

Program in Science, Technology, and Society

The [Program in Science, Technology, and Society](#) (STS) helps MIT offer an education that teaches scientists and engineers to engage the social and cultural dimensions of their work at the highest levels. This education sets MIT apart from the numerous engineering schools worldwide that turn out technical specialists. The STS program continues to distinguish itself as the leading department—and graduate program—of its kind in the United States.

Educational Activities

Undergraduate

In 2013–2014, 53 students from 12 majors picked STS as their concentration. The largest representation came from Biological Engineering (Course 20) and Electrical Engineering and Computer Science (Course 6). Three undergraduate students worked on minors in STS, two of whom graduated in academic year 2014. STS had one undergraduate major through the joint bachelor of science in humanities and science (Course 21S) program. Sheila Xu completed her thesis, “The Emergence of a Deaf Economy,” this spring, with Rosalind Williams serving as her thesis advisor.

Four students worked with STS on Undergraduate Research Opportunity Program (UROP) projects. Professor David Kaiser supervised students working on projects such as “Early History of Einstein’s General Relativity” and “Causal Relationships in Astronomy.” Adjunct professor John Durant supervised a student working on “Google Glass at the MIT Museum.”

Subjects and Enrollment

STS offered 28 undergraduate subjects and 20 graduate subjects in AY2014, including three undergraduate Humanities, Arts, and Social Sciences (HASS) Distribution (HASS-D)/Communication Intensive HASS (CI-H) subjects and two CI-H subjects. STS continues to emphasize collaboration with other areas of MIT and offered 16 subjects jointly with the following academic units: Aeronautics and Astronautics, Anthropology, Electrical Engineering and Computer Science, Engineering Systems Division, Health Sciences and Technology, History, Linguistics and Philosophy, Political Science, and Women’s and Gender Studies.

With an enrollment of 68 students, STS.006J/24.06J Bioethics continues to be one of our largest classes. The majority of our remaining undergraduate subjects were smaller, seminar-style classes with enrollments ranging from 11 to 32 students.

The Program in Science, Technology, and Society is rebuilding its faculty after several departures, and has been actively hiring new faculty. During the 2013–2014 academic year, however, STS was short-staffed and hence our overall enrollment figures were lower than they have been in recent years. Undergraduate enrollment totaled 367 students, which included majors from 22 MIT departments, plus Harvard University and Wellesley College students. The two majors with the largest representation were

Electrical Engineering and Computer Science and Mechanical Engineering. There were also a significant number of students from Physics (Course 8), Aeronautics and Astronautics, and Biological Engineering. Seventy-five freshmen were enrolled in STS classes. Graduate enrollment remained steady at 242 students from 26 programs. They included Aeronautics and Astronautics, Engineering Systems Division, Management, Architecture, Mechanical Engineering, Science Writing, Urban Studies and Planning, and Harvard University, in addition to doctoral students from History, Anthropology, and Science, Technology, and Society.

Doctoral Program

The doctoral program in History, Anthropology, and Science, Technology, and Society (HASTS) is run by STS with collaboration from the History faculty and the Anthropology Program. The program is administered by STS, which awards the degrees. In 2013–2014, professor Heather Paxson (Anthropology) served her first year as director of graduate studies. Professor Paxson ran the admissions process, chaired the HASTS steering committee, served as academic advisor to the first year cohort, and worked closely with students to encourage them to meet program deadlines in a timely manner.

The program celebrated its 25th anniversary in 2013 with a symposium attended by 90 people, including 31 alumni who traveled from around the world to participate. The symposium featured 15 HASTS alumni who made presentations on their current research in four categories: the environment, health and biology, technology, and infrastructure and communication. Each category included 10-minute presentations followed by a question and answer session. The symposium was followed by a dinner at the MIT Museum.

The HASTS program received 145 applications for admission by the January 1, 2014, deadline. We offered admission to 6.9% of the applicants and we are looking forward to enrolling three new students in the fall. The group holds undergraduate degrees in astronomy, social sciences/anthropology, and women, gender and sexuality studies, and two of the students have completed master's degrees.

