Illmensee inquiry

Mixed news on grants

PROFESSOR Karl Illmensee's grant from the Swiss National Science Foundation, suspended last year when doubt was cast on experiments carried out at the University of Geneva, will not be reinstated. Notice to this effect was given to Professor Illmensee in a letter from the foundation dated 14 March. Illmensee said on the telephone earlier this week that he had not yet decided whether to appeal against the decision. "It might be easier to apply for a new grant."

The foundation's decision stems from a meeting of the council of the foundation earlier this month. According to Dr P. Fricker, secretary of the foundation, the council was almost exclusively concerned with the report of the international commission on the Illmensee affair, delivered to the University of Geneva at the end of last month (see *Nature* 23 February, p. 673). Dr Fricker said that the council had considered the report with great care and that its eventual decision to terminate Professor Illmensee's grant was taken unanimously.

Although the commission's report said that it had not uncovered "convincing evidence" of false claims in respect of a series of experiments in the early summer of 1982, the commission also referred to "grave doubts" about some of the work and to "negligent" laboratory practice. The foundation's council seems to have taken the view that such comments outweigh Illmensee's formal exoneration.

Illmensee said earlier this week that the decision was unfair in that it would penalize members of his laboratory other than himself. He said, however, that he was now planning to follow the commission's advice and to repeat the disputed experiments, involving the replacement of nuclei of mouse embryos by those of cells of a teratocarcinoma — ostentatiously undifferentiated cells. Illmensee said that he would be negotiating with the University of Geneva for support for these experiments.

The immediate practical problem seems to be to recover cells of the teratoma, now represented by several ampoules of frozen material. He said that it would take some months to obtain viable cultures and to demonstrate that their characteristics and karyotype had not changed.

According to Illmensee, confirmation of the disputed results should be possible by the end of the year. If the new experiments should confirm those of 1982, Illmensee said, he would invite specialists from elsewhere to visit Geneva to inspect his protocols and verify his conclusions.

Stephen Budiansky adds from Washington: The National Institutes of Health (NIH) are close to a decision on reinstating Illmensee's research grant, which has been held up since May 1983 pending the outcome of the investigation by the University of Geneva commission.

The grant, worth $74,000, was recommended by the NIH Cancer Advisory Board in January 1983 and was to have run from 1 June. It was suspended in May of that year, when NIH learned of a statement in which Illmensee appeared to acknowledge having falsified data.

According to Mary Meyers of NIH's office of extramural research, NIH are now studying the commission's findings and will decide shortly on the fate of the suspended funds.

Meanwhile, efforts by other researchers to repeat Illmensee's experiments continue to prove unsuccessful. The committee set up last summer to investigate Illmensee's work at the Jackson Laboratory in Bar Harbor, Maine, noted that Illmensee's collaborator there, Dr Peter Hoppe, had tried on his own but failed to reproduce the results he had obtained with Illmensee. These experiments involved removing nuclei from fertilized mouse eggs to produce single-parent mice and, in other experiments, transplanting nuclei from partially developed embryos into fertilized mouse eggs whose nuclei were removed. In all the experiments, Hoppe prepared the fertilized eggs and reimplanted the embryos, while Illmensee performed the microsurgical removal and emplacement of the nuclei.

Hoppe last week refused to comment on the subject, and would not say whether he is still attempting to repeat the experiments. The Jackson Laboratory committee noted in its report that the "special combination of technical skills" of the Hoppe–Illmensee collaboration could be difficult to duplicate. Hoppe told the committee last summer that he suspected a deteriorated reagent was to blame for his failures. Dorothea Bennett of Sloan-Kettering, who chaired the committee, said last week, however, that she was dubious of that explanation: she said biologists tend to blame "anything" when results cannot be duplicated. □

Soviet Academy

Science to fuel materialism

SOVIET social scientists — particularly the economists and sociologists — are failing to match the achievements of their colleagues in the natural and technical sciences in meeting the demands of the "scientific and technical revolution", according to Academician P.N. Fedoseev, one of the vice-presidents of the Academy of Sciences. Speaking at the annual meeting of the academy, Fedoseev echoed the "sharp and well-deserved" criticism of the social sciences recently voiced by the Communist Party's central committee.

One major problem, for example, which Fedoseev emphasized "cannot be deferred", is the development of a method for calculating the "economic effect" of scientific and technological innovation, and for calculating the effect of economic and social factors on scientific and technical progress. These remarks, outwardly simply the application to the social sciences of Party directives on science in the service of the economy, may nevertheless herald a shift in policy.

Delays in the implementation of research results in industrial and economic practice have bedevilled Soviet planning for years, and the much-publicized "economic effect" of successful innovations selected for medals and awards is calculated, for the most part, on the basis of factory and production-line gross accounting.

Fedoseev's emphasis on the need for a new "methodology" for such calculations suggests that a more sophisticated approach to industrial applications may be on the way. One possibility is that it would take account, for example, of long-term savings due to the greater reliability of a new process, which do not necessarily become apparent during the first year of accounting. But the unfortunate economists and sociologists could also prove convenient scapegoats for both scientists and industrial managers, when the latter must explain why a new discovery is not yet giving results.

In contrast with the social scientists, representatives of the natural and technical sciences have been singled out for praise. Successes in the food programme range from the indigenous production of plant-protection chemicals to a project for the industrial production of protein from methane and methanol. In the energy programme, a team headed by Academician Anatolii P. Aleksandrov, president of the academy, has completed a detailed breakdown of the Soviet Union's energy needs until the year 2000. Other achievements honoured include the synthesis by genetic engineering of interferon and human insulin, the radar mapping of the surface of Venus and progress of the Kola deep borehole.

But despite those successes, all disciplines seem to have been included in Fedoseev's more general exhortation that scientists should give thought to raising the level of ideological work and to the education and upbringing of the younger generation. The role of science in educating young people in a Marxist materialist outlook is a standard concept in Soviet educational theory, but explicit exhortations to the academy to pay greater attention to the role of science in forming a materialistic outlook and in combating anti-scientific concepts and prejudices strike a note that has not been heard in academy meetings for many years.

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