

Center for International Studies

The [Center for International Studies](#) (CIS) is a principal venue at MIT for research and training in international relations, security, political economy, and several other areas of scholarly and popular interest. It has, since its founding 60 years ago, become one of the most productive and respected research institutions of its kind.

CIS houses the Security Studies Program (SSP), the MIT International Science and Technology Initiatives (MISTI), Seminar XXI, the Political Economy and Technology Policy programs, the Persian Gulf Initiative, the Program on Environmental Governance and Sustainability, as well as several less formal activities and initiatives. Drawn mainly from the Departments of Political Science and of Urban Studies and Planning (DUSP), some 80 faculty, scholars, researchers, and fellows are affiliated with CIS, joined by 40 administrative and support staff and 30 graduate students.

The director is Richard Samuels, Ford international professor of political science, and the associate director is Stephen Van Evera, professor of political science. CIS principal research scientist John Tirman has been executive director since October 2004.

New developments and activities in CIS in AY2011 include:

- David Miliband SM '90, former British foreign secretary, joined CIS as a Robert Wilhelm Fellow in April, giving several lectures and working with graduate students. A member of Parliament, he holds a degree from the Department of Political Science.
- Political science associate professor Chappell Lawson was named to head MISTI, effective July 1, 2011, succeeding longtime director Suzanne Berger, the Raphael Dorman–Helen Starbuck professor of political science. MISTI also added a new country program in Chile.
- A major new undertaking, the Puerto Rico Economy Project, was initiated with a conference in February, and began research in the spring.
- With the Delhi Policy Group, CIS and SSP convened a conference in January in New Delhi on Asian security, drawing the participation of high-level Indian policy makers.
- A new research project, Urban Resilience in Situations of Chronic Violence, was launched by DUSP professor of political sociology Diane Davis, with support from the US Agency for International Development.
- CIS welcomed Wilhelm Fellow Hans-Georg Eichler, MD, senior medical officer of the European Medicines Agency. He is working with political science associate professor Kenneth Oye and the MIT Center for Biomedical Innovation on new drug development paradigms.
- Led by Professor Samuels, CIS responded to the tsunami and nuclear crisis in Japan with a Starr Forum and leadership on the MIT Japan 3/11 Initiative, which is coordinating the efforts of many MIT faculty and students to help with the region's reconstruction.

- Rabia Mehmoud, a Pakistani television journalist, was the Elizabeth Neuffer Fellow for 2010–2011. Ms. Mehmoud also worked with American public broadcasting entities during the year.
- Sanam Naraghi Anderlini, an adviser on gender and conflict to the United Nations (UN), was named a CIS senior fellow.

Security Studies Program

SSP is a graduate-level research and education program; its senior research and teaching staff include social scientists and policy analysts. A special feature of the program is the integration of technical and political analyses of national and international security problems. Security studies is a recognized field of study in the Department of Political Science, where courses emphasize: grand strategy, causes and prevention of conflict, military operations and technology, and defense policy.

SSP held its second Ruina Nuclear Age Speaker Series dinner in November, with guest speaker Scott Sagan, the Caroline S. G. Munro professor of political science, codirector of Stanford University’s Center for International Security and Cooperation, and a senior fellow at Stanford’s Freeman Spogli Institute for International Studies. His talk was titled “Nuclear Power without Nuclear Proliferation?”

SSP held its 18th James Doolittle Awards Dinner in March, in memory of General “Jimmy” Doolittle SM ’24, PhD ’25, an American war hero and aviation pioneer. This year’s Doolittle Award recipient was Admiral Gary Roughead, chief of Naval Operations for the U.S. Navy.

In February and March, SSP and CIS hosted the three-part seminar series Central Asia in Global Affairs. The series included:

- “Strategic Regionalism and the US-Russia-China Struggle for Central Asia,” with speaker Alexander Cooley, associate professor of political science at Barnard College, Columbia University.
- “The Afghanistan Factor,” with speaker Michael Semple, fellow at the Harvard Kennedy School of Government, Carr Center for Human Rights Policy.
- “China’s Policy in Central Asia,” with speaker Sebastien Peyrouse, senior research fellow at Central Asia and Caucasus Institute, Silk Road Studies Program.

SSP held several special seminars, including:

- “The Institutional and Operational Implications of the Evolving Threat Environment,” with speaker Lieutenant General George Flynn, Deputy Commandant, Combat Development and Integration, U.S. Marine Corps.
- “Israel Amidst an Unstable Middle East,” with speaker Efraim Inbar, professor of political studies and director of Begin-Sadat Center for Strategic Studies, Bar-Ilan University, Israel.

- “Reconstruction in Iraq: The Challenges, the Wins, and the Losses,” with speaker Colonel Dionysos “Dan” Anninos, Chief of Staff, US Army Corps of Engineers.
- “‘Wars and Rumors of Wars’ and the U.S. Army Corps of Engineers: The Greatest Story Never Told,” with speaker Brigadier General Peter “Duke” DeLuca, North Atlantic Division Commander and Division Engineer.

