

## Associate Provost

The [associate provost](#) oversees three areas: extra-academic arts programs and institutions, international strategic programs and initiatives, and the OpenCourseWare (OCW) program. Arts programs include Arts Initiatives, to which the Office of the Arts reports; the List Visual Arts Center (LVAC); and the MIT Museum.

### The Arts

#### Current Goals

The overarching aim of the arts is to implement and advance the plans set forth in the [Arts at MIT White Paper](#) published by the provost in July 2011.

#### Accomplishments

The endowments for artists in residence administered by the Office of the Arts are the most generous funding available for the arts at MIT. It has become apparent that they could be used more effectively if faculty and student involvement were increased and opportunities distributed among a greater number of departments and programs. The program was relaunched in academic year 2011–2012 with excellent results. An open call for proposals circulated to all departments, labs, and centers produced an exceptional roster of visiting artists for the 2011–2012 academic year. Existing collaborations with faculty and creation of new projects were furthered by these residencies. Students benefited in unprecedented ways from workshops, open rehearsals, studio sessions, or master classes as part of the programming, and public presentations of the artists' projects were often oversubscribed. The integration of the visiting artists programs into the curriculum and research at the Institute became a “proof of concept” for one of the key components of the new Center for Art, Science, and Technology (CAST).

In April, MIT announced the creation of the Center for Art, Science, and Technology, based in the Office of the Provost, with support from the Andrew W. Mellon Foundation. The proposal was co-sponsored by the associate provost, Adèle Naudé Santos, dean of the School of Architecture and Planning; and Deborah K. Fitzgerald, Kenan Sahin dean of humanities, arts, and social sciences. Building on the tremendous energy generated by the Festival of Arts, Science and Technology that marked MIT's 150th anniversary during the winter and spring of 2011, CAST will promote closer collaboration among creative arts faculty, visiting artists, scientists, engineers, and students with the aim of creating and demonstrating viable models for cross-disciplinary inquiry and production. The center will advance MIT's leadership in integrating the arts into the curriculum and research of institutions of higher learning, a national initiative supported by the Mellon Foundation. By the end of the launch period, CAST hopes to set a new standard of excellence for bridging the arts, the sciences, engineering, and digital technology in ways that engage specialists and non-specialists alike.

The Eugene McDermott Award in the Arts at MIT achieved a new level of visibility in 2010 with the selection of conductor Gustavo Dudamel, a very successful campus residency, and a gala celebration that broke new ground by raising funds for the arts

and convening national leaders from the classical music world and every important Boston-area music organization, along with members of the Council for the Arts at MIT (CAMIT) and the MIT Corporation, upper administration, and faculty. This year's events for the 2012 recipient, multimedia performance and media artist Robert Lepage, sustained the high standard set by the 2010 award and surpassed it in two areas: the number of sponsors for the gala increased, and the residency created more extensive engagement with MIT faculty and students. Margaret McDermott, who attended the events at the age of 98 in 2010, was represented in 2012 by her daughter, Mary McDermott Cook.

The List Visual Art Center's exhibition Stan VanDerbeek: The Culture Intercom, one of four exhibitions created in recognition of MIT's 150th anniversary celebration, was awarded Best Show Involving Digital Media, Video, Film or Performance by the US section of the International Association of Art Critics. It was one of four exhibitions mounted for the 150th celebration, all of which received excellent reviews. The lecture by Cai Guo-Qiang and the dedication of the artist's Percent-for-Art project, Ring Stone, for the Sloan School of Management marked a very successful conclusion to the China Forum series for the academic year.

Attendance at the MIT Museum's many exhibitions and programs continued to increase, sustaining a trend that has seen the museum's total visitation more than double since FY2005. The new Kurtz Gallery for Photography was inaugurated, three major temporary exhibitions were installed, and the museum co-hosted the ninth International Symposium on Display Holography with the MIT Media Lab. Science on the Street, a statewide expansion of the Cambridge Science Festival, now in its sixth year, was launched, and the Science Festival Alliance, now in its third year, has seen the total number of science festivals nationwide increase to more than three dozen.

### **Administrative Initiatives**

The associate provost chairs the Creative Arts Council and the advisory board of the Catalyst Collaborative at MIT (CC@MIT). He is a member of the executive committee of the Council for the Arts at MIT and the advisory boards of the List Visual Arts Center and the MIT Museum.

