
RESEARCH MISCONDUCT AND PLAGIARISM

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INTRODUCTION¹

The 1995 article *Scientific Misconduct and the Plagiarism Cases* presented an analysis of the cases decided by the Public Health Service's ("PHS") Office of Research Integrity ("ORI") and the National Science Foundation ("NSF"), which involved allegations of plagiarism.² The article examined how the responsible federal agencies defined plagiarism in scientific misconduct cases,³ discussed responses to plagiarism,⁴ and highlighted the differential treatment depending on the federal agency processing the case and whether the federal agency analyzed the allegations as, or distinguished them from, a copyright violation.⁵

Several developments have prompted the author to revisit the concepts and substance of that article. First, the White House Office of Science and Technology Policy ("OSTP") promulgated a new definition of plagiarism, which may affect how federal agencies approach such allegations.⁶ Second, federal agencies have decided additional cases that provide further insight into how they interpret scientific misconduct regulations and guidelines when evaluating an allegation of plagiarism.⁷ Third, ORI explicitly refocused its efforts to be more educational,⁸ had some of its investigatory powers transferred to another entity,⁹ and changed its

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1. All Freedom of Information Act (FOIA) references/materials cited herein are on file with the author.

2. Debra Parrish, *Scientific Misconduct and the Plagiarism Cases*, 21 J.C. & U.L. 517 (1995).

3. *Id.* at 518–25.

4. *Id.* at 530–44.

5. *Id.* at 526–30, 544–52.

6. See Office of Science and Technology Policy, 65 Fed. Reg. 76,260 (Dec. 6, 2000).

7. See *infra* Parts III.A–B.

8. See OFF. RES. INTEGRITY, U.S. DEP'T HEALTH & HUM. SERVS., REPORT OF THE DEPARTMENT OF HEALTH AND HUMAN SERVICES REVIEW GROUP ON RESEARCH MISCONDUCT AND RESEARCH INTEGRITY (1999), available at http://ori.dhhs.gov/documents/report_review_group.pdf [hereinafter HHS REVIEW GROUP REPORT]; JOHN D. MAHONEY, NAT'L INSTS. HEALTH, NIH INITIATIVE TO REDUCE REGULATORY BURDEN: IDENTIFICATION OF ISSUES AND POTENTIAL SOLUTIONS (1999), <http://grants.nih.gov/grants/policy/regulatoryburden/index.htm>.

9. See Press Release, U.S. Dep't Health & Hum. Servs., HHS Announces Plans to Improve Research Integrity and Prevent Research Misconduct (Oct. 22, 1999), available at

approach to the resolution of cases.¹⁰ Fourth, a number of cases have been decided outside of ORI and NSF jurisdiction that highlight some of the disparities in the resolution of cases.¹¹ Fifth, the role of professional associations in responding to allegations of plagiarism has developed substantially during the past decade.¹² Finally, the uses of plagiarism detection software programs on the Internet and elsewhere have raised issues of equity when investigating allegations against students versus those against faculty, as well as allegations of copyright infringement, in the discovery and prosecution of plagiarism.¹³

I. THE EVOLVING DEFINITION OF RESEARCH MISCONDUCT AND PLAGIARISM

A. The Early Definitions of Research Misconduct

In the late 1980s, in reaction to a series of high profile cases involving allegations of scientific misconduct and congressional pressure,¹⁴ PHS and NSF issued regulations defining “misconduct in science.”¹⁵ PHS defined scientific misconduct as “fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research. It does not include honest error or honest differences in interpretations or judgments of data.”¹⁶ NSF defined misconduct as:

- (1) Fabrication, falsification, plagiarism, or other serious deviation from

<http://www.hhs.gov/news/press/1999pres/991022.html>.

