Arts Initiatives

Leila Kinney, executive director of Arts Initiatives, works on strategic planning, communications, development, and cross-school coordination for the arts. She oversees the staff of the Office of the Arts, which includes the MIT Center for Art, Science & Technology (CAST); Arts Communications; the Council for the Arts at MIT (CAMIT); Student Arts Programs; and the Student Art Association (SAA). She chairs the CAST selection committees, sets the agenda for the Creative Arts Council with the associate provost, and oversees the biennial Eugene McDermott Award in the Arts at MIT. She is an ex officio member of the executive committee of CAMIT and the advisory boards of the Catalyst Collaborative at MIT (CC@MIT), the List Visual Arts Center, and the MIT Museum. Also, she serves as the executive director of CAST.

Current Goals

The programs that fall under Arts Initiatives are designed to support all of the arts units at MIT; to bring outstanding visiting artists to campus to collaborate and cocreate with faculty and students, regardless of discipline or school; and to make MIT's outstanding arts faculty and the creative work developed at the Institute more widely known in the world. Our primary goals for the coming year are, first, to build CAST into a robust research center for the arts that can be sustained beyond its third and final grant from the Andrew W. Mellon Foundation, which extends through 2024, in part through alliances with several entities on campus that are interested in MIT's increasing reputation for creating bold new work at the frontiers of art, science, and technology. Second, as CAMIT approaches its 50th anniversary in 2022, we will engage in strategic planning to align its mission more effectively with major new opportunities in the arts that will emerge from new MIT Museum, Music and Theater Arts, and School of Architecture and Planning facilities that will open between 2021 and 2024.

Schwarzman College of Computing Launch

The arts were featured in several ways during the launch of the Schwarzman College of Computing in February 2019.

Arts Initiatives hosted Connect Arts, Community, and Computing, one of several student design challenges celebrating the new Schwarzman College. The Computing Connections Challenges were intended to showcase the many ways in which MIT is advancing computing and creating connections between disciplines. Focusing on innovation in arts and computing, the arts challenge presented interactive demonstrations of student projects ranging from large-scale murals animated with augmented reality to crowd-sourced computational astrophysics.

The challenges were set forward in two tracks: the Arts-Tech Challenge and the Mural Augmentation Challenge. Nine Arts-Tech teams presented projects incorporating arts, community, and computing. Disciplines ranged from astrophysics to cryptography and united to tackle social, ecological, and educational issues. The Mural Augmentation Challenge invited 12 MIT students to enhance large-scale murals in the Stata Building, including the 10 winning photographs from the recent Stata Street Artwork Competition

and one 10-foot mural created collaboratively by students and female inmates from the Suffolk County House of Correction.

In addition, Frontiers in Science, Technology, and the Arts, a symposium co-organized by MIT.nano and CAST, explored the intersection of cutting-edge science and technology with frontiers in artistic practice. The symposium featured faculty research and examined art forms and expressions enabled by the emergence of new materials and by advances in computing paradigms. Highlighting research, artistic collaborations, and innovations from across disciplines, each session included lightning talks, panels, and presentations from an interdisciplinary array of MIT faculty, visiting artists, and other researchers, practitioners, and innovators. The symposium was followed by the dedication of Olafur Eliasson's *Northwest Passage*, the new Percent-for-Art commission for the MIT.nano building. This site-specific piece, installed on the ceiling of the breezeway of Building 12, is the latest addition to MIT's outstanding public art collection, overseen by the List Visual Arts Center.

MIT Center for Art, Science & Technology

Established in 2012 in the Office of the Provost with a grant from the Andrew W. Mellon Foundation that has been renewed through 2024, the MIT Center for Art, Science & Technology facilitates and creates opportunities for exchange and collaboration among artists, engineers, scientists, and scholars in the humanities. A joint initiative of the Office of the Provost, the dean of the School of Architecture and Planning, and the dean of the School of Humanities, Arts, and Social Sciences, CAST is committed to fostering a culture in which the arts, science, and technology thrive as interrelated, mutually informing modes of exploration, knowledge, and discovery. The center's role is to affirm, energize, and reinforce the inherent synergy between these modes of thought and action.

It does so by collaborating with departments, labs, and centers across the Institute in four primary areas of activity. To integrate the arts throughout the curriculum, the center supports the development of new classes that reach across disciplines and majors. To enrich and encourage artistic collaborations, it looks for unexpected partnerships for visiting artists and seeks to embed residencies in ongoing research and teaching at MIT. To encourage the experimental phase of artistic creation, it provides creativity seed funds and research grants for faculty, research staff, and instructional staff throughout the campus. To share this creative work and knowledge with the public, CAST produces concerts, symposia, exhibitions, and publications in multiple media platforms. Since its inception, the center has awarded more than \$2.75 million in grants to more than 140 projects and worked with nearly 100 collaborators whose proposals are selected by a faculty committee in response to a biannual call.

Administrative Initiatives

In its early years, CAST had two funding streams: faculty grants and visiting artists. Through successful fundraising and in order to meet rising demand, the center now has six funding streams, including two new ones awarded in the current academic year. The Cross-Disciplinary Class Development Fund is available to full-time faculty and lecturers to develop new classes that integrate the arts into the core curriculum and engage students from across the Institute in producing new artistic work. The

International Performance and Exhibition Fund is intended to defray the costs of a performance, exhibition, installation, or other creative project that will appear in a major international venue within two years of application.

Faculty, full-time instructors, and principal research and curatorial staff from across the Institute, regardless of discipline, are invited to apply for funding and production support in response to a biannual call, and proposals are awarded by a faculty selection committee that includes two graduate student representatives. In AY2019, along with nine continuing projects, CAST awarded \$500,000 in funding for 17 projects commencing in AY2020 from a total of 23 submissions, including new awards for one distinguished visiting artist, five Mellon Faculty Grants, six visiting artist grants, four Fay Chandler Creativity Grants, and a cross-disciplinary class development grant.

