

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 2019–2020, 47 students from 12 different majors were active STS concentrators, and six worked on or completed a minor in STS. The latter students are majoring in biological engineering (three students), electrical engineering and computer science, mechanical engineering, and computer science/molecular biology. Two students worked on Undergraduate Research Opportunities Program (UROP) projects.

Two students pursued a major with STS this year. Yiran He graduated with a double major in STS and Materials Science and Engineering (Course 3) this spring. Her STS thesis, “Breakout: How Materials Start-Ups Separate from and Stay Connected to Academic Spaces,” was advised by Associate Professor William Deringer, with HASTS (doctoral program in History, Anthropology, and Science, Technology, and Society) alumna Ellan Spero serving as co-advisor. At Yiran’s request, we held our first undergraduate thesis presentation over Zoom, which allowed her family and friends to easily participate. Julian Dubransky joined us as a 21E joint major in the spring, with his engineering focus in civil and environmental engineering.

In the fall, we piloted a new activity with undergraduates in an effort to reach out to enrolled students who might be interested in further engagement with STS and to build a community for our minors and majors. We asked STS undergraduate instructors to recommend two to three students in their classes who seemed particularly interested in STS topics and invited them out to lunch with two STS faculty members and STS majors and minors. It worked out well, and we were hoping to replicate this activity every semester, but then the pandemic hit and we could not do it again in the spring.

In our program requirements, we made a small change to indicate to students that if they were unable to take STS.004 Intersections: Science, Technology, and the World and wanted to complete an STS minor, a substitution with a similar subject may be permitted by petition to the STS undergraduate officer.

This was the first year that the new Computing and Society Concentration was available for undergraduates. The interdisciplinary concentration draws together classes from nine School of Humanities, Arts, and Social Sciences (SHASS) areas to introduce students to critical thinking about computation and its technologies, making clear the direct relevance of SHASS fields to the work they are doing in science and

engineering classes as well as their future careers. STS took on the administrative responsibility for the concentration in its inaugural year and worked to promote it through communicating with undergraduate officers and administrators, having posters designed and hanging them around campus, and, with the help of the SHASS communications team, making students aware of the concentration through social media. Professor Deringer served as the first advisor for the new concentration, and one student officially signed up for and completed the concentration.

Subjects and Enrollment

STS offered 24 undergraduate subjects and 16 graduate subjects in AY2020, including three Communication Intensive in the Humanities, Arts, and Social Sciences (CI-H) subjects. We continue to emphasize collaboration with other areas of MIT and offered 17 subjects jointly with the following academic programs: Anthropology; Comparative Media Studies/Writing (CMS/W); Electrical Engineering and Computer Science; History; Institute for Data, Systems, and Society; Philosophy; Political Science; Urban Studies and Planning (DUSP); and Women's and Gender Studies.

With the hires of Professors Kate Brown and Eden Medina, we expanded our class offerings. New undergraduate subjects included STS.030 Forensic History: Problem Solving into the Past (Brown), STS.083 Computers and Social Change (Medina), and STS.005J Data and Society (Medina and Course 11 faculty member Sarah Williams). In addition, a new HASS class taught by Ed Bertschinger, STS.021J Science Activism: Gender, Race, and Power, was jointly listed with WGS. STS professor Dwai Banerjee taught STS.086J Cultures of Computing, a class primarily housed in Anthropology, for the first time.

STS also offered two new graduate classes: STS.461 History and Social Study of Computing (Medina) and STS.465J Research Seminar on Technology and the Work of the Future, which was co-taught by David Mindell, Frances and David Dibner Professor of the History of Engineering and Manufacturing (STS) and professor of aeronautics and astronautics, and Elizabeth Reynolds, executive director of the Work of the Future project. In addition, STS.436 Cold War Science was added back to the course catalog and was co-taught by David Kaiser, Germeshausen Professor of the History of Science and professor of physics, and Kate Brown.

Undergraduate enrollment totaled 439 students, which included majors from 20 different MIT programs along with Harvard University and Wellesley College students. The five majors with the largest representation were Electrical Engineering and Computer Science (Course 6), Mechanical Engineering (Course 2), Aeronautics and Astronautics (Course 16), Biological Engineering (Course 20), and Physics (Course 8). First-year students were highly represented in our classes, with an enrollment of 74 over the year. Graduate enrollment totaled 184 students from 15 different programs, including Architecture, Electrical Engineering and Computer Science, Management, Mechanical Engineering, Media Arts and Sciences, and Urban Studies and Planning, as well as programs at Harvard.

Doctoral Program

The doctoral program in History, Anthropology, and Science, Technology, and Society is run by STS with collaboration from the History faculty and the Anthropology Program. The program is administered by STS, which awards the degrees. Professor Tanalís Padilla (History) continued to serve as director of graduate studies this year.

The HASTS program received a record-breaking 201 applications for September 2020 admission (the prior record was 160 applications in 2016). We offered admission to 2.5% of the applicants and had an 80% yield. The program was scheduled to have a cohort of five, but after one person turned down our offer in early April, we decided to not offer the fifth slot, despite having a very strong wait list of applicants, because of the anticipated funding cuts brought on by COVID-19.

Four students will join us in the fall. They hold undergraduate degrees in science, technology, and society; history; anthropology and Italian; and public policy, and two have master's degrees.

In 2019–2020, 36 students were enrolled in the graduate program, including six who graduated in September 2019. These six students were looking forward to returning in May for their doctoral hooding ceremony, but instead they celebrated by watching the MIT Commencement activities on Zoom together with our academic administrator. Their advisors also joined in for a virtual toast. Three of these graduates have postdoctoral research positions at Washington University in St. Louis, the University of Geneva, and MIT. One is a lecturer in the Stanford Introductory Studies program (the second HASTS alum to join this program), and another was a lecturer for our department in the fall and the MIT Anthropology Program in the spring. The sixth graduate is an outdoor education specialist for an early and primary education Montessori school in Oregon. One of the six has recently accepted an offer for a tenure-track position at the University of Illinois at Chicago.

After it was announced that classes were going to be moved online and travel and in-person research were halted due to the COVID-19 pandemic, our academic administrator met with every cohort via Zoom to check in and help gauge what adjustments had to be made. Then, working with the director of graduate studies and the students' advisors, the program adjusted some departmental milestone deadlines and students forged ahead with what they were able to do in the face of uncertainty and lack of physical access to libraries and archives. We were able to proceed with our dissertation proposal presentations on April 30 as planned, via Zoom. First-year papers were all completed by the new deadline, and general exams are also anticipated to be completed within the extended time frame. The program allowed students to repurpose unused travel funding toward purchasing books since libraries were closed. Milestone forms are also being put in an online platform to facilitate easy signature gathering, replacing what was still mostly collection of signatures on paper.

