

## **Dean, School of Architecture and Planning**

The School of Architecture and Planning deals with a far wider range of fields and issues than its name suggests. In addition to the Department of Architecture (the oldest such department in the country) and the Department of Urban Studies and Planning (DUSP), it houses the Program in Media Arts and Sciences (MAS), the Media Laboratory, the Center for Real Estate (CRE), and the Center for Advanced Visual Studies (CAVS). The cross-disciplinary research and education occurring among these units enables faculty and students to address all aspects of the human environment.

During academic year 2004, the School saw a number of particularly exciting developments in faculty appointments and the initiation of new research and teaching ventures, as well as continued efforts to improve current course offerings and physical facilities. This report presents selected highlights of these achievements. Reports from the School's departments, programs, laboratories, and centers provide additional information about the past year.

### **Faculty**

In September, after 11 years as dean, William J. Mitchell stepped down as head of the School to concentrate on a new role as head of Media Arts and Sciences, one of the three main units of the School of Architecture and Planning and home to MIT's Media Lab. During his tenure as dean, he mounted a multimillion-dollar renovation of the School's administrative and academic spaces giving MIT the most up-to-date architecture and planning facility in the nation. Mitchell continues to serve as architectural advisor to MIT president Charles Vest, a position he has held since 1998. He is widely credited as a source of inspiration and guidance for MIT's Evolving Campus program—a \$1 billion building initiative—that is remaking the campus.

Terry Knight, associate dean of the School, was appointed interim dean when Mitchell stepped down. Knight also chaired the advisory committee for the selection of the new dean. The other members of the committee were Professors Rodney Brooks, Charles Correa, Michael Dennis, Langley Keyes, Mitchel Resnick, and Anne Whiston Spirn.

In January 2004, Adèle Naudé Santos became dean of the School of Architecture and Planning, with appointments in the Departments of Architecture and Urban Studies and Planning. Santos holds a master of architecture in urban design from Harvard, a master of architecture and a master of city planning from Penn, and a diploma from London's Architectural Association. She has designed, taught, lectured, and exhibited extensively in the United States, Japan, South Africa, and elsewhere, and her award-winning work has been featured extensively in the architectural press.

Santos has served most recently as a professor of architecture in the College of Environmental Design at Berkeley. Before that, she was founding dean of the School of Architecture at UC San Diego, chairman of the Department of Architecture at Penn, and a professor of architecture at Harvard's Graduate School of Design and at Rice. Santos

has also had a private practice since the 1960s. On her own and in concert with associates in South Africa, Philadelphia, and San Francisco, she has won an impressive number of awards and competitions all over the world—six of them in first place.

In the Department of Architecture, Marilyne Andersen was appointed assistant professor of building technology effective July 1, 2004. Arindam Dutta was promoted to associate professor without tenure effective July 1, 2004. The work of associate professor of design Mark Goulthorpe was exhibited at the Pompidou Center in Paris. In addition to her duties as associate dean, Terry Knight was appointed the director of the new Computation group in the department. Professor William Porter was coeditor of a book, *Design Representation* (Springer Verlag, 2004). Porter retired June 30, 2004. Joan Jonas served as acting director of the Visual Arts Program (VAP) while a search was mounted for a director. Professor Stanford Anderson edited *Eladio Dieste: Innovation in Structural Art* (New York: Princeton Architectural Press, 2004).

In the Program in Media Arts and Sciences, Hugh Herr was appointed assistant professor. With great sadness we report the untimely death, at age 61, of one of the Media Lab's founding members, Stephen Benton, who held the E. Rudge and Nancy Allen professorship of media arts and sciences.

The Department of Urban Studies and Planning appointed Brian Anthony Ciochetti a professor of the practice. He also was appointed chair of the Center for Real Estate. Jointly with Science, Technology, and Society and Media Arts and Sciences, the department also launched a multiyear visiting professor arrangement with renowned sociologist/theorist Manuel Castells. Three faculty members received promotions: Eran Ben-Joseph and Eric Klopfer were promoted to associate professor without tenure and Diane Davis was promoted to full professor.

