

## **Comparative Media Studies/Writing Section**

Comparative Media Studies/Writing (CMS/W) had another successful year despite the various challenges presented by Covid-19, with highlights covered below.

The one Covid-19–related difficulty that proved especially difficult to address within the academic year was guaranteeing funding for an incoming CMS graduate class. As a result, we decided to put graduate program admissions on hold for one year.

### **Academic Programs**

CMS/W participated in the Institute shift to online learning during the pandemic in a robust way. Many classes incorporated the online format to leverage guest speakers from all over the world, had multiple breakout room workshoping sessions, and recorded the subjects for later viewing. Most faculty also transitioned to the Canvas Learning Management System with the aid of an undergraduate learning technologist.

### **Undergraduate CMS Major**

The undergraduate program in Comparative Media Studies offers students an opportunity for interdisciplinary study of film, television, game design, virtual worlds, digital artworks, civic media, interactive writing, and other communications media. Now in its 13th year, the CMS undergraduate major enrolled 22 students, including eight students in the 21E/S (Humanities and Engineering/Science) joint major. Seven majors graduated in academic year 2021 (AY2021), with 151 students having graduated from the CMS undergraduate program since its inception as an experimental major. In 2021, CMS had five minors and 93 concentrators. During AY2021, CMS sponsored 61 Undergraduate Research Opportunities Program (UROP) positions for pay or credit. 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 Accenture, Electronic Arts, Facebook, Google, Oracle, Samsung, Twitch, the World Wildlife Fund, and YouTube; 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.

### **Education Concentration**

In AY2020, the Subcommittee on the HASS Requirement approved a Humanities, Arts, and Social Sciences (HASS) concentration in education. There were 12 active concentrators in AY2021, and six students completed the concentration.

### **CMS Graduate Program**

In 2021, the CMS graduate program paused admissions to reassess and reconfigure the program, so no new students were admitted. The program graduated eight students with master's degrees in June. In AY2021, Vivek Bald was the director of graduate studies.

### **Undergraduate Writing Major**

In 2021, six writing majors received degrees. Sixteen students majored in writing, including six students in the 21E/S joint major. In addition, Writing had 13 minors and

55 concentrators. Writing sponsored 27 UROP students in either paid or credit positions. 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**

Despite the Covid-19 pandemic, the Graduate Program in Science Writing continued teaching its core classes in person (masked). In 2021, the program received 71 applications for admission, accepted 12 students, and admitted eight students, including one international student and one student from an underrepresented minority group. The program also graduated six students. The program garnered an Ida Green Fellowship from the Office of Graduate Education for one of its admitted students and a Vice Chancellor's Excellence and Inclusion Fellowship for another. Alumni have had their work published in dozens of venues, including the *New York Times*, *Science*, *National Geographic*, and *Hakai*.

The program continued its collaboration with the Knight Science Journalism Fellowship program, providing two students as research assistants. All of the students had placements in half-time research assistant positions with the Kavli Institute for Astrophysics and Space Research, School of Engineering, Environmental Solutions Initiative, and School of Science in addition to the fellowship program. The initiative was again a success, providing the students with substantial financial support and valuable work experience.

### **CMS/W Research Groups**

#### **Civic Design Initiative**

The Civic Design Initiative, a new research group led by Professor James Paradis, aims to actively imagine democratic futures—including institutions, processes, and spaces—as technologically enhanced and human centered. This year, the team has been focusing on developing a research agenda and proposal for the MIT Climate Grand Challenge; the Deep Listening Project will seek to develop collaborations among research groups within and outside of MIT (including the University of Southern California and Carnegie Mellon University), international organizations such as the United Nations Development Programme and Red Cross Red Crescent, and indigenous and frontline communities in global locations that are undergoing adaptation planning due to changing climate conditions.

#### **Game Lab**

As part of its mission to bring together scholars, creators, and technologists, the Game Lab this past year devoted efforts to exploring the use of play in varying contexts—including education and technology—connected to both research projects and residential classes. The seven courses offered by the Game Lab, in conjunction with its 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 10th year running. The lab furthers its mission through active collaboration with other labs and centers on the MIT campus to create playful experiences.