The travel restrictions brought on by the COVID-19 pandemic have had a major impact on our students, nearly all of whom travel for their dissertation research and (during the summers after their first and second years) for preliminary research and other projects.

We were in the unusual position of having only two students out of the country doing dissertation research when the pandemic hit, and they were able to stay with family. However, students who were planning to embark on field work this summer and fall are dealing with great uncertainty about what will be possible for their own dissertation research, not only because of travel restrictions but also because of necessary restrictions on in-person research.

Projects, Grants, and Initiatives

Associate Professor of Science, Technology, and Society Robin Scheffler received a standard research grant from the National Science Foundation to support his project focused on the history of the biotechnology industry in the greater Boston area. The grant is for three years (March 2020 to February 2023).

The National Science Foundation awarded a Doctoral Dissertation Improvement Research Grant to doctoral student Rijul Kochhar. The grant (covering the period June through December 2020) will support his project titled Antibiotic Resistance, Planetary Crisis, and Bacteriophage Futures in the 21st Century. The principal investigator (PI) is Michael Fischer, Andrew W. Mellon Professor of Humanities, professor of anthropology, and professor of science, technology, and society.

Work of the Future, a research project involving David Mindell and Liz Reynolds and funded by the Ralph C. Wilson Foundation, will continue through December 2020.

INSPIRE: Testing Bell's Inequality with Astrophysical Observations, a National Science Foundation project led by David Kaiser, has been extended for an additional year and will conclude at the end of August 2021.

Doctoral student Michelle Spektor's National Science Foundation Doctoral Dissertation Improvement Research Grant ended in April 2020. The grant supported her project titled From Documents to Data: The Politics of National Biometric Identification Systems in the 21st Century. Jennifer S. Light, Bern Dibner Professor of the History of Science and Technology, professor of urban studies and planning, and head of the Program in Science, Technology, and Society, served as the principal investigator.

Ongoing Program Activities

As a result of the response to the emerging world pandemic of COVID-19, STS program events for spring 2020 were postponed.

Over the past year, STS continued collaboration efforts with Anthropology, History, and Comparative Media Studies/Writing to produce two events, Artificial Intelligence & Modern Warfare and Artificial Intelligence & Ethics.

Artificial Intelligence & Modern Warfare, held in fall 2019, welcomed Professor Lucy Suchman of Lancaster University as the guest speaker. She spoke on the growing body of scholarship that underpins an increasingly violent landscape of institutions, infrastructures, and actions promising protection to some but arguably contributing to our collective insecurity. Abby Rockefeller Mauzé Professor of the Social Studies of

Science and Technology Sherry Turkle acted as the moderator, and Professor Stefan Helmreich of Anthropology added commentary. It was a very well-attended event exceeding the seating capacity of 65.

Unfortunately, Artificial Intelligence & Ethics was postponed until the fall 2020 semester. It will take place as a Zoom webinar on November 16. All of the original panelists have confirmed their participation: Stephanie Dick of the University of Pennsylvania, Paul Dourish of the University of California at Irvine, and Safiya Noble of the University of California at Los Angeles. The event will be moderated by Fox Harrell of CMS/W.

In addition to these collaborative events, STS hosted two colloquia: Linking the Brain: Computerization, Biomedicalization, and Globalization in Neuroscience, 1960-2000 (Youjung Shin, MIT); and Local Code: Technology, Creative Practice, and History as Instrument (Nicholas de Monchaux, University of California at Berkeley).

The annual Arthur Miller Lecture on Science and Ethics took place in November 2019. Its aim was to explore the humanistic, social, legal, and cultural dimensions of scientific and technological developments. The panel featured leaders who identified many of the social complexities and challenges that have arisen with computation, artificial intelligence, and machinery learning. Panelists included Mar Hicks of the Illinois Institute of Technology and Arvind Narayanan of Princeton; the moderator was Eden Medina. The well-received event, with over 75 in attendance, included a sit-down buffet dinner for all.

In response to the quarantine period, the Morison Lecture and Prize in Science, Technology, and Society was rescheduled to October 1, 2020, and will take place as a Zoom webinar. Guest speaker Alondra Nelson, president of the Social Science Research Council, will discuss her latest book, *The Social Life of DNA: Race, Reparations, and Reconciliation After the Genome*.

STS awards the annual Benjamin Siegel Prize to the MIT student submitting the best written work on issues in science, technology, and society. The \$2,500 prize is open to undergraduate and graduate students from any school or department of the Institute. This year's committee awarded the prize to Jesse Gordon (Department of Chemistry) for his timely paper titled "The Coronavirus Chronicles: Emergence of a Global Pandemic."

Knight Science Journalism Fellowship Program

The Knight Science Journalism Fellowship Program (KSJ) started on a high note in AY2020, with 10 highly accomplished new fellows arriving in mid-August—our 37th class. The fellows, selected from more than 120 applicants, were an award-winning and diverse group; they were also our most international group in recent history, with a majority of fellows coming from outside the United States. They included accomplished reporters from the *Des Moines Register* and *Milwaukee Journal Sentinel*, veteran editors from international outlets such as the BBC and *New Scientist*, and a freelance journalist who had recently been named the European Science Writer of the Year. Our 2019–2020 fellows were as follows:

Anil Ananthaswamy, a freelance journalist and former staff writer and deputy news editor for *New Scientist*. He writes for *Nature*, *Scientific American*, *Quanta*, and *PNAS Front Matter*, among others. In 2013, he won the Association of British Science Writers' Best Investigative Journalism Award. He has authored three books: *The Edge of Physics*; *The Man Who Wasn't There*, which was longlisted for the 2016 Pen/E. O. Wilson Literary Science Writing Award; and, most recently, *Through Two Doors at Once*. He leads an annual science journalism workshop at the National Centre for Biological Sciences in Bangalore, India.

Bethany Brookshire, a staff writer for *Science News for Students*, a digital magazine that covers the latest in scientific research for children 9 to 14 years of age. She is also a contributor to *Science News* and a host of the independent podcast *Science for the People*. She edited *Science Blogging: The Essential Guide* (published in 2016) and has contributed freelance work to *Scientific American*, *Slate*, *The Guardian*, and many other leading publications. She has a BS in biology, a BA in philosophy, and a PhD in physiology and pharmacology.

