

Scientific publishers consider censoring “dangerous” research

In what some consider a pre-emptive strike to avert heavy-handed US government regulations, more than 20 publishers of leading scientific journals — including *Science*, *Nature* and the *Proceedings of the National Academy of Sciences* (PNAS) — committed themselves to rejecting data that could be misused for bioterror attacks. In their joint “Statement on Scientific Publication and Security” the editors and publishers stressed, however, that the journals have an obligation to “protect the integrity of the scientific process by publishing manuscripts of high quality, in sufficient detail to permit reproducibility” because “open publication brings benefits not only to public health but also to efforts to combat terrorism.”

The announcement — made public during the annual meeting of the American Association for the Advancement of Science (AAAS) in Denver in mid-February and subsequently published in several key journals — calls for “self-governance” by the scientific community as an alternative to government control of forthcoming articles. “It is up to us in the scientific community to define the standards and to establish the framework to ensure that critical information is withheld from terrorists while permitting the continued advancement of biomedical research and the protection of public health,” said Dr Ronald Atlas, president of the American Society for Microbiology, one of the strongest advocates of self-policing measures. “This is work in progress, however, and we will have to continually seek to improve the

process and, more specifically, define what sort of information might constitute a dangerous 'cookbook' for terrorists."

The joint statement was signed by, among others, editors of the *New England Journal of Medicine*, the *Journal of Virology*, the *Journal of the American Medical Association*, and Nobel Laureate Harold Varmus, president of the Memorial Sloan-Kettering Cancer Center in New York. It urges editors to modify articles or to decline to publish them if potential risks outweigh the benefits resulting from the publication of, say, the identification of a virulence cluster in a certain pathogen.

Critics of the new publication guidelines contend, however, that editors and referees would by no means be capable of objectively assessing what constitutes potentially "dangerous" science, that is, identify papers that were likely to cause more harm than good. "I've studied these things for 50 years, and I couldn't make that judgement, and I don't see how editors of journals can do either. The job of journals is to judge the scientific quality of things, not to act as people who censor or make these kind of decisions, which are more political than they are scientific," said Dr Stanley Falkow, a microbiologist at Stanford University, in the *New York Times*.

The new publication guidelines are the first tangible result from a January invitation-only workshop held at the US National Academy of Sciences (NAS) in Washington, DC, which brought together scientists and policy-makers to discuss the potential conflict between scientific openness — a cornerstone of the scientific process — and national security. At Dr Atlas's request the workshop had been convened to bridge an ever-widening gap between the two camps over how to balance the needs of scientists for free access to research data and the demands from government officials for more secrecy with respect to sensitive information.

At the January meeting, government officials encouraged the scientific community to draw up a self-censorship scheme of sorts, to safeguard scientific information from falling into the hands of terrorists. "We were warned ... that if we don't watch out, the government could misunderstand our work and put the screws on," Dr Eckard Wimmer, a microbiologist at the State

University of New York at Stony Brook, told the *New York Times*. Dr Wimmer, a signatory of the joint statement, considers it an important step "to avoid such damaging action by the government."

As to whether the new guidelines will drastically change the way scientific data are published remains to be seen, though. So far, it does not look as if they will. In the past two months editors at the PNAS "flagged" 20 submissions — less than 1% of all submitted manuscripts — which dealt with diseases and pathogens that could pose a risk to public health. Yet after careful review the Editorial Board of the journal decided to publish them unaltered. Similarly, in the years 2001 and 2002, out of 14 000 submissions to the 11 journals published by the American Society for Microbiology, only two, that is, less than 0.015%, gave cause for concern. They were both published with minor modifications, according to Dr Atlas.

Meanwhile even editors who support the new publishing policies seem to be worried that being overly restrictive might in itself do more harm than good. "Any work of value to terrorists will also be of value in countering terrorism," said Dr Nicholas Cozzarelli, the Editor-in-Chief of PNAS. Dr Falkow couldn't agree more. "Ignorance is not a good defence. Knowledge is." ■

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