In AY2014, 39 students were enrolled in the program. Four students earned their degrees in September 2013 and two graduated in June 2014. In addition, three of our recent alumni received tenure-track faculty positions over the last year at Northeastern University, University of Maryland School of Pharmacy, and the University of Virginia. Several more received highly competitive postdoctoral fellowships with the Harvard Society of Fellows, the Columbia Society of Fellows, and prestigious universities including Stanford University and Rutgers University.

Projects, Grants, and Initiatives

In September 2013, STS co-hosted a major two-day workshop, "The Evolving Culture of Science Engagement." The workshop, which included approximately 75 participants from across the United States and United Kingdom, was designed to foster creative exchange among scientists and science-communication practitioners. Professor Kaiser served as the principal investigator for the project, in collaboration with professors Durant (STS and MIT Museum) and Thomas Levenson (Comparative Media Studies/

Writing and the MIT Graduate Program in Science Writing). The workshop was supported with generous grants from the Noyce, Alfred P. Sloan, MacArthur, and Intel foundations, as well as from the Wellcome Trust (UK). Several offices across MIT also contributed funding, including STS, the Department of Physics, the Knight Science Journalism Program, and the offices of the Dean of Science and the Dean of Humanities, Arts, and Social Sciences.

Among other grants that were active in the department during 2013–2014 was a multi-year research grant from the National Science Foundation (NSF) on “Predictive Modeling of the Emergence and Development of Scientific Fields,” for which professor Kaiser serves as principal investigator. Kaiser also served as supervisor for Dr. Andrew Friedman’s NSF postdoctoral fellowship on “Dark Energy, Fine-Tuning, and the Multiverse: Testing Theories in Modern Cosmology” and on two NSF-funded doctoral dissertation research grants, awarded to David Singerman and Benjamin Wilson. Singerman’s project was titled “An Empire of Purity: Making the Modern Sugar Economy, 1875–1925,” and Wilson’s project was titled “Cold War Dreams: Nuclear Arms Control in American Science, Politics, and Culture.”

During fiscal year 2014, Professor Durant served as the principal investigator for a Marie Curie Fellowship awarded from the University of Leicester to support Dr. Marco Mason in his research project “Digital Media for Heritage: Refocusing Design from the Technology to the Visitor Experience.”

Ongoing Program Activities

Ongoing STS activities bring a wide variety of distinguished scholars to the MIT campus on a regular basis. The longest running of these activities is the STS Colloquium series. Each colloquium focuses on a substantial, pre-circulated paper and features both the paper’s author and a separate commentator. In AY2014, STS held three colloquia, bringing six distinguished speakers to campus during the fall semester, followed by four special seminars in early spring 2014.

In addition to our colloquia, STS presented two named lectures this past academic year, both focusing on the timely topic of surveillance, technology, and individual privacy. The biannual Morison Prize Lecture, named after STS founding professor Eting Morison, featured Dr. Daniel Ellsberg, senior fellow at the Nuclear Age Peace Foundation. Our second lecture was the Arthur Miller Lecture on Science and Ethics, which brought to campus professor David Lyon of Queen’s University, where he serves as chair of their Surveillance Studies Program. Both well-attended lectures were topical, drawing audiences from across MIT and the larger community.

The Nuclear Arms Control seminar series continued this year. In September 2013, professor Noam Chomsky of the Department of Linguistics spoke to a crowded audience in Room 10-250 on the prospects for a nuclear-free Middle East. Another event in the series, held in April 2014, featured Academy Award–winning director Oliver Stone along with professor Peter Kuznick of American University. Stone and Kuznick screened their recent documentary film about the atomic bombing of Hiroshima and Nagasaki and the start of the cold war. A panel discussion followed the film screening.

