## Exploiting genetics

Washington

Congress keeps muttering about legislation to regulate links between universities and industry on the exploitation of genetic engineering. Last week, Congressman Albert Gore's oversight committee held two days of hearings on the conflicts of interest that have arisen or may arise. The occasion gave university representatives an opportunity to parade local solutions they believe will prevent a recurrence of recent controversies.

In several well-publicized cases, university researchers pursued work in outside corporations that closely parallelled their academic research, and the financial arrangements between the parties, suggested conflicts of interest. (In the recent Calgene case, for example, a plant biologist at the University of California at Davis received a grant from Allied Chemical. The researcher was also vice-president of Calgene, a biotechnology firm in which Allied subsequently purchased a 20 per cent interest (see Nature 4 March, p.6).

Recent large grants by corporations to Massachusetts General Hospital and Washington University, St Louis, have heightened concern over possible conflicts with traditional freedom of academic inquiry.

Roderick Park, vice-chancellor of the University of California at Berkeley, testified — as did representatives of the University of Wisconsin, Stanford University and the University of California at Davis — that the universities are themselves concerned. Draft principles under consideration at Berkeley, for example, would prohibit

Professor Hartley says that the new research and teaching centre will have two chief lines of enquiry — the engineering of microorganisms able to digest wood and wood-like natural materials (including sugar-cane and baggasse) into usable chemicals, and the development of enzyme electrodes or sensors by which means the activity of a biochemical enzyme can be coupled directly to a semiconductor device. "We may be able to make microprocessors that can smell", Professor Hartley said.

On his own position at the centre, Professor Hartley says that there is no conflict between his chairmanship of a new academic centre and his membership of the scientific advisory board of Biogen, the Swiss-based company. He explains that his contract with Biogen allows him to keep confidential his work within Imperial College and vice versa. He considers that the centre, now that it is a going concern, will be able to apply successfully for a subvention from the fund earmarked by the University Grants Committee for the support of biotechnology in British universities (see *Nature* 20 May, p.173). any research on campus "whose benefits to education and research are small"; would require sponsors of research to allow free publication of all results; and would "scrutinize", but not necessarily forbid any arrangement that involved sponsorship of campus research by a company in which the researcher held a financial interest.

At the hearings, critics of universityindustry ties had a chance to point a finger at some of the more notorious conflict-of-interest cases and called for federal guidelines on financial disclosure. Albert Meyerhoff of the Natural Resources Defense Council (NRDC) testified that the universities have already proved incapable of confronting these issues themselves. The Pajaro Dunes conference failed to accomplish its purpose of drawing up ground rules for industry-sponsored research, he said. Meyerhoff also criticized the Stanford faculty for having rejected a proposal requiring disclosure of conflicts of interest.

NRDC called for federal legislation that would require universities receiving federal research funds to adopt financial disclosure rules for faculty. Researchers should disclose any financial interests they have in research sponsors and also any interests in companies that could benefit from their research, NRDC said.

No such legislation has been introduced. But Representative Albert Gore (Democrat, Tennessee), who conducted the hearings, has been increasingly concerned over the effects of new industry-university ties.

**Stephen Budiansky** 

## Research council visitors



Allegations that foreign scientists visiting British research council laboratories are subject to serious constraints on their freedom of expression seem to be a storm in a teacup. What is at issue is whether the terms on which visiting scientists agree to work in British laboratories muzzle public criticism of council policy.

Mr Stanley Alderson, who describes himself as a writer and human rights campaigner, claims that foreign scientists visiting the Agricultural Research Council (ARC), Medical Research Council (MRC), Science and Engineering Research Council (SERC) and Social Sciences Research Council (SSRC) are asked to sign an agreement, known as Form Y, accepting the conditions of work undertaken by British employees of the councils. As well as agreeing to observe safety arrangements, patent regulations and conditions governing publication of research work, visiting scientists are also required "during (their) visit and afterwards ... not to mention the Council's name in any public controversy". Mr Alderson says that the last condition is inspired by Section 2 of Britain's Official Secrets Act and contravenes the human rights guidelines of several international organizations.

The issue may be taken further. Not only does Mr Alderson plan to write to the national newspapers but Lord Avebury has written to Sir James Gowans, Secretary of MRC, drawing his attention to Form Y. Lord Avebury professed himself astonished that "any self-respecting scientist would give such an undertaking which on the face of it puts a gag on visiting scientists" and prevents them from ever commenting publicly on the policy of the research councils.

The research councils are clearly surprised and bewildered to find themselves at the centre of such a maelstrom. "Form Y? Notes for the guidance of visiting scientific workers? What is it? We've never heard of it." Form Y is in fact used only by MRC; visiting scientists are asked to sign it in exchange for access to MRC facilities.

An MRC spokesman said that Form Y had nothing to do with the Official Secrets Act and merely expressed work conventions understood by employees of any establishment. The phrase which requires that MRC should not be mentioned in any public controversy conforms with the guidance given to its own employees and was inserted to avoid embarrassement when making a public statement the individual should make it clear that he is speaking on his own behalf and not stating council policy unless he has obtained official approval in advance. MRC employees, he claimed, are not prevented from expressing their opinions as private individuals.

Visiting scientists at ARC and the National Environment Research Council (NERC) are asked to sign a form covering standard conditions — patent rights, health regulations, publication conditions — but there is no clause referring to the councils in any public controversy. NERC employees and overseas visitors who come for two or three months do have to sign Section 2 of the 1911 Official Secrets Act and Section I(2) of the 1920 Act. SERC has no official form at all, and the only restriction on visitors is that covering patent agreements.

What seems clear is that the obligation, explicit or understood, on an employee not to speak publicly on behalf of his employing body without official approval does not limit his right to speak out on any issue whatsoever as long as he makes it clear he is expressing a private opinion. What is not so clear, however, is whether an individual, employed by or visiting a research council, can publicly criticize the policy of the council without the fear of being disciplined. Jane Wynn