# New Budget Provides Lift for Science

On Feb. 2, President Bill Clinton gave Congress a 1999 budget containing surprisingly good news for many of the agencies that fund scientific research and development (R&D). The 381-page document, representing the first balanced budget proposal for the federal government in 3 decades, detailed some $1.7 trillion in spending programs.

While mandated efforts to balance the budget have caused science funding to slip in recent years, the proposed 1999 budget offers a nearly $2 billion increase, to slightly more than $78 billion, in R&D spending by military and civilian agencies.

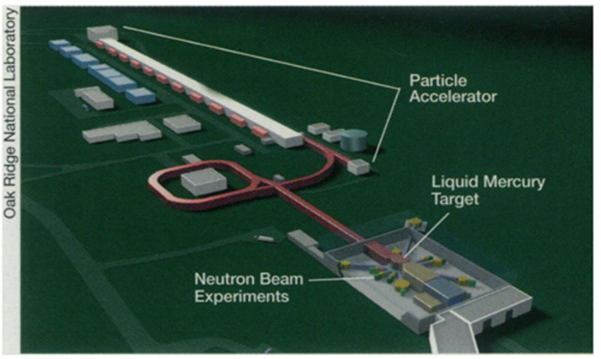
When adjusted for inflation, projected to be 2.0 percent, this increase represents a 0.6 percent rise over 1998 budget figures.

As the military portion of R&D funding continues to shrink, civilian agencies receive more of the bounty. Nondefense R&D jumps an inflation-adjusted 3.7 percent, to $37 billion, under the proposed budget. Moreover, in outlining the Research Fund for America set out by President Clinton in his State of the Union address, the budget calls for civilian R&D funding to grow by 32 percent in the next 5 years.

Presidential science adviser John H. Gibbons notes that the 1999 budget emphasizes the research component of R&D—welcome news to universities whose faculty pursue fundamental questions in science. Indeed, funding for basic research, both civilian and military, would increase 5.5 percent after inflation.

"It's a lot better starting point than we've seen in a while," says Albert H. Teich, director of science policy at the American Association for the Advancement of Science in Washington, D.C. "Still, you have to bear in mind it's not a done deal. There are a lot of hungry mouths to feed."

The most ambitious new science project in the budget is the Department of Energy's $1.3 billion Neutron Spallation Source, which would use a particle accelerator to send high-energy protons into liquid mercury, generating neutrons to probe materials, biological molecules, and the nature of matter. Though construction is not likely to start until 2000, the 1999 budget includes an initial $157 million for planning the facility, which would be built at Oak Ridge (Tenn.) National Laboratory.




*Artist's rendering of future Department of Energy Neutron Spallation Source.*

Overall, the Energy Department did well. Its R&D budget is slated to rise an inflation-adjusted 8.6 percent, with some of the new money going to the Climate Change Technology Initiative, a 5-year research and technology plan to reduce the country's emissions of greenhouse gases. The Environmental Protection Agency and several other federal agencies would join that initiative.

Another agency slated to receive a windfall in the 1999 budget is the Department of Health and Human Services, which oversees the National Institutes of Health. In 1999, NIH funding would leap an inflation-adjusted 6.5 percent, bringing its total to $14.8 billion. Furthermore, the budget outlines a plan to increase NIH's funding by 50 percent over 5 years.

Much of the new NIH money will be earmarked for cancer research and for research on AIDS and emerging infectious diseases. NIH Director Harold Varmus notes that nearly half the money will be used to increase the number and size of research grants available to investigators around the country.

The National Science Foundation would see an inflation-adjusted 8.8 percent increase in funding, according to the 1999 budget proposal. The foundation plans to emphasize new research programs in computing, communications, and science education.

Despite the scientific and public relations success of the Mars Pathfinder mission, financial hard times at NASA would continue. The agency's funding would drop an inflation-adjusted 4.5 percent in fiscal 1999. Still, Daniel S. Goldin, head of the space agency, remains upbeat. "The 21st-century NASA does better and more with less," he asserts.

The new NASA budget continues funding for the International Space Station, whose first components are scheduled to go into space later this year, and provides initial money for a satellite that would visit Jupiter's moon Europa. The craft, scheduled for launch in 2003, would bounce radio waves off the moon's icy surface, measuring the ice's thickness and determining whether an ocean of water—perhaps harboring life (SN: 11/1/97, p. 284)—exists under the frozen crust.

While the President's 1999 budget proposal has brightened the faces of many science agency officials, the source of most of the additional money for R&D remains unclear. Congressional opponents complain that the President's budget depends too much on billions of dollars from a still-unachieved legal settlement between tobacco companies and the federal government.

"The administration is clearly trying to force Congress to pass this tobacco settlement. If you associate all these good things, like health research, with it, that puts pressure on Congress," notes Teich.

*—J. Travis*

**Research and Development Funding**
**Budget Authority (in millions of dollars)***

| Agency or Department | FY 1997 (actual) | FY 1998 (estimated) | FY 1999 (proposed) | Percent Change 1998–1999† |
|---|---|---|---|---|
| Defense | 37,238 | 37,430 | 37,010 | -3.1 |
| Health and Human Services (National Institutes of Health) | 12,941 (12,750) | 13,836 (13,648) | 15,136 (14,798) | 7.2 (6.3) |
| NASA | 9,348 | 9,752 | 9,501 | -4.5 |
| Energy | 6,234 | 6,477 | 7,174 | 8.6 |
| National Science Foundation | 2,463 | 2,607 | 2,893 | 8.8 |
| Agriculture | 1,562 | 1,559 | 1,552 | -2.4 |
| Commerce | 978 | 1,079 | 1,080 | -1.9 |
| Interior | 592 | 609 | 631 | 1.6 |
| Transportation | 612 | 676 | 775 | 12.4 |
| Veterans Affairs | 588 | 608 | 670 | 8.0 |
| Environmental Protection Agency | 564 | 637 | 631 | -2.8 |
| Other | 833 | 928 | 1,106 | 16.8 |
| Total | 74,003 | 76,198 | 78,159 | 0.6 |

* Adapted from Office of Management and Budget data; figures are rounded.
† Adjusted for 2.0 percent inflation.