## More crisis for UK research

Now it seems that Britain will stay in high-energy physics for the time being, high-energy physics has an obligation to mitigate the squeeze on general research.

THE Kendrew committee, which has been looking into British membership of CERN, the European nuclear physics laboratory at Geneva, seems about to create a dilemma for everybody in sight — the British Science and Engineering Research Council, which pays the British subscription, the Advisory Board for the Research Councils, which has just presented the British government with a demand for extra cash, and even the management of CERN, the essence of the committee's conclusion seems to be that Britain should not immediately pull out of the European high-energy physics club, but instead demand that the cost of membership should be reduced from the end of this decade, when CERN will be equipping with superconducting magnets the electron collider now being built. Precisely what the committee thinks should happen if these negotiations come to nothing should be clear when its report is published. It will be particularly valuable to know why the committee has decided against withdrawal. Is high-energy physics after all worthwhile, or is it merely that the British research community will need the best part of five years to win what it can from past investment in CERN?

That the outcome is a compromise will be an embarrassment. Although high-energy physics is a steadily shrinking part of the budget of the Science and Engineering Research Council, it is still uncomfortably large. Last year, the advisory board was saying that the research council might have to withdraw from some whole field of science if the squeeze persisted. The Kendrew committee sprang from the sense that high-energy physics, the most conspicuous target for economizers, is too important to be abandoned just like that. The chief consequence of the Kendrew compromise is that there is no immediate prospect of relief. The reappraisal of all activities that has occupied the research council for the past six months will have to continue. Nor will there be much comfort in the recent guileful letter to Kendrew from Dr Jeremy Bray, the Labour Party spokesman on science and technology, pointing out that a future government might have different views about science budgets.

Speculations prompted by that kind of prospect are neither here nor there. Any British government would find itself in the same plight on public spending as does the present. Extra money for research, such as the advisory board has now asked for (£10 million extra next year and in each of the two succeeding years) would have to come from the British government's present spending programme. It would have been more interesting, but dangerous, if the Kendrew committee had resolved flatly to say that the research community cannot afford high-energy physics out of the present budget, and had thrown the onus of grappling

## **Biological manuscripts**

From the beginning of next week (20 May), Miranda Robertson, Biological Sciences Editor of Nature, will be based in the Washington office of Nature. Manuscripts offered for publication may be sent, as at present, to either the London or the Washington office; with the benefit of good communications, the speed with which manuscripts are dealt will be independent of the place at which they are received. But authors are asked please in future to send four copies of manuscripts intended for publication (one for each office and two for referees).

with the consequences onto the government.

The advisory board, whose role is to divide the science budget each year, will now be particularly under stress, if only because some of its members are at best agnostic on high-energy physics. But continued membership of CERN squares badly with economies being made elsewhere. Out of a total budget of £631 million, the research councils will have to spend £9 million this year and £11 million next year on persuading research people to retire early. That is simple waste. The advisory board is also acutely aware, to judge from this year's submission to the government. that its own economies will have to take effect before there can be much change in the pattern of spending within the universities on the support of research, which is estimated (a little optimistically) to be worth £550 million a year. Only in the academic year beginning in 1986 will there be the first signs of how the budgets of individual universities will be changed to take account of the importance attached to the research they do. So the muttering has begun that part of the university budget should be handed over to the research councils, which is a recipe for setting academics at each others' throats.

This is where the physics community, and the management of CERN, can help. Both have in the past been dealt with generously, and may by now have earned an obligation to do something for fields more recently made vigorous. The truth about CERN is that it is every bit as splendid a laboratory as its founders intended. It is a model of international collaboration, and it is successful in the work it does. For the past decade, conscious of its cost, the laboratory has also managed to keep ahead technically by finding the money with which to build a new accelerator by closing down an older machine, or by using it as a component for a larger one. But the laboratory has some defects. It has a larger permanent staff than might otherwise be necessary, perhaps because it is international. Much worse, it happens to be in Switzerland, one of the most prosperous countries in Western Europe and that which determines what people working there are paid. Nobody suggests that the new electron accelerator should be moved somewhere else (which would be impossible) or that people working at CERN should be underpaid, but this privileged laboratory should now help solve the problems that have arisen in Britain, and even elsewhere.

What can CERN do? Economizing is an obvious must, but cheeseparing would not save anything like as much as Kendrew appears to be looking for. Broadening the base of collaboration on the second phase of the electron collider is a much better course to follow. Neither the United States nor the Soviet Union is at present a paying member of the club, even though people from each country work on CERN collaborations by a kind of gentlemen's agreement, on the ground that reciprocity eventually accrues. Why not now formalize these arrangements? If CERN has shown that European collaboration in high-energy physics works, why should it not use its present position on the crest of a wave of success to show that international collaboration can also succeed? With the US Congress in the thick of trying to reduce the US budget deficit, this might be just the time for such a move. One of the curious ironies of this field, over several generations of particle accelerators, is that the practitioners are forever saying that machines will eventually have to be built and operated internationally - but not just yet.