

with one another for the next two decades. About 500 scientists and their collaborators attended; the numbers were limited only by the size of our largest auditorium. I had numerous calls from attendees praising the favorable climate for freedom of expression and the openness of questioning.

Marshall focuses on some minor remarks about the need for support for graduate students in competition with funds for "satellite building." This need is not really in dispute. One needs to consider the complexities of the scientific issues and the ambitious step forward that is Eos. Of course training the next generation of students is important. In NASA we have recognized the need for new talent and advancing beyond the hardware issues that we do understand. We must now address the problems of understanding the earth as a planetary body if we are going to learn to predict this changing system. The primary goal of Eos is directed toward understanding the earth on the global scale; the data, not the hardware, are the hallmark of Eos.

Marshall does not report the key role in Eos to be played by the 28 interdisciplinary investigator teams that were selected for Eos. The interdisciplinary investigators have specifically been brought into Eos early, long before any hardware is built or flown,

to aid in the scientific direction of Eos and to see that the unprecedented flow of Eos data will indeed become scientific information to be placed at the service, ultimately, of mankind. The interdisciplinary scientists will guide the development of the data and information system. They are expected to use all the data from the Eos instruments and to publish their results in the open literature. Their work is to lead to the development or improvement of theoretical models that will shed further light on the earth as a system. Eos interdisciplinary scientists come from a multitude of universities and national research organizations from around the western world.

All of us have come to recognize the urgency and importance of earth science in the next century, and we have little time for distraction. All of the ideas reported by Marshall are good: James Hansen's, Dixon Butler's, Francis Bretherton's, and those of the 500 who attended this meeting and the thousands who will use the Eos data. Our problem is sorting and establishing the priorities, finding out the missing pieces of the puzzle, deciding those we can afford, and encouraging participation by partners nationally and internationally who can help and contribute.

What did the meeting produce? More

scientific insight, organization into scientific teams, and plans for developing our scientific strategy.

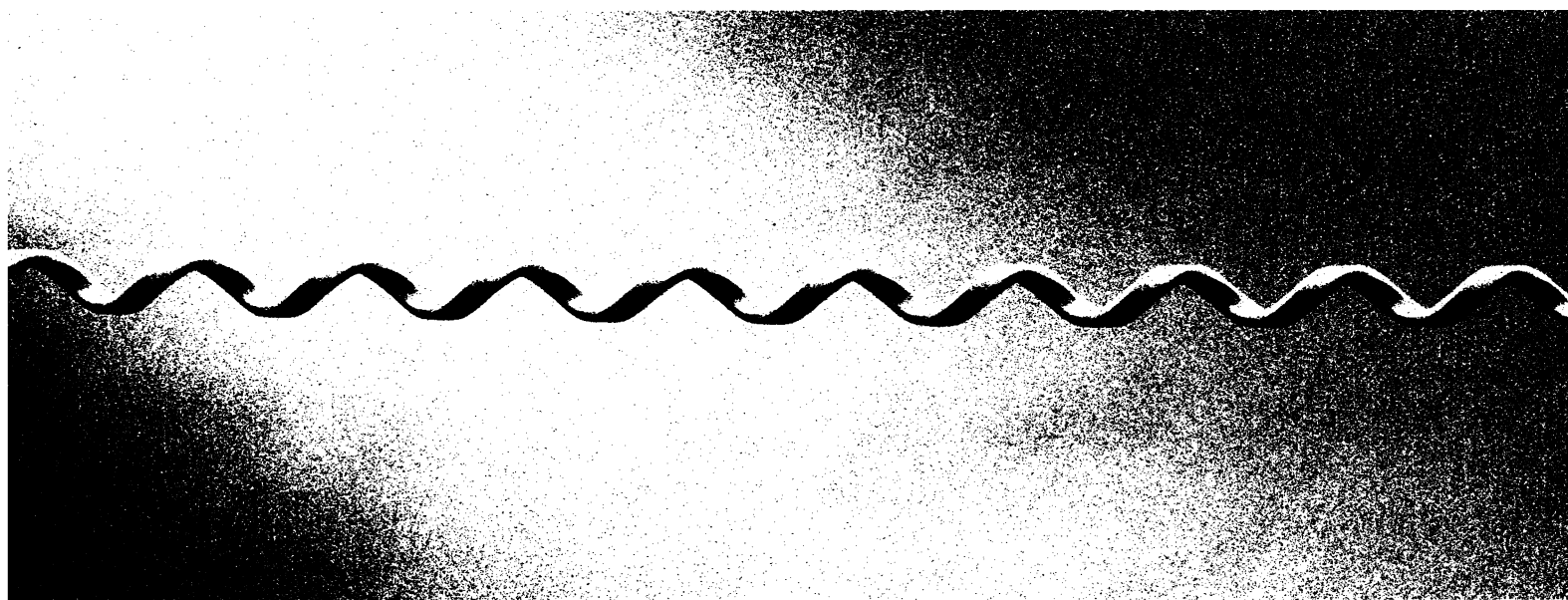
In the next century the nations of the world will depend on understanding this unique and fragile planet on which we live.

