

and the accused has a right to an attorney (whose fees the accused must pay), for instance. OSI itself, by comparison, moves at a snail's pace. It may spend months on what it fancifully calls a fact-finding "inquiry" before deciding whether to move to the more serious stage of an "investigation".

When, after "inquiries" that can include the interrogations of numbers of laboratory workers, OSI announces an "investigation", the accused is inevitably burdened with a presumption of guilt. Even OSI's advisers have been perplexed by its insistence that a full court analysis of every notebook in a person's possession, together with extensive interviewing of laboratory workers, can constitute a mere inquiry. Again, the Gallo case is pertinent. Gallo himself, as well as certain of his laboratory staff, submitted to more than 100 hours of "interviews" with OSI during what OSI said was nothing more than a preliminary fact-finding exercise. One cannot help but think of Alice in Wonderland's friend Humpty Dumpty who said, "When I use a word it means just what I choose it to mean — neither more nor less".

To be fair, OSI's procedures have developed as they have so as to preserve some sort of academic atmosphere while keeping lawyers at arm's length. Well-intentioned, to be sure. But OSI's powers are so close to those of a prosecutor and jury combined that it may be time to face the implications of that reality. Lawyers who have represented accused scientists have said that their clients, even if found guilty, would have been better off in court than in the hands of NIH.

The matter of the leaked report in the Imanishi-Kari case is an example. OSI argues that it adheres to due process and fairness in principle because the accused has a chance to rebut the OSI's conclusions before they are made final. And, to be sure, OSI asks those who receive copies of its draft conclusions to maintain their confidentiality. That is part of what OSI claims to be due process. But it is plain that OSI cannot enforce its confidentiality request. In the same week that the Imanishi-Kari draft was leaked, someone else leaked a report on a case involving a Georgetown University scientist to the *Washington Post*. It is understandable that lawyers protest that their clients are found guilty in the press before the proceedings are over. Were this taking place in the judicial system, violation of a confidentiality provision would lead to contempt of court and stiff fines.

The issue of fair proceedings has been festering long enough. It is good that the process is now to be scrutinized. Perhaps the whole process of investigating allegations of misconduct would be fairer in the long run were it to be fully open to public scrutiny as well — certainly once past the 60-day inquiry stage. The argument that private proceedings protect the reputation of the accused but innocent scientist does not hold water. In truth, once the fact that OSI is investigating someone becomes known, the accused's reputation is tarnished. In a closed system, it is therefore nearly impossible to undo the damage the way an acquittal does in an open court. Similarly, it is difficult for the scientific community to evaluate the seriousness of an OSI guilty verdict because the important details on which guilt or innocence may hinge are never laid out.

Investigations of scientific misconduct should be subject to

the "sunshine" laws that apply to many areas of government business. NIH should develop a system whereby the prosecutor — OSI — and the defendant could present their respective cases to an appropriately constituted panel of peers in an open hearing.

Because OSI is a quasi-legal office, it should in fairness adopt the safeguards of the legal system. □

Minister's reply

An innovation in relations between the British government and its critics is not an immediate success.

SQUABBLING about the adequacy of research funds is a long-standing British tradition which has reached a pinnacle of sophistication this week, involving the distinguished Select Committee on Science and Technology of the House of Lords and the rumbustious Secretary of State for Education and Science, Mr Kenneth Clarke. At the weekend, the select committee put out its most recent report on the state of British science, in particular pleading that there should be an immediate increase of £12 million in the funds at the disposal of the Science and Engineering Research Council (SERC), the largest of the five research councils and that most badly affected by this year's shortfall. Then, on Monday morning, before people would have had a chance to learn what the House of Lords was saying, the *Daily Telegraph* published a characteristically robust statement by Mr Clarke insisting that the British government is doing its duty by research. The newspaper, rather than the minister, linked together the report and his statement, which is not a direct reply.

There is, of course, no reason why ministers should not defend their departments against criticism in whatever ways seem appropriate. It is also much to be welcomed that they should do so by writing in the newspapers. (Mr Michael Foot MP, an employment minister in the 1970s, did just this to considerable effect.) But it will be a daunting refinement of the political process if ministers take to anticipating hostile comments on their conduct of their briefs and to disarming them with simultaneous publications in the public prints.

In reality, the select committee's criticism has not been disarmed. The essence of its case is that the increase of the science budget in the year beginning next month, nominally 2.7 per cent, is not enough to keep pace with inflation (most recently 8 per cent), and can be made to seem the 6 per cent the government claims only by an accounting device (postponing part of the cost of this year's graduate students until next year). Clarke's line is that "no country can afford to spend an unlimited amount on science", that priorities are necessary and that, for his part, he will act on the basis of the advice by the Advisory Board for the Research Councils. That would be a more compelling tale if he would publish the advice. Meanwhile, everybody concerned should recognize that amounts of money matter less than the government's stop-go spending in the field. Shutting enterprises for lack of funds in a mere six months is not only expensive, but bad for the spirit. And that has been going on for ten years now. □