

President's Report, 2009-2010

Center for International Studies

Established in 1951, the Center for International Studies (CIS) is one of the premier organizations of its kind, a leading venue of global research and education. The relevance of the Center's work for problem-solving on issues of security, international political economy and technology, the Middle East and other areas is reflected in dozens of programs, projects, and the work of faculty, staff, and graduate students through research, public outreach, and publications. Its international education program for MIT students, the MIT Science & Technology Initiative (MISTI), is a pioneering effort that has helped bring the world to 2500 students through internships abroad and educational events on campus.

Richard J. Samuels, Ford International Professor of Political Science, has directed the Center for nearly a decade with the active participation of about 30 faculty and researchers, 40 staff, and 30 graduate students, along with numerous distinguished affiliated scholars and practitioners. CIS's innovative exploration of international issues enriches MIT, the nation, and the world.

Highlights in 2009-2010 include:

- Creation of a CIS Advisory Board headed by Admiral William J. Fallon, who had served as a Wilhelm Fellow at the Center (2008-09).
- The launch of the South Asian Seminar, a joint venture between Brown University, Harvard University, and CIS.
- The Jerusalem 2050 project, a multiyear effort to envision a city of peace, culminated in the debut of its innovative web site.
- The Center was joined by Firlie Davies, a BBC journalist in Zimbabwe and the year's Elizabeth Neuffer Fellow, awarded to a female journalist of distinction in honor of Elizabeth Neuffer, the *Boston Globe* reporter who was killed during the Iraq War.
- Principal Research Scientist Cindy Williams' coauthored book, *Buying National Security*, led to Senate testimony and other activities assaying the nation's military finances.
- New research projects were started on cybersecurity, the Middle East peace process, and women and security, among others.
- Associate Professor Taylor Fravel was appointed to the new National Asia Research Program and, with Professor Samuels, addressed its first assembly.
- The Center mounted several major public events, including a Cold War cinema series, a dynamic photo exhibit on Darfur, talks by columnist Nicholas Kristoff and former Wilhelm Fellow Barbara Bodine, and events on the Haiti earthquake, "death of the news," and U.S.-Cuban relations, among others.

- CIS lost a friend and colleague when one of the giants of U.S. policy making and advocacy, Carl Kaysen, died at the age of 87. An adviser to President Kennedy and director of the Institute for Advanced Studies in Princeton, Kaysen was David W. Skinner Professor of Political Economy (Emeritus) and longtime affiliate of the CIS Security Studies Program.

CIS Advisory Board

The Center has founded an advisory board of distinguished scholars, business executives, diplomats, and civil society leaders to help provide guidance and outreach. Chaired by Admiral Fallon, recently retired from the US Navy after a distinguished 40-year career that included stints as head of the Pacific Command and the Central Command of the U.S. armed forces, the advisory board met twice during the academic year and will increasingly become an integral part of the Center's efforts, particular in boosting its "real world" relevance to problem solving. The members are: Mary Boies, an attorney and high-level government adviser; Jon Borschow, a businessman based in Puerto Rico and an MIT alumnus; Susan Chira, foreign editor of the *New York Times*; Chas W. Freeman, Jr., former US ambassador to Saudi Arabia; M. Shafik Gabr, a Cairo-based head of a major investment group; Alexis F. Habib, managing director of Spinnaker Capital Limited, London; Dana Mead, Chairman of the MIT Corporation; Yukio Okamoto, former adviser to the Japanese government; Ngozi Okonjo-Iweala, Managing Director of the World Bank who earned her PhD at MIT; John Reed, retired Chairman of Citigroup, and an MIT alumnus; Siddharth C.R. Shriram, an industrialist based in New Delhi; Jeffrey L. Silverman, a graduate of the Sloan School at MIT and a commodities trader in Chicago; Anthony Sun, a high-tech entrepreneur in Silicon Valley who earned degrees in engineering at MIT; Lynn Chatman Todman, director of the Institute on Social Exclusion in Chicago, and a MIT PhD in urban planning; and Thomas Wolf, a political science PhD from MIT and a Pennsylvania businessman who has served in the governor's cabinet.

Security Studies Program

The Security Studies Program (SSP) is a graduate-level research and educational program. The senior research and teaching staff includes 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 MIT Department of Political Science. Courses emphasize grand strategy, causes and prevention of conflict, military operations and technology, and defense policy.

In October, SSP held a panel discussion on "Obama and the Arab-Israeli Conflict: An Interim Report." Speakers included Shai Feldman, Judith and Sidney Swartz Director, Crown Center for

Middle East Studies, Brandeis University; and Senior Fellow, Khalil Shikaki, Crown Center for Middle East Studies, Brandeis University. Professor Steven Van Evera moderated the discussion.

SSP held its first Ruina Nuclear Age Speaker Series dinner in November with guest speaker Dr. Hans Blix, a world renowned scholar, diplomat, and a leader on nonproliferation and disarmament issues for decades. His talk was on “The Future of Nuclear Weapons.”

