Comparative Media Studies/Writing Section

Academic year 2017–2018 was eventful at Comparative Media Studies/Writing (CMS/W). We describe highlights below, but in particular we would like to spotlight the following faculty awards, publications, and new research.

Faculty and research groups were recipients of many grants, fellowships, and prizes. Faculty members received a variety of accolades, including a Levitan Prize in the Humanities, a Distinguished Overseas Professorship Award from China's Ministry of Education, and a 2017 Best Book acknowledgment from the American Association for the Advancement of Science (AAAS). They were also awarded a number of grants, such as a Mellon Faculty Grant and a Ford Foundation grant, as well as funding from Google and National Science Foundation (NSF) sub-awards through New York University and the University of Pennsylvania.

Faculty members have also had an excellent year with respect to publishing and presenting. On top of more than 200 articles, chapters, and talks, Professor of the Practice Marcia Bartusiak published *Dispatches from Planet 3*; Professor Junot Díaz published *Islandborn*, his first children's picture book; Professor Eric Klopfer, research manager Scot Osterweil, and others co-authored *Resonant Games*; Professor of the Practice Alan Lightman published two books, *Searching for Stars on an Island in Maine* and *In Praise of Wasting Time*; Professor Nick Montfort published *The Truelist* and *The Future*; and Professor Lisa Parks published *Rethinking Media Coverage: Vertical Mediation and the War on Terror*.

The formal addition of Professor Eric Klopfer and Assistant Professor Justin Reich as CMS/W faculty led to the Scheller Teacher Education Program and the Teaching Systems Lab coming under the CMS/W roof. These two research groups have increased CMS/W's research volume substantially and will continue to do so.

CMS/W continued its commitment to outreach by inviting colleagues from outside MIT to speak to its students. This year that included Pulitzer Prize–winning poet Tyehimba Jess, *New York Times* multimedia journalist Emily Rueb, BuzzFeed data engineer (and MIT alumnus) Walter Menendez, and others across five dozen public events.

As outlined in the remainder of this report, CMS/W's past academic year featured many additional excellent developments. Its undergraduate courses continue to be in high demand, particularly in relation to other courses that meet the HASS (Humanities, Arts, and Social Sciences) requirement. The CMS graduate program has maintained its high selectivity, and recent graduates have gone on to high-profile jobs and PhD programs in comparative media studies and related fields. The Graduate Program in Science Writing continues to be highly selective, admitting top young science writers to its one-year program. In its role supporting MIT writers, CMS/W has seen remarkable utilization of the Writing and Communication Center (WCC): 90% of WCC's schedule openings are used (an increase from last year's 88%), as compared with other schools' average of around 50%.

Lastly, CMS/W has had great success in advancing its mission through conferences and hackathons, the development and distribution/adoption of humanities-informed

technology, frequent employment of Undergraduate Research Opportunities Program (UROP) students, multi-institution international collaborations, and the securing of external grants, gifts, and sponsored research funding.

Mission

MIT Comparative Media Studies/Writing offers innovative programs that apply critical analysis, collaborative research, and design across a variety of media arts, forms, and practices. We develop thinkers who understand the dynamics of media change and can apply their insights to contemporary problems. We cultivate practitioners, scholars, and artists who can work in multiple forms of contemporary media. Our students and researchers help shape the future as critical and visionary partners at a time of rapid transformation.

At CMS/W, we are devoted to understanding the ways in which media technologies and their uses can enrich the lives of individuals locally, across the United States, and globally. Our faculty, researchers, and students share a deep commitment to the development of new tools and strategies that serve the needs of diverse communities in the 21st century.

In its unique approach to humanities, arts, and science writing education, CMS/W:

- Offers graduate and undergraduate degree programs centered on teamwork and research laboratories
- Engages with media practices across historical periods, cultural settings, and methods in order to assess change, anticipate media developments, and design new tools
- Supports a distinguished studio and workshop curriculum featuring the techniques and traditions of contemporary science writing, fiction, poetry, creative nonfiction, journalism, digital media, video, and games
- Works with programs throughout MIT to draw on and enrich the Institute's unique mix of intellectual and entrepreneurial talent
- Cultivates a community of students, faculty, and staff devoted to the highest standards of scholarship and ethical practice
- Extends its educational work into industry, the arts, and the public sphere by offering socially aware, critically informed expertise and events

Academic Programs

Undergraduate Comparative Media Studies Major

Now in its 10th year, the CMS undergraduate major enrolled 21 students, including seven students in the 21E/S (Humanities and Engineering/Science) joint major and four double majors. Five majors graduated in AY2018, which brings to 123 the number of students who have graduated from the CMS undergraduate program since its inception as an experimental major. This year saw the completion of the second CMS

undergraduate thesis, supervised by Professor T.L. Taylor. In 2018, CMS had four minors and 128 concentrators. During AY2018 CMS sponsored 60 UROP positions for pay or credit, along with another 27 over the summer. CMS graduates have gone on to careers in global digital commerce, video game production, brand management and marketing, program management, research, nonprofit management, and social networking software design at companies such as Nike, Electronic Arts, MTV, Microsoft, Google, Facebook, Oracle, Amazon, and Congressional Quarterly; others have pursued studies in theater arts, fine arts, or law. Many have gone on to leading graduate programs in the United States and abroad.

Graduate Program in Comparative Media Studies

In 2018, the CMS graduate program received 80 applications and admitted eight students, including two underrepresented minority students who received diversity fellowships from the Office of the Dean for Graduate Education. The program also graduated six students with master's degrees in June and expects to graduate one in September.

Undergraduate Writing Major

In 2018, three writing majors received degrees. Ten students majored in writing, including four students in the 21E/S joint major and four double majors. In addition, during AY2018 Writing had 12 minors and 70 concentrators and sponsored one UROP student. Writing majors have gone on to careers in journalism, fiction writing, education management, consulting, business analysis, technical writing, and public information.

Graduate Program in Science Writing

In 2018, the Graduate Program in Science Writing received 53 applications and admitted eight students, including one underrepresented minority student. One of these students was awarded the competitive Ida Green Fellowship from the Office of Graduate Education. The program also graduated seven students who now hold jobs at places such as *Science News*, the Fannie & John Hertz Foundation, and the National Institutes of Health and have had their work published in dozens of science magazines and journals. The program continued its collaboration with the Knight Science Journalism Fellowship program, providing four students as interns to write for *Undark* magazine. The upcoming year will unveil a groundbreaking collaboration with the MIT School of Engineering, School of Science, and School of Architecture and Planning to support science writing graduate students as half-time research assistants in their communications offices. This will provide the students with both valuable work experience and tuition assistance.

Research Groups

Center for Civic Media

The Center for Civic Media, led by Ethan Zuckerman, was created as a collaboration between Comparative Media Studies and the MIT Media Laboratory but is now solely a Media Lab research group supporting CMS research assistants. Along with Zuckerman, research scientist Rahul Bhargava has developed the application Gobo, which allows social media users to filter their own content. In addition, Nathan Matias launched the nonprofit Civil Servant with a hackathon, inviting researchers to support citizen behavioral science for a fairer, safer, more understanding internet.

Joy Buolamwini, in collaboration with Timnit Gebru of Microsoft, produced a report that showed statistically significant deficits in software testing accuracy when darkskinned subjects were tested, and this was particularly the case with women; IBM quickly amended its software for more accurate results. Also, in an inaugural piece of research on community engagement and intersectional design, Alexis Hope acted as artistic director of the Make the Breastpump Not Suck Hackathon, a combined policy summit, hackathon, art show, and business event for proponents of fairer maternal leave policies and more humane breast pumps. As a result of intensive and intentional design decisions, the crowd had a wide representation, including women of color, trans dads, and other communities often underrepresented in tech.

Creative Communities Initiative

The Creative Communities Initiative (CCI) had an active year working across several domains. CCI remains committed to using fieldwork and ethnographic insights to explore the frontiers of social and cultural change through various media communities. On the gaming front, Professor T.L. Taylor and several graduate students continued to work with the AnyKey initiative, a partnership between Intel and the Electronic Sports League designed to foster and support diversity in competitive digital gaming. Also, in March 2018, Ian Condry organized the Dissolve Music conference and sound festival, featuring over 40 musicians from Boston, Berlin, and Tokyo. Co-organized with former MIT lecturer Jan St. Werner and CMS graduate student Rekha Malhotra, the conference aimed to dissolve boundaries between performers and audiences, between academic disciplines, and between music and sound art.

Design Lab

The aim of the Design Lab (formerly the Mobile Experience Lab), co-founded by Associate Professor of the Practice Federico Casalegno, is to reinvent and creatively design connections among people, information, and places. Using cutting-edge information and mobile technology, the lab seeks to improve people's lives through the careful design of new social spaces and communities. The lab has reverted to its original name, the MIT Design Lab, a vision of co-founders Bill Mitchell and Casalegno. This name more accurately reflects the lab's research and methods.

In January 2018, Professor Casalegno taught an Independent Activities Period (IAP) course (in collaboration with the Media Lab) on envisioning the future of the aquarium. Sponsored by the New England Aquarium of Boston (NEAQ), the course brought together over 20 students from various disciplines across the campus to envision, design, and prototype the future user experience (interactive and immersive displays) in the aquarium. With additional funding from NEAQ, the Design Lab will continue to work on developing these visions to exhibit at NEAQ's 50th-anniversary event in 2019.

In February 2018, Professor Casalegno began a one-year leave of absence from MIT after spending 18 years as the founder/director of the Design Lab/Mobile Experience Lab. He is currently at the Samsung Design Innovation Center, based in San Francisco, leading

a global team of designers and engineers and bringing the value of design research to the global consumer electronics company. In his absence, Robert M. Metcalfe Professor of Writing and Comparative Media Studies James Paradis and Design Lab research associate Yihyun Lim are leading the lab.