John Fauber, an investigative medical reporter with the *Milwaukee Journal Sentinel* and the USA Today Network. His stories also appear in *MedPage Today*. Since 2009, Fauber's work has focused on conflicts of interest in medicine. He has won more than 25 national journalism awards, leading to a special commendation for his consistent excellence from the *Columbia Journalism Review*. Fauber also was a major contributor to a series of stories on prion diseases in humans and animals that was selected as a finalist for the Pulitzer Prize for Explanatory Reporting in 2003.

Andrada Fiscutean, a science and technology journalist based in Romania. She has written about Eastern European hackers, journalists attacked with malware, and North Korean scientists. Her work has been featured in *Nature*, *Ars Technica*, *Wired*, *Vice Motherboard*, and ZDNet. She is also editor-in-chief of ProFM radio, where she assembled a team of journalists who cover local news. In 2017, she won the Best Feature Story prize at SuperScrieri, the highest award in Romanian journalism. Passionate about the history of technology, Fiscutean owns several home computers made in Eastern Europe during the 1980s.

Richard Fisher, managing editor of BBC.com features in London and editor of BBC Future, a science, health, and technology features website aimed at international audiences. Through evidence-based analysis, original ideas, and human stories, BBC Future is dedicated to exploring how our world is changing. In 2019, the site won a best writing (editorial) Webby award. Fisher also oversees the teams behind BBC Culture, the BBC's global arts site, and BBC Reel, which features short-form factual video stories. Before that, he was a senior news editor and feature editor at *New Scientist* in London.

Tony Leys, who has worked at the *Des Moines Register* as an editor and reporter since 1988. He has been the newspaper's main health care reporter since 2000, with a strong focus on mental health and health care policy. He also helps cover politics, including Iowa's presidential caucus campaigns. Leys grew up in the Milwaukee area and graduated from the University of Wisconsin. He is a national board member of the Association of Health Care Journalists.

Thiago Medaglia, an independent reporter for *National Geographic Brazil*, where he was previously an editor. Medaglia is also the founder of *Ambiental Media*, a Brazilian startup that transforms scientific content into accessible, compelling, and innovative journalism products. An award-winning reporter and writer, he has published stories in several media outlets such as ESPN Brazil, Mother Jones, *Estadão*, *Folha de São Paulo*, and others. He is a coauthor of six books on environmental topics and was a 2015 fellow at the International Center for Journalists.

Sonali Prasad, who has degrees in both computer science and journalism. In 2016, she was a Google News Lab Fellow and won a grant from the Brown Institute of Media Innovation to study coral reef health. She has reported on science and environment issues for publications such as *The Guardian*, the *Washington Post*, *Quartz*, *Mongabay*, and *Hakai* magazine. She was hired as an investigative reporter for the Columbia Journalism School's Energy and Environment Project, and her team's work on the US Export-Import Bank's dirty fossil fuel investments won a Society of Environmental Journalists honorable mention award.

Molly Segal, an independent radio journalist based in Canada's Rocky Mountains. Her documentaries and reports on environment and science air on the Canadian Broadcasting Corporation's national radio programs—including *Quirks & Quarks*, *Ideas*, *Tapestry*, and *The World This Weekend*—as well as WHYY's *The Pulse* and WBUR/NPR's *Here & Now*. Segal has worked for CBC Radio/TV, stationed across Canada. Her work takes her to remote mountains looking for grizzlies, counting minuscule snails in ancient hot springs, and observing paleontologists searching for fossils 500 million years old. Segal is the host and producer of The Narwhal's upcoming inaugural podcast, *Undercurrent: Bear 148*.

Eva Wolfangel, a German science journalist focusing on technologies such as artificial intelligence and virtual reality, computer science, interactions between the digital and real worlds, and space travel. She writes for major magazines and newspapers in Germany and Switzerland—including *ZEIT*, *Geo*, *Spiegel*, and *NZZ*—and produces radio features. As a virtual reality reporter, she reports from virtual worlds as part of the journalistic cooperative RiffReporter. After several years as an editor, she became a freelance journalist in 2008. Wolfangel's specialty is combining creative writing and technical topics in order to reach a broad audience. In 2018, she was named European Science Writer of the Year by the Association of British Science Writers.

In August, we grieved the untimely death of our former associate director, David Corcoran. David was a 27-year veteran of the *New York Times*, a nurturing editor and career guide to countless young journalists, including 20 KSJ fellows he worked with between 2016 and 2018. Shortly after he retired from his position at MIT in spring 2018, he was diagnosed with acute myeloid leukemia. Staff members attended his memorial service in October, and we continue to stay in touch with family, friends, and colleagues who also cared deeply about him.

Throughout the year, KSJ continued to operate its highly productive, ever-growing, world-renowned program with its small and dedicated seven-member staff. Director Deborah Blum led the program for a sixth year and served as publisher of our award-winning digital magazine, *Undark*. Associate Director Ashley Smart, a former KSJ fellow and a long-time editor at *Physics Today*, ended AY2020 spearheading a website redesign

project after an eventful year mentoring fellows, planning our biweekly seminar series, contributing to *Undark* as the op-ed editor, and supervising our Graduate Program in Science Writing (GPSW) interns. Smart also oversaw the selection process for the Victor K. McElheny Award. Bettina Urcuioli, who continued in her fifth year as program administrator, took on KSJ's increasing grant management needs and provided broad support as our efforts continued to grow and expand with our new initiatives. Audience engagement editor Frankie Schembri, a GPSW graduate, continues to increase the readership and recognition of *Undark* magazine. Tom Zeller Jr., a former *New York Times* journalist, continued in his role as chief and founding editor of *Undark*, and *Undark* deputy editor Jane Roberts worked to further develop the magazine's widely respected fact-checking program. The entire team and the fellows received excellent support from Lucas Haugen, our part-time program assistant.

