

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 for global research and education. The relevance of the center's problem-solving work on issues related to security, international political economy and technology, Asian security, the Middle East, and other areas is reflected in dozens of programs, projects, and the work of faculty and staff through research, public outreach, and publications. Its international education program for Institute students, the MIT International Science and Technology Initiatives (MISTI), is a pioneering effort that has helped bring the world to 3,000 students through internships abroad and educational events on campus.

The coronavirus pandemic shadowed every activity this year. Nearly all center programs were continued remotely, however, a testament to the ingenuity and perseverance of the team. Research travel was curtailed, likely the most damaging impact of the virus on research.

The center conducted two town halls for all staff, faculty, and researchers, the first on the coronavirus and the second on diversity and inclusion. Both were led by knowledgeable and skilled moderators from MIT and helped answer a multiplicity of questions on these two urgent matters.

Richard J. Samuels, Ford International Professor of Political Science, is director of CIS, with the active participation of about 30 faculty and researchers, 40 staff members, and 30 graduate students along with numerous distinguished affiliated scholars and practitioners. The center's innovative exploration of international issues enriches MIT, the nation, and the world.

Leadership of the center includes Professor Samuels; John Tirman, executive director; Chappell Lawson, associate professor of political science and director of MISTI; and Taylor Fravel, Arthur and Ruth Sloan Professor of Political Science and director of the Security Studies Program (SSP).

MIT International Science and Technology Initiatives

MISTI serves as the hub for global education programs across the campus. MISTI provides international education and research opportunities for MIT students and faculty through student internship, research, entrepreneurship, teaching, and study abroad programs; faculty funds; international events on campus; and partnerships with companies, research institutions, universities, and government agencies around the world.

MISTI operates via 25 country and regional programs that manage robust internship initiatives connecting MIT students to professional experiences abroad. In addition to internships, MIT students taught in Ghana, Spain, Sudan, and the United Kingdom through the Global Teaching Labs program; the MIT Global Startup Labs program ran workshops in Uruguay; and the MISTI Global Seed Funds (GSF) program introduced new funds in Colombia, Israel, Jordan, and Mexico.

This year Covid-19 significantly impacted the operations of MISTI and its international partners, and MIT student and faculty travel remained suspended. MISTI continued to provide students with new opportunities and support for faculty international research and developed innovative programming to help MIT respond to changing global circumstances.

Professor Lawson completed a successful 10-year tenure as director of MISTI in AY2021.

MISTI Student Programs

MISTI offers MIT undergraduate and graduate students opportunities to intern, research, teach, and study abroad. These experiences are provided at no cost to the students. Students prepare for their placements through MIT courses in the host country's language, history, and politics and a series of non-credit training modules developed by MISTI staff.

Given travel limitations imposed by Covid-19, MISTI staff brainstormed with their international partners to reshape programming options, translating internship opportunities into a virtual format whenever possible. While students generally travel to countries previously unfamiliar to them, in response to the pandemic program managers used their networks to help set up internships for international students to work close to home. On top of restructuring the internship program, MISTI staff came up with online activities to help students and the MIT community learn and engage all year long.

In 2020–2021, MISTI provided 475 international opportunities. About one quarter of these placements were internships or research opportunities in companies, research institutions, or university laboratories. In a typical year, MISTI facilitates over 1,200 student placements.

Overall, 2020–2021 MISTI student placements were as follows:

- 371 (70 in person, 286 remote, 15 country nationals) internships (companies, research institutions, nongovernmental organizations, government agencies, universities)
- 15 Global Teaching Labs and other short-term teaching
- 13 long-term teaching (Global Startup Labs)
- 1 externship
- 6 short-term research projects
- 2 facilitated or supported training programs
- 57 workshops
- 10 study abroad projects

MISTI also serves as a resource to other programs across the campus involved in sending students abroad. In addition to student placements administered by MISTI, 41 students had international learning experiences through the Priscilla King Gray Public Service Center, and 30 students learned abroad through D-Lab.

MISTI Global Seed Funds

The GSF program enables MIT faculty and research scientists to launch early-stage international projects and collaboration with colleagues abroad. Through an annual call for proposals, GSF awards funds that can be used for international travel and meetings with international colleagues. Grantees are expected to involve MIT undergraduate and graduate students in their projects.

