

## Vice President for Research

The [Office of the Vice President for Research](#) (VPR) is responsible for stewardship of MIT's research enterprise. It seeks to foster strong, mutually beneficial relationships with research sponsor groups, including federal agencies, Congress, industry, foundations, and foreign governments. VPR's responsibilities also include research administration, policy, and compliance, executed in a manner to maximize the effectiveness of and minimize the burden on faculty and research staff.

Readers should consult the individual reports of each of the laboratories, centers, programs, and offices that report to VPR to learn about research highlights and accomplishments. A few notable achievements and changes are as follows.

The MIT Energy Initiative (MITEI) experienced a significant transition with the appointment of director Ernest Moniz as secretary of energy. The appointment of MITEI deputy director Robert Armstrong to succeed Professor Moniz ensures a smooth transition in this highly successful program.

In November 2012, the Massachusetts Green High Performance Computing Center (MGHPCC), a collaboration among MIT, the University of Massachusetts, Boston University, Northeastern University, Harvard University, the Commonwealth of Massachusetts, Cisco Systems, and EMC<sup>2</sup>, opened a data center in Holyoke, MA. MGHPCC is dedicated to providing the growing research computing capacity needed to support breakthroughs in science.

In December 2012, a major renovation of the Center for Environmental Health Sciences (CEHS), led by new director John Essigmann, was completed. CEHS facilitates and promotes research into the biological effects of exposure to environmental agents in order to understand and predict how such exposures affect human health.

The research facility for the Phillip T. and Susan M. Ragon Institute was dedicated in March 2013. The institute is a collaboration among MIT, Massachusetts General Hospital, and Harvard University with an initial focus on developing an effective vaccine against AIDS.

In April 2013, the National Aeronautics and Space Administration (NASA) selected the MIT-led Transiting Exoplanet Survey Satellite (TESS) project for a planned launch in 2017. Led by Kavli Institute senior research scientist George Ricker, TESS will use an array of wide-field cameras to perform an all-sky survey aimed at discovering transiting exoplanets, ranging from Earth-sized planets to gas giants, in orbit around the brightest stars in the solar neighborhood.

Numerous honors and awards were bestowed upon members of the community. Among the most notable, Penny Chisholm was awarded the National Medal of Science; Robert Langer was awarded the National Medal of Technology and Innovation; Mildred Dresselhaus, Ann Graybiel, and Jane Luu were awarded the Kavli Prize; and Michael Artin and Robert Langer were awarded the Wolf Prize. Amy Finkelstein was awarded

the John Bates Clark Medal, and Pablo Jarillo-Herrero, Timothy Lu, Parag Pathak, Pawan Sinha, and Jesse Thaler received Presidential Early Career Awards.

In FY2012, MIT's total research volume reached \$681 million, an increase of \$20 million (3.1%) over FY2011. There were 2,540 active awards and 460 members of research consortia. Federal funding constitutes 71% of on-campus research expenditures, with 15% from industry, 7% from foundations, 5% from state and local governments, and 2% from internal sources.

During FY2013 an across-the-board cut in federal programs, referred to as sequestration, was implemented, and VPR is closely monitoring its impact on the MIT community. The most prevalent effect so far is uncommon delays in proposal award decisions by federal agencies. The most significant effect is the warm shutdown of the Plasma Science and Fusion Center's Alcator C-Mod experiment. MIT continued to benefit from support from the American Recovery and Reinvestment Act (ARRA), with research expenditures from FY2009 through the third quarter of FY2013 totaling \$138 million. ARRA investments at MIT include projects on energy storage for the nation's electric grid and a detector to support neutrino physics.

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