Dean, School of Architecture and Planning

The School of Architecture and Planning is composed of five main divisions:

- The Department of Architecture, the first such department in the nation (1865), which came to be known as a leader in introducing modernism to America
- The Department of Urban Studies and Planning (DUSP), which began as the Program in City Planning in 1932 and was the second of its kind in the country, and has evolved into the longest continuous planning program in the United States
- The Media Laboratory, the birthplace of multimedia computing (1985), which has come to be known around the world as a first-class incubator of new design ideas
- The Center for Real Estate, which established the nation's first one-year graduate program in real estate development (1984), becoming recognized worldwide as a leader in the field
- The Center for Advanced Visual Studies (CAVS; 1967), which pioneered the
 use of technologies such as lasers, plasma sculptures, sky art, and holography
 as tools of expression in public and environmental art and is now a thriving
 fellowship program

The School is also host to the MIT Design Laboratory, the Legatum Center for Development and Entrepreneurship, and the Center for Bits and Atoms.

The unifying theme of our activities is design. Through the design of physical spaces and through the design of policies and technologies that shape how those spaces are used, we aim to sustain and enhance the quality of the human environment at all scales, from the personal to the global.

What follows are some of the highlights from the year. For more information, consult the divisions' individual reports.

Campus-wide Activities

The School of Architecture and Planning (SAP) was one of three schools taking the lead this year in a new MIT initiative to address the environmental impact of the world's ever-growing demand for transportation. By leveraging connections among faculty in three different schools, Transportation@MIT aims to speed the development of new ideas in sustainability, technology, business practice, and public policy.

In March, Robbin Chapman hosted nearly 80 recruitment professionals from New England institutions for the third annual Diversity Roundtable sponsored by the New England Higher Education Recruitment Consortium, an organization designed to advance the efforts of its members to recruit and retain outstanding and diverse faculty and staff.

Architecture

Leon Glicksman continued as a member of the Energy Council of the MIT Energy Initiative (MITEI) and as cochair of the MIT Campus Energy Task Force; Les Norford was the School's representative on the provost's Race Initiative Committee; and Caroline Jones served as a member of the MIT Gender Equity Chairs Committee.

Planning

Amy Glasmeier served on the MITEI educational task force and as advisor for the new undergraduate minor; she was also a member of the planning and research team providing advice to MIT president Susan Hockfield on the development of a corporate leaders committee to help foster regional engagement between MIT and industry.

Larry Susskind offered a new campus-wide doctoral seminar on "Green Technology Innovation" and organized the MIT Faculty Environmental Network for Sustainability. More than 75 members of the MIT faculty from across all five schools are working to develop a new undergraduate minor in environment and sustainability and a new interdisciplinary certificate of advanced graduate study in environment and sustainability.

Chris Zegras continued as the leader of the Transportation Systems Focus Area of the MIT-Portugal Program.

Education

A new initiative was launched this year exploring how landscape and design can redirect contemporary urbanization. Centered in the School's Joint Program in City Design and Development, the initiative is focused on landscape intelligence: analyzing the forces that shape the built and natural environment and using that understanding to design strategic solutions to the most pressing environmental and social challenges of our time, including climate change, renewable energy, water conservation, landscape toxicity, deindustrialization, environmental justice, adaptive reuse, and the design of cultural landscapes.

A project from a class in developmental entrepreneurship taught by Alex (Sandy) Pentland developed a design that holds considerable promise for millions of people around the world who live in houses with metal roofs—houses that become unbearably hot in the summer, deafeningly noisy in heavy rains, and freezing in the winter. Based on a concept created a decade ago by Les Norford and Leon Glicksman in the building technology program, their approach uses local agricultural waste such as straw, held together with a binder made of local resins, to make insulating panels that can be installed beneath the existing metal panels. The insulation panels can be manufactured locally, keeping the profits in the community, and can reduce the consumption of wood for heating, reducing greenhouse gas emissions and the negative health effects of indoor pollution from cooking fires.

MIT's Urbanization Laboratory was established in 2006 to invent new models of city form and function to accommodate the hyper-rapid urbanization now being seen in Asia

without sacrificing livability. This year's studio, led by Rahul Mehrotra and Alan Berger, was set in the Mumbai metropolitan region—home to India's richest city and Asia's largest slum, the source of a third of India's taxes, and the location of the world's most prolific entertainment industries.

Architecture

PhD candidates in the History, Theory, and Criticism Program significantly cornered the field in humanities research fellowships this year. The unusual number of fellowships—far greater than the average for US architecture schools—highlights the program's uniqueness in American education: alone among graduate programs in architecture schools, the SAP program hosts a substantial curriculum in art history, and its position in the nation's oldest school of architecture distinguishes it from the art history departments in other universities.