10. *Id.*

11. See, e.g., Thomas Bartlett & Scott Smallwood, *Four Academic Plagiarists You've Never Heard of: How Many More Are Out There?*, CHRON. HIGHER EDUC., Dec. 17, 2004, at A8 (discussing the cases of Stephen Ambrose, Doris Kearns Goodwin, and Lawrence Tribe).

12. See, e.g., COMMITTEE ON PUB. ETHICS, THE COPE REPORT 2005 5–8 (2005) available at <http://www.publicationethics.org.uk/reports/2005/cope2005.pdf>; Press Release, Am. Hist. Ass'n, AHA Announces Changes in Efforts Relating to Professional Misconduct (May 5, 2003), http://www.historians.org/press/PR_Adjudication.htm.

13. See Daniel H. Sharphorn & Kathryn Bender, Copyright and Plagiarism in the Digital World; Plagiarism by Faculty; Challenges and Issues, NACUA CLE Workshop (Nov. 10, 2005) (on file with author).

14. These cases include those involving William Summerlin (also known as “The Painted Mouse Case,” because Summerlin claimed to be able to transplant skin on a mouse when he simply had colored the skin with a magic marker), Elias Alsabti (who engaged in massive plagiarism and simply moved from institution to institution, avoiding significant consequences) and John Darsee (the case involving a prominent Harvard cardiology researcher who fabricated most of his data). See WILLIAM BROAD & NICHOLAS WADE, BETRAYERS OF THE TRUTH (1982).

15. See Responsibilities of Awardee and Applicant Institutions for Dealing with and Reporting Possible Misconduct in Science, 54 Fed. Reg. 32,446 (Aug. 8, 1989) (to be codified at 42 C.F.R. § 50) (giving PHS regulations); Misconduct in Science and Engineering, 56 Fed. Reg. 22,286 (May 14, 1991) (to be codified at 45 C.F.R. § 689) (giving NSF regulations). The term originally used in the regulations was “misconduct in science” or “scientific misconduct,” but in the 1993 NIH Revitalization Act, the term “scientific misconduct” was changed to “research misconduct.” See 42 U.S.C. § 289b(a)(3) (2000). The terms “scientific misconduct” and “research misconduct” are used interchangeably herein, as they are in the relevant literature.

16. 42 C.F.R. § 50.102 (1994).

accepted practices in proposing, carrying out, or reporting results from activities funded by the NSF; or (2) Retaliation of any kind against a person who reported or provided information about suspected or alleged misconduct and who has not acted in bad faith.¹⁷

B. Discrepancies in Misconduct Definitions

Although the PHS and NSF definitions were similar in wording, they proved to be significantly different in interpretation and application.¹⁸ Other federal agencies adopted similar definitions, but the PHS and NSF definitions assumed the greatest importance because the PHS and NSF provide funding to a majority of the research institutions.¹⁹ Federal regulations, including those promulgated by PHS and NSF, require institutions receiving funding from an agency to adopt policies and procedures for responding to allegations of misconduct.²⁰ Although most institutions adopted either the PHS or NSF definition as their own definition of research misconduct, some institutions adopted broader and conflicting definitions.²¹ This multiplicity of definitions among the agencies and academic institutions created confusion within the research community, since an action may or may not constitute scientific misconduct depending on which definition is applied and which body interprets the definition.²² Further, the same action may

17. 45 C.F.R. § 689.1 (1994).

18. NSF interpreted its definition more broadly and did not focus on categorizing the cases specifically as falsification, fabrication, or plagiarism, but evaluated almost all cases under the “serious deviation” rubric. *See* 45 C.F.R. § 689.1 (1994). Further, NSF did not require a finding of intent. *Id.* Accordingly, NSF found misconduct in a broader range of cases, including cases involving sexual harassment when the purpose of the grant was to encourage women to enter the sciences. The case of Dr. Dennis Rasmussen, NSF Case 89110010 (on file with author), in which he repeatedly sexually assaulted female undergraduate students and teaching assistants in Mexico while conducting studies as part of the NSF Research Experiences for Undergraduates program, which emphasized the inclusion of women proves this point. NSF found misconduct because Rasmussen used the educational opportunities provided by the grants to sexually assault students. PHS/ORI, however, attempted to categorize all allegations as either falsification, fabrication, plagiarism or “other practice,” and generally required intent to make a finding of misconduct. *See* 42 C.F.R. § 50.102 (1994).

