Scientific misconduct is not limited to the milieu of basic science but also occurs in clinical research—a striking context for misconduct given its immediate implications for patient care and treatment. This essay discusses the federal agencies that may have jurisdiction when misconduct occurs in a clinical trial, the differences between a federal agency finding of misconduct and an institutional finding, the differences between accusers and accused, and the process for finding misconduct and the sanctions imposed.

**Multiple Agencies**

When research misconduct occurs in clinical research in the United States, numerous government agencies may have jurisdiction. If the research involves Public Health Service (PHS) funds, the Office for Human Research Protections (OHRP, formerly known as the Office for Protection from Research Risks) and the Office of Research Integrity (ORI) will have jurisdiction. The Food and Drug Administration (FDA) will have jurisdiction over cases if falsification or fabrication occurred in the context of an FDA clinical trial. Similarly, if the case involves research conducted in a Department of Veterans Affairs (VA) hospital, VA will have jurisdiction. If the research is conducted with funding from the National Science Foundation, that agency will have jurisdiction.

Although only research supported by federal funding is subject to federal research-misconduct regulations, most academic and research institutions have research-misconduct policies and procedures that apply to all misconduct allegations, regardless of funding source. Many of those policies are based on federal regulations. Many sponsor agreements require notification of any allegations of research misconduct. Thus, a large number of cases not involving federal funds are investigated under research-misconduct policies and procedures that mirror those imposed by federal agencies, although the outcomes of these investigations are not necessarily reported to federal authorities.

Because of the breadth of types of cases handled, the following will focus on cases that were reported to ORI, the federal agency that has the most experience with research-misconduct cases. Since 1994, ORI has made about 190 findings of research misconduct, including about 70 findings in the context of clinical research. Misconduct cases that have arisen in the context of clinical research have included allegations of falsification and fabrication of interview data, alteration (fabrication or falsification) of a patient’s medical record, fabrication of medical data without alteration of a patient’s medical records, and failure to adhere to the study protocol. Other violations have involved fabrication or falsification of consent forms or substitution of a personal physical specimen for the study specimen.

**Different Standards for a Finding of Misconduct by the Office of Research Integrity?**

Although ORI has made about 190 findings of research misconduct and about 70 findings of research misconduct on the basis of falsification or fabrication in clinical research, ORI declined to make a misconduct finding in about 250 cases. Of the cases in which ORI did not make a finding, about 60 cases involved fabrication and falsification in the context of clinical research, including at least 16 cases in which ORI declined to make a finding of misconduct even though the institutions in question found that researchers had committed misconduct. Despite those statistics, ORI has made more findings—in terms of the percentage of total allegations reported—of research misconduct against clinical researchers than against basic scientists. From 1993 to 2007, ORI made findings of misconduct after 72% of allegations regarding clinical research compared with 40% after all allegations.

ORI has declined to make a finding of research misconduct on the basis of violation of human-subjects regulations even when falsification and fabrication occurred, despite the institutions’ deeming such violations a “serious departure” from standards of conduct of research. And ORI does not deem deviation from study protocol, failing to document informed consent properly, breach of human-subjects confidentiality, forging a physician’s signature, failing to report an adverse event, or failing to secure institutional review board or FDA approval of a protocol change as falling within the definition of research misconduct. Despite ORI’s exclusion of those actions from the definition of misconduct, many institutions deem them misconduct.

Although it has occurred in a rather small number of cases, ORI’s decision not to make a finding of misconduct when an institution has made such a finding raises concerns. When declining to convert an institutional finding of misconduct to a federal finding of misconduct, ORI has asserted a lack of adequate documentation, a lack of sufficient evidence to pursue a finding of research misconduct, a poor institutional investigation, a lack of sufficient evidence of a respondent’s intent to deceive, and the significance of the amount of data fabricated. In one case, ORI declined to make a finding of misconduct because of the time (a decade) that had passed between the alleged misconduct...
and the conclusion of the institutional process, the sufficiency of the institutional sanctions, and the respondent's retirement. Conversely, in the last 10 years, ORI has found no person guilty of misconduct if the person's institution did not. That is logical: the institution is closer to the misconduct and typically conducts its investigation when witnesses and evidence are still available and fresh, whereas ORI's reviews are often completed years after the original allegations.

