

Chapter V

ACADEMIC FRAUD AND SCIENTIFIC MISCONDUCT

I. Overview

From allegations concerning the integrity of cold fusion experiments at the University of Utah to the raging battles over plagiarism within the American Historical Association, incidents of scientific misconduct and fraud have captured national attention. Also occurring frequently are less-publicized events involving allegations of academic fraud or scientific misconduct by professors and students.

When faculty participate in fraud or misconduct, their actions may be innocent, may be intentional, or may fall in a gray area. In all cases, however, the alleged misconduct must be assessed, for the integrity of the college and its research processes are in question.

II. Application

DEFINITION

The framework prepared by several national associations, including

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the Association of American Universities, defines scientific fraud as:

1. falsification of data—ranging from fabrication to deceptively selective reporting, including the purposeful omission of conflicting data with the intent to falsify results.
2. plagiarism—representation of another’s work as one’s own.
3. misappropriation of other’s ideas—the unauthorized use of privileged information (such as violation of confidentiality in peer review) however obtained.

This framework suggests that research fraud involves deception. As the document states: “Fraud in research undermines the scientific enterprise in ways that go far beyond the waste of public funds.”

Another author, Barbara Mishkin, defines scientific misconduct as: (1) knowing misrepresentation of data research procedures or data analysis; (2) plagiarism and other improprieties of authorship (e.g. improper inclusion or exclusion of authors); and (3) violation of federal, state, or institutional rules on research involving human subjects, animals, DNA, new drugs and devices, and radioactive materials.

Sound research standards should require: (1) recording and retaining primary data and tissues; (2) adhering to the approved protocol; (3) complying with applicable rules, regulations, and policies; and (4) where applicable, replicating and discussing research results within the laboratory before publication or dissemination to others.

Even colleges that are not required to meet federal guidelines on scientific misconduct should identify basic research expectations and have a process for handling violations of institutional policies.

INVESTIGATIONS

Any investigations should include a number of steps. The framework prepared by the Association of American Universities recommends four stages:

1. An inquiry to determine whether the allegation or related issues warrant further investigation;
2. When warranted, an investigation to collect and thoroughly examine evidence;
3. A formal finding; and
4. Appropriate disposition of the matter.

Throughout the investigation, parties should be protected by a fair process. At the initial stage, accusers' names need not be disclosed. If the proceedings move to a formal stage, the identity of the accusers must be disclosed to the accused.

MODEL POLICIES

Universities funded by federal research funds must comply with guidelines on scientific misconduct and other standards for research. If they do not, they jeopardize their continued federal funding. All colleges and universities, however, should develop policies on professional ethics and research integrity. The AAUP, for example, has developed a model plagiarism policy which states:

The professor must scrupulously acknowledge every intellectual debt—for ideas, methods, and expressions—by means appropriate to the form of communication.

Scholars must make clear the respective contributions of colleagues on a collaborative project, and professors who have the guidance of students as their responsibility must exercise the greatest care not to appropriate a student's ideas, research, or presentation to the professor's benefit; to do so is to abuse power and trust.

In dealing with graduate students, professors must demonstrate by precept and example the necessity of rigorous honesty in the use of sources and of utter respect for the work of others. The same expectations apply to the guidance of undergraduate students, with

a special obligation to acquaint students new to the world of higher education with its standards and the means of ensuring intellectual honesty.

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Negligent Scholarship

In *Newman v. Burgin* (1991), professor Anny Newman sought an injunction to preclude certain University of Massachusetts officials from imposing sanctions for plagiarism.

In 1983, Newman had published an article about “Suze sina razmetnoga,” a poem written by 17th century Croatian poet Franjin Gundilic. Dianna Burgin, a professor in the Russian Department, became suspicious that Newman may have copied sections of the article from a 1952 book by Vsevolod Setschkareff; and Burgin brought those suspicions to the attention of the department’s personnel committee. The committee, basing its findings on numerous similarities between the book and Newman’s article, found that Newman may have been guilty of plagiarism and decided to investigate further.

Newman argued that the similarities did not amount to plagiarism because the “common passages reflected general knowledge among scholars in the field; many of the similarities consisted of paraphrases of the same lines of Croatian poetry and therefore had to resemble each other; and her article essentially paraphrased her 1962 Harvard Master’s thesis, which a noted scholar in the field had supervised and found adequate.” She also noted that of the article’s six footnotes, three cited the book in question.

