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EDITORIAL

The Politics of Science

Fifty years ago, in his office at the Carnegie Institution on 16th Street here in Washington, D.C., Vannevar Bush was putting the finishing touches on a document that was to be the blueprint for U.S. science and technology for the rest of the century. Bush was writing for a world of change and transition, a world where the only clear enemy was Communism and the battle was waged in terms of technological superiority.

We approach the 21st century in a similar period of sweeping change, although we have different enemies than those Bush envisioned. They are not armies; they are new and emerging diseases. They are not missiles, but the threat of rapid global climate change. They are not tanks and submarines; they are poverty, crime, and economic stagnation.

In culture and society, change can be a good force. Change is critical to a democracy and essential to a freely governed people. Change—in the United States and abroad—brought President Clinton into office in 1992, and the last congressional election told us that the tides of change have not yet abated.

For the nation's science and technology enterprise, there is no resisting these forces of change. The nation's domestic discretionary budget will be cut and cut dramatically. It will not be possible at any time in the foreseeable future to return to the days when each annual federal budget brought expansive increases in science funding and new starts for grand and expensive scientific projects. We must learn to do more with less—less money, fewer facilities, fewer researchers.

The current debates over science funding are not about who would preserve the status quo and who would advocate change. There will be no "business as usual"; the spendthrift budgets of the 1980s and early 1990s were unsustainable and mortgaged much of our national future. To pay that inherited mortgage, we already have made significant changes in the federal research system by downsizing, restructuring, and deregulating. We will need to do even more.

Rather, the question is one of balance: How do we balance the many competing needs of this nation as it enters the 21st century, and in doing so, how do we ensure that research and development (R&D) remain national priorities? We have to balance science funding with funding for hospitals, education, police, and housing. We have to balance our R&D portfolio with funding for environmental protection, antiterrorist activities, and military preparedness.

We will have to balance our zeal for budget cutting with the need to invest in our future. The mechanism we will use to balance national priorities is the political process, and the debate over how and with what speed these changes are accomplished is a political debate. Because science and technology have enjoyed much bipartisan support in the past, many in the research community have come to view science as a sacred cow that is somehow removed from the political agenda. But political debate is one of the inescapable consequences of political change. It is how we shape and define ourselves as a nation committed to democracy.

In the end, it will not be enough for us to simply repeat the arguments of Vannevar Bush in favor of putting money aside for science. It also will not be productive to lament the "politicization" of science. Money is scarce, and the scarcer it becomes, the sharper become the politics of how it is spent. We should instead be grateful that research stands as high as it does on the political agenda; it is a mark of the value of science to the U.S. public that the Administration and the Congress are struggling over how best to support R&D. We must use this period of change to secure a productive and peaceful future for the nation.

There are those who believe that scientists should stay out of politics. This is not a luxury we have; in truth, it is a luxury we never had. Each of us needs to be a partisan for science, to embrace a partisanship born of hope for the future. It is not partisanship based on party ideology but on concern over the possibility that the work of generations that has put us at the forefront of world science and technology could be undone in a few budget cycles. It is a personal partisanship based on conviction, and such partisanship is the moral calling of every citizen in a democracy.

John H. Gibbons
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