Coming off the early part of 2019, during which *Undark's* journalism was honored with numerous accolades including a prestigious George Polk Award for Environmental Journalism, the magazine continued its nonprofit aims of commissioning and publishing exemplary science journalism in the public interest and offering that journalism to other publications for use on their platforms. The roster of national and international publications that do so grew substantially over AY2020, such that *Undark's* work is now as likely to be encountered on the websites of *The Atlantic*, *Slate*, *Salon*, *Wired*, *Scientific American*, *Smithsonian* magazine, and *Quartz* as it is on our flagship [website](#). Our work is also published widely in newspapers and magazines abroad, with translations of *Undark* stories appearing over the last year in Spanish, French, German, Mandarin, and even Farsi. We are proud to say that our website now sees some 6 million visits annually, with millions more people encountering the work we produce in publications around the world.

With a redesign of our website launched in late 2019, *Undark* entered 2020—its fourth year—armed with a \$35,000 grant from the non-partisan National Institute for Health Care Management Foundation to pursue a four-part investigation of chronic kidney disease. The magazine also saw its work anthologized in the annual Best American Science & Nature Writing book series. With the arrival of COVID-19, the magazine's core team of three full-time and seven part-time editors went into overdrive, providing some of the most reliable science-based coverage of the pandemic as it first swept across the United States and the world. Over the summer and into the coming academic year, we will continue to commission and produce stories that scrutinize the science on the novel coronavirus and examine the way that science mingles with politics, economics, and culture in the often-messy effort to contain and, it is hoped, ultimately develop a cure for the contagion.

In 2019–2020, Knight Fellows audited a range of courses at MIT and Harvard and developed individual research projects that uniquely leveraged their time with us. The fellows engaged with an extensive curriculum of seminars, workshops, tours, and field trips designed by the KSJ faculty and staff to introduce them to top researchers and research sites in New England, hone their writing and science reporting, and boost their media production skills. KSJ hosted more than 30 semi-weekly science and journalism skill seminars over the course of the year, featuring a roster of distinguished speakers. Seminars are always open to the public; each week we send announcements inviting the MIT community to join, and we frequently welcome student, faculty, and staff attendees from around the school.

Fellows embarked on a multi-day field trip in early October to meet with researchers at the Marine Biological Laboratory and the Woods Hole Oceanographic Institute in Woods Hole, MA. Because of the pandemic, they were unable to travel to Bar Harbor, ME, for their scheduled field trip to the Jackson Laboratory and the Mount Desert Island Biological Laboratory, but researchers from the Jackson Lab conducted a remote seminar about the role of mouse modeling in rare and infectious disease research.

KSJ also organized three training workshops exclusively for the fellows in 2019–2020, and we were able to host all of them before the campus closed due to the pandemic. The first workshop, taught by former KSJ fellow and Columbia University adjunct Iby Caputo, focused on podcasting and audio storytelling. The second workshop covered mobile photography and videography and was taught by Duy Linh Tu from Columbia University. Finally, the third workshop focused on statistics for journalists and was taught by Jessica Ancker of the Medical Bioinformatics Department at Cornell University.

As for all of MIT, 2020 has been a very difficult time for KSJ with the arrival of the coronavirus pandemic, but we have persevered. The majority of the fellows departed in March for their home countries and states, but we continued to gather together remotely over Zoom. We also continued running our regular seminar schedule by Zoom when possible. While isolating in their homes and apartments around the globe, fellows were still able to work toward meeting all of their fellowship goals. They supported each other through the anxiety, strain, and separation. In May, the fellows presented their final research projects over Zoom, on schedule. Before their program concluded, we took advantage of Zoom one more time to celebrate their accomplishments, sharing a photo-based slide presentation of their year together and displaying their graduation certificates to group applause.

Additionally, KSJ responded to the pandemic by embracing its mission to pursue excellence in science journalism. During the height of the first wave, we created a comprehensive web-based resource—[Tips and Tools for Reporting on COVID-19](#)—for science journalists around the world facing the challenge of reporting on coronavirus responsibly. We also set up a dedicated email address (covid19@undark.org) for readers who wished to communicate with our staff directly on the pandemic. We regularly promoted this email address on our social feeds and received a number of thoughtful questions on all aspects of the pandemic, from its origins and preventative measures to the virus’s life span and modes of transmission. To address these queries, Deborah Blum took time each week to formulate answers based on the most recent research developments and expert recommendations. Blum’s answer roundups were published roughly every other week from late March through May and delivered back to readers through promotion on our social channels and in our weekly newsletter.

Under Associate Director Smart’s direction, a prestigious panel of jurists selected the second recipients of our new Victor K. McElheny Award in Science Journalism in March 2020. The award honors excellence in local and regional science journalism and this year recognized *Ahead of the Fire*, an investigative series published by the *Arizona Republic* that explored the ongoing risk of deadly wildfires in the American West. The series described the hundreds of communities across the west that remain vulnerable to—

and unprepared for—wildfires such as the 2018 Camp Fire, which killed 85 people in Paradise, CA, and surrounding areas. *Arizona Republic* reporters Pamela Ren Larson and Dennis Wagner (now at *USA Today*) told a heart-wrenching story of how mismanaged emergency alert systems, evacuation constraints, and other factors created the conditions for a catastrophe in Paradise. Working with a team of developers and data journalists from the USA Today Network, they identified more than 500 towns across the west that have even higher wildfire hazard potentials. The reporting was complemented with striking visuals from photojournalist Thomas Hawthorne and edited by Michael Squires of AZ Data Central. Wagner, Hawthorne, and Squires were part of the team that won the Pulitzer Prize for explanatory reporting in 2018.

Unfortunately, because of the pandemic, we were unable to hold an in-person award celebration on campus, so we honored the recipients remotely and had their certificates, crystal awards, and checks mailed to them directly.

As the lockdown continued and it became more and more apparent that returning to our normal, residential academic fellowship in fall 2020 would not be safe, the staff convened on Zoom to discuss alternatives. We decided to take a proactive approach and offered deferred fellowships to the incoming cohort, who all responded positively and accepted our offer to join us in fall 2021.

Director Blum meanwhile consulted with the directors of other university-based fellowship programs about what they were considering for the upcoming academic year. Each program took a different approach. KSJ decided to continue to do everything it could to support science journalism during such unprecedented times and initiated a plan to offer remote project-based fellowships during AY2020. We also began planning ahead for the financial security and health of the program.