In March 2018, the lab held the Tingling the Senses Hackathon. The hackathon called for creating unexpected sensory experiences through design and embedded technology in the form of wearables, the connected Internet of Things (IoT), and portable objects. Over 30 hackers of various backgrounds from MIT and Harvard assembled for a weekend to develop their ideas. Thousands of dollars in prizes were awarded as well.

The lab also held the Future of AI workshop in São Paulo, Brazil. In collaboration with Banco Bradesco, the team hosted a three-day workshop focusing on a human-centered approach to artificial intelligence (AI) technologies in the context of banking.

The lab has continued to collaborate with long-time partner ENI, within the MIT Energy Initiative (MITEI), to conduct research in the field of IoT that can be applied to wearable technology and portable robotics for safety in the workplace. Following the previous work done in the development of advanced safety devices, the team expanded the focus to portable robotics and compact drones for remote inspection of confined spaces. In June 2018, the Design Lab team presented the research and design prototypes of the hybrid drone-rover system at the MIT-ENI 10th Anniversary Workshop in Milan. Related research was also presented at the PETRA (Pervasive Technologies Related to Assistive Environments) conference in Greece.

In its second year of sponsored research with Puma, the Design Lab team of researchers and students traveled to Puma headquarters in Herzogenaurach, Germany, to present their semester-long work on smart material structures and connected shoes. During a three-day workshop, the group collaborated closely with the Puma Innovation Team in presenting, testing, and co-creating solutions for further research.

The previous year's research with Puma in applying auxetic structures for customized comfort and improved performance (through generative design and simulation) resulted in commercialization as Puma's next line of innovative running shoes. The lab is in the process of licensing the technology and is working closely with the production team at Puma to optimize the design for manufacturing.

In April 2018, the Design Lab held its first large public exhibition of ongoing research in the field of biodesign during Milan Design Week. The exhibition, titled *Breathing and Living the Future of Biodesign*, showcased four strategic vision and proof-of-concept prototypes to illustrate how micro-organisms can produce novel product experiences in the near future. Milan Design Week is one of the largest design festivals in the world, bringing over 500,000 people to design exhibitions and events throughout the city.

The lab is wrapping up work on Connected Lighting for Caring Cities, a project conducted in collaboration with Philips Signify (Philips Lighting). The team researched societal and user values of "caring" through ethnography and is working on prototyping the projected future experience of connected dynamic lighting through visual and interactive media. Assisted by Yihyun Lim, Professor Casalegno taught two professional education courses this summer, Innovation: Beyond the Buzzword and Driving Innovation through Design. The courses introduced participants to concepts in design thinking and innovation through lectures and hands-on workshop sessions.

As part of its mission to bring together scholars, creators, and technologists, the Game Lab devoted efforts this past year to explore the use of play in varying contexts, including education and technology.

The seven courses offered by the Game Lab, in conjunction with the lab's research and development opportunities, have maintained MIT's standing within the *Princeton Review*'s top schools for undergraduate or graduate study of game development for a ninth year running.

In fall 2017, the Game Lab co-hosted the Boston Festival of Indie Games for the fifth year. More than 3,000 people attended the event to see games developed by 300 invited developers and studios, giving students direct access to practitioners in game development. The event was covered in the national media, placing MIT and the MIT Game Lab as a center for independent game development.

The Game Lab has been pursuing projects in collaboration with the entertainment video game industry and, as such, has run events with Tencent E-Sports, based in Shenzhen, China, and the Swedish Games Industry in Stockholm, Sweden. As a result of these efforts, the MIT Game Lab has begun a relationship with Stockholm-based King Entertainment, creators of *Candy Crush Saga*, to conduct design research around tools to assist game developers with assessing diversity in the character designs in their games.

As part of a broader research project focused on surveying representations of European colonialism in board games, members of the MIT Game Lab traveled to Bogotá, Colombia, to conduct a four-week class on developing serious video games about topics important to people of the region. One example, in collaboration with Colombia's Universidad de Los Andes, focuses on the peace process between the Colombian government and the FARC guerrillas. In addition, a series of workshops funded by the MIT Center for Art, Science and Technology (CAST) were held in San Juan, Puerto Rico, at the Neeuko Collaborative Innovation Center and at MIT to create "counter-colonialist" board games about topics of importance to the people of Puerto Rico, such as local government and international responses to the devastation caused by Hurricane Maria.

In collaboration with the MIT Education Arcade, the Game Lab is in the middle of an 18-month project, CLEVR (Collaborative Learning Environments in Virtual Reality), that is investigating the use of virtual reality games to help students understand issues of scale in biological systems, particularly at the cell and DNA levels. Prototype development and initial research are supported by a \$450,000 unrestricted gift from Oculus. An additional \$900,000 unrestricted gift from an MIT donor is forthcoming; this gift will fund three additional years of development and distribution.

The Game Lab received student fellowship grants from the Massachusetts Space Grant Consortium to continue development of Einstein's Public Playground, an interactive planetarium experience showcasing the visual effects of near–light speed travel. The experience is planned for the Charles Hayden Planetarium at the Museum of Science, Boston, and the Abrams Planetarium at Michigan State University.

In summer 2018, the lab is partnering for a second time with MIT alum Riz Virk '92 and Tuff Yen, president of angel investor Seraph Group, to host Play Labs @ MIT, a nineweek summer accelerator for MIT-affiliated startups developing products and services using playful technology. This second batch consists of startups spanning a wide range of categories, including eSports, educational technology, blockchain, AI and machine vision, and voice applications.

HyperStudio

During AY2018, HyperStudio continued to advance its efforts in developing innovative digital tools and web applications for research and education in the humanities and social sciences, increasing outreach, and creating new curriculum initiatives for MIT students.

HyperStudio's signature project, the online educational multimedia initiative Annotation Studio, has grown its worldwide user base to more than 10,000 educators and students. The project, funded by the National Endowment for the Humanities (NEH), has been integrated into over 1,000 humanities curricula at universities, community colleges, and especially high schools. The initiative has seen significant uptake at the high school level, with curricula integrating Annotation Studio as a core component into literature, American studies, social sciences, and other humanities fields. In addition, 30 educational institutions have set up their own site-specific installations of Annotation Studio, including Harvard University, Vassar College, Barnard College, Hofstra University, Humboldt University (Germany), Wellesley College, and Stony Brook University. The project (with Jim Paradis as principal investigator [PI] and Kurt Fendt as co-PI) was funded through two multi-year NEH Digital Humanities grants (awarded in 2011 and 2013). Because Annotation Studio is open source, several institutions have been able to integrate it into their own projects. The HyperStudio team has continued to expand the functionality of Annotation Studio by developing a new tool, Idea Space, that connects the close reading/annotation process to academic writing. Idea Space allows students to select, filter, and organize their annotations and use them as the basis for essays, class discussions, and presentations. Details on both projects have been presented during invited talks at international conferences in Germany, Switzerland, and Spain as well as numerous workshops and conferences in the United States. A significant number of Annotation Studio users around the world have been organizing workshops primarily for other educators or school information technology personnel to introduce them to the pedagogical capabilities of the project.

Work on Professor Kenneth Manning's Blacks in American Medicine project has resulted in an online prototype that features more than 23,500 biographies of black doctors along with tools for data filtering and visual representation, including a new version of HyperStudio's advanced, open-source timeline tool Chronos. The goal of this effort is to bring Professor Manning's extensive research online. Based on biographical data of black doctors from 1860 to 1980, along with tens of thousands of personal and institutional documents and audio interviews, the project aims to tell the unique history of black medical professionals in America. Blacks in American Medicine, which will be part of HyperStudio's new Active Archives Initiative, will seek to engage diverse audiences in the understanding of a marginalized narrative within America's history by exploring how these professionals interacted with both the black community and the American public at large. During spring 2018, the project was at the core of a collaboration with the University for Applied Sciences in Potsdam, Germany, in which students and faculty worked with students in the advanced subject CMS.S62/S98 Digital Humanities II: Data, Archives, Interfaces on conceptualizing and implementing new data and interface approaches to engage a broad set of users in the untold history of blacks in American medicine.

HyperStudio's Active Archives Initiative aims at rethinking how users will interact with digital archives. Based on many years of experience in building online archives and tools for the humanities, this initiative seeks to empower users to engage in storymaking by discovering, interpreting, and organizing archived materials to construct new representations of the past. Simple and enjoyable to use and designed with a wide range of prospective users in mind, from professional scholars to high school students, Active Archives combines rich sets of standards-based resources, novel user interface designs, and scholarly and educational tools. The first projects in the initiative are new versions of the Blacks in American Medicine and US-Iran Relations projects. Details on the initiative were presented at several conferences, including the annual Digital Humanities conference in Montreal.

HyperStudio's director, Kurt Fendt, offered a second, advanced digital humanities subject starting in spring 2018. Based on the successful entry-level, project-based digital humanities subject, the new course offering focuses on machine learning, critical data visualization techniques for humanities-related data, and new archival approaches. The development of the advanced digital humanities class, as well as a reconceptualization of the entry-level subject (CMS.633/833 Digital Humanities: Topics, Techniques, and Technologies), has been supported by a d'Arbeloff grant.

HyperStudio hosted a Course 6 undergraduate student as part of the newly established School of Humanities, Arts, and Social Sciences (SHASS)/Department of Electrical Engineering and Computer Science (EECS) SuperUROP program. The selected student worked on integrating machine learning techniques into HyperStudio's existing and new archives, tools, and projects. The completed project, Spectacles, has been presented at several venues featuring innovative approaches to complex user-enhanced data.

