FRENCH SCIENCE

In Midst of a Freeze, Science Minister Calls for Expansion

PARIS—Since his appointment more than a year ago as France's minister of research and higher education, François Fillon has wanted to be seen as a champion of the nation's research efforts. Yet 2 months ago he was cast by researchers in the role of oppressor rather than defender of basic science. His National Consultation on the Greater Objectives of French Research, billed as a sweeping rethink of French research policy, triggered alarm bells throughout the scientific community, raising concerns that both fundamental research funding and the job security of scientists were under threat. And 4 days before the consultation's crowning event—a national "synthesis" meeting in Paris addressed by Prime Minister Edouard Balladur—1200 senior scientists and university presidents published a "manifesto for research" claiming that the vitality of French science was "being put at risk" by Fillon's plans (*Science*, 29 April, p. 652).

But this week, Fillon was back in the role of champion. Armed with his final report to the Parliament—which had been modified to meet the most serious objections from the scientific community—Fillon addressed the National Assembly on 21 June and asked for a steady increase in the science budget over the next 10 years. Although virtually all of the proposed increase would go to applied rather than basic research, Fillon told *Science* in an interview last week that he intends to maintain fundamental research at the level of inflation. This may fall far short of what many scientists had hoped for, but in light of France's economic woes it would still be good news. "For the moment, I don't think the scientific community will make trouble for its minister," says physicist Guy Aubert, director of the Ecole Normale Supérieure of Lyons and a key participant in the national consultation. "It will let him try to make a good defense of French research."

"I thought...we could define basic research priorities [in terms of] the strategic interests of the country. But...this was an error."

—François Fillon

Even with the cautious support of scientists, however, Fillon has a tough fight on his hands: Last month the budget ministry announced that 8% of the government's 1994 budget for research, excluding salaries, was being frozen. This may turn out to be a temporary measure, but it could result in some cuts—and the timing, right before Fillon's pitch for increases for science, couldn't have been worse. "To announce a freeze of 8% just before a national science debate, I'm not sure if that's a murder or a suicide," says François Kourilsky, director-general of the Centre National de la Recherche Scientifique (CNRS), France's largest public research agency.

To improve his chances of persuading the parliamentary deputies, Fillon arrived at the debate this week carrying some heavy ammunition, including a promise from Balladur that the research ministry would be the first to have its funds unfrozen. He had also enlisted the support of Jacques Chirac, a leading contender in next year's presidential elections. This had great symbolic value, because in the past Chirac has not been considered a friend of French science. When he was the conservative prime minister during the "cohabitation" with socialist President François Mitterrand in 1986 to '88, the research budget was frozen. This came as a great shock after several years of socialist indulgence of French science. And when the conservatives took power again in March 1993, many French scientists feared the worst—and their concerns were quickly borne out by a 9% cut in funding for new research projects in the 1994 budget.

Fillon says that he understands why many researchers mistrust the government's inten-

PUBLICATIONS

Quantity No Longer Counts in Britain

Chalk it up as a modest victory in the battle against publication inflation. Earlier this month, the councils that allocate core funding to British universities announced that they will no longer use total publication counts as a measure of the relative strengths of research departments. Instead, they will take into account only the four best papers individual researchers in each department have published in the previous 3 years. "The funding bodies wish to signal clearly that...the number of publications...is not considered necessarily to be an indicator of research quality," the councils said in a statement.

The shift has important implications. The councils—the Higher Education Funding Councils for England, Scotland, and Wales and the Department of Education for Northern Ireland—will soon begin a quadrennial assessment of the quality of each university's research departments. The councils will use the results to divvy up about $200 million in block grants a year.

The first assessment took place in 1992. The councils based their rankings on information supplied by the universities about the number of research staff members and students, total publications, external funding, and plans for future research. The councils then graded each department by peer review on a scale of 1 to 5, with grade 5 getting 4 times as much funding as a rating of 2, while a rating of 1 attracts no funds. The universities of Cambridge, Oxford, and London generally received the lion's share of top grades across many subject areas.

The next assessment, to be completed in 1996, will include similar measures, with the exception of publication counts. The decision to consider only a few top papers reflects a growing concern over some researchers' frantic efforts to accumulate publications by splitting results up into series of short papers and appending their names as co-authors on as many publications as possible. "We strongly welcome the decision to drop publication counts....[This reflects] the widespread view in the academic community that publication counts are a crude and unreliable measure of research performance," says David Triesman, general secretary of the Association of University Teachers.

A few other research granting bodies and tenure committees are also trying to deemphasize publication volume as a measure of a researcher's productivity. Three years ago, for example, the U.S. National Institutes of Health (NIH) revised grant application forms to stop researchers from submitting page after page of references. Now applicants must fit biographical and publication data on just two pages. Anthony Demsey, acting deputy director of NIH's division of research grants, who was instrumental in making that change, says "We've done a certain degree of curtailing but not to the same extent [as the British funding councils]."

–Claire O'Brien

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