Mark Jarzombek is preparing a cross-disciplinary class on modernisms with literature professor James Buzard; he also piloted a graduate subject in global architecture in the spirit of his highly successful textbook on the topic and will develop this curriculum further for undergraduates in 2010–2011.

Marilyne Andersen received grants from MITEI to develop a sustainable futures workshop that will be offered to undergraduate and graduate students and will be a subject offering in the planned Institute undergraduate minor in energy.

Several new undergraduate subjects were added in response to the changing needs of students and their desire to tap into subjects traditionally geared toward the graduate student population. In an effort to promote greater intellectual rigor and independent thinking, undergraduates are also being encouraged to complete a senior thesis.

Undergraduates continue to be encouraged to participate in a variety of international experiences offered by the department including, this year, Hong Kong University; Bombay, India; Leogane, Haiti; Italy's Veneto; and Singapore/Bangkok.

Increasingly, efforts have been made to make our programs green. Shun Kanda, Eran Ben-Joseph, Adèle Naudé Santos, and Andrew Scott offered workshops and studios in the summer and fall of 2008 and the spring of 2009 to design prototype housing and sustainable communities in Japan.

Yung Ho Chang, Dennis Shelden, and Tony Ciochetti taught a studio on the design of a house that costs \$1,000 (the 1K House) and addressed the issue of energy as well as poverty. John Ochsendorf, Marilyne Andersen, and J. Meejin Yoon prepared a new subject on design and sustainability that will be offered in the fall of 2009.

Planning

For the 2009–2010 admissions cycle, the total number of graduate applications was up sharply. The Environmental Policy and Planning program saw its graduate applications almost double this year, partly in response to the success of the MIT-US Geological

Survey Science Impact Collaborative, which attracts environmental scientists who want to learn to work at the intersection of science, politics, and public policy.

The Undergraduate Committee continued work on raising the visibility of DUSP among MIT's undergraduates; seven freshmen declared an urban studies and planning major this year (down from a high of 11 in 2006–2007 but still part of an overall upward trend).

Now in its third year, Phil Thompson's 4.001J/11.004J CityScope class focused on planning for federal economic development stimulus spending, with special attention to the potential of "green retrofitting" projects. This course was cotaught with Karen Polenske.

Another major attraction of DUSP for undergraduates is the 11.027 City to City subject, taught by Cherie Abbanat. This year 12 students traveled to Panama City to compare urban design, architecture, and city planning issues and problems there with those found in Boston.

Students in Eran Ben-Joseph's 11.304J Site and Infrastructure Planning Studio completed a manual for "ecologic-oriented development and infrastructure design" that used Tama New Town outside of Tokyo as a reference; this project is part of a long-term collaboration with Japan's Sekisui House to envision, design, and build prototypical sustainable residential communities for society in the years 2030-2050.

MITEI seed funding was extended to Judy Layzer for a new course on sustainability and to Carlo Ratti for MIT-wide energy benchmarking. In addition, Jonathan Raab's 11.369J Energy Policy for a Sustainable Future class brought efficiency-oriented policymakers to DUSP, while Phil Thompson worked with students to determine ways to use efficiency stimulus funds to create green jobs.

Tunney Lee and his planning studio students returned once again to China's Pearl River Delta, where they have worked since 2005 on issues of sustainable neighborhood development.

The Scheller Teacher Education Program embarked upon a second year of the "Simulations, Systems and Computational Literacy" project, focused on partnerships with the Boston Public Schools.

Media

The alternative freshman-year program had more than 20 students enrolled.

The Program in Media Arts and Sciences (MAS) offered five undergraduate subjects, and at least one MAS faculty and/or senior staff member conducted freshman seminars or served as freshman advisors.

Sixteen of the Media Lab's graduate students and all of its approximately 200 Undergraduate Research Opportunity (UROP) students are enrolled in degree programs outside the lab's academic program in Media Arts and Sciences.

Real Estate

The schedule for the Professional Development Institute was revised to coincide with the calendar year. During the first half of 2009, the program expanded its global program into the Middle East, offered custom executive education in Kuwait, participated in a Dubai symposium, taught at the Higher College of Technology in Abu Dhabi, and worked with Masdar, a sustainable city under development in Abu Dhabi, to discuss possible professional development offerings.

A new mini-course on domestic US real estate was offered during late May/early June.

The MSRED experience was enhanced this year by two treks. The first trek was to the Urban Land Institute's annual meeting in Miami and the second was the annual trip to New York City.

Visual Studies

The Visual Arts Program experienced a burst of growth this year, with an increase in applications to the graduate program, higher enrollments overall, and the addition of five new subjects. Antoni Muntadas led students in his 4.367 Studio Seminar in Public Art on a field trip to Istanbul.

