

Should Governments Support Science?

The case for increased federal spending on research rests on two assumptions: R&D is the engine of a stronger economy, and industry won't fill the gap if the government pulls out. That logic was embedded in a package of reports issued last week by the presidents of the National Academies of Sciences and Engineering, and the Institute of Medicine.* Their publication was timed just a few days before the 6 February release of the Administration's 1998 budget, and the message seems to be making headway in Congress (*Science*, 31 January, p. 608). But it's all hogwash to British biochemist Terence Kealey, who believes that "governments should not fund science."

Kealey brought his radical argument to the libertarian Cato Institute in Washington last week to launch the U.S. publication of his book, *The Economic Laws of Scientific Research* (St. Martins Press). He contends that there is no correlation between government spending on science and technology (S&T) and economic wealth in industrialized nations, either between countries or across the history of a single nation. What's more, he asserts, "industry will move in" if govern-



Triple threat. Academy presidents say that federal spending cuts hurt U.S. science.

ment cuts its R&D spending. Speaking in defense of federal support for science was Roland Schmitt, retired university president and former chair of the oversight board of the National Science Foundation. Schmitt called Kealey's thesis "fragile, flimsy, and unsubstantiated," adding that his linear regressions are "an astonishing theoretical trick" that cannot be tested.

Kealey insists that even basic research should be financed by industry and founda-

tions. "It is a total myth that industry will not fund pure science," he says, adding that industry will fund basic research because it is vital to develop and improve products. Universities, he admits, could shrink as a result. But researchers would no longer be dependent on the whims of politicians. When pressed, Kealey says he supports some government R&D spending for defense, environmental protection, and food and drug safety.

Not surprisingly, Schmitt had little trouble winning over an audience of lobbyists and science policy analysts. Even conservatives such as Robert Walker, the former Republican chair of the House Science Committee, are wary of Kealey's libertarian arguments. Although Walker believes that applied research is best left to industry, he says Kealey goes too far by suggesting that government should get out of basic research altogether. "Look at the human genome project," says Walker, now president of the Wexler Group, a Washington lobbying firm. "A single company or even a consortium couldn't do it all."

The three presidents of the national academies also see things differently. The same day Kealey spoke, they released summations of recent academy reports in six areas. Warning that "the U.S. government has decreased its investment [in S&T] by 5% in real terms since 1994," they said that U.S. leadership in science depends on reversing that trend.

—Andrew Lawler

* For more information, see the academy's Web site at <http://www2.nas.edu/21st/>

DEPARTMENT OF ENERGY

Peña Wins Reprieve on Realignment

Energy Secretary nominee Federico Peña appears headed for both confirmation in the job and at least a brief honeymoon with Congress. The clearest sign of that is a decision by Senator Pete Domenici (R-NM) to delay his plan to reshuffle the Department of Energy (DOE), raising the profile of energy research while shrinking the \$16-billion-a-year agency.

"I'm not going to be critical of Mr. Peña," said Domenici, a fierce protector of the two weapons labs in his state and whose family is friendly with Peña's, at last week's confirmation hearing. "With your intelligence and commitment, you would be a good secretary of energy." Domenici's failure to mention his plan to slim down the department and remove the secretary from the president's Cabinet, say congressional and Administration sources, suggests that he is willing to give Peña a chance to reform the troubled agency. Domenici had planned to unveil his reorganization in January (*Science*, 13 December, p. 1831). "For the time being, this [plan] is in abeyance—but don't think it's over by any means," says one DOE official.

The hearing gave Peña a taste of what it would be like to head the sprawling agency

in the wake of Hazel O'Leary's stormy 4-year tenure. A dozen senators demanded everything from more money for the three weapons laboratories to a detailed plan for cleaning up nuclear waste. In return, Peña promised to speed departmental streamlining, push DOE labs to work more closely with private industry, and support a \$4-billion-a-year program to assure the effectiveness of the nation's nuclear stockpile.

That amount is not high enough for Senator John Kyl (R-AZ), who argued that the proposed budget for stockpile stewardship between 1997 and 2002 would fall \$4.5 billion short of what's needed. Kyl also criticized Peña for hedging on the timetable for developing a source for tritium for nuclear weapons. Congress directed DOE to decide in 1997 whether to build a reactor or an accelerator to produce tritium, but Peña said DOE may not make up its mind until 1998. "This is not a matter of debate anymore; it's a matter of law," said Kyl.

Peña's lack of experience in the energy field did not seem to bother panel members.



Holding on. Senate gives Peña a chance to save DOE.

"That may be an advantage," said freshman Senator Mary Landrieu (D-LA). "You don't come to this post with preconceived notions." And Peña drew upon a different type of experience—as a Cabinet official during Clinton's first term—to argue that the energy community "needs a strong and effective voice at the highest level of government" and the chance

to present its case directly to the president. Domenici also remained silent on Peña's strong defense of a Cabinet role for DOE.

In the meantime, Peña is trying to build support within DOE and at the labs. Last month, he met with the directors of several of the national labs and addressed their concerns. Participants said he proved knowledgeable about the labs' problems and has no immediate plans for radical change. Last week, Peña promised legislators that he would search for "more creative ways" for the labs to work with industry while ensuring that they don't stray from their "core competencies."

—Andrew Lawler