SSP also held a special roundtable discussion titled “The Post–Osama bin Laden Era.” Professor of political science Barry Posen was moderator, with commentary by members/affiliates of SSP and the Department of Political Science. Political Science faculty discussants included associate professor Gabriel Lenz; assistant professor Vipin Narang; professor Roger Petersen; and professor Stephen Van Evera. They were joined by Colonel Charles Samaris of the US Army.

Sustaining a long tradition, SSP continued the Wednesday Seminar Series, which offers talks on topics relevant to national defense and international relations, including Iraq, Afghanistan, Russian energy policies, Iranian nuclear policy, terrorism, radicalization of Muslims in Europe, the problem of religion and war, the defense industry, humanitarian intervention, military technology and transformation, and military history. Speakers included academics, military officers, government officials, and journalists.

SSP publishes an annual report; a seminar summary series, *SSP Wednesday Seminars*; a quarterly newsletter, [Early Warning](#); and a working paper series. In June, the SSP quarterly newsletter went digital.

In January, the program received one-year awards from Lincoln Laboratory and Draper Laboratory.

Program research is built around the interests of the faculty, the dissertations of the graduate students, and occasional commissioned projects. Key research areas are:

Proliferation of Weapons of Mass Destruction

Examining the underlying logic of current nonproliferation strategies:

- Iran and North Korea
- Resource allocation and counter-proliferation policy

Change and Stability in Asia

How China will manage active territorial disputes as a rising power:

- The role of nationalism in shaping China’s foreign policy
- Implications of China’s growing engagement within the Asian region
- Securing Japan

U.S. Foreign and Defense Policy

US strategy for global engagement and states at risk:

- The nature and limits of U.S. military power
- The future of conventional warfare
- Reassessing U.S. grand strategy
- The U.S. resource allocation process
- Transforming the rewards for military service

Internal Conflict

Identity politics:

- Political violence
- Civil war
- Counterinsurgency
- Post-conflict reconstruction

MIT International Science and Technology Initiatives (MISTI)

During 2010–2011, MISTI expanded by creating a new MISTI Chile program, and sponsoring the Brazil-MIT Forum on Energy, Environment, Entrepreneurship, Policy Innovation, and Global Businesses, a joint meeting on energy with Santander Universities in Brazil. It also hosted 70 public talks to inform the MIT community about international issues, and helped to integrate international education into MIT through programs like Accelerating Information Technology Innovation and Middle East Education Through Technology, which send teams of students to Africa and Israel, respectively, to teach specific software skills. In addition, MISTI continues to educate the MIT community at large through its host country spring seminars and retreats, which are open to community members. It also teaches specific seminars on the history and culture of a country for interested MIT groups.

During this period, MISTI placed 566 students for study abroad, short courses, and seed fund research and internships. MISTI placed a total of 519 interns, up more than 10 percent from the previous year. These interns are trained in the language and culture of their host countries prior to departure, allowing them to “hit the ground running” and return to MIT with international networks and an understanding of how to work effectively in foreign cultures.

In addition to internships, MISTI added Chile, Belgium, and China seed funds this year, which enabled faculty workshops, faculty travel, and exchange of students. There were 112 applications for the seed funds, and several projects have resulted in seed fund recipients receiving larger grants for continuing research on their cross-border projects.

In response to the triple disaster in Tohoku, Japan, in March, MISTI took the lead and spearheaded the MIT Japan 3/11 Initiative. Starting July 2011, this five-year initiative will bring together professors from both MIT and the affected region around the issue of disaster planning. It has already resulted in the new course Artistic Intervention—Creative Responses, taught by associate professor Ute Meta Bauer of the Department of Architecture.

MISTI's efforts to internationalize MIT include a very popular minor in Applied International Studies and the MISTI 2.0 initiative, which allows for MISTI graduates to compete for funds to continue their research with their host country colleagues after they return to MIT. MISTI was directed by Professor Berger.

MIT-Brazil Program

Since its launch in fall 2009, the MIT-Brazil Program has been actively engaged in creating and supporting courses on Brazil and the Portuguese language, promoting the MIT-Brazil Seed Fund, which was initiated in spring 2010, and fostering connections between MIT and Brazil. In addition to its internship program, MIT-Brazil awarded five dissertation research travel grants for advanced graduate students to conduct research in Brazil over summer 2011. MIT-Brazil also provided partial support to a student-initiated MIT Sloan School of Management study tour known as "The Business of Education." In addition to supporting courses and training on Brazil, MIT-Brazil has hosted lectures on pertinent Brazilian politics and environmental issues. In the spring, it hosted the Brazil-MIT Forum on Energy, Environment, Entrepreneurship, Policy Innovation, and Global Businesses. The forum was sponsored by Santander Universities and designed to bring together leaders from Brazil and MIT to seek solutions to common challenges. The MIT-Brazil Program is codirected by Class of 1922 professor of political science and professor of management Richard Locke, and by professor of political science Ben Ross Schneider. During 2010–2011, MIT-Brazil sent six students to Brazil on internships.