In the Center for Real Estate, professor of urban studies and planning David Geltner finished his first year as director. John T. Riordan, previously the chairman of CRE, assumed the position of honorary chair. As mentioned above, Brian Anthony Ciochetti was appointed the new Thomas G. Eastman chairholder and chair of the Center for Real Estate. Assistant professor Lynn M. Fisher joined the faculty of DUSP with a dual appointment in CRE. She specializes in real estate development and economics.

Professor of architecture Krzysztof Wodiczko completed his first year as director of the Center for Advanced Visual Studies. Director emeritus Otto Piene is currently preparing two books for publication: *SKYART 2002* and *CenterBook*.

Increasing the diversity of the faculty continues to be an important goal for the School. Since 2001, when the School Report on the Status of Women Faculty was completed, the numbers and proportions of women faculty in the School have increased significantly. In 2001 there were 14 tenure-track/tenured women, comprising 19 percent of the total faculty. In AY2004 there are 24 tenure-track/tenured women, comprising 30 percent of the total faculty. In one department—the Department of Urban Studies and Planning—the percentage of women faculty has almost doubled from 20 to close to 40 percent.

This upswing is due in large part to the commitment and intensive efforts of department/program heads and faculty to find and recruit outstanding women applicants in faculty searches. It is also due to the work of the school-wide Diversity Committee. The committee interacts with every faculty search committee throughout the search process. It meets with each search committee at the beginning of a search to review affirmative action policies and to help develop a search plan. It reviews the short list of candidates and outreach efforts before candidates are invited for interviews. It reviews and approves the final search report. The committee keeps a database of advertising venues that target women and minorities, and it evaluates and updates this list when searches are concluded. However, it appears that the most effective recruitment tool is word-of-mouth and personal contacts.

Some next steps for the School are mentoring and guiding our new junior hires through the promotion process and continuing attention to minority faculty and student recruitment.

## **Space**

The School's long-term goal for Architecture and DUSP has been to acquire enough space to function effectively and to have the space located conveniently. DUSP, in particular, lost space in the previous move to the central campus and this has programmatically compromised them for many years. Interim space for DUSP was made available in Building 35 late in the spring of 2004. Once the Professional Education Program moves out of Building 9, DUSP will acquire this as permanent space (tentatively, spring 2005). In a careful consideration of both programs, it is clear that both departments will need more space to maintain their high academic status. Architecture has a large component of faculty and students housed in substandard conditions in Buildings N51-52. Several scenarios have been outlined to create facilities closer to the central campus to be occupied within reasonable time frames. In particular, the Campus Police will be moving out of W31 by the end of FY2005, making space available to the department for the Visual Arts Program.

Together with the staff from Planning and the Committee for Review of Space Planning, we are continuing to seek space to house the undergraduate students and faculty.

The Media Lab extension remains a very high priority, and faculty are actively fund-raising to achieve this.

## **Educational Initiatives**

Departments and programs in the School continue to develop their undergraduate and graduate programs in new directions, as described in the departmental sections of this report.

In the Department of Architecture, the Master of Architecture program was reaccredited by the National Architectural Accrediting Board for the maximum period of six years. Mark Goulthorpe's combination of philosophically based inquiry with digital design

methodologies was introduced to the studio design sequence. A new design stream for the SMArchS program was approved, and in the fall of 2004 the “design lab” will be officially announced. *SMArchS Guidelines*, a manual for students and faculty outlining history theory and criticism (HTC) requirements was produced. A mentoring program between HTC PhD students and SMArchS students was approved and will be implemented in the fall of 2004. A new discipline group called Computation was established in the department.

The Visual Arts Program added three new subjects and a new project, “Fearless Speech.” Five VAP subjects were made available through MIT’s OpenCourseWare initiative. Its cross registration program in the arts among MIT, the Massachusetts College of Art, and the School of the Museum of Fine Arts has been improved.

DUSP faculty member Dr. Eric Klopfer continues as director of the Teacher Education Program (TEP). Through TEP, undergraduates can complete certification in secondary math and science teaching. This year the TEP nearly doubled its number of licensed teachers to 12. Over the last year, the TEP has strengthened its relationship with the Cambridge Public Schools, the Boston Public Schools, and the Brookline Public Schools while developing new partnerships with Arlington and Belmont Schools.

