

Director's Corner

11 September 2008



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US National Science & Technology Summit

The US government policy for support of science and technology is being developed around the [2007 America Competes Act](#), a consensus policy to strengthen long-term US economic competitiveness through science and technology. This act calls for a substantial increase in US investment in science and technology, including an approximate doubling of the funding for the National Science Foundation over a five-year period, and an almost similar increase for the Department of Energy (DOE) Office of Science. Consequently, the President proposed increased budgets. President and Congress approved them with bipartisan support last year. Unfortunately, they were interrupted by the Omnibus Bill that so adversely affected high-energy physics funding, including the ILC. Hopefully this plan will resume on track in the next US budget. The Act directed the President to "*convene a National Science and Technology Summit to examine the health and direction of the United States' science, technology, engineering, and*

mathematics enterprises," and to issue a report on the Summit results. That summit meeting was held on 18 August 2008 at Oak Ridge Laboratory.

The Oak Ridge meeting brought together representatives from government, industry and research. I was invited to participate and to contribute a [white paper](#), as well as serve on one of the panels. My paper for this meeting emphasised the growing role of large-scale facilities in scientific research, now including fields well beyond physics and astronomy. I especially stressed the growing international collaborative nature of large-scale facilities, motivated by the need to bring together the talent, skills and resources necessary for such ambitious endeavours. As for the US, I explained that it is essential that mechanisms to provide funding stability must be developed. I also pointed out that actions like the ones resulting from the Omnibus Bill reinforce the view that the US is not a reliable international partner. In addition, I said that we must work to integrate and find common ways to achieve accountability, to develop governance, to oversee project management, etc.

How important is such a national policy meeting for the ILC? The main task and challenge for us is to develop a technical design and an implementation plan for the ILC that will be realistic and so attractive that our collaborating countries will want to join and invest in this partnership. Of course we expect the extraordinary scientific potential of a linear collider to be substantiated by the Large Hadron Collider (LHC). Assuming the energy reach of the ILC is well matched to the science, we must also produce a technically sound and cost-optimised design to bring forward. Just as important is an implementation plan that is realistic in terms of the scientific and national priorities of our partner countries. To do this, we must be fully aware of national priorities and strategies, and we must work with our collaborating countries to develop a plan that fits well with their plans and goals. I am confident this is all achievable, but needs willingness and effort.

I found this summit meeting quite stimulating. It is a very complex problem to take into account and balance the goals and needs of governments, industry and research. In addition, this meeting had an equally important parallel programme on improving science education. A stronger scientific and technical enterprise worldwide is a key to moving mankind forward in the 21st century. We must maintain a peaceful world, preserve our environment, and develop all the countries of the world. Scientific and technical advances can help provide the fuel to power our increasingly complex civilisation.

-- Barry Barish



Oak Ridge National Laboratory, host of the Science and Technology Summit



Discussions at the National Science and Technology Summit