The Game Lab has been pursuing projects in collaboration with the entertainment video game industry through the Ludus Center for Games, Learning, and Playful Media, a

membership-based research consortium. Because of the global Covid-19 pandemic, interest from Ludus members has been focused on improving online learning for various student populations, from k–12 through professional development. This includes revamping MITx courses and repurposing them for use in MIT residential classes, k–12 classes, after-school courses, and informal learning environments with partners in India, China, Israel, and Palestine.

As part of a broader research project focused on surveying representations of European colonialism in board games, a proposal funded by the MIT Center for Art, Science and Technology (CAST) is supporting design and development work to create a “counter-colonialist” board game about topics of importance to the people of Puerto Rico, such as local government and international responses to the devastation caused by Hurricane Maria.

Supported by MIT’s Abdul Latif Jameel World Education Lab (J-WEL) and in collaboration with the MIT-Nepal Initiative, the Game Lab met with designers and programmers of Open Learning Exchange Nepal, developing learning games for students in Nepal, sharing best practices, and providing feedback on early prototypes for ongoing software projects.

The Game Lab continues active and continuous collaboration with the MIT Education Arcade in projects focused on using new playful technologies in education and reaching learners as part of workforce development programs.

The Education Arcade and the Game Lab completed a three-year project, Collaborative Learning Environments in Virtual Reality (CLEVR), that investigated the use of virtual reality (VR) games to help students understand issues of scale in biological systems, particularly at the cell and DNA levels. Prototype development and initial research were supported by an unrestricted gift from Oculus. Additional funds were provided through the MIT Integrated Learning Initiative to support further study and investigation using VR in education.

The Education Arcade and Game Lab are currently investigating collaborative learning environments using phone-based augmented reality (AR) technology.

In collaboration with the AIM Photonics Academy in MIT’s Department of Materials Science and Engineering, the Education Arcade and Game Lab began contributing to the Virtual Manufacturing Lab, a three-year project sponsored by the Office of Naval Research and the Manufacturing Engineering Education Program. The lab creates games for learners interested in the use and importance of integrated photonics, including hyperscale data centers, lab-on-a-chip sensors, radio frequency avionics, and LIDAR applications.

### **Open Documentary Lab**

The Open Documentary Lab brings storytellers, technologists, and scholars together to advance the new arts of documentary. Founded by professor and principal investigator (PI) William Uricchio and directed by Sarah Wolozin, the lab is a center of documentary scholarship and experimentation at MIT. The lab’s co-creation studio, led by artistic director Katerina Cizek, researches and incubates co-creation methodologies, media methods that offer alternatives to a singular authorial vision and challenge inequality. Professor and lab affiliate Vivek Bald joined the leadership team this past year.

Through its various initiatives, including courses, workshops, a fellows program (with 17 fellows this past year), public lectures, experimental projects, and research (supported by graduate research assistants), 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 has attracted the interest of major foundations, including the MacArthur, Ford, and Knight foundations, and has developed funded partnerships with organizations such as Black Public Media, the Indigenous Screen Office, Witness, and Mozilla.

In November 2020, the lab hosted the inaugural indigenous delegation in partnership with Canada's Indigenous Screen Office. The event brought together 10 indigenous media scholars and artists and more than 60 MIT researchers on the theme of indigenous knowledge, artificial intelligence (AI), and digital worlds.

Other areas of research this year included deep fakery, misinformation, extended reality (XR) in Latin America, narrative experiences in immersive settings, local journalism, and emerging technologies in Kentucky. The lab began a Latin American research initiative and developed an exchange program with Universidad de Antioquia in Colombia funded by the MIT International Science and Technology Initiatives. The lab produced 31 public lectures with trailblazers across many disciplines and hosted the indigenous digital delegation, a seven-part deepfake series, and an AR conversation series. In addition, an accessibility working group was established. The lab's field study, *Collective Wisdom*, authored by Cizek and Uricchio, has been accepted by The MIT Press and will be published as a trade book in 2022.

### **Imagination, Computation, and Expression Laboratory**

Professor D. Fox Harrell (CMS/W and Computer Science and Artificial Intelligence Laboratory) directs the MIT Center for Advanced Virtuality and the MIT Imagination, Computation, and Expression Laboratory (ICE Lab). He has overseen a number of recent projects. Through Roleplaying for Social Perspective-Taking, the ICE Lab is designing and studying computer-supported roleplaying for supporting positive perspective transformation via reflection for digital media users. This involves creating tools, techniques, and methods to understand and model social identities and the cultural values of users' virtual identities (representations in online gaming, augmented reality, and virtual reality). Project VISIBLE is focused on creating, evaluating, and deploying a research testbed and experience using XR for users to learn positive and productive sociability. The aim is to produce both a novel simulation model and a prototype as a proof of concept. An anti-racism system called Passage Home VR models how people are socialized to perceive race; it has been deployed for national online studies. It both assesses how people are socialized to think about race (e.g., appreciation of diverse cultural histories) and acts as an intervention to make people aware of bias.

