

EDITORIAL/OPINION

Don't Cut Funding for Science

By STEVE CHARNOVITZ

Federally funded science programs are on the chopping block in Washington. They shouldn't be. Of course, the \$160 billion federal budget deficit needs to be eliminated. But there are plenty of ways to do that without stripping investment from America's future.

Although a few conservatives have been chary of science since the discoveries of Darwin, Republicans generally are not hostile to research. Still, some key congressional leaders lack a strong commitment to science.

For example, several months ago, Rep. Robert S. Walker, chairman of the House Science Committee, told the directors of five federal science agencies, "We have to get past the idea of these things as government programs."

Because scientific progress diffuses rapidly and promotes economic growth, civilization has long recognized the benefit of governmental subsidies for science. More than 2,300 years ago, Ptolemy III supported Eratosthenes' work in mathematics and astronomy. Two hundred years ago, George Washington told the Congress "there is nothing which can better deserve your patronage than the promotion of science and literature."

Federal promotion of science burgeoned during World War II, and again in the late 1950s. During the past three decades, however, federal spending on science has declined as a percentage of national output (including or excluding the space program in such calculations). During the 1980s, real funding for non-defense research and development fell sharply, but has since recovered to the levels of the mid-1960s.

Although much of the congressional ire is aimed at applied technology, science has not escaped the ax. The recently passed budget resolution provides only a tiny inflation adjustment for federally supported science. Therefore, between 1995 and 2002, the buying power of these gen-

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eral science and basic research programs would drop about 15%. This action threatens funding for universities, hospitals and government labs. The Congress has also allowed the research and experimentation tax credit to expire on June 30.

Instead of reducing federal support for science, Congress should be increasing it. Four years ago, Nobel Prize winner Leon M. Lederman suggested a doubling of the federal research budget. In considering what the right level of public support is, we should remember that scientific research is too labor-intensive to achieve productivity gains through economies of scale. We should also look at Japan and Germany, which spend proportionally more than we do on non-defense research. Another relevant factor is the continuing reduction of long-term research by U.S. corporations.

Just as Democrats sometimes have a blind spot for unsuccessful government programs, Republicans

sometimes have a blind spot for successful ones. It is not necessary to dismantle good programs to eliminate the deficit. There are scores of questionable programs that should be eliminated — tobacco subsidies, for example — before cutting the first dollar of science funding.

This is not to suggest that waste and duplication are absent from federal science programs. They aren't. But budget cuts alone are not likely to raise the efficiency of a public agency. Federal science programs need better management.

The top priority should be to design a new set of procedures to insulate project and site selection from politics. Whatever its scientific merit, the super-collider became a symbol of "pork barrel science" and has undercut public support for big projects in the future.

Another priority should be to reorganize the national laboratories and to clarify their military and civilian missions. A blue-ribbon panel

headed by Robert Galvin of Motorola provided some very useful recommendations to the Clinton administration on how to improve the labs. So far, the administration has been slow to act.

A third area for reform is to pursue more internationalization of science policy. This is already occurring in some fields like space, environment and biomedicine, but one can imagine much deeper cooperation among the European Union, Japan and the United States. Right now, the U.S. government lacks a Cabinet-level science minister even to participate in such discussions.

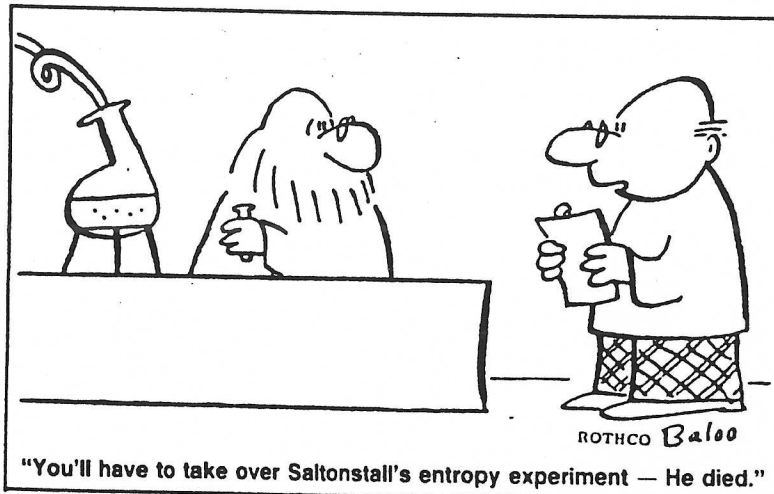
While it is fair to point the finger at Republican congressional leaders for reducing science in the current budget round, both parties share responsibility for the retrenchment on science since 1965. Indeed, in his 1983 book "Window of Opportunity," Rep. Newt Gingrich blames "liberals" for defunding technology and space programs.

Ideally both parties should work together to promote science. The Clinton administration had a good opportunity to promote bipartisanship in science, but failed to do so.

Last fall, for example, the White House released the first formal presidential statement on science in 15 years. It was a 31-page report called "Science in the National Interest." Substantively, it was fine. But the report was adorned with 22 side-bar quotations from prominent scientists and five from democratic politicians. The White House did not bother to include any quotations by Republican-elected officials.

The congressional plan to reduce real spending on science programs is unwise. Business groups and the public should oppose the beggar-thy-future budget cuts. America needs more, not less, governmental support for research, and for the institutions, scientists and students that carry it out.

Steve Charnovitz writes often on business and trade issues.



"You'll have to take over Saltonstall's entropy experiment — He died."