LETTERS

Letters discuss a new law that appears to require scientists to divulge the contents of even their laboratory notebooks under the Freedom of Information Act. A former official at the National Institutes of Health says that the act "provides several exemptions from disclosure" and that "careful attention may still forestall the catastrophe that some researchers and their institutions now envision." Another writer approves of the law. Questions are raised about advocacy on the part of scientists. Debate about the ethical and moral issues surrounding human cloning is advocated. And a spokesperson for the Environmental Protection Agency defends that agency's lead exposure prevention efforts.

STATISTICS STATISTICS COMPLEXES

Freedom of Information Requests

Jocelyn Kaiser's article "New law could open up lab books" (News of the Week, 6 Nov., p. 1023) presents a good picture of the perceived threat to the integrity of research labo-

ratory and clinical data that could be wrought by the new law that would "require Federal awarding agencies to ensure that all data produced under an award [grant] will be made available to the public through the procedures established under the Freedom of Information Act [FOIA]." It is important to recognize, however, that the FOIA and subsequent court decisions establish protections that were used for many years when the National Institutes of Health (NIH) dealt with FOIA issues and policies, and that can still be helpful in guarding against disclosures.

First, the act provides several exemptions from disclosure, of which three covered most circumstances where NIH deemed it better not to apply mandatory disclosure (1):

1) "trade secrets and commercial or financial information obtained from a person and privileged or confidential";

2) "interagency or intra-agency memorandums or letters which would not be available by law to a party other than an agency in litigation with the agency"; and

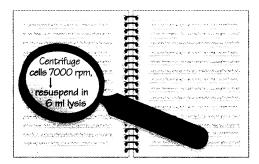
3) "personnel and medical files and similar files the disclosure of which would constitute a clearly unwarranted invasion of personal privacy."

Second, besides these and related exemptions from mandatory disclosure, various court cases have protected against disclosure of peer review evaluations to third parties. Supreme Court decisions have protected data from release when such release would harm the competitive position of the person supplying those data, and have denied third parties access, leaving it to the awarding NIH institute to determine whether to release certain data in a grant-sup-

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ported clinical trial, even though the institute had earlier released those data to an appropriate scientific organization to confirm the validity of the findings and conclusions.

In all cases, NIH established an advantageous system under which persons requesting information had to specify the in-



Will lab notebooks be available to the general public through the Freedom of Information Act?

formation or data requested to avoid "fishing expeditions," for instance, and sought advice from the persons supplying those data or information as to whether they wished to withhold parts of the requested data from disclosure under one or more of the allowable exemptions. Subsequent negotiations usually yielded some degrees of flexibility in releasing the information, at minimal risk or discomfort to the persons supplying it.

Adaptations of the above and other restraints in the FOIA and in niceties of responses should serve to protect government agency grantees, contractors, and intramural researchers against undue hardships and agony, as otherwise perceived by some who now face this new and sudden intrusion into their research lives. Time may have brought some subsequent changes into the basic act and corresponding agency regulations, and careful attention may still forestall the catastrophe that some researchers and their institutions now envision.

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1. Freedom of Information Act (1966, 1974), as amended by Public Law 93-502 (1974), exemptions (4), (5), and (6).

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Kaiser's article suggests that the new law which requires federally supported researchers to release their data upon FOIA requests will raise all kinds of problems for researchers. However, the law accomplishes two things: (i) it provides taxpayers, who paid for the research, access to the data; and (ii) federally supported scientists will not be able to shield their data from examination by other scientists.

The application of the law will be largely, if not entirely, limited to research that the government uses to justify regulations. Much of that research will involve human subjects, and appropriate safeguards are necessary and available to protect individuals' identity and privacy. Few federal research efforts are more politically charged than the U.S. Air Force's 20-year-long study of the health of the 1200 men who sprayed 90% of the Agent Orange used in Vietnam. Years ago, the Air Force researchers and the Department of Health and Human Services advisory panel to that study agreed to make all the data tapes available to anyone who requests them. The only alterations to the files are made by government experts who "scrub" out personal identifiers.

Data exchange is part and parcel of the practice of science.

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Science, Advocacy, and Credibility

In their letter "Ecological science and the human predicament" F. Bazzaz et al. (Science's Compass, 30 Oct., p. 879) make an important point about the need for scientists to go beyond their research and publication activities to inform the general public about the "relevance and importance" of their work. Of course, whereas the objectivity of scientific findings is subject to test, statements concerning relevance and importance reflect the personal views of the scientist concerned and are thus inherently subjective.

I am not so sure that *all* field research is done in systems altered by man—this statement reflects the terrestrial viewpoint of most of the numerous signers of the letter and might be difficult to demonstrate everywhere in the open ocean. But where I get nervous is when I read that ecologists must be ready and willing to devote part of their professional

SCIENCE'S COMPASS

lives to "stemming the tide of environmental degradation and the associated losses of biodiversity and its ecological services, and to teaching the public about the importance of those losses." My problem is not with preserving biological diversity, but with the difficulty in distinguishing between objective reporting and preaching. When an ecologist makes an apocalyptic statement about the death of one or another ecosystem, he trades his credibility as a scientist for his passion as an advocate. Credibility is a basic coin of science, and while scientists have every right to be avid supporters of whatever cause, they should not expect to be taken as seriously in their advocacy as they hope to be in their science.

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Human Cloning

Paul Berg and Maxine Singer ("Regulating human cloning," Editorial, 16 Oct., p. 413) draw a false parallel with the issues raised by the original recombinant DNA debate in the 1970s and conclude that legislation to ban or even restrict human cloning is not needed. They were participants in the earlier debate and know well that the major worries then concerned potential hazards presented by recombinant organisms, in the form of novel pathogens and threats to the

ecosystem. The opponents of regulation affirmed back then that recombinant genes had little chance of being accidentally transferred to new hosts. Yet recent evidence (1) calls this into question. At the time, some called for legislation, anticipating that voluntary governmental guidelines curtailing the in-

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discriminate horizontal transfer of genes would be dismantled as they restrained commercial development, which is indeed what happened (2). Such guidelines do not protect the public interest and can increase the probabilities of social harm.

Human cloning raises ethical and moral issues that go well beyond questions of safety, as acknowledged by the National Bioethics Advisory Commission (NBAC) in their report earlier this year (3). Berg and Singer object to the commission's recommen-

dation of a legislative ban, even though it is limited in time. They assert that "scientists and the general public agree that too many questions remain to allow creation of a human being by cloning." But scientists are not of one mind about human cloning, or other technical applications of equal enormity (4). Adequate public discourse remains sadly missing. Still, Berg and Singer argue for a voluntary regime so that "advances in biology and growth in the biotechnology industry" can move along an unfettered path. Their position goes to the larger question of the democratic control of the directions of science and its applications. We should be focusing on how best to promote wide public debate, not on how to narrow the public's

participation in deciding life-shaping issues posed by the new biology.

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