

Laboratory animals

The case for the defence

SCIENTISTS who perform experiments on living animals should make a greater effort to demonstrate to the public the benefits being gained, in the view of Dr Walter Bodmer, director of research at the Imperial Cancer Research Fund.

Dr Bodmer was speaking last week at a gathering of scientists and others with interests in animal research, brought together by the Association of British Science Writers to present "the case for vivisection" to journalists.

The organizers had felt that scientists were in danger of losing ground by default in the battle for public opinion on the use of animals in research, due to their reluctance to expose themselves to hostile criticism and, deplorably, possible abuse. It was ironic therefore that the Department of Health and Social Security declined to send a representative to explain the department's policy on animal tests for the safety of cosmetic products, and one speaker who did attend could be persuaded to attend only after being shown a list of the strictly-invitation-only guest list. In the event, the largely uncontroversial addresses were mainly restricted to lists of important research and safety testing that could not proceed without experiments on living animals (monoclonal antibodies, immunosuppressive drugs, oncogenes and

cancer, quality control of artificial hormones and so on).

Mr Bryan Cassidy, of the Toiletry and Perfumery Association Ltd, emphasized that (contrary to the impression generated by some antivivisection groups) the number of animals used in testing cosmetic products is a very small proportion of the total number of animal tests in Britain. The tests that are made, he claimed, are mainly on products with some medicinal effect (such as anti-dandruff shampoos and fluoride toothpaste). The popular image of rabbits being force-fed decorative products such as lipstick is a travesty, because such products are based on long-used ingredients well known to be safe.

However, Mr Cassidy did complain that European Community regulations are obliging manufacturers to produce full toxicological dossiers on well known substances. The only other speaker prepared to step beyond the justification based on putting human lives and suffering before those of other animals was Professor Ian Steele Russell, Professor of Neuroscience at University College, London, who bravely made the point that research must continue even if only for intellectual curiosity, since the practical implications of basic research could often cannot be foreseen.

Tim Beardsley

UK universities

Part reprieve this time

FEARS that public support for British universities and for research would be cut in the latest round of government economies have not materialized. On the eve of the long parliamentary recess, the Secretary of State for Education and Science, Sir Keith Joseph, announced last week that grants to the universities and the research councils will stay as they were. But the department intends to claw back from the funds already allocated to the University Grants Committee £23.5 million of the cost of university "restructuring" on the grounds that the original sum was "larger than is now necessary".

The government's plan to reduce public expenditure in the financial year now one-third gone by a total of £1,000 million was announced at the beginning of last month. (Half of the total will come from the disposal of part of the government's residual shareholding in British Petroleum Ltd.) These immediate economies are distinct from the exercise also now under way to reduce projected public expenditure by £5,000 million in future financial years.

Last week's statement says explicitly that there will no reduction of the grants to individual universities which have already been settled and no reduction of the budgets of the research councils already

agreed for this financial year. Moreover, student maintenance grants, which are paid by local authorities and whose total amount cannot legally be limited, will remain at the level agreed for the coming academic year — an increase of 4 per cent.

For the rest, the department hopes to save modest sums by more efficient administration, and to save £5 million on what it had planned to spend on grants to higher educational institutions that it supports directly.

The most worrying aspect of last week's decision is that the funds set aside for university reorganization have been substantially reduced. While it may be that the actuarial cost of the premature retirement of academics may be less than originally foreseen (and the actual cost will not be known until September 1984), it is also clear that the account for helping university institutions to merge or to relocate themselves has not yet been drawn up.

These developments will be mildly reassuring for those who have been relying on the Prime Minister's promise in 1980 that the science budget would be "protected". Whether the promise will survive the next and larger round of spending cuts will not be apparent until towards the end of the year. □

French energy

Electricity glut the danger

THE French Government has decided to reduce its ordering of nuclear power reactors by a third, to two a year, this year and next, compared with a planned three. This is closely in line with the recommendations of the Commission du Plan (*Nature* 26 May, p.273), which by estimating future French energy needs — falling because of the recession — had calculated that France could get by with existing reactors until 1987. To save the nuclear industry, which had claimed that to stop ordering would kill it off and throw thousands out of work, the commission then recommended the order of two reactors this year, then one a year to 1990. The government will in fact order two this year, two next and "one or two" in 1985.

In the meantime, Electricité de France, the national utility, will be encouraged to go in for some aggressive marketing, to try and push up the industrial use of electricity. This, however, must imply a less bright future for other forms of energy, notably coal — a highly political issue given the large numbers employed in the coal industry in Prime Minister Pierre Mauroy's northern constituency — and gas, which France is committed to buy from the trans-Siberian pipeline and also from Algeria. Far from an energy shortage, France is heading for an expensive energy surplus.

What effect this will have on French industry in, say, ten years, is difficult to determine. According to Jean-Pierre Brunet, president of the Compagnie Générale d'Electricité, which sells all kinds of electrical equipment, the task is to find uses in 1990 for an extra 50 TWh of electricity. Brunet claims in an article in the French newspaper *Le Monde* that French homes and industry are electrically under-equipped. "And France could export electricity", he says.

Brunet identifies four areas in industry that could profit from surplus electricity: one is where the electrical energy is used to raise the temperature of low-grade heat, as in heat pumps or recompressing low-pressure steam from turbines, the electrical power thus benefiting from a thermodynamic "amplification". The second is where special properties of electricity can be used — Brunet mentions polymerization, vulcanization, sterilization, melting and inductive heating. Then there are "new activities" such as laser cutting and soldering of materials; and finally, dual use in heating, where traditional sources are used during peak hours and electricity used off-peak. But whether such ideas will be inventive enough to raise French electricity consumption by more than an eighth over the 380 TWh per year in 1990 foreseen by the Commission du Plan is doubtful.

Robert Walgate