In 2020–2021, MISTI offered four new funds in Colombia, Israel, Jordan, and Mexico. A total of 155 applications were received, and more than \$1.9 million was awarded to 90 projects from 30 departments across the Institute. This brings the amount awarded to \$21 million over the 13-year life of the program. To support faculty members as they reconfigured their project plans during Covid, MISTI helped repurpose a portion of the GSF funds for student salaries to help with research progress. The annual call for proposals, which would have taken place in May 2020, was postponed to September due to the pandemic.

Training and On-Campus Events

MISTI's country programs offer dozens of pre-departure and public events on international topics in politics, culture, science, technology, history, industry, and the humanities for the MIT community. With in-person travel opportunities suspended, student training sessions for AY2021 were more limited than usual.

Instead, MISTI programs expanded their education and training focus to the entire MIT community. They worked with partners to provide international contexts and support, keeping MIT connected to the global community during the pandemic. Partnerships with student and campus groups led to opportunities for cultural exchange, language learning, and special projects. Numerous hackathons brought together hundreds of student participants from around the world to solve critical problems. A series of webinars examined the global implications of the pandemic and how we can move forward collaboratively.

Security Studies Program

The Security Studies Program is a graduate-level research and education program. Its 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 Department of Political Science, where courses emphasize grand strategy, causes and prevention of conflict, military operations and technology, and defense policy. Taylor Fravel is director of the program.

SSP publishes an [annual report](#) and a quarterly digital newsletter. In addition, members of the program have regularly made themselves available for a variety of media appearances both in print and online.

Ruina Nuclear Age Speaker Series

The SSP Ruina Nuclear Age Speaker Series (named in honor of former SSP director Jack Ruina) dinner was held virtually on December 3, 2020. This year's speaker was William

J. Perry, former US secretary of defense (1994–1997). Perry discussed how the defense secretary could support the abolition of nuclear weapons and offered his insights on modern-day challenges in mitigating or eliminating the potential for a nuclear catastrophe.

General Doolittle Award Dinner

The General James Doolittle Award reception was held virtually on April 22, 2021. This year's featured speaker and Doolittle Award recipient was General C.Q. Brown Jr., chief of staff of the United States Air Force. General Brown spoke on the need for the Air Force to accelerate change to meet the demands brought about by changes in technology and global events.

SSP Special Seminars

- Accelerating Innovation: University, U.S. Military, and Private Sector Partnerships (virtual event co-hosted by the MIT Innovation Initiative, the Security Studies Program, and MIT ROTC; May 6, 2021). The event featured several VIP panelists including former CEO of Google Eric Schmidt and an introduction by MIT president Rafael Reif.
- Starr Forum: Israelis and Palestinians: Yesterday, Today and Tomorrow (virtual event co-hosted by CIS; May 21, 2021). Speakers included Peter Krause, SSP alumnus and associate professor of political science at Boston College, and Stephen Van Evera, Ford International Professor of Political Science. John Tirman moderated the event.

Focus on Russia Seminar Series: Starr Forum

- Russia's Information War on America (September 24, 2020). Speakers were Nina Jankowicz, journalist and global fellow at the Woodrow Wilson Center; Peter Pomerantsev, journalist and visiting senior fellow at the London School of Economics Institute of Global Affairs; Carol Saivetz (moderator), SSP senior advisor; and Elizabeth Wood (moderator), professor of history at MIT and director of the MIT-Russia Program.
- Palaces & Sandcastles: Deconstructing Putin's Power (March 1, 2021). Speakers were Sam Greene, professor of Russian politics and director of the Russia Institute at King's College London, Saivetz (moderator), and Wood (moderator).
- Advice for President Biden—Dealing with Putin's Russia (April 12, 2021). Speakers were Andrey Kortunov, director general of the Russian International Affairs Council; Angela Stent, director of the Center for Eurasian, Russian and East European Studies and professor of government and foreign service at Georgetown University; Saivetz (moderator), and Wood (moderator).

Wednesday Seminar Series

Sustaining a long tradition, SSP continued the Wednesday Seminar Series, which offers talks on topics relevant to national defense and international relations, including cyber-security, China, Iraq, national security decision making, military technology, military history, and

nuclear security. Speakers over the past year included academics, military officers, and think tank analysts. The speaker series is open to the entire MIT community and general public.

Research and Education

Program research is built around the interests of the faculty, graduate students' dissertations, and occasional commissioned projects. Key research areas are nuclear strategy and statecraft, change and stability in Asia, US foreign and defense policy, and internal conflict.

Researchers working in the area of nuclear strategy and statecraft are exploring the underlying logic of current nonproliferation strategies, particularly with regard to North Korea and Iran, China's nuclear strategy, and resource allocation and counterproliferation policies.

