

NEWS

Bush and Congress set debate on priorities

President George W. Bush's vision of America's science priorities, as revealed in his budget request for fiscal year 2008, is pretty much the same as it was last year. But one crucial thing has changed: the Democrats are now in charge of Congress, and they are the ones who get to decide whether his request becomes reality.

When it received the president's request on 5 February, Congress was already in the process of laddling out an extra \$620 million for biomedical research in the current year, enough for the president's 2008 request to actually represent a cut. Bush has focused instead on increasing funding for the physical sciences under the second year of a 'competitiveness initiative' to stimulate investment in science and engineering. Overshadowing all such requests is the war in Iraq and the global war on terror, for which Bush is requesting \$142 billion for 2008.

Meanwhile, US researchers continue to deal with the messy leftovers of last year's budget process, of which the biomedical science boost forms a part. The budget process ground to a halt in December when the old, Republican-led Congress left without finalizing budget bills for fiscal year 2007. Soon, though, the current Congress is expected to pass a sort of

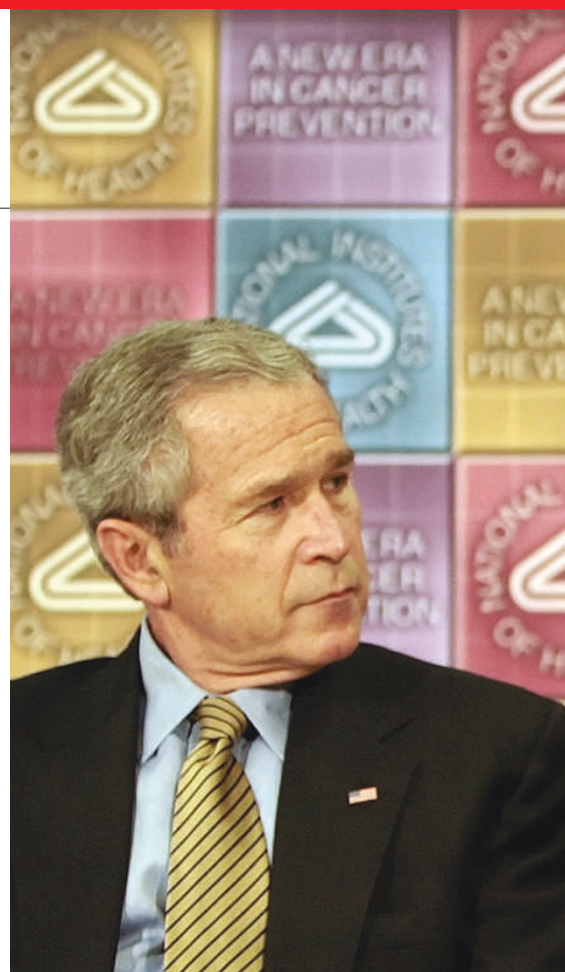
halfway budget for 2007, which would keep most agencies at their 2006 spending levels but make adjustments for some. The House of Representatives passed this bill on 31 January and the Senate is expected to do so by 15 February.

This week, Bush asked Congress to give the National Institutes of Health (NIH) \$28.7 billion in 2008 — \$232 million of it new money compared with 2006 levels. But of that, \$200 million would have to be transferred to the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria. That means, in effect, that Bush's request would cut the agency budget by roughly half a billion dollars, or 1.7% in 2008.

Health check

Elias Zerhouni, the NIH director, said he was pleased with both the congressional action and Bush's budget request. "I personally feel that there has been a huge turnaround — that Congress has regained confidence in the NIH," he said. "The same thing is true of this administration."

Research advocates weren't so upbeat. David Moore, a lobbyist at the Association of American Medical Colleges, says that his group has been encouraged by Congress approving the



NIH director Elias Zerhouni (right) feels President Bush's budget recognizes his agency's true role.

extra money for 2007. "We're equally discouraged with the administration's budget," he adds, "which essentially puts the NIH right back in the hole again."

But Congress may boost the agency's budget further in 2008. The key congressional appropriators in both chambers of Congress are strong NIH advocates. And last month, Bush

US SCIENCE AND TECHNOLOGY BUDGET (in millions of dollars)