Research

Architecture

Three professors from SAP are currently involved in massive land development projects in South Korea and Italy that are virtually unprecedented in their scope and scale. Alexander D'Hooghe and Nader Tehrani were among the winners last summer of a contest sponsored by the Urban Design Institute of Korea to propose a landfill project on South Korea's western coast that could be eight times bigger than the record-breaking Palm Deira landfill in Dubai. In addition, Alan Berger recently signed an agreement with Italy's Latina Province to design an ecological plan for 500 acres of the most polluted part of the region.

Marilyne Andersen received a MITEI seed grant to assess the energy savings potential of leading-edge building façade technologies.

Leon Glicksman and Les Norford carried out research on the Abu Dhabi Masdar project to develop energy-efficient air conditioning systems and design tools and investigate building energy use in urban settings.

Planning

This year marked the launch of the New Orleans Fellows Program, through which four DUSP students are working on one-year projects with community-based organizations in a number of New Orleans neighborhoods.

Working through the Community Innovators Lab and the DUSP Practicum Committee, students and faculty also worked on client-based projects for communities around Massachusetts (Lawrence, Springfield, Boston, and Lowell).

Dennis Frenchman, Michael Joroff, and William Mitchell continued a cross-campus interdisciplinary research effort involving design of the "Digital Mile" in Zaragoza, Spain, as part of the New Century Cities initiative.

Dennis Frenchman and Chris Zegras were recently awarded a \$650,000 grant from the China Energy Foundation to develop tools and prototypes for energy-efficient city form and real estate development in China.

In the fall, the four Just Jerusalem Competition winning teams (nine members total) came to MIT as "Jerusalem Visionary Research Fellows" for a semester to work with faculty from DUSP and the Center for International Studies (CIS) on transforming their ideas into detailed and implementable plans.

Media

The Media Lab welcomed 10 new sponsors and filed 20 patents in FY2009; three were issued, including one US patent for a touch-panel input device.

The Center for Future Storytelling was established at the Media Lab with a seven-year, \$25 million commitment from Plymouth Rock Studios, a major motion picture and TV studio slated to open in Plymouth, MA, in 2010; the organizations are working together to revolutionize how stories are told, from major motion pictures to peer-to-peer multimedia sharing.

The lab also announced two new research initiatives: the Autism and Communication Technology Initiative, directed by Rosalind Picard and Matthew Goodwin, which will foster the development of innovative technologies to enhance and accelerate the pace of autism research and therapy; and the Social Health Initiative, directed by Alex (Sandy) Pentland and Frank Moss, which focuses on building on a reactive health-care system centered on preventing disease rather than treating it.

In addition, the lab established two new research groups: Design Ecology, headed by David Small, which focuses on malleable design that is aware of—and can seamlessly interact with—changing environments, and High-Low Tech, headed by Leah Buechley, which explores how diverse audiences can integrate high- and low-technology materials to build their own technologies and help to democratize engineering.

A sampling of other research initiatives includes:

 SixthSense, a gestural pendant-like interface that projects digital information onto any surface and allows the user to interact with that information using natural hand gestures

- CollaboRhythm, an innovative platform that goes beyond today's online and video-conferencing technologies to facilitate remote collaboration between patients and their caregivers
- Graspables, which combine finger-touch pattern sensing with pattern-recognition algorithms to provide interfaces that can "read the user's mind"
- CityCar, a stackable, electric, two-passenger city vehicle that will create an urban transportation network that takes advantage of existing infrastructure (such as subway and bus lines), the economy of car sharing, and cutting-edge design to change the way we live in dense urban areas
- Nexi, a humanoid robot that possesses a novel combination of mobility, moderate dexterity, and human-centric communication and interaction abilities
- Sociometric Badges, which connect individuals through an innovative sensing
 platform that logs voice features, proximity to others, face-to-face-interactions,
 and movement to create a social network diagram of badge wearers—all in real
 time
- The world's first powered ankle-foot prosthesis, an important advance for lowerlimb amputees that propels users forward using tendon-like springs and an electric motor, reducing fatigue, improving balance, and providing a more fluid, humanlike gait

Real Estate

The first phase of the 1K House project focused on design and constructability issues and research based on the principles of affordability, livability, and sustainability. Students were charged with honoring the \$1,000 price cap on the houses, making the homes affordable to a larger, poorer population group. Innovative designs were also required to address infrastructure limitations and the need to harvest energy and treat waste in a self-sustained way. As part of the next phase, design proposals will be presented to representatives from Skanska, one of the Center for Real Estate's industry partners and an international construction company, to assess feasibility and create a full-size working prototype.