19. *See* FRANCIS MACRINA, SCIENTIFIC INTEGRITY: AN INTRODUCTORY TEXT WITH CASES 3 (2000).

20. *See* 42 C.F.R. § 93.102 (2005); 45 C.F.R. § 689.4 (2005); 45 C.F.R. § 689.4 (1988).

21. *See, e.g.*, Off. Vice Provost, Tufts U., Misconduct in Scientific Research and Scholarship, <http://www.tufts.edu/central/research/Misconduct.htm> (last visited Nov. 15, 2006) (including as misconduct violation of statutes and regulations applicable to scientific research). *See also* CENTER FOR HEALTHY POL’Y STUD. CONSULTING, FINAL REPORT, ANALYSIS OF INSTITUTIONAL POLICIES FOR RESPONDING TO ALLEGATIONS OF SCIENTIFIC MISCONDUCT § 2 (2000) (indicating that over half of the policies reviewed had a definition that was beyond the definition of misconduct used by ORI).

22. *See* OFF. RES. INTEGRITY, U.S. DEP’T HEALTH & HUM. SERVS., OFFICE OF RESEARCH INTEGRITY ANNUAL REPORT 2005 65 (2006), *available at* http://ori.dhhs.gov/documents/annual_reports/ori_annual_report_2005.pdf (concluding that a postdoctoral fellow falsified a figure published online prior to print in a journal, and though ORI accepted many of the institution’s factual findings, ORI did not find misconduct. The figure had been corrected prior to print in a journal) [hereinafter ORI ANNUAL REPORT 2005].

constitute misconduct at the institutional level, but not at the federal agency review level.²³

C. Difficulties Applying Existing Definitions

Regardless of the overall scope of the definitions of misconduct, aspects of these definitions created problems. First, despite the proclivity for adopting one of the federal agency definitions, the scientific and academic communities complained that the serious deviation prong of the definition was too vague and too difficult to apply.²⁴ Second, none of the agencies adopted formal definitions for “falsification,” “fabrication,” or “plagiarism.”²⁵ Although ORI did not adopt a formal definition of plagiarism, it published a “working definition” in its December 1994 newsletter:

ORI considers plagiarism to include both the theft or misappropriation of intellectual property and the substantial unattributed textual copying of another’s work. It does not include authorship or credit disputes.

The theft or misappropriation of intellectual property includes the unauthorized use of ideas or unique methods obtained by a privileged communication, such as a grant or manuscript review.

Substantial unattributed textual copying of another’s work means the unattributed verbatim or nearly verbatim copying of sentences and paragraphs which materially mislead the ordinary reader regarding the contributions of the author. ORI generally does not pursue the limited use of identical or nearly-identical phrases which describe a commonly-used methodology or previous research because ORI does not consider such use as substantially misleading to the reader or of great significance.

Many allegations of plagiarism involve disputes among former collaborators who participated jointly in the development or conduct of a research project, but who subsequently went their separate ways and made independent use of the jointly developed concepts, methods, descriptive language, or other product of the joint effort. The ownership of the intellectual property in many such situations is seldom

23. If federal agency funding is involved or sought for the research, the institution must report its finding to that federal agency. *See* 45 C.F.R. § 689.4(b)(5) (2005); 42 C.F.R. § 93.315 (1989); 45 C.F.R. § 689.4(b)(5) (1988). The federal agency will then review the case to determine whether a finding of misconduct is necessary and whether the institution complied with the applicable regulations and conducted a thorough, unbiased investigation with appropriate expertise. 42 C.F.R. § 93.403 (2005); 45 C.F.R. § 689.9(a) (2005).

