United States Senate

WASHINGTON, DC 20510

March 17, 2005

Dear Colleague:

We are writing to ask your support for the DOE Office of Science for fiscal year 2006.

The Office of Science supports research across the scientific spectrum from high energy physics to biology and environmental research; from fusion energy sciences to nuclear physics, from basic energy sciences to advanced scientific computation research. This Office provides 42 percent of the federal funding for the physical sciences in the United States. It is considered by the U.S. Science community as the primary steward for fields such as high energy physics, plasma physics, catalysis, and nuclear physics. The research sponsored by the Office supports 23,500 students, postdocs, and faculty across our Nation. Their large scientific user facilities are used by over 19,000 researchers each year. They include synchrotron light sources, neutron sources, high energy and nuclear physics accelerators, fusion energy experiments, scientific computing resources, and the Joint Genome Institute, a premier genome sequencing facility. New facilities being brought on line include the Spallation Neutron Source, four world class nanoscience research centers and a next generation ultrafast light source to allow researchers to "see" chemical bonds forming and breaking. Our industries use these facilities to obtain unique data so they can be innovative and competitive in a fierce global high-technology environment.

The Office of Science's research has proven its ability to deliver results over its 50 year life through the award of 70 Nobel Laureates. The science from this Office has spawned new industries such as nuclear medicine technologies that save thousands of lives each year. It has changed the way we see the universe and ourselves; by identifying the ubiquitous "dark energy" that is accelerating the expansion of the universe and by using its unique blend of scientific capabilities to initiate the human genome project and develop technologies that made it possible. The Nation's investment in the Office's basic research programs continues to pay dividends to the American taxpayer by training our students in the sciences, enabling our industries to remain competitive and sustaining our nation's long held policy to lead the world in science.

If you would like to sign this letter please contact Mr. Jeff Muhs with Senator Alexander at 224-4944, jeff_muhs@alexander.senate.gov or Dr. Jonathan Epstein with Senator Bingaman's Office at 224-5521, jonathan_epstein@bingaman.senate.gov.

Sincerely,

Lamar Alexander

Lamar Alexander
U.S. Senator

Jeff Bingaman
U.S. Senator

United States Senate

WASHINGTON, DC 20510

March 17, 2005

The Honorable Pete Domenici
Chairman
Energy and Water Development
Subcommittee
Committee on Appropriations
United States Senate
Washington, D. C. 20510

The Honorable Harry Reid
Ranking Member
Energy and Water Development
Subcommittee
Committee on Appropriations
United States Senate
Washington, D. C. 20510

Dear Chairman Domenici and Ranking Member Reid:

There is no room for complacency about maintaining the United States' current scientific strength and technological leadership. That is why we are writing to bring to your attention our bipartisan support for the Department of Energy's (DOE) Office of Science (the "Office") which faces significant cuts (3.8 percent) in the proposed FY06 budget. We request your support for an inflation-adjusted increase of 3.2 percent over FY05 budget levels for this Office, a 7 percent increase above the Administration's FY06 request.

This Office, the largest funding source for research in the physical sciences, keeps the United States at the leading edge of discovery in high performance computing, nanotechnology, and in basic energy research and related biosciences.

The Administration's FY06 budget request contains much good news for the U.S. scientific enterprise. The Spallation Neutron Source, which will restore U.S. leadership in neutron scattering science, is fully funded for start-up operations. The Office will begin operations at four Nanoscale Science Research Centers, ensuring that the U.S. stays well ahead of our international competitors in this emerging new scientific discipline. Additionally, construction and planning expenses for a number of major new facilities and ITER (a major international research collaboration in fusion energy) are supported.

But this encouraging news comes at a high price. To support these critical new initiatives -- and ensure the long-term vitality of DOE's scientific infrastructure -- the Office of Science is forced to cut its core research funding to individual researchers. It is not unrealistic to expect that 25 percent reductions in existing scientific personnel and operations at scientific facilities will be needed if the Administration's budget request is approved without consideration of existing programs. As many as 2,000 highly qualified scientific personnel, including our best and brightest graduate students and post doctoral fellows searching for breakthrough discoveries, may have to be taken off of promising projects. Major scientific research facilities that still have significant productive years ahead of them may have to run at wasteful levels far below their maximum operating capacity, or close down.

Such a major loss of intellectual capital would mean a nationwide decrease in our scientific capability and economic competitiveness. America's physical sciences' research infrastructure, yet again, would be particularly hard hit, coming at a time when our international competitors in Asia and Europe are increasing their investments in these critical disciplines that underpin virtually every facet of our lives and economy. We ignore at our peril the unprecedented competitive challenges from abroad. Other countries are investing heavily in research that produces talented, highly-educated workers and cutting-edge companies. For example, China graduates almost four times as many engineers as the United States. India is pouring money into technology parks to lure back native talent and build world-class advanced technology companies. South Korea has leveraged rapid global technology diffusion to "leapfrog" into the global economy

Our edge in science and technology is at risk, and the Administration's proposed out-year budget projections to FY2010 offer no relief. In fact, the situation worsens. The budget for the Office not only fails to keep pace with inflation, but actually declines for the next five years. Unless we stop this slide and restore the budget to a reasonable level, our entire U.S. scientific enterprise is in danger of eroding. Sustained investment in science and technology must be at the core of America's strategy to successfully compete.

We are acutely aware of the tight constraints on the available budgetary resources. Still we believe we must reaffirm the centrality and importance of our basic research investments. We urge you to increase the funding for the Office of Science to ensure that America remains at the forefront of scientific capability, thereby enhancing our ability to shape and improve our nation's and the world's future.

Sincerely,

Lamar Alexander

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