Programs

MIT Performing

AY2019 marked the inaugural season of MIT Performing, a prototyping and presenting series curated by Professor of Music and Theater Arts Jay Scheib. Based in MIT's new Theater Arts facility, MIT Performing promotes research-based artistic practices across disciplines, fostering new platforms for contemporary performance and bringing MIT's signature impulse for cross-disciplinary collaboration to the continued development of new and exciting performance platforms. The series debuted in November 2018 with the premiere of Andrew Schneider's "synaptic" physical-theater work NERVOUS/SYSTEM. The season moved into 2019 with three powerhouse women—the boundary-smashing acrobat-dancer-comedian Adrienne Truscott, the Irish actor and Beckett specialist Lisa Dwan, and the multidisciplinary phenom Ayesha Jordan—and culminated with a work-in-process presentation of *In the Jungle of Cities* (inspired by Bertolt Brecht's play) directed by Scheib.

THIS with Adrienne Truscott

Adrienne Truscott is a choreographer, circus acrobat, dancer, writer, storyteller, and comedian. As part of the inaugural MIT Performing series, Truscott's residency featured performances in February 2019 of her latest solo work, *THIS*, in Building W97. *THIS* is a brash, nonlinear confessional that bounces from 2017 feminism to the presidency to unconventional urban living. *THIS* explores the role of the dancer—and the role of the female body—in the real world with a hypnotic female spirit. Truscott mines her past and current large group and solo pieces for material available for theft and repurposing.

Line by Line with Ayesha Jordan

In a weeklong residency with collaborator Justin Hicks, multidisciplinary performer and creator Ayesha Jordan developed a work-in-progress version of *Line by Line*, a new work exploring the excavation of heritage and blended traditions specifically related to African American and creole cultures of Louisiana. Jordan and Hicks used their research as a backdrop to compose music, lyrics, and text incorporating the sounds of creole music culture, zydeco, and New Orleans bounce, as well as elements of second lines. The work-in-progress presentation on February 15, 2019, supplied the blueprint for Jordan's upcoming project *Shasta Geaux Pop: The Return Remixed*, premiering during The Shed's 2020 inaugural season in New York.

"A Body of Beckett" with Lisa Dwan

Lisa Dwan, acclaimed Irish actress, producer, and director, examines the role of dance in Samuel Beckett's work and the conversations he was having with the human body. "A Body of Beckett," her lecture/demonstration in Building W97 on February 21, 2019, explored the expansive metaphysical world where our identities exist. Dwan examined how the interior monologues in Beckett's *Texts for Nothing* push language to the brink of breakdown, unlocking Beckett's contemporary relevance to gender, identity, and the human condition.

In the Jungle of Cities

The inaugural season of the MIT Performing series culminated with a presentation inspired by Bertolt Brecht's genre-smashing play *In the Jungle of Cities* in Building W97 on May 17, 2019. Directed by Professor Scheib in collaboration with the student class ensemble of Theater Arts' 21M.842 Live Cinema Performance, *In the Jungle of Cities* chronicles a battle of violent determination between a lumber-dealing businessman and an impoverished bookseller. Precariously pitched between success and squalor, capital and pain, and self-loathing and an overwhelming desire to flee from reconciliation at all costs, this new prototype performance was a multi-platform cautionary tale on the true virtues of being thick skinned.

MIT Sounding

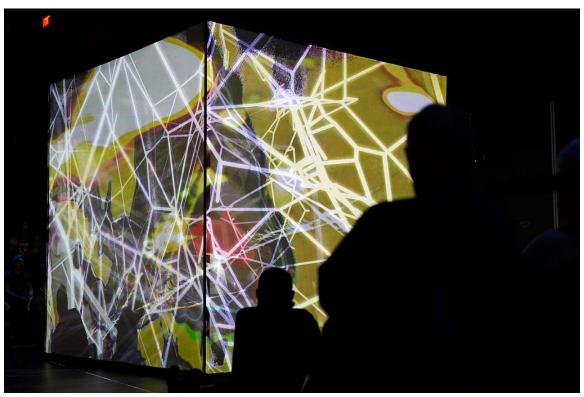
One of CAST's most important public-facing initiatives, MIT Sounding has been built around combining what is next in music, technology, and culture with a global foundation. The fifth season of MIT Sounding, curated by Evan Ziporyn, faculty director of CAST and Kenan Sahin Distinguished Professor of Music, continued to present unique artists who push the envelope of their respective genres, creating new, evolving music for the 21st century. The series opened with a familiar face, Jacob Collier, who returned for a two-week residency with the MIT Festival Jazz Ensemble, where he continued his groundbreaking collaboration with Ben Bloomberg at the intersection of music and technology and performed an album release concert featuring music from his new work, Diesse Vol. 1 (see more about his residency below). In February, the season continued with the American premiere of Spider's Canvas / Arachnodrone, a virtual 3D reconstruction of a spider's web in which each strand is "tuned" to a different note, creating a virtual sonic landscape to be used as the instrument through which the musician traversed, like a spider through its web. April featured Haitian rapper, poet, and singer BIC (see more about his residency below), performing his work in Kreyòl with musicians, dancers, and performers from MIT and the greater Cambridge area, and an 80th-birthday celebration for Institute Professor John Harbison featuring Dawn Upshaw and Institute Professor Marcus Thompson, with performances by the Boston Modern Orchestra Project at Jordan Hall. The season closed with a solo piano recital by Joel Fan featuring a bold selection of works by MIT composers.

Spider's Canvas / Arachnodrone

Spider's Canvas / Arachnodrone is an immersive performance/installation that allows audience members to experience "life in the web." A co-creation of an interdisciplinary team brought together by CAST and based closely on a tent-web made by a South American spider, the work is not simply interdisciplinary but quite literally an interspecies collaboration. Project team members included CAST faculty director Evan

Ziporyn, composer/visual artist Christine Southworth '02, sound artist and Music and Theater Arts lecturer Ian Hattwick, and spider researcher Isabelle Su in collaboration with visiting artist Tomás Saraceno and McAfee Professor Markus Buehler, head of the Department of Civil and Environmental Engineering.

The piece had its premiere in November 2018 as part of Saraceno's acclaimed *ON AIR* exhibition at Palais de Tokyo in Paris. It then had its US premiere in February 2019 as part of the MIT Sounding series. It was performed in the Building W97 theater for soldout audiences over its three-day run. Following the February live performances, *Spider's Canvas / Arachnodrone* was placed in the Immersion Lab at MIT.nano as an audiovisual installation and accompanied by pop-up performances for the Cambridge Science Festival in April and MIT commencement week in June.