The ICE Lab has also looked at ways to combat misinformation. It created an online course on misinformation and deepfake technologies that was supported by a grant from J-WEL Higher Education. In terms of learning and pedagogy, this course is designed to be engaging and dynamic while providing broader perspectives on misinformation and disinformation, past and present.

In an exploration of virtuality and health, the ICE Lab supported the development of and collaborated on a virtual reality interface that allows educators to create immersive three-dimensional audio reconstructions of patient experiences. Medical students will experience the world as patients with specific diagnoses, leading to an increase in understanding of distinctions between psychiatric diagnoses and empathy for patients.

The ICE Lab was a recipient of a number of grants, including a three-year \$930,000 grant for Computationally Supported Roleplaying for Social Perspective Taking, a two-year \$140,000 grant for Project VISIBLE, and a J-WEL Higher Education grant for Teaching Media Literacy in the Age of Deepfakes. It has also assembled a powerful group of advisors, including industry and academic experts, philanthropic supporters and advocates, and a steering committee of MIT internal experts.

### **Scheller Teacher Education Program and Education Arcade**

The Scheller Teacher Education Program (STEP) and the Education Arcade continue to explore the intersections of pedagogy and technology to promote playful, powerful learning. This past year, STEP continued to develop teachers' capacity to implement innovative and project-based learning by offering educators professional development through projects with XQ Schools and the Emerson Collective (United States), La Caixa (Spain), and the Catalyst Education Lab (Hong Kong). STEP also enhanced the MIT community's engagement with educational k–12 programs, spearheading the launch of the Undergraduate Teaching Opportunities Program, which supported 25 fall and 18 spring teaching and experiential learning programs involving more than 100 students by providing training and administrative assistance for program managers and students. In its academic offerings during this pandemic year, STEP offered online introductory classes and hybrid theory and practice classes to provide safe, effective instruction for 50 students and six student teachers. At both levels, classroom observations and student teaching took place in virtual classrooms, allowing STEP to partner with a wide variety of public schools.

Other STEP projects continued to leverage curricula and technology to engage learners in science, technology, engineering, and mathematics (STEM) domains and help them develop other skills such as computational thinking and computer-based modeling of complex systems. The EAGER-ITEST Developing AI Literacy Interventions to Teach Fundamental Concepts in AI project generated field-advancing knowledge in AI education that informed the definition of AI literacy for middle school students as well as generating recommendations on teaching AI to inform educators and curriculum designers. The project also benefited k–12 education by providing a set of tested and refined AI learning activities and assessment tools that are relevant to middle school students, broadly accessible to educators, and capable of being implemented in low-resourced sites. Still other projects explored, through design and research, innovative educational applications of mobile games and simulations, VR, alternate reality games, geolocation AR, and other experimental and nontraditional formats, including furthering the field's understanding of design principles for VR in education.

### **MIT Teaching Systems Lab**

Established in 2015 by Associate Professor Justin Reich, the MIT Teaching Systems Lab (TSL) designs, implements, and researches the future of teacher learning. TSL's multi-



pronged approach to teacher education includes using open source digital simulations to support teacher learning, reaching adult learners at scale through massive open online courses and podcasts, and building an open community of simulation users. This year, TSL staff played a pivotal role in responding to the Covid-19 pandemic, redesigning the lab's teacher fellowships to support remote math learning in the Boston Public Schools and among 24 computer science educators across the country. PI Reich provided intellectual leadership to education stakeholders in the United States and worldwide on education technology, online learning, and equity through a series of widely disseminated reports based on research documenting the lived experiences of teachers and students during the pandemic (with over 20,000 downloads combined), his recently published book *Failure to Disrupt: Why Technology Alone Can't Transform Education*, and a virtual conference on the future of math learning with 33 panelists and more than 500 registrants. Simulation-based edX courses on misinformation and equity teaching practices reached thousands of educators around the world. TSL supported MIT students and cross-registrants from Harvard and Wellesley in remote learning with a rapid syllabus redesign of the CMS.594 Education Technology Studio and CMS.595 Learning, Media, and Technology flagship courses. The lab has two research scientists, five postdoctoral researchers, one videographer and several instructional design staff, two graduate students from Comparative Media Studies and the Sloan School of Management, and 13 undergraduates who work with the lab during the year.

