Up, Down, and Sideways: How Other Research Agencies Fared

Washington resembled a three-ring circus on 7 February as each agency put the best face on its 2001 budget request. Here are highlights from those presentations:

• **NSF:** The National Science Foundation's 17%, $675 million increase includes a 20% boost to its $3 billion research account and 5% more for education, although director Rita Colwell emphasized that the agency's total investment in people—students and teachers as well as researchers—would rise by 11%. NSF's new facilities account soars by 45%, to $139 million, led by $17 million to kick off a $75 million mobile seismic array and $12 million to begin a $93 million network of high-tech ecological observatories. But NSF declined to request anything for a $75 million high-altitude research plane despite a $6 million appropriation last year from Congress. Funding for biocomplexity jumps by 172%, to $136 million, and NSF's portion of the information technology initiative leaps 160%, to $326 million. (For a look at how NSF's budget request came about, see last week's issue, 4 February, p. 778).

• **Energy:** After a year of being battered by allegations of espionage at the national labs, Department of Energy (DOE) Secretary Bill Richardson said "it's time to return to science." The agency's $18.9 billion budget request includes an 8% boost, to $7.6 billion, for DOE's R&D programs. The core Office of Science would get a 12%, $337 million hike, to $3.2 billion, with basic research and computing programs getting the lion's share of the new riches. Biology, fusion, and physics research budgets would rise slightly. Richardson is also requesting $10 million for a Scientific Recruitment Initiative, saying that DOE will have to work harder to attract talent, as hiring at national laboratories has "suffered because of the espionage issue."

• **Environment:** "It's basically a stay-the-course budget" for the Environmental Protection Agency's Office of Research and Development, says ORD assistant administrator Norine Noonan. The 2001 request totals $530 million, $6 million below this year but an increase of $38 million after congressional earmarks are subtracted from the 2000 budget. The total includes a $5 million increase for research on the health effects of endocrine disrupters and a $7 million boost for epidemiological studies of soot's health effects. The office also wants to complete a report on the state of U.S. estuaries next year. The agency's extramural grants program would rise 13%, to $101 million.

• **Defense:** Military research advocates got mixed news from the Department of Defense, which has requested a 4% jump in basic research and an 8% reduction in applied studies. The basic research account would rise $50 million to $1.2 billion, with much of the increase devoted to biowarfare defense and cybersecurity initiatives. Applied research funding would shrink by $271 million to $3.1 billion. But if last year's pattern holds true, Congress probably won't go along with the overall cut, which would put the defense research budget 10% below its 1993 level.

• **Agriculture:** The department proposes growing its National Research Initiative by $31 million, to $150 million. The agency is also asking for $120 million for a second year of a separate extramural grants initiative for applied research (*Science*, 21 January, p. 402). But the congressional outlook is uncertain. House appropriators blocked new funds for the extramural grants program last year and may do it again. "We're going to try to ... convince them that it's an appropriate expenditure," says the agency's budget chief, Steve Dewhurst. And the Agricultural Research Service would get a $50 million boost to $956 million, including increases for research on everything from emerging diseases and invasive species to climate change and crop-based fuels.

• **USGS:** The U.S. Geological Survey's national mapping program would be the main beneficiary of a requested 10% increase, to $895 million. It hopes to add $29 million to the $127 million it will spend this year on the mapping effort, which collects and distributes data on everything from coastal wetlands to historical trends in urban growth. The survey is also asking for a $22 million boost for biological research, $2.6 million to buy 150 new seismographs for earthquake-prone San Francisco and other cities, and $4 million for new real-time stream gages for flood forecasting.

• **NOAA:** While its overall budget soars by 20%, the National Oceanic and Atmospheric Administration's research spending sticks closer to sea level, inching up just $5 million to $303 million. Overall, the agency is requesting $489 million more than last year, half of which would go toward marine sanctuaries and estuary reserves. Spending on climate and air-quality research would jump $25 million, with virtually all of that going to overhaul the agency's storm monitoring and reporting systems. Spending for research on the oceans and Great Lakes, however, dives by nearly $20 million.

• **NIST:** The biggest chunk of the 12% increase for the $636 million National Institute of Standards and Technology, some $50 million, would establish an Institute for Information Infrastructure Protection to foster public-private partnerships aimed at keeping computer data secure. The agency's core science laboratories would also get a 20% boost, to $332 million. The Advanced Technology Program, long a target of Republicans, would rise by $33 million, to $175 million.

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a balanced research portfolio," Clinton said at the 3 December 1999 address on economic growth. Last month Clinton offered some details at Caltech, and a week later mentioned it in his State of the Union address—to bipartisan applause.

Indeed, the Administration has in some ways come full circle on R&D policy, says Harvard's Hart. "It's come around to emphasizing the conventional wisdom that drove R&D policy for a long time," he says, adding that basic research has traditionally drawn broader support from lawmakers than have applied programs that favor a particular industry or sector of the economy.

So far, the back-to-basics approach is drawing favorable reviews from science groups. And Gingrich says he is happy to see his one-time political opponent "finally get religion when it comes to science." Although current Republican congressional leaders have been noticeably gentle in their reactions to Clinton's proposals, their acquiescence doesn't necessarily mean the request will glide through Congress, notes MIT's Crowley. President George Bush, he recalls, tried to double NSF's budget over 5 years. "But that idea never got out of the blocks," he says.

–DAVID MALAKOFF

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> "Science and technology is about as good an investment as you can possibly make."
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> —Neal Lane