

## The AIDS panic

SIR—Public pressure for protective measures against acquired immune deficiency syndrome (AIDS) is only now starting to surface<sup>1</sup>. Perhaps the greatest danger now is that the dramatic change in public attitudes towards the disease will have consequences more devastating than the syndrome itself. Growing demands for protection will force governments to adopt measures which, to be effective, may undermine the foundations of Western society, to the extent that they lead to segregation of the infected population, not only blood donors<sup>2</sup>. The US army has already made a pioneering decision in that direction<sup>3</sup>.

A computerized listing of all seropositives used as a new basis for discrimination and eventual segregation of the potential viral carriers is not a fictitious danger. It is the logical outcome of the development of a fear for which the AIDS virus is less responsible than scientists and journalists. After accusing the sexual minority, rejected since biblical times by the prevalent religions, the authors of the sensational will now stress the number of victims<sup>4</sup> and emphasize the hope for a vaccine (R. Gallo quoted in *Le Monde*), while the scientists, having exhausted the immunosuppressive properties of sperm, seminal fluid and homosexuality, now predict the danger of a lethal pandemic within the next 15–25 years<sup>5</sup>, forgetting that African AIDS, although appearing in 1970, has not fulfilled even part of the prophecy. The reasoning has been so simple as to appear flawless, as is always the danger with inductive science. A mere extrapolation from preliminary epidemiological data or other animal lentiviral diseases is sufficient to predict a pandemic in the 21st century, in the same simplistic way that for two years homosexuality was believed to be the cause of the syndrome, since AIDS was predominant in the homosexual population. The infectious agent hypothesis was then considered to be “too simplistic”<sup>7</sup>.

There is no way out of this potentially explosive situation other than factual information. It is thus urgent to refrain from formulating too easy extrapolations, if we do not wish to spend the next twenty years with the fear of contamination. Establishing the time lapse during which seropositive individuals are viral carriers is under these circumstances a research priority second only to that aiming at the investigation of the mechanisms of resistance of those who, although infected with the virus, do not develop the full-blown disease.

However, perhaps the first priority is to inform the lay public so that the fear of the unknown does not develop into hysteria, and instead of promising vaccines, which we do not yet know how to produce, it is urgent to explain what AIDS is not and, by

extrapolating from the known, define the limits of the epidemic rather than the boundaries of terror in our imagination.

DIMITRI VIZA

*Faculté de Médecine,  
Laboratoire d'Immunobiologie,  
15, rue de l'Ecole de Médecine,  
75006 Paris, France*

1. *Nature* 316, 663–664 (1985).
2. Siegal, F.P. & Siegal, M. (eds) *AIDS: The Medical Mystery* (Group Press, New York, 1983).
3. *Nature* 316, 668 (1985).
4. *Le Monde*, 31 August (1985).
5. *Le Monde*, 17 July (1985).
6. Seale, J. *New Scientist* No. 1467, 29–30 (1985).
7. Sonnabend, J.A., Witkin, S.S. & Purtillo, D.T. in *The Acquired Immune Deficiency Syndrome and Infections of Homosexual Men* (eds Pearl, M.A. & Armstrong, D.) 409–425 (Yorke, New York, 1984).

## What is life?

SIR—R.L. Hoult (*Nature* 316, 480; 1985) is brave to make a stab at clarifying what is meant by saying that a human embryo is “alive”.

However, his attempt at distinguishing between dependent and independent viability — with embryos being dependently viable — is not very useful since the word viable means “capable of living either dependently or independently”. Hence the problem of defining the words “alive” or “capable of living” is still not addressed in his letter.

The fundamentalists who seek to prevent embryo experimentation may not be impressed, in any case, by a distinction between dependent and independent viability.

The real need is for biologists to seek to change the terms of the debate on experimentation. The problem is that the argument that “embryos are not alive — in some sense or other” is purely defensive. And it is liable to be dismissed for seeking to blind the public with science.

At the root of the debate is a very serious question: “At what point should biologists and others stop seeking to improve the human condition?” Society has views and concerns about this question, as do biologists.

There is probably, for example, general concern that embryo experiments should stop at the point where there are feelings of pain in the embryo. That concern can only be addressed by biologists explaining vigorously and clearly what those words mean and what are the limits of current knowledge on pain in an embryo.

Since the fundamentalism of Darwin's days, the consensus view of society has shifted. Further shifts are likely if biologists are successful in explaining fully and clearly what they are up to, if they demonstrate honestly how their work seeks to improve the human condition and if they win the resources needed to do that job of explaining.

M.A.R. YUILLE

*3a Halesworth Road,  
London SE13 7TJ, UK*

©1985 Nature Publishing Group

## Good news for Spanish scientists

SIR—Alfonso Martínez Arias's recent letter (*Nature* 18 July, p.184) casts very serious doubts on the attitudes of the Spanish government to reincorporation into the scientific community of young scientists working abroad. I should like to report on recent steps that show, in my view, a much more serious commitment by our government than that conveyed by the statement of your correspondent on “national propaganda (words and wishes)”.

First, special fellowships (of which 105 were awarded in August) have been created to help to reabsorb into the Spanish scientific community young researchers who have been working abroad. PhD degrees from foreign institutions are now automatically accepted.

Second, a programme was launched in 1984 to provide funding for both foreign and Spanish scientists intending to spend their sabbatical leave in Spain. Particularly in the case of Spaniards, this may lead to more permanent employment.

Third, in a recent programme for promoting young Spanish scientists to posts in universities and national research laboratories, credit has been given for time spent in foreign institutions. Last but not least, the present government's Law of University Reform has abolished, as a method of university recruitment, those peculiar endurance tests (“oposiciones”) that brought so much misery and retardation to Spanish science.

Bureaucracy is, however, always present. Even if some of the statements by Alfonso Martínez Arias about PhD validation are grossly exaggerated, there is undoubtedly ample room for improvement. We are currently working on eliminating obstacles on the basis of the Law of University Reform.

Whether the actions I describe will break all the barriers above the Pyrenees I do not know. These mountains look at times frightfully high. Let us hope, at least, that we shall succeed in tunnelling through them.

J. M. ROJO

*Secretary of State for Universities  
and Research,  
Serrano, 150, 28006 Madrid, Spain*

## Three of a kind

SIR—You refer to the University of New South Wales as “Sydney's other university” (*Nature* 316, 196; 1985). Actually there are three universities in Sydney. The University of Sydney provides a third option for students, and some very creditable research still goes on there.

MARK WESTOBY

*School of Biological Sciences,  
Macquarie University,  
North Ryde, NSW 2113, Australia*