

vent the fire." If USGS and NBS were cut, the research "would not be carried out by the private sector," warned USGS chief Gordon Eaton.



Commerce. The National Institute of Standards and Technology (NIST) continues its reign as a favored child of the Clinton Administration, with a requested 20% increase that would raise its budget to \$1.02 billion. But mindful of Congressional opposition to its industry-led research programs, NIST has lowered its sights. The Advanced Technology Program (ATP)—the Administration's primary tool for funding high-risk industrial research—would receive a 14% boost, to \$491 million, after a 150% rise in 1995. And there is a

62% increase, to \$147 million, for the Manufacturing Extension Partnership program. NIST's director, Arati Prabhakar, says it will be hard to reach the Administration's goal for ATP of \$750 million by 1997. But even getting this year's increase through Congress could be difficult. "We're cutting it all," says a staffer for Representative Harold Rogers (R-KY), chair of the House appropriations subcommittee that oversees Commerce's budget.



Agriculture. Twelve labs would be closed as the Agricultural Research Service braces for a proposed 2% cut in its \$800 million budget. The work, mostly at crop improvement centers like the Pecan Field Station in Brownwood, Texas, would be dis-

continued and replaced by research in areas such as pest control and human nutrition.

The National Research Initiative (NRI) would receive \$130 million, an increase of \$27 million, for competitive peer-reviewed grants to researchers working in areas from plant and animal science to food safety.

The next step for the budget is Congress. Although Administration science officials talk about having "dodged a bullet" in preserving the overall R&D budget, they admit that they are likely to face heavier fire in the months to come.

—Jeffrey Mervis

With reporting from Andrew Lawler, Eliot Marshall, Antonio Regalado, Wade Roush, Robert Service, and Richard Stone.

U.K. BUDGET

Priority Initiatives Squeeze Science

Researchers in Britain got a surprise last week when the government announced how the research budget for fiscal year 1995–96 will be divvied up. Although Britain's six research councils will receive a total of 2.9% more cash than in the year before—just enough to keep up with inflation—science minister David Hunt announced that about 5% of the £1.28 billion (\$2 billion) total would be earmarked for a set of "priority initiatives" in applied research defined by the government. As a result, some areas of research may have to be squeezed to pay for the new priorities.

This budget redirection is the first time researchers have truly felt the government's commitment to steer research into more wealth-creating areas, as outlined in a 1993 white paper, or policy statement. The white paper led to a reorganization of the responsibilities of the research councils last year that was well received by researchers (*Science*, 29 July 1994, p. 596). But it also launched an exercise dubbed "technology foresight," in which industrialists and academics were asked which areas of research would most benefit the country's prosperity. The new priority initiatives are the first fruits of that process.

The areas Hunt named as priorities include the genome project (to receive \$6.2 million), bioprocessing, wealth-creating products from plants (such as designer plastics and oils), cognitive engineering (improving the human/computer interface), environmental diagnostics and clean technology,

and mainstream physics and mathematics. In addition, the new Edward Jenner Institute for Vaccine Research in London will receive \$3.9 million.

Although some of the initiatives are extensions of projects already under way, in some cases existing projects may have to be cut to shift funds to the new priority areas. "Inevitably there will be some reorientation. ... [But] we hope to protect as much of the curiosity-driven research as possible," says Tom Blun-

del, chief executive of the Biotechnology and Biological Sciences Research Council. An official from the Engineering and Physical Sciences Research Council says the requirement that \$33 million of his council's budget be allocated to priority initiatives is "likely to mean problems with new commitments." He added that it is difficult to commit funds to 3-year projects if the government is going to require more initiatives

in coming years. Each of the research councils will meet in the next month to decide how to redistribute funds to accommodate the initiatives. The earmarking apparently came as a shock to the research councils, which previously defined their own research priorities, and the mostly university-based researchers they support. David Porteous, head of the Medical Research Council's (MRC's) Human Genetics Unit at Edinburgh, calls the emphasis on value for money at the expense of curiosity-driven research "worrying." He adds: "It's not always possible to know where the next breakthrough is going to come from."

Ironically, the council that will receive the largest increase for the year is the one with perhaps the least potential for wealth creation: the Particle Physics and Astronomy Research Council. This hike is due to European currency fluctuations that have caused large net increases in subscriptions to international consortia such as the CERN high-energy physics center and the European Space Agency (ESA). But even this increase will not be enough to avert a squeeze on some projects, says Chief Executive Ken Pounds: "There are [projects] queueing up for funding which we won't be able to fund." For example, Pounds predicts that any U.K. instruments for the forthcoming ESA gamma-ray observatory Integral will be "the first casualty" of the cash deficit. Other projects that the council may have to abandon include the GEO600 gravitational wave interferometer, planned in collaboration with Germany, and the proposed Very Small Array of telescopes in Tenerife in the Canary Islands, to detect microwave background radiation.

—Claire O'Brien

Claire O'Brien is a science writer in Cambridge, U.K.

ALLOCATION OF THE SCIENCE BUDGET (£ millions)

	1994–95 allocation	1995–96 allocation	Increase	Priority initiatives
BBSRC	157.1	161.6	4.5	12.2
ESRC	59.8	61.2	1.4	1.3
EPSRC	358.9	365.7	6.8	21.1
MRC	269.3	277.8	8.5	14.0
NERC	151.7	155.5	3.8	3.2
PPARC	187.4	196.4	9.0	8.3
Others*	56.7	63.5	6.8	7.1
Total	1240.9	1281.7	40.8	67.2

BBSRC: Biotechnology and Biological Sciences Research Council; ESRC: Economic and Social Research Council; EPSRC: Engineering and Physical Sciences Research Council; MRC: Medical Research Council; NERC: Natural Environmental Research Council; PPARC: Particle Physics and Astronomy Research Council.

*Includes Royal Society and pensions.

dell, chief executive of the Biotechnology and Biological Sciences Research Council. An official from the Engineering and Physical Sciences Research Council says the requirement that \$33 million of his council's budget be allocated to priority initiatives is "likely to mean problems with new commitments." He added that it is difficult to commit funds to 3-year projects if the government is going to require more initiatives