In AY2020, Director Blum secured more new and continuing external grant funding than in any other year in the program's history. KSJ received new or extended grants from the Kavli Foundation, the Gordon and Betty Moore Foundation, the Rita Allen Foundation, the Howard Hughes Medical Institute, the National Institute for Health Care Management Research and Educational Foundation, and the Alfred P. Sloan Foundation. With the support of these grants, KSJ was able to devote a significant part of the year to supporting science journalism nationally through improved training and education. Since 2016, the Kavli Foundation has supported six science editing symposia organized by KSJ. The idea first began at a KSJ–Kavli Foundation symposium in 2016 that brought together almost 30 editors, journalists, foundation representatives, and scholars. The symposium first identified an acute need for better training of science editors, which we have sought to address by hosting symposia specifically for them each year. In fall 2019, our symposia brought science editors together ahead of the Online News Association meeting in New Orleans to explore challenges, ethics, and opportunities in editing outstanding science stories and integrating science into daily journalism. The goal was to help editors deepen their understanding of science to make their journalism better, to find stories they may be overlooking, and to provide greater context and nuance to stories they are already covering. The workshop was led by a superlative group of science journalists. It opened on the afternoon of September 10

with three sessions. The first, focused on better understanding how science works, was led by Dan Vergano, a science reporter for BuzzFeed News. The second session looked at how to tell compelling science stories for a general audience. That session was led by Nancy Shute, editor-in-chief of *Science News*. The afternoon wrapped up with a session with Nancy Rabalais, professor of oceanography and coastal sciences at Louisiana State University and a MacArthur Foundation Fellow, about the effects of climate change.

Jessica Ancker of Cornell University kicked off the next day with a session to help journalists make sense of science data. This was followed by a session on responsible health care journalism with Shannon Brownlee, senior vice president of the Lown Institute. After lunch, attendees heard from Mark Schleifstein, environment reporter and Pulitzer Prize winner at the *Times-Picayune*, who discussed how a science perspective can inform policy coverage. Finally, the day concluded with a session featuring Gina McCarthy, former Environmental Protection Agency administrator and current director of the Harvard T.H. Chan School of Public Health's Center for Climate, Health and the Global Environment. She discussed how climate change is a health issue and how that framing resonates with the public.

The grant we received from the Moore Foundation, now in its second year, enabled KSJ to hold training workshops in science fact checking, to develop and plan curricula for science news fact checking courses to be used by universities, and to create a fact checking resource page for journalists around the world that which will be hosted on the KSJ website.

Financial support from the Howard Hughes Medical Institute secured in November 2019 has been used to fund the production of a free-to-all, multi-chapter digital science editing handbook that will be made available online through the KSJ website in the coming months. The handbook will address the needs of local, regional, and national editors responsible for covering science-related issues but with little training or experience in doing so, and it will serve as a resource that editors can rely on for guidance as they look for and edit science-related stories, including those focused on health, environment, and public policy. Important topics covered include the following:

- How to determine when studies deserve attention and when they do not
- Basic scientific information and an understanding of the scientific process
- Critical questions to ask reporters and how to make sense of their answers
- Making sense of science statistics
- Making science stories relevant to the targeted audience
- Managing freelance networks
- Where to find experts and how to make sure they really are experts
- How to avoid false balance
- Lessons learned from other editors

In June 2020, we received confirmation from the Alfred P. Sloan Foundation accepting our grant proposal for \$100,000 to support publication of *The Tactical Guide to Science Journalism*. The guide has already been accepted for publication by Oxford University Press in 2021. It is based on the bedrock importance of investigative journalism, vetting of sources, conflicts of interest, and fact checking, with the potential to reach journalists not only in North America but around the world. It explores the new terrain of digital journalism—audio storytelling, multimedia skills, data visualization, and more.

Looking ahead, we believe that despite the challenges posed by the pandemic, KSJ will continue to strengthen its role in supporting and improving science journalism in multiple ways. Our greatly improved and expanded website will launch in fall 2020, providing new training and opportunities in both fact checking and science editing for journalists around the world. Our project fellowship program will enable us to directly support some of the best American science journalism during the coming challenging period. In addition, we hope to expand our online training programs in the months ahead—maintaining our stature as the leading science journalism fellowship program in the world.

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Faculty

Dwai Banerjee

Dwai Banerjee completed the fourth year of his appointment at MIT. Over this period, his case for promotion to associate professor (without tenure) was approved.

His first book manuscript, *Hematologies: The Political Life of Blood in India* (coauthored with Jacob Copeman), was released by Cornell University Press at the end of 2019. During this time, he also finished the last revisions for his monograph *Enduring Cancer: Life, Death and Diagnosis in Delhi*, soon to be published by Duke University Press.

Professor Banerjee continued work on his new project A Counter-History of Computing in India, for which he was previously awarded the Levitan Prize. He conducted archival work in Calcutta and Delhi, successfully gathering a large portion of the archival sources that will go into the making of a book related to the project. He presented early versions of his findings at the Annual Conference on South Asia in Madison, WI.

Professor Banerjee was invited to speak as part of the anthropology colloquium series at the New School for Social Research about his *Hematologies* project. He continued his active membership in the American Anthropological Association, presenting research on the social experience of cancer in India at the organization's annual conference in Vancouver. Early in 2020, Banerjee was selected to participate in the Data and Society Workshop in New York, where he led two panels on his colleagues' ongoing computing and society projects. Since that time, however, his conference activities have been on hold due to the COVID crisis.

Professor Banerjee continued his service to the field by reviewing papers for several highly ranked disciplinary journals. Also, he published a paper on his work on cancer in India in his subdiscipline's leading journal, the *Medical Anthropology Quarterly*. Along with Jacob Copeman, he published another paper on the anthropological theory of gifts in the leading anthropology journal *Anthropology Theory*.

Banerjee has also continued service to his department by serving on an internal committee on STS strategic initiatives and participating in the Active Learning Project, a collaborative effort with the MIT Stephen A. Schwarzman College of Computing. This project seeks to establish a conversation between SHASS and the college by focusing on a key area of overlapping interest: the ethics of computing. He taught three classes over the past year, two of which were aimed at undergraduate students: 21A.350J/STS.086J/WGS.276J Cultures of Computing and STS.012 Science in Action. Both had significant enrollments and proved successful pedagogically, even with the learning challenges during the pandemic. He also taught a graduate class, STS.417 STS in the Global South, that drew in students from his own and other departments. In addition, he served on an exam committee for a HASTS graduate student.

Over the next year, Professor Banerjee looks forward to the publication of *Enduring Cancer*. He also hopes to make significant progress on his current research project.

