

## **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 2017–2018, 89 students from 23 different majors were active STS concentrators. Of seven students who worked on their minor in STS, three are majoring in biological engineering and the remainder in physics (with a double major in earth, atmospheric, and planetary sciences), mechanical engineering, material sciences and engineering, and aeronautics and astronautics. Two students worked with us on Undergraduate Research Opportunities Program (UROP) projects. Professor Emeritus Louis Bucciarelli supervised one student on “The Value of Intercollegiate Design Competitions.” The other UROP student worked with Professor John Durant on an MIT Museum project in collaboration with the Department of Brain and Cognitive Sciences.

Professor Rosalind Williams served as STS’s undergraduate officer this year. In the fall semester, she submitted a findings and recommendations report from the 2016–2017 STS Curriculum Review Committee. Based on the report’s recommendations, STS officially eliminated the Tier I and Tier II requirements of the concentration effective AY2019. Professor Williams and the STS academic administrator also held a focus group of STS minors at the end of the spring semester and hope to implement some of the group’s recommendations in the upcoming year.

#### **Subjects and Enrollment**

STS offered 22 undergraduate subjects and 12 graduate subjects in AY2018, including six Communication Intensive in the Humanities, Arts, and Social Sciences (CI-H) subjects. We continue to emphasize collaboration with other areas of MIT and offered 12 subjects jointly with the following academic programs: Anthropology; Electrical Engineering and Computer Science; Institute for Data, Systems, and Society (IDSS); Nuclear Science and Engineering; Political Science; Urban Studies and Planning (DUSP); Women’s and Gender Studies; and Comparative Media Studies/Writing.

The program offered two new undergraduate subjects this year: STS.028 Seven Wonders of the Engineering World (taught by Professor Merritt Roe Smith) and STS.033J People and the Planet: Environmental Histories and Engineering. STS.033J was team-taught by Professor Robin Scheffler and three other instructors (from DUSP, IDSS, and Mechanical Engineering) as one of the two required classes for the environment and sustainability minor.

Undergraduate enrollment totaled 357 students, which included majors from 27 different MIT programs, along with Harvard University and Wellesley College students. The three majors with the largest representation were Electrical Engineering and Computer Science (Course 6), Mechanical Engineering (Course 2), and Biological Engineering (Course 20). First-year students were highly represented in our classes, with an enrollment of 58 over the year. Graduate enrollment totaled 113 students from 21 different programs, including Aeronautics and Astronautics, Architecture, Electrical Engineering and Computer Science, Management, Mechanical Engineering, and Urban Studies and Planning, as well as programs at Harvard.

### **Doctoral Program**

The doctoral program in History, Anthropology, and Science, Technology, and Society (HASTS) is run by STS with collaboration from the History Section and the Anthropology Program. The program is administered by STS, which awards the degrees. History professor Harriet Ritvo returned to serve as interim director of graduate studies from summer 2017 through April 2018, when History professor Tanalís Padilla took over the position.

The HASTS program received 151 applications for September 2018 admission. We offered admission to 5.3% of the applicants and had a 50% yield. Five students will join us in the fall (one deferred admission from the previous year). This group of incoming students holds undergraduate degrees in foreign service, science and society, sociology and anthropology, political science and philosophy, and physics, and three of them have completed master's degrees.

In spring, a number of our students received prestigious awards for the upcoming year. One student was awarded a National Science Foundation (NSF) Doctoral Dissertation Research Improvement Grant, a Social Science Research Council International Dissertation Research Fellowship Grant, and a Wenner-Gren Foundation Dissertation Fieldwork Grant. Six of our 10 students entering their sixth or seventh year of the program received competitive fellowships, including the Weatherhead Fellowship Award, the NAEEd/Spencer Fellowship, the Notre Dame Institute for Advanced Study Graduate Fellowship, and the Mellon/ACLS Dissertation Completion Fellowship.

In 2017–2018, 34 students were enrolled in the graduate program, including four who graduated in September 2017. Soon after graduation, three of these students went on to postdoctoral or teaching positions at Wesleyan University, Stanford University, and Tel Aviv University. Other alumni also have moved to new faculty positions within the last year, including positions in the Department of History at Auburn University, the Department of Global Health and Social Medicine at King's College London, and MIT Global Studies and Languages.