MIT-China Program

The MIT-China Program's range of activities continues to grow through integrative collaborations with partners in Greater China and at MIT. Through the MIT–China Educational Technology Initiative, teams of MIT students now introduce MIT OpenCourseWare (OCW) and iLabs educational content at 12 universities and five high schools spanning Greater China. A new partnership with MIT Sloan China Lab has been established that brings together MIT Sloan MBA and MISTI China engineering students to conduct summer consulting projects at Chinese companies. The MIT-China Program has also further expanded its role in the MIT Greater China Strategy Working Group, headed by professor of electrical engineering and computer science Victor Zue. In spring 2010, MIT-China launched the start of the MIT Greater China Fund for Innovation, a new MISTI global seed fund to which MIT faculty and research scientists can apply to start collaborations in China, Hong Kong, and Taiwan; six MIT projects were funded in 2010–2011. MIT-China also continues to manage the MISTI partnership with the Department of Electrical Engineering and Computer Science (EECS). Eighty-one EECS students were placed MISTI-wide in 2010–2011. Additionally, the EECS International program and MIT-China have expanded EECS's Empower the Teachers program with faculty and MIT student exchanges with the University of Hong Kong and the Chinese

University of Hong Kong. The MIT-China Program is directed by professor of political science Edward Steinfeld. During 2010–2011, the program sent 53 interns to China, Hong Kong, and Taiwan.

MIT-France Program

The MIT-France Program held special training sessions for its interns on French culture, history, and current political events before sending them to research institutes, companies, and universities in France. In addition to a dynamic internship program, MIT-France supports budding collaborative research between faculty and students at MIT and in France through the MIT-France Seed Fund. This year, the program received 14 requests for funding from professors, of which it funded five. On June 28–29, the MIT-France Program, together with the MIT Energy Initiative, organized a meeting in Paris with major university and public research laboratories working in the energy field. The France-MIT Forum was opened by president Susan Hockfield and French minister of education and research Valerie Pécresse. The forum was attended by 350 people from industry, government, and universities. Among the new agreements for collaboration between France and MIT that were signed at the meeting was a plan for a new joint MIT–Centre national de la recherche scientifique (CNRS) laboratory on nano-materials, to be located on the MIT campus and headed by professor Franz Ulm and CNRS director Roland Pellenq. This full-scale research center collaboration grows out of an early, small seed research grant. The MIT-France Program maintains close relations with sponsors; for the sixth year, it organized a weeklong seminar at MIT for top managers from Total, France’s largest company. This seminar included meetings with MIT experts in science, engineering, economics, and political science. The MIT-France Program also sponsors numerous activities for the MIT community on pertinent issues involving France. The program is directed by Professor Berger. During 2010–2011, it sent 97 students to France.

MIT-Germany Program

The MIT-Germany Program expanded its mission of international education through internships, workshops, and the establishment of a new MIT-Germany seed fund, to be initiated in fall 2011. Specifically, the MIT-Germany Program offered two industry workshops: Testing New Automotive Technologies, with Continental; and Symbiosis of Mobility and Technology, with Deutsche Bahn. MIT-Germany also took part in the MiNT Educational Initiative (Mathematics, computer science, Natural sciences, and Technology) to reach out to German high school students to promote science and technology. During Independent Activities Period (IAP), MIT-Germany partnered with the Alumni Association to offer and prepare students for externships abroad. The MIT-Germany Program also supports events on pertinent issues at MIT, and Stammtisch, a student-run club to practice language skills. The MIT-Germany Program is directed by Markus Buehler, Esther and Harold E. Edgerton associate professor of civil and environmental engineering. During 2010–2011, the program sent 107 interns to Germany and Switzerland.

MIT-India Program

The MIT-India Program expanded opportunities for interns and added several new initiatives, including an India Innovation Fund to provide seed funding for faculty

projects in India. This year, funding was distributed to five faculty members, whose proposals were selected out of 28 proposals; the MIT-India/Institute for Financial Management and Research Trust Seed Fund also awarded two grants to MIT faculty. India was highlighted on campus through a dynamic lecture series, with 13 public events cosponsored by the MIT-India Forum, the Office of the Provost, and several academic departments. In summer 2011, MIT-India will initiate a program called Teaching Innovation to Indian university students at Chitkara University. Over IAP, the program supported an early-entry program designed to encourage interest in India among underclassmen. Fourteen students traveled to India on a study trip in January as a culmination of 4.S10 Delhi and Jaisalmer: An Architectural Journey through Two Indian Cities. The MIT-India Program is directed by Arundhati Tuli Banerjee, director of MIT's Office of Global Initiatives. During 2010–2011, the program sent 51 interns to India.

MIT-Israel Program

The MIT-Israel Program has grown and expanded its activities at MIT and in Israel this year. Thirteen students did internships related to energy and the environment that were supported by a dedicated donation. The program has developed a comprehensive training module that integrates pre-internship, during-internship, and post-internship experiences. One-on-one matching with Israeli MIT alumni, organized with the MIT Club of Israel, helped students build on their pre-internship training and integrate into the wider Israeli and MIT communities. Selected graduates of the MIT-Israel Program were trained as mentors for the current class. In addition to pre-departure training, MIT-Israel interns also took part in a five-day in-country seminar on Israeli science and technology. At MIT, the program supported several courses on Israel and Hebrew. The program organized or cosponsored 13 Israel-related events on the MIT campus and three events in Israel, collaborating with the MIT Club of Israel and MIT's Venture Mentoring Service. The MIT-Israel Program is directed by Christine Ortiz, dean for graduate education and professor of materials science and engineering. During 2010–2011, the program sent 50 interns to Israel.