The Housing Affordability Initiative (HAI) issued a report revealing that moderate-income working households in Maine are increasingly finding adequate housing to be out of reach and very-low-income households continue to have a difficult time affording adequate housing. HAI also began work in the spring focused on the dilemma of housing supply and public policy responses to the housing market crisis.

Recent research indicates that the vertical phasing of buildings may hold significant potential for helping developers manage risk by allowing a building to grow in height as market conditions warrant. This development method is an example of a "real option" in real estate—a right but not an obligation to pursue a future course of action. Real options are important because of the value they can add to a project.

The Center for Real Estate has been working with the National Association of Real Estate Investment Trusts to generate a suite of indexes and has continued to produce the Transaction-Based Index using data provided by the National Council of Real Estate Investment Fiduciaries; these indexes have been cited repeatedly by news sources such as Bloomberg, the *Wall Street Journal*, and CNBC.

The New Century Development initiative was expanded to include a focus on promoting sustainable building development in the real estate industry.

Visual Studies

The yearlong MIT Federal Emergency Management Agency (FEMA) Trailer Project reached its conclusion. Directed by Jae Rhim Lee, the effort redesigned and rebuilt a surplus trailer originally purchased to house victims of Hurricane Katrina. The repurposed trailer was donated to the nonprofit arts organization Side Street Projects and toured nationally.

This year's artist fellows at the Center for Advanced Visual Studies were John Malpede, an eminent performer, director, and activist who often uses governmental, legal, and media sources as found texts; John Bell, theater historian, puppeteer, and cofounder of Brooklyn-based avant-garde theater group Great Small Works; Jane Philbrick, who sculpts language to foreground the physical, tactile material properties of her immaterial medium; and Wendy Jacob, an artist who makes sculptures and site-based installations that explore the interface between architecture and bodily experience.

This year's graduate affiliate was Laurel Braitman, a PhD candidate in the doctoral program in History, Anthropology, and Science, Technology, and Society. A CAVS graduate affiliate is an MIT graduate student who receives studio space at the center, a small grant for materials, and studio visits from the center's staff; in turn, he or she helps link the center and visiting artists to his or her home department or laboratory.

Events

In an exceptional event last fall, five winners of the Nobel Prize in Economics convened at MIT for the launch of the Legatum Center for Development and Entrepreneurship, which focuses on promoting entrepreneurship in low-income countries, encouraging innovation and competition in the very places where development is urgently needed.

An exhibition of recent photographs by Portuguese architect Júlio de Matos was on display in the Wolk Gallery last fall, capturing the ambience of a rapidly vanishing landscape and way of life in the ancient hutong neighborhoods of Beijing—communities that are threatened today by the city's building boom.

Architecture

The department sponsored a number of public activities for undergraduates or their parents, including Jan Wampler's talk and reception at Family Weekend, an open house, tours, a building workshop and reception for prefreshmen, a new-major orientation

program, and senior thesis presentations. In addition, two exhibitions of undergraduate design work were presented in a new exhibition space in the lobby of Building 9.

The work of Yung Ho Chang, head of the Department of Architecture, was on display at London's Victoria & Albert Museum last summer as part of a major exhibit showcasing the latest in architecture, fashion, and graphic design from China; in conjunction with the exhibit, Chang also created a specially designed installation in the museum's John Madejski Garden, and when the show moved in October to the Cincinnati Art Museum, he designed the installation for the entire exhibit.

On display in the Wolk Gallery this spring, *Working in Mumbai* presented the urban interventions, historic preservation, and contemporary building projects of Rahul Mehrotra and RMA Architects in India.

Riverscapes, an exhibition of photos of historical water landscapes by Adriana de Miranda, was on display in Rotch Library in the fall.

The Aga Khan Program for Islamic Architecture (AKPIA) hosted five postdoctoral fellows and two workshops: "Water in Architecture, Landscape + Urbanism," organized by James Wescoat, and "Exploring the Role of History in Contemporary Architectural Practice," organized by AKPIA students Christian Hedrick and Zameer Basraii.

Planning

In August, DUSP participated in MIT's freshman pre-orientation program, offering 15 new freshmen a three-day "Discovering Urban Studies and Planning" session designed by Judith Layzer and Ezra Glenn.

In December, over 80 people gathered at the MIT Museum to hear a panel discussion reflecting on the 50th anniversary of the PhD program.

For the sixth consecutive year, DUSP participated in the China Planning Network's "China Week" in Beijing and Chongqing, which included an urbanization summit and a number of special forums.

The City Design and Development program sponsored a speaker series on "Landscape and Urbanism," a new concentration of study in the program, which highlighted work of current DUSP professors and brought visitors to campus over the year.

Media

Skellig, a new opera composed by Tod Machover, had its world premiere in November as a highlight of Juice, the NewcastleGateshead Festival for Children and Young People in Newcastle, England.