Those studying change and stability in Asia are examining means of preventing territorial and maritime disputes in the region, China's military and grand strategy, US-China relations, and Japan's foreign and security policies.

Those working in the area of US foreign and defense policy are examining the US strategy for global engagement. Topics include the nature and limits of US military power, the future of conventional warfare, and reassessments of the US grand strategy.

Researchers focusing on internal conflict are examining identity politics, particularly with regard to political violence, civil war, counterinsurgency, and postconflict reconstruction.

SSP has a visiting fellows program in addition to the military fellows who rotate annually from the four US armed services. The Stanton Foundation has awarded funds to support several scholars on nuclear issues and a chair in political science. The program just completed its ninth year of the fellowship, which included two postdoctoral fellows and one predoctoral fellow.

The Charles Koch Foundation is funding a two-year joint SSP-Harvard Kennedy School fellowship. It is intended to support research addressing fundamental issues related to US grand strategy, foreign policy, and America's role in the world. SSP hosted two postdoctoral fellows in 2020-2021.

SSP receives major support from the Carnegie Corporation of New York, which provided a 24-month grant to support our research on global diffusion of power. It also received funding from the Stanton Foundation and the Frankel (MIT) Global Policy Fund, among other foundations and donors. In April 2021, the program received a one-year award from Lincoln Laboratory.

Global Dynamics Simulation Lab

Professor Samuels and principal research scientist Eric Heginbotham manage the Global Dynamics Simulation Lab, which supports a coherent research and teaching program aimed at assessing and anticipating international crises.

The work includes research on and development of simulation methodologies. The lab aims to develop and refine a range of simulation approaches to international relations, including “two-level games,” involving the concurrent efforts of leaders focusing on separate domestic and international objectives to negotiate with peer states on critical matters such as arms control and trade, “experimental” games that can be repeated while holding some variables constant and exploring the impact of changes in others; and tabletop games that can quickly simulate the impact of policy-making as decisions are made.

The work also involves research on and development of global dynamics simulation tools, including, for example, original or derivative computer models of military conflict, the spread of contagious diseases, or the factors that drive energy prices. The models can then be run to resolve simulation “moves” as they occur.

Finally, the lab is being configured to be the primary repository for international crisis simulation reports, not just from MIT but also from other academic and (where documents are unclassified or declassified) government sources. In the case of games with overlapping themes or structures, it may be possible to draw inferences from games lacking strict uniformity. Housing the repository will make MIT the go-to institution for simulation work and provide an important asset for research on best practices.

Seminar XXI

For more than three decades, CIS has hosted Seminar XXI, an educational program for senior military officers, government officials, and executives in nongovernmental 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 85 fellows 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 35th year and now has more than 2,600 alumni. Professor Kelly M. Greenhill of Tufts University was named to succeed longtime director Robert Art. Kenneth Oye, professor of political science and professor of data, systems, and society, was acting director in AY2021.

Program on Emerging Technologies

CIS created the Program on Emerging Technologies (PoET) with support from a National Science Foundation Integrative Graduate Educational and Research Training grant. The program was founded as a joint venture with Political Science; Science, Technology, and Society; and Engineering Systems. Professor Oye serves as director. Current activities focus on assessing and managing the benefits and risks of biological, medical, and information technologies. PoET research, education, and policy efforts are

collaborative, with teams of technologists, scientists, social scientists, and policymakers working jointly on responsible innovation. In 2020–2021, PoET expanded its activities in research, education, and public service.

Research

- Developed and evaluated safeguards to limit potential security, safety, and environmental effects of biological engineering applications. Two sets of applications were emphasized: gene drive control of vector-borne disease (with Professor Oye serving on the National Institutes of Health Novel and Exceptional Technology and Research Advisory Committee working group on gene drives) and genetically engineered biological chassis for materials production (with support from the Dutch Research Council, the Netherlands National Institute for Public Health and the Environment, Wageningen University, and Yale University).
- Worked on a study on information hazards associated with potentially dangerous tools and applications of biotechnology, with attention to potential adverse side effects. Controls on information flows to malevolent actors also limit access to information by scientists seeking to advance knowledge, by biosafety officers and benign technologists seeking to avoid inadvertently creating hazards, and by policy communities seeking knowledge to inform deliberation. This project focuses on improving tradeoffs across these desirable ends.
- Conducted research on planned adaptive management of risks associated with emerging technologies, pharmaceuticals, finance, and security affairs.
- Conducted research on biological and internet security in partnership with the Computer Science and Artificial Intelligence Laboratory, with attention to the effects of regulations on terms of trade.