MIT-Italy Program

The MIT-Italy Program has continued to expand its presence on campus and in Italy. In addition to the intensive Italian I language class for prospective interns, the program offered entry-level opportunities for 29 students to teach science and mathematics at Italian schools using OCW materials through the Highlights for High Schools program during IAP. The Highlights program will continue next year with the involvement of MIT faculty from the Department of Physics and the Media Lab. As a major participant in MISTI Global Seed Funds, the program used its long-term collaborations with the polytechnic universities of Turin and Milan to offer funding through the MITOR Project and the Progetto Roberto Rocca, respectively. The MIT-Italy Program organized training sessions and hosted talks on pertinent issues. The program also hosted two major events this spring: Progetto Rocca Day at MIT brought together students and faculty involved in research collaborations and set the agenda for future collaborations; and the workshop Italy and MIT at 150: Celebrating and Strengthening the Partnership marked the joint anniversary by bringing together faculty, Italian companies, foundations, and other institutions to celebrate the strong history of partnership and the future

collaboration between MIT and Italy. The MIT-Italy Program is codirected by DUSP associate professor Carlo Ratti, and Serenella Sferza. During 2010–2011, it sent 47 interns to Italy.

MIT-Japan Program

The MIT-Japan Program continues to enjoy great success in educating MIT students both at MIT and in Japan. Students participating in the program are required to take two years of Japanese language as well as a course on Japan, and to participate in a two-day retreat, seven spring training sessions, and a training weekend in Kyoto. In AY2011, the program worked closely with the Foreign Languages and Literature section to offer an intensive Japanese course during IAP and the Fast Track Japanese Language Program, which enables students to learn two years' worth of Japanese in a single year. The program also awarded Hayashi Seed Fund grants to four MIT scientists doing research on environmental issues with Japanese and other Asian researchers. Finally, the program educated the community at large on Japan through lectures, a weekly Japanese language table, movies, and other cultural events. Following the March earthquake and tsunami, the MIT-Japan Program began working with senior lecturer Shun Kanda in the School of Architecture to establish the MIT Japan 3/11 Initiative. This five-year project aims to engage faculty and students from MIT and universities in Tohoku and elsewhere in Japan in workshops held in Tane, Japan, with the collaborative goal of mobilizing the study and implementation of disaster-resilient planning that includes design and reconstruction initiatives. The MIT-Japan Program is directed by Professor Samuels. During 2010–2011, it sent 25 interns to Japan.

MIT-Mexico Program

The MIT-Mexico Program continues to expand its network of host institutions and internship opportunities in different regions of Mexico; in AY2011, it sent its largest group of interns to Mexico since the program was launched. Interns went to several local and international companies, government entities, research institutions, and universities. In addition, interns were involved in public service studies under the direction of Tecnológico de Monterrey at various campuses throughout the country. The MIT-Mexico Program also created a university consortium through which two of the most important universities in Mexico have become members and sponsors of the program. On campus, the program partnered with other groups at MIT, sponsoring numerous events, including talks on pertinent issues such as immigration, science and technology, and the economy in Mexico; film screenings; and other academic and cultural events. The MIT-Mexico Program is directed by David W. Skinner professor of political economy Michael Piore. During 2010–2011, the program sent 36 interns to Mexico.

MIT-Spain Program

The MIT-Spain Program continues to expand its network of host institutions within Spain. At MIT, the program cooperated with various departments to host public lectures and other events. MIT-Spain collaborated with the Complutense University of Madrid-Real Colegio Complutense and the Minda de Gunzburg Center for European Studies at Harvard University for a lecture titled "American Experiences: Spanish Professors in US Universities (1936–1950)." MIT-Spain also hosted a networking session at MIT

with AMBAR Venture Capital to promote entrepreneurial initiatives in Spain. Finally, the MIT-Spain/Barcelona Chamber of Commerce Seed Fund awarded three grants to promote research collaborations between Spanish and MIT researchers. The MIT-Spain Program is codirected by professors of aeronautics and astronautics Manuel Martinez-Sanchez and Jaume Peraire, and research scientists Mercedes Balcells-Camps (Harvard-MIT Division of Health Sciences and Technology) and Luis Perez-Breva (Department of Chemical Engineering). During 2010–2011, the program sent 50 interns to Spain.

MIT-Africa Program

The MIT-Africa Program was established in 2009 with the Total company's gift of a chair on contemporary Africa to the School of Humanities, Arts, and Social Sciences (SHASS). This gift was the first step in a series of collaborations in education and research between Africa and MIT. Professor Daniel Posner has been selected to hold this chair in the Department of Political Science. Professor Berger and Patricia Gercik, MISTI associate director, are currently managing the MIT-Africa Program.