SSP held its 17th Doolittle Awards Lecture in March in memory of General “Jimmy” Doolittle, American war hero, aviation pioneer, and MIT graduate. This year’s Doolittle Award recipient was Professor Richard Overy, University of Exeter. Professor Overy's research includes the Second World War, and air power in the twentieth century.

Continuing a long tradition, SSP convened a major seminar series, the so-called Wednesday Seminars, 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 were 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 addition to her coauthored book, *Buying National Security*, Dr. Williams’s edited volume, *Filling the Ranks: The Transformation of Military Personnel Policy*, was translated into Chinese and published by the Ministry of Defense of the Republic of China.

In January 2010, the program received one-year awards from Lincoln Laboratory and Draper Laboratory. In June the program was awarded a two year, \$600,000 grant from the Carnegie Corporation of New York.

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 Counterproliferation Policy
- Biosecurity: Bridging the Gap Between the Life Sciences and National Security

Change and Stability in Asia

- How Will China 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

US Foreign and Defense Policy

- US Strategy for Global Engagement and States at Risk
- The Nature and Limits of US Military Power
- The Future of Conventional Warfare
- Reassessing US Grand Strategy
- The US Resource Allocation Process
- Project on the Federal Budget and Budget Process for National Security and International Affairs
- Transforming the Rewards for Military Service

Internal Conflict

- Identity Politics
- Political Violence
- Civil War
- Counter-Insurgency
- Postconflict Reconstruction

The program was directed in 2009-10 by Professor of Political Science Steven Van Evera. Ford International Professor of Political Science Barry Posen, the permanent director, was on leave in 2009-10.

MIT International Science and Technology Initiatives (MISTI)

During 2009-2010, MISTI expanded, hosted 79 public talks to inform the MIT community on international issues, and helped to integrate international education into MIT through a number of programs. During this reporting period, MISTI placed 477 students internationally for study abroad, short courses, seed fund research, and internships; MISTI sent 425 interns, up more than 10% from the previous year. MISTI interns are trained at MIT in the languages and cultures of their host countries prior to departure, allowing them to hit the ground running and to return to MIT with international networks and an understanding of how to work effectively in foreign cultures.

MISTI's efforts to internationalize MIT include: a very popular minor in applied international studies; courses on language and culture held in-country; workshops involving MIT professors, students, and young professionals from global companies; and a dynamic speaker series on international issues. In addition, MISTI launched an MIT-Brazil Program during this period which includes an MIT-Brazil Seed Fund.

MISTI also received a study grant from HED-USAID to explore partnerships for improving tertiary education in Ghana and Nigeria and funding from Google and Total for an Empowering the Teachers Program to bring young Nigerian faculty in the fields of Electrical Engineering and Computer Science to MIT. Finally, MISTI has also seen dramatic growth in its research collaborations with MIT scientists in France, India, Italy, Spain, and Japan.

MISTI is directed by Suzanne Berger, Raphael Dorman and Helen Starbuck Professor of Political Science.

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 Portuguese language at MIT, promoting a MIT-Brazil Seed Fund to be initiated in the fall of 2010, and fostering connections between MIT and Brazil. In addition to MIT-Brazil's internship program, the Program has awarded six Dissertation Research Travel Grants for advanced graduate students to conduct research in Brazil over the summer of 2010. MIT-Brazil also provided partial support to a student-initiated Leadership Training Institute project in Brazil over IAP. In addition, MIT-Brazil provided partial funding and pre-departure training for the "Agriculture and Innovation: Creating Value Across the Supply Chain" Program, a student initiated MIT Sloan Course, advised by Professor Richard Locke. In addition to the support of courses and training on Brazil, MIT-Brazil has hosted lectures on pertinent Brazilian politics and environmental issues. The MIT-Brazil Program is co-directed by Class of 1922 Professor of Political Science and Professor of Management Richard Locke and Professor of Political Science Ben Ross Schneider.

During this reporting period, MIT-Brazil has sent 5 students 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. The program has increased internship opportunities through new partnerships with companies, universities, and high schools; in particular, university and high school placements grew through the MIT China Educational Technology Initiative (CETI). At MIT, the Program has partnered with the Department of Electrical Engineering and Computer Science (placing 70 EECS students in MISTI programs and helping to launch EECS's "Empower the Teachers" program with exchanges with the University of Hong Kong, Chinese University of Hong Kong, and Fudan University), participated in the MIT-Greater China Strategy Group (headed by Professor Victor Zue, Director of Computer Science and Artificial Intelligence Laboratory), and launched the MIT Greater China Fund for Innovation (a new MISTI seed fund to which faculty and research scientists can apply to start innovative collaborations with partners in China, Hong Kong, and Taiwan). MIT-China Program is directed by Professor Edward Steinfeld.

During 2009-2010, 53 interns were sent to China, Hong Kong, and Taiwan.

