Program in Media Arts and Sciences

Graduate Program

A total of 157 students—87 master's candidates and 70 doctoral candidates—were enrolled in the Media Arts and Sciences (MAS) graduate program during the 2014–15 academic year. The MAS graduate student community included 48 women, 71 foreign students, and 6 students from underrepresented minority groups (UMGs). During the year, 52 advanced degrees were awarded (39 master's and 13 doctorates).

MAS received 760 applications to the graduate program and offered admission to 51 new students (including 17 women), a 9% admissions rate. Forty-seven students (including 16 women) will enroll, a 92% yield.

In addition to supervising MAS graduate students, MAS faculty and research staff collectively advised and supported more than 30 graduate students from other departments, including Biological Engineering, Physics, Electrical Engineering and Computer Science, Mechanical Engineering, Civil and Environmental Engineering, Engineering Systems Division, and Computation for Design and Optimization. The program also enrolled students from the Harvard-MIT Division of Health Sciences and Technology (HST).

MAS offered 31 graduate courses during the 2014–2015 academic year.

Diversity and Inclusion

In June 2014, we hired Monica Orta as our first assistant director of diversity and inclusion. In the past year, we have made significant strides in this work, focusing on three main areas: branding and infrastructure building; admissions; and climate efforts. We had the greatest success in our admissions results. With the help of faculty partners, we increased the admission rate of URMs from 0% in the previous admission cycle to 13%. We also increased the yield of women admitees, which has generally lagged behind that of men. This year it went up from 88% to 94%. Since we know the climate new students come into is critical to their success, we launched a climate survey to gauge the experience of current students. While generally positive, we are exploring ways to address the needs that came up in the survey, namely space and professional development opportunities. In the next year, we will work to create a student database that will allow us to track our students' progress through the program and help keep both students and their advisors on a consistent track.

Student Honors and Awards

David Sengeh (Biomechatronics), CityFARM creator Caleb Harper, and alumnus Manu Prakash were among National Geographic's 2015 Emerging Explorers.

Caleb Harper (researcher, Changing Places) received the Laya Wiesner Community Award from the MIT Women's League.

Yves-Alexandre de Montjoye (Human Dynamics) was selected as one of MIT Tech Review's Innovators Under 35 in Belgium for his PDS/SafeAnswers data privacy platform.

Achuta Kadambi (Camera Culture) and Cornell University student Suren Jayasuriya were awarded Qualcomm's Innovation Fellowships for their joint proposal, "Nanophotography: Computational CMOS Sensor Design for 3D Imaging," focused on creating robust platforms for 3D imaging.

Bianca Datta (Object-Based Media), Niaja Farve (Fluid Interfaces), Alexis Hope (Civic Media), and Amy Yu (Macro Connections) were all selected as 2015 MIT Graduate Women of Excellence.

Tiffany Tseng's (Lifelong Kindergarten) photography turntable project, Spin, won an Editor's Choice award at Maker Faire.

Two Media Lab projects were among Gizmodo's 7 Most Important UI and UX Ideas of 2014: the Fluid Interfaces group's Tangible, Handheld, and Augmented Window (THAW), which allows a smartphone to act as a second interface for your computer; and the Tangible Media group's dynamic, interactive shape display table, TRANSFORM.

TRANSFORM also received a Golden Mouse Award at CHI 2015, and the paper on the project, "bioLogic: Natto Cells as Nanoactuators for Shape Changing Interfaces," won Best Talk and an Honorable Mention award.

The Camera Culture group's vision-correcting display was named one of 2014's world-changing ideas by *Scientific American*.

Undergraduate Program

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. In addition, the MAS program offered five undergraduate subjects.

MAS also has an alternative freshman-year program, now in its 16th year. The students in the program participate in weekly Media Lab tutorial/laboratory sessions connected with two core freshman subjects, pursue Media Lab UROP projects, 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 (HASS) Distribution Requirement. For the 2014–2015 academic year, we had 54 applicants for the program, and we selected 24 students, 75% of whom were women and 17% of whom were underrepresented minorities.

Faculty and Staff

Honors and Awards

Rosalind Picard tops CNN's list of "Seven Tech Superheroes to Watch in 2015" in recognition of her work developing the Embrace smartwatch.

Ed Boyden was awarded an Andrew Carnegie Prize in Mind and Brain Sciences.

Forbes Japan selected Sputniko! as one of the 10 Most Active Women in Japan for the "Female Power" issue in January.

Hugh Herr was chosen as R+D Magazine's Innovator of the Year for his work in bionics.

New Books

Cesar Hidalgo-Ramaciotti published *Why Information Grows: The Evolution of Order, from Atoms to Economies* in June 2014.

Pattie Maes Academic Head