HyperStudio's weekly digital humanities email newsletter, *h+d insights*, has further solidified its role as one of the key information sources in the field. Produced by one of HyperStudio's research assistants, the newsletter has grown well beyond 1,000 active subscribers. HyperStudio's Twitter account now has more than 2,400 followers.

Imagination, Computation, and Expression Laboratory

The Imagination, Computation, and Expression Laboratory (ICE Lab), established at MIT in 2010 by D. Fox Harrell, professor of digital media and artificial intelligence, applies AI and cognitive science approaches to research on and development of interactive narratives, video games, virtual reality technologies, social media, and related forms of digital media.

Professor Harrell was recently appointed as the director of the MIT Center for Advanced Virtuality, a new center for research into virtual reality, augmented reality, and related technologies. He is also currently pursuing several endeavors advancing his research on virtual identity. NSF funds his work using avatars to help local middle and high school students from groups typically underrepresented in STEM (science, technology, engineering, and mathematics) fields see themselves as learners and doers of computer science. He recently concluded a three-year MIT Computer Science and Artificial Intelligence Laboratory (CSAIL)/Qatar Computing Research Institute (QCRI) collaboration researching culturally specific everyday uses of virtual identities in social media and video games (with the Middle East and North Africa as a case study). He also collaborated on *The Enemy*, a Rose d'Or Award–winning project using virtual reality technologies to help humanize the other in the face of global conflict (e.g., in Gaza, Congo, and El Salvador).

Outcomes of recent ICE Lab projects include Grayscale, an interactive narrative teaching users about sexism in the workplace; Mimesis, an online game that models the social and psychological impacts of subtle forms of racism; and MazeStar, an educational computer game platform that engages students in learning computer science concepts while seeing themselves as powerful STEM learners and doers. The ICE Lab has also developed an AI tool called AIRvatar to analyze and reveal patterns in how people develop and use virtual identities. AIRvatar has been used to empirically discover and demonstrate statistical patterns of racial and gender discrimination in video games.

Open Documentary Lab

The Open Documentary Lab (ODL) brings storytellers, technologists, and scholars together to advance the new arts of documentary. Founded by Professor William Uricchio and directed by Sarah Wolozin, the lab is a center of documentary scholarship and experimentation at MIT. Through courses, workshops, a fellows program, public lectures, experimental projects, and research, the lab educates and actively engages the MIT community and the larger public in a critical discourse about new documentary practices and encourages people to push the boundaries of nonfiction storytelling. The lab currently has two graduate students, four faculty affiliates (Vivek Bald, Sasha Costanza-Chock, Christine Walley, and Hanna Rose Shell), and collaborations with leading institutions including the Sundance Institute, the Tribeca Film Institute, and National Film Board of Canada. It has attracted the interest of major foundations including the MacArthur and Ford foundations.

In September, the lab began work on a white paper commissioned by the Ford Foundation to survey the history, methodologies, and best practices of co-creation. To date, we have interviewed over 70 people, conducted five group feedback sessions, and written six case studies. We received new funds to host a symposium about cocreation that will take place in September. The co-creation studio mentored filmmakers throughout the year, including the Detroit Narrative Agency, Rada Films, and Assia Boundaoui. We also ran a workshop on surveillance funded by the Mozilla Foundation.

We were asked to submit an application for a new three-year \$900,000 grant from the John D. and Catherine T. MacArthur Foundation and expect to receive the grant in September. The lab continued its fellows program, lecture series, and resource development.

In the spring, Sandra Rodriguez again offered MIT's first course on virtual reality, CMS S60 Hacking VR. Through a grant from CAST, the course was accompanied by an XR lecture series open to the MIT community and the public. Oculus Story Studio supplied the equipment.

In June, Professor Uricchio received a multi-year grant of \$50,000 from the International Documentary Festival of Amsterdam to provide research advice.

ODL continued to develop Docubase, a curated, interactive database focusing on the people, projects, and tools transforming documentary in the digital age. It also updated its Moments of Innovation site, Professor Uricchio's visual white paper about the history of documentary and technology. The lab's publication, *Immerse*, continues to thrive, with contributions by MIT faculty, researchers, and students.

Scheller Teacher Education Program and Education Arcade

The Scheller Teacher Education Program (STEP) and the Education Arcade explore the potential of games and simulations as media that support learning both in and out of the classroom. Over the past year, STEP has continued work funded by five NSF grants aimed at integrating science and computer science education among upper elementary and high school students using Starlogo Nova, a web-based 3D modeling tool.

STEP has also continued work with collaborators such as the Emerson Collective (on implementing project-based learning in its XQ schools), the MIT Game Lab (on codeveloping a virtual reality game funded by Oculus Facebook), and the Woodrow Wilson National Fellowship Foundation (on developing a master's of education curriculum for the Woodrow Wilson Academy of Teaching and Learning). The work with the Woodrow Wilson Foundation includes the development of ELK ("eliciting learning knowledge"), a game that will help teachers evaluate their students' existing knowledge.

The Science and Engineering Program for Teachers (which partners with MIT alumni clubs) was successfully held again this year with significant programming expansion resulting from new funding. The program almost doubled in size thanks to funding from alum Rick Barry.

STEP also served as a co-host and co-organizer for the Connected Learning Summit, with over 600 attendees. This conference aimed to fuel a growing movement of innovators harnessing emerging technology to expand access to participatory, playful, and creative learning. During the conference, Professor Klopfer held a talk about *Resonant Games* (The MIT Press), his new book co-authored with Scot Osterweil, Jason Haas, and Louisa Rosenheck. The book explores how to design educational games that engage young learners and integrate content and play.

The MIT Teaching Systems Lab (TSL)—established in 2015 by Assistant Professor Justin Reich— designs, implements, and researches the future of teacher learning. All around the world, education stakeholders are calling for more ambitious teaching and learning in classrooms: less rote recitation and more active, engaged learning. The only way that will be possible is if we can dramatically increase the quantity and quality of teacher learning available to educators throughout their careers. At TSL, we work on this urgent global challenge through three lines of work: designing and researching the future of online and blended learning for educators, developing a series of teacher practice spaces that allow educators to rehearse for and reflect upon important decisions in teaching, and exploring new opportunities for playful assessment in schools. The lab has two additional principal investigators (Eric Klopfer and Vijay Kumar), four research scientists, three postdoctoral researchers, six instructional design staff, three graduate students (from Comparative Media Studies and Electrical Engineering and Computer Science), and more than 20 undergraduates who work with the lab during the year.

With support from resource development staff throughout the Institute, Eric Klopfer's Education Arcade raised \$7.25 million from the Emerson Collective to support work with educators. We created a private online course, Launching Innovation in Schools, that included 665 XQ participants and a new massive open online course (MOOC)— Envisioning the Graduate of the Future—with over 2,000 registered participants and 95 certificate earners.

We reran two additional MOOCs funded by Microsoft, Launching Innovation in Schools (3,419 registered, 82 certified) and Design Thinking for Leading and Learning (5,597 registered, 118 certified). Justin Reich and colleagues won the 2018 MITx Teaching and Learning Award.

We raised \$150,000 from Google, \$100,000 from the Woodrow Wilson National Fellowship Foundation, and \$50,000 from the Abdul Latif Jameel World Education Lab (J-WEL) to fund work helping teachers address issues of bias and equity in teaching practices. Since starting this project in 2017, we have used online practice spaces, inperson workshops, and workshop materials to serve over 4,000 educators from 45 states through partnerships with Code.org, Exploring Computer Science, Mobile Computing Science Principles, the College of St. Scholastica, and other organizations.

We won a \$300,000 EAGER grant from NSF to support research on formative assessment in maker education environments in partnership with MakerEd and school districts in California and Virginia. We are working with two schools that implemented makercentered curricula to develop and incorporate 10 embedded assessment tools that can be used to assess middle school students' maker mindsets and skills as well as domainspecific standards.

We hosted six lab playtest events at the MIT Office of Open Learning, where teachers and teacher educators offered feedback on our prototypes and learned more about games and simulations in teacher education. We hosted 169 attendees in 2017–2018 and supported other research groups in testing new projects, including groups from the Media Lab, the Woodrow Wilson National Fellowship Foundation, OCW Educator, and the Harvard Graduate School of Education. In 2017–2018, playtests helped four master's students and 13 undergraduates gather data for theses and class projects.

Justin Reich taught a new class, CMS.595/CMS.895 Learning, Media, and Technology, to 20 MIT undergraduates and to graduate students from MIT and Harvard.

We presented our research at Learning@Scale, the International Conference of the Learning Sciences, the meeting of the Association for Computing Machinery (ACM) Special Interest Group on Computer Science Education, the American Educational Research Association annual meeting, the American Academy of Colleges of Teacher Education Conference, the Learning with MOOCs Conference, and the Computer Supported Collaborative Learning Conference. In addition, we presented invited talks at Harvard University, Carnegie Mellon University, the Hasso Plattner Institut MOOC Symposium, the Northeast Big Data Spoke, the LearnLaunch–MIT Across Boundaries Conference, BETT Asia, EduTECH Middle East, the J-WEL Learning Weeks, the QS Edudata Summit, and the Innovation in Education Conference. We published papers in *AERA Open* and the *International Journal of Artificial Intelligence in Education*.

We continued our design and development support of the Woodrow Wilson Academy of Teaching and Learning, developing new challenges and supporting an overhaul of its design process.