### **Trope Tank**

The Trope Tank was closed to the public and researchers during AY2021, and its resources were also in storage as the Hayden Library renovation was being completed. Two UROP students worked with Professor Nick Montfort and research affiliate Angela Chang to undertake new research on narrative variation using the Curveship platform. The system will also be used in 21W.765 Interactive Narrative in the fall. Volunteer graduate researcher Ardalan SadeghiKivi will pursue a project during summer 2021 with support from the Transmedia Storytelling Initiative. While the Trope Tank was unable to host in-person meetups for the local interactive fiction group PR-IF, Chang coordinated online meetings for the group, which continued throughout the year. The major goal for fall 2021 is to get the physical space in order once again for the sort of in-person collaboration (research, artistic, and learning) that has been the hallmark of the Trope Tank for its first decade.

### **Writing, Rhetoric, and Professional Communication**

Writing, Rhetoric, and Professional Communication (WRAP), a teaching and research group of nearly 40 lecturers within CMS/W, is led by Director Suzanne Lane and Associate Director Andreas Karatsolis. WRAP collaborates with MIT faculty in every department to teach written, oral, and visual communication to over 4,000 students a year in more than 100 Communication Intensive (CI) subjects. WRAP also assesses the writing abilities of incoming first-year and graduate students, teaches the foundational writing subjects (Communication Intensive in the Humanities, Arts, and Social Sciences—Writing Focused [CI-HW]) in CMS/W, and provides communication instruction to graduate students in a number of departments. This year WRAP has developed instruction for new CI subjects in Materials Science and Engineering (3.010 Structure of Materials, 3.020 Thermodynamics of Materials, and 3.056 Materials Physics of Neural Interfaces), for Course 6's new major in artificial intelligence and data science (6.800

Robotic Manipulation and 6.806 Advanced Natural Language Processing), and for the System Design and Management graduate certificate program.

Over the past year, WRAP has been specifically focused on enriching its teaching through innovations in online instruction and further development of anti-racist and inclusive pedagogy, specifically in composition and communication. The group revised syllabi and instruction to include more texts—both theory and model texts—by Black authors and to ensure that its commenting practices are informed by an understanding and valuing of multiple English dialects. WRAP developed a series of workshops on online instruction and focused staff meetings throughout the year to highlight innovative developments in both digital learning and social justice pedagogy. Despite the pandemic, this year WRAP lecturers collectively created a dozen experiential learning opportunities for MIT students, offered workshops for the MIT community, presented 17 conference talks, and published half a dozen articles.

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. The lab's primary project this year has been continuing to develop an entirely new approach to large-scale evaluation of student writing (e.g., for placement exams). The team designed a prototype of this system four years ago and then teamed with a local software company (working through MIT's Technology Licensing Office) to build a working platform. The approach incorporates "generative rubrics"—genre-based, detailed descriptions of observable attributes in student texts specific to the content of the assignment—to partially automate the feedback process. All student texts are human evaluated and the specific feedback is human selected, but the system reduces the human time involved by a factor of four, thus reducing costs while generating new, detailed data about student performance. Over the past year, ArchiMedia has been aided in developing and assessing this project by five UROP students.

The lab also completed its multi-year project, funded by a \$240,000 grant from the Davis Educational Foundation, to collaborate with science and engineering faculty in producing "disciplinary reasoning diagrams" of six different STEM fields. The team successfully completed reasoning diagrams for proof-based and applied mathematics, brain and cognitive science, mechanical engineering, computer systems engineering, materials science and engineering, and comparative media studies. These reasoning diagrams function as discipline-specific maps that visualize relationships between concepts and the reasoning patterns that connect them and thus serve to scaffold student learning and communication. The team presented a workshop on the methodology for creating these diagrams at the International Writing Across the Curriculum conference this summer and wrote an article for a special issue of *Across the Disciplines* that will be published in October.

