

## **Department of Energy**

## Office of Science Washington, DC 20585

Over the past few years, DOE has recognized that the high performance computing needs of the research community supported by the Office of Biological and Environmental Research (BER) are likely to expand significantly. To prepare for such growth, BER and the Office of Advanced Scientific Computing Research (ASCR) will solicit input from the BER research community that will assist in planning for future DOE investments in computing and data storage capabilities at the National Energy Research Scientific Computing Center (NERSC).

We invite you to participate in a requirements workshop entitled "Large Scale Production Computing and Storage Requirements for Biological and Environmental Research." to be held on September 11 & 12, 2012, in the Washington, DC, area.

The goal of the workshop is to characterize and project BER's production computing, storage, and service requirements for 2016 at NERSC. NERSC is the principal provider of production High Performance Computing (HPC) facilities and services for the Office of Science (SC). The mission of NERSC is to accelerate the pace of scientific discovery by providing computing, information, data, and communications services for research sponsored by SC. NERSC supports the largest and most diverse research community of any computing facility within DOE.

Input on computing requirements to be collected during the workshop will help NERSC plan for future systems acquisitions and services, and will help ensure that NERSC continues to provide world-class support for scientific discovery. The tangible outcome of the meeting will be a report that includes both the projected HPC and computing services requirements for 2016 at NERSC and a supporting narrative based on projected BER science needs.

The meeting will be conducted following a framework developed during the first iteration of these NERSC/SC Program Requirements Gathering Workshops, which took place during the period 2009 - 2011 (for more information, visit http://www.nersc.gov/science/requirements-workshops/). Designated BER program managers, Drs. Susan Gregurick, Dorothy Koch, and Renu Joseph, the NERSC program manager Dr. Yukiko Sekine, and NERSC personnel have tailored the meeting format and process to meet BER/NERSC-specific needs.

As in previous workshops, we ask each participant to address current bottlenecks and future computing systems and service requirements in descriptive case studies of their research. We expect this to stimulate discussion of HPC needs within the context of BER science from the whole group. Detailed information and reference materials will be

available at the meeting web site: <a href="http://www.nersc.gov/science/requirements-workshops/BER-2012/">http://www.nersc.gov/science/requirements-workshops/BER-2012/</a>.

Please respond to the meeting organizing committee (<u>BER-Workshop-Committee@nersc.gov</u>), confirming your attendance **no later than May 11, 2012.** 

We believe this meeting will help NERSC maintain its reputation as the flagship production computing facility for DOE's Office of Science and provide world-class resources for BER research over the next decade. Thank you again for your participation.

Dr. Sharlene Weatherwax

Associate Director of Science for Biological and

**Environmental Research** 

Dr. Daniel Hitchcock

Associate Director of Science for Advanced Scientific Computing

Research