

SCIENTIFIC MISCONDUCT

Federal Panel Recommends Universities Play Bigger Role

A panel charged by Congress with improving the practice and oversight of research is proposing that universities, rather than the federal government, take responsibility for defining and investigating scientific misdeeds that fall short of blatant misconduct. Past misconduct investigations have focused on serious violations such as falsification, fabrication, and plagiarism (FF&P), say panel members, while lesser transgressions have often been ignored. Under the new proposal, says Kenneth Ryan, a Harvard University reproductive biologist and chair of the 12-member Commission on Research Integrity, "we want to have the government involved in felonies and to get institutions involved in misdemeanors."

To accomplish that, the commission is suggesting revisions to federal definitions of scientific misconduct. The Public Health Service currently defines misconduct as "falsification, fabrication, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research." Other agencies employ broadly similar language. The commission, however, suggests the following wording: falsification, fabrication, plagiarism, or "material failure to comply with institutional assurances of research integrity and applicable laws. ..."

Commission member Priscilla Schaffer, a molecular geneticist at Harvard and one of five working scientists on the panel, sees the proposed language as "much more readily interpretable and not so loose-ended as the 'serious deviation' clause." This proposed definition will be aired at a series of regional meetings beginning next month in San Francisco.*

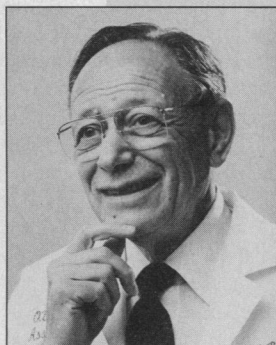
The change would be more than semantic, however. Critics of the current definition—including many biomedical researchers—have argued that the serious-deviations clause is too vague and could be used to strangle anything that threatens scientific orthodoxy. Proponents, including officials at the National Science Foundation (NSF), say the existing definition gives the scientific community flexibility to police practices

that it deems unethical.

In practice, the disputed language is one reason federal and institutional investigators have shied away from pursuing infractions short of blatant misconduct. "All of our confirmed findings of misconduct are FF&P," says Lyle Bivens, director of the Office of Research Integrity (ORI), the investigatory arm of the Public Health Service and the agency to which the commission reports. In addition, the scientific community has downplayed the significance of authorship disputes and other forms of "bad behavior," says Ryan, because of the potentially devastating sanctions—including a ban on federal grants—imposed on scientists found guilty of scientific misconduct. Ryan

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JEFF THEBAUTH

says the intent of including lesser misdeeds in the definition of scientific misconduct is "to get a broader fix on what might constitute bad behavior" and does not imply that such transgressions ought to be punished to the same extent as FF&P. "There would

probably be differential sanctions by the government and by institutions," says Bivens.

However, Ryan declined to elaborate on the sort of sanctions that should be imposed for lesser misdeeds. "At this juncture," he says, "I'm personally less interested in how we deal with misconduct than setting up a system in which it's less likely to occur."

The commission's solution is to put the onus on federally funded institutions, including universities, to develop and enforce their own set of standards of research integrity. Its proposal would also give agencies a way "to hold an institution's feet to the fire," says commission member Karl Hittelman, associate vice chancellor for academic affairs at the University of California (UC), San Francisco.

Panel members suggest, for example, that

the new definition could be enforced through a process modeled after university guidelines that govern research on human subjects and animals. Ryan says the commission isn't suggesting that universities must set up institutional review panels to scrutinize every protocol. Rather, his concern is that universities provide the federal government with a binding pledge that their scientists are abiding by integrity standards.

Outside experts seem to like the approach the commission has taken. "I absolutely agree that many incidents that qualify as questionable research practices should be handled by the institutions themselves," says Edward David, former chair of a National Academy of Sciences panel that concluded in 1992 that less serious incidents should be handled by universities. Even advocates of narrowing the federal definition of misconduct are receptive. "If their goal is to separate these classes of actions, I'm sympathetic," says UC Berkeley biochemist Howard Schachman, who is serving as NIH's ombudsman for extramural research.

The consensus breaks down, however, on whether the assurances should contain a laundry list of infractions. The commission is leaning away from calling for such a list, says Ryan, and Cornelius Pings, president of the Association of American Universities, warns that it would create problems. "Inevitably you're left in the trap of leaving something off," Pings says, "and having someone going scot-free because they say, 'Look, what I did is not on the list.'"

But others, including ORI's Bivens, argue that universities should seriously consider listing infractions. "I think it would be very useful to develop a list of serious infractions outside of FF&P," he says. Marye Ann Fox, vice president for research at the University of Texas, Austin, and a vice chair of the National Science Board, which oversees NSF, agrees that universities may need to be specific. "If, by this extended definition, they mean having institutes be responsible for specific practices that we would guarantee and sign off on, I would have no problem," she says.

Whatever approach is adopted will require the federal government to get its misconduct act together. "It calls for a level of interagency cooperation that doesn't exist now," says one NSF official who follows the issue closely. An interagency panel formed in 1989 has made little progress on a model policy for handling misconduct in science, but that could be changing. The White House is keen to see agencies adopt a single definition of scientific misconduct and procedures for policing the community, says one White House staffer, but only after the commission delivers its final recommendations next year.

—Richard Stone

*The meetings will be in San Francisco, 9–10 February; Chicago, 9–10 March; and Boston, 10–11 April. For more information, contact Henrietta Hyatt-Knorr, (301) 443-5300.