At the request of MIT's dean for digital learning, we are evaluating the Supply Chain Management (SCM) MicroMasters, the first MicroMasters program offered by MIT and one of the first blended master's programs nationwide. In our research, we have examined log data from 116,850 students who participated in one of the SCM MOOCs and 14,355 pre-course survey responses. We also conducted in-person interviews with 33 blended and 18 residential SCM students about their on-campus experiences and collected end-of-semester survey data. Additionally, we analyzed course grades for all students in the SCM master's programs and any student in a course with at least one SCM student.

We created targeted interventions to support students' plan making and sense of belonging in all publicly available MOOCs published through MITx, HarvardX, and Stanford OpenEdX, reaching tens of thousands of learners in one of the largest MOOC experimental studies ever conducted.

Trope Tank

The Trope Tank, directed by Professor Nick Montfort, is a lab for research, teaching, and creative production. Its mission is to develop new poetic practices and new understandings of digital media by focusing on the material, formal, and historical aspects of computation and language.

During 2017–2018, the quick placement of a postdoc in a tenure-track position and the lack of a CMS research assistant meant the lab had a small staff consisting of the director, one research associate, and one predoc. Nevertheless, work proceeded.

A Trope Tank collaboration led to a new online literary magazine, *Taper*, which will run twice yearly. *Taper* focuses on computational creative writing and is published under the imprint of Montfort's micropress, Bad Quarto. The editorial collective includes a faculty member from the University of Massachusetts Boston and an MIT undergraduate. Trope Tank predoc Pierre Tchetgen published a poem in the journal that he created as part of his dissertation project. To present the first issue, an exhibit (with a dedicated presentation of each piece published) and reception were held in the Trope Tank on May 22, 2018.

Along with MIT's Rotch Library, the Trope Tank hosted the *Author Function* exhibit from January through March 2018, curated and installed by Montfort. The exhibit showcased computer-generated books from Montfort's collection along with Using Electricity, the new book series Montfort is editing.

In September 2017, the Trope Tank collaborated with Michel DeGraff of Linguistics to bring Haitian poet/singer/songwriter B.I.C. (Roosevelt Saillant) to MIT for a short visit. The visit included the concert B.I.C. at MIT in the Stata Center on September 19, which was well attended by members of the local Haitian community as well as by the immediate MIT community. It also involved a one-day collaboration among B.I.C., DeGraff, and Montfort to develop the first-known digital poem in Haitian Creole, "Sentaniz Nimerik."

In June, the first peer-reviewed journal article on the Renderings translation project appeared; one translation from French was also published this year. We anticipate more activity on this project when there are again in-house literary translators.

The Trope Tank continues to host the monthly meetings of the local interactive fiction club, the People's Republic of Interactive Fiction, as well as class visits and discussions with visiting researchers and colleagues from MIT.

An Adana Eight-Five platen press, a high-quality hand-operated tabletop letterpress, was added to the lab for teaching and very small print-run projects. A large cabinet of type was also procured and brought to the lab.

A tour of the Trope Tank was given to symposium participants as part of Grappling with the Futures: Insights from Philosophy, History, and Science and Technology Studies (Harvard and Boston University, April 2018). Also, the lab's equipment and researchers supported a display of Commodore 64 work during @party, a Boston demoparty; Commodore 64 projections at the New York City performance venue PSNY; and other exhibits and events.

Writing, Rhetoric, and Professional Communication

Writing, Rhetoric, and Professional Communication (WRAP) collaborates with every MIT department to provide communication instruction to MIT students at all levels, from first-year undergraduates to advanced graduate students. WRAP, led by Director Suzanne Lane and Associate Director Andreas Karatsolis, is devoted to teaching students how to analyze and produce effective communications. As the instructional backbone of MIT's communication requirement, WRAP teaches the foundational writing subjects (Communication Intensive in the Humanities, Arts, and Social Sciences–Writing Focused [CI-HW] subjects) in CMS/W and works collaboratively with MIT faculty to provide embedded and integrated communication instruction to over 4,000 undergraduates.

WRAP's nearly 40 faculty members teach written, oral, and visual communication in more than 100 Communication Intensive subjects, from 21M.030 Introduction to World Music to 9.46 Neuroscience of Morality and 2.009 Product Engineering Process. WRAP also teaches semester-long subjects and offers specialized communication workshops for graduate students in a variety of departments and programs (e.g., Leaders for Global Operations, Aeronautics and Astronautics), as well as specialized workshops open to the MIT community during IAP. Because we assess the writing of incoming first-year students (through the Freshman Essay Evaluation) and of incoming graduate students (through the Graduate Writing Exam), we have a rich set of data for understanding the communication abilities and needs of MIT students. Our instructional approach is research-based: we analyze the genres, discourse, and reasoning of each field; identify the typical challenges that students face in developing professional-level communication abilities; and develop targeted instruction and materials to help students gain both a conceptual understanding of rhetorical principles and procedural knowledge of how to apply them for different contexts, audiences, and genres. WRAP also researches how professional and disciplinary communication practices are changing with new media in order to prepare students for the complex communication landscape they will enter as professionals.

In the past year, WRAP has collaborated with half a dozen new Communication Intensive subjects in Civil and Environmental Engineering, Physics, Chemistry, Brain and Cognitive Sciences, and Economics; has offered workshops on professional communication to students in the MIT Energy Initiative; and has hosted a thesiswriting bootcamp for graduate students in mechanical engineering. In addition, WRAP offered the following workshops during IAP: Communicating Science to the Public, Writing Successful Proposals, Reasoning and Argumentation, and Beyond Citation: Understanding How to Reason with Sources.

In order to improve our understanding of MIT students' communication abilities and to develop a system for longitudinal assessment, we have designed a new, more rigorous and detailed assessment instrument that we call a "generative rubric." We have also created a system by which this rubric can be used to generate pedagogical feedback for students and produce research data that can be used for curricular design. We are working with an industry partner, Vivantio, to build this system, which will be the first automated writing assessment tool that combines data analytics with human assessment of rhetorical ability for longitudinal research on writing. Our pilot of the system in an alpha version has already generated a great deal of useful data that will allow us to better target our instruction in CI-HW subjects.

WRAP's affiliated research lab, ArchiMedia, investigates how digital media is shaping professional communication practices and how digital tools can be used (and designed) to teach professional communication. Its past projects include a collaboration with CSAIL to design an online application to teach students how to paraphrase (as part of a larger research study into how MIT undergraduates and graduate students use sources in their academic writing), the development of online communication instruction modules on MITx for Materials Science and Engineering and Chemical Engineering, and an analysis of the emerging genre of graphical abstracts. Over the past year, WRAP has made strong progress on three separate grant-funded projects.

With funding from the National Science Foundation, WRAP is participating in a multiinstitutional project (with Dartmouth College, the University of Pennsylvania, North Carolina State University, and the University of South Florida) to study the effects of teaching undergraduate STEM students how to effectively peer review each other's texts. This project involves collaborating in the design of an online peer review platform that also functions as an analytical tool for collecting and studying data about how students provide, and respond to, peer reviews. The platform incorporates natural language processing and sentiment analysis to assess students' responses in cognitive, interpersonal, and intrapersonal domains. This year WRAP included undergraduate subjects in biology, materials science, mathematics, and computer science in the study. The project's data collection process has been completed, and the project will now move into a more intensive analysis phase. Preliminary results were presented at the Fifth International Conference on Writing Analytics in January.

In 2016, WRAP received a three-year grant of \$240,000 from the Davis Educational Foundation to collaborate with science and engineering faculty in producing "disciplinary reasoning diagrams" of six different STEM fields. These reasoning diagrams function as discipline-specific maps that visualize relationships between concepts and the reasoning patterns that connect them. Students can use the diagrams throughout the composing process to map the relationship of concepts in an experiment, to scaffold the process of reading background literature in the field, to storyboard a slide presentation or design a poster, and to outline paths of explanation for communicating technical knowledge to various audiences. Because these diagrams are visual and schematic, they can be remembered easily, and thus they aid not only in preparing to communicate to a specific audience and context but also in improvising or adapting to audiences in live situations. Before receiving the grant, WRAP had completed a reasoning diagram in materials science and engineering and was partway through constructing one in comparative media studies. This year, it completed the comparative media studies diagram as well as diagrams for brain and cognitive science and computer systems. We have also made progress on diagrams for chemical engineering, applied mathematics, and mechanical engineering. During the past year, we presented elements of the methodology, the existing diagrams, and the associated pedagogy at the International Writing Across the Curriculum conference, the meeting of the Rhetoric Society of America, and the NACV (Academic Communication Skills Network) Expert Meeting at TU Delft in the Netherlands.

Finally, with the aid of an alumni funds grant, ArchiMedia has been developing Metalogon, an online tool for rhetorically analyzing speeches and oral presentations. The platform allows teachers and students to upload video recordings of presentations and then embed commentary on rhetorical elements, which plays back in real time. The tool provides a framework of concepts about the development of ideas, structure, style, and delivery, and as students and instructors use these concepts to provide feedback, the tool captures annotated segments of the videos for an online library of examples of each rhetorical element. In this manner, Metalogon is both a feedback and peer review application, and over time it becomes a compendium of discipline- and genre-specific teaching examples. The platform is now functional and was used for the first time in 3.014 Materials Laboratory and 21W.016 Writing and Rhetoric: Designing Meaning in fall 2017. We continue to make improvements and will be using the system in more subjects in the coming year. Overall, WRAP has had a very successful year in both the lab and the classroom and continues to fulfill its mission of providing research-based and innovative communication instruction for the 21st century.