**Accusers and Accused in the Context of a Clinical Trial**

The majority of those found to have committed misconduct in a clinical trial are not the principal investigators (PIs) on particular studies but study staff. In many of the cases of misconduct, the misdeeds are identified by others involved in a study and include co-workers, temporary personnel, and study monitors, and the misconduct is detected before publication of any scientific articles based on the tainted data. Although study staff constitute the majority of the targets of misconduct investigations, PIs may be investigated for research misconduct committed by a supervisee either under the “captain of the ship doctrine” or because of the failure to detect the supervisee's misconduct. However, ORI has not found a PI guilty of the misconduct of a supervisee. The latter point may be best illustrated by the cases of Cynthia King and Patrina Lowe. ORI found that the PI did not exercise sufficient supervision over study staff. ORI concluded that "negligence, lack of competence, lack of supervision, and inadequate assignment of authority all contributed significantly to the problems that arose in the ALLHAT program." Despite that conclusion, ORI did not find that the PI had committed research misconduct.

**Investigating an Allegation**

The process of investigating potential misconduct generally begins with the institution. If an institution receives PHS funds, it must have policies and procedures for responding to allegations of research misconduct. The first analytic question typically is whether the alleged behavior meets the definition of misconduct. The second question is whether the allegation is sufficient to begin an inquiry. The sole purpose of an inquiry is to determine whether there is sufficient information to warrant opening an investigation into the alleged misconduct. A finding of misconduct requires finding that the behavior was a substantial departure from accepted practices of the relevant research community; that the misconduct was committed intentionally, knowingly, or recklessly; and that the misconduct was proved by a preponderance of the evidence. The burden of proving misconduct is on the institution.

When an institution makes a finding, it produces a written report; if the case involves PHS funding, the institution must report its finding to ORI for review. After ORI concludes its review, it may make a federal misconduct finding and propose sanctions. It also may approve closing a case without a finding or refer the matter for further investigation, including criminal investigation. The ORI finding and sanctions constitute the final determination unless the accused seeks review of ORI's finding by appeal to an administrative law judge within 30 days of the notice.

Investigating research misconduct results in considerable delay. Although federal regulations prescribe a limited timeline for conducting investigations, the timelines typically are not honored, and extensions are extremely common. For clinical research, in which timing is often critical, that can have devastating effects on quality and reliability. On average, it takes more than 11 months for an institution to complete its investigation of research misconduct and 8 months more for ORI to make its findings. In cases of clinical-research misconduct, the institutional investigations have been completed in as little as 3 months and as long as 15 months. ORI has taken an additional 5–20 months to complete its review of institutional investigations.

**Administrative Sanctions**

When a finding of research misconduct is made in the context of a PHS-sponsored grant, the sanction typically imposed is a 3-year exclusion from receiving federal funds or serving in an advisory capacity to PHS (serving on study sections). A few cases have resulted in lifetime debarment or exclusion, and one case resulted in the very modest sanction of mandatory ethics counseling and exclusion from attending an ORI conference. More recently, ORI has favored supervision plans in lieu of debarment or exclusion. In recent years, ORI has resolved a substantial number of cases with respondents' agreeing to a plan of supervision rather than debarment or exclusion from federal funding or from participation in federally funded projects.

A finding of research misconduct, particularly one resulting in a short exclusion period, may not end a person's research career. However, a number of physician–researchers found guilty of research misconduct have given up their research careers. Although professional societies sanctioned some of those physicians, most were able to continue in their clinical careers. One nurse found guilty of research misconduct went to law school and is a member of a large international law firm.

For cases involving misappropriation of research funds, the Department of Health and Human Services (DHHS) may seek to recover the lost monies. However, apart from misconduct cases that reached the district-court level for civil or criminal action, repayment of misappropriated funds has been infrequent. In the cases of Eric Poehlman and Pat J Palmer, misappropriated funds were recovered, and Roxana Gonzales, found guilty of misconduct for falsifying research funded by the National Institute of Mental Health, voluntarily offered to make restitution of lost funds.