DUSP faculty members participate in a wide range of collaborations with departments and organizations within the Institute as well as in the US and around the world. They often incorporate class projects and thesis work with these “real-world” partners. The City Design and Development group, in cooperation with the Media Lab and with support from DUSP and the dean, established the SENSEable City Laboratory. Innovative projects include development of a programmable glass for use in buildings and charting real-time activity in the city through the use of cell phone data, in cooperation with the largest cell phone company in Europe.

Professor Dennis Frenchman, in conjunction with research scientist Michael Joroff, has initiated a research project with the CERTI Foundation to design Sapiens, an experimental high-technology, education, entertainment, and research park on the island of Florinopolis, Brazil.

Professor JoAnn Carmin hosted faculty and students from the University of Economics, Prague, as part of an ongoing Czech-US collaborative project examining how government agencies and nongovernmental organizations learn from disaster. The visit, which included a series of lectures, organized training sessions, and roundtable discussion, was a continuation of a program initiated last spring when she took students to Prague to learn about the Czech floods of 2002, train in field research methods, and assist with data collection.

Professor Balakrishnan Rajagopal, in association with Professor Susan Murgott from the Department of Civil and Environmental Engineering, is developing a research project on the human rights of *dalits* (so-called untouchables) in India to water, health, and sanitation. This project, with students from both departments participating, will be

supported by the Robert Kennedy Memorial Center for Human Rights initially and will run for the next two years.

The Master in City Planning (MCP) committee implemented the remaining elements of the new core curriculum approved in 2002. The core practicum requirement was implemented in the fall term with the unveiling of six subjects, including three new subjects that will engage MCP students in the practice of city planning in the field. The committee also implemented new standards and procedures for thesis preparation, including a new spring thesis prep subject for students who wish to begin their research over the summer.

The PhD committee formulated a preliminary plan to restructure the program, with a goal of moving students more quickly through their general examinations and into their dissertation. Changes include instituting fixed-format general exams at the end of the second year (currently each student writes an individual exam proposal sometime in their second or third year); a schedule of discussions for first-year PhD students on topics including finding fellowship aid and how to write a journal article; and weekly seminars where advanced PhD students can present their job talks and early PhD students can present their preliminary thesis work.

Recognizing that technology permeates the research interests of many faculty and students in each of the program areas, DUSP established Urban Information Systems (UIS) as a cross-cutting initiative to replace the program group Planning Support Systems, which focused on technological dimensions of planning. Rather than a separate program group, the goal of UIS is to bring together doctoral students and faculty from across the department who share an interest in information technology and its applications to planning and development.

The CRE matriculated 33 members of the Class of 2003, the 19th class of Master of Science in Real Estate Development graduates, in October 2003. From a strong applicant pool, 47 people were offered admission to the Class of 2005, and 38 accepted. In AY2004, CRE integrated construction engineering courses into its curriculum, providing students with a third area of interest: construction. During FY2004, the CRE was the catalyst for the following five research initiatives: the Housing Affordability Initiative; the Commercial Real Estate Data Laboratory; Working SPACES: Office Space Design Principles Project; New Century Cities; and House Price Movements-MRAC Database. The center also conducted its first thesis webcast in May 2004. They are planning a follow-up in the fall of 2004. The 19th summer of professional development courses brought 251 students, enrolling in five classes, to campus last summer.

ArchNet, an online community for architects, planners, urban designers, interior designers, landscape architects, and scholars, with a special focus on the Islamic world, continues to grow. ArchNet now has over 35,000 images, 2,000 publications, and 18,000 members from over 120 countries around the world. ArchNet aims to become an indispensable educational tool that will bring diverse communities together through the discipline of architecture. They are now collaborating with Peter Rowe, previously dean of the Graduate School of Design at Harvard University.