Spider's Canvas / Arachnodrone installation at MIT. (Photo by Leon Yim)

John Harbison's 80th Birthday at Jordan Hall

On April 7, 2019, in Jordan Hall, the Boston Modern Orchestra Project performed works by Institute Professor John Harbison in honor of his 80th birthday. Featured were *Remembering Gatsby (Foxtrot for Orchestra)*; Dawn Upshaw performing Harbison's *Milosz Songs, Symphony No. 6*; and the *Concerto for Viola and Orchestra* with MIT Institute Professor Marcus Thompson.

Don't Want to Wait with Joel Fan

Over the spring 2019 semester, Joel Fan worked with MIT music composition students to provide feedback on their work for solo piano, visited a broad selection of music classes, and on April 18 performed a bold selection of works by MIT composers including Keeril Makan, John Harbison, Evan Ziporyn and Christine Southworth, Charles Shadle, and

Elena Ruehr. Celebrated for his exuberant virtuosity and a bold repertoire that embraces piano classics and inspired discoveries of contemporary and world music, Joel Fan reinvents the piano recital by illuminating the rare and unexpected.

Mellon Faculty Grants

Full-time faculty can apply for Mellon Faculty Grants to develop research or creative projects with a significant impact on campus or beyond. Recent recipients are listed below.

V. Michael Bove, Media Laboratory

V. Michael Bove and David Levine, professor of the practice in theater, dance, and media, are investigating the possibilities of 360-degree 3D holographic films in their project Volumetric Cinema. During Independent Activities Period (IAP) and spring 2019, Bove, Levine, and seven students explored volumetric cinema through the development of a set of experimental films. In fall 2019, the project will culminate in the creation of a short film produced and screened on a Voxon VX1, a cutting-edge 3D volumetric display.

Gediminas Urbonas, Program in Art, Culture and Technology

Gediminas Urbonas's Mellon Faculty Grant supported The Swamp School, an experimental branch of The Swamp Pavilion, Lithuania's representation at the 2018 Venice Biennale of Art and Architecture. The Swamp School brought together artists, architects, designers, urbanists, and philosophers to challenge conventional concepts of territory through experiments in design, pedagogy, and artistic intelligence. Events at The Swamp School included installations, performances, and presentations by MIT faculty and graduate students, primarily from the Program in Art, Culture and Technology (ACT).

Joseph A. Paradiso, Media Laboratory

Joseph Paradiso, in collaboration with Marie-Pier Boucher (a postdoctoral fellow in the MIT Program in Science, Technology and Society) and Xin Liu (arts curator in the Media Lab Space Exploration Initiative), received a CAST Mellon Faculty Grant to support their Diversifying Space project. The project brought artist Agnes Meyer-Brandis to MIT in March 2019 for a weeklong residency during which she presented at the Media Lab's Beyond the Cradle conference, gave a public lecture on her work, and led a workshop in Marie-Pier Boucher's STS.058 Space Exploration and Interplanetary Habitation class.

Ana Miljacki, Department of Architecture

Ana Miljački leads the Critical Broadcasting Lab, an initiative that challenges norms of architectural production and dissemination through new forms of operative criticism. Through a series of interventions including workshops and public lectures, the Critical Broadcasting Lab serves as a curatorial entity at MIT and beyond. In a series of Agit Arch experiments in fall 2018, Miljački and participants from the lab investigated contemporary media and methods of broadcasting architectural discourse and criticism.

Pawan Sinha, Department of Brain and Cognitive Sciences

During the past year, 9.S52/9.S916 Vision in Art and Neuroscience introduced students to core concepts in visual perception through the lenses of art and neuroscience. The

course was taught by Pawan Sinha; Seth Riskin, director and co-founder of the MIT Museum Studio; and Sarah Schwettmann, a PhD student in intuitive physics in the Department of Brain and Cognitive Sciences.

Students engaged with these concepts through hands-on studio practice as a means to explore and visualize the principles of perception. Using light as a medium and the darkroom as a canvas, students externally visualized stages of internal neural processing, ultimately synthesizing the material in their own studio work, which culminated in an exhibition at the MIT Compton Gallery and a symposium titled Interstitial Illumination. Vision in Art and Neuroscience, the first Brain and Cognitive Science course of its kind at MIT when it was offered in fall 2017, was offered for the second time in fall 2018.

Fay Chandler Creativity Grants

Full-time instructional staff can apply for Fay Chandler Creativity Grants to subsidize a creative project that will be publicly presented within a year of the award. Recent recipients are as follows.

Ken Urban, Music and Theater Arts

Director Logan Vaughn, dramaturg Ignacia Delgado, and actors Heather Alicia Simms, Eddie Kaye Thomas, Naomi Jacobson, and Jordan Geiger came together at MIT to work with Ken Urban to workshop his new play, *The Immortals*. A comedy, *The Immortals* tells the story of Alice, the only black junior academic in the English department at a mostly white elite university; as Alice battles her way toward tenure amidst professional and personal obstacles, she cannot stop thinking about the story of Henrietta Lacks, the woman whose immortal cells were exploited by science. The workshop with theater professionals took place at MIT in March 2019 and culminated in two staged readings at the Building W97 theater that contributed to the development of Urban's work in progress. Urban's eight playwriting students observed the workshop in preparation for workshopping their own plays for the MTA Playwrights Lab.

Brandon Clifford, Department of Architecture

Brandon Clifford collaborated with composer Ashley Fure to create *Filament: Megaphones at the New York Philharmonic*. Clifford designed a set of unique megaphones for Fure's new composition; the megaphones were prototyped at the American Academy in Rome and the P-E-O-P-L-E Festival in Berlin, and they premiered at the New York Philharmonic in September 2018. With the megaphones, Clifford aimed to democratize the listening experience throughout the audience. A group of CAST and CAMIT affiliates attended the premiere together in New York City.

Stephanie Frampton, Literature

Stephanie Frampton received CAST funding to support ARTificial Intelligence, an ongoing series of public provocations and conversations centered on the intersections of artificial intelligence (AI) and art. In November 2018, ARTificial Intelligence presented The Laughing Room, a project by MIT PhD student Jonny Sun in partnership with the Cambridge Public Library and the MIT Hayden Library. The Laughing Room is an

artificially intelligent room that plays a laugh track whenever participants say something the room's algorithm deems to be funny. The project will be featured in the Wiesner Student Art Gallery in AY2020.