### **Writing and Communication Center**

AY2021 was not a typical year for the Writing and Communication Center (WCC). Due to the pandemic, all WCC activities took place remotely via Zoom. However, despite the limitations imposed by the pandemic, the center had an extremely productive year. WCC was able not only to offer its usual high-quality resources to the MIT community but to expand its activities and pilot new programs.

In fact, during AY2021 WCC conducted 3,530 individual consultations, an increase of 17% relative to the previous year and 14% relative to AY2019. The percentage of sessions with graduate students increased from 49% to 57%, while the percentage of sessions with other MIT client groups, including undergraduate students, postdoctoral scholars, researchers, and faculty members, remained the same. WCC clients represented all MIT schools and programs, with the highest numbers from the Schools of Engineering, Architecture and Planning, and Science. Forty-four percent of users were monolingual English speakers and 37% were English-language learners. The remainder of users (19%) were multilingual speakers with native-like proficiency in English. According to surveys received from clients after their sessions, 99.3% of clients had successful consultations and 98.7% had engaging and helpful discussions of their projects. These high assessment rates are not surprising given that WCC has been a valuable resource for the MIT community since its inception in 1982 and its lecturers, who are all professional writers, teachers, and communicators, are tuned to the needs of the MIT community.

In addition to its major mission of teaching through individual sessions, WCC continued and even expanded its offering of workshops for all MIT community groups. During Independent Activities Period, WCC created a four-session series—Tips, Tricks, and Tools for Production Writing—geared toward graduate students and postdocs to enhance their toolkit in time management, coping with stress, avoiding procrastination, and building a community of writers. The series attracted 138 participants and will be offered again next year. WCC also offered a number of other workshops geared toward various groups of the diverse MIT community. Some workshops were designed to accommodate the needs of minority undergraduate students (workshops on science presentations) or undergraduate and graduate students in general (Critical Thinking as a Critical Writing Tool, Creating Fluid Prose, and Crafting a Compelling Abstract). Other workshops were designed for graduate students only (Writing Your Thesis Proposal, Master’s Thesis Writing, and Revising Your Teaching Statement), for staff only (Crafting Effective Emails), and for wider audiences (Research Statements for Job Applications and How to Present Engagingly). The 17 workshops that WCC offered to the MIT community attracted 465 participants and were very well received. Given the success with these virtual events, WCC will try to balance virtual and in-person workshops in the future.

Last but not least, WCC conceptualized, designed, and developed Writing Together Online (WTO), a new writing program aimed at helping MIT graduate students, postdocs, researchers, and faculty members be more productive in achieving their research and writing goals. After launching this program during the National Week of Writing, WCC conducted 19 writing sessions of 90 minutes each during fall 2020 and attracted 50 participants. Motivated by this initial success, and after securing funding through an MIT Graduate Improvement Grant, WCC expanded the program to offer 75 writing sessions in March through June with 98 individual users. The majority of WTO users were graduate students (71%), followed by postdocs (16.4%) and other groups of academic writers including lecturers, faculty, researchers, and staff. Anonymous surveys showed that the participants found these sessions very helpful. The end-of-program evaluations also emphasized that WTO helped its attendees make progress on their writing projects and taught effective practices through regular writing sessions, goal setting, and focused writing. Moreover, the program provided accountability for participants through a goal-sharing process, peer support, and checking of practices



at the end of each session. Most important, the program contributed to building camaraderie and a writing community across schools and programs.

In summary, despite the challenges of isolation and remote learning, AY2021 became a year of productive exploration for WCC and allowed the center to further engage the MIT community in communication and writing.

## **CMS/W Faculty Summaries**

### **Ian Condry**

Ian Condry received three grants in the past year to extend and expand the MIT Spatial Sound Lab, a community production studio for immersive audio teaching and performance activities. “Spatial sound” refers to new technologies that allow composers and researchers to use new computing hardware to create next-generation surround sound projects. The efforts build on the success of the Dissolve Music festival in February 2020, which drew over 500 audience members and 30 performing artists, including MIT students and faculty as well as local artists and participants from Harvard, Berklee, and the Rhode Island School of Design. In AY2021, the lab received funding from the Council for the Arts at MIT, MindHandHeart, and the Transmedia Storytelling Initiative to purchase additional equipment and hold community-building events in AY2022. The lab houses the most advanced object-based mixing technology in Boston, the d&b Soundscape, thanks to a collaboration with the German-based company d&b audiotechnik. In fall 2021, the lab will be collaborating with the new Music Innovation space in E38. In addition, the lab is working closely with Professor Erin Kara (MIT Physics) to extend research focused on gaining an understanding of the reverb characteristics of supermassive black holes.

