

## RESEARCH INTEGRITY

# Commission Proposes New Definition of Misconduct

The existing definition of scientific misconduct lets too much real mischief slip by, a panel reviewing federal research misconduct policies has concluded. As a result, the 12-member Commission on Research Integrity will recommend broadening the misconduct standard used by universities and the federal Office of Research Integrity (ORI) to include misdeeds such as failure "to respect the intellectual contributions or property of others." The panel, which began its work 15 months ago at the behest of Congress, is scrambling to finish by early November, when it hopes to turn over a set of recommendations to the Department of Health and Human Services (HHS). It put near-finish touches on its new misconduct definition at a meeting in Washington, D.C., last week.

Panel members say the proposed new definition is meant to remedy the vagueness of the current one, which describes misconduct as falsification, fabrication, and plagiarism (FF&P), and other deeds that "seriously deviate" from common scientific research conduct. In practice, the impreciseness of "seriously deviate" has meant that institutions and the ORI, which is part of HHS, have generally limited their investigations to FF&P. "We felt FF&P had never been defined and didn't cover all of the areas that needed to be covered," says Harvard University reproductive biologist Kenneth Ryan, head of the panel. The new definition "is broader, but it gets more specific in the areas in which we feel the most serious misconduct occurs." Some observers agree that the proposal is an improvement, but it is drawing some harsh criticism from others who favor limiting the definition to FF&P because they think the proposed alternative will be a nightmare to interpret and will suppress differences of opinion that are a healthy part of the scientific process.

The definition, about 500 words long, consists of a statement of principle followed by three examples (see box). The statement of principle says that scientists should be "truthful and fair" and that research miscon-

duct is "significant behavior" that corrupts the scientific record. Two of the examples—misappropriation and misrepresentation—correspond to FF&P, while a third, interference, covers material damage, such as destroying data. A phrase still being finalized underscores that these federal rules would be minimum standards and would not override those set by universities. The definition also lists two other forms of "professional misconduct": obstructing misconduct investigations, and failing to comply with federal regulations covering areas such as human experimentation and animal care.

To Ralph Bradshaw, president of the Federation of American Societies for Experimental Biology (FASEB), the proposal is "overly broad, vague, and unclear," as he wrote in a recent letter to the panel. The commission's work, he added, "[reflects] a lack of understanding of the process of basic scientific research." FASEB and other crit-

ics, such as Edward David, chair of a National Academy of Sciences panel that endorsed a narrow definition based on FF&P in 1992, worry that the phrase "truthful and fair" will stifle science by opening the way for disgruntled researchers to pursue trivial cases against their colleagues because an author didn't reference their work, for example.

Some also question whether legal terms such as "intent" and "reckless" will make much sense to scientists, a concern shared by commission member Priscilla Schaffer, a Harvard molecular geneticist. "I think it's too legalistic, but then I've been told by my lawyer colleagues on the commission that this is a necessity," Schaffer says. Also sure to provoke controversy is the commission's decision to include violation of federal research regulations under the misconduct rubric. "It could be a problem if there are two sets of regulations and reporting duties," says Barbara Yoder, a contracting grant officer for the University of California system.

Ryan, however, says the definition is "not so much vague as broad," and that the legal terms will serve to ward off trivial cases. How well it would work could depend on whether researchers try to twist it for their own ends, says Cornelius Pings, president of the Association of American Universities:

"If reasonably interpreted by reasonable people, I don't see anything here that's going to be an impediment to research." And several administrators contacted by *Science* say the spelled-out examples are an improvement over FF&P. "I'm very comfortable with [the definition], and I think it will work," says University of Minnesota Acting Vice President for Research Mark Brenner.

Ryan says the panel's final report will add some clarifications: It will stipulate that honest mistakes would not be subject to sanctions, and it may specifically recommend that ORI and institutions no longer dismiss plagiarism cases involving collaborators as mere authorship disputes. The final document will also include recommendations about how universities and ORI should administer misconduct policies. The commission isn't likely to urge drastic changes, Ryan says. However, he says it could recommend making ORI purely investigative and assigning its adjudication function to some other body. Members also intend to specify criteria for sanctions, because at present "there are no written standards." The commission plans to complete these tasks at a final meeting in October.

—Jocelyn Kaiser

## EXCERPTS FROM PROPOSED DEFINITION

"It is a fundamental principle that scientists be truthful and fair in the conduct of research and the dissemination of its results. Violation of this principle is research misconduct. Specifically, research misconduct is significant misbehavior that fails to respect the intellectual contributions or property of others, that intentionally impedes the progress of research, or that risks corrupting the scientific record or compromising the integrity of scientific practices. ...

"Examples ... include but are not limited to ... :

■ **Misappropriation:** An investigator or reviewer shall not intentionally or recklessly a. plagiarize, which shall be understood to mean the presentation of the words or ideas of another as his or her own, without attribution ... ; or b. [make use of any information in breach of any duty of confidentiality].\*

■ **Interference:** An investigator or reviewer shall not intentionally and without authorization take or sequester or materially damage any research-related property of another. ...

■ **Misrepresentation:** An investigator or reviewer shall not with intent to deceive, or in reckless disregard for the truth, a. state or present a material or significant falsehood; or b. omit a fact so that what is stated or presented as a whole states or presents a material or significant falsehood. ...

[These behaviors are a subset of the professional misconduct that is the responsibility of institutions where research is conducted.]\*"

The definition also says obstruction of misconduct investigations constitutes professional misconduct, as well as non-compliance with federal research regulations such as those covering the use of hazardous materials and animal and human subjects.

\*Wording in brackets is not yet final.