

Patterns in Scientific Integrity Policies

July 2013

Throughout the Scientific Integrity Report Card grading process, a number of trends across agencies became apparent:

1. **Reliance on Old Research Misconduct Regulations**

Many agencies are relying on pre-existing regulations regarding research misconduct in order to implement scientific integrity policies. Research misconduct regulations were promulgated by many agencies in the early 2000s—a decade ago—after the Office of Science and Technology Policy proposed and adopted a uniform Federal Policy on Research Misconduct. 65 Fed. Reg. 76,260 (Dec. 6, 2000). In relevant part, “research misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.”

- Fabrication is making up data or 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 [i.e. the record of data or results that embody the facts emerging from the research, and includes, but is not limited to, research proposals, progress reports, abstracts, theses, oral presentations, internal reports, journal articles, and books].
- Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

Pursuant to this policy, following an allegation of research misconduct, there must be an inquiry into the merits, a formal investigation, and adjudication for corrective action. Research misconduct does not include honest error or differences of opinion; a finding of research misconduct requires:

- there be a significant departure from accepted practices of the relevant research community (i.e. the humanities, social sciences, or scientific research community);
- the misconduct be committed intentionally, or knowingly, or recklessly; and
- the allegation be proven by a preponderance of evidence.

It is unclear whether these preexisting research misconduct regulations are sufficient alone to address all aspects of a compromise in scientific integrity. For example, the definition of research misconduct does not include intimidation or coercion by managers or supervisors to falsify science, or personnel retaliation based on the content of one's research. Unfortunately, political manipulation of science tends to involve a much larger chain of command than the research misconduct regulations—principally aimed at low-level “garden variety” scientific malfeasance—contemplate.

2. Lack of Explicit Whistleblower Protection

Very few agencies have explicitly extended protection from retaliation to those making complaints about a violation of scientific integrity. Most scientific integrity policies only reference preexisting protections under the Whistleblower Protection Act and the employee-training NoFEAR Act. In relevant part, the Whistleblower Protection Act protects disclosures that an employee reasonably believes evidences a violation of “any law, rule, or regulation.” 5 U.S.C. 2302(b)(8).

Although there are a few cases where disclosures regarding agency policies were protected under the Whistleblower Protection Act, those cases are ambiguous as to on what grounds the disclosures were protected. Therefore, it is still an untested legal theory as to whether a scientific integrity complaint—divorced from any other type of disclosure—would actually be protected by the Whistleblower Protection Act. For this reason, it is of paramount importance that agencies include an explicit provision that extends whistleblower protection to allegations of scientific misconduct.

3. No Clear Role for the Office of the Inspector General

Some agencies provide that the agency's Office of the Inspector General (OIG) will conduct all scientific integrity investigations. Other agencies state that the OIG will only investigate if the misconduct arises to an allegation of fraud, waste, or abuse. Still more agencies do not address, what, if any, role the OIG will play in investigations of scientific misconduct. This omission may allow simultaneous and potentially conflicting investigations. Moreover, IGs often lack the expertise necessary to resolve scientific integrity complaints involving highly technical disputes. Finally, IG investigations have no set process, quality control, or transparency.

4. Failure to Create Written Public Communications Policies

Overall, agencies have actually done best in the Public Communications arena of their scientific integrity policies. However, a number of agencies are still lacking a clear, written policy for scientists to reference when deciding how to proceed with external communications regarding their official work. For example, a number of agencies only vaguely state that there should be “appropriate coordination” with supervisors and/or a public affairs officer without more.

5. Insufficient Transparency in the Administrative Record

Agencies continue to exercise broad discretion regarding what materials are included in administrative records—the official files documenting the basis for each policy decision an agency makes. When original research documents are not kept in the administrative record, political officials can more easily manipulate the record’s contents to provide an apparent basis for an otherwise unsound policy decision. When combined with the extreme deference given by courts to agencies, a manipulated administrative record can make an agency decision practically legally unchallengeable.¹ Although a number of agencies provide in their scientific integrity policies that they would make an effort to provide underlying data online pursuant to the Open Government Initiative, only one agency—the Food and Drug Administration—even referenced the inclusion of original research documents in its administrative records.

¹ For a detailed discussion on environmental agencies’ tendency to abuse the process of compiling the administrative record, see James N. Saul, *Overly Restrictive Administrative Records and the Frustration of Judicial Review*, 38:4 Lewis & Clark Env’tl. L. Online, http://www.elawreview.org/elaw/384/overly_restrictive_administrat.html.