rehouse the glass plate negative collection, and created a database system for long-term storage and retrieval of all digital images in the Museum's digital image archive.

Education and Outreach

Adult Programming

We developed a new program series, “Object Lessons,” to make public the richness of our collections. On the third Wednesday of every month, a curator gave a talk focused on a fascinating item drawn from the collections. Visitors heard exciting stories that illuminated scientific and technological achievements at MIT and their impact on our daily lives. Over the course of the year, curators invited faculty and other content experts to join them as speakers, thus enriching the experience. Topics and objects included rare 18th century maps, antique research thermometers, a square of fabric from the Wright Brothers Flyer, Apollo computer programs, architectural plans, and Vietnam War-era student strike banners.

During IAP we offered two shipbuilding-related courses, continued the annual four-session holography studio course, and added a three-part holography lecture series to the roster.

Family Programming

Our fall hands-on Family Adventures in Science and Technology (FAST) programs focused on a variety of topics and were supported by the Department of Physics and the Center for Materials Science. From December on, they focused on celebrating the Centennial of Flight. We worked closely with the Department of Aeronautics and Astronautics and Draper Laboratory, which very generously codeveloped, staffed, and supported our activities and events, culminating in a Festival of Flight hosted in April, where over 18 different aviation-oriented clubs and agencies met with the public.

Our annual major event, the Friday After Thanksgiving Chain Reaction, with kinetic sculptor Arthur Ganson, attracted a very large crowd of 1,300 people. We plan to move this program from duPont Gymnasium to Rockwell Cage in November 2004 to accommodate the ever-increasing audience and teams of participants.

Through our partnership with the Media Lab in the Playful Invention and Exploration (PIE) Network, we were able to continue a twice-monthly series of programs called “Invention Studios” and “InventioNibbles,” both utilizing emergent technologies. Visitors produced electric xylophones, musical water fountains, a “monster shop,” and mechanical theaters, and explored tactile sensations and cartooning. We also began offering PIE-based programs to home school and adult audiences.

School and Group Programming

School programs offered this year included “Color My World” (light and color), “Exploring the Third Dimension: Holography Exhibition Tour and Laboratory Visit,” “Entering the Third Dimension: Holography Hands-On,” “In the Blink of an Eye” (stroboscopy), “Lost at Sea” (navigational tools), and “Team Rocket” (principles of flight

and propulsion), serving over 800 students throughout the state and greater New England. We held our second teacher workshop with the Museum Institute for Teaching Science, with 44 teachers enrolled. Several of these educators returned with their classes during the school year.

For the third year in a row, the February school vacation week became an opportunity to observe National Engineers Week. We were able to implement a weeklong celebration thanks to the continued support of Dean Magnanti and the School of Engineering. Various departments were involved in making one-day presentations to visitors, including the Chemical Engineering Department, the Institute for Soldier Nanotechnology, MIT's Micro Engine Project, and the Leaders for Manufacturing Program.

Playful Invention and Exploration Network Research Project

The MIT Museum completed three very successful years of participation in the Playful Invention and Exploration (PIE) Network museum collaborative. This National Science Foundation-funded project, which concluded in June 2004, created an innovative spirit of collaboration between the MIT Media Lab (the recipient of the PIE grant) and the MIT Museum, resulting in a number of highly innovative public programs exploring the roles of digital technology within informal learning environments. Achievements supported by this grant included:

- MIT Museum's collaboration with 17 student and faculty researchers from six research groups at the MIT Media Lab, as well as the Center for Advanced Visual Studies and the Computer Science and Artificial Intelligence Laboratory.
- 20 MIT students, faculty, and staff volunteered a total of 450 hours assisting in the development and implementation of invention-related programs and exhibitions for the general public.
- Approximately 375 families and adults attended 38 invention-related workshops, totaling 120 hours of direct visitor interaction.
- Over 1,200 visitors attended invention-related museum events and exhibitions that were free with the price of admission.
- MIT Museum staff led public activities and participated in professional speaking engagements at six external conferences and museum events at locations including the Exploratorium, the Science Museum of Minnesota, the Lemelson Center at the Smithsonian Institution's National Museum of American History, and the Association of Science and Technology Centers' annual conference.



MIT research scientist Brian Silverman shares a programming environment that he helped to create during the 2003 MindFest event, a celebration of playful invention supported by the NSF-funded Playful Invention and Exploration Network.