### **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 AY2018, STS held six colloquia, bringing 14 distinguished speakers to campus. Speakers hailed from the National University of Singapore; the University of Massachusetts, Amherst; Rensselaer Polytechnic Institute; Brown University; Columbia University; Harvard University; the University of British Columbia; Boston University; York University; and the University of Paris, Didero. They spoke on a breadth of topics ranging from “Prehistories of the Digital Database: Law and Geo-National Technologies” to “Golden Ages: Orientalism and the History of Science” and “The Metropolis: The Infrastructure of Empire.”

In fall 2017, STS hosted the annual Arthur Miller Lecture on Science and Ethics with guest lecturer Kevin Esvelt of MIT. Esvelt is an assistant professor in the MIT Media Laboratory and director of the Sculpting Evolution Group. At this year’s lecture, Professor Esvelt spoke on “Responsive Science: A Path towards Faster, Safer, Community-Guided Research.” The informative lecture was attended by listeners across MIT, Tufts University, Boston University, and the greater Boston area.

In spring 2018, STS hosted the Morison Lecture and Prize in Science, Technology, and Society with guest lecturer Sheri Fink. Fink, a Pulitzer Prize-winning author and *New York Times* correspondent, spoke on human rights during natural disasters in a lecture titled “Healthcare Ethics and Human Rights in Emergencies: From Katrina to Maria and Beyond.” The event had a large turnout and ended with a lively discussion.

STS administers the Benjamin Siegel Prize of \$2,500, awarded annually to the MIT student submitting the best 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 prize to MIT philosophy PhD candidate Marion Boulicault for her paper “Gender and the Measurement of Fertility: A Case Study in Critical Metrology.”

### **Projects, Grants, and Initiatives**

The NSF Doctoral Dissertation Improvement Research Grant awarded to doctoral student Clare S. Kim (“Manifold Exchanges: Mathematics, Aesthetics, and Modernism in America, 1920–1960”) ended on January 31, 2018. Professor David Kaiser served as the principal investigator (PI).

The NSF three-year “INSPIRE: Testing Bell’s Inequality with Astrophysical Observations” project, led by Professor Kaiser, was extended for an additional year and will conclude August 31, 2018.

Professor Emeritus Bucciarelli will complete the final year of a two-year NSF grant supporting his collaborative research project titled “Liberal Studies in Engineering—Broadening the Path to the Profession: Feasibility Study.” The project is scheduled to end on August 30, 2018.

### **Knight Science Journalism Fellowship Program**

AY2018 marked further achievements in the continued growth and expansion of the Knight Science Journalism Fellowship Program (KSJ), building on KSJ director Deborah

Blum's first two years leading the program. Among the year's notable developments, the program's digital science magazine, *Undark*, surpassed three million unique page views during the year, joined in partnerships with publications ranging from *The Atlantic* to *Smithsonian* magazine, and won several awards, including a national medical reporting award from the Endocrine Society for Blum herself. KSJ continued to expand its Kavli Foundation-funded science editing project and announced the creation of a new award in science journalism, named after founding director Victor K. McElheny, to celebrate and support science writing in local and regional publications.

Director Blum, Associate Director David Corcoran, and *Undark* editor Tom Zeller worked to select the 35th class of Knight Fellows, a group of 10 distinguished journalists chosen from a competitive pool of more than 120 applicants. The 2017–2018 fellows were Teresa Carr, Caty Enders, Sujata Gupta, Joshua Hatch, Rowan Jacobsen, Ehsan Masood, Jane Qiu, Kolawole Talabi, Mico Tatalovic, and Caroline Winter.

In addition to auditing courses at MIT and Harvard, the Knight Fellows engaged in an extensive curriculum of seminars, workshops, tours, and field trips designed to introduce them to top researchers and research sites in New England and boost their media production skills. KSJ hosted more than 40 semiweekly science and journalism skill seminars over the course of the year featuring a roster of distinguished speakers, including leading scholars from MIT and Harvard such as Melissa Nobles (dean of the School of Humanities, Arts, and Social Sciences), David Kaiser, Sheila Jasanoff, Naomi Oreskes, Claude Canizares, and Felice Frankel along with journalists ranging from Paula Apsell, senior executive producer of *NOVA*, to Carl Zimmer, a genetics columnist for the *New York Times*.