Education

- Sponsored, designed, and staffed the core 17.310[J] Science, Technology, and Public Policy course, serving undergraduate and graduate students from across the Institute and from the Woods Hole Oceanographic Institution. PoET affiliate Lawrence McCray guided graduate students' research on adaptive risk governance and established a working paper series as an outlet for student papers.
- Reconfigured the curriculum of the Seminar XXI program to include sessions on the security implications of pandemics, information technology and biological technology, and climate change. In December 2020, PoET organized a special panel on Covid-19 with an immunologist and geneticist from the Johns Hopkins Center for Health Security and a former Food and Drug Administration official with the Gates Foundation.

Public Service

- Served as the hub for the Synthetic Biology Policy Group, a network meeting weekly to discuss topics in biomedical and biological engineering. The network links CIS and Lincoln Laboratory to the National Academy of Sciences, the

Engineering Biology Research Consortium, and the American Biological Safety Association International and to institutions including the Johns Hopkins, Harvard, and Emory medical schools and Stanford Bioengineering. Since January 2020, the group has focused on Covid-related technical topics and policy issues.

- Provided leadership for the Broad Institute Biofoundry. The foundry, supported by the Safety Committee of the Defense Advanced Research Projects Agency, functions as a genetic design institute that enables forward engineering of sophisticated, massively multi-part genetic systems.
- Participated in the National Institutes of Health Novel and Exceptional Technology and Research Advisory Committee.

Human Rights & Technology Program

For the third year, the Human Rights & Technology Program sponsored research opportunities for MIT students to connect matters of human rights and how they are affected by technology, for good or ill. Eight fellowships were awarded, three to undergraduates and five to graduate students (including a two-person team). The topics ranged widely and included the use of cryptocurrency in sex trafficking, how local actors circumvent internet censorship in Iran with technical and social innovations, and an investigation into the use of ShotSpotter, a surveillance technology that may violate privacy rights and worsen racist policing.

A workshop on the state of the field in human rights and technology was scheduled for autumn but had to be postponed because of the coronavirus emergency.

The program is administered by John Tirman and Anat Biletzsky, Albert Schweitzer Professor of Philosophy at Quinnipiac University and CIS research affiliate.

Persian Gulf Initiative

The Persian Gulf Initiative, in its 15th year, completed one of its major objectives, a book on US-Iran relations that was the subject of five critical oral history conferences. Successfully submitted to Johns Hopkins University Press, *Republics of Myth: National Narratives and the US-Iran Conflict* is coauthored by John Tirman, Professor Hussein Banai of Indiana University, and Malcolm Byrne, deputy director of the National Security Archive at George Washington University. A website covering much of the same material advanced during the year as well. It is the third book produced through the work sponsored by the initiative.

A new project drawn from the initiative's work on Iraq War mortality is the web-based Human Security Dashboard, which provides data and analysis on several armed conflicts, including those in the Gulf area. Development on this began over the past year. The initiative also produced a website focusing on Iraq War mortality.

Tirman made several media appearances to comment on US-Iran relations and conditions in Iraq, including a 30-year retrospective on US involvement in Iraq published in the *DAWN Journal*. In addition, he was named a fellow at the Democracy for the Arab World Now (DAWN) nongovernmental organization, founded by slain journalist Jamal Khashoggi.

Public Programs

In 2020–2021, CIS fostered a diverse and enriching public education program. The center’s Starr Forums and public lectures continued to offer events on pressing global issues with leading academics, policymakers, and journalists. The program launched a new event series in late spring, MIT x True Africa University (MIT x TAU), that explores sustainability issues in Africa through the lens of that continent’s experts.

To that end, the program produced 14 Starr Forums and 11 MIT x TAU webinars. The events were held virtually as Zoom webinars and had record numbers of registrants. For example, there were as many as 765 registrations for a Starr Forum and 730 registrations for an MIT x TAU webinar.

The Starr Forums averaged 191 real-time views per virtual event, an increase from an average of 160 people in attendance at our pre-pandemic in-person events. The MIT x TAU webinars averaged 160 real-time views.

Archived videos of both Starr Forums and MIT x TAU webinars are available on demand on our YouTube channel. On this platform, the Starr Forum videos averaged nearly 500 additional views per event, and MIT x TAU videos averaged more than 200 additional views.