Writing and Communication Center

The Writing and Communication Center offers free professional instruction and advice to the MIT community, including undergraduate students, graduate students, postdocs, faculty, staff, and alums. WCC is the only MIT writing center staffed completely by experts—experts in such fields as rhetorical theory, composition studies, oral presentation theory and practice, and teaching of English as a second language. All are MIT lecturers, are published writers and scholars, are experienced college classroom teachers of various forms of communication, and have taught at MIT for many years. Not including WCC director Steven Strang (who founded the center in 1982 and has since been its director), these lecturers have a combined 142 years of experience teaching at MIT (ranging from 5 to 25 years). Thus, WCC lecturers are intimately familiar with the expectations, conventions, and genres of all of the subjects studied at MIT. Regardless of clients' academic discipline, WCC lecturers teach them how to deepen their ideas and develop their content, how to fine-tune their documents and conference presentations for specific and specialized audiences, how to sharpen their critical thinking and analysis, and how to improve their writing style and speaking performances.

WCC is a teaching institution. Its motto ("be a better writer") embodies its dedication to instructing clients rather than simply editing or proofreading papers.

Once again, national and international writing center directors and professors visited WCC to learn how a professional writing center is created and run. Directors and professors from countries including Qatar, Australia, China, Colombia, and Italy visited in AY2018.

During AY2018, 1,105 unique clients (989 in AY2017) consulted WCC 3,801 times (3,268 in AY2017). Of those clients, 71% were non-native speakers of English (74% in AY2017). In AY2018, non-native speakers of English made 2,911 visits (2,706 in AY2017). The table below shows percentages by client type.

Group	Unique clients AY2017	Unique clients AY2018	Client visits AY2017	Client visits AY2018
Undergraduate students	27%	26%	16%	12%
Graduate students	48%	45%	48%	48%
Postdocs	15%	12%	19%	17%
Faculty	1%	1%	2%	2%
Visiting scientists, visiting scholars, alumni, staff, spouses, special students	9%	15%	14%	21%
All English-as-a-second-language clients	75%	71%	82%	77%

Percentages of Clients and Visits by Client Type, AY2017 and AY2018

The usage rate was 90% during AY2018 (88% in AY2017). WCC's continuing high usage rate (experts consider 50% good) is a testament to the best practices and superior service offered by the center's lecturers.

Additional Services

- Throughout the year, WCC director Steven Strang and all eight WCC lecturers participated in the MIT Graduate Student Council's weeklong De-stress Your Dissertation events, giving presentations and individual instruction during the council's group writing sessions.
- Strang again ran weekly meetings of the MIT Writers Group, with 5–10 people attending each session, including undergraduate students, graduate students, staff members, postdocs, and faculty.
- In the fall, Strang gave presentations to incoming students in the Center for Real Estate's program, as well as incoming graduate students, and participated in such events as the Department of Chemistry's Resource Fair.
- Strang met with faculty members from Course 2 in the fall to discuss WCC's contributions to mechanical engineering undergraduate and graduate students, postdocs, and faculty.
- During IAP 2018, WCC once again sponsored a workshop led by lecturer Thalia Rubio on how to write an effective abstract.
- Also during IAP, WCC taught 21W.794 Graduate Technical Writing Workshop, a three-credit course for students who have failed the scientific and engineering writing skills test. Since 2010, WCC lecturer Pamela Siska has taught all sections of this course, with advice from and supervision by the center's director.
- At the request of CSAIL staff members, WCC sponsored a training series (funded by the Cambridge Arts Council and developed by IMPACT) during IAP 2018 that fused self-defense training with a creative/reflective writing workshop. Selfdefense modules alternated with 20-minute writing sessions (prompted and free writing/feedback) focusing on the experience of self-protection.
- During spring 2018, WCC taught 21W.899 Graduate Independent Study in Writing, a three-credit course for students unable to take 21W.794. The course was taught by Pamela Siska as a tutorial and had eight students (as compared with nine in AY2017).
- In AY2018 WCC sponsored three "cover letter workshops," led by Rebecca Thorndike-Breeze, for Spouses and Partners Career Connect.
- During the spring, WCC sponsored two workshops for MITEI on how to create effective poster presentations. The workshops were run by Thalia Rubio.
- In July, Thalia Rubio gave two talks on creating poster presentations to members of MITEI.

Survey Results

WCC uses the same seven-point Likert scale used for course evaluations; the key statement is "This session was very helpful" (see table below), and respondents can circle any number from 1 (strongly disagree) to 7 (strongly agree).

WCC's staff members once again distinguished themselves with profound efforts and impressive results. Anonymous survey forms filled out after each consultation (and deposited in a locked box) revealed that WCC's lecturers earned a 6.72 (out of a possible 7) rating from clients (as compared with 6.75 in AY2017). These consistently high ratings are evidence that WCC is employing best practices in writing center instruction (note that no client marked 1, 2, or 3).

Writing and Communication Center Anonymous Survey Results, AY2018 vs AY2017

Statement	7	6	5	4
This session was very helpful, AY2018	86%	10%	3%	1%
This session was very helpful, AY2017	84%	12%	3%	1%
I learned something new about writing or oral presentation, AY2018	84%	9%	4%	2%
I learned something new about writing or oral presentation, AY2017	81%	12%	5%	2%
Because of this session, I can handle a similar writing/speaking situation better next time, AY2018	86%	11%	2%	1%
Because of this session, I can handle a similar writing/speaking situation better next time, AY2017	83%	11%	4%	1%

Note: 7 = agree strongly, 1 = disagree strongly.

Faculty Awards, Publications, and Notes

Vivek Bald

Fellowships and Honors

Whiting Public Engagement Fellowship

Levitan Prize in the Humanities

Seminars and Colloquia

"The King of Curry" (public presentation), Brooklyn Historical Society, Brooklyn, NY (August 2017)

Fatal Love (panel), Queens Museum, Queens, NY (July 2017)

Marcia Bartusiak

Publications

Dispatches from Planet 3 (Yale University Press)

"In Good Company," Natural History magazine, October 2017

"Chasing New Horizons" and "Discovering Pluto," *Wall Street Journal* (book reviews), May 2018

"The Earth Gazers," Washington Post (book review), February 2018

"Endurance," Washington Post (book review), November 2017

"In the Shadow of the Moon," Choice (book review), September 2017

Lectures

"The Day We Found the Universe," Starlight Festival, Yerkes Observatory, Williams Bay, WI (May 2018)

"The Day We Found the Universe," Aldus Society, Columbus, OH (March 2018)

"The Day We Found the Universe," Carnegie Observatories, Pasadena, CA (March 2018)

"Einstein's Unfinished Symphony," Search for Meaning Festival, Seattle University, Seattle, WA (February 2018)

"How the 100-Inch and a Variable Star Revealed Our Modern Universe" and "First Light: The Astronomy Century in California," Huntington Library, San Marino, CA (November 2017)

"Einstein's Unfinished Symphony," Wheaton College, Norton, MA (November 2017)

Awards

2017 AAAS Best Book award for Einstein's Unfinished Symphony (2nd edition)

2017 Best American Science and Nature Writing award for the *Natural History* column "Einstein's Symphony"

Ian Condry

Ian Condry was on leave during fall 2017 pursuing ethnographic fieldwork in Berlin and Tokyo on music and musicians. In the spring, he co-organized (with Jan St. Werner of the Fine Arts Academy in Nuremberg, Germany, and Rekha Malhotra of MIT) a large international conference, Dissolve Music @ MIT, that received coverage in the *New York Times* and the *Boston Globe*. He had a pair of publications released in Japan and gave several talks, including a keynote at Manchester Metropolitan University (England) and an invited talk at Ca' Foscari University in Venice, Italy. Dissolve Music @ MIT, held at MIT in March 2018, included three evenings of music and sound performances and two afternoons of conference presentations. Over 40 scholars, musicians, and technologists presented panels, keynotes, lightning talks, tech demos, and listening sessions. More than 300 people attended the three days of events. Among the performing musicians were Mouse on Mars, Breaking Forms, Matti Gajek, Proxemia, Michiyoshi Sato, and Trever Hagen. Scholars included Thomas F. DeFrantz, Nancy Baym, Rajna Swaminathan, and Wayne Marshall. The event was free and open to the public and was held at Warehouse XI in Somerville. Sponsors were the MIT Center for Art, Science and Technology; MIT Global Studies and Languages; MIT-Japan; the Goethe-Institut Boston; d&b audiotechnik; SAVI; and the Fine Arts Academy, Nuremburg. Plans are being made for the next Dissolve Music, likely to be held in September 2019.

Publications

"I Don't Mind Being Poor': Capitalism, Music, and Youth Culture in 21st Century Japan," in *The Lost Two Decades and the Transformation of Japanese Society* (International Research Center for Japanese Studies)

"Cultural Politics in Trumpland: A Report from the First 100 Days" (in Japanese), *Annual Review of Cultural Studies*, 2018

"Poder Femenino? La musica pop femenina encierra algunas contradicciones de genero: las estrellas son objetos, pero tamien lideres," *Fernanda* magazine, 2017

Honors and Awards

Mellon Faculty Grant, MIT Center for Art, Science and Technology, Dissolve Music @ MIT (2018)

Conferences

"Music and the Curvature of Social Space-Time" Dissolve Music @ MIT (March 2018)

"Anime, Postcapitalism, and the Future of Work" (invited talk), Japanese Animation in Europe and Beyond, Ca' Foscari University, Venice (February 2018)

"In the Mix of Tokyo's DJ Scene: Embodied Ethnography as Learning and Expertise," American Anthropological Association annual meetings, Washington, DC (December 2017)

"Japanese Pop Music: Everything Is Free Now, and Why That's Good for Music and Musicians" (keynote address), Digital Japan conference, Manchester Metropolitan University, Manchester, England (October 2017)

"Japanese Pop Idols, Underground DJs, and Freestyle Monsters and the Future of Work" (invited talk), Alma Mater Studiorum, Bologna, and Ca' Foscari University, Venice (October 2017)

Sasha Costanza-Chock

Fellowships and Honors

Resisting Reduction Essay Competition Prize, Journal of Design and Science

Mitsui Career Development Professorship

Faculty Associate, Berkman-Klein Center for Internet & Society, Harvard University

Publications

"Transformative Media Organizing: Key Lessons from Participatory Communications Research with the Immigrant Rights, Occupy, and LGBTQ & Two-Spirit Movements," in *The Routledge Companion to Media and Activism* (Routledge).

