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Spanish science is still at risk

Although it may well be the only country in Europe to increase research spending next year, Spain still faces the loss of outstanding researchers. Both the government and universities need to make difficult choices.

panish scientists like to quote the fact that the Brazilian footballer Ronaldo was this year sold by the club FC Barcelona to Inter Milan for a fee higher than the entire budget of their research council, CSIC. The national passion for football, it seems, is more enduring than that for science. Scientists are therefore right to be more concerned about the failure to capitalize on their country's recent investment in research than relieved to learn that a significant increase in research budget is foreseen for next year (see page 773). For the lack of research tradition makes Spain particularly vulnerable to the long-term effects of a period of famine.

In the 1980s, Spain, then one of Europe's lowest science spenders, injected a major funding boost. The research budget grew by around ten per cent a year, the number of research institutes expanded, and thousands of young scientists were sent abroad for postdoctoral training. The benefits of this push should now be being felt. But the economic doldrums of the 1990s threw the dream of matching the research efforts of countries such as Germany and France — rather than those of Greece and Portugal — off balance, and implicit promises that returning postdocs would be stably integrated into an expanding research scene were broken.

Corrective action must be taken before the present army of young scientists on which Spain's future depends leave for other careers. That haemorrhage is already under way, despite stopgap solutions offered by successive governments. A sustainable solution requires a

fundamental change to the outmoded and inflexible employment practices that Spain shares with some other European countries — particularly Italy. These continue to provide permanent researchers with all the privileges of tenure, even though these are no longer affordable, while outlawing the renewable temporary contracts that could allow the establishment of a tenure track system. The government has begun to debate changes in the law to increase employment flexibility in general, but changes are years away.

In the short term, the government must remember its promise to create 150 new tenured positions for CSIC out of the 1998 pool of new civil servant posts when these are distributed next spring, even at the price of taking jobs from other sectors; that would certainly raise morale among the ranks of mutinying foreign-trained postdocs. Research institutions must take advantage of the new rules of the National Plan which allow them to hire temporary staff on its grant money. And the academic community must help itself by accepting the need for greater mobility.

The latter means that universities must be prepared to abandon their tradition of hiring locally, and from within their own ranks, while young researchers must be prepared to leave their home town to compete for jobs, even temporary, that arise elsewhere. All this will inevitably involve some social dislocation; but it is part of the price that Spain must pay if it wishes to become a modern, science-based state.

Light in dark places

Despite cultural differences, countries face common challenges in confronting new biomedical advances.

t is always a comfort when two individuals who have viewed each other sceptically, perhaps even disdainfully, from a distance find that, on closer acquaintance, they have more in common than they realized. Such was the experience in Paris last week at a meeting organized jointly by *Nature* and the British Council on the handling of bioethics issues in Britain and France. Those who were expecting a fiery clash between two opposing world-views will have come away disappointed. For beneath surface differences there was a surprising degree of harmony, particularly on the way in which the bioethics debate in both countries has opened up the question of public access to decision-making (see page 775).

Differences certainly remain. One focus of discussion, for example, was the status given to the concept of 'society' as an entity affected, for good or ill, by modern biomedical advances. France has, at least since the revolution of the eighteenth century, awarded greater significance to this idea in its legislation than Britain, which continues to think of communities primarily as collections of individuals. Some speakers suggested that this difference was responsible, for example, for contrasting attitudes about the extent to which threats such as eugenics can be adequately addressed by legislation.

But it also became clear that cross-Channel similarities are more important than differences. This in itself is not surprising. As has been graphically illustrated by the instant global reaction to the possibility of human cloning, the issues raised by modern science know

no national or political boundaries. At the same time, the growing displacement in all societies of traditional forms of personal contact by modern techniques of communication has added new weight to demands for transparency at all levels of decision-making.

For Britain, at least, the reluctance of government officials to make available the full details of technical reports relating to recent food scares, such as the outbreaks of bovine spongiform encephalopathy and *Escherichia coli* poisoning, has already strengthened the hands of those demanding that the Labour government fulfil its pre-election commitment to introducing a fully fledged Freedom of Information Act. In France, the needs are less obvious. But last week's meeting revealed a sense that more can still be done to engage the public directly in regulating the impacts of modern science — including giving the media greater access to this process.

Scientists, too, have a responsibility to open up. Three days after the meeting in Paris, it was announced through a British television company that researchers at the University of Bristol had produced a 'headless' frog embryo, opening the possibility of growing similar human bodies primarily as a source of 'spare parts'. To their credit, the scientists involved have not ducked from publicly discussing, even at this early stage, both the potential benefits and dangers of their work, including their own moral qualms. Their confidence that an informed public is a responsible public — more familiar as a political tradition in the United States — is welcome.