The Media Lab had a strong presence at the Museum of Modern Art's *Design and the Elastic Mind* exhibit, which featured the work of Neri Oxman and Hugh Herr's advanced prostheses.

In May, more than 100 "Scratch Days" were hosted in 31 countries, giving children throughout the world a chance to connect through animation, music, games, and other media by using Scratch, the simple programming language developed by the Media Lab's Lifelong Kindergarten group.

A cutting-edge interactive sculpture developed by a team from the Mobile Experience Lab was unveiled last summer at the 74th Pitti Uomo Trade Show, a major fashion event at the Fortezza da Basso in downtown Florence.

In October, the Media Lab's sponsor week featured a one-day symposium on "Smart, Sustainable Cities" led by Bill Mitchell, head of the Lab's Smart Cities research group.

In January, Media Lab students were once again involved in "geek chic" on the runway with Seamless Computational Couture, a student-organized fashion show highlighting wearable technology.

Visual Studies

CAVS presented an exhibition last fall by urban designer Damon Rich and the Center for Urban Pedagogy that explored the relationship between finance and architecture. To expand the impact of the exhibit, members of the MIT community were invited to use the show as a platform for lectures or demonstrations of their own research in the areas of home finance, the mortgage crisis, and related topics.

During last summer's Democratic National Convention in Denver, Krzysztof Wodiczko transformed a military Humvee into a work of public art, projecting the words and voices of homeless veterans against silent city walls.

Within the past year CAVS has mounted exhibitions at the MIT Museum, the St. Louis Contemporary Art Museum, and the Queens Museum in New York. Addressing such topics as the mortgage crisis, climate change, the financial crisis, AIDS in Haiti, and disability, CAVS artists have collaborated with MIT scientists, engineers, and scholars to create programs for the public.

Ports and Ships, an exhibit of photographs by Andrea Frank, was on display this spring in the MIT Museum's Compton Gallery.

Wendy Jacob established a collaboration with Gallaudet University for deaf and hardof-hearing undergraduates, resulting in a two-day seminar at MIT on low-frequency vibration.

Publications

Architecture

In August 2008, the department published *Projects of the Design Process*, a companion book to *Conversations of Design: Essays by the Undergraduate Architecture Faculty*, published in 2007. The first publication addressed the theories behind teaching

undergraduates within the new curriculum; the second publication focuses on the work produced using these theories.

Yung Ho Chang published a book on cultural policy in China. He also published an interview in *Mark* magazine illustrated by MIT students.

Other publications included:

- Public Works: Unsolicited Small Projects for the Big Dig, J. Meejin Yoon with Meredith Miller (MAP Book Publishers, 2008)
- Designing the Reclaimed Landscape, Alan Berger, editor (Taylor & Francis, 2008)
- Sustainable Urban Housing in China: Principles and Case Studies for Low-Energy Design, Leon Glicksman and Juintow Lin (Springer, 2007)
- The Possibility of (an) Architecture: Collected Essays, Mark Goulthorpe (Routledge, 2008)
- From Autoplastic to Alloplastic: Decoi Architects, Mark Goulthorpe (Hyx/Pompidou, 2008)
- American Boundaries: The Nation, the States, the Rectangular Survey, Bill Hubbard (University of Chicago Press, 2008)
- Bombay Deco, Rahul Mehrotra and Sharada Dwivedi (Eminence Designs, 2008)
- World's Greatest Architect: Making, Meaning and Network Culture, William J. Mitchell (MIT Press, 2008)
- Political Economies of Landscape Change: Places of Integrative Power, James L.
 Wescoat Jr. and Douglas M. Johnston, editors (Springer, 2007)
- Expanded Practice: Howeler + Yoon Architecture/My Studio, J. Meejin Yoon (Princeton Architectural Press)

Planning

All of the work of the Beijing Studio from 1985 to 2008 was published in Chinese and English in *The Beijing Joint Studio: 20 Years of International Cooperation by World Architecture*.

Other publications included:

- Escape from Empire: The Developing World's Journey through Heaven and Hell, Alice Amsden (MIT Press, 2007)
- Learning from Work: Designing Organizations for Learning and Communication, Anne Beamish (Stanford Business Books, 2008)
- Democracy as Problem Solving: Civic Capacity in Communities Across the Globe, Xavier de Souza Briggs (MIT Press, 2008)
- Technology, Livability and Historic Cities, Dennis Frenchman, William Mitchell, Anne Beamish, Giandomenico Amendola, and Christine Outram (SAP Press, 2008)