CC@MIT is a collaboration established in 2004 between MIT and the Underground Railway Theater (URT), one of two professional theater companies housed in the Central Square Theater in a building owned by MIT. The project brings together theater artists and scientists to create and present plays that deepen public understanding of science and technology while providing emotional and artistic experiences not present in other dialogues about science. Given the success of the project in building audiences for plays about science, the other residence theater company at Central Square Theater, the Nora Theatre, began to present plays on related subjects in the 2011–2012 season. In spring 2012, the advisory committee approved a proposal to have the Nora collaborate with URT on the Catalyst Collaborative at MIT. The new arrangement, advisors believe, will serve CC@MIT's mission by increasing the number of plays about science and related programming presented each season and the fundraising capacity of the effort.

In preparation for the 40th anniversary of the Council for the Arts in October 2012, the associate provost and the CAMIT leadership initiated a strategic planning retreat, with the aim of setting goals for the next five years and recruiting the next generation of leaders and members.

In an effort to further the goal of broadly communicating the excellence of the arts at MIT and to augment existing communications staff serving the arts, the associate provost and the deans of the School of Architecture and Planning and the School of Humanities, Arts, and Social Sciences jointly funded a new position in social media on a one-year, experimental basis.

### **Finances and Funding**

The Andrew W. Mellon Foundation granted \$1.5 million over four years to support the establishment of CAST.

Margaret McDermott gave an additional \$1 million donation to MIT, with \$400,000 designated to raise the McDermott Award from \$80,000 to \$100,000 and the remaining \$600,000 for the McDermott Fund, dedicated to initiatives by the president and the associate provost to promote and communicate the excellence of the arts at MIT.

The List Visual Arts Center received \$100,000 from the Ellsworth Kelly Foundation for art conservation, with \$30,000 designated for the endowment for conservation and the remainder for current needs.

Ronald A. '54 and Carol Kurtz donated \$500,000 to the MIT Museum to renovate a portion of the second floor for the newly designated Kurtz Gallery for Photography and an additional \$50,000 to publish a beautifully illustrated catalogue of the exhibit Berenice Abbott, Photography and Science: An Essential Unity. Sidney Silber '39 made a gift of \$250,000 to fund the Sidney Silber '39 MIT Studio, a hands-on educational platform where students can learn how to communicate complex scientific and technological ideas by developing practical (hardware and/or software) projects that have the potential for deployment in the museum environment. In addition, the museum raised \$1,133,290, including funds for the Cambridge Science Festival and the Science Festival Alliance.

### **Future Plans**

- To establish CAST as an international leader in demonstrating how the arts, science, and technology can thrive as interrelated, mutually informing modes of exploration, knowledge, and discovery
- To make the case for the prominence of the arts in MIT's next major fundraising campaign
- To celebrate CAMIT's 40 years of support for the arts and to advance ambitious goals for the next 5 to 10 years

## Personnel

Paul Ha was appointed director of the List Visual Arts Center, following Jane Farver's retirement, and assumed his position in December 2011. Kenan Sahin distinguished professor of music Evan Ziporyn was appointed the inaugural director of the MIT Center for Art, Science, and Technology. In addition, a faculty advisory committee for CAST was appointed, whose members are Tod Machover, Muriel R. Cooper professor of music and media at the MIT Media Lab; Jay Scheib, associate professor of theater arts; and Meejin Yoon, associate professor of architecture. Leila Kinney, executive director of Arts Initiatives, will serve as executive director of CAST in support of the faculty director.

## International Initiatives

### Accomplishments and Finances/Funding

The International Advisory Committee (IAC), co-chaired by the associate provost and Claude Canizares, the vice president for research, continued to review proposals for new and existing international programs across the five schools. IAC also held a half-day retreat at the end of August 2011 that brought together the committee, the provost, deans and/or associate deans of the five schools, and the leaders of many of MIT's major international projects. More than 50 senior faculty and staff were present. The associate provost discussed the "serial research and education" model that currently prevails at MIT and introduced for consideration three other models: the university network model, the autonomous international campus model, and the Internet (online) certificate and degree model. Various faculty and staff leaders then examined these three models. One significant outcome of the retreat was a series of internal IAC discussions about international strategies, lessons learned from existing international programs, and where MIT faces its greatest challenges and competition on the international front. The result was a draft document that revised and updated IAC's 2009 report "Guiding Strategies for International Activities."

