Program in Media Arts and Sciences

Graduate Program

A total of 124 students—64 master's candidates and 60 doctoral candidates—were enrolled in the Program in Media Arts and Sciences (MAS) graduate program during the 2008–2009 academic year. The MAS graduate student community included 24 women, 48 foreign students, and 15 individuals from underrepresented minority groups.

During the year, 32 advanced degrees were awarded (27 master's and five doctorates). MAS received 590 applications to the graduate program and offered admission to 48 new students (including 10 women). Forty-three students (including seven women) enrolled.

In addition to supervising MAS graduate students, MAS faculty and research staff collectively advised and supported 23 graduate students from other MIT departments and programs, including the departments of Architecture, Electrical Engineering and Computer Science, Physics, Mechanical Engineering, and Materials Science and Engineering, as well as the Biological Engineering Division and the Harvard-MIT Division of Health Sciences and Technology.

MAS offered 40 graduate courses during the 2008–2009 year.

Student/Postdoctoral Fellows Honors and Awards

Alumnus Yael Maguire was elected a Young Global Leader of the World Economic Forum.

Doctoral candidate Cati Vaucelle received the School of Humanities, Arts, and Social Sciences (SHASS) Peter de Florez Fund for Humor award.

Alumni Alex Rigopulos and Eran Egozy were ranked among the 2008 top 100 most influential people by *Time* magazine.

Graduate student John Moore was awarded the Center for Integration of Medicine and Innovative Technology's Engineering First Prize for his work on CollaboRhythm: Primary Care Teamwork Anywhere at Any Time.

Undergraduate Program

Students from the Undergraduate Research Opportunities Program (UROP) continued to represent the largest undergraduate presence at the Media Lab. More than 200 undergraduates from across the Institute participated in a wide variety of research projects, with many of these students pursuing their undergraduate theses under MAS faculty supervision. In addition, the MAS program offered five undergraduate subjects, and at least one MAS faculty and/or senior staff member conducted freshman seminars or served as freshman advisors.

Now in its 10th year, the MAS alternative freshman-year program enrolled 23 students in 2008–2009. These students participated in weekly Media Lab tutorial/laboratory

sessions connected with two core freshman subjects, pursued Media Lab UROP projects, and took two MAS undergraduate subjects on design and research, one of which is an option for satisfying part of the undergraduate Communication Requirement. The program, a first step toward a greater MAS presence in undergraduate education, has also turned out to be a successful "feeder" program for graduate students: the current MAS graduate student body includes many freshman-year program participants.

Faculty and Staff

Leah Buechley was appointed as an assistant professor of media arts and sciences. Buechley received her PhD and SM degrees in computer science from the University of Colorado at Boulder and an AB in physics from Skidmore College. She is head of the High-Low Tech group at the Media Lab.

David Small was appointed as an associate professor of media arts and sciences. Small received his PhD and SM degrees in media arts and sciences at MIT and received his SB in cognitive sciences from MIT. He is head of the Design Ecology research group in the Media Lab.

Associate professor Hugh Herr was awarded tenure. Herr heads the Biomechatronics research group at the Media Lab and is the current holder of the NEC career development chair.

Associate professor Cynthia Breazeal was awarded tenure. Breazeal heads the Personal Robots group and is the current holder of the LG career development chair. She is also the codirector of the new Center for Future Storytelling in the Media Lab.

Honors and Awards

Edward S. Boyden III received two National Science Foundation grants, an Emerging Frontiers in Research and Innovation Grant and a Small Grant for Exploratory Research. He also received the McGovern Institute for Brain Research Neurotechnology Award, the Congressionally Directed Medical Research Programs Post-Traumatic Stress Disorder Concept Award, and the MIT Alumni Class Funds Award for Excellence in Educational Innovation. Ed was also named one of the 20 best scientists under age 40 by *Discover* magazine.

Springer Handbook of Robotics (to which Cynthia Breazeal was a contributor) received a PROSE Award for Excellence in Physical Sciences & Mathematics. Breazeal also received the Gilbreth Lectures Award from the National Academy of Engineering, and was named by *Time* magazine as having one of the best inventions of 2008.

Hiroshi Ishii was chosen as the Thomas A. Wasow visiting scholar in symbolic systems at Stanford University.

Tod Machover's new opera, *Skellig*, premiered in November 2008 at the new Norman Foster–designed Sage Gateshead Music Centre in England to sold-out houses and critical acclaim. Machover was also named a fellow of the Royal Society of Arts in London.

William Mitchell, along with the Smart Cities group, won the \$100,000 Buckminster Fuller Challenge Prize for work on urban mobility and continued work on smart lightweight electric vehicles and their use in urban mobility systems.

Alex (Sandy) Pentland received the Carlos Ghosn Award for Automotive Design, the Future of Health Technology Award, and the 2009 Breakthrough Idea of the Year from the *Harvard Business Review* for *Honest Signals*.

Ramesh Raskar was awarded the Alfred P. Sloan Fellowship.

Mitchel Resnick and the Lifelong Kindergarten group organized the international Scratch Day, bringing together Scratch enthusiasts at 120 gatherings in 44 countries. Scratch software, developed by the Lifelong Kindergarten group as a programming language for children, has now been downloaded by more than one million people. Also, the LEGO Company introduced the WeDo robotics kit, based on work from the Lifelong Kindergarten group.

New Books

William Mitchell, *Re-Inventing the Automobile: Personal Urban Mobility for the 21st Century* (in press) and *World's Greatest Architect* (MIT Press, 2008).

Mitchel Resnick Program Head Professor of Media Arts and Sciences LEGO Papert Career Development Professor of Learning Research

More information about the Program in Media Arts and Sciences can be found at http://www.media.mit.edu/mas/.