24. COMM’N ON RES. INTEGRITY, U.S. DEP’T HEALTH & HUM. SERVS., INTEGRITY AND MISCONDUCT IN RESEARCH 10 (1995), *available at* http://ori.dhhs.gov/documents/report_commission.pdf [hereinafter COMMISSION REPORT]. Specifically, the “other practices that seriously deviate” clause, apart from the vagueness complaint, was criticized by some based on the idea that the clause might be utilized to “punish creative or novel science.” *Id.*

25. *See* 42 C.F.R. § 50.102 (2003); 45 C.F.R. § 689.1 (2005).

clear, and the collaborative history among the scientists often supports a presumption of implied consent to use the products of the collaboration by any of the former collaborators.

For this reason, ORI considers many such disputes to be authorship or credit disputes rather than plagiarism. Such disputes are referred to PHS agencies and extramural institutions for resolution.²⁶

Despite ORI's broad informal definition of plagiarism, ORI has not found plagiarism in any form other than verbatim copying of text, i.e., "verbatim plagiarism."²⁷ Similarly, NSF has received allegations of intellectual property theft, but such allegations have not resulted in findings of misconduct.²⁸ Further, although the ORI working definition does not explicitly state that intent is required to demonstrate misconduct, ORI appears to have incorporated the concept of intent when evaluating cases.²⁹ In contrast, NSF has not required intent and has made findings based on negligent conduct.³⁰

D. Entities Seek to Clarify "Research Misconduct"

In 1993, the Secretary of the Department of Health and Human Services ("HHS") established the Commission on Research Integrity to make recommendations regarding research misconduct and integrity, including a proposal for a new definition for research misconduct.³¹ In 1995, the Commission—known as the Ryan Commission for its chair, Kenneth Ryan of Harvard University—delivered its report to the Secretary and made thirty-three recommendations.³² The Ryan Commission recommended that "research misconduct" be defined as:

26. *ORI Provides Working Definition of Plagiarism*, ORI NEWSL. (Off. Res. Integrity, U.S. Dep't Health & Hum. Servs., Rockville, Md.), Dec. 1994, at 5–6, available at http://ori.dhhs.gov/documents/newsletters/vol3_no1.pdf.

27. Although ORI has not found plagiarism when verbatim plagiarism was absent, in the case of Yahya Abdulahi, ORI also found the respondent plagiarized concepts. Findings of Scientific Misconduct, 61 Fed. Reg. 39,461 (Dep't Health & Hum. Servs. July 29, 1996). ORI has also found misconduct with respect to figures and photographs. See 69 Fed. Reg. 43,420–21 (July 20, 2004): Tirunelveli Ramalingam plagiarized two figures previously published by a different author in a 1997 article in the *Journal of Biological Chemistry*. 68 Fed. Reg. 61,811 (October 30, 2003): Dr. Ilya Koltover plagiarized a scanning micrograph from a graduate student. 66 Fed. Reg. 35,982–83 (July 10, 2001): Dr. David Jacoby plagiarized a Southern blot analysis of genomic DNA that had originally been a figure in a 1997 article written by different authors in the *Journal of Virology* and included the plagiarized material in various presentations and grant applications.

28. As of December 31, 2004, NSF had opened 185 cases involving allegations of intellectual theft. See Response to FOIA request of Jan. 14, 2005 (on file with author).

29. See, e.g., Case of Dr. Lonnie Mitchell, ORI Case No. 87-01 (available through FOIA from ORI) (finding that plagiarism had not occurred, based on the lack of a specific intent to deceive).