- Business Improvement Districts: Research, Theories, and Controversies, Lorlene Hoyt et al., editors (Auerbach Publications, 2008)
- Learning to Be Capitalists: Entrepreneurs in Vietnam's Transition Economy, Annette Kim (Oxford University Press, 2008)
- Augmented Learning: Research and Design of Mobile Educational Games, Eric Klopfer (MIT Press, 2008)
- Natural Experiments: Ecosystem-Based Management and the Environment, Judith Layzer (MIT Press, 2008)
- Digital Water Pavilion, Carlo Ratti and Walter Nicolino (Electa, 2008)
- New York Talk Exchange: A Project for MoMA, Carlo Ratti, William Mitchell, et al. (SAP Press, 2008)
- Inside the Sponge, Carlo Ratti and Talia Dorsey (CCA Press, 2007)
- Changing Cities: 75 Years of Planning Better Futures at MIT, Lawrence Vale (SAP Press, 2008)
- Built to Win: Creating a World-Class Negotiating Organization, Lawrence Susskind with Hal Movius (Harvard Business School Press, 2009)
- *Multiparty Negotiation*, Lawrence Susskind with Larry Crump (Sage Publications, 2008)
- The Cure for Our Broken Political Process: How We Can Get Our Politicians to Resolve the Issues Tearing Our Country Apart, Lawrence Susskind with Sol Erdman (Potomac Books, 2008)

Media

- *Holographic Imaging,* Stephen Benton and V. Michael Bove Jr. (Wiley-Interscience, 2008)
- The Computer Clubhouse: Constructionism and Creativity in Youth Communities, Robbin Chapman with Yasmin Kafai and Kylie Peppler (Teachers College Press, 2009)
- Honest Signals, Alex (Sandy) Pentland (MIT Press, 2008)

Visual Studies

- Andrea Frank: Ports and Ships, Andrea Frank (Kunstalle Göppingen, 2008)
- With Love From Haha: Essays and Notes on a Collective Practice, Wendy Jacob, Laurie Palmer, and John Ploof, editors (WhiteWalls, 2008)
- Villa Lituania, Gediminas Urbonas (Sternberg Press, 2008)
- Devices for Action, Gediminas Urbonas (Museum of Contemporary Art, Spain)

Personnel

Barbara Feldman was appointed assistant dean for development. Feldman most recently worked as director of principal gifts and planned giving at Boston's Museum of Science, where she helped to create and launch that institution's first major capital campaign and secured \$120 million in gifts in the first three years.

Architecture

Dennis Shelden was appointed associate professor of the practice of architecture in the Design and Computation Group. A world leader in building information modeling, he is a founder and chief technology officer of Gehry Technologies, a fully independent company formed in 2002 by the research and development team of Gehry Partners.

Philip Freelon was appointed professor of the practice in architectural design beginning July 1, 2009. Elevated to a fellow of the American Institute of Architects in 2003, Freelon is among the most celebrated African American architects practicing in the US today.

William O'Brien Jr. was appointed assistant professor beginning July 1, 2009. Since the fall of 2007, he had been teaching in the graduate curriculum at the University of Texas at Austin. He previously taught at the University of California, Berkeley, College of Environmental Design as a Maybeck fellow and at the Ohio State University Knowlton School of Architecture as a LeFevre emerging practitioner fellow.

John Fernandez spent the academic year in residence in Lisbon at the Department of Mechanical Engineering, Instituto Superior Técnico, with the MIT-Portugal Program.

The History, Theory, and Criticism Program hosted two visiting scholars, Feng "Philip" Yuan from Shanghai, who investigated contemporary urban design and participated in teaching with Stanford Anderson, and Alessandra Moro from Cesena, Italy, who studied high-rise buildings in Europe.

Nasser Rabbat continued to serve as president of the Middle East Medievalists, lectured worldwide, and published articles and book sections.

Planning

In January, Amy Glasmeier took over as head of DUSP. An expert in economic geography, regional planning, and spatial statistics, she was previously on the faculty of Pennsylvania State University and the University of Texas at Austin.

Upon stepping down from his role as department head, Larry Vale began a one-year sabbatical as a visiting scholar at Harvard's Graduate School of Design; he was also awarded the Ford Chair, previously held by Lang Keyes. He will return to teaching in January 2010.

Xavier de Souza Briggs was named associate director of the White House Office of Management and Budget and is now on a two-year professional leave. In his new

position, Briggs oversees six cabinet agencies (Housing and Urban Development, Treasury, Transportation, Justice, Commerce, and Homeland Security).

Alice Amsden was appointed by the United Nations secretary-general to a three-year seat on the UN Committee on Development Policy, a subsidiary of the UN Economic and Social Council.

The Housing, Community, and Economic Development program group marked the retirement of two long-standing intellectual leaders—Lang Keyes and Marty Rein.

Media

Leah Buechley was appointed assistant professor of media arts and sciences. A well-known expert in the burgeoning field of electronic textiles, Buechley directs the Media Lab's new High-Low Tech research group, investigating the integration of high and low technology with the goal of helping people design and build their own technologies.

