

Research Integrity and Scientific Misconduct: Responses and Critical Issues

Moderator:

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Speakers:

Mary Scheetz

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Bethesda, Maryland

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The questions of how to define research misconduct and how to protect whistleblowers and accused researchers are important and controversial in science. Mary Scheetz described the definition and guidelines pro-

posed by the US Department of Health and Human Services Commission on Scientific Integrity, and Mark Frankel described how various scientific communities—researchers, trainees, administrators, journal editors, the news media, and government agencies—have responded to the report and related efforts. The panelists also discussed the potential effects of electronic publishing on the opportunities for misconduct and the likelihood of detecting it.

Scheetz explained that the most recent proposed definition attempted to respond to criticisms and discussions throughout the scientific community. In general, the definition covers research misconduct (misappropriation, interference, and misrepresentation) and professional misconduct (obstruction of an investigation of research misconduct and noncompliance with research regulations). Scientists (investigators) have applauded the new definition because it addresses difficult issues that lie outside the traditional designations of fraud, fabrication, and plagiarism. They are also, however, worried that the proposed definition will stifle scientific inquiry.

Mark Frankel began his presentation by saying that in the middle to late 1980s the scientific research community did not appear to be taking misconduct issues seriously. Scientists seemed to feel that any problems were minor and should be left to the research community to handle. A series of scandals involving prestigious academic institutions, however, put the issue of misconduct on the front pages of national newspapers, and the community had to acknowledge the problem. He thinks that the scientists' objections and comments, although they might appear diffuse on the surface, all deal with an important core concern: who controls science and the conduct of science. Scientists are afraid that the government is gaining control, and they consider that dangerous for the future of science.

The panelists then discussed the guidelines proposed by the Office of Research Integrity (ORI) for the protection of whistleblowers. The government is concerned that institutions will retaliate against those who bring charges of misconduct. (ORI has resolved 19 retaliation cases since 1992 and

has now created a separate staff to handle whistleblower cases.) Scientists are concerned that whistleblowers have too much power and protection and the accused too little, and many want more protection for accused researchers. Responding to questions about the whistleblower issues, Frankel commented that he works with member societies to set up standards for professional behavior, and he

urges them to set a standard for the members' active obligation to report acts of misconduct. Both panelists discussed the question of who should investigate charges of misconduct, particularly in light of the inherent conflict of interest when an institution investigates one of its own members.

As the final section of the discussion, the panelists addressed the potential for miscon-

duct and the detection of misconduct presented by electronic publication. They noted that the electronic medium makes manipulation of images and data easy, but it also allows (in theory) the creation of "digital signatures" or "digital authentication" for documents as a way to ensure that they are not tampered with after publication. ●