30. See, e.g., NSF Case No. 02-07 (available through FOIA from NSF).

31. Off. Res. Integrity, About ORI—History, <http://ori.dhhs.gov/about/history.shtml> (last visited Nov. 21, 2006).

32. COMMISSION REPORT, *supra* note 24, at 33.

significant misbehavior that improperly appropriates the intellectual property or contributions of others, that intentionally impedes the progress of research, or that risks corrupting the scientific record or compromising the integrity of scientific practices

Examples of research misconduct include but are not limited to the following:

Misappropriation: An investigator or reviewer shall not intentionally or recklessly

- a. plagiarize, which shall be understood to mean the presentation of the documented words or ideas of another as his or her own, without attribution appropriate for the medium of presentation.³³

The Ryan Commission also recommended a uniform federal research misconduct definition across federal granting agencies.³⁴ Although the concept for a uniform definition received PHS/ORI community support, the Commission's proposed definition did not.³⁵ Moreover, despite an HHS intra-departmental implementation group recommendation that a notice of proposed rulemaking be published to elicit comment, HHS did not publish the proposed definition for comment.³⁶

Instead, in August 1996 the Secretary created the HHS Review Group on Research Misconduct and Research Integrity ("Review Group") to review the PHS and ORI policies and procedures. In July 1999, this Review Group issued its report, making fourteen recommendations.³⁷ Among other things, the Review Group suggested that ORI define "research misconduct" as:

fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.

. . . .

Plagiarism is the appropriation of another person's ideas, processes, results, or words without appropriate credit, including those obtained through confidential review of others' research manuscripts.

Research misconduct does not include honest error or honest differences of opinion.³⁸

Meanwhile, OSTP, through the Committee on Fundamental Science of the

33. *Id.* at 15.

34. *Id.* at 30.

35. See Billy Goodman, *Scientists are Split Over Finds of Research Integrity Commission*, THE SCIENTIST, Jan. 22, 1996, at 8.

36. See FED'N AM. SOC'YS FOR EXPERIMENTAL BIOLOGY, IMPLEMENTATION PROPOSAL ON RECOMMENDATIONS BY THE COMMISSION ON RESEARCH INTEGRITY 8-9 (1996), available at <http://opa.faseb.org/pdf/raub.pdf>.

37. The Secretary accepted the Review Group's recommendations in October 1999. Press Release, *supra* note 9. Independent of the Review Group, in March of that year, the National Institutes of Health had issued a report with various recommendations relating to research integrity. MAHONEY, *supra* note 8.

38. HHS REVIEW GROUP REPORT, *supra* note 8, at 4.

National Science and Technology Council, established a working group to develop a government-wide policy on research misconduct, including a definition. As a result, on December 6, 2000, OSTP published a new definition of research misconduct and urged federal agencies to implement this new definition through the promulgation of agency regulations.³⁹ The OSTP definition specifically defined plagiarism as “the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit.”⁴⁰

E. Federal Agencies Revise Misconduct Definitions

In response to OSTP policy, NSF amended its definition through a final rule that went into effect in April, 2002.⁴¹ The new NSF regulations state in relevant part for conduct occurring on or after the effective date:

(a) *Research misconduct* means fabrication, falsification, or plagiarism in proposing or performing research funded by NSF, reviewing research proposal submitted to NSF, or in reporting research results funded by NSF.

....

(3) *Plagiarism* means the appropriation of another person’s ideas, processes, results or words without giving appropriate credit.

....

(b) *Research misconduct* does not include honest error or differences of opinion.⁴²

Thus, for conduct within NSF’s jurisdiction occurring on or after April 2002, the new NSF definition applies, and for conduct occurring before that date, the prior definition applies.

In April, 2004, PHS published a notice of proposed rulemaking and solicited comments on its new definition.⁴³ In May, 2005, PHS published a final rule which defined research misconduct in substantially the same terms as NSF.⁴⁴ The rule defines “research misconduct” as “fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. . . . (c) Plagiarism is the appropriation of another person’s ideas, processes, results, or words without giving appropriate credit. (d) Research misconduct does not include honest error or differences of opinion.”⁴⁵

39. See 65 Fed. Reg. 76,260 (Dec. 6, 2000). The regulations had been proposed in October 1999. 64 Fed. Reg. 55,722 (Oct. 14, 1999).