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Rabies Vaccine Trials

Marjorie Sun's articles (News & Comment, 30 June, p. 1535; 14 July, p. 126) report on the proposal of the Wistar Institute to conduct trials on South Carolina and Virginia islands of a new vaccine to orally immunize wildlife against rabies.

Although Wistar's approaches to the health authorities in South Carolina and Virginia were not significantly different, the resulting decisions of the health officials from the two states are in sharp contrast. In his letter of 5 July 1989 announcing that he had approved the proposed trial on Parramore Island, Virginia State Health Commissioner C. M. G. Buttery stated, "Virginia is proud to be a part of this first important step toward controlling wildlife rabies." The letter of 31 March 1989 of South Carolina



To thousands of researchers, this is a

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Health Commissioner M. D. Jarrett stated "We do not believe that the health and environment of the citizens of South Carolina can be assured if these trials are conducted. Therefore, we cannot allow these proposed field trials to proceed." Whereas Virginia health authorities were satisfied that the risks, if any, of conducting the proposed trial were minimal and acceptable with respect to the potential benefits resulting from the trial, South Carolina health authorities asked for absolute assurance that such risks did not exist.

Another issue which arose in both states is whether the relevant parties in each state would be adequately protected by means of indemnification and an insurance policy provided by Rhône-Mérieux, the manufacturer of the vaccine, against monetary judgments resulting from suits brought by third parties. Contrary to the remark attributed to a South Carolina health official, such insurance has been in place for over a year, is current, and has never lapsed. Although Virginia health officials were satisfied by the indemnification and insurance provided by Rhône-Mérieux, the owner of Parramore Island in Virginia is a private group, the Nature Conservancy, which must also grant its approval for use of the island for the vaccine trial.

In a sense, the existence of such wide divergences among state health authorities may be a blessing for organizations wishing to test novel biological materials and who must obtain approval at the state and the federal level. A major element of the local decision process is a reading by state officials of the local political scene. The result of this reading may override any judgment by state health officials based solely on scientific considerations. In selecting sites for field trials, scientists must also be acutely aware of the local political scene and not base their choice of sites on scientific considerations alone.

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Mirror, Mirror . . .

No wonder women need new sources of support in the sciences, when we are referred to as members of the "fair sex" in as august a publication as *Science* (News & Comment, 14 July, p. 126).

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I was surprised by Constance Holden's arch reference to women as "the fair sex" in her article "New support for women scientists." It is unfortunate that an article that was intended to encourage women should instead reinforce the use of such patronizing language.