David Small was appointed associate professor of media arts and sciences. Small received his PhD and SM degrees in media arts and sciences at MIT and received his SB in cognitive sciences from MIT. He is head of the Design Ecology research group in the Media Lab.

Real Estate

Tony Ciochetti became the director of the Center for Real Estate and is now chairman, director, and holder of the Thomas G. Eastman chair.

David Geltner was on sabbatical during the 2008–2009 academic year and assumed the role of director of research for the center.

Visual Studies

Gediminas Urbonas was appointed associate professor in the Visual Arts Program. Working in joint artistic practice with his partner Nomeda, Urbonas has established an international reputation for socially interactive and interdisciplinary artwork exploring the conflicts and contradictions posed by the economic, social, and political conditions in the former Soviet countries.

CAVS associate director Larissa Harris left in the fall to become a curator at the Queens Museum in New York.

In April, Michael Mittelman was appointed associate director of the center. He is an artist, educator, technologist, and founder of ASPECT: The Chronicle of New Media Art.

Recognition

Adèle Naudé Santos was honored with the 2009 Topaz Medallion for Excellence in Architectural Education, given by the American Institute of Architects and the Association of Collegiate Schools of Architecture.

A redevelopment plan drafted by an interdisciplinary team from SAP was chosen as the \$50,000 winning scheme in the seventh annual Gerald D. Hines Student Urban Design Competition of the Urban Land Institute. The jury chose the entry over plans submitted by other finalist teams from Columbia, Kansas State, and the University of Miami.

A third of MIT's 12 Fulbright scholarship winners this year, MIT's highest tally on record, were from SAP: Nicholas DuBroff (urban studies and planning), Jennifer Furstenau (architecture), Anneka Lenssen (art history), and John Lopez (architecture history).

Six simultaneous exhibits at the MIT Museum featured work by members of the SAP community—photographer Andrea Frank, the late holographer Steve Benton, roboticist Cynthia Breazeal, artist Meejin Yoon, the Media Lab's Sociable Media Group, and Media Lab artist-in-residence Marisa Jahn (with Steve Shada and Cati Vaucelle).

Architecture

John Ochsendorf was awarded a 2008 MacArthur Fellowship, commonly known as a "genius" grant, for "creativity, originality and potential to make important contributions in the future"; he will receive \$500,000 in no-strings-attached support over five years. Ochsendorf is the second from the School of Architecture and Planning to win a "genius" grant. In 2007, Media Lab alumnus Saul Griffith (SM 2001, PhD 2004) was honored for being a "prodigy of invention in service of the world community."

J. Meejin Yoon was awarded a \$50,000 fellowship in architecture and design by United States Artists (USA), a national artists' advocacy organization. Yoon is the second from SAP honored with this award; in 2007, Nader Tehrani was named a USA Target Fellow in Architecture and Design, along with his business partner Monica Ponce de Leon.

Shelia Kennedy received a USA Congressional Award for her achievement in design for clean energy and an Energy Globe Award for the Portable Light Project in Mexico. The Portable Light Project was also selected by California's prestigious Tech Museum of Innovation as one of 25 global innovations that benefit humanity. The Portable Light Project creates new ways to deliver renewable power and light to people in the developing world.

Alexander D'Hooghe and Nader Tehrani won a design competition for their proposal for Saemangeum Bay, Korea, reputedly the world's largest landfill. D'Hooghe won additional competitions in Belgium and New York City; exhibited work in several venues, including the Shenzhen Biennal; and launched a research group, Platform for a Permanent Modernity, in architectural urbanism.

A team of four PhD students in the Computation program racked up a string of impressive wins in design competitions, including first prize in the 2008 London Architecture Gallery International Competition, first prize in the 2009 Gillette Landmark International Design Competition; and a win in the Media Lab's Permeable Building Challenge, an invitation to create engaging augmentations of the Lab's interior space using elements of the outdoor natural environment.

Larry Sass's digitally fabricated shotgun house was part of the Museum of Modern Art's exhibition, *Home Delivery*, in New York City.

In his practice, Yung Ho Chang won the international competition to design a 200-meter skyscraper for Shenzhen Television in Shenzhen, China.

Michael Dennis' firm won the Boston Society of Architects Honor Award for Planning Excellence for the Middlebury College Campus Master Plan.

Phil Freelon, as a partner in Freelon Adjaye Bond/SmithGroup, was awarded the design commission for the Smithsonian National Museum of African American History and Culture in Washington, DC, and, with partner HOK, the Civil Rights Museum in Atlanta. Freelon was also chosen by the American Institute of Architects to receive the 2009 Thomas Jefferson Award, given to a private-sector architect who has a record of accomplishment in the design of architecturally distinguished public facilities.

