

overall research spending.

Although most researchers contacted by *Science* are reluctant to criticize the new government publicly just days after it has taken power, many see the absorption of research into a larger ministry as a sign of hard times ahead for French research. "It's certainly giving research a very low priority, that's very clear," says one internationally known French scientist, who asked not to be identified, adding that the appointment of Dufourcq is a "typically political nomination."

Courtillot says that "it's a little bit strange to have someone who is not known in the world of research." Although former Research Minister Fillon was a career politician with no scientific training, he had won the grudging respect of many French researchers, who felt that he was trying his best to defend French science. And most scientists still look

back with nostalgia at the tenure of physicist Hubert Curien, the last scientist to serve as research minister, who held the post during much of the last decade when the Socialists held a solid grip on the government.

Dufourcq says, however, that the fears of French scientists about the intentions of the new government are misplaced. "I really, really don't believe that this fear can be justified," she told *Science*. "I think that if there is concern, this concern is going to dissipate very quickly." To help win over the scientific community, last Friday—their first day on the job—Dufourcq and Bayrou made a well-publicized, highly symbolic visit to the Paris headquarters of CNRS, France's largest public research agency.

Indeed, despite their reservations about Dufourcq's qualifications, a number of French scientists say they are prepared to give her

the benefit of the doubt—at least for the moment. Moreover, not everyone agrees that research will automatically be subsumed under the new governmental setup. "The fact that it is going to be united in a big ministry is not necessarily bad," says Marc Girard of the Pasteur Institute in Paris. "It all depends on how Mr. Bayrou plans to arrange things and on what the research budget will be." The first budgetary details should be known by June or July, when the administration will announce how much research money is available for the second half of 1995.

"I don't want to be aggressive today," says Jean-Claude Mounolou, director of CNRS's Center for Molecular Genetics in the Paris suburb of Gif-sur-Yvette. "On the other hand, once I know the [new] budget, I reserve the liberty to speak my mind."

—Michael Balter

SCIENCE POLICY

U.K. Spells Out New Research Priorities

LONDON—Science has rarely had a high profile in British political life, but at the moment science policy is a main attraction—perhaps more so than at any time in the past 20 years. A crescendo of activity, which has been building up since the publication of a science and technology policy white paper in 1993, hit a new high this week when Prime Minister John Major unveiled a report setting out new priorities for British research.

The report, published along with a clutch of others aimed at improving the competitiveness of industry, spells out a set of broad priorities for science that follow the Conservative government's theme that research should be more focused on wealth creation. "It's the next step in a long-term science strategy," says Major. The priorities selected by the report were identified through an enormous consultation exercise to determine future technology trends and highlight national strengths and weaknesses in exploiting them (*Science*, 12 May, p. 795). This "foresight" exercise involved more than 10,000 British academics and industrialists and produced 15 reports, each covering a different industrial or research sector. "The exercise has been seen as a trailblazer across the world," says Science Minister David Hunt.

The new report is a distillation by the project's steering group of the most urgent cross-sector priorities for science, technology, and infrastructure. The 15 sector panels made a total of 360 recommendations, which

the steering group has boiled down to six broad science and technology themes: communications and computing power; new organisms, products, and processes from genetics; advances in materials science, engineering, and technology; production processes and services; clean, sustainable technology; and social trends. Within these themes, 27 key areas are listed, either because they were highlighted by most of the panels or because

of a match between industrial potential and British science strengths. These include genetic and biomolecular engineering, bioinformatics, sensors, and software engineering.

But the steering committee has not simply tried to pick potential winners; it has also identified parts of the research infrastructure for extra attention, such as selective support for basic research excellence, the communications infrastructure, and long-term finance. "It's not just a case of identifying

new science and technology, but a more holistic look," says steering committee member Kenneth Gray of the electronics company Thorn EMI.

To back up its new priorities, the government announced that it would put an additional \$60 million over 3 years into a new program, with matching funds from industry, that will support collaborative projects using mechanisms already established by the government.

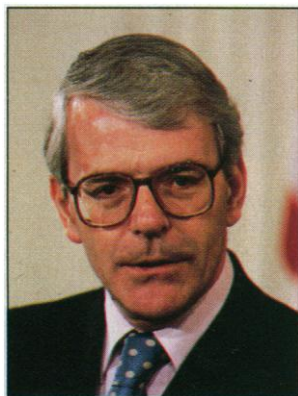
This emphasis on wealth creation causes some anxiety for researchers, who worry

that they will be pressured into pursuing more applied research. "It is vital that the outcome allows for a healthy volume of responsive-mode research," says Oxford University physicist John Mulvey of the pressure group Save British Science. Indeed, the research community will be watching with interest to see what impact the exercise has on the science budget. Already, 5% of next year's budget for the research councils has been earmarked for projects emerging from the exercise, and the government sees the allocation of this budget as initiating significant change. "The danger is that the outcomes of the foresight exercise might become a too narrow prescription for research council funding," says Mulvey.

A notable byproduct of the foresight exercise itself has been the establishment of networks linking academics and industrialists. "The exercise has helped some sectors learn about the more advanced research culture of some of the other sectors, which was very valuable," says steering group member Barbara Young, professor of construction management at University College London. To help maintain this momentum, the foresight panels are being retained to develop the networks and help implement the results of the exercise.

The pressure is now on the government to show some real results from this \$2.5 million initiative. "If foresight is just treated as a paper exercise it will be a disaster," says steering committee member Mike Brady, professor of engineering science at Oxford University. Judging the success of this approach to a new national science strategy may take many years, but an early sign may come when the government publishes a progress report before the end of the year.

—Nigel Williams



High profile. Prime Minister John Major unveiled report.

J. MARKOWITZ/SGMA