Stephanie Hunt, learning technologies coordinator for this project, has created a searchable online database of workshop materials to assist in dissemination of PIE-like activities in other educational settings.

Outreach

We developed a relationship with Novartis Institute for Biomedical Research (NIBR), whose new headquarters are across the street from the museum in the former NECCO building. Earlier this year, NIBR organized a local competition for individuals and Cambridge school students to redesign the signature NECCO water tower, which had been painted bright pastel colors mimicking the candy maker's popular multi-colored candy roll. We installed a display of the submissions in our street-level display windows.

In June we cohosted the American Association of Museums conference on Learning in Museums. This two-day program held at the Museum of Fine Arts and MIT Museum attracted 130 museum professionals from throughout the United States to analyze and discuss the many dimensions of adult learning.

Exhibitions

Main Galleries

We exhibited *ZENetic Computer*, the work of Naoko Tosa, a visiting scholar at the Center for Advanced Visual Studies, in the fall. This work combined Buddhist principles, Asian philosophy, and images from traditional Japanese ink painting, kimono, and haiku, and was manipulated with a computer, producing a breathtaking interactive installation. This spring we installed *Telling It Like It Is: Student Activism at MIT During the Vietnam War*, a selection of 16 posters from our collection of protest posters. We joined the Edgerton Center and Institute Archives in commemorating the 101st anniversary of Harold "Doc" Edgerton's birth by holding a special exhibit for Technology Day. Claire Calcagno, a Dibner Fellow, organized *Illuminating the Past*, which focused on Edgerton's marine archaeological work and drew on our extensive Edgerton collection.

Compton Gallery

The museum mounted two exhibitions in Compton Gallery. *Knowing Where to Stand: Photographs by Anne Whiston Spirn* focused on landscape architecture by the award-winning faculty member. It was followed by *Gabriele Basilico: Urban Renewal in Emilia-Romagna*.

Traveling Exhibitions

The museum's exhibition *Seeing the Unseen: Photographs by Harold Edgerton* continues to tour the United States. During the past year it was on loan to the Mary Brogan Museum

of Art and Science, Tallahassee, FL; the Trout Gallery at Dickinson College, Carlisle, PA; and the Grout Museum of History and Science, Waterloo, IA.

Administration

Development

Since December, 36 donors have made gifts totaling \$35K to the Friends of the MIT Museum program that provides much needed unrestricted support. In April we were awarded a major grant from the Lord Foundation of Massachusetts that will fund a new initiative in FY2005 focusing on emerging technologies being developed at MIT. They and their creators will be featured in a series of short-term changing exhibits and a variety of public programs. The Council for the Arts at MIT again made a generous gift to help fund new exhibitions in Compton Gallery and education programs for the community.

Public Relations and Marketing

In January, the MIT Museum produced a general marketing rack card for distribution by a marketing firm at local hotel and tourist destinations for the calendar year. Jack Curtis arranged for MIT World to video, present, and archive on its web site an “Object Lessons” gallery talk by Deborah Douglas related to *Hub of the Air Universe*, which she curated. Working with the Department of Ocean Engineering and iCampus, he helped stage the press opening for *iQuarium*, a new exhibit component in the Hart Nautical Gallery. As outreach to underserved communities, he renewed the museum’s relationship with local Big Brothers/Big Sisters organizations and the museum’s free summertime admission program for them. Targeting potential adult visitors, he also linked the museum with Cambridge School Volunteers and offered its 1,200 tutors discounted summertime admission. His web work helped fulfill the redesign goal for the museum’s web site—to present a rich and accessible communications vehicle that efficiently serves visitors, researchers, and donors.

Retail and Functions

At the Visitor Services desk we continue to offer a select line of retail items that commemorate a visit to the museum. Among these is *Nightwork* (MIT Press), a compendium of the best hacks that was a top seller during the holiday period.

The MIT Museum was a unique and hospitable venue for 56 functions hosted by MIT and external clients during the past year.

Jack Curtis, Public Relations and Marketing

Debbie Douglas, Curator, Science and Technology

Stephanie Hunt, Research Associate, Emerging Technologies

Kurt Hasselbalch, Curator, Hart Nautical Collections

Mary Leen, Acting Director

Jenny O'Neill, Collections Assistant
Beryl Rosenthal, Director, Exhibitions and Public Programs
Gary Van Zante, Curator, Architecture and Design
Joan Whitlow, Registrar and Collections Manager

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