

Dean, School of Science

The mission of the School of Science is to teach and do research in the sciences (life, physical, and mathematical) that supports the creation and transfer of knowledge, educates the world's future scientists, and leads to innovation and discoveries that enhance human knowledge and experience. The School of Science accomplishes this mission by providing comprehensive education in the sciences and mathematics to MIT undergraduate and graduate students; conducting forefront research of the highest quality that pushes the boundaries of knowledge and the frontiers of science; enhancing the educational and scholarly connections between and among scientific disciplines and between science and engineering; mentoring postdoctoral scientists and junior faculty so that they can excel; promoting public service and educational and scholarly outreach; and creating and maintaining a diverse and broadly inclusive environment that strives to be free of intellectual barriers.

Building and Strengthening a Diverse Community

One of the highest priorities of the School administration is to support our existing outstanding faculty and to recruit to MIT exceptionally talented young researchers and educators, especially underrepresented minorities and women, to our faculty. A new faculty search policy has been established with standards to guarantee every faculty search is used as a vehicle to increase the diversity of our faculty. The School has made intensive efforts to identify minority candidates; however, the pool of available candidates is very small in all the fields of science. Further, the competition for the available candidates is intense. In academic year 2005, eight new faculty members joined the School, including three women.

School of Science Faculty Awards

Our faculty received numerous honors in recognition of their research and service, many offered by professional societies and professional communities. The individual reports from the School's departments/labs/centers will make note of many of these awards. Several especially notable awards deserve additional mention here. Professor Frank Wilcek was awarded the Nobel Prize in physics for a "colorful" discovery in the world of quarks, the building blocks of the atomic nucleus. Professors Nancy Kanwisher and David Page were elected to the National Academy of Sciences in recognition of their distinguished and continuing achievements in original research. Professors Tania Baker, Mounji Bawendi, Mark Bear, Claude Canizares, Leonard Guarente, Daniel Nocera, Gang Tian, Graham Walker, and Maria Zuber were elected to the American Academy of Arts and Sciences.

School of Science Staff Awards

The School of Science Rewards and Recognition Program continues to recognize the many dedicated and hard-working people within our department, labs, and centers. During the 2005 academic year, the annual Infinite Mile ceremonies were held in March. A total of 37 awards were given in the categories of Infinite Mile Awards and the Dean's Education and Student Advising Awards. In addition, the School offers the Spot Awards

program, which recognizes employees “on the spot” for doing something beyond their normal duties. A total of 93 Spot Awards were received by a variety of administrators, support staff, service staff, technical staff, and research staff during the fall of 2004 and the spring of 2005.

Academic Program Statistics

There were 891 undergraduate majors in the School of Science during the past academic year, a 2 percent increase over the previous year. The number of minority student majors at the undergraduate level changed as follows:

African Americans	26 to 28 (7.7% increase)
Hispanics	79 to 69 (12% decrease)
Native Americans	16 to 14 (12% decrease)
Asian Americans	238 to 369 (55% increase)

Fifty-eight minors were awarded in the School in AY2005. The female undergraduate population increased from 449 to 479. Twenty-nine percent of the Institute’s upperclass undergraduates were enrolled in the School of Science. Graduate enrollments in science increased from 1,107 to 1,119, representing 18 percent of the graduate population at MIT. The number of minority students at the graduate level changed as follows:

African Americans	18 to 14 (22% decrease)
Hispanics	40 to 28 (30% decrease)
Native Americans	2 to 2 (No change)
Asian Americans	77 to 88 (14% increase)

The number of female graduate students remained the same at 375. The overall percentage of female graduate students is 34 percent.

There were 268 faculty members in the School this year, representing a 74 percent decrease from the previous year. The undergraduate student-to-faculty ratio remained at 3 to 1, and the graduate student-to-faculty ratio remained at 4 to 1.

Fundraising

New gifts and pledges to the School of Science totaled \$69.5M in FY2005. The campaign total for the school reached \$310.5M at the end of calendar year 2004.

Research Volume

The FY2005 research volume for units within the School of Science totaled \$144.2M, a \$4.2M (3.0%) decrease from FY2004. The primary sponsors, in order of size, are the Department of Health and Human Services (National Institutes of Health primarily), the Department of Energy, the National Science Foundation, and NASA. It should be noted that the impact of School of Science faculty extends beyond the units of the School. The research volume for Science faculty at the Institute totaled \$239.5M, a \$12.3M (5.4%)

increase over FY2004. This increase represents the addition of the Broad Institute to MIT, as well as the growth in neuroscience and computational systems biology.

The many new research initiatives and fundamental discoveries that occurred in the various departments and laboratories of the School of Science are discussed in the reports of those units.

Robert J. Silbey
Dean, School of Science
Class of 1942 Professor of Chemistry

More information about the School of Science can be found online at <http://web.mit.edu/science/>.