40. Federal Policy on Research Misconduct, 65 Fed. Reg. at 76,262.

41. See Research Misconduct, 67 Fed. Reg. 11,936 (Mar. 18, 2002) (to be codified at 45 C.F.R. § 689).

42. Misconduct in Science and Engineering, 45 C.F.R. § 689.1 (1994).

43. See Public Health Service Policies on Research Misconduct, 69 Fed. Reg. 20,778 (Apr. 16, 2004).

44. See Public Health Service Policies on Research Misconduct, 70 Fed. Reg. 28,370 (May 17, 2005) (to be codified at 42 C.F.R. § 93).

45. 42 C.F.R. § 93.103 (2005).

Importantly, PHS/ORI has signaled that it will no longer require intent to make a formal finding of research misconduct.⁴⁶ ORI will also expand its jurisdiction to include cases involving plagiarism of PHS-supported research.⁴⁷ In other words, plagiarism for ORI purposes will include plagiarism of PHS-sponsored research by PHS-recipient reviewers, not just plagiarism in PHS-sponsored research.⁴⁸ Although the proposed rule indicated that ORI would not consider authorship disputes as plagiarism allegations,⁴⁹ the final rule stopped short of that explicit exclusion.⁵⁰ Other agencies have indicated they intend to adopt the OSTP definition,⁵¹ but few have taken concrete steps to do so.⁵² In sum, although both ORI and NSF will have nearly identical definitions, whether the interpretation of those definitions will continue to vary by agency remains an open question.

II. THE EVOLVING AGENCY AND THIRD PARTY ROLES

A. ORI Process and Changes Thereto

1. ORI and Institutional Investigations

Institutions retain primary responsibility for making formal findings of misconduct. Institutions have a sixty-day period, commencing with receipt of an allegation of research misconduct, to conduct an inquiry to determine if there is

46. See Audio Tape: Comments of Alan Price, National Association of College and University Attorneys (NACUA) Annual Meeting (June 2005) (on file with NACUA).

47. See Public Health Service Policies on Research Misconduct, 70 Fed. Reg. at 28,371. In the past, as noted above, PHS would not have asserted jurisdiction over the case if the plagiarizer was not PHS-supported or had not sought PHS support for the research.

48. See *id.* However, PHS “jurisdiction does not attach . . . where there is no PHS support for the research record . . .” *Id.*

49. See Public Health Services Policies on Research Misconduct, 69 Fed. Reg. 20,778, 20,781 (Apr. 16, 2004).

50. See Public Health Services Policies on Research Misconduct, 70 Fed. Reg. at 28,377.

51. See Public Health Services Policies on Research Misconduct, 42 C.F.R. § 93.103 (2005). See also Office of Research Integrity, U.S. Dep’t of Health and Human Services, Policies—Federal Policies, http://ori.dhhs.gov/policies/federal_policies.shtml (last visited Nov. 15, 2006) (indicating that the Department of Agriculture, Commerce, Education, Interior, and Justice have drafted their policies but they are undergoing internal review) [hereinafter Federal Policies].

52. See Public Health Service Policies on Research Misconduct, 69 Fed. Reg. 42,102–07 (July 14, 2005) (adopting misconduct regulations for the National Aeronautics and Space Administration). NASA research is broadly defined as any involving the use of NASA facilities, equipment or personnel. *Id.* at 42,204. The possible sanctions in the current regulations are grouped in classes similar to NSF’s grouping of sanctions. *Id.* at 42,106. See also Nat’l Endowment for Human., Research Misconduct Policy (2001), <http://neh.gov/grants/guidelines/researchmisconduct.html>. According to the ORI website, the following other agencies have formalized their misconduct policies: the Department of Energy, the Department of Defense, the Department of Labor, the Department of Transportation, the Department of Veteran Affairs, the Environmental Protection Agency, and the Smithsonian Institute. See Federal Policies, *supra* note 51.

