## **U.K. Labs: A Year of Uncertainty**

The British government is pushing ahead with its plans to privatize most publicly owned labs. But a review has failed to show the way forward, or to convince researchers that science is in safe hands

LONDON—Most of Britain's government laboratories have been living on the edge for the past year, while the Conservative government considers whether to close or merge them, turn them over to the private sector, or keep them in public ownership. Forty establishments—including well-known biology labs such as Rothamsted and the John Innes Centre—that employ a total of about 20,000 staff members and spend \$1.2 billion a year are being subjected to top-to-bottom reviews. Last week, the government announced its intentions for the first dozen of these labs. The verdict for virtually all of them: more reviews.

The government said it intends to privatize most of the labs in this first batch, but it called for further studies to explore how they can be transferred to the private sector. "The government wants to privatize us but doesn't know what to do," says Mark Paice, a staff representative at the Silsoe Research Institute near Bedford, which develops advanced engineering for agriculture, one of the establishments reviewed in the first round. Only two of these 12 labs will definitely remain in the public sector: the Central Laboratory of the Research Councils, formed in 1995 by merg-

ing the Daresbury and Rutherford-Appleton laboratories, two prominent physics centers, and the National Weights and Measures Laboratory. Less fortunate is the world-renowned John Innes Centre for Plant Biology in Norwich, which the government wishes to privatize; it faces further uncertainty and further review (see table).

The announcement drew flak from both researchers and politicians and added to the uncertainties in the labs still awaiting the results of their reviews. "I'm angry and amazed," says Brian Legg, director of the Silsoe Institute, at the prospect of yet further review. Adam Ingram, spokesperson on science and technology for the opposition Labour Party, says the review serves only to demoralize scientists. "This government is working to hurt science," he says. And it is not just the Labour Party that is taking potshots: Lord Selborne, Conservative chair of the House of Lords science and technology select committee, describes the review as a "pointless exercise," adding, "It's an incompetent way to operate."

These negative reactions were sharpened by the fact that the government has not published the reports of the committees that conducted the reviews. The three departments responsible for the labs—the Department of Trade and Industry (DTI), the Ministry of Agriculture, Fisheries, and Food, and the Scottish Office—simply announced the preliminary findings. Ian Lang, Secretary of State at DTI, for example, said that the six DTI labs reviewed in the first round were all deemed to be doing valuable work, but privatization should be pursued for four of them. "Our objective," he said, "is to ensure the government receives the best quality scientific and technical services, with the best possible value for money for the taxpayer."

## Difficult relationship

Last week's exchange of statements was the latest twist in a relationship between scientists and the Conservative government that has blown hot and cold. Researchers were delighted in 1992, when the government appointed a Cabinet minister for science and followed that move with a white paper the following year—the first for 3 decades—that promised more support for basic science. But last year, the Office of Science and Technology (OST) was shunted into DTI, and as a result the minister for science no longer sits at the Cabinet table.

One constant in the relationship, however, has been a series of reviews of research establishments, sparked by the Conservative Party's policy of encouraging private-sector operation of many services once exclusively run by the government. One review conducted before the publication of the white paper, and a second soon afterward, gave most of the establishments a clean bill of health. But the shift of the OST to the DTI—which has always exhibited a fervor for privatization—is thought by many researchers to have spurred this latest effort to rationalize public sector laboratories.

The government announced the effort last fall. Dubbed "prior options," it is the most far-reaching reappraisal of Britain's publicly funded research so far. The reviews, carried out by institute staff, civil servants, and industrialists, aim to determine whether an establishment's function is necessary and, if so, whether there is scope for privatization, contracting out the work, or transferring it to other institutes.

The 40 labs participating in the prioroptions review are not the only ones to face the prospect of life in the private sector. The government has already privatized several

Institute	Staff	Research	Decision
Central Laboratory of the Research Councils (DTI)	1900	Facilities and technical expertise for physicists and engineers	Remain public
Institute of Arable Crops Research (DTI)	790	Biology of optimal crop production and environmental interactions	Pursue privatization
Institute of Grassland and Environmental Research (DTI)	400	Manipulation and utilization of grassland and low-input agriculture	Pursue privatization
John Innes Centre (DTI)	440	Basic plant biology	Pursue privatization
National Weights and Measures Laboratory (DTI)	48	Pursuit of statutory functions	Remain a DTI executive agency
Silsoe Research Institute (DTI)	250	Advanced engineering to support agricultural applications	Pursue privatization
Directorate of Fisheries Research (MAFF)	450	Monitoring and management of fish stocks	Move to an executive agency
Fisheries Research Service (SO)	220	Fisheries monitoring and aquaculture	Move to an execut agency
Forestry Research Commission (SO)	300	Maintaining tree health and enhancing environmental impacts	Move to an executive agency
Macaulay Land Use Research Institute (SO)	265	Multidisciplinary assessment of land-use options and impacts	Pursue privatization
Scottish Agricultural Science Agency (SO)	140	Scottish agriculture and environmental impacts	Deferred
Scottish Crop Research Institute (SO)	370	Strategic assessment of agricultural, horticultural, and industrial crops	Pursue privatizati

laboratories, including the National Physical Laboratory and the National Engineering Laboratory, through management-led buyouts, setting up of contractor operators, or simply selling them off to private companies. It added one more to the list last month, when the Laboratory of the Government Chemist (LGC) was sold for \$7.5 million to a consortium of management, the Royal Society of Chemistry, and the venture capital company 3i. And the government recently announced that Britain's two venerable Royal Observatories will have to compete with the private sector for contracts to manage most of the country's ground-based astronomy (Science, 3 May, p. 641).