Takehiko Nagakura received US and Chinese patents for Deskrama, an interactive visualization device that he continues to develop with new capabilities.

Leon Glicksman received the American Society of Mechanical Engineers Heat Transfer Memorial Award and was selected to be a fellow of the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

James Wescoat was elected a lifetime national associate of the National Research Council's Water, Science, and Technology Board.

Mark Jarzombek received a Fulbright Senior Specialist Award.

Planning

Anne Spirn won a number of awards for her recent book *Daring to Look*—the Great Places Book Award, the John Brinckerhoff Jackson Book Prize, and an honorable mention in the 2009 PROSE Awards. Another of her books, *The Granite Garden*, was recognized by the American Planning Association as one of the 20th century's 100 Essential Books of Planning.

Four different student teams from DUSP and the Center for Real Estate were awarded first, second, third, and honorable mention prizes in the Federal Home Loan Bank's 2009 Affordable Housing Development Competition.

Media

Edward Boyden received the McGovern Institute for Brain Research Neurotechnology Award, the Congressionally Directed Medical Research Programs Post-Traumatic Stress Disorder Concept Award, and the MIT Alumni Class Funds Award for Excellence in Educational Innovation. He was also named one of the 20 best scientists under age 40 by *Discover* magazine.

Time magazine named Cynthia Breazeal as having one of the best inventions of 2008.

Tod Machover was named a fellow of the Royal Society of Arts in London.

Bill Mitchell, along with the Smart Cities group, received a \$100,000 Buckminster Fuller Challenge Prize for work on urban mobility and continued work on smart lightweight electric vehicles and their use in urban mobility systems.

Alex (Sandy) Pentland won two research prizes for his work on human dynamics and communication. In honor of his book *Honest Signals*, he was named the winner of the 2008 Future of Health Technology Award, and for his research on human-vehicle interface technologies he was named a winner of the 2008 Carlos Ghosn Award from Nissan Motor Co. Ltd.

PhD candidate Neri Oxman and alumnus Saul Griffith were listed among the 100 Most Creative People in Business by *Fast Company* magazine.

Jeff Lieberman, a PhD candidate in media arts and sciences, was chosen to host a new TV series that uses visual technologies to explore phenomena outside human perception. *Time Warp*, which premiered in October on the Discovery Channel, uses new technologies such as super high-speed video capable of recording up to a million frames per second, 10,000 times slower than normal, to bring never-before-seen wonders into the range of human discernment.

Visual Studies

Krzysztof Wodiczko represented Poland at the 53rd Venice Biennale and received the Golden Gloria Mundis Award from the Polish minister of culture.

Joan Jonas was featured in the 53rd Venice Biennale, the 28th Biennial of São Paulo, the Yokohama Triennale 2008, and the Sydney Biennale 2008. She was awarded the Francis J. Greenburger Award and the 2008 Hans Molfenter Prize for her contributions to contemporary art.

Antoni Muntadas received the \$170,000 Velázquez Prize from the Spanish Ministry of Culture in recognition of his outstanding career and contribution to contemporary art.

Jae Rhim Lee received a grant of \$10,000 from Creative Capital, a national organization that supports individual artists.

Design Laboratory

Last summer, the Design Laboratory moved to new offices at 1 Cambridge Center.

The ArchNet website is in the process of being completely reconceptualized and redesigned to move from a largely "top-down," centralized mode of collection and dissemination to one that is "bottom-up" and decentralized.

Legatum Center

The Legatum Center for Development and Entrepreneurship was founded on the belief that economic progress and good governance in low-income countries emerge from entrepreneurship and innovations that empower ordinary citizens. The center was established in 2007 through a structured gift of \$50,000 from Legatum, a global investment firm.

The center administers programs and convenes events that promote and shape discourse on bottom-up development. Led by Iqbal Z. Quadir, founder of GrameenPhone and Emergence BioEnergy, the center runs a highly competitive fellowship program for MIT graduate students who intend to launch enterprises in low-income countries. In addition, the center convenes an annual conference, hosts lectures, and supports teams of enterprising men and women at MIT who are passionate about starting viable businesses in the developing world.

Space

Architecture

After many years, the department consolidated all of the architecture design studios in one location on the main campus, bringing the last and largest undergraduate studio from Building N51 to the fourth floor of Building 7.

Visual Studies

CAVS prepared for its planned merger with the Visual Arts Program in the Department of Architecture and the relocation of the merged unit to Buildings E14 and E15 next year. Residing outside the Department of Architecture, in the School for Architecture and Planning, the merged unit will consolidate the efforts of both units and report directly to the dean.

Adèle Naudé Santos

Dean

Professor of Architecture and Urban Studies and Planning

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