**Criminal Investigations and Sanctions**

Although most misconduct allegations are evaluated in the context of administrative sanctions, the Department of Justice (DOJ) may open a criminal investigation if a violation of federal law is determined. When it becomes apparent that the facts of the misconduct case may have criminal implications, the DOJ may request ORI to open a criminal investigation. ORI may request the DOJ to close the misconduct case and continue the criminal investigation. More often, however, ORI and the DOJ agree to open both investigations.

When a finding of research misconduct is made in connection with a federal criminal investigation, additional criminal charges and sanctions may be imposed. In those cases, the DOJ may impose a criminal judgment or order a fine and/or imprisonment. When the misconduct has occurred in a clinical trial, the DOJ may seek reimbursement of patient care costs.
investigations and sanctions, some are evaluated and resolved in the context of civil and criminal venues. In 2005, ORI closed the Kornak case involving falsification in a clinical trial in connection with VA, and Kornak was sentenced to federal prison for criminally negligent homicide of a research subject during the course of a drug trial. Kornak had pleaded guilty to mail fraud, making a false statement, and criminally negligent homicide in January 2005. The court ordered him to pay restitution to the pharmaceutical companies. A lifetime debarment was imposed by VA and DHHS. The US attorney’s office chronicled Kornak’s offenses as defrauding the clinical-trial sponsor by submitting false documentation about study subjects who did not qualify for the trial and falsifying forms that were crucial for determining whether subjects could take part in the study. Kornak falsely reported that the person who died had matched the criteria for enrolling in the study although the subject had damaged organs and died as a result of the drugs administered as part of the study.

In the case of Pat J Palmer, ORI found her guilty of scientific misconduct for fabricating records of interviews with the families of autism patients and for fabricating her credentials by claiming to have a BS and a PhD, and inserting her name among the lists of authors of 10 publications. Palmer was criminally charged with stealing $53,857 in travel vouchers and claiming to have a degree in violation of state law. She faced 10 years in prison for each count of first-degree theft and 5 years for each count of second-degree theft. In October 2003, she pled guilty to first-degree theft and falsifying academic degrees. She received 3 years of supervised probation and a $1,250 fine, and she paid her institution $18,976.80 for travel-voucher money that she had pocketed. ORI imposed a 3-year exclusion on Palmer.

Conclusion
Many institutions consider research misconduct in clinical trials the most egregious form of research misconduct. Because of the wide-ranging effects that clinical research can have on the direction of future endeavors and on public welfare and the public perception of science and medicine, this type of misconduct should result in immediate corrective action. However, a review of the cases handled by ORI does not indicate that cases of clinical-research misconduct result in much stronger sanctions or action against the perpetrators than cases of non–clinical-research misconduct. Most of the cases are referred to OHRP, which takes action against institutions and not against individual investigators. For cases in which ORI does take action, the sanctions are not more severe than those for misconduct in non-clinical trials.

JAMA and the BMJ invite abstracts for the Seventh International Congress on Peer Review and Biomedical Publication

Following the successful previous congresses, the Seventh International Congress on Peer Review and Biomedical Publication, which will be held September 8–10, 2013, in Chicago, Illinois, will provide a forum for the presentation and discussion of new research on peer review and scientific publication. Abstracts on any aspect of scientific peer review, publication, and information access and exchange will be considered.

The increasing sophistication of research into these issues means that preference is likely to be given to well-developed studies with generalizable results (eg, multijournal, prospective, multiyear trials and prospective observational studies). Retrospective studies, systematic reviews, bibliometric analyses, surveys, and other types of studies will also be considered. Abstracts that report new research and findings will be given priority.

Abstracts can be submitted between January 1 and March 1, 2013.

Suggested research topics, instructions for preparing and submitting abstracts, programs and abstracts from previous congresses, information about the meeting hotel, and other information are available on the Peer Review Congress Web site at www.peerreviewcongress.org.