In November 2013, STS honored professor Leo Marx, Kenan Professor of American Cultural History (Emeritus), on the occasion of the 50th anniversary of his landmark book, *The Machine in the Garden*. With help from the Marx family and Oxford University Press, the celebration gathered several past and current STS faculty members and HASTS students, along with other colleagues of Marx's from throughout his illustrious career, to discuss the lasting impact of his work in the history of technology.

Also in November 2013, STS helped sponsor the annual meeting of the History of Science Society, which brought to Cambridge and Boston more than 800 specialists in this field of endeavor. The meeting was followed by a reception at the MIT Museum.

The Benjamin Siegel Prize of \$2,500 is awarded annually to the MIT student submitting the most well written work on issues in science, technology, and society. The prize is open to undergraduate and graduate students from any school or department of the Institute. This year's committee awarded the 2013–2014 prize to Erhardt Graeff, a master's student in the Center for Civic Media, for his paper "What We Should Do Before the Social Bots Take Over: Online Privacy Protection and the Political Economy of Our New Future."

Knight Science Journalism Fellowship Program

The [Knight Science Journalism Fellowship Program](#) at MIT, now in its 31st year (and sixth year under the leadership of Philip Hilts) continues to attract science journalists from around the world seeking to learn more about the science and technology they cover. The program received 197 applications for 12 spots in the 2013–2014 fellowship year. The 31st class of Fellows included Catalina Arevalo, Aleszu Bajak, Julia Belluz, Nick Clark, Rachel Ehrenberg, Mark Harris, Lynda Mapes, Jason Palmer, Susan Phillips, Jonathan Sahula, Yves Sciama, and Tom Zeller. In addition, Maryn McKenna was awarded a project fellowship to develop a multimedia series consisting of video, audio, and animation. The series will explore the rise of close-confinement chicken farming around the globe, its economic benefits, and its health and environmental risks.

Fellows spent a majority of their time attending classes at MIT and Harvard. They also attended more than 40 faculty-led seminars that had been specially organized for the program, as well as additional seminars and workshops devoted to science and technology and their wider impacts. Some of the seminar topics included "The Limits of Human Reason RISK," "Why Smart Computers Can't Pass the Turing Test...Yet," "How Cooking Made Us Human," "Obamacare Meets Wearable Technology," and "Law, Science, and Society in America."

The Knight Science Journalism program's digital media training continued to expand. Fellows attended workshops on video production and editing, radio reporting, data journalism and visualization, and online multimedia under the instruction of experts from both academia and top news organizations. The 2013–2014 fellowship year also saw the addition of new or expanded sessions in photojournalism and instruction in narrative nonfiction storytelling. The program is committed to providing vital skills training to fellowship appointees and educating them on the techniques and technologies crucial to success in the rapidly changing landscape of digital newsgathering.

Program director Philip Hilts organized several multi-day intensive seminars, referred to as boot camps, for current Knight Fellows and other science journalists. In December 2013, the Medical Evidence Boot Camp brought together medical researchers to evaluate scientific and medical evidence. Also in December, the four-day Energy and Climate Change Boot Camp was held, bringing to MIT top American climate scientists who discussed everything from the latest research in solar technology to polar ice melting to the crisis of flooding that is beginning in low-lying areas such as Florida. In March 2014, the Food Boot Camp was offered for the fifth time. Foodborne disease, obesity and malnutrition, and toxic imports were among the topics covered by researchers and leaders from universities, government, and industry. The fellows also took a three-day field trip to Woods Hole, MA, to visit the Marine Biological Laboratory and the Woods Hole Oceanographic Institution. In addition, the 2013–2014 fellows took field trips to the Jackson Laboratory in Bar Harbor, ME, and to the Harvard Forest in Petersham, MA.

The Knight Fellowships are supported by an endowment from the John S. and James L. Knight Foundation, by MIT, and by alumni and foundation gifts.

