basic research paid for by the government by 8 per cent, or $\$ 1.2$ billion, to $\$ 17$ billion, and applied research by 5 per cent, or $\$ 850$ million, to $\$ 16.5$ billion. Total federally funded research and development would grow by 3 per cent to $\$ 78$ billion.

The emphasis on basic research echoes the views of leading Republicans in Congress, and contrasts with Clinton's previous emphasis on technology programmes. But Jack Gibbons, the president's science adviser, denies that the administration has been bounced by the Republicans into backing basic research. "We're delighted that there are calls for increased research and development from Capitol Hill," Gibbons says. "It would be fruitless and unproductive to argue about who came first."

The administration proposes to spend the money on research and other investment priorities, including education and the environment, without cutting other spending or consuming the $\$ 9.5$ billion budget surplus projected for 1999. The budget avoids breaching the spending limits set in last year's balanced budget agreement by proposing that extra money should be diverted to research through a tobacco settlement.

ColinMacilwain

## Global warming is bright spot for Energy



President Bill Clinton has asked Congress for the biggest dollar increase in the history of the National Institutes of Health (NIH) biomedical agency, with the focus on cancer research spending.

The request, made in the $\$ 1.73$ trillion 1999 budget Clinton sent to the Congress on Monday (2 February), for $\$ 1.15$ billion in new money would bring the NIH's budget to $\$ 14.8$ billion in 1999 - an 8.4 per cent increase. The budget also projects a 48 per cent increase in spending on NIH by the end of 2003 , when the agency's funding would reach $\$ 20.2$ billion.

Cancer research fared particularly well, with Vice President Al Gore using a White House ceremony last week to declare scientists "right on the verge" of a breakthrough, and to tout a 65 per cent, $\$ 4.7$ billion increase in cancer funding at NIH over the next five years. Ninety per cent of it would go to the National Cancer Institute (NCI).

In spite of this focus on cancer, "everyone is a winner in this budget" , says NIH's director, Harold Varmus. "There is not a single activity at the NIH that is not going to be markedly enhanced."

Clinton calls the new money "vital" to America's continued leadership in science and technology, and describes NIH as the "flagship" of his 'Research Fund for America', a $\$ 25.3$ billion, five-year package of spending increases on science and technology, of which NIH would ultimately collect $\$ 17$ billion.

Like the rest of the fund, the NIH increases
would be funded entirely from revenues from a proposed $\$ 368.5$ billion settlement with the tobacco industry, under which Congress would limit cigarette makers' liability. That settlement is, however, regarded as far from certain to be enacted by Congress.

Health and human services secretary Donna Shalala has insisted that, if the tobacco agreement collapses, the administration will find the NIH money elsewhere within its budget. "This is not contingency funding," she said at a briefing last week.

Congressional Republicans questioned that. Arlen Specter (Republican, Pennsylvania), who chairs the Senate subcommittee that funds the NIH, called the assumed tobacco revenues "pie in the sky" and questioned where the new money will come from.

Among NIH institutes, the National Human Genome Research Institute would benefit most handsomely, with a 10.3 per cent increase to $\$ 240$ million. The NCI would see its budget boosted by 8.9 per cent, to $\$ 2.8$ billion, in 1999.

Throughout NIH, research project grants would reach a record number of 28,603 . The number of new grants and grants competing for renewal would increase by 8.4 per cent, to 8,267 . The value of these new and competing grants would next year be boosted on a onetime basis by 10 per cent.

Separately, funds for NIH training grants would be boosted by 19 per cent, with most of the money going to stipends. Meredith Wadman

## EPA to spend more on clean air and water

The $\$ 7.8$ billion budget request for the Environmental Protection Agency (EPA) is up 6 per cent from this year's level, with much of the increase going to pay for clean water and air programmes. But the agency's overall funding for science and technology goes down 6 per cent, to $\$ 631$ million, and the Office of Research and Development drops 9 per cent to $\$ 487$ million.


The US Geological Survey's $\$ 807$ million budget request represents a 6 per cent increase over last year's appropriation, but funding is projected to decline slightly, to $\$ 796$ million, by 2003. The 1999 increase includes money for clean water initiatives, species and habitat conservation studies, and $\$ 15$ million for a multi-agency natural disaster information network.

## Technology projects fall from presidential grace

This Clinton budget is the first since 1993 to omit grandiose plans for two programmes that were once in the vanguard of the administration's technology policy. No expansion proposals are made for the Advanced Technology Program and the Manufacturing Extension Partnership, both run by the Department of Commerce.