MIT-France Program

During this reporting period, the MIT-France Program sent MIT students to research institutes,

companies, and universities in France. The MIT-France Program held special training sessions for its interns on French culture, history, and current political events. 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 28 requests for funding from professors, and funded eight of those proposals. The MIT-France Program maintains close relations with sponsors; for the fifth year, it organized a weeklong seminar at MIT for top managers from Total, France's largest company, which included meetings with MIT experts in science, engineering, economics, and political science. The MIT-France Program sponsors numerous activities for the MIT community on pertinent issues involving France. MIT-France Program is directed by Professor Berger.

During 2009-2010, 86 students were sent to France.

MIT-Germany Program

During this reporting period, the MIT-Germany Program expanded its mission of international education through internships and workshops. Specifically, the MIT-Germany Program offered the workshop "Tender for Östgötapendeln traffic in south Sweden," which was based on a railway's successful bid to enter the Swedish market. MIT-Germany also took part in the MiNT Educational Initiative (Mathematics (M), Computer Science (I), Natural Sciences (N) and Technology (T)); MiNT brings MIT undergrads together with industry in order to reach out to international students and promote science and technology education. The MIT-Germany Program also supports events on pertinent issues at MIT. MIT-Germany Program is directed by Franz-Josef Ulm, George Macomber Professor of civil and Environmental Engineering.

During 2009-2010, 89 students were sent to Germany, Austria, and Switzerland.

MIT-India Program

The MIT-India Program grew during this reporting period with larger numbers of students trained and sent to India for internships and workshops. In addition to this expansion of opportunities for interns, the Program added several new initiatives including an India Innovation Seed Fund. This year, India Innovation funds were distributed to five faculty members selected from 28 proposals; the MIT-India/IFMR Seed Fund also awarded four grants to MIT faculty during this reporting period. India was highlighted on campus through a dynamic lecture series with 13 public events co-sponsored by the MIT-India Forum, MIT's Office of the Provost, and several academic departments. Last summer, MIT-India co-sponsored the MIT-FabLab Conference in Pune, attended by 80 participants from across the world; over IAP, the Program supported an early entry program designed to encourage interest in India among underclassmen. Eleven students traveled to India on the study trip in January of 2010 as a culmination of the Freshman Seminar class on Indian architecture and planning. The MIT-India Program is directed by Arundhati Tuli Banerjee.

During 2009-2010, 41 interns were sent to India.

MIT-Israel Program

The MIT-Israel program has grown and expanded its contacts in Israel and has integrated Israel-related events into the MIT community. The program finalized agreements with over 30 companies, universities, and NGOs; while 13 students did internships related to energy and the environment that were supported by a dedicated donation. At MIT, the Program supported several courses on Israel and Hebrew: 50 students took the credited course “Israel – History, Culture and Identity” with Visiting Assistant Professor Nahum Karlinsky and Mr. Ehud Eiran; 40 students studied Hebrew at an Ulpan co-sponsored by MIT-Hillel; and many Sloan students attended a new one-day course on “Israel and Entrepreneurship.” The program organized or co-supported Israel-related events on the MIT campus and events in Israel that involved Israeli academics, politicians, and business professionals on issues of energy policy and engineering education. In addition to their pre-internship training at MIT, MIT-Israel interns took part in a five day in-country seminar on Israeli Science and Technology. The MIT-Israel Program is directed by Christine Ortiz, Professor of Materials Science and Engineering.

During 2009-2010, 33 interns were sent to Israel.

MIT-Italy Program

The MIT-Italy Program has continued to expand its presence on the MIT campus and in Italy. In addition to the intensive Italian I language class for prospective interns, the Program offered entry-level opportunities for 23 students to teach science and math at Italian schools using OCW course materials through the Highlights for High Schools Program over IAP. The Highlights Program will continue next year with the involvement of MIT faculty from the Physics Department and the Media Lab. A major participant in the Global Seed Funds, the Program used its long-term collaborations with the Politecnici of Milan and Turin to offer funding through the MITOR Project and the Progetto Roberto Rocca. The MIT-Italy Program organized training sessions and hosted talks on pertinent issues at MIT. A new, experimental writer-in-residence program was added and Beppe Severgnini, one of Italy’s best-known journalists and cultural experts, came to MIT to train interns. Major public events for this reporting period brought together professors from MIT, the Consul General of Italy in Boston, and speakers from major American and Italian universities. The MIT-Italy Program is co-directed by DUSP Associate Professor Carlo Ratti and Dr. Serenella Sferza.

During 2009-2010, 45 interns were sent to Italy.

MIT-Japan Program

The MIT-Japan Program continues to enjoy great success in educating MIT students in Japanese both at MIT and in Japan. At MIT, students are required to take Japanese language, a course on Japan, participate in a two-day retreat, eight spring training sessions, and an in-country training weekend in Kyoto. During this reporting period, the Program worked closely with Foreign Languages and Literature to offer an intensive Japanese course during IAP. In addition, the Program received a grant from the Toshiba Foundation to support the Fast Track Japanese Language Program, which was initiated by Professor Shigeru Miyagawa, Department Head Foreign Languages and Literature, and Hal Abelson, Professor of Computer Science and Electrical Engineering. The Fast Track Program will support research to enable students to learn

two years of Japanese in a single year. The Program also awarded Hayashi Seed Fund grants to two MIT scientists doing research on environmental issues with Japanese and Asian researchers. Finally, the Program educates the community at large on Japan through lectures, a weekly Japanese language table, movies, and other cultural events. The MIT-Japan Program is directed by Professor Samuels.

