

Defence research

Defence to support UK academic research

In a move that could more than double its financial support for university research over the next three years, the British Ministry of Defence (MOD) is embarking on two new collaborative schemes involving universities, industry and its own research establishments. The increase in funds, amounting to anything up to £15 million on top of the £9 million already spent annually on direct collaboration with universities, will come from MOD's research budget, now running at about £380 million per year.

More than one third of MOD's research budget is spent externally, most of it in industry on applied research with specific

University of Geneva

Illmensee's view

WITH the collaboration of others in his laboratory, Dr Karl Illmensee is still hoping to reproduce some of his early experiments on mice before he leaves the University of Geneva in September 1987. The difficulties in doing so, he said this week, are partly the result of continual interruptions caused by the need to attend to administrative affairs connected with the events that led him not to seek an extension of his contract with the University of Geneva (see *Nature* 11 July, p.98).

"The climate here is so hostile that there is no possibility to do research", says Illmensee, and "there is false information" in the internal report that was to have been submitted to the faculty meeting that would have considered extending his contract beyond September 1987.

Apart from interruptions from the university and the press, says Illmensee, the problems of repeating some of the past results are normal scientific difficulties. He has sufficient financial support from the university to attempt to reproduce past experiments and to continue with some of the research that has been interrupted, in close collaboration with others in his laboratory. These include three postdoctoral scientists, one from Hungary and two from West Germany, who have joined the laboratory in the past year.

"My priority", says Illmensee, "is to repeat the experiments of 1982 involving teratocarcinomas." The problem, he claims, is still that of re-establishing the teratocarcinomas. The second priority is to repeat the 1977 production of homozygous diploid mice using a technique that nobody has been able to reproduce. "I have no idea if the time (until September 1987) will be sufficient for me to complete these experiments", he says.

Peter Newmark

applications in mind — not to be confused with the funds spent on development, which in total amount annually to £1,900 million. But a small percentage of the research money goes into strategic ("seed-corn") research. About five per cent of work carried out in the research establishments falls into this category. Externally, MOD supports some 650 research projects among 72 universities, colleges and polytechnics.

For some time, academics suffering a steady squeeze in funds for science have been casting covetous looks at MOD's resources, comparing, for example, its £380 million research budget with the £280 million available to the Science and Engineering Research Council (SERC). Partly in response to concern that it should generally seek to do more for the country's science base, but partly because of its own need to increase the return on its funds, MOD has set up a collaborative scheme for university research grants with several of the research councils, particularly SERC and the Natural Environmental Research Council (NERC).

The new scheme, to start towards the end of this year, should involve only minor change in the councils' grant funding procedures. Applicants will be invited to indicate whether they are interested in, or opposed to, part support by MOD. Following peer review, research staff in MOD will assess appropriate grant proposals and offer up to 50 per cent of the required support. The councils will then decide whether to provide the balance.

Both MOD and the research councils emphasize that the new scheme should not bend council funds towards defence-related research. And an MOD spokesman says that grants with significant defence relevance that fail to obtain council support may still be taken up by MOD. Furthermore, jointly funded research projects will be subject to restrictions on publication only when patents are involved or when researchers move into classified areas. Such occasions "are conceivable", according to the spokesman, "but we will bend over backwards to keep work unclassified. Our aim is not to be bureaucratic." Recent restrictions on US researchers by their Department of Defense, such as the much publicized cancellation of sessions at a recent physics conference, are viewed at MOD with disfavour.

MOD is to circulate every university with a portfolio explaining the scheme and listing the specific areas of primary interest together with names of principal MOD researchers so that interested academics can establish informal contacts. The research councils will issue announce-

ments of opportunity for grant applications, with a deadline of 1 December.

A second scheme for university collaboration is being set up by MOD that will involve the research councils only peripherally through their peer review panels. This scheme has been stimulated by MOD's experience of the Alvey scheme for university/industry collaboration in information technology, and will aim to stimulate such activity in other areas of defence-related research. MOD would support the whole of the university component, to the tune of £1 million in the first year increasing to about £4 million in 1988. By that time, MOD expects to spend £5 million annually on the collaborative grants scheme and £6 million direct to the universities. But if the demand is strong enough, a further £5 million could be available.

Phillip Campbell

Genetic engineering patents

Interferon interference

LEGAL tussles over the commercialization of alpha-interferon have taken a new turn with the filing in Vienna by Biogen NV of a complaint against Boehringer Ingelheim Zentrale GmbH for its marketing of a product containing an alpha-interferon produced by recombinant DNA technology. Last August, Biogen was granted a broad European patent for "recombinant" alpha-interferons. Boehringer Ingelheim is one of several companies that have registered their opposition to the patent with the European Patent Office.

Biogen, of Geneva, Switzerland, and Cambridge, Massachusetts, is suing the West German pharmaceutical company Boehringer Ingelheim over an eyedrop for the treatment of keratitis caused by the herpes simplex virus that has been marketed in Austria since early this year. Acknowledging that the product contains a recombinant alpha-interferon, Dr Dieter Laudien, head of the Boehringer Ingelheim patent department, says that the company, and its subsidiary Bender, does not believe that Biogen's patent can be enforced.

Its opposition, lodged with the European Patent Office in May, is based mainly on evidence that enough information about alpha-interferon and its sequence was known and published before Biogen's patent filing to make Biogen's achievements "non-inventive". By starting its lawsuit against Boehringer Ingelheim, Biogen has clearly signalled that it is optimistic that its European patent will survive the opposition when the matter is considered, probably in a few months time. Meanwhile Biogen is still expecting to receive patent protection in the United States despite the rival patent granted to Hoffmann-LaRoche (see *Nature* 21 March, p. 207).

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