Mikael Jakobsson, Comparative Media Studies

Mikael Jakobsson designed a counter-colonialist board game with Mary Flanagan, the Sherman Fairchild Distinguished Professor in Digital Humanities at Dartmouth College; Aziria Rodríguez Arce, a graduate student in Comparative Media Studies; and the Game Lab. The team aims to address the hopes and struggles of the people of present-day Puerto Rico, contrasting existing games that depict colonialist and Eurocentric histories.

In July 2018, Jakobsson and his team led a class at the University of the Andes in Bogotá and workshops at the Universidad del Sagrado Corazón in San Juan and MIT in which professional game designers, students, and others from Colombia and Puerto Rico shared their ideas and experiences and created game concepts. The team held workshops at MIT in July and January to present findings from the conceptualization workshops as a background for design exercises and analyses of contemporary board games with colonialist themes. The focus of these workshops was to encourage participative game design practices, provide methods participants could take away for use in their own work, and inform understanding of issues resulting from colonialist practices.

International Exhibition and Performance Grants

CAST launched this category of grants in spring 2018, with the first grant awarded for AY2019. Funds are intended to defray the costs of a performance, exhibition, installation, or other creative project that will appear by invitation in a major international venue within two years of application.

ACT professor Judith Barry was awarded an International Exhibition and Performance Grant in support of *Something in Mind*, a new work and the centerpiece of a solo exhibition at HOME arts center in Manchester, England. The exhibition, scheduled to open in January 2019, was delayed due to the venue's lack of funds, and a new date and venue have not been determined.

Visiting Artists

Faculty or program directors can apply for grants for collaborative projects with visiting artists. Visiting artist projects must include student engagement and a public presentation and may include master classes, participation in the regular curriculum, or research and development of new artistic work. CAST also offers small grants for exploratory visits for potential visiting artists, which can be helpful in establishing the basis for collaborations and full-fledged proposals. In addition, two distinguished visiting artists are appointed by a curatorial advisory committee for one academic year and are eligible for a single renewal of their residency. The Dasha Zhukova Distinguished Visiting Artist Program is targeted toward creators from across the disciplines of art, architecture, and design, while the Mellon Distinguished Visiting Artist Program is open to creators from any performing arts discipline.

Dasha Zhukova Distinguished Visiting Artist Matthew Ritchie was in residence at MIT in AY2019 to develop new work in collaboration with a team of MIT faculty and students including Evan Ziporyn, Markus Buehler, and PhD student Sarah Schwettmann. During eight residency visits over the course of the academic year, Ritchie guest lectured in two classes; led a roundtable discussion for graduate students; participated in the Met x Microsoft x MIT art and artificial intelligence hackathon; presented at the Frontiers in Science, Technology and the Arts symposium during the launch of the MIT Schwarzman College of Computing; and gave the keynote at the MIT Computer Science and Artificial Intelligence Laboratory (CSAIL) gala.

The project Ritchie is developing at MIT is a site-specific work that uses artificial intelligence to create new images and sounds for a virtual reality (VR) experience. Ritchie's Dasha Zhukova Distinguished Visiting Artist appointment was renewed for AY2020, when he will present his final project.



Matthew Ritchie, Dasha Zhukova Distinguished Visiting Artist at the MIT Center for Art, Science and Technology, presents his AI project at the Metropolitan Museum of Art as part of the Met x Microsoft x MIT hackathon in February 2019. (Photo by Sean Hanratty)

Mellon Distinguished Visiting Artist Exploratory Visits

As part of the selection process for the Mellon Distinguished Visiting Artist grant, CAST conducted two exploratory visits with artists suggested by the curatorial advisory committee.

Jacob Collier

Celebrating the December 7, 2018, worldwide release of *Djesse Vol. 1*—the follow-up recording to the 2017 double-Grammy-winning *In My Room*—Jacob Collier preempted his world tour with a one-of-a-kind sold-out performance in Kresge Auditorium on December 8. MIT has been an artistic home away from home for him over the past

several years. This MIT Sounding concert featured the MIT JC Orchestra (composed of MIT and Berklee College musicians), the MIT Festival Jazz Ensemble, the MIT Vocal Jazz Ensemble, the MIT Concert Choir and Chamber Chorus, Rambax MIT (a Senegalese drumming ensemble), Suzie Collier (Jacob's mom), and other special guest musicians from Boston and Los Angeles. The concert included the first live performance of "With The Love In My Heart," adapted by Jamshied Sharifi, and rarely heard orchestral arrangements along with musical surprises. Collier's return to MIT followed the success of his 2016 large-scale concert and subsequent New England Emmy–winning documentary about that event, *Imagination Off The Charts: Jacob Collier Comes to MIT*.

In addition to working with CAST and Frederick Harris on the performance, Collier visited classes, met and rehearsed with students, and collaborated with MIT's master audio technologist Ben Bloomberg, media experience artist Peter Torpey, and other MIT artists including Laura Grill Jaye (MIT Vocal Jazz Ensemble director), William Cutter (MIT Choirs conductor), and Senegalese drumming master Lamine Touré (Rambax MIT director).

BIC

BIC is a Haitian rapper, poet, and singer who began working with Professor of Linguistics Michel DeGraff and Professor of Digital Media Nick Montfort in fall 2017 to create digital literary art in Kreyòl. They used "Sentaniz," a well-known story written by Haitian writer Maurice Sixto, as the storytelling basis for BIC's digital work titled *Sentaniz Nimerik*.

The cross pollination of Kreyòl linguistics, poetry, computer science, and music continued at MIT for one week in April 2019. As part of MIT Sounding, BIC performed his work at the Kafe Kreyòl on April 3 and on campus on April 5 in collaboration with musicians, dancers, and performers from MIT and the greater Cambridge area. BIC's residency included workshops in Kreyòl digital poetry and storytelling through dance and movement, visits to four classes ranging from popular world music to contemporary social and linguistic challenges of the black diaspora, and rehearsals with Rambax MIT. The residency aimed to facilitate opportunities for both the MIT community and the broader Haitian community in and around Boston to experience new cultural expressions of digital poetry and music making in Kreyòl.



