A although scientific research misconduct is rare, ensuring the integrity of research is critical for maintaining public trust in science and political support for research funding. To safeguard against research misconduct and address allegations of wrongdoing, federal agencies and private research institutions have developed a plethora of codes and procedures. In October 1999, the White House Office of Science and Technology Policy proposed a research misconduct policy (www.whitehouse.gov/WH/EOP/OSTP/html/9910_20_3.html) that will apply to all federal agencies and federally funded research.

The need for a uniform policy became clear after several high-profile allegations of research misconduct in the 1980s resulted in Congressional hearings. The American Association for the Advancement of Sciences, Sigma Xi, the National Academy of Sciences, and others contributed to the development of the OSTP policy.

Sybil Francis, OSTP senior policy analyst, stresses that the new policy is intended to protect the integrity of the research record. It does not attempt to address matters such as unethical treatment of laboratory animals or of human research subjects, or fiscal or sexual misconduct. Research misconduct is defined in the proposed policy as “fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.”

According to the proposed policy, “Fabrication is making up results and recording or reporting them. Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record. Plagiarism is the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit, including those obtained through confidential review of others’ research proposals and manuscripts.” A finding of research misconduct requires that there be “a significant departure from accepted practices of the scientific community for maintaining the integrity of the research record” and that the misconduct be committed “intentionally, knowingly, or in reckless disregard of accepted practices.” The allegations must be proven by a preponderance of the evidence.

When the proposed policy was announced, most scientific societies lauded it, but many had concerns about some aspects of its definition of misconduct. David Kaufman, president of the Federation of American Societies for Experimental Biology, said that the definition is clearer and less ambiguous than existing standards, but he objected to treating data omission as falsification because there may be legitimate scientific reasons to omit data. He also suggested that plagiarism be defined not as failure to give appropriate credit, which could be a simple oversight in citation, but instead as using another’s ideas as one’s own.

NAS, whose 1992 report Responsible Conduct: Ensuring the Integrity of the Research Process defines research misconduct in nearly the same way as the proposed policy, urged OSTP to add language making it clear that agencies and institutions can set additional standards for actions that they believe are sanctionable. Such actions might include refusing to give peers reasonable access to unique research materials or data that support published papers, exploiting or inadequately supervising research subordinates, and using inappropriate methods to enhance the apparent significance of research findings.

At a NAS-sponsored meeting on the proposed policy in November 1999, much of the discussion focused on procedural aspects. Julius Younger, president of the American Society for Microbiology, said that the safeguards for an accused researcher fall short of OSTP’s stated goal to provide for fair and timely procedures. In particular, accused researchers would not have the right to examine evidence, confront witnesses, or present favorable witnesses. Younger also suggested that the guidelines include a mechanism for handling false accusations. Another concern is that the guidelines lack reasonable time limits for investigations and adjudications and a “statute of limitations” on charges of research misconduct.

The proposed policy also directs federal agencies to defer to the researcher’s home institution to handle allegations of research misconduct. However, the agency may conduct its own investigation, and when multiple agencies are involved each can impose its own sanction. These provisions present a potential problem because multiple proceedings could result in conflicting decisions and the researcher would be subjected to the stress and expense of defending against the same charges more than once.

OSTP was expected to finalize the policy in late winter, following a 60-day comment period and any resulting revisions. Implementation by the agencies will begin in the spring. Agencies will have up to 1 year to implement the new policy.