

US universities are keeping pressure on federal agencies to reduce the burden of government regulation on the administration of research grants. The universities claim that over-zealous regulation has created a climate of distrust between themselves and the government.

Two reports emphasising the need for more sympathetic regulation have recently appeared in Washington, one arguing for a general relaxation of the rules governing how universities should account for the use of research funds. The other seeking institutional changes in the way that such rules are administered.

The first report, produced by the National Commission on Research, a body established in 1978 by a group of higher education institutions, says that universities should be given greater responsibility to regulate themselves. For example, rather than research workers being required to complete detailed reports of the way in which they spend their time, it suggests that there should be merely "explicit certification by individual investigators that direct salary charges to their research agreements are reasonable and fair, coupled with the federal program officer's review of the reasonableness of these expenditures for the work undertaken".

The commission, whose report appears in the 14 March issue of *Science*, also recommends that government agencies and universities should construct an option, analogous to the "standard deduction" in income tax calculations, to charge activity treated as indirect costs under sponsored agreements. The fixed percentage would be

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negotiated, and could either be uniform, or vary from one institution to the other.

More specific recommendations have come from the Sloan Commission on Government and Higher Education, a two-year enquiry financed by the Alfred P Sloan Foundation of New York. In general, says the Sloan Commission, support systems for university research are "fundamentally sound". But steadier funding and long-term real growth are needed: and like the NCR, the Sloan Commission criticises the excess of government regulation.

The Sloan report, which was published in Washington last week, recommends the development of a "corps of federal auditors sophisticated about scientific research and how research universities operate". It suggests that the "natural location" for a new audit agency would be in the National Science Foundation.

At present, most universities are audited by the Department of Health, Education and Welfare, according to a federal rule that auditing responsibility is assumed by the government agency which provides the largest financial support.

In recent months DHEW auditors have become increasingly critical of the way in which universities account for the use of research funds, pinpointing areas of

misuse and inadequate auditing. According to the Sloan Commission, however, DHEW's representatives "often have little experience in dealing with research institutions, receive little training, and typically stay in the assignment only briefly".

The commission suggests that the NSF is the most competent body to conduct financial oversight since it is "the only federal agency devoted entirely to research". (Although others have argued that its present close relationship to universities might preclude any credibility as an objective auditing agency.)

In other recommendations designed to strengthen federal support of university research, the commission recommends that every research grant and contract carry with it an additional 7% of the project's direct costs. These would be used in direct support of research, but on projects selected by the university and its faculty rather than the funding agency.

And in order to help alleviate the growing problem of faculty recruitment, the Sloan Commission recommends that about \$100 million a year be spent on two new kinds of fellowship to provide short-term support for PhDs. One would be a scheme of 1000 competitive national post-doctoral fellowships awarded each year, and carrying two years' support, and renewable for a further two years. The second would be a scheme of 300 national research fellowships, each carrying five years of support for research on university campuses, in federally-funded research centres and intramural federal laboratories. □

Antibiotics in animal feeds: health study 'may be impossible'

In a report that gives little direct guidance to policy-makers, a panel of the National Academy of Sciences has concluded that there is insufficient evidence to determine whether the use of sub-therapeutic doses of antibiotics in animal feeds is a significant threat to human health.

The report also states that the research necessary to establish and measure a definite risk "has not been conducted and, indeed, may not be possible."

The Academy's report seems likely to spark another round of a controversy that has simmered ever since the publication of the Swann report in the UK in 1968. This pointed to the dangers of antibiotic resistance being passed from animals to humans. Antibiotics in animal feedstuffs were subsequently banned in the UK, and later in other European countries.

Attempts to impose a similar ban in the US have been strongly opposed by the animal feedstuff and livestock industries. When the FDA announced in 1977 that it was considering such a ban, the proposal was withdrawn after a public hearing at which several companies expressed the view that there was insufficient evidence to demonstrate that such a ban was necessary

— and that if imposed it would considerably increase the price of meat.

The Academy's report, produced by a panel under the chairmanship of Dr Reuel Stallones of the University of Texas School of Public Health, provides little clue to the FDA about how it should proceed. But it does highlight areas in which more data are needed.

For example, the report says that those in close contact with animals receiving antibiotics "are more likely to harbour antimicrobial resistant *E. coli* than persons who are not exposed. However, studies do not usually indicate the type, duration and dose levels of the antimicrobials received by the animals: sub-therapeutic use was not distinguishable from therapeutic use".

Furthermore, the panel states, there are no data from which to assess the relationship between the consumption of meat from animals that received sub-therapeutic amounts of antibiotics, and the general prevalence of antimicrobial-resistant *E. coli* in human populations.

Nor, it suggests, can much help be gathered from studying the situation in Europe. "Data gathered from the United Kingdom, the Federal Republic of

Germany and the Netherlands do not indicate clearly whether restrictive regulations have actually reduced or averted the postulated hazards to human health", the report says.

And it adds that restrictions on the use of antibiotics in the United Kingdom "may well have altered the patterns of their use without significant alteration to the total amounts used or their consequences".

The committee does suggest four possible studies on individual aspects of the transmission chain — on the effects in animals, on the passage of antibiotic resistance to meat-eaters, on the effects of occupational exposures to animals, and on the human morbidity and mortality consequences of antibiotic resistance — which, it says, "would provide a useful scientific background for policy-makers".

But the panel warns that at best "the remaining gaps in our knowledge will still have to be bridged by conjecture and speculation". This is little consolation to the FDA or to Congress, which has already provided a further \$1.5 million in the Agency's current budget for a full-scale comprehensive survey.

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