BIC with Rambax MIT. (Photo by Leon Yim)

Hussein Chalayan

Hussein Chalayan is a London-based fashion designer known for innovative and technology-focused design. As a CAST visiting artist, Chalayan worked with Assistant Professor of Architecture Skylar Tibbits and his team at the Self-Assembly Lab to create active, transformable fashion—innovative pieces that unite Tibbits's self-assembling, programmable materials with Chalayan's inventive designs. Chalayan traveled to MIT in December 2018 to work on prototypes at the Self-Assembly Lab and is scheduled to return once more in AY2020.

Agnieszka Kurant

Conceptual interdisciplinary artist Agnieszka Kurant collaborated with CSAIL principal research scientist Boris Katz to explore the crossover between collective intelligence and artificial intelligence. Kurant and Katz analyzed how collective intelligence and emergence, in both nature and culture, could be applied to creativity and art production. Their research was used to conceptualize crowd-sourced artworks shaped and animated by a new working class—workers of online crowdsourcing marketplace platforms.

Kurant's residency culminated with Collective Intelligence, a panel that was part of the Comparative Media Studies/Writing lecture series. Kurant reflected on outsourcing her artworks to human and non-human collective intelligence and the system of profit sharing she has created, artworks as complex systems or collective tamagotchis emulating life, and the observable evolution of individual authorship, culture, nature, labor, and society. Kurant and Stefan Helmreich (professor of anthropology), Caroline Jones (professor of history, theory, and criticism of architecture and art), and Adam Haar Horowitz (a master's student and research assistant in the Fluid Interfaces Group) discussed the idea of collective intelligence in relation to emerging technology, artistic inquiry, and social and cultural movements. The panel was moderated by Professor Montfort.

Diemut Strebe, Ida Ely Rubin Artist in Residence

Diemut Strebe and Professor of Aeronautics and Astronautics Brian L. Wardle worked to develop a method to cover objects with a grown "forest" of carbon nanotubes (CNTs), which absorb 99.965% of light, creating the blackest black material on earth.

The artwork *The Redemption of Vanity* will be made using a 16.78 carat natural yellow diamond (valued at \$2 million) provided by L.J. West Diamonds. The diamond is coated with a new material proven to be the blackest black on earth, making the diamond seem to disappear into an invisible void. Created with patented CNT technology newly developed by Professor Wardle and necstlab at MIT, this blackest black is the most light-absorptive material accessible today and is available for any artist to use.

After a series of experiments in the spring, Wardle and Strebe are finalizing the process of applying the CNT coating to the diamond and expect to exhibit the work in fall 2019 at the New York Stock Exchange.

Hyphen-Labs, Ida Ely Rubin Artist in Residence

Hyphen-Labs collaborated with faculty and researchers in several MIT labs: Imagination, Computation, and Expression; Synthetic Neurobiology; and the Center for Civic Media. Hyphen-Labs conducted research for the next phase of NeuroSpeculative AfroFeminism, a three-part digital narrative at the intersection of product design, virtual reality, and neuroscience that explores the lack of multidimensional representations of black and brown women in technology and futurism.

In fall 2018 Hyphen-Labs worked with Danielle Olson, a PhD student in CSAIL, to adapt Olson's assessment toolkit that was used in her SM thesis and will be incorporated in Hyphen-Labs's VR experience. The assessment was distilled into a user-friendly format that directly led to customizing the VR content and provided an opportunity for future analysis of the data collected.

Karin Coonrod

Professor of Literature Diana Henderson hosted theater maker and artistic director Karin Coonrod at MIT to develop text-based theatrical works. Coonrod focused on crossing boundaries between the arts and humanities and working with old and new technologies and texts such as <code>Judith</code>, the Anglo-Saxon companion manuscript to <code>Beowulf</code>. A music/text/ chamber/hybrid/opera, <code>Judith</code> privileges a Hebrew/Anglo-Saxon modern heroine as a strong-hearted deliverer of her suffering people. Drawn from the Anglo-Saxon epic fragment of the same name, <code>Judith</code> investigates the psychology of the heroine in confrontation with the tyrant through the lens of the story of the English language. Coonrod created a text to be sung and spoken in Anglo-Saxon and in modern English rooted in Anglo-Saxon. The opera's composer and musical director is Paul Vasile, with whom Coonrod collaborated closely on the medieval mystery plays performed in Orvieto and New York City.

Coonrod led workshops with professional singers Sarah Heltzel and Sorab Wadia and MIT students Carles Boix, Allison Hamilos, Srinivasan Raghuraman, and Rachael Skye. Associate Professor Arthur Bahr and undergraduate student Carissa Skye provided Anglo-Saxon training for the cast. Undergraduate student Derek Yen joined Carissa Skye as an Anglo-Saxon speaker in the public performance. During the workshops at MIT, Coonrod was able to complete movements 1 and 2 of the opera and hear it for the first time with the five singers, five instruments, and three Anglo-Saxon speakers.

Judith was presented at the theater in Building W97, and Professor Henderson moderated a talk back with the audience.

Thom Kubli

Multidisciplinary artist and composer Thom Kubli is collaborating with Jerome B. Wiesner Professor of Media Arts and Sciences Hiroshi Ishii and members of the Media Lab's Tangible Media Group to develop a 3D printer capable of creating ultra-light hollow shapes filled with helium.

Kubli and Ishii are working with researchers in the Department of Materials Science and Engineering (DMSE) as well as faculty in the Department of Architecture to determine the necessary properties for a lighter-than-air printing material and investigate construction algorithms for 3D printed objects that take into account particular material properties in relation to an embedded helium core.

Kubli envisions the sculptures as artistic references to other objects that have had cultural impact in the pantheon of modernity, such as spacecraft and smartphones. The sculptures will circulate for an unlimited period of time in zero gravity as a new form of space debris that evokes the encyclopedic collections of objects found in Wunderkammer, the cabinet of curiosities of the European Renaissance.

During two visits to MIT, Kubli worked with faculty and researchers in the Tangible Media Group and DMSE to conduct experiments with ultra-lightweight materials and develop simulation and design software for 3D printing. The project team meets biweekly with Kubli via video conference.

