Peer review: NIH urged to streamline bids ...

Washington. Senior scientists in the US biomedical research community last week expressed enthusiasm for simplifying the processing of grant applications by the National Institutes of Health (NIH) by using only outline proposals for initial screening.

Many agreed that peer review is now too nit-picking and needs to get back to the main purpose of evaluating scientific merit. The favoured approach is being referred to as 'just in time', after the concept developed by the Japanese car industry. There was less enthusiasm for a proposal set-price grants for small projects.

But Bruce Alberts, president of the National Academy of Sciences, also admitted that "things can go wrong" with the scientific panels that are central to the NIH's system of peer review.

Alberts was speaking at a meeting organized by Harold Varmus, director of the NIH, to discuss ways in which peer review could be made fairer, more efficient and less cumbersome for both applicant and reviewer.

The NIH has a two-tiered process for evaluating unsolicited proposals. Initially such proposals go to a panel of scientists, known as a study section, who have expertise in a particular field — such as biomedical endocrinology — and review applications for their scientific merit. An application receiving a sufficiently high score then passes to a second panel within the relevant institute. This decides whether the proposal fits the institute's research priorities.

The NIH is already experimenting with one modification intended to reduce the workload of the study sections (see *Nature* **369**, 269; 1994). But many feel that more sweeping changes are needed. As funding has become tighter in recent years, for example, applicants have refined the art of grantsmanship, fine-tuning their applications to meet anticipated questions.

Aubert appointed as director of CNRS

Paris. Guy Aubert, currently director of the Ecole Normale Supérieure in Lyons, has been officially nominated to succeed François Kourilksy as director-general of France's Centre National de la Recherche Scientifique.

Aubert is a physicist specializing in magnetic materials, and has been director of the Lyons institution, which he helped to create in 1985, since 1988. He was also rapporteur for the series of colloquia on research organized last year by François Fillon, the research minister, and was responsible for preparing the "synthesis" report submitted to the final national colloquium earlier this year.

At the same time, in an attempt to make fine distinctions among many high-quality proposals, study section members can find themselves discussing the minutiae of experimental methods. "My concern is to get back to a time when the only thing that a study section considered was scientific merit," says David Botstein, chair of the department of genetics at Stanford University.

The budgetary squeeze that is largely responsible for the close scrutiny is unlikely to go away in the near future, so the NIH is looking for organizational changes that would throw the emphasis of review back to a consideration of overall scientific merit.

The 'just in time' idea met with general approval. Researchers would submit an application detailing the science proposed but containing only a rough outline of costs; a detailed budget would be submitted only if the study section approved the science. "This could do for the NIH and the universities what it did for Toyota," said Botstein.

Other suggestions were more controver-

sial. One was a proposal that scientists in search of smaller grants might apply for preset amounts, say \$100,000 or \$150,000. This would free the applicant from having to account for every cent spent on equipment, allowing the study section to concentrate on the quality of science, and whether it could be done for the sum requested.

But despite favourable comments — and the fact that a National Commission on Research recommended this approach in 1980 — several participants voiced concern over how the amounts would be set, and what would happen if the price of a piece of research fell between two preset levels.

A less popular suggestion for reducing the time spent on reviewing applications was that scientists with an established track record should be allowed to write a shorter proposal than junior scientists. Sharon Murphy, chief of haematology and oncology at the Children's Memorial Hospital in Chicago, said it might be seen as an "old fogey's network".

The composition and organization of the

... as Britain seeks to reassure

London. Britain's Office of Science and Technology has launched what one observer describes as a "charm offensive" designed to reassure university researchers that new procedures for evaluating research grant applications will continue to make significant use of the peer-review process.

Last week, William Waldegrave, the minister for science (and rumoured at the time as a potential victim in this week's anticipated cabinet reshuffle), issued a statement in which he confirmed that peer review would "remain centre stage".

The statement was intended to reassure parts of the scientific community — whose concern has already been picked up by opposition politicians — about the implications of new procedures for evaluating research grant applications being introduced by, in particular, the Engineering and Physical Sciences Research Council (EPSRC).

In particular, fears have been expressed that the explicit mission given to the research councils in last year's white paper of contributing towards wealth creation could reduce the emphasis placed on scientific quality in assessing whether a particular application is funded.

There is also concern that the introduction of non-scientific criteria in allocating research funds — together with a decision by the research councils to streamline the functions of their scientific advisory committees and place greater responsibility in the hands of programme managers — will reduce the influence of the scientific community on the councils' decisions (see *Nature* **368**, 85; & 369, 3; 1994).

In defending the new system after its formal approval by the council last month, Richard Brook, professor of materials at the University of Oxford and the newly appointed chief executive officer of the EPSRC, claimed that his goal is to improve the efficiency with which grant applications are processed.

Most scientists seem to approve of the steps to streamline peer review, agreeing

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Brook: seeking greater efficiency.

that the present system is both cumbersome and time-consuming. Until now, for example, all applications have been considered by a full peer-review committee; future applications will receive an initial screening by three individuals, and

only those passing this hurdle will be considered by a full review group, made up of individuals selected from a pool of members of a subject-based 'college'.

Grant-holders say that they are also reassured by the Office of Science and Technology's insistence that council officials, in deciding which applications are to be funded, "will not vary the rankings of scientific quality made by the peer reviewers".