Faculty Activities

Michael Fischer, Andrew W. Mellon professor of humanities, taught five classes (Introduction to Global Medicine: Bioscience, Technologies, Disparities, Strategies; Ethics and the Law on the Electronic Frontier; Social Theory and Analysis; Ethnography; Global Science, Technology and Society), chaired two PhD committees, and served on five other PhD committees. He served on the editorial boards of *East Asian Science, Technology and Science*; *Science, Technology and Society*; *Cultural Politics*; and *Cultural Anthropology*. He continues to co-edit a book series at Duke University Press with now 22 volumes published and more in the pipeline. He gave talks at Harvard, Princeton, and UC Irvine, at four international and two national conferences. He published three book chapters, two peer reviewed journal articles, one general article, and three book reviews. He prepared two book chapters and submitted two journal articles. He continued to do fieldwork in Singapore during term breaks, participated in the January MIT-Singapore University of Technology and Design (SUTD) summit meeting, and spent a month in residence at SUTD planning for a six-month residency in 2015.

David Kaiser, the Germeshausen professor of the history of science, continued to serve as department head of the Program in Science, Technology, and Society. He published five peer-reviewed research articles in physics (including two in the journal *Physical Review Letters*), two book chapters in the history of science, and five popular essays in venues such as *Nature*, *London Review of Books*, *Huffington Post*, and *Nautilus*. He also completed an edited volume, *Groovy Science: Science, Technology, and American Counterculture* (co-edited with Patrick McCray), which has been submitted to the University of Chicago Press. Renowned experimental physicist Anton Zeilinger has begun collaborating with Kaiser to perform the new experiment that Kaiser and his co-authors proposed in one of their *Physical Review Letters* publications. Kaiser's research article received international news coverage in *Nature*, *Nature Physics*, *NBCNews.com*, *Forbes*, and in comparable news outlets in the UK, India, Italy, and Germany. For the second year in a row, the physics senior thesis student whom Kaiser advised received the Barrett Prize for the best senior thesis in astrophysics. He continues to advise

several physics UROP students as part of the “Density Perturbations Group” that he co-advises with professor Alan Guth in MIT’s Center for Theoretical Physics. Five of his PhD advisees completed their dissertations (four in STS and one in Physics); he continues to advise eleven PhD students and two postdoctoral fellows (one in STS and one in Physics). Kaiser serves as an editor of the scholarly journal *Historical Studies in the Natural Sciences*, on the editorial board of MIT Press, on the advisory board of *Nautilus*; and on the alumni advisory board for the Department of Physics and Astronomy at Dartmouth College. He served as local organizer for the 2013 annual meeting of the History of Science Society, and delivered four invited keynote addresses during the academic year at meetings in the US, the Netherlands, and Russia. He was also one of the keynote speakers for this year’s Campus Preview Weekend at MIT. Together with several colleagues, Kaiser organized a major conference in September 2013 on the “Evolving Culture of Science Engagement” and completed a lengthy white paper on changing styles and best practices in popular-science communication. His book, *How the Hippies Saved Physics*, received the Davis Prize from the History of Science Society for best book aimed at a general audience.

Associate professor Clapperton Chakanetsa Mavhunga has continued to sharpen his research around the theme of the history, philosophy, and practice of science, technology, and innovation from Africa. This year he completed his first book, *Transient Workspaces: Technologies of Everyday Innovation in Zimbabwe*, in which he explores technology in Africa from an African perspective. Technology in his account is not something always brought in from outside, but is also something that ordinary people understand, make, and practice through their everyday innovations or creativities—including things that few would even consider technological. Technology does not always originate in the laboratory in a Western-style building but also in the society, in the forest, in the crop field, and in other places where knowledge is made and turned into practical outcomes. His focus is on the indigenous hunt, one of many spaces of African innovation that he calls the “transient workspace.” This book comes out with MIT Press in September 2014. He is finishing his second book, *How African Knowledge Became Science*, in which he shows how, contrary to perception, a lot of so-called “colonial” science was, in fact, based on African knowledge, as was the case with tsetse fly control stratagems.