"Design Justice, A.I., and Escape from the Matrix of Domination," *Journal of Design and Science*, 2018

"Media, Communication, and Intersectional Analysis: Ten Comments for the International Panel on Social Progress," *Global Media and Communication*, 2018

"Design Justice: Towards an Intersectional Feminist Framework for Design Theory and Practice," *Proceedings of the Design Research Society*, 2018

"#MoreThanCode: Practitioners Reimagine the Landscape of Technology for Justice and Equity" (with Maya Wagoner, Berhan Taye, Caroline Rivas, Chris Schweidler, and Georgia Bullen) (report for the NetGain Funder Collaborative, Research Action Design & Open Technology Institute)

Conferences, Colloquia, Seminars, and Workshops

Shaping Data, Shaping Power (moderator), Allied Media Conference, Detroit (June 2018)

#MoreThanCode: Findings from the Tech for Social Justice Field Scan (presenter and facilitator), Allied Media Conference, Detroit (June 2018)

Activism, Social Justice and the Role of Contemporary Scholarship (invited panelist), International Communications Association Annual Convention, Prague (May 2018)

"So You Want to Disrupt the Matrix of Domination: Towards a Design Justice Approach to Data Interventions" (presentation), International Communications Association Annual Convention, Prague (May 2018)

"Data and Discrimination" (keynote), Data Justice 2018, Cardiff (May 2018)

#DesignJustice, MIT Women and Gender Studies (WGS) Intellectual Forum (March 2018)

Workshop on Refugees, ICTs, and the Media (participant), MIT (February 2018)

Speaking Truth to Power (invited panelist), MIT (February 2018)

Next Labor: Designing Platform Cooperatives in a Worker-Centered Way (invited panelist), New School, New York City (November 2017)

"Inclusion in the Age of AI" (keynote), AI & Inclusion Symposium, Institute for Technology and Society, Rio de Janeiro (November 2017)

Inclusión en Acción: Encuentro de Voces y Perspectivas (invited participant), Centro de Internet y Sociedad de la Universidad del Rosario and Berkman Klein Center for Internet & Society, Universidad del Rosario, Bogotá (October 2017)

"Transformative Media Organizing: Key Findings from Participatory Action Research Across Three Social Movements" (presentation), International Association for Media and Communication Research, Cartagena, Colombia (July 2017)

The International Panel on Social Progress (plenary respondent), International Association for Media and Communication Research, Cartagena, Colombia (July 2017)

Junot Díaz

In March Junot Díaz published *Islandborn* (Dial Books), his first picture book, produced in collaboration with illustrator Leo Espinosa.

Fox Harrell

Grants, Fellowships, and Honors

J-WEL Grant in Workplace Learning Innovation, Interactive Narrative for Reflective Engagement (2018–2019, \$35,000)

NSF STEM+Computing Grant, Toward Using Virtual Identities in Computer Science Learning for Broadening Participation (2015–2018, \$599,941)

QCRI-CSAIL Alliance, Understanding and Developing for Cultural Identities Across Platforms: Value-Driven Design Principles and Best Practices in a Qatari Context (2015–2018, \$750,000)

Seminars, Colloquia, and Presentations

Transforming the Classroom for the 21st Century (invited panelist), Ford Foundation Fellows Conference, Washington, DC (May 2018)

"African American Digital Scholarship: Racing the Avatar Dream" (invited talk), Stanford University, Stanford, CA (April 2018)

"Self, Expression, and the Avatar Dream" (invited talk), Face to Face Conference, New York City Arts in Education Roundtable (April 2018)

"Understanding and Developing for Cultural Identities Across Platforms: Value-Driven Design Principles and Best Practices in a Qatari Context" (with Haewoon Kwak), Qatar Computing Research Institute/Hamid Bin Khalifa University, Doha, Qatar (March 2018)

"Reflections on the Avatar Dream" (invited talk), Thinking Out Loud Presidential Colloquium Series, Brown University, Providence, RI (February 2018)

"Equity and the Avatar Dream: From Gaming Sexism to Virtualizing the Enemy" (invited talk), Division of the Social Sciences, University of Chicago (February 2018)

"Rated 1.0: Imagination, Identity, and Storytelling," SHASS/Office of Philanthropic Partnerships (February 2018)

"Imagination, Identity, and Storytelling" (invited talk), Televisa Internacional, Mexico City (November 2017)

"The Avatar Dream and the Future of Storytelling" (invited talk), Future of Storytelling Summit, New York City (October 2017)

"Expressing Our Virtual Selves" (invited talk), Pratt Institute, New York City (October 2017)

"The Enemy—From Concept to 'Virtual' Reality" (invited talk with Karim Ben Khelifa), MIT Museum (September 2017)

Juried Exhibitions and Performances

The Enemy (award-winning virtual reality project against war), MIT Museum (October through December 2017)

Exemplars Collection and Exhibit, National Science Foundation, SEAD Curatorial Committee, Washington, DC (August 2017)

Publications

"Foundations of Interaction in the Virtual Reality Medium" (with Danielle Olson, Ainsley Sutherland, and Cagri Zaman), in *Encyclopedia of Computer Graphics and Games* (Springer)

"Embellishment & Effects: Seduction by Style" (with Dominic Kao), in *Avatar*, *Assembled* (Peter Lang)

"Exploring the Use of Virtual Identities for Broadening Participation in Computer Science Learning" (with Danielle Olson, Dominic Kao, Aziria Rodriguez, Laurel Carney, and Sneha Veeragoudar), proceedings of the Immersive Learning Research Network Conference, Missoula, MT (June 2018)

"Grounding AI-Driven Cross-Cultural Analysis with Community Insights" (with Ali Jahanian, Sercan Şengün, Peter Mawhorter, and Haewoon Kwak), proceedings of the ArabHCI Working with Arab Communities workshop, Montreal (April 2018)

"The Effects of Badges and Avatar Identification on Play and Making in Educational Games" (with Dominic Kao), *Proceedings of the ACM SIGCHI Conference on Human Factors in Computing Systems*, Montreal, (April 2018)

"Playable Experiences at AIIDE 2017" (with Mike Treanor, Nicholas Warren, Mason Reed, Adam M. Smith, Pablo Ortiz, Laurel Carney, Loren Sherman, Elizabeth Carre, Nadya Vivatvisha, Paolo Mardo, Andrew Gordon, Joris Dormans, Barrie Robison, Spencer Gomez, Samantha Heck, Landon Wright, and Terence Soule), *Proceedings of the AAAI Conference on Artificial Intelligence and Interactive Digital Entertainment*, Little Cottonwood Canyon, UT (October 2017) "Generating Cultural Personas from Social Data: A Perspective of Middle Eastern Users" (with Joni Salminen, Sercan Şengün, Haewoon Kwak, Bernard Jansen, Jisun An, Soon-Gyo Jung, and Sarah Vieweg), *Proceedings of the IEEE International Conference on Future Internet of Things and Cloud*, Prague (August 2017)

"MazeStar: A Platform for Studying Virtual Identity and Computer Science Education" (with Dominic Kao), *Proceedings of the Foundations of Digital Games Conference*, Hyannis, MA (August 2017)

Media Mentions

"3Q: D. Fox Harrell on his video game for the #MeToo era," *MIT News*, January 19, 2018

"Virtual Enemy at the MIT Museum," Los Angeles Review of Books, January 8, 2018

"A Look Back at Some of the Best Exhibitions Still on View," Open Studio with Jared Bowen, PBS (WGBJ), December 22, 2017

"This VR Exhibit Lets You Connect with the Human Side of War," *MIT Technology Review*, December 6, 2017

"Face to Face with 'The Enemy,' Viewers Explore Conflict in Virtual Reality at MIT," NPR, November 30, 2017

"The Enemy' Review: Facing Down Conflict," Wall Street Journal, November 4, 2017

Heather Hendershot

Articles

"After the Roy Moore Allegations, Can Democrats Really Win in Alabama?" *Washington Post*, November 9, 2017

"Facts Are Not Stupid Things: Lessons from *The Reagan Show,*" *Film International*, July 2017

Talks

"The 'Phooey!' Candidate: How Segregationist Lester Maddox Used Notions of 'Liberal Media Bias' to Take Georgia," Society for Cinema and Media Studies, Toronto (March 2018)

"Local Election Coverage and Public Affairs Programming: Major Archival Gaps for Radio," Radio Preservation Task Force, Library of Congress, Washington, DC (November 2017)

Eric Klopfer

Publications

Resonant Games (with Jason Haas, Louisa Rosenheck, and Scot Osterweil) (The MIT Press)

"Multiplayer Disciplinarily-Integrated Agent-Based Games: SURGE Gameblox" (with Douglas B. Clark, Paul Medlock-Walton, and Raúl Boquín), in *Simulation and Gaming* (Intech Open)

"Massively Multiplayer Online Roleplaying Games and Virtual Reality for Learning," in *Virtual, Augmented, and Mixed Realities in Education* (Springer)

