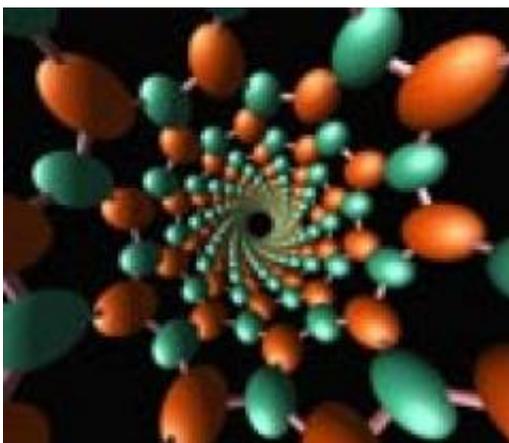


National Science and Technology Council releases strategy for digital scientific data

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This photo shows a view down the middle of a boron nitride nanotube. Credit: Vin Crespi, Pennsylvania State Physics. Distributed under the Creative Commons license <http://creativecommons.org/licenses/by-sa/2.0/>.

The National Science and Technology Council (NSTC) released a report describing a strategy to promote preservation and access to digital scientific data. The report, *Harnessing the Power of Digital Data for Science and Society*, was produced by the NSTC's Committee on Science under the auspices of the Office of Science and Technology Policy (OSTP) in the Executive Office of the President.

The open and timely publication of [digital scientific data](#) called for in the report will advance President Obama's plan to democratize data by publishing government information online in forms that the public can

readily find and use. OSTP, which is implementing the President's agenda on transparency and open government, in collaboration with the CIO Council, is working to create a central, online repository--data.gov--where the public can download such information in open, structured formats. The report provides a strategy to ensure that digital scientific data produced by and for the Federal government and made available via data.gov and agency websites can be reliably preserved for maximum access in catalyzing progress in science and society.

Digital imaging, sensors, analytical instrumentation and other technologies are becoming increasingly central to all areas of science. Increases in computing power drive advances in modeling and [simulation](#) that extend the reach of science. Improvements in networking increase access to information, instrumentation, and colleagues around the globe. Digital data are the common thread linking these powerful trends in science.

"Science and engineering research and education are increasingly digital," said Arden L. Bement, Jr., director of the National Science Foundation and co-chair of the Committee on Science. "New observation systems are prime examples, expanding the scales for conducting observations from the sub-atomic to the cosmic; from a billionth of a degree to millions of degrees; and from sub- picoseconds to light years. A broad framework for promoting continuing access and interoperability for scientific data is key to progress in this digital age."

The report lays out a strategic vision for "a digital scientific data universe in which data creation, collection, documentation, analysis, preservation, and dissemination can be appropriately, reliably, and readily managed, thereby enhancing the return on our nation's research and development investment by ensuring that digital data realize their full potential as catalysts for progress in our global information society."

The report includes three key recommendations to pursue this vision. The first is to create an interagency subcommittee under NSTC that will focus on goals that are best addressed through continuing broad cooperation and coordination across agencies. The second key element of the strategic framework is for departments and agencies to lay the foundations for agency digital scientific data policy and make the policy publicly available. In laying these foundations, agencies should consider all components of a comprehensive policy to address the full data management life cycle. The third key element is for all agencies to promote a data management planning process for projects that generate scientific data for preservation.

More information: The report represents the combined effort of representatives from 22 federal agencies working together under the Interagency Working Group on Digital Data. The report may be found at www.nitrd.gov/About/Harnessing_Power.aspx .

Source: National Science Foundation ([news](#) : [web](#))

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