sufficient evidence to warrant an investigation.⁵³ If there is sufficient evidence, they have thirty days to commence the investigation and 120 days to complete it.⁵⁴ Institutions frequently request extensions of these deadlines, and ORI frequently grants their requests.⁵⁵ An institution must report its investigation findings to ORI for review and ORI may then make a federal determination of misconduct.⁵⁶

As noted above, in March 1999, the HHS Review Group made fourteen recommendations to improve the PHS misconduct policies and procedures.⁵⁷ The Secretary of HHS accepted these recommendations in July 1999, and she approved the necessary organizational changes in May, 2000.⁵⁸ Pursuant to these changes, ORI officially ceased to have authority to conduct investigations.

The responsibility for conducting investigations was transferred to the HHS Office of the Inspector General (“OIG”).⁵⁹ This change may signal the effective end of such HHS investigations because OIG typically investigates Medicare fraud cases that result in very large recoveries and enhance the prestige of that office, while little public support can be gleaned from investigations with no prospect of monetary recovery.⁶⁰ Despite ORI’s apparent loss of the ability to conduct formal investigations, its review of an institutional finding of misconduct has many of the same attributes as an investigation. During such a review, ORI contacts and interviews potential witnesses—including parties who did not participate in the institutional inquiry—and develops new evidence beyond that identified by the reporting institution.⁶¹ Thus, the primary effect of the change in ORI investigatory power is that it cannot take over an institutional investigation the way it could have in the past.

53. 42 C.F.R. § 93.307 (2005).

54. *Id.*

55. 42 C.F.R. § 93.314 (2005).

56. *See* 42 C.F.R. § 93.403 (2005).

57. MAHONEY, *supra* note 8, at Part IV.

58. *See* HHS REVIEW GROUP REPORT, *supra* note 8.

59. *See* 69 Fed. Reg. 20,778 (Apr. 16, 2004); *id.* at 20,782.

60. Although ORI worked with OIG in cases prior to May 2000, OIG appears to have played only a minor role and did not recommend criminal sanctions or civil penalties in those cases unless a qui tam action had been filed. *See* OFF. RES. INTEGRITY, U.S. DEP’T HEALTH & HUM. SERVS., ANNUAL REPORTS, http://ori.dhhs.gov/publications/annual_reports.shtml (listing ORI Annual Reports by year, with each year indicating the number of referrals to the HHS Office of Inspector General) [hereinafter ORI ANNUAL REPORTS]. *But see* OFF. INSPECTOR GEN., U.S. DEP’T HEALTH & HUMAN SERVS., WORK PLAN 44 (2006), *available at* <http://oig.hhs.gov/reading/workplan/2006/WorkPlanFY2006.pdf> (indicating a focus on Integrity of Research Involving Human Subjects); *id.* at 52 (indicating that the OIG will continue to work with the Department of Justice to develop and pursue cases involving false claims from institutions receiving PHS funds). Although the public is interested in safety in clinical trials of new drugs and devices, those cases typically fall under the purview of the FDA, not ORI, because the research typically is not sponsored by PHS but the commercial entity that is submitting the information to the FDA for approvals. *See id.* at 46–47.

61. *See* 42 C.F.R. § 93.403 (2005).

2. PHS and Institutional Misconduct Findings

The HHS Review Group found that, prior to 2000, the PHS and ORI accepted institutional findings approximately ninety to ninety-five percent of the time and initiated its own investigations only five percent of the time.⁶² Since 2000, ORI has not recommended a federal finding of misconduct against an individual without an institutional finding of misconduct.⁶³ Conversely, up through December, 2004, ORI rejected eighteen institutional findings of misconduct as a basis for a federal finding of misconduct.⁶⁴ All but one of these rejections occurred after 2000.⁶⁵ Further, it is important to note that these are cases in which ORI opened a case file believing that the alleged misconduct might fit within the federal definition of misconduct. Cases in which ORI knows *a priori* that the conduct will not satisfy the federal definition of misconduct or in which it will not have jurisdiction are never accorded case status within the ORI system.⁶⁶ Accordingly, there may be many more institutional findings of research misconduct that do not result in a federal finding.