Jenna Sutela

Artist Jenna Sutela was born in Finland and now lives and works in Berlin. Active in video, performance, sound art, sculpture, and installations, Sutela is known as a "bioartist." She works with living creatures, primarily bacteria and fungi, that appear in her sculptural installations, in her performances, and as moving inspirations for AI languages. During her 2019–2020 residency with CAST and the Department of Architecture, she hopes to investigate life forms that survive in extreme environments as part of her exploration of microscopic life.

Sutela's work is multimodal, involving sound art, music composition, computational poetry, and performance art as well as the standard artistic genres of sculpture, new media, and installation. She writes and theorizes on topics such as AI, biological computing, synthetic biology, and natural/artificial languages.

During an exploratory visit to MIT in February 2019, Sutela met with potential faculty collaborators to explore opportunities to stimulate curiosity-driven research.

Communications

The communications effort in the Office of the Arts is devoted to making the arts at MIT more widely known, regardless of discipline or department. External coverage in prominent news outlets and periodicals is a primary concern and fills a gap not addressed by the News Office or elsewhere at MIT. Twenty-seven blog posts and 31 Campus News articles were published in AY2019 (blog posts were written by freelancers now that we no longer have a research writer on staff). The most popular blog post, "Transforming a Rough Childhood in Rural Louisiana into a Graphic Novel," reached almost 700 readers. Articles on the arts at MIT featured visual and performing artworks made or produced by MIT visiting artists, faculty, students, and alumni as well as exhibitions and arts events on campus.

Media Coverage

The Met x Microsoft x MIT project including the work of CAST distinguished artist Matthew Ritchie was covered widely in national media outlets such as the *Wall Street Journal* and Artnet. *Spider's Canvas / Arachnodrone* garnered media interest from the *Washington Post* and Australian radio. CAST executive director Leila Kinney was featured in an extended interview on WBAI/WGBH radio about the intersections of art and technology at MIT. WBUR featured visiting artist Jacob Collier's collaboration with Media Lab graduate student Ben Bloomberg. WBUR also covered the Suffolk County

House of Correction Mural Project in a radio segment with MIT students. Profiles of PhD student Jonny Sun in both the *Boston Globe* and the *New York Times* mentioned The Laughing Room. *Theater Times* covered the MIT Performing Ayesha Jordan residency, which represented the first time we have appeared in that publication. The *Boston Musical Intelligencer* published a very positive feature, "A Rewarding Harbison Tribute," about the MIT Sounding John Harbison 80th-birthday concert at Jordan Hall.

The Boston Globe continued to cover the Kurtz Gallery of Photography's exhibitions at the MIT Museum, as they have for nearly every exhibition since the gallery opened. The photography exhibition Imagined Communities: Photographs by Mila Teshaieva was very well received in a Boston Globe review stating that "Teshaieva is the latest in an impressive roster of contemporary European photographers brought to the museum by MIT's Gary Van Zante, who curated the show." The exhibition also received positive reviews in The Brooklyn Rail and Photograph magazine. The Arresting Fragments: Object Photography at the Bauhaus exhibition at the MIT Museum was featured in the Boston Globe and Art New England magazine.

I.M. Pei's passing was covered in obituaries in the *New York Times*, on WGBH and WBUR, and in many national and international publications, and almost all mentioned his education at MIT. The *Boston Globe* included an article discussing his buildings on the MIT campus, among others in the Boston area.

Website and Electronic Communications

Arts at MIT publishes a comprehensive view of arts news, resources, stories, and events from across the Institute on the arts portal. The site serves more than 132,000 visitors annually, including members of the MIT community as well as external international and domestic audiences. Information is also distributed regularly via email to more than 11,000 alumni and 3,400 subscribers worldwide. Arts at MIT social media accounts reach 35,000 followers via Facebook, Twitter, Instagram, and YouTube.

In 2018, a digital timeline of the history of Arts at MIT was added to the portal and includes milestones representing many departments, labs, and centers at the Institute dating back to MIT's founding. Arts at MIT also commissioned the *MIT Architectural Tour* video to showcase the unique architecture on MIT's campus, and the video was featured on MIT News. The Arts at MIT communications staff produced several short videos about in-house CAST projects, including Andrew Schneider's residency and MIT Performing production, the \$15,000 Creative Arts Competition, and The Laughing Room.

We also tracked our most popular posts based on engagement. On Facebook, the most popular post was about the Suffolk County House of Correction Mural Project. On Twitter, the most popular post was about BIC's concert at MIT as part of the MIT Sounding series. On Instagram, the most popular post featured *The Beautiful Brain* exhibit at the MIT Museum. The #MITPerforming campaign was particularly successful in terms of both reach and engagement.

Council for the Arts at MIT

The Council for the Arts at MIT was founded in 1972 by MIT president Jerome B. Wiesner. With its enthusiastic advocacy for all of the arts at MIT, the council's mission is

to act as a catalyst for the development of a broadly based, highly participatory program in the arts firmly founded on teaching, practice, and research at the Institute. Council members are alumni and friends with a strong commitment to the arts and serving the MIT community.

At the start of the year, MIT president L. Rafael Reif appointed Susan M. Poduska to a one-year term as interim chair of CAMIT for FY2019 and Hyun-A C. Park to a three-year term as CAMIT chair starting in FY2020. CAMIT director Rachel Bennett worked closely with the executive director of Arts Initiatives, the associate provost with responsibility for the arts, and council leadership on planning, including planning for several executive committee transitions.

McDermott Award Selection Committee (Susan Poduska, Chair)

The Eugene McDermott Award in the Arts at MIT, presented by CAMIT, was established in 1974 by Margaret McDermott (1912–2018) in honor of her husband, Eugene McDermott (1899–1973), co-founder of Texas Instruments and long-time friend of MIT. The award reflects MIT's commitment to risk taking, problem solving, and connecting creative minds across disciplines.

This year the McDermott Award selection committee met several times and selected the 2020 award recipient, who will be announced in fall 2019.

Awards Committee (Nancy Lukitsh, Chair)

The Student Art Awards Committee recognized nine MIT students for outstanding accomplishments in the arts.

Grace Yin '19 (electrical engineering and computer science) received the 2019 Louis Sudler Prize in the Arts for excellence as a violinist and scholar. The Sudler Prize recognizes a graduating senior who has demonstrated excellence in any artistic discipline.

