

HAMPTON UNIVERSITY

Highlights



"THERE IS ALWAYS A HIGHLIGHT AT HAMPTON UNIVERSITY" September 2007

HU IS THE LEADING HBCU IN SCIENCE RESEARCH INITIATIVES

For the second year in a row, Hampton University is the leading Historically Black College and University (HBCU) recipient of federal science and engineering funds, according to a report recently released by the National Science Foundation.

Hampton University received \$44 million in FY 2005, with over three-fourths of the total from NASA. In the aeronautical/astronautical engineering subfield, Hampton University ranked third, behind John Hopkins University and Georgia Institute of Technology, among all universities in research and development expenditures. Just over \$9 of every \$10 in Hampton University's total federal science and engineering funds were for research and development programs, the report said.

"Hampton University's faculty members are to be congratulated for their world-class research initiatives," said HU President Dr. William R. Harvey.

Hampton University has become an international leader in atmospheric research. Hampton University researchers have led six NASA missions, the latest of which was the launching of AIM, a \$140 million satellite from Vandenberg Air Force Base in California.

NASA's Aeronomy of Ice in the Mesosphere (AIM) mission makes Hampton University the first HBCU to have total mission responsibility for a NASA satellite mission. AIM will determine why polar mesospheric clouds (PMCs) form and why they vary. Polar mesospheric clouds are also called "noctilucent," or night shining, clouds. This is NASA's first mission



Students in both France and the U.S. meet via a video conference as part of the CALIPSO Outreach program.

dedicated to exploration of these unique and mysterious clouds. This will provide the basis for study of long-term variability in the mesospheric climate and its relationship to global change.

"The occurrence of these clouds at the edge of space and what causes them to vary is not understood," said Professor and Co-director of Hampton University's Center for Atmospheric Sciences Dr. James M. Russell, III, AIM's principal investigator.

The other HU projects currently operating in orbit are Sounding of the Atmosphere using Broadband Emission Radiometry (SABER) and the Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observation (CALIPSO).

NASA launched CALIPSO on April 28, 2006. The satellite, developed through a joint partnership between the U.S. and France that includes Hampton University, will eventually

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help improve scientists' understanding of the global climate, hurricanes and temperature changes. Dr. M. Patrick McCormick, co-director of HU's Center for Atmospheric Sciences, is the co-principal investigator for the CALIPSO project and spent a decade preparing for the mission.

The National Science Foundation Survey of Federal Science and Engineering Support to Universities, Colleges and Nonprofit Institutions shows that federal agencies obligated a new high of \$28.4 billion to 1,227 academic institutions for science and engineering activities for FY 2005. Federal academic science and engineering obligations to 79 of the 102 HBCUs totaled \$479 million in FY 2005, a 1.5 percent increase over FY 2004.

The full set of detailed statistical tables on the FY 2005 Survey of Federal Science and Engineering Support to Universities, Colleges and Nonprofit Institutions is available at <http://www.nsf.gov/statistics/fedsupport/>.