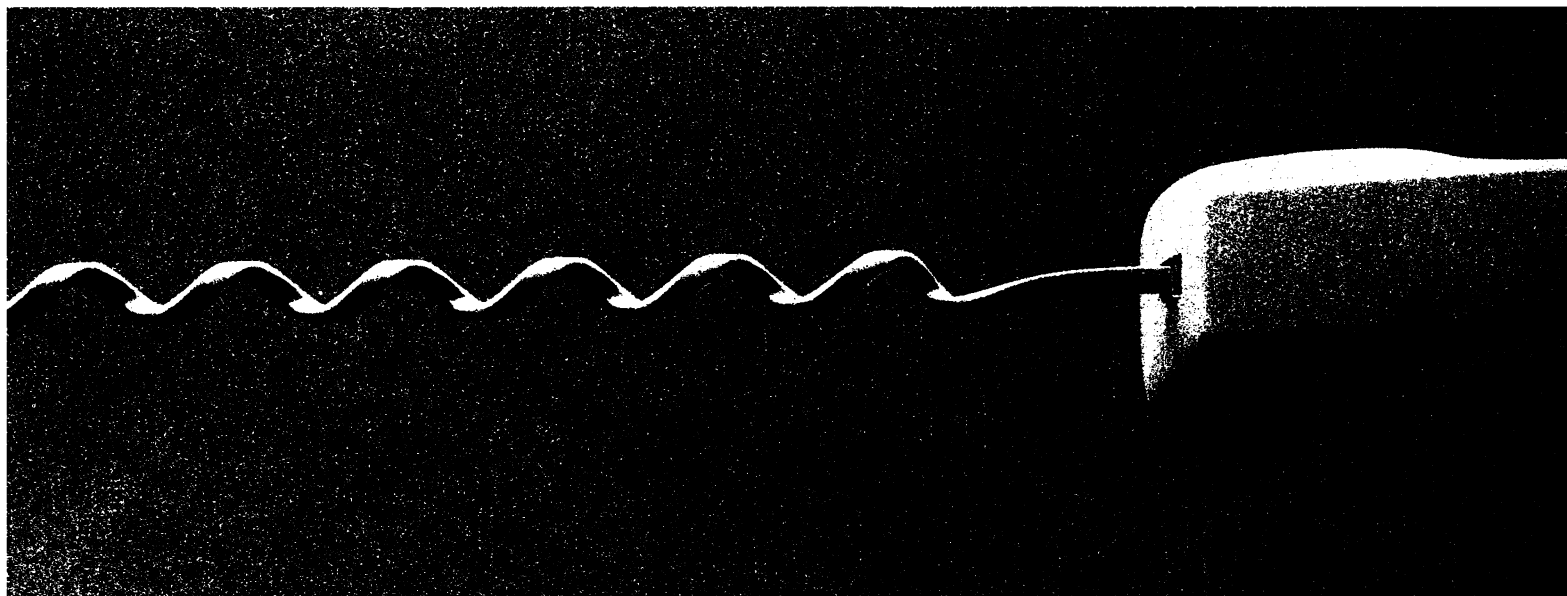
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Response: The phrase was a modest attempt to spoof stereotypes. Obviously, it misfired.—CONSTANCE HOLDEN

Erratum: In Eliot Marshall's News & Comment article "Clean air?" Don't hold your breath" (5 May, p. 517), Bernard D. Goldstein's affiliation was incomplete. Dr. Goldstein is a professor at the University of Medicine and Dentistry of New Jersey—Robert Wood Johnson Medical School and director of the Environmental and Occupational Health Science Institute, a joint program of Rutgers University and UMDNJ—Robert Wood Johnson Medical School.

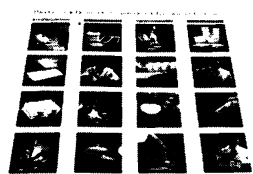
Erratum: In the report "The reservoir for HIV-1 in human peripheral blood is a T cell that maintains expression of CD4" by S. M. Schnittman *et al.* (21 July, p. 305), reference 10 on page 308 should have read, "K. Clouse *et al.*, *J. Immunol.* 142, 431 (1989)."



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