The KSJ program, with continued funding from the Kavli Foundation, has begun focusing on supporting science through improved training and education. The idea began at a 2016 KSJ-Kavli symposium that brought together almost 30 editors, journalists, foundation representatives, and scholars. The symposium identified such an acute need for better training of science editors that the Kavli Foundation agreed to fund two additional science editing symposia. Both were held in 2017, one in June at MIT's Endicott House and the other in October in Palo Alto, CA, just ahead of the World Conference of Science Journalists in San Francisco. The workshops involved training conducted by a group that included editors from the *Washington Post*, *Buzzfeed*, *Mosaic*, *Science*, and *Scientific American*; attendees included representatives of publications ranging from *Quartz* to the *Fresno Bee*. The response to these events was so strong that Kavli funded two more symposia in 2018, one in July at the European Conference of Science Journalists in Toulouse and one (upcoming) at the Online News Association meeting in Austin in September. In addition, the Gordon and Betty Moore Foundation was so impressed with the work that it awarded KSJ a \$50,000 gift in support of these continuing efforts.

KSJ also organized three training workshops for the fellows. One focused on mobile photography and was taught by Duy Linh Tu of Columbia University. One focused on podcasting and audio story telling and was taught by Ibby Caputo, a former KSJ fellow and a Columbia University adjunct faculty member. Finally, the third focused on

statistics for journalists and was taught by Jessica Ancker of the Medical Bioinformatics Department at Cornell University. Fellows also attended a genetic engineering workshop at MIT, organized by BioBuilder, and went on a field trip to the Marine Biological Laboratory in Woods Hole, MA. In addition, they received travel support that enabled them to attend the World Conference of Science Journalists in San Francisco; the 2018 meeting of the American Association for the Advancement of Science in Austin, TX; or a 2018 conference on narrative journalism hosted by Boston University. KSJ is now in discussions with the Kavli Foundation for continued support of this program.

The program's magazine, *Undark* celebrated its two-year anniversary in April 2017 with a science trivia party at Mamelah's during the 11th Cambridge Science Festival. The event, which was coordinated by our digital marketing manager, Anar Badalov, sold out every table there. Badalov has also played an essential role in the increasing readership and recognition of the magazine, which is edited by former *New York Times* journalist Tom Zeller. Tom is joined on the staff by associate editor and chief fact checker Jane Roberts and David Corcoran, who serves as book editor. In AY2018, David and Jane also coordinated on a program (initiated in 2015–2016) that provides paid internships to MIT graduate science writing students, who write for the KSJ website and are trained as fact checkers for *Undark*.

David Corcoran retired from KSJ as associate director in July 2018 and will be replaced in August by Ashley Smart, a former KSJ fellow and a longtime editor at *Physics Today*. He will take over Corcoran's duties in mentoring fellows, overseeing the KSJ website (including internship editing), and working on *Undark*. Smart will also oversee the Victor K. McElheny Award in Science Journalism, which is funded through a generous gift from McElheny and his wife, Ruth, with additional support from the Rita Allen Foundation.

The Knight Science Journalism Fellowship Program is supported by an endowment from the John S. and James L. Knight Foundation and by additional alumni and foundation gifts.

## Faculty Activities

In 2017–2018, Assistant Professor Dwaipayan Banerjee completed the second year of his appointment at MIT. He continued his active membership in the American Anthropological Association, presenting new research on cancer and urban poverty at the group's annual conference in Washington, DC. He also gave an invited talk at Tufts University on his research on pharmaceutical markets and was an invited speaker during the Harvard University History of Science colloquium series. Chosen for an awarded talk—the First Annual Chair's Lecture—Banerjee presented his work on cancer in India at Rice University. At Yale, Banerjee participated in a cancer history workshop and discussed his ongoing book project. He also attended the annual South Asia conference at the University of Wisconsin, presenting research on the politics of blood donation. Early in the academic year, Banerjee organized a workshop at MIT in which faculty across the country presented research on emerging trends in science and technology in South Asia. At the Society for Social Studies of Science conference in Boston, he presented new research on the economies of gifted blood in India.