PLAZmA, the new high-tech communications resource consisting of four large plasma monitors, has been installed around the Building 7 fourth-floor dome. PLAZmA, curated by Terry Knight, associate dean, and Jim Harrington, facilities manager, both showcases the work of the School and builds its community. Content for PLAZmA includes faculty, staff, and student research, practice, or course-related work, material from School publications and galleries, simulcast or recorded talks and lectures, and the School events and activities calendar. Faculty and students can also use the monitors on an as-needed basis for personal laptop presentations.

## **Events and Awards**

Each year faculty and students of the School receive numerous honors in recognition of their research and service offered by the School, the Institute, professional societies, and national and international recognitions. This year was no exception. The reports of the School's departments, laboratories, centers, and programs make note of many of these awards. Several especially notable awards deserve additional mention here.

In the Department of Architecture, department head Stanford Anderson received the 2004 Topaz Medallion, the highest award in architectural education, awarded jointly by the American Institute of Architects and the Association of Collegiate Schools of Architecture. Associate professor Ann Pendleton-Jullian received the prestigious Rotch Traveling Studio Award, which partially funded a three-and-a-half-week student trip to Bangladesh and India. Assistant professor J. Meejin Yoon was appointed the Class of 1948 career development professor effective July 1, 2004. She also won a competition to build an interactive sound and light installation at the summer 2004 Athens Olympics called "White Noise White Light." In November, assistant professor John Ochsendorf was awarded the Benvenuto Prize from the Associazione Edoardo Benvenuto in Italy for his PhD dissertation in engineering from Cambridge University on the "Collapse of Masonry Structures." Caroline Jones was appointed the Alfred Henry and Jean Morrison Hayes career development chair for three years beginning July 2003. Erika Naginski was named to the Alfred Henry and Jean Morrison Hayes career development chair. Assistant professor Wendy Jacob and Professor Krzysztof Wodiczko participated in the MASS MoCA exhibit, "The Interventionists: Art in the Social Sphere." Professor Michael Dennis' Schwartz Center for the Performing Arts opened at Emory University with a concert by the New York Philharmonic Orchestra.

The 17th Arthur H. Schein Memorial Lecture was presented by Ricardo Legorreta, Cecil Balmond gave the 7th Felis Candela Lecture and Eduardo Catalano presented the 11th Pietro Belluschi Lecture.

Department of Architecture student Rebecca Luther received the AIA Medal for top-ranking graduating MArch student. The Francis Ward Chandler Prize for achievement in architectural design was awarded to Rori Dajao and Matthew Pierce. A newly created departmental award, the Special Recognition Award for outstanding service to the department was awarded to Robert Morgan. SMArchS student Axel Kilian's project

"Museo Costantini," in collaboration with Juergen Mayer H. and Bettina Vismann, was accepted to the Architecture Biennale in Venice 2004.

In the Program in Media Arts and Sciences, assistant professor Cynthia Breazeal was selected by *Technology Review* as one of the 100 innovators aged 35 or younger whose technologies are poised to make a dramatic impact on our world. She was also chosen as one of three finalists for the National Design Awards, given annually by the Smithsonian Institution's Cooper Hewitt, National Design Museum, and received the ALA achievement award for pioneering work in HRI and sociable robots, as well as the Commonwealth 21st Century Award for Innovation. Tod Machover received the first Ray Kurzweil Award of Technology in Music at the Telluride Tech Festival. John Maeda was named as one of the "20 Master Designers" by *Fast Company* magazine. Barry Vercoe was the recipient of the 2004 Society for Electro-Acoustic Music's (SEAMUS) Award for Lifetime Achievement. Saul Griffith, a PhD candidate working with Joseph Jacobson, won the Lemelson-MIT Student Prize for Inventiveness. PhD candidate Pengkai Pan, of the Interactive Cinema group, received the first-ever National Excellence Award for Overseas Chinese Students from China's Ministry of Education.