### **Paloma Duong**

Paloma Duong was awarded a School of Humanities, Arts, and Social Sciences (SHASS) Digital Humanities Faculty Fellowship for fall 2022. She published a book chapter, “Images of Ourselves: Cuban Mediascapes and the Postsocialist Woman of Fashion,” in *Cuba’s Digital Revolution: Citizen Innovation and State Policy* (forthcoming). She also presented “Cuban Mediascapes after the End of History” at the (Post)Socialism as a Global Resource conference and “Cuban Travels” at Emerson College’s Department of Writing, Literature & Publishing. She was a panelist at the International Consortium for Critical Theory and gave talks to two student groups, MIT Cubanos and the Tau Beta Pi Engineering Honor Society, in spring 2021.

### **Fox Harrell**

Fox Harrell co-convoked the “BIAS In AI” panel at the Unfolding Intelligence Symposium and served in many capacities for students, including as a faculty supervisor to the VR/AR Club and as an advisor on the club’s AR Graduation app.

### **Heather Hendershot**

Heather Hendershot published two pieces in the *Washington Post*, “The 2020 Party Conventions Are Actually What the Parties Have Always Dreamed Of” and “Restoring the Fairness Doctrine Can’t Prevent Another Rush Limbaugh.” Her essay on the

*Creature from the Black Lagoon* trilogy appeared in *Creepy Bitches: Essays on Horror from Women in Horror*. She presented research at the Society for Cinema and Media Studies and Organization of American Historians conferences and served on the screening committee for the Peabody Awards. She was presented two Dean's Fund awards of \$2,000 each and a \$10,000 SHASS Research Fund Award to support production of her book manuscript. Most important, she completed the second half of her book, a study of network television coverage of the 1968 Chicago Democratic National Convention, an event that she takes as a pivot point for the mainstreaming and nationalization of the right-wing notion of "liberal media bias."

### **Eric Klopfer**

Eric Klopfer has been serving as head of CMS/W. He is also director of the Scheller Teacher Education Program/Education Arcade. This past year, he was awarded the MIT Class of 1960 Innovation in Education Fellowship. He had several papers published on the Education Arcade's work on virtual reality for learning; was a keynote speaker at the Institute of Electrical and Electronics Engineers (IEEE) International Conference on Teaching, Assessment, and Learning for Engineering (TALE); and co-organized the online Connected Learning Summit (which was attended by over 700 people). He also is co-PI on the new Responsible AI for Social Empowerment and Education (RAISE) initiative.

### **Tom Levenson**

Tom Levenson published a new book in May, *Money for Nothing: The Scientists, Fraudsters, and Corrupt Politicians Who Reinvented Money, Panicked a Nation, and Made the World Rich*.

### **Alan Lightman**

Alan Lightman published *Probable Impossibilities: Musings on Beginnings and Endings*, a collection of "meditative essays on the possibilities—and impossibilities—of nothingness and infinity, and how our place in the cosmos falls somewhere in between."

### **Nick Montfort**

The past year saw the publication of two of Nick Montfort's books, *Exploratory Programming for the Arts and Humanities* (second edition, The MIT Press, 2021) and the computer-generated literary book *Golem* (New Sight, 2021). Both are freely available in open access digital formats in addition to being for sale as print books. In February, he hosted CAST visiting artist Lupe Fiasco for a well-attended online conversation in advance of the Grammy Award-winning rapper's in-person visit, planned for this October. He also curated the CAST online art show *Generative Unfoldings*, which opened in April. Montfort presented a physical art installation called *Book Post* (installed for him by others on site) at the University of Bergen's Humanities Library. He continued to give talks and participate remotely in panel discussions via the New York City gallery Babycastles; at the European Society for Literature, Science, and the Arts conference; at the Electronic Literature Organization conference; at the demoparty Lovebyte; at Pittsburgh's WinterHack; at New York University; at a conference hosted by TU Braunschweig; and at a meeting of the Seattle/Tacoma Interactive Fiction Group. In addition to miscellaneous print publications, he released three digital projects online, two of them collaborations. Two interviews with him were published, one on video

