caution should be institutionalized is a question deserving serious thought.

The proposal for a scientific court of appeals raises other difficulties. Who would serve on the committees? Impartial wisdom in drug evaluation is very hard to come by. It is no insult to the talented men who work in the field of pharmacology to point out that there are very few of them—a fact they themselves constantly bemoan. The largest cadre of experts in the drug field work for the pharmaceutical industry. Should they be permitted to serve on these committees? Should only representatives of the company making the appeal be disqualified? Surely company representatives should be heard at such an appeal, but what would the effect of the natural camaraderie of industry scientists be on the desired impartiality of the deliberations? Academic clinical pharmacologists are in very short supply, and it is in the nature of their work that their ties with industry are often very close. The reason is mutual dependence: drug companies need their advice and service in testing new drugs; the scientists frequently need facilities and financial aid available only from a company whose interests they share. What should their role on the court of appeals be? The problem of impartial advice is difficult in any field—as members of the government's grant-giving advisory panels well know. But in the field of drugs a supposedly pure "scientific" dispute can have terrific economic consequences for a manufacturer, and the problem of obtaining unbiased advice may be a crippling one. It is no secret that committees can be stacked, and it is some measure of the distrust and confusion apparently endemic to FDA-industry relations that while the agency, and some of its critics, worry about a committee being stacked *in favor of a company*, the industry has professed some worry that a committee would be stacked *in favor of the agency*.

### Let NAS Do It

Faced with such sensitive dilemmas involving science policy, there has been an increasing tendency in recent years to turn to the pristine National Academy of Sciences, in the hope that the Academy would either agree to arbitrate the dispute itself or else suggest the members of an arbitrating committee. However, in a circumstance that has the aura of an attempt to evade a negative governmental decision, it is most unlikely that the Academy would agree to do the job itself. And, for that matter, although the Academy can name people to serve on such a committee, it cannot create them. The manpower problem remains.

Even if the mechanics of selection could be worked out, the problem of occasion remains. On this point it appears that industry's views are not entirely unified. A vice-president of Hoffman-La Roche, testifying at the Fountain hearings, seemed to envision a panel resolving very fundamental disputes between FDA and industry scientists. The example he gave was a current disagreement about whether adequate animal testing requires histological examinations of the organs of all animals used in a particular test or just of those receiving the highest dosages of a new drug. But most of the proponents of a court of appeals seem to envision it resolving controversies in which there is a more direct relationship of economic to scientific content. The position of PMA appears to be that an appeal should be allowed at any stage in which the FDA is empowered to turn down industry's work, either when approval is being sought for the initiating of clinical trials, when an application is submitted for permission to market a new drug, or when the question of withdrawal arises.

The effect of this intervention on the operation and morale of the Food and Drug Administration has to be considered, too. While admittedly the agency has gone through some bad times and made some mistaken decisions, it is not clear why the best way to reform it is to establish a prestigious committee over its head. One argument made in favor of the industry proposal is that it would bring the FDA into closer contact with top authorities in a given field. This is certainly desirable. But the FDA, somewhat belatedly, has already begun to establish links with outside experts. Last year it established a committee, headed by Walter Modell of Cornell, to advise the commissioner on general policy; in addition, the Medical Bureau, under its new director, Joseph Sadusk, has recently begun to acquire outside advisors to consult with it on a variety of problems connected with its evaluation of new drugs. The proposed court of appeals, instead of functioning cooperatively, would function only when the FDA staff was accused of being in error. While a decision of the scientific panel would not be binding legally, it could well be binding intellectually. The fear of being overruled by an outside panel, even if it did not actually encourage buck-passing, could easily reduce the incentive among much-harassed FDA staff members for firm commitment to agency decisions involving unpleasant consequences to the industry.

In the last analysis it seems clear that, although both the agency and the agency-industry relationships are in need of changes, the proposed court of appeals is not the change that is needed. If the agency is as wary as it ought to be, it will turn the proposal down. And if the industry is as anxious as it claims to promote safer drugs, it will come up with some more relevant suggestions.—ELINOR LANGER

## Meeting Notes

The **American Institute of Biological Sciences** will hold its annual meeting 23–28 August at the University of Colorado, Boulder. Information is available from Gordon Alexander, Department of Biology, University of Colorado, Boulder, or from AIBS, Room 508, 2000 P St., NW, Washington, D.C. The societies scheduled to hold sessions in conjunction with the AIBS meeting are listed in the Forthcoming Events section, page 193.

Papers are being solicited for presentation at a symposium on **models for the perception of speech and visual form**, scheduled 11–14 November. The meeting will be sponsored by the data sciences laboratory, Air Force Cambridge Research Laboratories, and will take place in Boston. Emphasis will be placed on analysis of problems in current models for the perception of structured stimuli. Attendance at the meeting will be limited to 350 persons. Deadline for abstracts: *15 August*. (G. A. Cushman, Wentworth Institute, 550 Huntington Avenue, Boston, Mass. 02115)

The University of Washington, Seattle, will be the site of the fourth western national meeting of the American **Geophysical** Union, 28–30 December. Papers are invited on all the major areas of geophysical research. Deadline for submitting abstracts: *9 October*. (AGU, Suite 506, 1145 19th Street, NW, Washington, D.C. 20036)