This year, MISTI once again provided support for the Accelerating Information Technology Innovation (AITI), a student-run organization that promotes development through education in appropriate information and communication technologies. During summer 2011 recess, AITI will send 14 students to Ghana, Kenya, Nigeria, and Rwanda to teach classes on mobile phone application development, with an emphasis on independent research, problem solving, and entrepreneurship.

In addition to AITI, and under the direction of Professor Berger and EECS professor Akintunde Ibitayo Akinwande, MISTI has initiated the Empower the Teachers program to bring junior Nigerian computer science and electrical engineering faculty to MIT in fall 2011 to study pedagogical approaches in their discipline. This program is supported by the Total and Google companies. Professor Akinwande interviewed 17 finalists out of a pool of more than 50 applicants, and selected eight junior faculty members. These fellows will be mentored by EECS faculty, take courses and participate in seminars relevant to MIT's problem-solving approach to teaching, and audit MIT courses in their disciplines. Participants will also take part in a weekly seminar focusing on revisions of their own course material.

MISTI Global Seed Funds

MISTI offers seed funds to help MIT faculty and researchers launch early-stage international projects and collaborations. Applicants are encouraged to involve students—both undergraduate and graduate—in their projects. These awards cover travel, meeting, and workshop costs. During AY2011, a Belgium, two Chile, and a China seed fund were added.

Based on the highly successful MIT-France Seed Fund, MISTI Global Seed Funds was launched in 2008 to support projects in any country. The program now includes this general pool and 10 separate country-specific funds in Chile (two funds), Belgium, Brazil, China, France, Germany, India (two funds), Italy (two funds), Japan, and Spain. The maximum award is typically \$30,000.

In the second grant round of 2010–2011, 112 proposals were submitted; of these, 46 projects received \$903,912 in funding. Faculty and research scientists from 27 departments across the Institute submitted proposals for projects in 26 countries. All awardees include undergraduate, graduate, or postdoctoral student participation. As in the case of student internship programs, MISTI provides cultural preparation for participating students before their departure.

Whenever possible, MISTI leverages the seed fund program to create new opportunities for students and enhance faculty connections abroad. For instance, some students involved in seed fund grants go on to become MISTI interns, and often faculty collaborators abroad offer internships to MISTI students.

Minor in Applied International Studies

The Minor in Applied International Studies (MAIS) is a rigorous, interdisciplinary academic experience that prepares MIT undergraduates for productive roles in today's global academic and professional environments. Since its creation in 2005, more than 95 students have completed MAIS, fulfilling the requirements in the critical areas of language and culture; international politics, economics, and history; and international experience. Now the second largest minor in SHASS, MAIS draws students from MISTI, D-Labs (Development through Dialogue, Design, and Dissemination), the Cambridge-MIT Institute, and the Public Service Center. During 2010–2011, MAIS had 33 undergraduates.

MISTI 2.0

A new initiative for MISTI alumni to build on their previous international experiences, MISTI 2.0 provides funding and support for new collaborative research and projects with former host country colleagues and partners. MISTI alumni can form project teams and apply for up to \$2,000 per student for travel, meeting, and workshop costs. An evaluating committee (the MISTI 2.0 coordinator, two additional MISTI country coordinators, the MISTI associate director, and three Venture Mentoring Service mentors) reviewed the 16 applications for funding and awarded MISTI 2.0 funding to seven teams returning to work in Brazil, France, Germany, Israel, Italy, and Mexico. MISTI 2.0 grantees are expected to attend a 10-hour country-specific training session during IAP and complete a post-project report detailing their experience. During 2010–2011, seven students were awarded MISTI 2.0 funds.

Political Economy and Technology Policy Program

CIS applies theories and methods from the discipline of political economy to issues in science and technology policy, with work in two primary areas. The Political Economy and Technology Policy Program is headed by Professor Oye, of the Department of Political Science and the Engineering Systems Division (ESD) and former CIS director.

Program on Emerging Technologies (PoET).

This multidisciplinary program links ESD, the Department of Political Science, and the Program on Science, Technology, and Society (STS). PoET examines the nature and

effects of emerging technologies; conducts research on key areas of uncertainty on these issues; and offers recommendations for improving the capacity of public and private institutions to adapt in the face of irreducible uncertainty. Retrospective studies on the automobile, laser, and global positioning system provide a basis for identifying factors that affect the diffusion of technologies across actors and applications, and for evaluating assessments of effects of technologies during their infancies. PoET was founded under a National Science Foundation (NSF) Integrative Graduate Education and Research Training (IGERT) grant (2004–2009), with support for creating new courses and for integrating research and training for doctoral students from ESD, Political Science, and STS. IGERT trainees conducted research on information technology and military strategy; standard setting and craft in satellite design; projecting economic effects of synthetic biology; synthetic biology security; design of survivable systems; regulatory foresight and adaptation; and technology policy and innovation.