Kate Brown

Kate Brown joined the STS faculty in January 2019. In March 2019, Professor Brown published a history of the Chernobyl disaster called *Manual for Survival*. The book generated a great deal of interest, and she spent several months during summer and fall 2019 on book tours in London and several cities in Poland giving talks and fielding questions from journalists. Among these media appearances, Professor Brown appeared on *Democracy Now*, NPR's *Tech Nation*, BBC's *Channel 4 Today*, *BBC World*, BBC's *Good Morning Scotland*, BBC London's *Robert Elms Show*, *Sky News Tonight*, CNN International, a *Guardian* podcast, and Economist Radio. Excerpts from *Manual for Survival* appeared in *The Guardian* and *The Daily Telegraph*. Brown published op-eds in the *Washington Post*, South Africa's *Business Day*, and the *Los Angeles Times*. Reviews of the book appeared in major media venues such as the *New York Times*, the *New York Review of Books*, BBC Future, *The Tribune*, *The Times of London*, the *Daily Mail*, the *Irish Times*, *The Evening Standard*, *Orion*, the *Washington Spectator*, *Liberación* (Paris), and *LeDevoir* (Montreal).

In Poland, Professor Brown spoke at the Big Book Fair in June 2019 in Warsaw and at festivals in Krakow and Lublin. She gave over a dozen interviews for radio and print journalists from the Polish media. *Manual for Survival* was published in Spanish by Capitan Swing in March 2020. Interviews about the book appeared in *La Vanguardia*, *El Mundo*, *Revista*, and *Leboradiario*, among others. Professor Brown worked with translators for publication of *Manual for Survival* in 2020 and 2021 in French, Korean, Chinese, Slovak, Ukrainian, Russian, and Lithuanian. *Manual for Survival* was voted among the best books of 2019 by reviewers from the *Boston Globe*, *BBC History* magazine, the *New Statesman*, and *The Mail*. In 2020, *Manual for Survival* was short listed for three international book prizes: the National Book Critics Circle for nonfiction, the Pushkin House Prize, and the Ryszard Kapuściński Award for Literary Reportage.

Professor Brown edited two special issues in June 2019: The Social and Cultural Histories of British Nuclear Mobilisation since 1945 for *British History* and Labor Laid Waste: Waste Workers in the 20th Century for *International Labor and Working-Class History*. In addition, she wrote several academic articles related to her Chernobyl research. “Learning to Read the Great Chernobyl Acceleration: Literacy in More Than Human Landscapes” appeared in the summer 2019 issue of *Current Anthropology*.

In October 2019, Professor Brown wrote an article on Chernobyl media representations (“A Soviet Propaganda Win Delivered 33 Years Late”) for *American Historical Review*. In the spring 2020 issue of *Academe*, Brown published an article about academic freedom called “The Big Secret in the Academy Is That Most Research Is Secret.” The summer 2020 issue of *Slavic Review* featured a forum on *Manual for Survival*. In that issue, Brown published an article titled “The Shadow of the Soviet Legacy on the World’s Nuclear Future.”

Professor Brown gave a number of invited lectures and keynote addresses before the pandemic shutdown in March 2020, including talks for the European Society for Environmental History (keynote), the MIT Seminar on the History of the Environment, Harvard’s Davis Center, the American Historical Association’s meeting, the Chicago Humanities Festival, and Montana State University. Talks at Temple University, the University of Michigan, the University of Chicago, and Princeton University were canceled due to the pandemic; so too were extended stays as a visiting scholar at the University of Copenhagen and the University of Zurich.

In terms of service to the profession, Professor Brown continued to serve as founding editor of History Unclassified, a section in the *American Historical Review*, and as senior editor of *International Labor and Working-Class History*. At MIT, Brown served on the promotion committee for Clapperton Mavhunga, the renewal committee for John Durant, and the tenure committee for Dwai Banerjee, and she is a faculty mentor for Assistant Professor Megan Black (History). She serves on the Gender Equity Committee and the Martin Society of Fellows Nominating Committee, and she is directing the reading list of a HASTS student.

In April 2020, Professor Brown published an article called “The Pandemic Is Not a Natural Disaster” in *The New Yorker*. That article, which focused on the interconnections between plants and people, is the start of a new book project. She will finish and submit a second article on this topic commissioned by *Eurozine*.

William Deringer

William Deringer completed his fifth year as a member of the STS faculty and his first year as an associate professor (without tenure). A highlight of his year came when his first book, *Calculated Values: Finance, Politics, and the Quantitative Age*, was awarded the Oscar Kenshur Prize, given annually by the Center for Eighteenth-Century Studies at Indiana University in recognition of the best book “of interest to eighteenth-century scholars working in a range of disciplines.” In conjunction with the Kenshur Prize, Professor Deringer’s work was featured at an interdisciplinary seminar at Indiana University in September 2019. During the year he continued research toward his current book project, *Discounting: A History of the Modern Future (in One Calculation)*. That project

traces the history of “exponential discounting” —a powerful calculation widely used to place a “present value” on future economic outcomes—from its early-modern origins through the present.

Professor Deringer completed an article, “Just Fines: Mathematical Tables, Church Lands, and the Algorithmic Ethic, c. 1628,” that examined the social history behind some of the earliest printed discounting tables—and what that story reveals about the centuries-long quest to use algorithms to solve social problems related to fairness and justice. That article, which will also form the basis for the first chapter of his book project, was submitted for review in the journal *History of Science*.

Deringer presented his research during invited talks at the London School of Economics Department of Accounting and the University of Glasgow Adam Smith Business School in October 2019. In addition to his research on the *Discounting* project, Deringer completed an article examining the interrelations between personal computing and financial innovation in the 1980s; the article, titled “Michael Milken’s Spreadsheets: Computation and Charisma in Finance in the Go-Go ‘80s,” has been accepted for publication in the *IEEE Annals of the History of Computing*. This research was also highlighted in a feature article in *Gizmodo*. At MIT, Deringer taught the STS.003 From Ancient Greeks to Modern Geeks: A History of Science undergraduate course (with Professor Kaiser) and the STS.260 Introduction to Science, Technology, and Society graduate course.

His service contributions included serving as the undergraduate officer for STS, as a member of the graduate admissions committee for the HASTS doctoral program, as a faculty fellow of the SHASS Burchard Scholars Program, and as a member of the Presidential Committee on Distinguished Fellowships.