During 2009-2010, 38 interns were sent 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. The Program received a grant from OpenCourseWare to support OCW interns at universities in Mexico City. In addition, interns were involved in public service studies under the direction of Tecnológico of Monterrey. On campus, the Program sponsored numerous events including talks on pertinent issues such immigration and business collaborations between the US and Mexico. The MIT-Mexico Program is directed by Professor Michael Piore.

During 2009-2010, 20 interns were sent 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. MIT-Spain sponsored an IAP course with the Engineering Systems Division called "Electric Power System Modeling For a Low Carbon Economy" that was attended by 42 students. Elazer R. Edelman, the Thomas D. and Virginia W. Cabot Professor of Health Sciences and Technology and a member of the MIT-Spain Advisory Board, received the Spanish Order of Civil Merit from the Government of Spain in recognition of his "efforts to improve scientific relations and academic interchange between Spain and the United States." Finally, the MIT-Spain/Barcelona Chamber of Commerce Seed Fund awarded five grants to promote research collaborations between Spanish and MIT researchers. The MIT-Spain Program is co-directed by Co-Directors Dr. Mercedes Balcells-Camps, Professor Manuel Martinez-Sanchez and Professor Jaume Peraire.

During 2009-2010, 50 interns were sent to Spain.

MIT-Africa Program

The MIT-Africa Program was established last year with Total's gift of a Chair on Contemporary Africa to the School of Humanities, Arts, and Social Sciences. This gift was the first step in a series of collaborations in education and research between Africa and MIT. Professor Berger and Patricia Gercik, MISTI Associate Director, are currently managing the Africa Program.

In the fall of 2009, MISTI provided support for Dr. Anjali Sastry's course "Practicing Management," a section of the Locke/Johnson G-Lab class at the Sloan School. Forty-three students took the class last fall, and then seven went to Ghana and Kenya over IAP to perform a health delivery study that was supported by MISTI and Total.

MISTI also provided support for the Africa Information Technology Initiative (AITI), a student-run organization that promotes development through education in appropriate information and communication technologies. During the 2010 summer recess, AITI sent nine students to Kenya and Rwanda to teach classes on mobile phone application development with an emphasis on independent research, problem-solving, and entrepreneurship.

During this reporting period, MISTI, in cooperation with Judson Harward, Associate Director of the Center for Education and Computing Initiatives, iLabs, Obafemi Awolowo University in Nigeria, and Ghana Telecom University College, received an HED-USAID study grant to write a pre-proposal paper on tertiary education in Ghana and Nigeria.

Finally, under the direction of Professor Suzanne Berger, Professor of Political Science, and Akintunde Ibitayo Akinwande, Professor of Electrical Engineering and Computer Science, and with the support of Total and Google, MISTI has initiated an Empowering the Teachers Program that will bring junior Nigerian Computer Science and Electrical Engineering faculty to MIT in the spring of 2011 to study MIT's pedagogical approach in these disciplines.

MISTI Global Seed Funds

MISTI offers seed funds to help MIT faculty and researchers launch early-stage international projects and collaboration. Applicants are encouraged to involve MIT students—both undergraduate and graduate—in their projects. These awards cover travel, meeting, and workshop costs to facilitate international projects and collaboration.

Based on the highly successful MIT-France Seed Fund, MISTI Global Seed Funds was launched in 2008 with funding from Office of the Provost to support projects in any country. MISTI Global Seed Funds now includes this general pool and nine separate country specific funds in: Brazil, China, France, India (two funds), Italy (two funds), Japan and Spain. The maximum award is typically \$30,000.

In the second grant round (2009-2010), 132 proposals were submitted; of these, 43 projects received \$664,793 in funding. In an out-of-cycle call for proposals for a new India Innovation Fund, 28 proposals were submitted, and five projects received \$150,000.

Faculty and research scientists from 29 departments across the Institute submitted proposals for projects in 40 countries. All awardees include undergraduate, graduate, or post-doctoral student participation. As in the case of MISTI 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 (MAIS)

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 80 MIT students have completed the MAIS, fulfilling the requirements in three critical areas: language and culture; international politics, economics, and history; as well as international experience. Now the second largest minor in the School of Humanities, Arts, and Social Sciences, MAIS draws students from MISTI, D-Labs, CMI, and the Public Service Center. Dr. Serenella Sferza, who co-directs the MIT-Italy Program, advises students in MAIS. During 2009-2010, MAIS had 20 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 MIT student for travel, meeting, and workshop costs. An evaluating committee (the MISTI 2.0 Coordinator, two additional MISTI country Coordinators, the Associate Director of MISTI, and three mentors from the MIT Venture Mentoring Service) reviewed the 19 applications for funding and awarded MISTI 2.0 funding to four teams returning to work in India, China, Belgium, and Germany. MISTI 2.0 grantees are expected to attend a ten-hour country-specific training session during IAP and complete a post-project report detailing their experience.