Research continues on two emerging technologies:

1. Synthetic biology research has been led by Professor Oye and supported by NSF's Synthetic Biology Engineering Research Center (SynBERC), in partnership with biological engineers at MIT, Harvard University, Stanford University, Lawrence Berkeley National Laboratory, and Boston University, and with the David Rejeski technology policy group at the Woodrow Wilson Center. The MIT group has worked on protocols and standards, safety and security issues, and intellectual sharing and ownership. In 2010–2011, the MIT group focused on the design, testing, and demonstration of ready-to-roll applications of synthetic biology for safety and sustainability. One highlight was a joint MIT–Wilson Center exercise titled “Beyond Containment: Assessing, Testing, and Demonstrating Safety on Release of SynBIO Devices and Chassis,” with emphasis on a re-engineered arsenic biosensor and on “rE.coli” engineered to limit horizontal gene flow. Participants from MIT, the White House Office of Science and Technology Policy, the Environmental Protection Agency, Friends of the Earth, and Dow AgroSciences committed to work in depth on risk governance in this area. The MIT group has also managed “human practices” judging in the 2010 International Genetically Engineered Machine (iGEM) Jamboree; trained iGEM faculty on safety and security issues; and presented research on synthetic biology policy issues to conferences and workshops organized by the American Association for the Advancement of Science, the International Risk Governance Council, Genopole (France), the Eidgenössische Technische Hochschule Zürich, the Massachusetts Medical Research Association, the Federal Bureau of Investigation, and SynBERC.
2. Future internet research has been led by senior research scientist David Clark, of the Computer Science and Artificial Intelligence Laboratory (CSAIL) and the NSF Future Internet Design initiative. Under the leadership of professor of political science Nazli Choucri, Dr. Clark and IGERT trainees are now carrying the security components of internet work to a new level with their independent Department of Defense Minerva Initiative project.

Project on Knowledge Assessment and Policy Adaption

CIS research fellow Lawrence McCray and Professor Oye are leading book-length projects on the evaluation and utilization of scientific and technical knowledge in areas of uncertainty and controversy. *Grasping Third Rails: Assessing Scientific and Technical Knowledge in Areas of Controversy* is a book examining public controversies with significant scientific and technical content, with research underway on security issues including ballistic missile defense and Iraq weapons of mass destruction claims; and on health and environmental issues, including PM2.5, methyl mercury, climate change, and dietary standards. *Uncertainty, Anticipation, and Adaption: Empirical Studies* is a book assessing the potential of anticipation and adaptation under conditions of pervasive uncertainty, using studies comparing U.S. and European Union policies on particulates, prion-based diseases, water, and pharmaceuticals. In 2010, Dr. McCray and Professors Oye and Petersen published “Planned Adaptation in Risk Regulation: An Initial Survey of US Environmental, Health, and Safety Regulations” in *Technology Forecasting and Social Change*.

In 2010–2011, work focused on reform of systems for evaluating the safety, effects, and cost-effectiveness of pharmaceuticals, with emphasis on adaptive approaches to drug licensing. This work has been conducted jointly with Hans-Georg Eichler, Wilhelm Fellow and senior medical officer of the European Medicines Agency, and has been supported by the MIT Center for Biomedical Innovation. Highlights of the past year include a draft paper by Dr. Eichler and Professor Oye on the climate for adaptive licensing; workshops with regulators, payers, drug developers, and others on prospective pilot exercises to test new approaches to licensing; and consultations with the President’s Council of Advisors on Science and Technology staff on the reform of drug licensing.

Seminar XXI: Outreach to the Washington, DC, Policy Community

For more than two decades, CIS has hosted Seminar XXI, an educational program for senior military officers, government officials, and executives in non-governmental organizations in the national security policy community. The program provides future leaders of that community with the analytic skills needed to understand other countries and foreign relations in general. A cohort of about 90 meets throughout the academic year in Washington, DC, and northern Virginia.

Fellows learn to recognize the assumptions that underlie assessments of foreign societies and to explore policy issues critical to American interests through a variety of lenses. At each session, eminent speakers present alternative perspectives from which to understand a given country or problem. The fundamental criterion for choosing fellows is that they currently hold or are expected to hold top posts in the military or government within the next three to five years.

The program just completed its 25th year and now has more than 1,600 alumni. Robert Art, Christian A. Herter professor of international relations at Brandeis University and a senior fellow in CIS SSP, directs Seminar XXI.

Program on Environmental Governance and Sustainability

The Program on Environmental Governance and Sustainability (PEGS) is in its third year, founded and directed by JoAnn Carmin, DUSP associate professor of environmental planning and policy. The program explores with students research and ideas about how to promote environmentally sound and socially just development. Many of the activities associated with PEGS draw on field-based knowledge, complemented with consideration of global governance institutions, organizations, and processes. In 2010–2011, the program selected four PEGS Fellows—graduate students whose work is partially funded by the program. PEGS convenes a global sustainability working group of students as well. During AY2011, Professor Carmin worked with Professor Davis and students on conflict and environmental challenges in cities.

