

Program in Media Arts and Sciences

Graduate Program

A total of 189 students—98 master’s candidates and 91 doctoral candidates—were enrolled in the [Program in Media Arts and Sciences \(MAS\)](#) graduate program during the 2018–2019 academic year. In addition to supervising MAS graduate students, MAS faculty and research staff collectively advised and supported more than 40 graduate students from other departments, including Biological Engineering, Physics, Electrical Engineering and Computer Science, Mechanical Engineering, Civil and Environmental Engineering, and Computation for Design and Optimization. Faculty also supervised students from the Harvard-MIT Division of Health Sciences and Technology and the Institute for Data, Systems, and Society.

MAS offered 35 graduate courses during AY2019. The graduate student community included 72 women, 85 international students, and 40 students from underrepresented minority groups. During the year, 53 advanced degrees were awarded (40 master’s degrees and 13 doctorates).

MAS received 1,307 master’s applications and admitted 50 new master’s students, a 3.8% admissions rate. There are 47 students expected to enroll (including two 2018 admits who deferred for one year), a 90% yield.

Diversity and Student Support

MIT Summer Research Program

The MIT Summer Research Program (MSRP) brings undergraduate students from across the United States to conduct research at MIT for nine weeks over the summer. In addition to gaining research experience, interns learn about applying to and succeeding in graduate school. In summer 2018, the Media Lab hosted six MSRP interns in five different research groups.

MAS Ambassadors

The MAS Ambassadors program aims to leverage current students’ networks by sending them to their previous institution or company to speak about MAS. This program allows us to expand our reach, as well as give prospective students a more interactive experience by meeting current students and hearing from them firsthand. This year we sponsored three trips:

- Pedro Colon-Hernandez (Object-Based Media) presented at the University of Puerto Rico at Mayaguez.
- Angela Vujic (Fluid Interfaces) and Tony Shu (Biomechatronics) presented at Georgia Institute of Technology.
- Laura Perovich (Object-Based Media) presented at Bowdoin College.

MAS Open House Travel Grants

The MAS Open House is a way for prospective students to learn more about the lab, meet with faculty and graduate students, and determine if this is the best program for them. Unfortunately, the cost of traveling to Cambridge for the Open House can be a deterrent for those who live far away or do not have funds to travel here. To alleviate this burden, individuals can apply for a MAS travel grant. This year, MAS awarded 12 travel grants.

MAS Virtual Visits

In its second year, this MAS recruitment series continued to reach applicants who cannot visit the lab in person. In 2018, two students—Vik Parthiban and Emily Salvador (Object-Based Media)—participated in the virtual visits to share their experience with prospective students. Our newest MAS faculty member, Deblina Sarkar, also used the platform to share her vision for her new research group.

Students Offering Support Program

The Students Offering Support (SOS) program pairs applicants with current students who provide feedback on either the applicant's statement of purpose or portfolio. Because MAS research groups vary so much in the skills and experience they are looking for, this individualized attention goes a long way in helping applicants understand what to highlight in their applications. This year, 25 applicants were paired with 21 volunteers from 12 different research groups. SOS has become a benchmark program across the Institute, and it serves as a model for other departments that would like to create an application assistance program.

Women's Lunch Series

These monthly lunches serve as a space for our women graduate students and postdocs to connect and build community. Each session features a dynamic speaker who addresses some aspect of professional or personal development. The speakers in AY2019 were as follows:

Sheena Allen—founder and CEO, CapWay and Phocal

Jamira Burley—youth and social justice advocate

Jenny Sabin—professor of architecture, director of Graduate Studies, Cornell University

Kate Darling—research specialist, MIT Media Lab

Kemi Sorinmade—owner of Growth Studio

Mariana Arcaya—assistant professor of urban planning and public health, MIT

Saida Grundy—assistant professor of sociology and African American studies, Boston University

Amanda Nguyen—founder and CEO, Rise

Diversity Series

The MAS Diversity Series brings the Media Lab community together each semester to develop skills and explore ideas of diversity and social justice through presentations and discussion.

“Science-Based Skills for Avoiding Burnout”

Nataly Kogan—co-founder and CEO, Happier

Inspired by research on happiness, Nataly Kogan’s company, Happier, aims to inspire people to do more of what brings them joy. Starting with a personal story, her presentation to the Media Lab community taught attendees practical, research-backed tools to practice self-care to optimize energy, increase motivation, and get through challenges with resilience and self-compassion.