During 2009-2010, seven students were awarded MISTI 2.0 funds.

Seminar XXI: Outreach to the Washington Policy Community

For more than two decades, the Center for International Studies has hosted Seminar XXI, an educational program for senior military officers, government officials, and executives in NGOs 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 generally. A cohort of about 85 meets throughout the academic year in Washington, D.C., 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 24th year and now has more than 1,600 alumni. Robert Art, Christian A. Herter Professor of International Relations at Brandeis University and senior fellow in the CIS Security Studies Program, directs Seminar XXI.

Political Economy and Technology Policy Program

This CIS program applies theories and methods from the discipline of political economy to issues in science and technology policy, with work in three primary areas. The program is headed by Kenneth Oye, Associate Professor of Political Science and former CIS Director.

Program on Emerging Technologies (PoET). Daniel Hastings, Frank Field, Kenneth Oye and Merritt Roe Smith manage this research and doctoral training program. 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 GPS provide a basis for identifying factors that affect the diffusion of technologies across actors and applications; and for evaluating assessments of effects of these technologies during their infancies.

In 2009 the program finished its final year of the NSF IGERT grant. During the program's four-year run many educational and trainee research accomplishments were reached. One of the most significant educational achievements of the program was the creation of two new courses relating to the objectives of the IGERT program: "Social and Political Implications of Technology" & "Integrating Seminar on Emerging Technologies." In addition to the educational achievements IGERT trainees made notable strides in the following research fields: 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; & Technology Policy and Innovation.

NSF Synthetic Biology Engineering Research Center (SynBERC), this initiative supports ten doctoral trainees a year. Prospective studies on current technologies center on: (1) Internet II and ubiquitous computing, conducted in partnership with David Clark of CSAIL and NSF Future Internet Design (FIND); (2) synthetic biology, conducted in partnership with Drew Endy, Natalie Kuldell, and Tom Knight of MIT Biological Engineering, Jay Keasling of Lawrence Berkeley National Laboratories. Prospective work centers on protocols and standards, safety and security issues, and intellectual sharing and ownership. The group is adding a proactive component on the design and demonstration of applications of emerging technologies for safety, sustainability and security. This past year this SynBERC group activities, research and projects included: Hosting and judging the 2009 iGEM Jamboree "Human Practices summary"; Training iGEM faculty on safety and security issues; presentation to International Risk Governance Council "Synthetic Biology: Benefits and Risks of Current Research"; and "Beyond Containment: SynBio Design, Testing and Demonstration for Safety and Security" a pilot exercise on red-teaming Biosensors and e.Coli chassis.

Project on Knowledge Assessment, Anticipation, and Adaption. Lawrence McCray and Kenneth Oye are leading research 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* will examine public controversies with significant scientific and technical content, with research underway on security issues including ballistic missile defense and Iraq WMD claims; and on health and environmental issues including PM2.5, methyl mercury, climate change, and dietary standards. *Uncertainty, Anticipation, and Adaption: Empirical Studies* will assess the potential of anticipation and adaptation under conditions of pervasive uncertainty, using studies comparing US and EU policies on particulates, prion based diseases, water, and pharmaceuticals. Studies and workshops are funded by NSF and US EPA.

Project on Technology Transfer for Climate Change and Development. The 15th Session of the Conference of the Parties at Bali reestablished the centrality of technology development and transfer for addressing climate change and promoting development. At the request of the United Nations, Kenneth Oye, Katherine Dykes (IGERT trainee) and associates in the United States and abroad are addressing three sets of issues.

- To identify key technology development and transfer issues at the heart of continuing discussions on how to address climate change and development issues effectively;
- To specify policy relevant sources of uncertainty associated with such issues and to define researchable questions that would address such sources of uncertainty;
- To suggest some research approaches appropriate to these ends and to identify individuals who might be productively engaged in such research activities.
- To discuss what program and projects currently exist within universities on renewable technologies and sustainability and how these programs can be improved

Middle East and Persian Gulf

The Persian Gulf Initiative continued into its sixth year with progress on its U.S.-Iran “critical oral history” project, which brings together policy makers and scholars to discuss particularly vexing episodes in the relationship. The initiative is supported by the Carnegie Corporation of New York and a generous alumni family. The first major phase on the U.S. role in the Iran-Iraq war is being concluded and will result in a book and the opening of the project’s innovative archive, developed in cooperation with MIT’s HyperStudio. The Initiative also continued its work on Iraq, particularly its web site, “Iraq: The Human Cost.”

A similar “critical oral history” project was initiated on the Camp David negotiations in 2000 between Palestinians and Israelis, brokered by President Clinton. The first meeting of negotiators from that summit will be held in the autumn of 2010.