Persian Gulf Initiative

Begun in 2005, the Persian Gulf Initiative seeks to bring together scholars and practitioners from the Gulf and the U.S. to explore contemporary issues, particularly security relationships. It has over the years sponsored several research initiatives, publications, visiting scholars, and public forums at MIT and in New York, Washington, DC, and elsewhere. In 2010–2011, the initiative convened the third in a series of critical oral history conferences at the Musgrove Conference Center, in St. Simons Island, GA, which brought together high-level decision makers from the US and Iran to discuss the fitful attempt to normalize relations in the late 1990s. With MIT's HyperStudio, that project is developing a rich resource of documents for scholars and students.

Puerto Rico Economy Project

CIS was invited by Jon Borschow '72 to help develop a healthier, sustainable economy for Puerto Rico, and the center has responded by organizing a major research effort. Following a two-day kickoff conference at MIT in February, the Puerto Rico Economy Project (PREP@MIT) is cooperating with the Foundation for Puerto Rico to develop practical ideas for implementation on the island. Several MIT faculty and graduate students from the Department of Political Science, DUSP, and the MIT Sloan School of Management are participating. PREP@MIT is also working with federal officials to introduce new ideas into the policy-making process.

Urban Resilience in Situations of Chronic Violence

The Urban Resilience in Situations of Chronic Violence project, headed by Professor Davis, seeks to better understand the ways in which urban communities cope successfully with chronic violence. Based on field studies in eight cities—Mexico City, Managua, Medellin, São Paulo, Kigali, Nairobi, Johannesburg, and Karachi—the researchers build theories of this coping, or resilience, with respect to security, livelihoods, and justice. The project is supported by a major grant from the U.S. Agency for International Development.

South Asia

The Joint Seminar on South Asian Politics continued into its second year with eight sessions on discrimination in India, corruption in India, political violence in South

Asia, religion, and other topics. The seminar is cosponsored with Harvard and Brown universities, and managed by Professor Narang.

In January, CIS coorganized a major conference in New Delhi with the Delhi Policy Group on Asian security. Speakers included Professors Narang, Posen, and Samuels, and Admiral William Fallon (chair of the CIS advisory board and former Wilhelm Fellow), among others. The conference also featured addresses by the foreign minister and several other Indian political leaders, intellectuals, and journalists. Siddharth Shriram SM '78, CIS advisory board member, was instrumental in the conference's organization.

Women and Security

The culmination of a two-year effort, the Women and Security project launched its case-study report, "What the Women Say: Participation and UNSCR" [United Nations Security Council Resolution 1325], at the US Permanent Mission to the UN in October. Assessing the landmark UN Security Council resolution on women, the project commissioned case studies in six countries. The well-received report, prepared in cooperation with the International Civil Society Action Network and CIS Senior Fellow Sanam Anderlini, earned extensive press coverage and presentations at the National Security Council, the US Institute of Peace, and Harvard Law School, among others. Principal research scientist John Tirman published an article in *Foreign Service Journal*, and Ms. Anderlini spoke in Colombia and elsewhere on the findings. The project was supported by the Irish and Norwegian governments.

Myron Weiner Seminar Series on International Migration

Named in honor of the late director of CIS and professor of political science, the Myron Weiner Seminar Series on International Migration held four well-regarded sessions in 2010–2011, including discussions on refugee protection, development in Mexico and Morocco, and controversies over citizenship in the US and Brazil. The series is a project of the Inter-University Committee on International Migration, which has participation from six area universities and is hosted by CIS.

Public Programs

In 2010–2011, CIS continued to foster a very active public education program—lectures, seminars, films, and other events that draw in both the MIT community and a broad swath of the Greater Boston community. The center's Starr Forums and public lectures continued to offer events on pressing global issues with leading academics, policy makers, and journalists. The events were well attended by the MIT community and beyond, and the dialogues were spirited and informed. Videos of the events are posted on the websites TechTV, MIT World, and YouTube. When possible, CIS involved like-minded organizations on campus and the local community, as well as local media outlets.

Several Starr Forums were staged soon after two unexpected global events: the revolution in Egypt, and Japan's nuclear crisis. On Egypt, CIS offered an eyewitness account from a photojournalist who was in Tahrir Square during the uprising. Later,

the center hosted a talk with the founders of the April 6 Youth Movement—a peaceful organization that played a key role in Egyptian president Hosni Mubarak’s departure.

On Japan, MIT experts discussed the country’s nuclear past, present, and future from a political and engineering perspective. A talk was cosponsored by the Department of Nuclear Science and Engineering, and the panel included Professors Samuels and Oye, and professor of nuclear science and engineering Michael Golay.

CIS was delighted to host a talk with David Miliband SM ’90, former foreign secretary for the UK, and a Wilhelm Fellow in residence in April. Miliband discussed mending, not just ending, the war in Afghanistan. Months prior to his talk, CIS hosted Report Card on President Obama, featuring MIT experts who graded the administration’s work on three issues: Afghanistan, climate, and the economy.

Multiple book talks were held with their respective authors. They featured the books *Washington Rules: America’s Path to Permanent War* (with Andrew Bacevich); *Peace Meals* (with Anna Badkhen); and *The Shah* (with Abbas Milani).