and one in print. He joined the editorial board of the journal *Media-N* and continued other work as series editor of *Using Electricity* (Counterpath, Denver), co-editor of the Platform Studies series (The MIT Press), and publisher of *Bad Quarto*, which continues to release an important online computational poetry journal. Finally (but not least), he contributed as a teacher and advisor. In addition to teaching two MIT courses he had previously taught, he taught a new version of the Comparative Media Studies graduate seminar CMS.796 Major Media Texts. Due to some challenging circumstances at the University of Bergen, where he has had an affiliation, he also remotely taught a course there on computer-generated art and advised a student who completed an excellent master's thesis on TikTok.

### **James Paradis**

James Paradis has worked on expanding the CMS/W educational and research program in media and global warming this past year with two new environmental humanities classes focused on climate. The first class, CMS.375/875 Reading Climate through Media, explores how climate is constructed in the contemporary media in order to help students gain a better understanding of how views of global warming are shaped and received in the public sphere. The second class, CMS.374/876 Transmedia Art, Extraction and Environmental Justice" (cross listed in Course 4 as 4.376 under the same title), focuses on four key substances (coal, silica, uranium, and copper) and explores civic and environmental issues related to today's extractive economies and the role that artists, media makers, and transmedia producers play in shaping public perception, individual choices, and movement building toward ideas of sustainability and environmental justice. Both classes involve students in extensive project work in writing, visualization, and video making.

Paradis is also collaborating on two MIT Climate Grand Challenge projects. The first, Platform for Collaborative Climate Adaptation: Co-designing Imaginaries and Deep Listening Protocols for Procedural Justice, is focused on adaptation regimes and is being conducted in the context of the CMS Civic Design Initiative research group. The second, Strategies to Reduce Atmospheric Methane, is a climate mitigation project that proposes the development of a comprehensive program for rapid reduction of the greenhouse gas methane, which is 120 times as powerful a global warming agent as carbon dioxide and offers a good short-term target for reduction. In both projects, Paradis, a communication specialist, focuses on the use of media as an agent of behavioral change.

### **Justin Reich**

Justin Reich created three new online courses: *Becoming a More Equitable Educator*, *Sorting Truth from Fiction*, and *YouthInFront: Understanding and Supporting Student Activism*. He also produced several reports about the crisis of schooling during Covid-19:

- Remote Learning Guidance From State Education Agencies During the COVID-19 Pandemic: A First Look
- Imagining September: Principles and Design Elements for Ambitious Schools During COVID-19
- Imagining September: Online Design Charrettes for Fall 2020 Planning with Students and Stakeholders

- What's Lost, What's Left, What's Next: Lessons Learned from the Lived Experiences of Teachers during the 2020 Novel Coronavirus Pandemic
- Healing, Community, and Humanity: How Students and Teachers Want to Reinvent Schools Post-COVID

### **Paul Roquet**

Paul Roquet signed a contract with Columbia University Press for a book on VR and Japan (forthcoming in spring 2022) and published articles on virtual reality in the journals *Sound Studies* and *Media Theory* and a piece on ambient YouTube videos in *Real Life* magazine. An essay on solo animation in Japan (originally presented at the CMS colloquium) is out now in the *Routledge Handbook of Japanese Cinema*. Roquet taught CMS.100 Introduction to Media Studies and his Cinema in Japan and Korea class over Zoom.

### **Edward Schiappa**

Edward Schiappa completed a new book, *The Transgender Exigency: Defining Sex & Gender in the 21st Century*, which will be published by Routledge in 2022. He also published two articles: "Single-Sex Colleges in the U.S. & the Transgender Exigency" in the *Proceedings of the 6th Tokyo Conference on Argumentation: Argumentation & Education* (Japan Debate Association, 2021) and "In What Ways Shall We Describe Mathematics as Rhetorical?" in *Arguing With Numbers: The Intersections of Rhetoric and Mathematics* (Penn State University Press, 2021). In addition to co-teaching a first-year advising seminar, he taught CMS.701 Current Debates in Media and brought back a subject created by Henry Jenkins, CMS.621 Fans and Fan Culture. Schiappa serves as faculty liaison to the writing groups at MIT and is the CMS/W representative on the Subcommittee on the Communication Requirement.

### **Eric Klopfer**

**Head, Comparative Media Studies/Writing**