2001 U.S. BUDGET

Record Year for Science, But Can It Be Repeated?

Science won record increases last year, but a new president, a slowing economy, and stiff competition could make an encore difficult

Science funding advocates are still breathless from the success they enjoyed in Washington in 2000. But disinclined to rest on their laurels, they're already fretting about how to maintain the momentum in the new year.

On 21 December, President Bill Clinton capped a banner year for science by signing the last of the 13 annual spending bills that detail the U.S. government's $1.8 trillion budget. Only one-third of that money is available for so-called discretionary spending, but legislators committed nearly 15%, or nearly $91 billion, to research and development (R&D) (see table). That record total is 9.1% higher than last year and far above the $85.4 billion requested by the Clinton Administration, according to an annual analysis prepared by the American Association for the Advancement of Science (AAAS, publisher of *Science*).

Leading the way were major increases for the National Institutes of Health (NIH), the National Science Foundation (NSF), and basic science programs at the departments of Defense and Energy. The boosts push nondefense R&D to an all-time high of $45.4 billion, essentially matching the $45.5 billion slated for military-related research. More significantly, the 2001 figures end years of stagnating budgets for nonbiomedical research.

But science lobbyists worry that repeating such gains could be difficult in the 2002 fiscal year that begins on 1 October. "A number of factors will make our lives more anxious," predicts one lobbyist for a major research university. A slowing economy could reduce projected surpluses in the federal budget and make lawmakers wary of funneling more cash into basic research. And new leadership in the White House and several key congressional committees could also complicate the budget-making process.

The annual rite will begin next month, when the outgoing Clinton team releases a "steady-state" budget that holds spending increases to a projected 3% or 4% rate of inflation. The incoming Bush Administration won't unveil its budget priorities until March or April, and even then, it will produce only an outline that could take months to fill out. As a result, "We have to be prepared for some numbers that are not going to look terribly good at the beginning," says physicist Michael Lubell, lead lobbyist for the American Physical Society in Washington, D.C.

Apart from pushing for a bigger budget, groups are also preparing for battles on a range of other issues, including revitalizing the Department of Energy's (DOE's) Office of Science, the government's third-largest civilian research funder.

Last month, 11 prominent physical scientists—including former Clinton White House science adviser John Gibbons and two former DOE science chiefs, Martha Krebs of the University of California, Los Angeles, and Princeton University's William Happer—declared that DOE's $3 billion science program is in "crisis" due to strained budgets and DOE security and pollution cleanup scandals. "The problems "have given the overall agency a negative image that, in practice, has proved damaging to ... its missions in science and energy," the group concludes.

The five-page discussion paper offers two possible solutions. One is to promote the science chief to the rank of undersecretary, improving "the visibility and influence of science at DOE." A more radical alternative is to create a new "National Institute of Science and Advanced Technology," similar to NASA or NIH, that would merge R&D programs at DOE and the Department of Commerce. "The new agency would be a visible recognition by the U.S. government that long-term research drives economic progress," the panel says. With much of official Washington on holiday, there's been little reaction to the proposals so far. But Lubell says that "it's important to get them on the table so the discussion can begin."

—DAVID MALAKOFF

HOW RESEARCH FARED

Department/Agency	FY 00 (millions of dollars)	FY 01*	% change
National Institutes of Health	17,813	20,313	14.2%
Cancer Institute	3,311	3,757	13.5%
Alternative Medicine Center	69	89	29.3%
Minority Health Center		130	—
National Science Foundation	3,897	4,426	13.6%
Research	2,959	3,350	13.2%
Education	691	787	13.8%
Info. Tech. Research program	90	215	139%
H-1B visa fees (estimate)	33	105	218%
NASA	13,600	14,285	5%
Space science	2,193	2,508	14.4%
Earth science	1,443	1,498	3.8%
Life sciences	275	317	15.4%
Energy (Office of Science)	2,815	3,186	13.2%
Basic sciences	779	1,013	30%
High-energy physics	704	726	3.2%
Biological/environmental	434	500	15.2%
Computer research	128	170	33.1%
Defense (basic research)	1,161	1,327	14.3%
Commerce			
NOAA research	1,755	1,869	6.5%
NIST	636	598	–6%
U.S. Geological Survey	815	883	8.3%
EPA science and technology	642	696	8.4%
Agriculture			
National Research Initiative	119	106	–10.9%
Future agricultural initiative	120	120	0%
Cross-agency nanotech initiative	247	419	69.6%
TOTAL R&D	$83,300	$90,900	9.1%

* Does not include 0.22% cut for all agencies except NIH.

SOURCE: CONGRESS, AAAS