## Painful options

The prior-options review is prompting a great deal of nervousness in labs across the country. Researchers fear that privatization may erode the ability to maintain long-term basic and strategic research, as institutions compete for short-term contracts. "A real worry I have is that we'll move to more funding on a project-by-project basis," says Legg. "There's a notion

that research, like business, can be switched on and off. Without long-term commitment we wouldn't be able to plan new initiatives and build up new areas, and we'd soon lose our international competitive edge." Richard Flavell, director of the John Innes Centre, worries that the government's policies do not address long-term support in a focused way. "The prioroptions review hasn't resolved anything," he says.

Some have also expressed fears that laboratories carrying out particularly sensitive research, such as the Institute of Animal Health and the Central Veterinary Agency, which are the key centers for critical work on bovine spongiform encephalopathy—"mad cow disease"-may also be pushed into the private sector. Both are being reviewed in later rounds of the prior-options exercise. "There's a very high level of concern" that privatization of these institutes would jeopardize the continuity and impartiality of research, says Nigel Titchin, chair of the science group of the Institute of Professionals, Managers, and Specialists, which represents many staff at the institutes. Indeed, Britain's Royal Society urged that the review should be used to optimize the nation's long-term ability to carry out scientific work in the public interest, but instead it is deepening worries about Britain's commitment to long-term research.

To begin with, however, the prior-options review was welcomed by some researchers because it provided an opportunity for staff to highlight their institute's work. "We carried out a major survey of our user community and got an extremely positive response," says

Ben Miflin, director of the Institute of Arable Crops Research (IACR), which includes the Rothamsted laboratory. Biologist Klaus Naumann at the Bayer chemical company in Monheim, near Düsseldorf, Germany, agrees with that assessment. "Contributions made by the institute to the fundamental understanding of insect behavior and insect toxicology are among the most important for scientific pest control in the past 30 years," he says.

Researchers at the John Innes Centre mount a similar defense. "If we can't convince the government we are making a high-profile contribution we'd be in a sorry state," says director Flavell. Elliot Meyerowitz, professor of biology at the California Institute of Technology, says the John Innes Centre is one of the premier centers for plant develop-

"Our objective is to ensure the government receives the best quality

[science] with the best possible value for money."

-lan Lang

ment, morphology, and genetics in the world. "There's nowhere in the U.S. covering such a breadth of basic plant research on the same site," he says. "It'd be a shame to do any-

thing which affects their research."

## Privatize or bust

But while the institutes may have won the scientific arguments, they appear to be losing the battle to remain under the government's wing. Ian Taylor, the minister for science at the DTI, told a meeting of scientists last month that the status quo was an option, but last week's announcement that the government hopes to privatize many of the first 12 establishments reviewed suggests this is a last resort.

The Central Laboratory of the Research Councils will remain firmly in the public sector because the two-site laboratory, which employs about 1900 staff members and is a key provider of equipment and facilities for Britain's physicists, was deemed to already be successfully run along private-sector lines. Its director, Paul Williams, says the lab adopted a more marketoriented management style following major restructuring which involved job losses. "We have little automatic funding, and almost all our work comes by competitive tender," he says. Williams says, however, that he's relieved by the outcome of the review.

Directors of some of the other establish-

ments are looking on the bright side. John Innes's Flavell says he believes a more independent footing for his institute ultimately could also have some advantages. "As a locally owned company it might be possible to lessen the vagaries of the government's annual public expenditure round," he says. And LGC's Richard Worswick, who retains the title of Government Chemist, believes privatization has brought the laboratory some advantages. "We've greater local control of our work. It has strengthened our position," he says.

But the Biotechnology and Biological Sciences Research Council (BBSRC), which runs four of the 12 laboratories in this round and others being reviewed in later rounds, seems less than enthralled. The council issued a terse statement following last week's announcement pointing out that a move to full privatization "raises many complex matters about possible changes to ownership of assets and associated legal, constitutional, and financial issues." Moving the institutes into the private sector might also prove expensive for the government. Although many of the institutes already have some degree of autonomy, full privatization in the government's view would require moving all liabilities, such as pension and redundancy costs, to the private sector, which is likely to require it to find a large cash sum for the transfer. Estimates by the BBSRC suggest that such a move might cost up to \$390 million for the total of eight BBSRC institutes alone. "A real worry is that the science budget may have to contribute [to these costs]," says Tom Blundell, BBSRC's chief executive.

The government is nevertheless pressing on. The review of the second set of institutions, including the British Geological Survey and the Institute for Animal Physiology at Babraham, will be completed by July and the final set by December. The new reviews of privatization options ordered by the government last week for laboratories in the first round of prior options will be carried out by the prime minister's efficiency adviser, Sir Peter Levine. Only now getting under way, they are likely to make the whole process much longer than anyone had originally anticipated. "Conducting a review is a long and arduous process demanding a lot of time which could otherwise be spent exploiting scientific opportunities," says IACR's Miflin.

The government, however, may soon run out of time: It must hold a general election before May next year, and with the Labour Party doing well in the opinion polls a change of governing party is possible. Says Labour's Ingram: "A Labour government will halt the current privatization program of the public-sector research establishments and set out to restore the morale and commitment of public-sector scientists and researchers." Another year of uncertainty for government scientists seems guaranteed.

-Nigel Williams