David Mindell, the Frances and David Dibner professor of the history of engineering and manufacturing, has been working on a book, *Our Robots, Ourselves: How the New Robotics is Changing Human Experience*. The book is under contract with Viking/Penguin and its completion has been supported by a grant from the Alfred P. Sloan Foundation; it will be published in 2015. He lectured on this material at Google, Rockwell Collins Inc., the Xconomy Silicon Valley Robotics Forum, and a variety of other academic and public venues. In the spring of 2014 he organized a seminar series, Conversations on Autonomy, which brought leading researchers in robotics to discuss social and cognitive dimensions of their work. He joined the MIT Museum advisory board and was a member of the ad hoc committee of the Innovation Initiative. He spoke to MIT’s Leader to Leader program on the history of MIT. He helped initiate and guide change at the Knight Science Journalism Fellows Program. He is a member of the advisory board for Woods Hole’s Center for Marine Robotics. He has served on the Aero-Astro Centennial planning committee and as co-convener of the MIT Housemaster Council. Mindell and his wife Pamela continue as housemasters at MIT Edgerton House.

Associate professor Natasha Schüll received several honors for her book *Addiction by Design: Machine Gambling in Las Vegas* (Princeton University Press, 2012). In particular, *Addiction by Design* was awarded the prestigious Sharon Stephens Book Prize by the American Ethnological Society and received honorable mention as first runner-up for the Gregory Bateson Book Prize of the Society for Cultural Anthropology. A senior editor at *The Atlantic* named it the best book he had read in 2013. Favorable reviews and features appeared in academic journals (*Anthropology Now*, *American Journal of Sociology*, *Contexts*, *Technology and Culture*, *Social Studies of Science*, *Journal of Cultural Economy*) and in popular media venues (*The New York Times*, *New Statesman*, *New Scientist*, *The Financial Times*). Schüll conducted radio interviews on the book for NPR, WGBH, and Radio France. *Addiction by Design* was acquired for translation by the Italian publisher Sossella Editore and in spring 2014 Schüll's new book, *Keeping Track: Personal Informatics, Self-Regulation, and the Data-Driven Life*, was awarded a contract with Farrar, Straus, and Giroux. A short piece, "Obamacare Meets Wearable Technology," appeared in the *MIT Technology Review* in the fall, and an interview on a related subject with Evgeny Morozov was published in *Public Books*. During the 2013–2014 academic year, Schüll also published a long-form book review in the journal *BioSocieties*, her article "Turning the Tables: The Crusade to Sell Slots in Macau" appeared in a Routledge volume called *Exploring the Production and Consumption of Risk*, and she completed an article on the use of tracking software by online poker players called "The Gaming of Chance," to appear in the University of Chicago Press volume *Modes of Uncertainty*. Schüll was profiled by the Robert Wood Johnson Foundation with a piece titled "From Slot Machines to Personal Health Tracking Tools."

Schüll delivered a keynote lecture, "The Self in Self-Tracking" for the IEEE International Symposium on Technology & Society and a presentation to the Gambling Research Lab at Waterloo University in Toronto during summer 2013. During the fall, she also presented at the American Public Health Association in Boston and at the Cultures of Finance working group speaker series in New York. At the American Anthropological Association meeting in Chicago and at the Social Studies of Science meetings in San Diego she presented on her new project. In spring 2014, she delivered a National Science Foundation Distinguished Lecture in the Social, Behavioral & Economic Sciences (SBE) in Washington DC. This was followed by an invitation to speak at a conference organized by the White House Office of Science and Technology Policy on the cultural, ethical, and legal issues around "big data." At New York University she delivered a Paduano Seminar in Business Ethics and served as a workshop speaker for the mini-conference "Attention by Design," held in the Department of Media, Culture, and Communication. At Columbia University she was a participant in the two-day workshop "Calculating Capitalism" and she also spoke at the Cambridge Science Festival's "Big Ideas for Busy People" event, at McGill's Communication Department Speaker Series, and at "The Habit Summit" at Stanford University. Finally, she was a speaker for the MIT Media Lab course "Tools for Well-being," at the annual meeting of the New York State Council on Alcoholism and Drug Dependence, and at the American Public Health Association annual meeting in Boston.