Women and Security

A portfolio of work on the many issues of women and security grew in 2009-10 with the publication of an edited volume, *Women, Migration, and Conflict* (Springer), coedited by Principal Research Scientist John Tirman and Georgetown University Professor Susan Forbes Martin. That was the culmination of a MIT project commissioned by the U.N. Population Fund. Dr. Tirman also co-organized a case study project to assess the implementation of U.S. Security Council Resolution 1325, in cooperation with Sanam Anderlini, a CIS Research Affiliate. The cases (Aceh, Colombia, Israel/Palestine, Liberia, Sri Lanka, and Uganda) were completed this year and will be presented to the U.N. community in October, the 10th anniversary of the resolution, which is designed to promote women's participation in security matters.

Program on Human Rights & Justice (PHRJ)

This program, headed by Associate Professor Balakrishnan Rajagopal of the Department of Urban Studies and Planning (DUSP), is a joint venture with that department. In 2009-10, the program co-sponsored an April conference on "Group Violence, Terrorism and Impunity: Challenges to Secularism and Rule of Law in India: A Workshop." This workshop critically engaged the relationship between group violence and the rule of law, examining definitions of "secularism" and the role of the Indian state in perpetuating group violence. Prof. Paul Brass, University of Washington, gave the keynote address, and was joined by a distinguished group of Indian scholars over the two-day meeting.

The program co-sponsored two events on Gaza in conjunction with the Harvard-MIT Gaza Working Group, one a teleconference at Harvard with Palestinians in Gaza and the second a panel discussion, chaired by Professor Rajagopal, on the U.S. response to the Gaza crisis, which featured three well-regarded experts. It convened a public talk by Malalai Joya, a renowned women's rights activist and Member of the Afghan parliament, and was a co-sponsor of the photo exhibit and talk on Darfur.

PHRJ continued with its summer internship program, generously supported by the Chancellor, which enables several MIT students to intern with a NGO abroad to work on the relationship between the environment and human rights.

Program on Environmental Governance and Sustainability (PEGS)

Now in its second year and headed by DUSP Associate Professor JoAnn Carmin, PEGS was initiated to provide an inter-disciplinary forum for faculty and students at MIT to conduct research and exchange ideas about how to promote environmentally sound and socially just development. The activities for this year were intentionally kept modest, with efforts focused on building ties to other programs within CIS and gaining visibility on the MIT campus. Toward this end, PEGS co-hosted an event with MISTI-India that featured student research related to urban climate impacts in different cities in India. A second event for the MIT community, co-hosted with the Global Sustainabilities Working Group at CIS, was a talk by Mark Redwood from

the International Development Research Centre of Canada on urbanization, poverty, and the environment. Both of these events drew large numbers of students and faculty from across schools and departments at MIT. An important outreach activity this year was a session, co-organized with the Urban Anchor of the World Bank, for the Resilient Cities Congress in Bonn, Germany in which leading scholars and international experts came together to discuss and challenge emerging wisdom on urban climate adaptation.

Public Programs

The Center has a very active public engagement strategy that mainly involves public forums on a variety of global issues. This is meant to draw in the MIT community, especially students, but is generally available to the public—increasingly so through the use of on-line videos of events. The reach of these events is now in the many thousands.

Starr Forums—endowed by the Starr Foundation—and other public lectures continued to offer events on pressing global issues with leading academics, policymakers and journalists. The events were well attended by the MIT community and beyond. Videos of our events are posted on our website, TechTV, MIT World and YouTube. We often involve like-minded organizations on campus and the local community as well as media outlets, such as National Public Radio 's WBUR. Highlights from the past academic year include:

“U.S. Cuba Relations” with Julia Sweig and Wayne Smith; “Challenges Facing the United Nations” with Ambassador Peter Maurer; “Rebuilding Haiti” featuring MIT scholars with ties to Haiti; “Yemen: Avoiding the Mistakes and Learning the Lessons of Iran and Afghanistan” with Ambassador Barbara Bodine; and “Death of the News?” featuring journalists with international expertise.

Multiple book talks were held with their respective authors, including: “Half the Sky: Turning Oppression into Opportunity for Women Worldwide” with Pulitzer Prize winners Nicholas Kristof and Sheryl WuDunn; “Why History Matters?” with Victor Kattan who was joined by Institute Professor Noam Chomsky; and “Crossing Mandelbaum Gate” with Pulitzer Prize winner Kai Bird.

Art also was used as a means to increase dialogue on global issues. We featured the world-traveling Darfur-Darfur exhibit and included a panel discussion on the crisis; for the anniversary of the fall of the Berlin wall, we screened a film from the era and discussed the cold war's influence on cinema and societies; and for the 30th anniversary of the Iranian revolution we hosted a related photography exhibit.