Banerjee also continued his service to the discipline, serving as a peer reviewer for the flagship journals of anthropology—*American Ethnologist*, *BioSocieties*, *Cultural Anthropology*, and the *Journal of the Royal Anthropological Institute*—and participating as a discussant at a book workshop at Brown University. In addition, he wrote three book reviews that were published in *American Anthropologist*, *South Asia History and Culture*, and *Contemporary South Asia*. Continuing his publishing work, Banerjee contributed research articles to *Science, Technology and Society* (“Therapies Out of Reach: Anticancer Drugs and Global Trade Regimes”) and *Modern Asian Studies* (“Ungiven: Philanthropy as Critique”). Banerjee also signed a contract with Cornell University Press for *Hemopolitics*, a book co-authored with Professor Jacob Copeman. The book received very positive peer reviews and is now in the process of production. He made significant progress on his first monograph, *Concealing Cancer—Endurance and Everyday Life in Contemporary India*.

Banerjee’s classroom activities involved teaching two courses, one at the graduate level and the other at the undergraduate level. His graduate seminar STS.417 STS Seminar in the Global South was co-taught across MIT and Harvard in collaboration with Gabriela Soto Laveaga and Clapperton Mavhunga. This class introduced a new transregional focus and had enrollments of more than 20 graduate students across several departments in both universities. His entry-level STS.012 Science in Action: Technologies and Controversies in Everyday Life undergraduate class explored a range of controversies about the role of technology, the nature of scientific research, and the place of politics in science. Banerjee also provided service to the department as the faculty representative at the Graduate Professionalization Seminar, as a co-organizer of the STS colloquium series, and as a core member of the Graduate Admissions Committee.

Assistant Professor William Deringer completed his third year as a member of the STS faculty in AY2018 and his second as Leo Marx Career Development Assistant Professor. He spent the year on leave as a visiting research fellow at the Shelby Cullom Davis Center for Historical Studies at Princeton University, where he joined a diverse and select group of scholars examining the theme of “risk and fortune.” The highlight of the year was the completion and publication of his first book, *Calculated Values: Finance, Politics, and the Quantitative Age*, released by Harvard University Press in February 2018. The book has already attracted interdisciplinary and international attention, with prominent reviews in *Finance and Development*, the quarterly journal of the International Monetary Fund, and *Les Echos*, France’s leading financial and business newspaper. Also, Deringer gave presentations on *Calculated Values* at both Stanford University and Columbia University. While at the Davis Center, Deringer continued his work on a second book-length research project, currently titled *Discounting: A History of the Modern Future (in One Calculation)*. That project examines the history of “present value” calculations from their early-modern origins through 21st-century debates about climate change politics, tracing the history of those technical devices as a way to tell a broader story of the history of calculation, value, and futurity over several centuries. He presented research on one crucial episode in that story, the emergence of the concept of the “social rate of discount” in economics and public policy in the 1960s, at the annual meeting of the Society for Social Studies of Science, a Davis Center seminar at Princeton, and a Harvard University/Boston University symposium.

Deringer also presented research on the history of spreadsheets in 1980s finance at the annual meeting of the Society for History of Technology's Special Interest Group on Computing and Information Systems. In addition, he completed editorial work (along with Lukas Rieppel of Brown University and Eugenia Lean of Columbia University) on the 2018 edition of the annual History of Science Society journal *Osiris*; the theme is "Science and Capitalism: Entangled Histories." That volume will appear in October 2018 and will include an article by Deringer titled "Compound Interest Corrected: The Imaginative Mathematics of Financial Time in Early-Modern England." Deringer will return to teaching and service at MIT for the 2018–2019 academic year, during which he will teach new courses on the history of social science and risk, fortune, and futurity (with Caley Horan of History) and will serve as the STS undergraduate officer.

Professor Michael Fischer taught two subjects in the fall term and one in the spring and co-convened the weekly Joint MIT-Harvard ("Friday Morning") Seminar in Medical Anthropology. He serves as a PI on a Singapore University of Technology and Design (SUTD) International Design Center grant under the terms of which he spent two months in Singapore at SUTD. Through that grant, he is supporting one of our graduate students and has supported one postdoc. He is a co-PI on the \$15 million Hewlett-Packard Foundation grant on cybersecurity led by Daniel Weitzner and Hal Abelson, under which another HASTS graduate student has been supported. He also has a small grant from MISTI (MIT International Science and Technology Initiatives) Israel under which he is collaborating with the above-mentioned postdoc (who is moving to Hebrew University) and a professor at Ben Gurion University. He serves as an advisor and chair for two dissertation committees as well as serving on three other HASTS dissertation committees and one at Harvard. He is active on four editorial boards: *East Asian Science, Technology and Science* (for which he is the associate editor for Southeast Asia); *Science, Technology and Society*; *Cultural Politics*; and *Cultural Anthropology*. He continued to co-edit the leading STS book series, *Experimental Futures*. His book *Anthropology in the Meantime: Experimental Ethnography, Theory and Method for the Twenty-First Century* is now in press; he published two book chapters, one article in a peer-reviewed journal, and one review essay. He gave the keynote address at the meeting of the Israel Anthropological Association and made two presentations at the American Anthropological Association meeting.