In the fall, Schüll taught a revised version of her subject Self as Data to great success, along with the STS undergraduate capstone seminar. In the spring, she co-taught an updated version of the HASS-D/CI-H course Bioethics with Julia Markovits and advised

a number of graduate students in the HASTS program; Schüll also served on three general examinations for the program. During the 2013–2014 academic year, Schüll continued her institutional service on the Subcommittee on the HASS Requirement. Within her department, she acted as an organizer and host for the STS seminar series and served as chair of the speaker selection committee for the annual Arthur Miller Lecture. Her professional service included organizing two panel sessions for academic society annual meetings: “Producing Digital Publics” (accepted to the 2014 American Anthropological Association meetings) and “Phenomenological Perspectives on Self-Tracking” (for the 2013 Society for the Social Studies of Science meetings). She also served as a book manuscript reviewer for MIT Press and Routledge Press. Schüll’s public service included acting as a consultant to the Massachusetts Gaming Commission’s research subcommittee, as an expert advisor to the Social and Economic Impacts of Gambling in Massachusetts project team, and as lead advisor to the Massachusetts Gaming Commission on implementation of Statute 97. (Authored by Schüll, the statute requires that gambling establishments share their customer-tracking data with researchers.) In June of 2014 she became a member of the Predatory Gambling Liability Project, a group of lawyers, academics, and public advocates developing a consumer protection case against gambling technology. She was also appointed as a member of the Values-In-Design Council for Future Internet Architectures, a National Science Foundation Early-Concept Grants for Exploratory Research (EAGER) project.

Hanna Rose Shell, the Leo Marx career development associate professor of Science, Technology, and Society, conducted research and writing on her book *Shoddy: Technologies of Material Reuse*, along with her concurrent digital humanities project, both about the interwoven histories of textile recycling and sustainable reuse. During fall 2013, she organized and chaired a panel at the Society for the History of Technology (SHOT) annual meeting on the topic of “Salvage Technologies.” Shell also founded a new section of the journal *Technology and Culture* called “Beyond Words” and took on an editorial role at the journal. Her article, an essay on the growing scholarly relationship between text and non-text based historical analysis and study, appeared in *Technology and Culture’s* spring 2014 issue. As an active member of the Institute-Wide Task Force on the Future of MIT Education, she was a member of the working group on the future global implications of edX and the opportunities it creates. Within this working group, she focused on global education and its impact on external students, working in close association with Sanjay Sarma, Eric Klopfer, Sep Kamvar, and a cross-Institute team to draft and finalize the associated section of the task force report throughout the year and into summer 2014. Shell participated in a symposium at New York University on the topic of obfuscation, was an invited campus-wide lecturer at Pratt University, and was an invited speaker for the Metropolitan History of Science, Medicine, and Technology Colloquium Series held at NYU in May.

Merritt Roe Smith, the Leverett Howell and William King Cutten professor for the history of technology, spent the fall 2013 semester on leave working on a book about technology during the American Civil War era. He gave a presentation on the same subject at Georgia Tech in the spring and delivered the keynote lecture on American industrialization at the Tsongas Center/UMass Lowell Teaching American History Workshop in July. He continued his appointments as a distinguished lecturer of the