Art, again, was used as a means to increase awareness on global issues. CIS featured a one-man show that portrayed the complexities and contradictions in Palestinian-Israeli identity, and hosted two film screenings: *Enemies of the People*, with codirector Rob Lemkin, a harrowing elucidation of the minds and souls of Pol Pot regime officials; and *Budrus*, about a Palestinian who unites local Arabs and Jews in an unarmed movement to save his village.

The center assembled a CIS display for the much-lauded MIT150 Open House that included a poster session, videos, and print materials. The program continued to publish *Precis*, its biannual newsletter, as both a print and web-based publication.

Finally, the Emile Bustani Middle East Seminar (organized by Philip Khoury, associate provost and Ford international professor of history) continued with several lectures, including: “US and Israeli Interests: Aligned or Diverging?” with Andrew Bacevich (Boston University); “Fundamentalist and Other Obstacles to Religious Tolerance,” with Malise Ruthven (writer/historian); “Lebanon: Consensus in Times of Enmity,” with Augustus Richard Norton (Boston University); and “What Happened to the End of Ideology and the Triumph of Liberalism in the Arab World?” with Michaelle Browsers (Wake Forest University).

Publications

Books

JoAnn Carmin and Julian Agyeman, eds., *Environmental Inequalities Beyond Borders: Local Perspectives on Global Injustices* (MIT Press, 2011).

JoAnn Carmin and Adam Fagan, eds., *Green Activism in Post-socialist Europe and the Former Soviet Union* (Routledge, 2011).

Diane Davis and Nora Libertun de Duren, eds., *Cities and Sovereignty: Identity Conflicts in Urban Spaces* (Indiana University Press, 2011).

John Tirman, *The Deaths of Others: The Fate of Civilians in America's Wars* (Oxford University Press, 2011).

Stephen Van Evera and Sidharth Shah, eds., *The Prudent Use of Power in American National Security Strategy* (Tobin Project, 2010).

Articles, Papers, and Book Chapters

Owen Cote and Benjamin Friedman, "Overwrought on START [Strategic Arms Reduction Treaty]," *The National Interest* (December 1, 2010).

Diane Davis, "Irregular Armed Forces, Shifting Patterns of Commitment, and Fragmented Sovereignty in the Developing World," in Michael Hannagan and Chris Tilly (eds.), *Contention and Trust in Cities and States* (Springer Publishers, 2011).

Fotini Christia, Stephen Biddle, and J. Alexander Their, "Defining Success in Afghanistan: What Can the United States Accept?" *Foreign Affairs*, July/August 2010: 48–60.

Fotini Christia, book review of *Afghanistan: A Cultural and Political History* by Thomas Barfield, *The Middle East Journal*, 64, no. 4 (2010): 650–651.

M. Taylor Fravel and Evan S. Medeiros, "China's Search for Assured Retaliation: Explaining the Evolution of China's Nuclear Strategy," *International Security*, 35, no. 2 (Fall 2010): 48–87.

M. Taylor Fravel, "International Relations Theory and China's Rise: Assessing China's Potential for Territorial Expansion," *International Studies Review*, 12, no. 4 (December 2010).

Barry R. Posen, "Overkill," *Foreign Affairs* (July/August 2010).

Richard J. Samuels, "An Ancient Tool for Holding Passions Captive," *The Boston Globe* (July 28, 2010).

Richard J. Samuels and Robert Madsen, "Japan's Black Swan," *Foreign Policy* (March 16, 2011).

Richard J. Samuels, Eric Heginbotham, Adam Liff, and Ely Ratner, “Japan Debates its Security Options: The USAF [U.S. Air Force] in a Dynamic Security Landscape,” paper prepared by RAND Corporation for Project Air Force, Washington, DC, 2010.

Harvey M. Sapolsky, “Security Studies and Security Policy: An American Perspective,” in Robert Denmark et al., eds., *The International Studies Compendium Project* (Wiley-Blackwell, 2010).

Harvey M. Sapolsky and Benjamin Freidman, “When Intervention Is Easy: For Post-Cold War America, Military Adventures Forever Beckon—and Their Lessons Are Quickly Forgotten,” *The Philadelphia Inquirer* (April 8, 2011).

John Tirman, “UNSCR 1325: Slow Progress, Uncertain Prospects,” *Foreign Service Journal* (April 2011).

John Tirman and Sanam Naraghi Anderlini, *What the Women Say: Participation and UNSCR 1325* (MIT CIS and the International Civil Society Action Network, 2010).

Jim Walsh, “Pyongyang Policy Options: Instruments and Principles for Dealing with North Korea,” paper for the Tobin Project (2010).

Cindy Williams and Benjamin Friedman, “How to Cut the Military,” *The New York Times* (May 8, 2011).

Affirmative Action Goals

CIS seeks to guarantee equality of opportunity in employment and to increase the representation and participation of minorities and women in both management and administrative and technical staff positions. To that end, the program has adopted a rigorous search process for new positions, posting job listings on websites that serve underrepresented populations and seeking the help of MIT human resources recruiters in identifying qualified applicants from underrepresented populations.

Richard J. Samuels
Director

Stephen Van Evera
Associate Director

John Tirman
Executive Director