In the Department of Urban Studies and Planning, Professor J. Phillip Thompson won a Martin Luther King Leadership award from MIT. Professor Balakrishnan Rajagopal was elected as a member of the Executive Council of the American Society of International Law, to the Asia Advisory Board of Human Rights Watch, and to the International Advisory Board of the Robert Kennedy Memorial Center for Human Rights. In addition to the many departmental, School, and Institute awards received by DUSP students, many also received national and international recognition. The 2004 Boston-Area Affordable Housing Development Competition first-place award went to Diana Bernal, Whitney Foutz, Leslie Mullins, and Ray Hodges. Annis Whitlow received the American Planning Association Charles Abrams Scholarship and Kath Phelan received the National Science Foundation Science and Technology Studies Dissertation Grant. Departmental grants included awarding Peilei Fan the outstanding PhD Dissertation, while the Outstanding MCP Thesis award went to Tracy Sayegh and Mark Shorett.

The Center for Real Estate hosted a lively meeting in April, in partnership with the Boston Council of the Urban Land Institute, for corporate supporters, current students, faculty, and members of the public. The conference was organized to discuss the future of Boston's convention business with the opening of the new Boston Convention Center. Panelists included Heywood Sanders from the University of Texas, William Mitchell (MIT), and Maureen McAvey, ULI fellow.

At the Center for Advanced Visual Studies, Professor Krzysztof Wodiczko was presented with the College Art Association's annual award for a "distinguished body of work" for work developed and exhibited during the previous year. He also received an honorary doctorate from the Maine College of Art. Fellow Nell Breyer was awarded an LEF New England General Grant for development and production of the "i:move" installation and live performance series that explores how movement is perceived. Fellow Elizabeth Goldring received an Alumni Lifetime Achievement Medal.

The Ralph Adams Cram Award for outstanding interdisciplinary work at the master's level was presented to Greg Morrow for his thesis, "Civitas Peregrina: Abject Space in Early Immigrant Toronto." His thesis was submitted in partial fulfillment for the degrees of master of science in architecture studies and master in city planning.

The Harold Horowitz (1951) Student Research Fund was awarded to the following six students this year: Salo Vinocur Coslovsky and Lianne Fisman, both PhD candidates in urban studies and planning; Coryn Kempster, an MArch candidate in architecture; Andrea Lyn Lockerd, a PhD candidate in media arts and sciences; M. Dhakshike Wickrema, an MCP candidate in urban studies and planning; and Susana M. Williams, an MCP/SMArchS candidate in urban studies and planning and architecture.

Recipients of this year's Infinite Mile Award were Ramona Allen (Media Lab/MAS), Donna Beaudry (Architecture), Kevin Davis (Media Lab/MAS), and Diane McLaughlin (School of Architecture and Planning, Dean's Office).

## **Goals for 2005**

*Strengthen the role of the School of Architecture and Planning within MIT.* Our observation is that our School is somewhat peripheral to the academic heart of MIT and is in many ways "invisible." It is our intention to build greater strength into the academic offerings at the undergraduate level and to encourage cross-disciplinary linkages between individuals and programs at the graduate level. We will actively recruit students to join our majors in architecture and urban studies and planning by making these offerings more visible.

*Develop and implement a "One School" concept.* Although there are enormous strengths in each department and program individually, the School would be more attractive and stimulating to students and faculty if there was a greater sense of community. Lack of community has been an issue raised by students and faculty and is currently being addressed. Collaborative areas of overlap between departments need to be encouraged, nurtured, and strengthened. Our unique strength is having the disciplines of architecture, media arts and sciences, and urban studies and planning in one school. For architecture, in particular, a productive collaboration with research in media arts and sciences will set it apart from competitive institutions. Ongoing collaborative work between urban studies and planning and media arts and sciences, such as the SENSEable City Laboratory and the Cannes Reloaded workshop in the fall has been a successful first step in the type of cross-fertilization that will help our School remain top ranked in its fields. Testing the inventive products of research in the built-environment would extend the influence of media arts and sciences. Our School has not yet reached the level of excellence of which it is capable, and the key to reaching this peak is in the productive nature of interdisciplinary work.

**Adèle Naudé Santos, Dean and Professor of Architecture and Urban Studies and Planning**  
**Terry Knight, Associate Dean and Associate Professor of Architecture**

More information about the School of Architecture and Planning can be found on the web at <http://sap.mit.edu/>.