Michael Fischer

Michael Fischer taught three subjects in the fall term and was a co-convenor of the weekly Joint MIT-Harvard Seminar in Medical Anthropology. He finished the residency requirement for his 10-year contract with the Singapore University of Technology and Design, spending six weeks in Singapore. He funded one of our graduate students on that project. He continues as a co-PI on the Hewlett-Packard Foundation grant and as an executive committee member on the Initiative for Information Policy led by Daniel Weitzner and Hal Abelson.

In addition, Fischer continues to work on a small grant from the MIT-Israel Program in collaboration with a former postdoc (now a faculty member at Hebrew University) and a professor at Ben-Gurion University (with a first paper under review). He served as chair of two dissertation committees and was a member of several other committees.

Professor Fischer is active on the editorial boards of *East Asian Science, Technology and Society*; *Cultural Politics*; and *Cultural Anthropology*. He continues to co-edit the leading STS book series *Experimental Futures*, which now has 40 titles. His own book *Anthropological Futures* appeared in the fall, and he is completing a new 11-essay volume tentatively called *Enabling Arts in a Lumpy World*. He gave keynote addresses at

conferences in Makassar (Indonesia), Beijing and Kunming (China), and Seoul (Korea) and did collaborative fieldwork with filmmaker Thorsten Trimpop in New Guinea.

Deborah Fitzgerald

Deborah Fitzgerald, Leverett Howell and William King Cutten Professor of the History of Technology, taught a required introductory undergraduate class in the fall semester. She served as the STS faculty representative for a yearlong graduate seminar and participated fully in the PhD admission process. Professor Fitzgerald chaired an internal committee to consider a promotion case, and she again co-chaired (with History professor Harriet Ritvo) the MIT Seminar on Environmental and Agricultural History.

Professor Fitzgerald's professional activities included participating in the European Rural History Organization, writing an afterword for a set of history of science essays for Berghahn Press, serving as outside evaluator for two tenure and full professor cases, reviewing manuscripts for the journals *Isis* and *Environmental History*, reviewing book manuscripts for the University of California Press and the University of Chicago Press, and serving as an evaluator for the Radcliffe Institute, the American Academy in Berlin, and the American Council of Learned Societies.

David Kaiser

David Kaiser began a new role as associate dean for social and ethical responsibilities of computing in MIT's new Stephen A. Schwarzman College of Computing during AY2020. Since April 2020, he has also co-chaired the new Legal, Ethical, and Equity Committee for MIT Campus Planning, which has been active in response to the COVID-19 pandemic.

In addition to these administrative roles, Kaiser published a new book, *Quantum Legacies: Dispatches from an Uncertain World*. Also, he published five research articles in physics and the history of science as well as several other brief essays in such venues as *The New Yorker*, *Science*, and *Nature*. Finally, he contributed to three technical reports on various aspects of COVID-19 epidemic modeling and testing strategies as part of the COVID in India Working Group (University of Chicago and MIT).

He continued to co-direct (with Professor Alan Guth) the Density Perturbations Group in MIT's Center for Theoretical Physics, which focuses on theoretical studies of early-universe cosmology. He also co-directs (with Professor Anton Zeilinger of the Vienna Institute for Quantum Optics and Quantum Information) the international Cosmic Bell collaboration, which designs and conducts novel experimental tests of the foundations of quantum theory. During the year he delivered invited keynote presentations, colloquia, and public lectures at the University of Vienna, the Harvard Black Hole Initiative, the MIT-Tufts cosmology colloquium, an MIT Physics Department colloquium, and the Carl Sagan Day public lecture at MIT.

Professor 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 is also a member of the advisory boards for the Catalyst Collaborative (MIT and Central Square Theater) and the MIT Museum, for which he chairs the subcommittee on student engagement. He continues to serve on the

Alumni Advisory Board for the Department of Physics and Astronomy at Dartmouth College and to chair the Committee on Honors and Prizes for the History of Science Society. Over the past year, he was the principal advisor for three postdoctoral scholars (in Physics) and four PhD students (three in HASTS and one in Physics) and served as a dissertation committee member for another three PhD students (one in HASTS and two in Harvard's History of Science Department). He also supervised a prize-winning undergraduate physics thesis in.

Jennifer Light

Jennifer S. Light began her second term of service as director of STS on July 1, 2019.

Professor Light's book manuscript, *States of Childhood*, entered the production process at The MIT Press, and she published a chapter in *Historical Studies in Computing, Information, and Society*. She 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 and other journals as well as several university presses, and she also reviewed multiple tenure and promotion cases for peer institutions.

Professor Light chaired the program review for the Georgia Institute of Technology's School of History and Sociology and gave invited lectures at the University of Pennsylvania School of Design and the Columbia University Graduate School of Architecture, Planning, and Preservation. Due to the pandemic, other speaking engagements—including talks at Radcliffe, the University of Cambridge, and the JFK Library—were canceled.

At MIT, Light served on dissertation and qualifying exam committees for PhD students in HASTS, DUSP, and Architecture. She was awarded a second d'Arbelloff grant to develop additional course materials for the NEET (New Engineering Education Transformation) program after the success of the curriculum piloted in fall 2020. In recognition of her contributions to the history of computing and information technology, the Charles Babbage Institute appointed her a senior research fellow for 2019–2022.

Eden Medina

Eden Medina, associate professor of science, technology, and society, started her appointment in STS on July 1, 2019. During AY2020, she published a peer-reviewed book chapter (with Mark Carey), "New Narratives of Technology, Expertise, and Environment in Latin America: The Cold War and Beyond," in *Itineraries of Expertise: Science, Technology, and the Environment in Latin America's Long Cold War*. Her *Technology and Culture* article "Forensic Identification in the Aftermath of Human Rights Crimes in Chile: A Decentered Computer History" was awarded the 2019 Abbott Payson Usher Prize for the best scholarly work published during the preceding three years under the auspices of the Society for the History of Technology.

Professor Medina applied and was selected to be a 2020–2021 fellow of the Radcliffe Institute for Advanced Study at Harvard University. She delivered talks at Harvard University, Tufts University, and the Universidad de los Andes in Bogotá, Colombia.

She participated in a plenary panel on the history of facial recognition at the Prada Osservatorio in Milan, Italy, as part of the *Training Humans* exhibit and presented her research at the Data & Society Institute's Contested Data workshop.

Professor Medina served on the editorial board of *Hispanic American Historical Review*, the advisory council of the AI Now Institute at New York University, and the executive committee of the Society for the History of Technology.

