US-European space cooperation

SIR — We were pleased to see (*Nature* 26 May, p.271) the interest and attention devoted to the work of the US National Academy of Sciences-European Science Foundation Joint Working Group on Cooperation in Planetary Exploration (JWG). We too believe that these discussions could lead to a new and important level of cooperation between Western Europe and the United States in scientific exploration of the Solar System — a cooperation which would be extremely beneficial to both sides.

Unfortunately, there were some inaccuracies in the article's rendition of the continuing discussions and in the premature anticipation of JWG's final conclusions. We would like to clarify several points.

- (1) Contrary to the information given in the article, JWG has not reached a final decision on the cooperative planetary exploration missions that it will recommend to the National Aeronautics and Space Administration (NASA) and the European Space Agency (ESA), or on their sequence. While the missions described in your article are similar to the candidates which JWG has under consideration, it is a factual error to represent them in the aggregate as the concluding position of this advisory body.
- (2) The US planetary core programme recommended by NASA's Solar System Exploration Committee is derived from a low-cost mission strategy made possible by innovative approaches to planetary spacecraft and payload instrumentation, and by a continuing programme of stable funding. The initial core programme of four missions primarily represents a US national effort; of course, where there are opportunities within the core programme for collaboration with international partners, these are endorsed and encouraged by JWG. Moreover, the US Space Science Board, the parent body of the US delegation to JWG, has taken the position that a programme of cooperative missions should be predicted on a separate, vigorous US national planetary programme. Under these circumstances, we were surprised to see your article assert that JWG would take three-quarters of the initial US national core programme and mandate it as an international programme.
- (3) Finally, we are puzzled by the statement that "support" for this effort will be relatively easier to win from NASA than from ESA. The various elements of support fiscal, political and scientific will of necessity extend the decision-making process into various governmental areas. Although there are clear differences between the decision-making processes in the United States and in Western Europe, we have no reason to believe that support for a cooperative programme will be more or less easy to obtain from either of the two sides.

As you will appreciate, JWG is in the late stages of a complex and sensitive series of discussions and negotiations on a matter which could lead to significant effects on the way some planetary exploration will be conducted into the far future, and which could have salutary effects in broader ways.

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Not the PhDs

SIR — The opinion page analysing scientific fraud in the United States (Nature 2 June, p.361) preserves an erroneous impression cultivated in many previous reviews elsewhere that PhD researchers are responsible for the recent crop of scandals. Some medical journal editors are reluctant to make sharp identifications but the plain fact is that MD researchers are overwhelmingly implicated. How is it possible to discuss causes and remedies without mentioning the professional species?

Regarding cause, the disciples of Socrates from their first day of laboratory instruction are taught the sanctity of data. By the time they finish a PhD programme, suspect candidates have largely been eliminated by a series of mentors. The disciples of Hippocrates, contrariwise, receive diminishing doses of basic science laboratory training and indoctrination as medical schools respond to budget pressures.

Regarding remedy, a PhD falsifying data loses his job and his career. The MD culprit loses his position also but by signing a promise to withdraw from research, he can enter a career of clinical practice and easily double his annual income. Different penalties result in different susceptibilities to temptation.

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THE article did not put the blame on PhDs (or even younger MDs) but said "the indifference of many senior people... is more serious". Editor, *Nature*.

Suicide by nuclear war

SIR — The book review by Frank Barnaby (Nature 16 June, p.639) is ominous. When he says the nuclear arms race may be out of political control, what he means, and later implies, is that in a formally democratic society it is out of democratic control because it is in the hands of special interests. One of these is the scientific establishment itself. The record here is absolutely dismal. Except for the Federation

of American Scientists (an elite body), and more recently and quite surprisingly the American Medical Association, attempts to inject a note of reality into this issue have not only been effectively non-existent but subject to a censorship which, to say the least, is intellectually dishonest. In this respect science is behaving like the dishonest tailors in the fairy story "The emperor's new clothes".

Rather than put up with this I have resigned from societies (AAAS, AMS) which practise it. Anyone who values science as a cultural endeavour should ask themselves what is it contributing to the human enterprise? Otherwise we face the ultimate catastrophe predicted by Norbert Wiener, namely a computerized war in space which will make the Earth uninhabitable.

Fortunately we have, as a constituency to appeal to, the legendary "man in the street", so far left out of the picture, who is not as stupidly complacent as the armchair strategists seem to think. For him the idea of racial suicide is not appealing.

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Food for others

SIR — You comment on the \$20,000 million programme by the US Department of Agriculture to reduce food production in the United States and therefore to keep prices and profits up (*Nature* 23 June, p.645) and suggest that more money could be spent on genetic research and on other methods of reducing cost.

While this suggestion is certainly sensible and worthy of much consideration, another idea occurs to me. With over 800 million people destitute and in conditions of near or actual starvation (World Bank) throughout the world and with the numbers of destitute and hungry growing within the United States, where the 1930s style soup kitchens have now reopened, would it not also be a sensible idea to pay the farmers to produce more, not less, and to give the excess food to those who most need it? I would have thought \$20,000 million would have helped the world's destitute quite nicely!

Of course, this would mean that we would have to run the world as if people, not profits, mattered and that idea seems to be anathema to the administrations on both sides of the Atlantic. On the other hand, if the United States spent at least a little on feeding the poor Indian in Central America, the latter, with a full stomach and friendly northern neighbour, might be more disposed towards the Western rather than the Communist way of doing things, and President Reagan might actually succeed in "saving" Central America. But perhaps that is too much to hope for!

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