

LETTERS

Required vigilance?

An ethicist argues that the guidance provided by the Recombinant DNA Advisory Committee is still needed. Vice President Al Gore's editorial and metaphor of "distributed intelligence" are called "exhilarating" and "important" in a continuing dialogue. How do the eggs and brooding behaviors of dinosaurs compare with those of birds and reptiles? (Right, Oviraptor may have brooded, not stolen, eggs.) Can benefit-cost analysis adequately account for long-range problems like global warming? And what is the meaning of a mysterious image of tissue from a mad cow?



DONNA L. SLOAN

Respect for the RAC

Eliot Marshall (News & Comment, 17 May, p. 945) writes that "in proposing to do away with RAC [the Recombinant DNA Advisory Committee]," National Institutes of Health (NIH) Director Harold Varmus "is following the recommendations of two expert advisory groups he commissioned last year." But at least one of those committees, the Ad Hoc Review Committee, recommended that Varmus *not* do away with the RAC. After recommending that the RAC should avoid duplicating case-by-case review of every clinical gene transfer protocol, the executive summary of the Ad Hoc Review Committee's report states (1, p. 648)

Review of protocols by the RAC in an open public forum should continue in several areas of concern in which a particular protocol or new technology represents a significant departure from familiar practices.

Marshall also writes that the advisory groups suggested that NIH should treat "gene therapy no differently from other types of biomedical research." Most observers in this arena agree that research involving the modification of somatic cells to cure disease is in principle no different from other sorts of biomedical research. But the Ad Hoc Committee makes it clear that there are enormously controversial extensions of that research now on the horizon. Among these extensions are the "modification of the germ line [and] the use of gene transfer for enhancement purposes" (1, p. 648). Given those possible extensions, the

Ad Hoc Review Committee found (1, p. 648) that

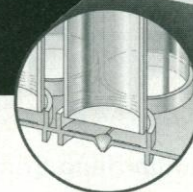
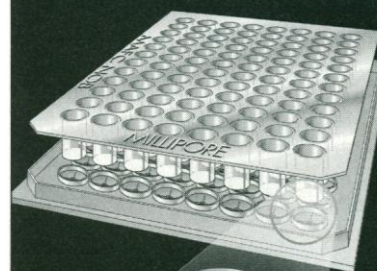
gene therapy differs in major ways from other clinical technologies in use or under development and is, therefore, deserving of continued public scrutiny.

The article reports that Varmus hopes that in the place of the RAC he can "appoint a small group of experts to meet several times a year to advise NIH on gene therapy" and that "NIH [will] sponsor regular public workshops" to examine the more controversial applications of new genetic technologies. But at least three features of the RAC make it an indispensable public institution.

First, the RAC has a 20-year history. Because the group has worked through many complex ethical questions over time, it does not have to reinvent the ethical wheel each time it faces another protocol. Public workshops of the sort mentioned by Varmus would not have the benefit of such ongoing reflection. Second, the RAC's members are from both scientific and lay communities. Small groups of experts of the sort mentioned by Varmus risk losing touch with the ethical concerns of the people who pay for their research. Third, the RAC has built a reputation for thoughtfulness and independence. That reputation did not come easily. It was built in the face of skepticism about the ability of an NIH-appointed committee to independently evaluate proposals submitted by members from the NIH community.

Given the controversial extensions of genetic research now on the horizon, it is in

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the interest of the public—and ultimately NIH—that there is a group which enjoys such history, diversity, and respect.

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References

1. Ad Hoc Review Committee, Recombinant DNA Advisory Committee, *Executive Summary of Findings and Recommendations* (National Institutes of Health, Bethesda, MD, 1995).

Exhilarating Editorial

Regarding the editorial by Al Gore (12 Apr., p. 177) and the subsequent responses (Letters, 10 May, p. 793): How dare the Vice President of the United States write an editorial championing scientific research and education in the profession's leading journal! How dare he describe and promote an organizational metaphor for a productive society that is exemplified by the accumulated global practice of investigative science! How dare a long-standing science advocate and author of a best-selling popular science book sully these hermetic pages!

Thank goodness there are enough well-dressed emperors among us to dress down such demagoguery!

Every once in a while I am heartened by evidences of a very slowly growing public appreciation of the value of basic scientific research. To see the Vice President of the United States fostering such an appreciation and so resolutely supporting my profession and my passion on the editorial page of *Science* is, quite simply, exhilarating.

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After the letters highly critical of Vice President Gore's editorial, I can only conclude from the apparent discordance between the vehemence of the printed criticisms and Gore's text that some of the writers themselves are politically motivated. What Gore had to say made sense to me.

We can argue about the usefulness of Gore's models and whether we think "big" science or "small" science is the most productive in the long run, but to label Gore's remarks as "offensive and inappropriate" or as being "so full of so little understanding"

is itself offensive and inappropriate. What do we want government science policy to be if it should not be directed at a "learning society"?

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It is not surprising, given the current political climate in the United States, that the readers' responses to "The metaphor of distributed intelligence" not only challenge the opinions of Vice President Gore, but also claim that *Science* does not have the right to print such opinions. Although it is true that "Al Gore is not a member of *Science*'s editorial staff, nor is *Science* or the AAAS a branch of the Democratic Party," as one writer puts it, this is irrelevant. *Science* has printed plenty of controversial editorials written by individuals who are not on the editorial staff. The fact is that the editorial was an important statement of the Administration's policy regarding federally funded science. Gore speaks not only for the Democratic Party, but for the administrative branch of the U.S. government. Whether one agrees with his opinions or not, and whether or not one voted for him, doesn't change this.

Even Carl von Linné
would have difficulty
classifying this