Agency	2006 (actual)	2007 (likely)	2008 (president's request)	Notes
National Institutes of Health	28,359	28,979	28,700	An additional \$158 million from other government sources, for diabetes research and the National Library of Medicine, will be provided in 2008 but is not included in the request at left.
National Science Foundation	5,590	5,916	6,430	Restored funds for 2007 may allow the United States to participate in the International Polar Year as planned. A new petascale computing centre is also in the works.
Department of Energy's Office of Science	3,633	3,796	4,398	Much of the proposed boost is related to the American Competitiveness Initiative to foster innovation. Also includes funds for several biofuel research centres.
NASA	16,273	16,247	17,310	Plans to replace the space shuttle are likely to have to move more slowly than planned because of expected cuts for 2007.
National Oceanic and Atmospheric Administration	3,851	3,851	3,812	The president called for more funding for ocean research in late January, but the agency would still face cuts under his 2008 request.
National Institute of Standards and Technology (core funding)	431	491	594	Although core funding, for science and related construction projects, is increased, the zeroing out of congressionally mandated projects or earmarks, means that the total 2008 budget goes down for the agency.
Environmental Protection Agency	7,619	7,619	7,200	The EPA's budget continues to be eroded.
US Geological Survey	958	978	975	\$3 million of the increase for 2007 will be for ocean science programmes.
Department of Defense (basic & applied research)	6,405	6,893	5,785	The Defense Advanced Research Projects Agency budget for 2008 shrinks by 1% to \$3.1 billion.
Homeland Security (science & technology)	1,467	848	799	Funds are shifting to a new office for detecting nuclear and radiological threats.



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the initiative through Congress may prove difficult. For 2007, congressional supporters were able to add only about half of what the president had requested for the initiative in its first year. That discrepancy may make it even harder to bolster the numbers further for 2008, says Michael Lubell, head of public affairs for the American Physical Society. "Clearly, it's a heavy lift," he says.

Space fight

Another agency that may see congressional wishes lined up against the president is NASA. Bush's request calls for \$17.3 billion for the agency. That's a 6.5% increase over what NASA is likely to get if the 2007 spending bill passes the Senate, but the latest numbers don't offer much cause for optimism.

The spending bill that passed the House last week includes a \$26-million cut for the agency from its 2006 levels, at a time when NASA is struggling to complete its space shuttle and space station programmes. "While the money being proposed for 2008 is back up to where it was planned to be, you can't make up for that year of inadequate funding," says John Logsdon, director of the Space Policy Institute at George Washington University in Washington DC.

NASA administrator Michael Griffin this week admitted that plans to develop the Orion capsule and Ares I rocket to carry astronauts into orbit may take longer than expected. "I am concerned about our ability to bring these new capabilities on-line by 2014," he said.

Within its science priorities, though, NASA has reshuffled funds in order to launch the Global Precipitation Measurement Earth-observing satellite in 2013, which is earlier than had been expected. And a servicing mission to the Hubble Space Telescope is set to go ahead in September 2008.

All the winners and losers in this year's budget race make Sam Rankin, director of the American Mathematical Society office in Washington DC, nervous. Take any agency or programme, he says, and "you do a chart of the differences from one year to the next and it looks like someone with bad teeth. In some ways, we are starting to pit sciences against one another, and I don't think that is helpful. We need something that is consistent and adequate." ■

Emma Marris, Geoff Brumfiel, Meredith Wadman and Lucy Odling-Smee
See Editorial, page 568.

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signed a law laying out broad directions for the NIH's future funding and administration (see *Nature* 444, 796–797; 2006). The law recommends that Congress fund the agency at \$32.8 billion in 2008. That might be pie in the sky, but it's a pie that Congress might at least cast a glance at in the coming months.

Getting physical

Meanwhile, the push is on to dramatically boost funding in the physical sciences. The president's request for 2008 includes \$4.4 billion for the Department of Energy's Office of Science, which funds such fields as high-energy and nuclear physics. That would be a 16% increase over the tentative 2007 funding levels currently under consideration in Congress. The request includes \$51 million for construction of the Linac Coherent Light Source at Stanford University in California, and \$160 million to begin the US contribution to the International Thermonuclear Experimental Reactor (ITER), the \$6-billion international fusion project that is slated to begin construction in Cadarache, France.

The competitiveness initiative would also provide a 21% jump in core research funding at the National Institute of Standards and Technology (NIST). That would bring NIST's total research budget to \$501 million. The budget also calls for just under \$94 million in funding for facilities that would go, in part, towards a new laboratory for atomic-scale electronics at the agency's campus in

Boulder, Colorado. Overall, NIST's budget would drop 5% owing to the exclusion of several congressionally mandated projects, known as earmarks.

The competitiveness initiative also shows cash on the National Science Foundation (NSF), which would receive \$6.43 billion — an increase of more than 15% over its 2006 funding. The money goes to particular directorates within the NSF, including engineering; computer and information science and engineering; and mathematics and physical sciences. This division worries Joel Widder, a lobbyist with the firm Lewis-Burke Associates in Washington DC and a former NSF staffer. "It is clear that the administration is deciding which directorates are part of the competitiveness initiative," he says. "I am concerned that this may become a more pronounced difference over time." He thinks the agency should have more control over how the money is divided up.

The competitiveness initiative has some Democratic friends on Capitol Hill, including Bart Gordon (Democrat, Tennessee), who chairs the House Committee on Science and Technology. And a similar programme to boost funding for the agencies was unveiled in 2005 by Nancy Pelosi (Democrat, California), who is now Speaker of the House.

But getting the substantial increases for

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