Professor Deborah Fitzgerald continued to be active as a scholar, a teacher/mentor, and an academic citizen in AY2018. As a scholar, she completed and submitted a commissioned article titled "World War II and the Transformation of American Food" for the history of science journal *Osiris*. She has begun work on a commissioned entry for the *Oxford Handbook of Agriculture* on the global history of agricultural expertise. She is continuing research on what the Census of Agriculture reveals about the decline of diversified farming and regional food production in 20th-century America. She presented her work at the European Society for Rural History meeting in Belgium in September and again in Spain in June. In addition, she presented papers at meetings of the American Historical Association in January and the Agricultural History Society in May. She taught two classes over the past year: an undergraduate introduction to STS and a graduate seminar on the history of food. She advised eight freshmen throughout the year and mentored two young visiting professors, one from Brazil and the other from Switzerland. She also mentored a visiting postdoc who has now

taken a position at the Worcester Polytechnic Institute. As a citizen, she wrote for two outside cases (a distinguished professor case at Iowa State University and a tenure case at Aalto University in Helsinki). She wrote a book review for *Diplomatic History* and participated in book review roundtables for *Agricultural History* and *Environmental History*. She reviewed fellowship proposals for the Radcliffe Institute and began a three-year appointment reviewing fellowship proposals from senior scholars for the American Council of Learned Societies. With Harriet Ritvo, she hosted the long-running MIT Seminar in Environmental and Agricultural History, and she served on the HASTS graduate admissions selection committee. Finally, she served as chair of the Open Access Task Force subcommittee on publications.

Professor David Kaiser was on sabbatical during AY2018. He completed two new chapters for his forthcoming historical study of Einstein's general relativity. Also, he continued to co-direct (with MIT professor Alan Guth) the Density Perturbations Group in MIT's Center for Theoretical Physics, which focuses on theoretical studies of early-universe cosmology, and to help lead the international Cosmic Bell collaboration with Professor Anton Zeilinger (University of Vienna), which has been designing and conducting novel experimental tests of Bell's inequality. During the academic year, Kaiser submitted and/or published two research articles in the history of science and seven research articles in physics, contributed invited prefaces for new editions of two classic physics textbooks, and published popular essays on aspects of physics and its recent history in the *New York Times*, the *New Yorker* magazine, and *Aeon* magazine. In October Kaiser organized and hosted the second annual New England Workshop on Theoretical Cosmology and Gravity, held at MIT, which involved approximately 100 participants. He also delivered invited colloquia at the University of Minnesota, Columbia University, Boston University, and the University of California, Santa Barbara, and lectured on physics and the history of science at high schools, universities, and research institutes throughout Madrid and Barcelona on a public diplomacy tour organized by the US embassy in Spain. As part of his continuing outreach efforts associated with the Cosmic Bell project, he helped design and participated in a novel one-day curriculum on quantum entanglement for fourth graders at a charter school in Winchester, MA.

Kaiser chairs the editorial board of The MIT Press, serves as an associate editor of *Historical Studies in the Natural Sciences*, and is a member of the advisory boards for *Nautilus* and *Undark* magazines. He served on the search committee for a new director of the Max Planck Institute for the History of Science in Berlin and on the Alumni Advisory Board for the Department of Physics and Astronomy at Dartmouth College. In addition, he chaired the Committee on Honors and Prizes for the History of Science Society. He was the principal advisor for two postdoctoral scholars (in Physics) and four PhD students (three in HASTS and one in Physics) and served as a dissertation committee member for another six PhD students (three in HASTS, two in Harvard's History of Science Department, and one in the Physics and Astronomy Department at Dartmouth College). He continues to serve as an advisor for several NOVA television programs on physics and the history of science and was a guest on a number of public radio programs.