For our *Audit of the Conventional Wisdom* series we introduced “video audits” and produced multiple shorts on a range of issues from Afghanistan to Krygyzstan to the defense budget and a nuclear Iran. The *Audits* continued to generate media interest, including requests from *Foreign Policy* and WBUR's *Here and Now*. We launched a video gallery on our website to

feature videos and enable viewers to both comment and subscribe. We continued to produce print *Audits* and also published *precis*, the Center's 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: "The Present Crisis in Iran" with Ervand Abrahamian; "Palestinians, Israelis and the Making of Peace: What the Results of the Latest Public Opinion Survey Tell Us" with Shibley Telhami; "The Arab Monarcho/Presidential Security States: Their Origins, Trajectories and Possible Futures," with Roger Cohen; "Oil Markets and Politics: Why the Left and the Right Both Get It Wrong," with Robert Vitalis.

Migration Seminars

The CIS-based Inter-University Committee on International Migration is a longstanding body that has over three decades sponsored research, organized conferences, and now mainly convenes a seminar series named in honor of Myron Weiner, a renowned migration scholar, one-time director of CIS and professor of political science who passed away in 1999. In this academic year, the seminar series included David Andrew Singer, MIT Department of Political Science "Migrant Remittances and Exchange Rate Regimes in the Developing World"; Christopher Caldwell, author and senior editor of *The Weekly Standard*, "Reflections on the Revolution In Europe: Immigration, Islam, and the West"; Dr. Westy A. Egmont, Boston College, "The Massachusetts 'New American' Agenda: Policy on Immigrant Integration at the State Level"; Randall Akee, Department of Economics, Tufts University, "Immigrants and Networks: The Effect of Families and Friends on Employment Probabilities"; Katrina Burgess, Fletcher School of Law and Diplomacy, "Translocal Governance: Migrant Associations and Democratic Accountability in Mexico"; and Michael Teitelbaum, Harvard Law School and Sloan Foundation, "Skills Shortages and Visas: Cycles of Anxiety about the U.S. Science and Engineering Workforce."

The Committee is a collaboration of MIT, Harvard, Tufts, Boston University, Brandeis, and Wellesley College.

Publications and Notable Activities & Awards

Books

Michael Fischer and B. Good, S. Willen, and M.J.D. Good, (edited) *A Reader in Medical Anthropology: Theoretical Trajectories, Emergent Realities* (Blackwell 2010)

Karen R. Polenske, (editor) *The Economic Geography of Innovation*, (Published in Chinese, Higher Education Press, 2009)

Kathleen Thelen, (co-edited with James Mahoney), *Explaining Institutional Change: Ambiguity, Agency and Power* (Cambridge University Press, 2010)

John Tirman (co-editor with Susan Forbes Martin), *Women, Migration, and Conflict: Breaking a Deadly Cycle* (Springer, 2009)

Cindy Williams, (editor), *Filling the Ranks: Transforming the U.S. Military Personnel System* (Chinese language translation) (Taipei: Military History and Translation Office, Ministry of National Defense, ROC, 2009)

Cindy Williams and Gordon Adams, "Buying National Security: How America Plans and Pays for Its Global Role and Safety at Home" (Clifton, NJ: Routledge, 2010).

Articles and Book Chapters

Fotini Christia, "Flipping the Taliban" (with Michael Semple), *Foreign Affairs*, July/August 2009

Diane Davis, "The Political and Economic Origins of Violence and Insecurity in Contemporary Latin America: Past Trajectories and Future Prospects." In Desmond Arias and Daniel Goldstein (eds.), *Violent Democracies in Latin America: Toward an Interdisciplinary Reconceptualization*, Durham (Duke University Press, 2010)

Diane Davis, "Divergent Epistemologies in the Search for Co-Existence: The Jerusalem 2050 Project," in Moshe Moaz (ed.), *The Meeting of Civilizations: Muslim, Christian, and Jewish* (Brighton, UK and Portland US: Sussex Academic Press, 2009): 108-126

Michael Fischer, "Iran and the Boomeranging Cartoon Wars: Can Public Spheres At Risk Ally With Public Spheres Yet to be Achieved?" *Cultural Politics* 5(1), 2009, 27-62

Michael Fischer, "Dr. Folkman's Decalogue and Network Analysis." in Good, B., M. Fischer, S. Willen, eds., *Medical Anthropology: Theoretical Trajectories, Emergent Realities* (Blackwell, 2010)

Michael Fischer, "Emergent Forms of Life in Corporate Arenas," in Melissa Cefklin, ed., *Ethnography and the Corporate Encounter: Reflections on Research in and of Corporations* (Berghahn, 2009)

M. Taylor Fravel, "The Limits of Diversion: Rethinking Internal and External Conflict," *Security Studies*, Vol. 19, No. 2 (May 2010), pp. 307-341.

Karen R. Polenske, Hongtao Liu, Youmin Xi, and Ju'e Guo, "Comprehensive Evaluation of Effects of Straw-based Electricity Generation: A Chinese Case," *Energy Policy* 2010

Karen R. Polenske, Patrick Canning, Ainsley Charles, Sonya Huang, and Arnold Waters, "Energy Use in the U.S. Food System," U.S. Department of Agriculture, Economic Research Service Economic Research Report No. 94 (March 2010)

Barry Posen, "Emerging Multipolarity: Why Should We Care?," *Current History*, November 2009, Volume: 108, Issue: 721: 347

Balakrishnan Rajagopal, "The International Human Rights Movement Today," *Maryland Journal of International Law*, 56 (2009)

Richard J. Samuels and Robert Madsen, "Japan, LLP," *The National Interest*, No. 107 (May/June 2010)

Richard J. Samuels, "Gojūnen Keiko Shite no Nichibei Gunji Dōmei no Rifuōmu" (Reforming the Military Alliance after Fifty Years), *Shushin* (January 2010): 10-14.