The Dean of the college of Arts and Sciences requested that two Slavic-language scholars at other universities consider the article and the issue of plagiarism. One of the scholars found that the article contained “exemplary instances of plagiarism.” The other scholar found that the article was “indebted to Dr. Setschkareff’s major work considerably more than formally acknowledged” but that this indebtedness may not amount to “conscious, deliberate and outright plagiarism,” since the author simply may have experienced “lapses in awareness.” Newman presented letters from six scholars who all found that she had not plagiarized.

The committee concluded that Newman had “no conscious intent to deceive” but that her “scholarship had been negligent and contained an objective instance of plagiarism.” At the request of the Dean of the School of Arts and Sciences and the Provost, the Chancellor instituted the following sanctions: the committee’s findings were made public, and Newman was prevented from serving as an administrator or a member of various academic boards.

Newman then filed suit, alleging a constitutional due process violation. The District Court dismissed the suit, and Newman appealed. (Generally, only public colleges may be open to a due process claim; however, the court’s discussion of the issue of plagiarism is instructive for both public and independent institutions.)

First, although the university did not follow its own procedures for “major personnel actions,” the court did not find that Newman’s due process rights had been violated. The court basically held that the due process clause “does not require the university to follow any specific set of detailed procedures as long as the procedures the university actually follows are basically fair ones.” Newman could have brought a contract claim alleging that by not following its own procedures, the university breached its contract of employment. Such a contract claim can be brought against either a public or private institution based on policies such as those contained in a faculty handbook.

Second, Newman claimed that the University’s decision was “so arbitrary that it violated the Constitution’s Due Process Clause.” To determine the validity of this argument, the court was required to discern whether the decision represented a “substantial departure from accepted academic norms.” Thus, the court was forced to address the definition of plagiarism. Newman argued that several academic sources define plagiarism as “involving an intent to deceive.” The court, however, quoted one source that defined plagiarism as giving “the impression that you have written or thought something that you have in fact borrowed from another.” The court also quoted the *MLA Handbook for Writers of Research Papers, Theses, and Dissertations*, which suggests that “one can plagiarize through negligence or recklessness without intent to deceive.”

Finally, the court held that the decision did not represent a substantial departure from accepted academic norms so as to warrant overriding the decision of the University.

Misappropriation of Student Research

In 1986, Jason C. Yu, a tenured professor, was charged by the Department of Engineering at the University of Utah with violating the code of faculty responsibility. Fifteen separate charges of scientific misconduct were filed against Yu as a basis for his termination.

A committee of the university reviewed the charges and dismissed twelve of them, but three of the charges concerning plagiarism were found to be valid. The committee found that Yu had committed plagiarism by failing to give recognition to a co-author of a joint research project and by representing and continuing to represent as his own work two publications that were in fact prepared primarily by two of his students at his previous university.

Based on the evidence before the committee, the committee recommended that Yu be suspended from employment for one year without pay. The university president concurred in this recommendation and moved to suspend Yu.

Yu then appealed to a review body of the university. This body reviewed the evidence and recommended that the committee review the matter again to address certain procedural defects and to allow Yu to present to the committee additional information.

After further review, the committee reaffirmed its earlier decision on Yu's plagiarism, but this time, it recommended his dismissal from the university. When the president affirmed this recommendation, Yu appealed. The review body affirmed the president's decision on Yu's immediate dismissal. Yu then filed a lawsuit. (*Yu v. Peterson*, 1993)

Yu alleged that he had been deprived of his due process rights and that there was not an adequate evidentiary basis to support the charges of plagiarism. The lower court dismissed the complaint, and Yu appealed.

On appeal, Yu charged that the policy under which he was found to have plagiarized was vague—a charge frequently made in these investigations. The specific policy stated:

A faculty member must not plagiarize or permit the appearance that he or she is the author of work done by others.

The court categorically rejected the notion of vagueness and then turned to Yu's other challenge regarding the process by which the

termination occurred. Yu argued that between the first hearing and the second hearing, the penalty was increased from a one-year suspension to a dismissal and that this was unfair. The court rejected this notion and held that there was an adequate basis for the decision on termination. It noted that Yu did not fully cooperate in the second review.

The court also noted that at the second hearing, substantial new evidence was offered that called into question whether Yu had significantly participated at all in the research for the co-authored papers. The court noted:

[the committee] found that he did not thoroughly understand how the mathematical computations had been converged. This caused the committee to doubt the credibility of most of Dr. Yu's testimony. The committee also questioned whether handwritten notes that he submitted were authentic.

Concluding that at the second review, there was adequate evidence to develop a stricter penalty, the court upheld the dismissal of Dr. Yu.