Professor Jennifer Light continued her service as director of STS. Over the past year, she completed a book manuscript, *States of Childhood*, for submission to The MIT Press. She also submitted a paper to *Harvard Educational Review* that has been accepted for publication. Light gave presentations and hosted workshops for the Harvard History of Science Department; the MIT History, Theory, and Criticism of Architecture and Art Program; and the Stanford History Department. She participated as a panelist in a discussion with Cornel West organized by the Graduate Student Council's Diversity and Inclusion Subcommittee and hosted an Authors@MIT event at the MIT Press Bookstore. Professor Light served on the editorial boards of *IEEE Annals of the History of Computing*, *Historical Studies in the Natural Sciences*, *Information and Culture*, and the *Journal of Urban History*. She refereed manuscripts for these journals along with *Modern Intellectual History* and several university presses, and she also reviewed tenure and promotion cases for peer institutions. At MIT, Light served on dissertation committees for PhD students in HASTS, DUSP, and Architecture as well as a master's thesis committee (Architecture). In addition, she participated on dissertation committees for students at Northwestern University and Harvard. Along with her regular duties as department head, Light chaired an ongoing STS senior search, served on DUSP mentoring and tenure committees, reviewed grant proposals for MISTI, and participated on the Institute-wide Martin Family Society of Fellows for Sustainability selection committee and the MITx faculty advisory board.

Professor David Mindell is on professional leave from MIT to pursue a start-up opportunity as founder and CEO of Humatics Corp. The company's work has been featured widely in the public press and is currently being piloted and sold in a number of aerospace and manufacturing companies. Over the past year, he served as a member of the MIT Museum Advisory Board. In February, at the request of MIT president Rafael Reif, Mindell agreed to co-chair the MIT Task Force on the Work of the Future, which has now been set up along with several high-level advisory boards. In this capacity, he has presented to the MIT Corporation and the President's CEO Advisory Board as well as at *MIT Technology Review's* EmTech conference, multiple congressional and committee staff meetings, and other venues. Humatics was named one of the Institute's "STEX 25" featured startups by the MIT Industrial Liaison Program. Mindell and his wife, Pamela, continue as heads of house at MIT Edgerton House.

Assistant Professor Robin Wolfe Scheffler enjoyed a productive third year as a member of the STS faculty. During fall 2017, he took a research leave to complete revisions for his forthcoming book *A Contagious Cause: The American Hunt for Cancer Viruses and the Rise of Molecular Medicine* (University of Chicago Press). Reflecting widespread interest in this work, Scheffler gave invited presentations on his research at the Harvard Kennedy School of Government, the Countway Library of Harvard Medical School, Cambridge University, Stanford University, King's College London, the Rensselaer Polytechnic Institute, and the University of California, Los Angeles. Scheffler also took advantage of this research leave to begin work on his next project, tentatively titled *Genetown: The Biotechnology Industry in Greater Boston*. The promise of this project was recognized with the award of the James A. and Ruth Levitan Prize in the Humanities in December 2017. With a collaborator at Yale, sociologist Natale Aviles, Scheffler is preparing an article on biomedical research for submission to *Social Studies of Science*. Scheffler was an invited speaker at the Cambridge Historical Society and on WBUR's *Radio Boston*.

Within STS, Scheffler served as a member of the Committee on Honors and Prizes and on the qualifying exam committee for Rijul Kochlar. He also supervised a graduate student, providing training in archival research methods. Outside the program, Scheffler continues to serve as a member of the Environmental Solutions Initiative minor steering committee, a member of the Global Health and Medical Humanities steering committee, and an affiliated member of the Center for Environmental Health Sciences. He is also in discussions with faculty in Course 20 regarding integration of the history of biotechnology into the capstone Communication Intensive in the Major (CI-M) course. With support from the Alumni Class Fund, Scheffler is preparing *Engineering Life*, a new course (to be offered in spring 2019) that will explore the history of biotechnology in Kendall Square, with the aim of producing a small exhibit at the MIT Science Museum. After research leave in fall 2017, Scheffler taught two classes in the spring semester. The first was an undergraduate lecture course, STS.049 *The Long War on Cancer*, and the second was part of the Environmental Solutions Initiative minor core course 11.004/11.204/STS.033 *People and the Planet*, which focuses on the history and cleanup of the Mystic River. Scheffler offered a historical overview of both the environment and the role of science in environmental policy itself.

