

Mikulski Announces \$1.2 Million NSF Grant to Upgrade Internet Pipeline in Maryland

100 Gbps Data Pipeline for Science and Engineering Research to Be Developed at Johns Hopkins University

October 27, 2011

Washington, D.C.--U.S. Senator Barbara Mikulski (D-Md.), Chairwoman of the Commerce, Justice, and Science Appropriations Subcommittee, today announced a \$1.2-million National Science Foundation (NSF) award to Johns Hopkins University (JHU) and the University of Maryland at College Park (UMD) to build one of the world's fastest and most advanced scientific networks. The award will increase JHU's network capacity to 100 gigabit per second (100 Gbps), which will allow for the transfer of massive amounts of data.

"As a proud supporter of science, and of funding science, I am pleased to see Johns Hopkins University as one of the first universities in our nation to expand their cyberinfrastructure to this level," said Senator Mikulski. "This grant will help Maryland stay on the cutting edge of science and technology, which is good for the state, for the economy, and for jobs."

This enormous bandwidth, novel in the public sector, will enable on-site analysis of large, complex datasets in such fields as astrophysics, genomics, ocean circulation, and medical research.

"This bandwidth upgrade will now allow enormous scientific data sets to be moved to JHU from Google, Oak Ridge National Laboratory, and the San Diego Supercomputer Center, for example," according to the lead researcher JHU physicist Alexander Szalay.

This installation, supported by NSF's Office of Cyberinfrastructure, will be one of the nation's first public 100 Gbps Internet connectivities, allowing JHU and its collaborators to stay on the cutting edge of science, moving data sets thousands of times bigger than previously possible.

"High-performance computing at Maryland's universities positions our state as a national leader in the next generation of scientific and engineering innovation," Mikulski said.

The network will be built at Johns Hopkins University at the Bloomberg Center and supported by the regional MAX research and engineering network aggregation point at University of Maryland.

The National Science Foundation (NSF) is an independent federal agency that supports fundamental research and education across all fields of science and engineering. In fiscal year (FY) 2011, its budget is about \$6.9 billion. NSF funds reach all 50 states through grants to nearly 2,000 universities and institutions. Each year, NSF receives over 45,000 competitive requests for funding, and makes over 11,500 new funding awards. NSF also awards over \$400 million in professional and service contracts yearly.