“Cuing Identity Threat: How Situational Cues Signal Threat in Academic Settings and What We Can Do about It”

Mary Murphy—professor, Department of Psychological and Brain Sciences, and associate vice provost for Diversity and Inclusion, Indiana University

Mary Murphy discussed the cues hypothesis, which posits that subtle situational cues in our environment can trigger identity threat—the concern that one will be devalued or disrespected in a setting because of their social group membership. Her presentation focused on the effects of situational cues in educational and workplace settings.

Attendees discussed how to create more identity-safe environments where all people can thrive.

Professional Development

This professional development conference was an opportunity for students to learn new skills, network with MAS alumni, and explore career options without having to define their exact future career. Nearly 100 MAS students were in attendance. Participants learned about designing their life, grant writing, social entrepreneurship, data visualization, starting a company, and more.

Faculty Roundtables

The faculty roundtables provided a chance for MAS students to meet with three different faculty in a casual setting over lunch. Faculty discussed their career paths and gave the students advice. The following 10 MAS faculty members participated in the roundtables:

Fadel Adib—Signal Kinetics

Tod Machover—Opera of the Future

Canan Dagdeviren—Conformable Decoders

Joseph Paradiso—Responsive Environments

Hugh Herr—Biomechatronics

Rosalind Picard—Affective Computing

Kent Larson—City Science

Mitch Resnick—Lifelong Kindergarten

Andy Lippman—Viral Communications

Danielle Wood—Space Enabled

Professional Development Series

Lily Zhang, manager for Graduate Student Professional Development, organizes programming around professional and career development, including a monthly series. Workshops focus on career building skills for traditional and non-traditional trajectories.

Katie Rae—CEO and managing partner, The Engine

Kirsty Bennett—manager, MIT Women’s League, and founder, MITell

Diana Chien and Victor Prost—MIT Communications Lab

Kelly Heaton—mixed media artist, Kelly Heaton Studio

Steven Braun—data analytics and visualization specialist, Northeastern University

Penny Webb—interaction designer, Philips

Anne Helen Petersen—author and journalist, BuzzFeed News

Undergraduate Engagement

The Undergraduate Research Opportunities Program (UROP) continued to represent the largest undergraduate presence in MAS and the Media Lab. More than 200 undergraduates from across the Institute participated in a wide variety of UROP research projects at the Media Lab, and many students pursued their undergraduate theses and advanced undergraduate projects under MAS faculty supervision.

MAS also has an alternative first-year program. The students in the program participate in weekly Media Lab tutorial/laboratory sessions connected with two core first-year subjects, pursue Media Lab UROP programs, and take two MAS undergraduate subjects on design and research, one of which satisfies part of the undergraduate Communication Requirement, as well as the arts portion of the Humanities, Arts, and Social Sciences Distribution Requirement. For AY2019, we had 58 applicants for the program, we selected 24 students, of whom 58% were women, 21% were from underrepresented minority groups, 21% were international students, and 25% were first-generation college attendees. The program received a grant from the Office of the Vice Chancellor for an experiment in project-based learning for General Institute Requirements subjects, in conjunction with the Experimental Study Group.

Faculty and Staff

New Appointments

Zach Lieberman was appointed adjunct associate professor of media arts and sciences in January 2018. Lieberman has been recognized as one of the most respected and influential new media artists in the world, and has had an equally strong impact as an educator and software designer. He received his BA from Hunter College in 2000 and an MFA from Parsons School of Design in 2002, and has been an adjunct and visiting professor at Parsons.

Ekene Ijeoma was appointed assistant professor of media arts and sciences in January 2019 and will be leading the Poetic Justice research group. Ijeoma is an artist and designer with a strong background in software development and hardware design, who uses his work to tell the stories of underrepresented communities and underreported issues, seeking to instruct and inspire, and to instigate social changes.

Sampling of Honors and Awards

Ed Boyden was one of six recipients of the 2019 Rumford Prize from the American Academy of Arts and Sciences for “extraordinary contributions related to the invention and refinement of optogenetics.” Boyden has been elected to the National Academy of Sciences. In addition, the Royal Society has awarded Ed Boyden the Croonian Medal and Lecture 2020.

Cynthia Breazeal was named Future Thinker 2019 at the German Innovation Awards.

Hiroshi Ishii’s pioneering work in human-computer interaction research has been recognized with the 2019 Association for Computing Machinery’s Special Interest Group on Computer Human Interaction Lifetime Research Award.

Neri Oxman was named a 2019 International Fellow of the Royal Institute of British Architects, a lifetime honor recognizing architects whose work exhibits “distinction and a breadth of contribution to architecture.” In addition, Oxman will receive the San Francisco Museum of Modern Art’s 2019 Contemporary Vision Award this fall.

Tod Machover

Academic Head

Muriel R. Cooper Professor of Music and Media