The MIT-SUTD (Singapore University of Technology and Design) Collaboration, under the direction of professor Sanjay Sarma (Mechanical Engineering), reports to the associate provost, who chairs the collaboration's steering committee and serves with the provost and dean of engineering on its joint governance council. The "collaboration," which builds on more than a decade of MIT education and research activities in Singapore, is to date the largest and most complex university capacity-building endeavor in MIT's history. MIT-SUTD has made excellent progress in the area of curriculum development and has also contributed to efforts to recruit the collaboration's first faculty members. The International Design Center (IDC), which constitutes the research arm of the collaboration, has emerged slowly but now appears to be building up steam. The appointment at long last of a co-principal investigator of distinction on the SUTD campus should accelerate joint research efforts at the IDC branch on campus and at the branch on the SUTD campus. The associate provost was a featured speaker at SUTD's opening day ceremony on May 7, which launched the first classes ever taught at SUTD. Other speakers included Tony Tan, president of Singapore, and SUTD president Thomas Magnanti.

The effort to help the government of Rwanda develop a climate observatory (expected to be the largest in equatorial Africa) has been making reasonable progress in recent months. The associate provost and professors Maria Zuber and Ronald Prinn of the Department of Earth, Atmospheric, and Planetary Sciences lead this effort, which emerged from a field trip they made to Rwanda in November 2009 at the request of the Rwandan government.

The associate provost continued to advise the Greater China, India, and Middle East faculty working groups on designing and implementing strategies for these countries and regions. Major new initiatives that have emerged in the past year include the Tata Frugal Engineering Project with India and the MIT-Aramco collaboration with Saudi Arabia. Both include new, large funding opportunities for MIT.

In 2011 the associate provost, in cooperation with the Global Initiatives Office in Resource Development, established new faculty innovation (seed) funds for India and China as part of the MIT International Science and Technology Initiatives (MISTI) seed fund initiative; \$150,000 each for India and China was made available for research and educational seed initiatives, and that funding will be renewed for the coming year.

The associate provost chairs the Advisory Council of the Kuwait Center for Natural Resources and the Environment. The original agreement with the sponsor, the Kuwait Foundation for the Advancement of Science, was revised and extended, providing the center with considerably larger competitive research funding than it previously had. Professor Mujid Kazimi and associate professor Jacopo Buongiorno of Nuclear Science and Engineering have been serving since July as the center's director and associate director, respectively. Dr. Murad Abu-Khalaf replaced Dr. Amina Hamzaoui as the center's executive director in March.

The associate provost co-chairs with a Portuguese colleague the Advisory Council of the MIT Portugal Program (MPP), which is now directed by professor Dava Newman (Course 16). He paid a visit with Professor Newman and dean of engineering Ian Waitz to Lisbon in September to discuss with high-ranking government officials how best to sustain MPP amidst the financial crisis that Portugal has been experiencing for over a year. MIT should learn whether the program will be funded for another five years in the summer of 2012.

The associate provost helped to organize the effort to secure a \$35 million research grant (over five years) for the Computer Science and Artificial Intelligence Laboratory from the Qatar Computer Research Institute (supported by the Qatar Foundation). This new program is to begin July 1, 2012.

Early in the second semester, the associate provost and the vice president for research organized a discussion of faculty and senior staff involved in and/or interested in Brazil that attracted nearly 30 participants. At least two new collaborations with Brazil are at various stages of discussion with the Brazilian government and one of its top universities.

The associate provost worked with the dean for graduate education and the director of MISTI in an effort to secure a major endowment from the Turkish government to support qualified Turkish PhD students at MIT and to start up a full-blown MISTI Turkey program. We are awaiting the government's decision on whether to make the requisite funding available.