Ben Ross Schneider, "Hierarchical Market Economies and Varieties of Capitalism in Latin America." *Journal of Latin American Studies*, 41 (August 2009): 553-75

Ben Ross Schneider, "Big Business in Brazil: Leveraging Natural Endowments and State Support for International Expansion." In Lael Brainard and Leonardo Martínez-Díaz, eds., *Brazil as an Emerging Economic Superpower?* Washington, DC: The Brookings Institution, 2009

David Andrew Singer, "Migrant Remittances and Exchange Rate Regimes in the Developing World," *American Political Science Review*, 104 (2):307-323

David Andrew Singer and Alexandra Guisinger, "Exchange Rate Proclamations and Inflation-Fighting Credibility." *International Organization*, 64 (2):313-337

David Andrew Singer and Bumba Mukherjee, "International Institutions and Domestic Compensation: The IMF and the Politics of Capital Account Liberalization." *American Journal of Political Science* 54 (1):45-60

Eugene Skolnikoff, "Scientific Cooperation with CHINA in the Face of U.S. Controls on Technology," *NCURA Magazine*, Vol.XLII, No.3 (May/June 2010): 8-9, 19.

Kathleen Thelen, "Institutionalizing Dualism: Complementarities and Change in France and Germany," (co-authored with Bruno Palier), *Politics & Society* (March 2010)

Kathleen Thelen, "Beyond Comparative Statics: Historical Institutional Approaches to Stability and Change in the Political Economy of Labor," *Oxford Handbook of Comparative Institutional Analysis* (2010)

Kathleen Thelen, "Economic Regulation and Social Solidarity: Conceptual and Analytic Innovations in the Study of Advanced Capitalism," *Socio-Economic Review* (October 2009): 1-21.

Kathleen Thelen, "Institutional Change in Advanced Political Economies," *British Journal of Industrial Relations*, 47: 3 (September 2009): 471-498.

John Tirman, "International Relations," in Robert E. Looney, ed., *Handbook of US-Middle East Relations: Formative Factors and Regional Perspectives* (Routledge, 2009)

John Tirman, "Diplomacy, Terrorism, and National Narratives in the U.S.-Iran Relationship," *Critical Studies on Terrorism*, Vol. 2, No. 3 (December 2009): 527-539

John Tirman, "Achieving Détente with Iran," *Bulletin of the Atomic Scientists*, July 2, 2009

Stephen Van Evera and Peter Krause, "Public Diplomacy: Ideas for the War of Ideas," *Middle East Policy*, Vol. 16, No. 3 (Fall 2009): 106-134.

Stephen Van Evera, "Foreword," in A. Trevor Thrall and Jane K. Cramer, eds., *American Foreign Policy and the Politics of Fear: Threat Inflation since 9/11* (London: Routledge, 2009): xi-xvi.

Stephen Van Evera, "Offense/Defense Dominance," in *Encyclopedia of Power* (Sage, 2010)

Cindy Williams, "The U.S. Defense Budget," Statement before the Committee on the Budget, United States Senate (February 23, 2010).

Cindy Williams, "Research Priorities at DHS's Science and Technology Directorate," Statement before the Subcommittee on Technology and Innovation, Committee on Science and Technology, U.S. House of Representatives (October 27, 2009).

Awards, Fellowships, and Notable Activities

Diane Davis, the Bernard Brodie Prize (2010) for Best Article of the Year. Cited article: "Non-State Armed Actors, New Imagined Communities, and Shifting Patterns of Sovereignty and Security in the Modern World," *Contemporary Security Policy*, vol. 30 no. 2 (August 2009): 221-245

Taylor Fravel, Selection as a Research Associate with the National Asia Research Program launched by the National Bureau of Asian Research and the Woodrow Wilson International Center.

Barry Posen, Elected as Fellow of the American Academy of Arts and Sciences, Cambridge, Massachusetts.

Balakrishnan Rajagopal, Member, Advisory Panel, International Council on Human Rights Policy Project on "Climate Change and Human Rights: Technology Policy", Geneva, 2009

Richard Samuels, 2009-2010 EAI Fellowship for the Study of East Asian International Relations:
Seoul, Beijing, and Shanghai

Kathleen Thelen, Fellowship, Radcliffe Institute for Advanced Study; Abe Foundation
Fellowship, Social Science Research Council; Vice President (President-Elect) of Organized
Section on Comparative Politics, American Political Science Association

Richard J. Samuels, Director

Stephen Van Evera, Associate Director

John Tirman, Executive Director