Amalia Lee '19 (materials science and engineering and music), Pip Mothersill G (media arts and sciences), Garrett Souza '19 (electrical engineering and computer science), and Gary Zhexi Zhang G (Program in Art, Culture and Technology) received the 2019 Laya and Jerome B. Wiesner Student Art Awards. The Wiesner Awards recognize outstanding achievement in and contributions to the arts at MIT.

Guillermo Bernal G (media arts and sciences) finished first in the 2019 Harold and Arlene Schnitzer Prize in the Visual Arts. Erin Genia G (Program in Art, Culture and Technology) received the second prize, Emily Toomey G (electrical engineering) was awarded third place, and Dipo Doherty G (integrated design and management) received an honorable mention. The Schnitzer Prize, established by Harold and Arlene Schnitzer in 1996, is awarded for excellence in a body of artistic work.

Annual Meeting Committee (Margaret Dunn, Chair)

Forty CAMIT members, in addition to MIT students, faculty, staff, and other guests, participated in the council's 46th annual meeting, which took place April 3–5, 2019. Highlights of the meeting included a presentation by Theater Arts faculty who had received CAMIT funding in their first year in Building W97; an immersive performance of *Synesthesia*

Suite at the Museum of Science, supported in part by CAMIT; and a Boston Symphony Orchestra concert conducted by 2010 McDermott Award winner Gustavo Dudamel.

Grants Committee (Niels Cosman, Chair)

This year, the CAMIT grants committee awarded \$132,046 to support 32 projects by MIT students, faculty, and staff. Outstanding projects included the following:

- Undergraduate student Garrett Souza expanded *Infinite* magazine and launched MIT Design Week. These grassroots initiatives bring together art, technology, design, and fashion.
- Undergraduate student Siranush Babakhanova worked with students and faculty
 at MIT and Arizona State University to create Neoperceptions, a new LED-based
 live performance technology. The technology was developed for Synesthesia Suite,
 an interactive concert at the Museum of Science featuring music by artist and
 composer Mary Bichner.
- Graduate student Devi Lockwood created and launched 1,001 Stories, an
 interactive exhibition of stories about water and climate change from around the
 world presented at the Cambridge Science Festival.
- Senior lecturer Sara Brown took part in the House of Correction Mural Project, in which MIT students and incarcerated women in the Suffolk County House of Correction collaborated to paint a mural in the facility's community room.

Ten undergraduates and student groups, 10 graduate students, five faculty members and lecturers, and seven staff members received funding this year. In addition to this support, the grants committee continued the director's grants program, which awarded \$7,840 to support 18 projects by and for undergraduate students and student groups. The committee also continued to support a seed fund for projects by graduate students in the MIT Program in Art, Culture and Technology.



Students taking part in the LIMINAL fashion show during MIT Design Week. (Photo by Leon Yim)

Membership and Nominating Committee (Hyun-A Park, Chair)

At the end of FY2019, the council was made up of 83 full members, eight ex officio members, two honorary members, and nine associate members. This year CAMIT

welcomed eight new members: John J. Alam, Niels J. Cosman, Susan Eve Haar, Caroline Huang, Nedra A. Kalish, Sheila P. Lemke, Brigette B.J. Noh, and Robert S. Scalea. Long-time member John C. Kern, past member Ruth Bowman, and honorary member I.M. Pei passed away in FY2019.

Over the summer, the nominating committee welcomed several members to new roles on the executive committee: Karen W. Arenson (chair, communications), Niels J. Cosman (chair, grants committee), Margaret M. Dunn (chair, annual meeting committee), Nancy T. Lukitsh (chair, Student Art Awards Committee), and Charles F. Stone III (past chair). It also welcomed the following members to new roles as committee vice chairs of: Sheila P. Lemke (grants committee), Janet B. Plotkin (annual meeting committee), Caroline Wang (Arts Scholars Committee), and Tracy Taylor Wydra (Student Art Awards Committee).

Annual Allocations and Ticket/Membership Programs

In 2019, the council continued to provide support to the MIT Program in Art, Culture and Technology; the Center for Art, Science & Technology; the List Visual Arts Center; the MIT Museum; Student Arts Programs; and other important arts organizations on campus.

It also continued partnerships with Boston-area cultural organizations including the Boston Ballet, the Boston Symphony Orchestra, the Isabella Stewart Gardner Museum, the Institute of Contemporary Art/Boston, and the Museum of Fine Arts, Boston, providing free and discounted tickets and admission for MIT students. In addition, CAMIT financed faculty requests for tickets to specific arts events to supplement students' coursework and piloted a new program that provided small grants to MIT faculty to bring artists to their classes as guest speakers. Finally, the council funded free tickets for students to attend a pair of off-campus arts events featuring MIT faculty artists: Tod Machover's *Schoenberg in Hollywood* (Boston Lyric Opera) and Evan Ziporyn's *Bowie Symphonic: Blackstar* (Isabella Stewart Gardner Museum). This year, the council supported more than 10,000 off-campus student experiences in the arts through this program.

Excursion

In October 2018, 25 council members and guests, in addition to four MIT staff and guests, participated in a weeklong trip to Amsterdam and other areas of the Netherlands. Highlights of the trip included a canal boat ride and reception, an architecture tour of the city, a visit to the Eye Film Institute, and a welcome dinner at Hotel De L'Europe. Other highlights were a private before-hours tour of an exhibition of Leonardo da Vinci's drawings at the Teylers Museum in Haarlem; a performance at the St.-Bavokerk church with a special behind-the-scenes visit with the organist; studio visits with artist Gwenneth Boelens, who had her first solo museum exhibition at the MIT List Visual Arts Center in April 2017; a visit to the Rijksakademie, a celebrated artist residency program, with director Emily Pethick; and a farewell dinner at the Ship Chandlers Warehouse, a private canal house.

Student Programs

Student Arts Programs, managed by Sam Magee, includes Arts Scholars (a program endowed by the Council for the Arts at MIT), the Graduate Arts Forum, and arts entrepreneurship programming, including the Creative Arts Competition and the

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START Studio. Stacy DeBartolo manages the Student Art Association and the Freshman Arts Seminar Advising Program.

Arts Scholars

Arts Scholars, founded in 1989, is a select group of undergraduate and graduate students who share a special interest in the arts. The Arts Scholars calendar includes excursions to on-campus and local arts events. An expert in the relevant discipline accompanies students on each excursion. Discussions, learning from the expertise of the guest, and the arts experience positively affect students' lives and their studies at MIT. In AY2019, 50 students (26 undergraduates and 24 graduate students) participated as Arts Scholars. Their courses of study ranged across the Institute from engineering and the sciences to management and media.

