

correspondence

Mongolian science

SIR, — In connection with the interview with me, by Vera Rich in *Nature* (28 June, page 754) I would like to ask you to publish the following explanation.

When Vera Rich visited me in Warsaw in October 1978, she was astonished to learn from me that there is a Museum and Palaeontological Laboratory in Ulan Bator, with a group of competent Palaeontologists, some of a very high standard.

I was shocked when I read what she published in *Nature* some 9 months later — an article with ironical remarks about the scientific relationships between the CMEA countries (Comecon in Vera Rich's wording) and about Soviet science; and containing misleading information, for example that R. Barsbold's article (28 June, page 792) is based on materials from the Polish-Mongolian expeditions, while in fact it describes the specimens collected by the Soviet-Mongolian expeditions.

The unacceptable side of her article is the perjorative and condescending tone in which she writes about Mongolian science and scientists. As her article is written in a form of an interview with me, it makes me look disloyal to the people with whom I have been co-operating for years. I have never described my Mongolian colleagues in a derogatory way. What I have done was the opposite, but this apparently did not fit Vera Rich's ideas about Mongolia.

As a result of this interview co-operation between Polish and Mongolian palaeontology may be impaired. Is this really the aim of *Nature's* policy?

Yours faithfully,

ZOFIA KIELAN-JAWOROWSKA
Academy of Sciences Institute of
Palaeobiology, Warsaw, Poland.

Readers concerned that we may have seriously slighted Mongolian scientists are urged to read Vera Rich's original article. Ed.

Alpha-fetoprotein screening on a US regional basis

SIR — The future of pregnancy alpha-fetoprotein (AFP) serum screening in the United States (5 July, page 6) is dependent upon decisions from the political as well as the scientific communities. Intense pressure has been applied to the Food and Drug Administration (FDA) to restrict test reagent kit licensure to carefully monitored regional programme. Few such programmes currently exist, due to lack of financial support from major funding sources such as the Department of Health, Education and Welfare, thus placing the FDA in a difficult position.

A number of private and commercial laboratories in this country have produced their own reagents and now offer the AFP test for pregnancy. Such testing is legal and is not covered by FDA restrictions. In the absence of coordinated action by federal funding and licensing agents such testing will proliferate and its quality will be unpredictable. Equally

important, the ability to interpret and follow up properly on test results will be generally poor, especially in the absence of an integrated patient service programme. These issues have been extensively discussed at the 1977 and 1978 Scarborough Conferences.

Pilot programmes in Nassau County, New York and in Maine have demonstrated beyond doubt that AFP testing in pregnancy can be carried out successfully on a regional basis within the structure of the US health care system. There is no question that such testing, properly applied, represents a major step forward in the identification and management of a variety of high-risk pregnancies, including major malformations (e.g. anencephaly, spina bifida, omphalocele, congenital nephrosis), twins, molar pregnancies, missed abortions, fetal demise, and pregnancies at high risk for premature delivery. If the full potential for this testing is to be realized, it must be actively supported and carefully executed.

Towards that end, plans are being made for a third Scarborough Conference to be held in June 1980, and emphasis is to be placed on the process of regionalisation. We hope that government agencies will have taken purposeful and positive action by that time; representatives from that sector will be invited to participate.

Yours faithfully,

JAMES E. HADDOW
EDWARD M. KLOZA

Foundation for Blood Research, Scarborough, Maine, US.

Recombinant DNA and induced tumours

SIR, — In the editorial (7 June, page 461), in which you call on the US Congress to act on recombinant DNA legislation (in itself a questionable intervention by *Nature*), you base your recommendation, in part, on risk experiments which "have indicated hitherto unanticipated potential hazards (such as the ability of DNA strands to induce tumours in laboratory animals)". Since the "risk experiments" presumably referred to were from our laboratories, we would like to comment.

As part of the polyoma risk assessment experiment (*Science* 203, 883 and 887; 1979), which was designed to monitor the possible transfer of potentially infectious DNA out of *E. coli* and into susceptible mammalian cells, we inoculated baby hamsters with polyoma virus DNA (Israel *et al.*, *J. Virol.* 29, 990; 1979) and with polyoma DNA contained in recombinant molecules (Israel *et al.*, *Science*, in the press). In brief, the two types of polyoma DNA showed comparable oncogenicity; when contained in the *E. coli* K-12 host, which was the experimental system, the recombinant DNA did not induce any tumours.

First, it seems misleading to state that "DNA strands" can induce tumours, without the qualification that you are referring to DNA from a tumour virus. Second, this finding would have been "unanticipated" only by persons who both know little or nothing of tumour virology, and who did not even read the material. Tumourigenesis and cell transformation by DNAs from various tumour viruses, including polyoma virus, have been reported many times over the past 19 years; these findings are widely known, and are well referenced in our paper in

the *Journal of Virology*, as well as in the publications cited there.

Since the example cited by *Nature* has no substance, we must wonder if there are any "unanticipated potential hazards" at all. Indeed, the 31 May issue (page 360) quotes one of us as saying "I do not know of a single piece of new data that has indicated that K-12 recombinant DNA research [meaning those experiments not prohibited by the US guidelines] could generate a biohazard." This remains our view, despite *Nature's* careless assertion to the contrary.

Major recombinant DNA policy recommendations based on uncritically accepted misstatements made by uninformed persons are only too familiar, but one would expect *Nature* to employ higher standards.

Yours faithfully,

WALLACE P. ROWE
MALCOLM A. MARTIN

National Institute of Allergy and Infectious Diseases,
Maryland, US.

Preparing oral rehydration salt solutions

SIR, — Even if packets of oral rehydration salts are available (29 March, page 389), are illiterate village people capable of preparing the correct concentration of solution? If not, then they must be helped — in high concentrations the salts could be hazardous and in low concentrations they are useless. The ingredients, brown sugar, sugar, salt and sodium bicarbonate are available in most rural areas; but the 'pinch', spoon and drinking glasses are so variable that they cannot be reliably used for measuring.

The Indonesian spoon mentioned in the article is suitable for measuring the solids, but how is the fluid measured? The recommended beer bottle is not available in Muslim countries. I would, therefore, like to suggest that the UNICEF oralyte packet should contain a plastic bag, with a marked narrow neck like a bottle and instructions for measuring the fluid, and that the relevant agencies distribute cheap half-litre drinking glasses in remote villages where the UNICEF packets are not available. Three indentations should be made on the bottom of the glass: one for measuring each of sugar, salt and sodium bicarbonate. The level of the water required should be marked on the glass and instructions together with the limitations of oral rehydration should be engraved on it in local language.

The glasses should be distributed free or at a subsidised cost. They will usually be used for drinking water.

Yours faithfully,

MOSLEMUDDIN KHAN
International Centre for Diarrhoeal
Disease Research, Bangladesh.

Erratum

In Norman Dombey's article (26 July, page 270) the sentence "So in a fast reactor of the design envisaged in CFR1 or Superphenix . . . there will be no overall negative Doppler coefficient" should conclude " . . . there will be an overall negative Doppler coefficient".