"Teaching About Complex Systems Is No Simple Matter: Building Effective Professional Development for Computer-Supported Complex Systems Instruction" (with Susan Yoon, Emma Anderson, Jessica Koehler-Yom, Chad Evans, Miyoung Park, Josh Sheldon, Ilana Schoenfeld, Daniel Wendel, and Hal Scheintaub), *Instructional Science*, 2017

Invited Talks

Keynote lecture, Association of Medical Illustrators meeting, Newton, MA (2018)

Keynote lecture, Chang School Talks, Toronto (2018)

Keynote on augmented and virtual reality, International Conference on Computers in Education, Christchurch, New Zealand (2017)

Presentation, Cracking the Code: The Next Generation of Women in STEM, Boston (2017)

Research Funding

Reach Every Reader (2018–2022, \$1 million)

Emerson Collective Game Based Learning (2017–2022, \$2 million)

Clever (Exploring Scale in VR) (2017-2019, \$450,000)

Biograph 2.0, NSF Discovery Research PreK-12 (2017–2019, \$1.1 million)

Science and Integrated Language Plus Computational Thinking and Modeling with English Learners, NSF STEM + Computing (2017–2020, \$2.5 million)

Helen Lee

AY2018 was the third year of CMS/W professor Helen Elaine Lee's three-year term as WGS director. Professor Lee serves as chair of the Office of Minority Education Faculty Advisory Committee and the Community Service Fund Board. She is a member of the selection committee for the Martin Luther King Jr. Visiting Professor Program and the editorial board of the *MIT Faculty Newsletter*. In AY2018, she served as a faculty mentor

for 2.S991 Designing the First Year Experience, as a diversity orientation facilitator for incoming freshmen, and as a member of the MindHandHeart Department Support Project. She participated in student-oriented events, including serving as a host for visiting artist Tyehimba Jess, presenting a lightning talk for Campus Preview Weekend, and addressing incoming first-year Interphase Edge students and the parents of incoming first-year minority students. In addition, she continued co-organizing (with lecturer Joaquin Terrones) a series of gatherings for queer and transgender students and faculty members of color initiated in AY2017. For the third consecutive year, she organized a career panel of MIT black alumnae for My Sister's Keeper, an organization dedicated to the support of black women students, faculty, and staff at MIT that Professor Lee helped to found. She was also involved in representing MIT in the broader community, serving on the American Academy of Arts and Sciences Public Face of Science Initiative's Boston-Cambridge Public Engagement Working Group; speaking on a panel at the Second Annual Women of Color in the Academy Conference, held at Northeastern University in April 2018; and participating in a series of community gatherings for that group after organizing the first such event at MIT in April 2017.

Tom Levenson

Articles

"The World Defeated Smallpox. Why Does Polio Still Exist?" *Boston Globe*, March 9, 2018

"Antibiotics Gave Us Routine Surgery, Growing Resistance Could Change Everything," *Boston Globe*, December 2, 2017

Alan Lightman

Publications

Searching for Stars on an Island in Maine (Pantheon)

In Praise of Wasting Time (TED Books)

Review of The Order of Time, New York Times Book Review, May 14, 2018

"Meditations on Fact and Faith," Memphis Commercial Appeal, April 11, 2018

"Fact and Faith: Why Science and Spirituality Are Not Incompatible," *BBC Science Focus*, April 5, 2018

"Deep Space," Downeast magazine, April 2018

"The Infinity of the Small," Harper's magazine, March 2018

"Consciousness," The Fabulist, March 2018

"How the Heavens Fell to Earth," Nautilus, March 2018

"Thinking Big Thoughts about the Boundary of Science," Washington Post, January 5, 2018

Interviews

"You've Wasted Another Perfectly Good Hour and That's OK," KERA Radio, May 24, 2018

"Science and Spirituality," WBUR, Boston, April 2018

"Religion, Science, and Philosophy," Maine Public Radio, April 2018

"The Spiritual Universe," Ascend podcast, September 2017

"Ingenious," Nautilus magazine, August 2017

Seth Mnookin

Fellowships

Age Boom Academy Fellowship on New Technology and the Aging Workforce, Columbia University Mailman School of Public Health (2018)

Publications

"A Deadly Spectrum" (review of *Asperger's Children: The Origins of Autism in Nazi Vienna*), New York Times Book Review, June 2018

Invited Talks

Driving R&D Innovation in Vaccines Through a Robust Ecosystem (moderator), BIO (Biotechnology Innovation Organization) International Convention, Boston (June 2018)

"The Power of Personal Stories and the Challenge of Communicating Epidemiological Evidence to the Public" (keynote), Simons Foundation Autism Research Initiative Annual Science Meeting, New York City (October 2017)

Op-Ed and Short-Form Public Writing (panel), annual meeting of the Society for Social Studies of Science, Boston (August 2017)

Communications Forum

Republican Resistance in the Age of Trump (moderator) (April 2018)

An Evening with Sarah Vowell (moderator) (October 2017)

Nick Montfort

Publications

Using Electricity (Counterpath book series editor)

The Truelist (Using Electricity series, Counterpath)

The Future (Essential Knowledge series, The MIT Press)

"Conceptual Computing and Digital Writing," in *Postscript: Writing After Conceptual Art* (University of Toronto Press)

"The Complexity of Poetic Pattern: Recreating Early Work in Machine Translation," *Amodern*, 2018

"Further Reading" (editorial), Humanities, 2018

"Programmer l'art littéraire," L'étincelle, 2018

Conferences

On Code and Literature (panel), Forum Vertigo, Centre Pompidou, Paris (June 2018)

Translations and Renderings (roundtable with Leonardo Flores, Aleksandra Małecka, Ariane Savoie, and Natalia Fedorova), Electronic Literature Organization Conference and Festival, Universidade Fernando Pessoa, Porto, Portugal (July 2017)

Invited Talks

"Perspectives and Collective Future-Making," MEDEA series, University of Malmö, Malmö, Sweden (March 2018)

"Exploratory Programming," Open Forum: Computational Thinking and Programming Practice, Aarhus University, Aarhus, Denmark (March 2018)

"Starting Art & Inquiry from Code: Growing a Project Computationally," Aarhus University, Aarhus, Denmark (March 2018)

"Preserving Corpses with Emulation," Stanford Software Preservation Workshop (February 2018)

"Roguelikes as 'Concrete Gaming,' More Poetry Than Art," Clash of Realities, Cologne Game Lab, Cologne, Germany (November 2017)

"True to Platform" (keynote), Clash of Realities, Cologne Game Lab, Cologne, Germany (November 2017)

"Exploratory Programming and a Very Quick Workshop," Sarah Lawrence College, Yonkers, NY (September 2017)

Selected Digital Poetry and Art Projects

Cadavres Exquis/Exquisite Corpses (digital project with Ariane Savoie), exhibited by and published in the digital edition of the *Vassar Review* (June 2018)

Re-Upstart (updated version of *Upstart*), digital poem shared on the web and exhibited (November 2017)

Scripting the Other (with Annie Abrahams and collaborators), The Wrong New Digital Art Biennale (November 2017)

Untitled [*Eden*], type-in program commissioned by *Decoy* magazine (October 2017)

Readings

Reading from *The Truelist, Author Function* event with John Cayley, Liza Daly, and Allison Parrish, Cambridge, (March 2018)

Readings from *The Truelist*, launch events with Rafael Pérez y Pérez and Allison Parrish, Cambridge, New York City, Philadelphia, and Providence, RI (February 2018)

Reading from The Future, launch event, Cambridge (December 2017)

Reading of digital poetry (including *Autopia*) with workshop participants Aleksanda Małecka and Piotr Marecki, Krakow, Poland (October 2017)

"Gender and Computational Poetry," reading at the WGS Intellectual Forum, MIT (September 2017)

Reading of Sliders and other poems at WordHack, New York City (September 2017)

Selected Group Exhibitions

Autofolio Babel in History of the Future, Boston Cyberarts Gallery (May–June 2018)

Blind Date in Store 2, Babycastles, New York City (November 2017)

2x6 and Autopia, Piksel17, Bergen, Norway (November 2017)

Re-Upstart, Studio at 550, Cambridge (November 2017)

Autopia, Roskilde Bibliotekerne, Roskilde, Denmark (October-November 2017)

Waves 3 Ways (Topsy's Revenge), Medien, die wir meinen, Berlin (July 2017)

Selected Music Visualization Performances

Livecoding of Commodore 64 BASIC visualizations, Performance Space New York (April 2018)

Livecoding of Commodore 64 BASIC visualizations with Sean Lee, Babycastles, New York City (January 2018)

Curated Exhibits

Taper #1, Trope Tank, MIT (May 2018)

Author Function, Rotch Library, MIT (January-March 2018)

Awards and Honors

2017 Turn On Literature Prize honorable mention for Autopia

Lisa Parks

Publications

Rethinking Media Coverage: Vertical Mediation and the War on Terror (Routledge)

Life in the Age of Drone Warfare (co-edited with Caren Kaplan) (Duke University Press)

"Book Review Forum: *Life in the Age of Drone Warfare*" (with Emily Gilbert, Peter Adey, Majed Ahkter, Lucy Suchman, Tyler Wall, Jutta Weber, and Caren Kaplan), *American Association of Geography Review of Books*, 2017

"Media Fieldwork: Critical Reflections on Collaborative ICT Research in Rural Zambia" (with Lindsay Palmer and Daniel Grinberg), in *Applied Media Studies* (Routledge)

"Drone Media: Grounded Dimensions of the US Drone War in Pakistan," in *Place*, *Space and Mediated Communication* (Taylor & Francis/Routledge)

"Signal Territories: Broadcast Infrastructure, Google Earth, and Phenomenology," in *Conditions of Mediation: Phenomenological Perspectives on Media* (Peter Lang)