Graduate Arts Forum

The MIT Graduate Arts Forum, now in its 16th year, is designed to build an interdisciplinary community of graduate students who admire or create art as part of their graduate studies or through independent practice. We enjoy an ongoing collaboration with the Graduate Student Council (GSC), a partnership that allows us to reach more graduate students and take advantage of cost sharing between departments. In 2019, GSC and the Grad Arts Forum co-hosted two new events. One was a gallery tour of arts institutes in Boston, and the most recent was a walking tour of public art and augmented art along the Rose Kennedy Greenway.

START Programs

The START Studio is an ideation and maker space for arts-focused student enterprises and teams in the arts-entrepreneurship space. Students from around the Institute sign up to use the space to work on their initiatives and have 24-hour access to the studio. A maker-in-residence oversees the studio and is available to students 16 hours a week. Teams using the START Studio include Tea with Teachers and the MIT Animation Group; the studio also hosts a new installation of an algorithmic soundwave synthesizer called the Spatial Sound Lab.

Arts on the Radar

Arts on the Radar, a joint event organized by the List Visual Arts Center, ACT, Music and Theater Arts, and the Office of the Arts, is an annual arts-focused kickoff event held at the beginning of September for MIT students. Activities at Arts on the Radar in 2018 included an interactive art installation, the List Visual Arts Center's Student Lending Art Program exhibition, a performance by a student band, demos of art projects funded by CAMIT, and open studios hosted by ACT graduate students. More than 500 students attended the 2018 event, marking a substantial increase in attendance from previous years.

Wiesner Student Art Gallery

The Wiesner Student Art Gallery, located on the second floor of the Stratton Student Center (W20), was reserved for a show every month this academic year and is booked for the coming academic year as well. Exhibitions over the past year ranged from photography to installation and from solo shows to group exhibitions. The monthly

exhibition openings are well attended and will be held on the first Thursday of the month beginning in the fall. As the reputation of the gallery grows, demand has increased, as has the breadth and quality of the student art exhibited for the MIT community. The START maker-in-residence serves as the gallery coordinator, overseeing the space, artists, and vibrant shows, and has proven successful in this role. Included in the past year's exhibitions were a group show designed by students in ACT and a show featuring the four winners of the Schnitzer Prize in the Visual Arts. The Wiesner Gallery has shows scheduled through December 2019.

Creative Arts Competition

Founded in 2013, the MIT Creative Arts Competition has grown from a single \$10,000 prize to a semester-long program offering mentorship, workshops, access to a maker space on campus, and three prize levels along with an Audience Choice Award. The 2019 competition drew a record 28 teams that submitted their proposals in February. Teams then worked with arts industry mentors to develop a business plan and pitch over the following six weeks. The names of the eight finalists were announced in April. Later that month, the teams pitched their proposals to a panel of judges before a live audience at the Media Lab.

First prize was awarded to Teach To Learn, a free online cultural exchange and mentorship service that supports musicians in resource-poor countries by connecting them to mentors in the United States using live video and e-learning platforms. Second prize went to Sky International Music Education, which aims to bring high-quality music education resources to China; the group hires young professional musicians to provide online, live, interactive video lessons through its application and uses artificial intelligence to customize and visualize the learning process. Third prize was awarded to ArtNext, which turns a home into a gallery experience by providing curated art through a subscription model along with at-home curatorial services, making use of gallery and museum collection holdings. The Audience Choice Award went to Along Fault Lines, a platform that sparks emotional recovery among populations dealing with urban trauma (e.g., natural disasters or social conflicts) through artist residency programs that rebuild communities and revitalize cultures.

The Creative Arts Competition culminated this year's cycle with a "demo day" hosted by the New York Foundation for the Arts.

Student Art Association

The Student Art Association, founded in 1969, is a suite of four studios that provides space for hands-on exploration of drawing, painting, printmaking, darkroom photography, and ceramics. This year SAA offered more than 60 classes and workshops during the fall, spring, summer, and IAP. More than 750 individuals were enrolled during the year, 64% of whom were matriculated students. Although SAA classes are open to the entire MIT community, students are allowed priority registration and can register one week earlier than other affiliates.

SAA hosted a ceramics master class this year featuring master potter Hongwei Li, as well as a two-day underglaze workshop sponsored by the American Art and Clay Company. In January, SAA partnered with ArtMatr to host a robot painting IAP workshop in which students explored creative painting processes via an oil-based robot painting system.

That workshop was led by Sang-Won Leigh, a recent MIT graduate, and guest speakers included Eric Fischl, Barnaby Furnas, and visiting artist Matthew Ritchie.

In October 2018, Student Art Association students participated in a show honoring SAA founder Mimi Luft, who passed away in 2017. More than 40 artists participated in the event, titled Art Show! An MIT Student Art Association Contemporaspective, and artwork was on view in the Wiesner Student Art Gallery throughout October.



Work exhibited at Art Show! An MIT Student Art Association Contemporaspective in the Wiesner Student Art Gallery. (Photo by Heidi Erickson)

Freshman Arts Seminar Advising Program

In AY2019, six first-year MIT students and one associate advisor participated in the Freshman Arts Seminar Advising Program (FASAP). The goal of the program is to introduce first-year students to the wealth and breadth of arts opportunities available to MIT students. Activities included a public art tour with the List Visual Arts Center, a glass-blowing demonstration, a private reception with artist Nick Mauss, an evening at the Boston Symphony Orchestra, a ceramics workshop, and a dinner and private rehearsal with visiting artist Jacob Collier. In addition to leading weekly seminar meetings during the fall term, Stacy DeBartolo served as the academic advisor for this group of students.

Personnel

Rachel Bennett, director of the Council for the Arts at MIT, left her position in May 2019, and Leila Kinney will serve as interim director until a new director is appointed. Sarah Hirzel was hired as maker-in-residence, replacing Justin Playl. Danna Solomon replaced Dain Goding as assistant to the executive director of Arts Initiatives and CAST.

Leila Kinney serves as co-chair of the executive committee of a2ru, the Alliance for the Arts in Research Universities.