Professor Merritt Roe Smith was recognized for his undergraduate teaching by being named a Margaret MacVicar Faculty Fellow at MIT in March 2018. He continues to work on two books, a general survey of technological change in 19th-century America and a volume on the Civil War as a technological event. After more than 25 years at the helm, he recently stepped down as the editor of the acclaimed Johns Hopkins University Press series on the history of technology. Last October at the annual meeting of the Society for the History of Technology, and again in January at the American Historical Association meeting in Washington, he served as the chair and commentator on a session devoted to the ideological dimensions of industrialization in the early American republic. In June, he gave a lecture on the American system of manufacturing and its long-term implications at the National Endowment for the Humanities Landmarks of American History Workshop at the University of Massachusetts Lowell. He continues to serve on the editorial board of *Vulcan* and on the national advisory committees of the Thomas A. Edison Papers (Rutgers University), the American Precision Museum (Windsor, VT), and the Lincoln Prize in Civil War History (Gettysburg College). His committee service at MIT included the Committee on Academic Performance as well as the Kate Brown appointment committee.

Professor Sherry Turkle focused her research and writing time during the 2018 academic year on her intellectual memoir, *What We Know About Life*, under contract to Penguin Press. It deals with her career at MIT during the birth of the personal computer culture and the rise of cognitive science and artificial intelligence (AI). Turkle began to explore how technology changes not just what we do but who we are shortly after coming to MIT in 1976. Her concerns were developing at the same time as the explosive growth of digital culture—a domain that was, in the main, bracketing these same questions to pursue a vision of human beings living with machines in a new “friction-free” life. Today, the question of what kind of life that has turned out to be is ever more urgent. Turkle’s memoir uses history to address our most current concerns. She is a visible presence in our international debate on issues of technology, psychology, culture, and

politics. This year, as a result of the revelations about Facebook and data privacy as well as new concerns about social media and mental health, Turkle has been featured in numerous articles, interviews, and TV and radio specials.

Professor Turkle also has spoken on issues such as technology, health, social media, the ethics of AI, and sociable robotics at venues including the Examiners Club, The Boston Psychoanalytic Institute and Society, the Harvard Club of Boston, and KSJ. Out of Boston, she spoke at the annual convention of the National Association of Secondary School Principals, the meeting of the National Association of Cardiology, and events hosted by Facebook and Microsoft. For her work on “Reclaiming Conversation in Business,” she was on the shortlist for the Thinkers50 Digital Thinking Award. She has appeared on all of the major cable outlets as well as on *20/20* and *The ABC Nightly News*. She has been widely cited by outlets as diverse as the *New York Times*, *Bloomberg News*, and *USA Today*. Highlights of her op ed and opinion publishing this year included “Entre Facebook et ses utilisateurs, un amour déçu” (*Le Monde*); “Why These Friendly Robots Can’t Be Good Friends to Our Kids” (*Washington Post*); and “Will Voice-Technologies Render Us Mute?” (*Dialogue Magazine*).

Turkle co-authored two papers on the urgent topic of turning to technology to replace human psychotherapists: “Bodies in the Room: Keeping Talk Therapy Real” in *Medium* and “Sleepwalking Towards Artificial Intimacy: How Psychotherapy Is Failing the Future” on Forbes.com. In more academic writing, she authored “The Assault on Empathy” in the *Behavioral Scientist*; the preface to *Left to Our Own Devices*, by Margaret E. Morris (The MIT Press); and “Reclaiming Psychoanalysis: Sherry Turkle in Conversation with the Editors” in *Psychoanalytic Perspectives*. Over the past year, Professor Turkle began serving as an advisor for the Children’s Screen Time Action Network while continuing her longtime work on the advisory boards of Common Sense Media and the Boston Children’s Museum. She is also a board member of the Electronic Privacy Information Center and the Society of Responsible Robotics. In addition, she is a member of the executive boards of *The Public Eye*; *Science, Technology, and Human Values*; and *Philosophy and Technology*. Professor Turkle serves on the Boston-Cambridge Events Planning Committee of the American Academy of Arts and Sciences.

**Jennifer S. Light**

**Department Head**

**Bern Dibner Professor of the History of Science and Technology**

**Professor of Urban Studies and Planning**