In the area of teaching, Medina developed and taught three new classes: STS.083 Computers and Social Change (undergraduate, fall), STS.461 History and Social Study of Computing (graduate, spring), and STS.005J Data and Society (undergraduate, spring). Her Data and Society course constituted a joint effort between STS and DUSP to create a class that synthesized the social, ethical, and technical aspects of data science. She co-taught the course with Professor Sarah Williams of DUSP as part of the new SHASS Computing and Society Concentration.

At MIT, Medina served as a member of the Social and Ethical Responsibilities of Computing advisory board and the Dean's Action Group on Active Learning Projects for Social and Ethical Responsibilities of Computing. She moderated the panel for the Arthur Miller Lecture on Science and Ethics, spoke at the MIT Path of Professorship 2019 Workshop, and presented her research to the visiting committee as part of the STS external review. She performed additional service as a member of the Legal, Ethical, and Equity Committee for MIT Campus Planning in the context of COVID-19. Professor Medina read and discussed student applications to the MIT HASTS program as part of the admissions committee and discussed future directions of the program as part of the STS Strategic Initiatives Committee. She served as the primary advisor for three PhD students, as a committee member for six doctoral students, and as a qualifying exam committee member for one student. Professor Medina began an additional position at MIT this year as associate head of house of East Campus.

David Mindell

David Mindell leads MIT's Task Force on the Work of the Future, which is publishing a series of research briefs and a final report in November. He and Liz Reynolds co-taught a course this spring on the themes of the task force. Professor Mindell coauthored a research brief with John Leonard and Erik Stayton titled "Autonomous Vehicles, Mobility, and Employment Policy: The Roads Ahead." His company, Humatics, has pioneered the use of ultra-wideband navigation in the New York City subway system and is playing a key role in helping the city recover from the COVID-19 crisis. Professor Mindell continues to serve as head of house at MIT Edgerton House and has been deeply involved in the campus response to the COVID crisis and the return to campus policy and planning for the fall.

Robin Wolfe Scheffler

Robin Wolfe Scheffler had a productive fifth year during which he took a semester of paternity leave to welcome his family's first child. Professor Scheffler taught one course before taking paternity leave, a graduate seminar on the history and historiography of science. He also served on two dissertation committees.

Alongside his ongoing studies in applied human development, Professor Scheffler continued to make steady progress on his second book project, *Genetown: Boston and the Rise of the Modern Biotechnology Industry*. The potential of this project was recognized by the National Science Foundation's Science and Technology Studies Program, which awarded Scheffler a \$376,000 grant to support his work over the next three years.

He presented parts of his ongoing work at the Science History Institute, the Massachusetts Historical Society, Virginia Tech, and McGill University as well as the annual meeting of the Organization of American Historians. He is a primary advisor for the development of a digital platform by the Science History Institute for collecting oral histories from the biotechnology industry. He also gave media interviews regarding his research to Radio Open Source and *Times Higher Education*. He completed a major article on the use of humor in the history of science ("Brightening Biochemistry: Humor, Identity and Scientific Work at the Sir William Dunn Institute of Biochemistry, 1923-1931") that will appear in *Isis*, as well as an essay review on the history of venture capital investing for *Reviews in American History*. Work on other articles is ongoing.

Within STS, Professor Scheffler served as a reader on the Graduate Admissions Committee and the Strategic Initiatives Committee. Within the Institute more broadly, he continues to serve as a member of the MIT Museum Life Science Advisory Committee and as an advisor and interviewee for the MIT Video Productions film *From Controversy to Cure: Inside the Boston Biotech Boom*. He remains a member of the Center for Environmental Health Sciences and of the steering committees for the Environmental Solutions Initiative minor and the Global Health and Humanities minor.

He has also continued his service to the history of science as a member of the History of Science Society's Suzanne J. Levinson Prize Committee, as a member of the American Association for the History of Medicine's Shyrock Prize Committee, and as a reviewer of articles, books, and manuscripts for major journals and academic presses.

Merrit Roe Smith

Merritt Roe Smith, Leverett Howell and William King Cutten Professor of the History of Technology (STS and History), is on sabbatical as of January 2020. In May 2019 Professor Smith delivered an invited plenary lecture, "John H. Hall and Harpers Ferry's Role in the Industrial Revolution," as part of the 75th Anniversary Commemorative Program of the Harpers Ferry National Historical Park. A month later he returned to the national park to participate in a panel of authors who have written about Harpers Ferry's history. He also delivered a keynote address ("The Rise of American Capitalism in International Context and the Emergence of the 'American system' of Manufacturing") at the National Endowment for the Humanities Workshop for Teachers at the University of Massachusetts Lowell and the Tsongas Center of the Lowell National Historical Park. After over 25 years at the helm, Smith stepped down as the editor of the acclaimed Johns Hopkins University Press series on the history of technology, during which he oversaw the publication of over 30 monographs. He continues to serve on the editorial board of *Vulcan* (a journal devoted to the history of military technology) 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 chairmanship of the Siegal Prize Committee, the Siegal Teaching Prize, and the Kate Brown appointment committee, for which he wrote the letter on Brown's teaching. He also served on the Will Deringer associate professor without tenure committee.

Sherry Turkle

Sherry Turkle completed her intellectual memoir exploring the relationship between personal experience and professional passion. Her book *The Empathy Diaries* will be published in spring 2021. Professor Turkle's paper "Rejecting the Sirens of the Friction-Free World" will appear in *Which Side of History?*

She radically curtailed her speaking this year in order to devote herself to writing, but before COVID-19 caused her to cancel engagements for spring and summer 2020, including the Nobel seminar in South Korea, Professor Turkle did speak at a few occasions on the topic of her next book: the downside of applying the engineering aesthetic of "friction free" to the social and political world. Professor Turkle was a featured speaker at a seminar on social issues in computing sponsored by Hewlett Packard and another on ethics and social media sponsored by the Siebel Scholars program. Her work was the centerpiece of a multiple-day seminar on artificial intimacy sponsored by the Aspen Institute.

Professor Turkle continued her nonprofit board and advisory work for the Electronic Privacy Information Center, the Boston Children's Museum, *Harvard Magazine*, the Children's Screen Time Action Network (a project of the Campaign for a Commercial-Free Childhood), and the Society of Responsible Robotics. She also serves on the executive boards of *The Public Eye*; *Science, Technology, and Human Values*; and *Philosophy and Technology* and is a member of the Harvard visiting committee.

Jennifer S. Light Head