Organization of American Historians and honorary guest professor at the Kanazawa Institute of Technology in Japan. He also continued to edit the Johns Hopkins University Studies in the History of Technology (Johns Hopkins University Press) and served on the national advisory committees of the American Precision Museum (Windsor, VT), The Thomas Edison Papers (Rutger's University), WGBH's *American Experience* television series, the American Textile History Museum (Lowell, MA), the Sam & Elizabeth Colt Industrial and Frontier Heritage Center (Hartford, CT), and the Lincoln Prize in Civil War History (Gettysburg College). He recently joined the board of editors of *Vulcan*, a new journal published by Brill on the social history of military technology. His Institute committee service includes memberships on the S³ Advisory Committee, the Dean for Undergraduate Education Faculty Advisory Committee, and the MIT 2016 Planning Committee. He also led a weeklong MIT Alumni tour titled "New England and the Industrial Revolution" (June 2014). His essay, "Becoming Engineers," appeared in *Railroads in Historical Context: Construction, Costs, and Consequences*. In October 2013, he commented on a session called "Salvage, Reuse and Repurposing in the History of Technology" at the 56th annual meeting of the Society for the History of Technology in Portland, ME.

Sherry Turkle, the Abby Rockefeller Mauzé professor of the social studies of science and technology, has been working on a new book project on "Reclaiming Conversation," to be published in fall 2015. Particularly focusing on the role of conversation in teaching and learning Turkle has spoken about the project in many venues, such as Harvard University's Kennedy School, the Springfield Forum, and the New England Association of Schools and Colleges Annual Meeting. This year Turkle was named a fellow of the American Academy of Arts and Sciences, to be inducted in October 2014. During 2013–2014, Turkle made many appearances on national media, including being featured in articles in *Scientific American*, documentaries produced by the BBC and the Canadian Broadcasting Company, interviews with NBC Nightly News with Brian Williams, the CBS Morning News, *Rolling Stone*, NPR's *Science Friday* and *On Point*, WGBH's *Greater Boston*, and an interview with Bill Moyers, an encounter that was the highlight of her year.

Rosalind Williams, the Bern Dibner professor of the history of science and technology, was actively engaged in scholarship, service, and teaching during 2013–2014. She published *The Triumph of Human Empire* in October through the University of Chicago Press. Later that month, she was awarded the Leonardo da Vinci medal, a prestigious lifetime achievement award and the highest prize bestowed by the Society for the History of Technology. Her acceptance address was published in the spring in SHOT's journal, *Technology and Culture*. The book's publication also led to a series of invitations for talks and media appearances, including a BBC Forum broadcast, a Huntington Library Trent Danes History of Civil Engineering lecture, a Google office talk, and visits to Boston area retirement communities. These dominated the spring term, while she was on sabbatical leave to begin research and writing for her next project, in which she will explore the distinctive qualities of historical experience in an increasingly human-built world.

The Triumph of Human Empire is dedicated to Leo Marx and Thomas Parke Hughes, whom Professor Williams was able to honor in more collective ways. In the fall term, she led STS planning efforts, in collaboration with the Marx family and Oxford University Press, to

celebrate the 50th anniversary of the publication of Leo Marx's seminal work *The Machine in the Garden*. In the spring, she organized a memorial dinner for MIT friends of Tom Hughes, and wrote a remembrance of Hughes for the School and the Institute.

Williams taught two new subjects in the fall semester: an undergraduate introduction to STS, STS.004 Intersections: Science, Technology, and the World (which will soon be published on OpenCourseWare) and a graduate seminar focusing on exploration, STS.452 Living in a Technological World.

Over the past academic year, Professor Williams continued her involvement with various European universities. In late 2013, she participated in a biennial meeting of the Scientific Advisory Commission for the Open University of Catalonia, one of the earliest and consistently highly regarded online institutions of higher education. Her consulting service there has been invaluable in understanding the challenges of edX, OpenCourseWare, and other MIT initiatives involving online learning. In late spring, she visited the Technical University of Eindhoven as a distinguished visiting professor, and met with senior administration, history of technology faculty, and assorted staff and students involved with the revolutionary changes in undergraduate education there. She has been involved with the Technical University of Eindhoven for the past six years, and the creation of a Bachelor College there is explicitly modeled after MIT's undergraduate curriculum.

David Kaiser

Director

Germeshausen Professor of the History of Science

Senior Lecturer in Physics