"Infrastructure," in Keywords in Media Studies (New York University Press)

Grants, Awards, and Honors

National Science Foundation grant, Network Sovereignty: A Comparative Study of Local Network Initiatives in Rural, Low-Income Communities (with co-PI Ramesh Srinivasan) (2018–2020, \$400,000)

Senior Fellow, International Research Center for Cultural Techniques & Media Philosophy (IKKM), Bauhaus University, Weimar, Germany (2018)

J-WEL Grant in Higher Education Innovation, Social IT Solutions Workshop in Tanzania (2018–2019, \$30,000)

Skoltech Foundation grant, Interlinking the Global Internet: The Value of Satellites (2017–2018, \$75,000)

Lectures and Conference Presentations

"Tactical Drone Use and Vertical Mediation at Standing Rock" (keynote), European Network for Cinema and Media Studies Conference, Amsterdam (June 2018)

Media Industries and Infrastructures (invited panelist), Media in Transition Conference, University of Utrecht, Utrecht, the Netherlands (June 2018)

"Mobile Phone Eavesdropping: Historicizing and Theorizing the Cell Site Simulator" (invited talk), IKKM, Bauhaus University, Weimar, Germany (June 2018) "Experimenting with Media History: The Project Mercury Earth Station in Zanzibar," IKKM, Bauhaus University, Weimar, Germany (June 2018)

Internet Infrastructure Workers in Tanzania: Moving Broadband from Sea to Land (panelist), International Communication Association Conference, Prague (May 2018)

"A Nodal Approach to Network History: The Project Mercury Earth Station in Zanzibar" (keynote), Network History ICA Pre-Conference, Prague (May 2018)

"Mediating Animal-Infrastructure Relations" (invited talk), Medium/ Environment Conference, University of California, Berkeley (April 2018)

"The FAA, Surveillance, and Anti-DAPL Drone Activists" (invited talk), Sioux Surveillance Conference, Brown University, Providence, RI (April 2018)

"Rethinking Media Coverage: Vertical Mediation and the War on Terror" (invited talk), University of Pittsburgh (April 2018)

"Moving Broadband From Sea to Land: Internet Infrastructure and Digital Labor in Tanzania" (invited talk), CMS Colloquium, MIT (March 2018)

"Vertical Mediation and the War on Terror" (invited talk), Drexel University, Philadelphia (February 2018)

"Vertical Asymmetries, Mediation, and the War on Terror" (keynote), Midwestern Interdisciplinary Graduate Conference on Asymmetry, University of Wisconsin–Milwaukee (February 2018)

"Vertical Mediation and the War on Terror" (invited talk), Sociology Colloquium Series, University of Alberta, Edmonton, Alberta, Canada (February 2018)

"Surveillance Pressure Points" (invited talk), Dar es Salaam Institute of Technology, Dar es Salaam, Tanzania (January 2018)

"Surveillance Pressure Points (keynote), Mozilla Workshop, MIT (December 2017)

"Vertical Mediation and the War on Terror" (invited talk), Open Documentary Lab, MIT (November 2017)

Transmit Trap Dynamics and Social Media Users in Turkey (panelist), Middle Eastern Studies Association Conference, Washington, DC (November 2017)

Surveillance and the Spectrum: The Globalization of Cell Phone Interception Technologies (panelist), National Communication Association Conference, Dallas, TX (November 2017)

"Vertical Power in the Trump Era" (invited talk), Conference Against the Use of Drones in Warfare, Duke University, Durham, NC (October 2017)

"Mapping Orbit and Studying Satellite Systems" (invited lecture), Urbanism Seminar, School of Architecture and Planning, MIT (October 2017)

"The FlowNet: Project Transnational Investigations of Social Media Use and 'Internet Freedom'" (invited talk), Microsoft Research Colloquium, Cambridge (August 2017)

Edward Schiappa

Publications

"Audience Conjectures and Rhetorical Studies: An Update" (with Jennifer Stromer-Galley), in *Rhetorical Audience Studies and Reception of Rhetoric: Exploring Audiences Empirically* (Palgrave Macmillan)

"The Greeks, Pragmatism, and the Endless Mediation of Rhetoric and Philosophy," *Philosophy & Rhetoric*, 2017

"Persistent Questions in the Historiography of Early Greek Rhetorical Theory," in *Logos without Rhetoric: The Arts of Language Before Plato* (University of South Carolina Press)

"Parasocial Communication" (with Peter B. Gregg), in *The Sage Encyclopedia of Communication Research Methods* (Sage)

T.L. Taylor

Seminars and Colloquia

"Re-figuring Esports," ReFiG Conference, University of Alberta, Edmonton, Alberta, Canada

The Grassroots Game (panelist), Foundations of Digital Games Conference, Cape Cod, MA

"On the Fields, in the Stands: The Future of Women and eSports" (keynote), Esports Symposium, University of California, Irvine

"Play as Transformative Work" (keynote), QueerGame Con, University of Southern California, Los Angeles

The Wright Stuff: A Guide to Video Gaming Law (invited panelist), Copyright Society Mid-winter Meeting, Napa Valley, CA

Digital Methods Best Practices workshop (co-organizer), Hawaii International Conference on System Sciences

Esports (panelist), Tencent Digital Sports Global Summit, Beijing, China

"Positive Values of Esports," MIT x Tencent, Cambridge

Women in Esports (organizer and moderator), GeekGirlCon, Seattle

Professional Player Contracts/Negotiations Must Haves (invited panelist), Biz-esports Conference, Los Angeles

Invited research talk, Twitch, San Francisco

"5 Myths in 5 Minutes" (invited talk), Advocacy Microtalks, Game Developer's Conference, San Francisco

"Grassroots Growth: How Game Communities Built an Esport Scene from the Ground up and Why They Still Matter," Game Developer's Conference, San Francisco

Publications

"Gender & Esports Tournaments: Best Practices Recommendations" (white paper for AnyKey)

Media Mentions

"How This Charlotte Dad Quit His IT Job and Now Makes \$100K a Year Playing Video Games," *Charlotte Observer*, October 4, 2017

"So You Want to Be a Competitive Gamer? Women in Esports Offer Advice to Encourage More Women," *GeekWire*, October 2, 2017

"E-sports Isn't Just a Kids Game Anymore: There's Big Money for the Best," *Los Angeles Times*, July 21, 2017

"A Gamer Channel's Mission: Send the Trolls Packing," New York Times, July 19, 2017

"Female Esports Pros Hope to Close the Gender Gap" (video feature), Kotaku

Grants

Social Sciences and Humanities Research Council of Canada grant for Refiguring Innovation in Games (ReFiG) (PI: Jennifer Jenson, York University)

William Uricchio

Grants

MIT Alumni Class Fund (\$40,000 for one-time virtual reality support)

International Documentary Festival Amsterdam (\$50,000 per annum for joint research consultation)

Ford Foundation (\$125,000 for co-creation report and conference)

MacArthur Foundation (\$85,000 for co-creation studio pilot and \$250,000 from a three-year, \$750,000 grant to support the Open Documentary Lab)

Publications

"Re-Thinking the Social Documentary," in *The Playful Citizen: Power, Creativity, Knowledge* (University of Amsterdam Press)

"La télévision et les arts: au-delà de la traduction et de la transmission," in *Une télévision allumée : les arts dans le noir et blanc du tube cathodique* (Presses Universitaires de Vincennes)

"Things to Come: The Possible Futures of Documentary from a Historical Perspective," in *i-docs: The Evolving Practices of Interactive Documentary* (Wallflower Press)

"Contextualizing the Apparatus: Film in the Turn-of-the-Century Sears, Roebuck & Co. Consumers Guide's Department of Special Public Entertainment Outfits and Supplies," in *Exposing the Film Apparatus: The Film Archive as a Research Laboratory* (University of Amsterdam Press)

"Data, Culture and the Ambivalence of Algorithms," in *The Datafied Society: Studying Culture Through Data* (University of Amsterdam Press)

"Virtual Reality: Hope, Hype, Humbug," Los Angeles Review of Books, 2018

Playful Thinking (book series editor, The MIT Press)

Talks

"Stories are Changing..." (keynote), Sheffield Documentary Festival, Sheffield, England (June 2018)

"The Future of Media Studies: After the Algorithmic Turn," Utrecht University, Utrecht, the Netherlands (May 2018)

"How Shall We Frame the Future? Reflections on a Changing Media Ecosystem" (keynote), Lviv Media Forum, Lviv, Ukraine (May 2018)

"Augmented Reality and the World as Documentary," i-Docs Conference, Bristol, England (March 2018)

"Big Data and the Public Service Tradition," Utrecht Data School and European Broadcast Union, Utrecht, the Netherlands (December 2017)

"The Digital Condition" (keynote), Digital Cultures Conference, Warsaw (September 2017)

"Putting VR in Context: Critical Observations" (keynote), Open City Documentary Festival, London (September 2017)

Jing Wang

Jing Wang received a Distinguished Overseas Professorship Award from the Ministry of Education of the People's Republic of China (PRC). Also, Professor Wang continued to run NGO2.0, a nonprofit organization registered in Shenzhen, China, that specializes in social media activism. The aim of NGO2.0 is to help Chinese grassroots nongovernmental organizations learn how to use information communication technology to engage in advocacy and other work related to social causes. Wang received another two years of grant support from Ford Foundation China. As part of the Maker Program launched by NGO2.0, Wang designed a smart piggy bank and received invention and application patents from the PRC Bureau of Intellectual Property in spring 2018. Wang also co-authored "Roundtable on New Mediascapes and the Futures of Advertising" (*Advertising & Society Quarterly*, 2017).

Edward Schiappa Head