# **Program in Media Arts and Sciences**

Now in its fourth year, the alternative freshman-year program of the Program in Media Arts and Sciences (MAS) enrolled approximately 30 students in academic year 2004. These students took special Media Lab recitation sections of two core freshman subjects, pursued Media Lab Undergraduate Research Opportunity Program (UROP) projects, and participated in two new MAS undergraduate subjects on design and research. We view this program as a first step toward establishing a full-fledged undergraduate program.

# **Education**

For AY2004, the MAS graduate program received 395 applications, from which 55 new students (including 15 women) were offered admission: 49 for the master's program and 6 for the doctoral program. This brought the total MAS enrollment to 123, which included 28 women, 3 underrepresented minorities, and 50 foreign students. Of the total, 62 were master's candidates and 61 were doctoral candidates. Forty-one advanced degrees were awarded during the year (31 SM and 10 PhD). The program offered 35 graduate subjects.

In addition, MAS faculty and research staff collectively advised and supported 43 graduate students from other MIT departments and programs. These include the Departments of Electrical Engineering and Computer Science, Chemistry, Physics, Mechanical Engineering, Materials Science and Engineering, and Urban Studies and Planning, as well as the Harvard–MIT Division of Health Sciences and Technology, the Biological Engineering Division, and the Sloan School of Management.

The largest undergraduate presence at the Media Lab continued to be through UROP students; more than 280 from throughout the Institute participated in a wide variety of research projects. Many of these undergraduates pursued their undergraduate theses under MAS faculty supervision. In addition, the Program in Media Arts and Sciences offered 12 undergraduate subjects, and five MAS faculty members and staff conducted freshman seminars or served as freshman advisors.

## **Faculty and Staff**

## **New Appointments**

Hugh Herr was appointed assistant professor of media arts and sciences. Dr. Herr, who received his PhD in biophysics from Harvard University, was previously at the Harvard–MIT Division of Health Sciences and Technology and the Harvard Medical School, where he was assistant professor of physical medicine and rehabilitation.

#### Tenure

Joseph Jacobson, who had been an associate professor without tenure in the Program in Media Arts and Sciences, was promoted to associate professor with tenure. He heads the Media Laboratory's Molecular Machines group.

John Maeda, who had been an associate professor without tenure in the Program in Media Arts and Sciences, was promoted to associate professor with tenure. He heads the Media Laboratory's Physical Language Workshop.

#### **Promotions**

Scott Manalis, who had been an assistant professor in the Program in Media Arts and Sciences, was promoted to associate professor without tenure. He heads the Media Laboratory's Nanoscale Sensing group.

#### **Honors and Awards**

Cynthia Breazeal was selected by *Technology Review* as one of the 100 innovators aged 35 or younger whose technologies are poised to make a dramatic impact on our world. Dr. Breazeal was also chosen as one of three finalists for the National Design Awards, given annually by the Smithsonian Institution's Cooper Hewitt, National Design Museum, and she received the ALA achievement award for pioneering work in human-robotic interaction and sociable robots, as well as the Commonwealth 21st Century Award for Innovation.

Tod Machover received the first Ray Kurzweil Award of Technology in Music at the Telluride Tech Festival. The award recognized Machover's pioneering research in music technology as well as his achievements as a composer and performer.

John Maeda was named as one of the "20 Master Designers" by Fast Company magazine.

Barry Vercoe was the recipient of the 2004 Society for Electro-Acoustic Music's (SEAMUS) Award for Lifetime Achievement.

The Electrical Engineering division of the National Science Foundation selected Professor Joseph Paradiso's work, "Towards Sensate Media and Electronic Skins: Testbeds for Very-High-Density Distributed Sensor Networks," as one of only five research projects to be showcased as winning "nuggets."

### **New Book**

William J. Mitchell, Me++: The Cyborg Self and the Networked City, MIT Press, 2003.

## Students

#### **Awards**

Saul Griffith, a PhD candidate working with Joseph Jacobson, won the Lemelson–MIT Student Prize for Inventiveness. The prize recognizes Griffith's invention of a "desktop printer" for low-cost eyeglass lenses, as well as his creation of comic strips that inspire children to learn about science and engineering.

Hayes Raffle and Amanda Parkes, studying with Hiroshi Ishii, won honorable mention at Ars Electronica in the Interactive Art category for their Topobo project, which will be exhibited at Ars Electronica in Linz, Austria, beginning this fall.

MS recipient James Dai, who studied with John Maeda, received the 2004 Laya and Jerome B. Wiesner Student Art Award from MIT.

PhD candidate Pengkai Pan of the Interactive Cinema group received the first-ever National Excellence Award for Overseas Chinese Students from China's Ministry of Education.

William J. Mitchell Head Professor of Architecture and Media Arts and Sciences

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