

Program in Media Arts and Sciences

Now in its sixth year, the alternative freshman-year program of the Program in Media Arts and Sciences (MAS) enrolled 18 students in 2004–2005. These students took special Media Lab recitation sections of two core freshman subjects, pursued Media Lab Undergraduate Research Opportunities 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 AY2005, the MAS graduate program received 331 applications, from which 60 new students (including seven women) were offered admission. This brought the total MAS enrollment to 130, which included 34 women, four underrepresented minorities, and 53 foreign students. Of the total, 67 were master's candidates and 63 were doctoral candidates. Forty-three advanced degrees were awarded during the year (27 master's degrees and 16 doctorates). The program offered 33 graduate subjects.

In addition, MAS faculty and research staff collectively advised and supported 36 graduate students from other MIT departments and programs. These include the departments of Electrical Engineering and Computer Science, Chemistry, Physics, Mechanical Engineering, and Materials Science and Engineering, 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 250 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 four undergraduate subjects, and five MAS faculty members and staff conducted freshman seminars or served as freshman advisors.

Faculty and Staff

Deb Roy, who had been an assistant professor in the program, was promoted to associate professor without tenure. He heads the Media Laboratory's Cognitive Machines group.

Bruce Blumberg, associate professor, who headed the lab's Synthetic Characters research group, left as of June 30, and is now working at Blue Fang Games in Waltham, Massachusetts.

Two faculty members who maintain research labs at the Media Lab have received tenure in other departments: Scott Manalis in the Biological Engineering Division and Ike Chuang in the Department of Electrical Engineering and Computer Science.

Faculty Honors and Awards

Stephen Benton, a founding member of the Media Laboratory and head of MAS at the time of his death at age 61 in November 2003, was posthumously awarded the 2005 Edwin H. Land Medal, which recognizes an individual who has, from a base of scientific knowledge, demonstrated a pioneering entrepreneurial creativity that has had major public impact.

Hiroshi Ishii was one of two MIT faculty members to receive the Class of 1960 Innovation Award.

Neil Gershenfeld and Ted Selker were named to the *Scientific American* 50, the magazine's annual list of leaders in science and technology. Gershenfeld (along with alumnus Raffi Krikorian and Danny Cohen of Sun Microsystems) was also selected as Communications Research Leader of the Year for his work on the Internet 0 protocol for embedded connectivity. Selker and Professor Michael Alvarez of Caltech were recognized for their work with the Caltech/MIT Voting Technology Project.

Neil Gershenfeld was also chosen as one of the "40 leading thinkers in science and engineering" by *IEEE Spectrum*.

Hugh Herr's work in biomechatronics was cited as one of "10 emerging technologies" in the May issue of *Technology Review*.

John Maeda was selected to serve on the board of trustees of the Smithsonian Institution's Cooper-Hewitt National Design Museum. In addition, he was named one of the 40 most influential people in design by *ID* magazine.

William Mitchell's book, *Me++: The Cyborg Self and the Networked City* (MIT Press, 2003), won the 2004 Institute of Electrical and Electronics Engineers (IEEE)–USA award for distinguished literary contribution.

Cynthia Breazeal received an Office of Naval Research Young Investigator Award to study robust and flexible human-robot teamwork in uncertain environments.

Rosalind W. Picard was named a fellow of IEEE.

Tod Machover's computer-generated musical collage of Handel's entire *Messiah*, compressed into a six-minute piece, was selected as the opening track of Cantaloupe Record's *Messiah Remix* CD.

Joseph Paradiso and doctoral candidate Mathew Laibowitz won the award for best paper at the third International Conference on Pervasive Computing for "Parasitic Mobility for Pervasive Sensor Networks."

Student Awards

Mary Farbood was awarded top honors for her harpsichord performance at the 57th Prague Spring International Music Competition.

Kimiko Ryokai and Stefan Marti were selected as a Gold IDEA winner for the I/O Brush in the 2005 Industrial Design Excellence Awards. James Patten's Audiopad received the bronze award.

Marc Schwartz won a Fulbright fellowship to study at the Keio University Center in Japan, where he will work on developing internet-based, peer-to-peer software that will allow learners of Japanese and English to communicate for improved language skills.

New Books

Neil Gershenfeld, *FAB: The Coming Revolution on Your Desktop—From Personal Computers to Personal Fabrication*, Basic Books, 2005.

John Maeda, *Creative Code*, Thames & Hudson, 2004.

William J. Mitchell

Program Head

Professor of Architecture and Media Arts and Sciences

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