In a famous patent case involving Reed College in Portland, Oregon, a federal court was required to determine whether student theses were previously published and whether work from those theses was subject to patent. (*In Re Cronyn*, 1989)

Reed College requires students to prepare a student thesis and to present the thesis at an oral presentation. The purpose of the requirement is to give students the opportunity to carry out laboratory or scholarly research and to present the work in a more thorough and formal manner than is normally possible with the usual term paper.

A copy of each thesis is filed in the main college library and in the department where the student work was done. These theses are listed on individual cards, which show the titles and the students' names.

As it turns out, a professor who had supervised three student theses applied for a patent, the basis of which appeared to be the work of the three students reflected in their theses. Under patent law, if work has been "previously published," it is not subject to a patent.

The court reviewed the Patent Board's determination that the work had been previously published. In a technical decision, the court concluded that these theses were not "previously published" because they had been neither catalogued nor indexed in a meaningful way and were not accessible to the public.

Obviously, this is a very narrow ruling that applies to patent situations, but clearly the use of such work by a professor raises serious questions of ethics and propriety. College rules and regulations should govern issues related to the appropriation of student research data.

False Accusations of Misconduct

Marcus B. Feldman's contract as an assistant professor of mathematics at Southern Illinois University was not renewed because he falsely had accused a colleague of plagiarism. The irony was that the person whom Feldman accused of plagiarism received tenure at the same time Feldman's contract was not renewed.

Feldman filed suit in federal district court. (*Feldman v. Bahn*, 1993) He argued that he was being discharged for exercising his First Amendment freedom and that, as a public employee, he should have constitutional protection.

Because the court did not grant immunity to certain state officials, the university appealed. On appeal, the court acknowledged the importance of free speech, but it also affirmed the university's right to investigate allegedly false accusations and to apply its processes to such matters.

Yet an unsupported charge of plagiarism reflects poorly on the accuser; the First Amendment does not ensure that a faculty member whose assessment of a colleague's work reveals bad judgment will escape the consequences of that revelation.

The court ruled that once an institution investigates a charge of plagiarism, it must balance the various interests and that three options emerge as a result of an investigation:

If the charge is correct, the plagiarist should be disciplined; if the charge is unfounded, the accuser should be disciplined; if there is some basis for the charge, but the university believes that the accusation is unproven, then no one should be disciplined—for a university does not wish to discourage candid discourse about the quality of work being performed by the faculty.

Finally, the court sustained the decision of the university, finding that there was an adequate basis for the department chair's determination that Feldman's charges were false.

A concurring opinion emphasized the importance of the right of the university to take action on academic misconduct:

Even though acts of academic fraud financed by public monies are matters of clear concern not only to users of the state university system but to all tax paying citizens, the university cannot function as a credible employer or academic institution without the ability to discipline members of its staff who irresponsibly impugn the integrity of the school or its faculty.

SANCTIONS

To deal with scientific misconduct, colleges should develop faculty handbook policies on lesser sanctions that may be applied when the sanction of termination is not appropriate under the circumstances or when the evidence does not support a finding of adequate cause for dismissal.

In its 1979 report, the AAUP Joint Subcommittee on Faculty Responsibility recommended lesser sanctions. In its framework, the American Association of Universities also points to the importance of lesser sanctions, including (1) removal from a particular project; (2) letter of reprimand; (3) special monitoring of future work; (4) probation; (5) suspension; (6) salary reduction; and (7) rank reduction.

Although the AAUP has not recommended specific procedures for lesser sanctions, institutions should formulate such procedures. An important consideration is that as the penalty becomes more severe, a faculty member should have an opportunity for some form of review to contest the imposition of the sanction. For example, if the alleged offense is minor—such as one calling for an oral or written reprimand—a college should provide for proper notification of the complaint, an informal conference on the facts, and perhaps the right to be accompanied by a colleague or friend. A more serious sanction, such as suspension, might require a process involving a faculty review committee prior to the determination on a suspension.

III. Preventive Measures

- Colleges should develop policies and procedures on scientific misconduct or academic fraud, including a definition of the conduct that must be avoided.
- Sanctions other than dismissal should be identified.
- Fair process must be provided to a professor who is accused of academic misconduct, including some form of pre-investigation which permits the college to make an assessment of the charges before they are moved to a more formal process.
- Colleges should make clear its policies on the use or misuse of student material, including senior papers and theses.
- Colleges should review codes of conduct developed by professional associations to determine if they should be included in college policies.

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