correspondence

GDR's state of science

SIR,—Under this presumptuous title your journal, which has built its reputation on a claim of fair and objective reporting, saw fit to publish the 'impressions' of an anonymous correspondent of his visits to unnamed biochemistry and microbiology laboratories in an undisclosed city of the GDR (13 October, page 548). The picture on the same page intimates that it might have been Leipzig. As a biochemist at the Karl-Marx University of Leipzig I feel that the readers of *Nature* deserve substantial factual information to do justice to the heading chosen by the editors.

The state of biochemistry is of course part of the general development of sciences in the GDR. In the last ten years alone funds for science have increased more than threefold and the percentage of the GNP going to science and technology has increased from 2 to 5. The life sciences have had their fair share in this development. As far as biochemistry is concerned it may suffice to mention that of the seven departments in medical faculties six are housed in new buildings (Rostock, Berlin, Leipzig, Halle, Jena, Magdeburg). In the Academy of Sciences there have been founded eight institutes of life sciences with a sizeable representation of biochemistry, in particular in the Institut für Molekularbiologie, Berlin-Buch, and the Institut für Biochemie de Pflanzen, Halle. All establishments are headed by prominent scientists rather than by administrators. The development of research in the life sciences is largely based on prognostic documents, worked out by some hundreds of scientists themselves, which have been accepted by government as a framework for implementation.

The vast majority of scientists in the GDR go along with the tenets held by most thoughtful scientists elsewhere—that freedom of research is tied indissolubly to social responsibility. All scientists loyal to the GDR have equal chances regardless of creed and there is certainly no pressure to join the Socialist Unity Party or any other. As far as the spirit of young biochemists is concerned all I have experienced is enthusiasm rather than despondency. There is a general feeling of social security and optimism shared by the scientists with all citizens of the GDR which is based on the record of uninterrupted progress of our socialist society which does not know economic

crises or unemployment. There is of course no denying that we wish to have more foreign exchange at our disposal for more equipment, literature and travels. But we know that this depends in the first line on the efforts of our workers to increase export.

As far as conditions at the Karl-Marx University are concerned, scintillation counters, analytical and preparative ultracentrifuges from internationally renowned manufacturers as well as the internationally leading biochemical journals are in fact available. The Karl-Marx University maintains an effective cooperation with British universities and biochemists.

For many years there has been a regular exchange of staff and students, biochemists included, between the Karl-Marx University and the universities of Leeds, Manchester and York. Two biochemists of the Karl-Marx University, one of them myself, are members of The Biochemical Society of Great Britain.

The growth of biochemistry is reflected in the number of members of the Biochemische Gesellschaft der DDR, whose membership has doubled over the past few years and now totals 610. The scientific life is an active one and a multitude of national and international meetings are held including the Federation of European Biochemical Societies (FEBS) Advanced Courses. It is to be hoped that a good many readers of *Nature* will participate at the 12th FEBS Meeting to be held in Dresden, 2–8 July, 1978 and will be able to judge for themselves both the general state of life and of science in the GDR.

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Discarding the diet-heart hypothesis

SIR,—No, Mr Rivers (3 November, page 2), I am not a heretic, I am a scientist. Science is for me a religion both because it opens an endless wonderland and because it works. It is, in a needy world, a way to solve problems, as are Buddhism and Christianity and Judaism and the other religions, each in their own way. The way science works is quite simple but not widely understood. Using the best available evidence the scientist formulates an hypothesis and then he and his peers set out to disprove that hypothesis. We never prove in science, we advance to new understanding by

disproofs. The hazard, as Platt has so eloquently said in his essay 'The step to man', is that scientists may become so enamoured with some favourite hypothesis that they never test it. Or they become intrigued with the testing hardware and dawdle or they refuse to accept the disproving results of good tests. The last has happened with the diet/heart hypothesis. A noisy clutch of scientists is defending, excusing, delaying, procrastinating over the decision to discard a disproven hypothesis. Their tactics prevent progress.

Sir Andrew Huxley was lately quoted (8 September, page 95) as saying that the most sinister behaviour for scientists is to refuse to test an hypothesis (say the inheritance of intellectual ability) because it would be thought socially or politically wicked to raise a question whose answer might disagree with some preconception. No less sinister is the tactic of the diet/heart enthusiasts who, by their noisy propaganda hope to coddle and prolong the diet/heart hypothesis. That hypothesis has been shown wrong by scientific method. I believe that because I believe in the scientific method.

The heretics, Mr Rivers, are selling corn oil.

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Research and culture

SIR,—It is sad, when it comes to defending support for basic science, that *Nature* editorialists should resort to stating the obvious, that is that basic research is a cultural activity ('How much further can the pendulum swing?' 27 October, page 743).

Sad but not surprising, considering how many educated persons, including scientists, seem to ignore this fact or are confused by the distinction between civilisation and progress. Civilisation is culture. Encouraging cultural activity is maybe the best investment for the future of a nation; it is an investment in enlightenment, a non-depreciating quality (whether or not research comes up with the cure for cancer—that would be progress).

After talking with friends in the British theatre, however, who have been out of work for a while now, it might not be such a good idea, after all to remind the government that research is a cultural activity.

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