Starr Forum highlights over the past year include the following:

- The Haitian Constitutional Crisis and the International Community, with Robert Fatton, University of Virginia; Georges Fauriol, Center for Strategic and International Studies; Sabine Manigat, independent researcher (Haiti); Amy Wilentz, University of California at Irvine; and Malick Ghachem, associate professor of history, MIT (moderator)
- Myanmar and South Asia: Democratization, Authoritarianism, and Refugees, with Ambassador Gautam Mukhopadhyaya, Centre for Policy Research; Jonathan Saha, Durham University, United Kingdom; Yasmin Ullah, Rohingya social justice activist; Harn Yawngghwe, Euro-Burma Office; and Sana Aiyar, associate professor of history, MIT (moderator)
- Israelis and Palestinians: Yesterday, Today and Tomorrow, with Peter Krause, associate professor of political science, Boston College; Stephen Van Evera; and John Tirman (moderator)
- On Causes of and Responses to Anti-Asian Violence, with Melissa Nobles, Kenan Sahin Dean of the School of Humanities, Arts, and Social Sciences and professor of political science, MIT; Paul Watanabe, University of Massachusetts Boston; Katharine Moon, Wellesley College; Tram T. Nguyen, Massachusetts state representative and House Asian Caucus member; Kenneth Oye (moderator); and Christine Pilcavage, managing director, MIT-Japan Program (moderator)
- President Biden’s Foreign Policy Challenges: Views From Abroad, with previous CIS Robert E Wilhelm Fellows Naomi Chazan, Hebrew University of Jerusalem; Paul Heer, Center for the National Interest; Shivshankar Menon, former foreign secretary of India; Lourdes Melgar, Baker Institute Center for Energy and former Mexican energy minister; and moderated by Richard Samuels (moderator)

- Democracies on the Rocks? with Susan Hennessey, Lawfare; Neeti Nair, University of Virginia; Steven Levitsky, Harvard; Daniel Ziblatt, Harvard; and Richard Samuels (moderator)
- Russia’s Information War on America, with Nina Jankowicz, Wilson Center; Peter Pomerantsev, London School of Economics; Elizabeth Wood (co-chair); and Carol Saivetz (co-chair)
- Beyond 9/11: Homeland Security for the 21st Century, with Alan Bersin, Harvard Kennedy School; Stevan E. Bunnell, former general counsel of the US Department of Homeland Security; Chappell Lawson; Admiral Peter Neffenger (US Coast Guard, retired), Northeastern University; Amy Pope, Atlantic Council; Seth Stodder, partner at Holland & Knight LLP; and Juliette Kayyem, Harvard Kennedy School (moderator)

The following are highlights from the inaugural MIT x TAU series, moderated by its creator Claude Grunitzky, a CIS research affiliate and the founder of *True Africa* magazine and True Africa University:

- Africa’s New Technologies, with Iyinoluwa Aboyeji, CEO of Flutterwave
- Africa’s Economic Power, with Jeffery Sachs, Columbia University
- Africa’s Expertise, with M. Amah Edoh, MIT
- Africa’s Innovation, with Maya Horgan Famodu, entrepreneur, founder, and partner at Ingressive
- Africa’s Agricultural Reinvention, with Sara Menker, entrepreneur and CEO of Gro Intelligence
- Africa’s Future Government, with Evan Lieberman, Total Professor of Political Science and Contemporary Africa, MIT

The CIS biannual newsletter, *précis*, features original articles covering the center’s research community. Both *précis* and the monthly In the News email newsletter are circulated across the Institute and to like-minded research centers, nongovernmental organizations, policymakers, and journalists.

The program staff manages the external website, the intranet site, email newsletters. In addition, the staff provides ongoing media support through news releases, direct media promotion and outreach, and news features.

The CIS website had an astounding increase in users, bringing us up from 39,716 visitors during the previous year to 84,669 in AY2021.

The CIS YouTube channel had 188,113 views, which was also a substantial increase from the prior academic year. Twitter averaged more than 1,000 profile visits per month and Facebook had an average monthly reach of 7,500.

The program produced an animation video providing a thorough yet brief (approximately 60 seconds) overview of the work being done at CIS. The video is used for promotional purposes at each Starr Forum event and posted on our website and social media channels.

The program also is part of the selection committee for the center's Elizabeth Neuffer Fellowship, which brings an outstanding young female journalist to CIS with additional weeks at the *New York Times* or the *Boston Globe*. This year, the pandemic prevented the appointment of a new fellow.

John Tirman
Executive Director