### Future Goals

- To build on the work of the Greater China Faculty Working Group, which was reconstituted in 2011, to focus on the implementation of the China strategy report
- To accelerate the activities of the India Faculty Working Group and to develop new resources for research and educational programs in and with India through the MIT India Trust and the MIT-India Innovation Fund
- To continue to assist in efforts to strengthen MIT's relationship with SUTD, the Kuwait Center, and the MIT Portugal Program
- To advance the Middle East Faculty Working Group's discussions about MIT's Middle East strategies and, specifically, to develop MIT's latest collaboration with Aramco in Saudi Arabia, which the associate provost is overseeing
- To continue to monitor through IAC all major international research and education programs, especially those in Singapore, Abu Dhabi, Saudi Arabia, Portugal, Spain, Brazil, Russia, and China
- To expand efforts to develop major new initiatives with Brazil and Turkey
- To find a solution for regularly updating and strengthening the impact of the [Global MIT website](#), which is listed on the MIT homepage

### OpenCourseWare

#### Accomplishments

This year, OpenCourseWare published 38 new courses and updated 69 previously published courses, for a total of 107 courses published during the year. This brought the total number of courses on OCW to 2,142. OCW also added six new supplemental resources, bringing the total number of these educational enrichment units to 42.

In addition, under a grant from the Stanton Foundation, OCW published seven new Scholar courses, which are foundational courses specifically structured for independent study. There are now 12 Scholar courses on OCW. The new courses are 6.00 Introduction to Computer Science and Programming, 6.01 Introduction to Electrical Engineering and Computer Science I, 7.01 Fundamentals of Biology, 9.00 Introduction to Psychology, 14.01 Principles of Microeconomics, 18.03 Differential Equations, and 18.06 Linear Algebra.

Other highlights include the collaboration with the Chemistry Department on the Dow-funded Chemistry Outreach project, which has resulted in the development of several new features that will be published on the Highlights for High School section of OCW in fall 2012; notable among them is the new “5.301 Chem Lab Boot Camp,” which has a reality TV format that relates the adventures of freshman students taking this Independent Activities Period course. OCW received a grant from the NASDAQ Foundation to create a new OCW website feature that highlights courses on entrepreneurship. A new initiative called “OCW Educator,” conceived by the OCW Faculty Advisory Committee, aims to share information about teaching practices at MIT with educators at MIT and around the world. OCW continued its collaboration with the Singapore University of Technology and Design program to coordinate, produce, and deliver 18 new courses to SUTD. Similarly, OCW continued its collaboration with the MIT Energy Initiative, publishing two more courses from this new curriculum.

This year OCW also enhanced several internal work processes to streamline video production, speed development of video transcripts (an accessibility concern), and analyze OCW course publication in relation to the MIT curriculum to ensure that published materials are relatively timely and reflective of what is taught at the Institute.

The American Library Association recognized OCW as one of the Best Free Reference Web Sites for 2012. The OpenCourseWare Consortium conferred the 2012 President’s Award for OpenCourseWare Excellence on professor Shigeru Miyagawa, chair of the OCW Faculty Advisory Committee, for his contributions to the global OCW movement.

### **Personnel and Administrative Initiatives**

OCW experienced turnover in two senior positions. Joseph Pickett replaced former publication director Dan Carchidi, and Peter Pinch replaced former production manager Kate James. OCW also created and filled a new video production manager position, promoting Brett Paci to this position.

### **Finances/Funding**

OCW expenses for FY2012 totaled \$3.6 million, about 8% below its budget of \$3.9 million. A major financial highlight of the year was the signing of OCW’s first sponsors under the corporate underwriting program initiated last year. Lockheed Martin and Mathworks together contributed \$500,000 and have pledged additional funds in future years. Additional corporate prospects are being courted. Individual donors made gifts totaling \$351,402, down 16% from last year.

**Future Goals**

In FY2013, OCW will continue to publish new and updated MIT courses and will continue publication work on the Singapore University of Technology and Design, MIT Energy Initiative, and Chemistry Department collaborations. By arrangement with the Stanton Foundation, OCW will publish three more Scholar courses and use the remaining grant funds to mount an awareness campaign to draw more attention to, and use of, Scholar courses.

OCW will complete the redesign of its website in the coming year. This will update the overall look and feel of the website to convey a more dynamic, fresh, innovative personality for OCW; create opportunities for showcasing courses and resources; and improve the overall user experience to increase discoverability of courses.

OCW will continue to work with the chancellor, MITx, and other MIT educational innovation programs to develop better communications and to identify and exploit areas of potential synergy among these groups.

**Philip S. Khoury**  
**Associate Provost**