3. PHS Misconduct Hearings

Since 1992, under an interim policy, ORI has offered hearings to those

62. See 69 Fed. Reg. 20,781 (2004).

63. This is based on reading all the cases where ORI made a finding of misconduct.

64. See FOIA response from Darlene Christian, Freedom of Information Officer, Dep't of Health & Human Servs., to author (Jan. 13, 2005) (on file with author). Two of these cases involved rejecting an institutional finding of plagiarism. See ORI Case No. 1996-16; ORI Case No. 2001-20 (available through FOIA from ORI). See Feb. 18, 2005 response from PHS to Parrish (on file with author).

65. In fact, before 2000, ORI only rejected one institutional finding of misconduct. See Letter from Office of Public Health and Science to author (Feb. 18, 2005) (on file with author). In 2000, ORI closed one case. See OFF. RES. INTEGRITY, U.S. DEP'T HEALTH & HUM. SERVS., HIGHLIGHTS OF 2000 ORI ANNUAL REPORT (2001), available at http://ori.dhhs.gov/documents/annual_reports/ori_annual_report_2000.pdf [hereinafter ORI ANNUAL REPORT 2000]. In 2001, ORI closed three cases. See OFF. RES. INTEGRITY, U.S. DEP'T HEALTH & HUM. SERVS., ANNUAL REPORT 2001 (2002), available at http://ori.dhhs.gov/documents/annual_reports/ori_annual_report_2001.pdf [hereinafter ORI ANNUAL REPORT 2001]. In 2002, ORI closed four cases. See OFF. RES. INTEGRITY, U.S. DEP'T HEALTH & HUM. SERVS., ANNUAL REPORT 2002 (2003), available at http://ori.dhhs.gov/documents/annual_reports/ori_annual_report_2002.pdf [hereinafter ORI ANNUAL REPORT 2002]. In 2003, ORI closed six cases. See OFF. RES. INTEGRITY, U.S. DEP'T HEALTH & HUM. SERVS., ANNUAL REPORT 2003 (2004), available at http://ori.dhhs.gov/documents/annual_reports/ori_annual_report_2003.pdf [hereinafter ORI ANNUAL REPORT 2003]. Finally, in 2004, ORI closed three cases. See OFF. RES. INTEGRITY, U.S. DEP'T HEALTH & HUM. SERVS., ANNUAL REPORT 2004 (2005), http://ori.dhhs.gov/documents/annual_reports/ori_annual_report_2004.pdf [hereinafter ORI ANNUAL REPORT 2004].

66. See ORI ANNUAL REPORT 2005, *supra* note 22. The report claims that for allegations to become cases, they need to meet the definition of scientific misconduct established by PHS regulations. The ORI determines whether the incident reported (if found to be true), constitutes "fabrication, falsification or plagiarism." The allegations cannot become cases if, for example, the allegations represent questions of "honest differences in interpretations or judgments of data," which are expressly excluded from the PHS definition of scientific misconduct.

individuals who dispute a proposed finding of misconduct.⁶⁷ Hearings are conducted before a panel of three members of the HHS Departmental Appeals Board (“DAB”), which is generally staffed by lawyers.⁶⁸ The interim policy provides for the inclusion of up to two scientists on a panel.⁶⁹ That being said, no case has ever included two scientists on a panel, and many panels involved none.⁷⁰ However, as discussed more fully below, recently ORI has been more selective about cases in which it will allow a hearing and has settled the vast majority of the cases by agreement.⁷¹ Since 1992, the hearing process has commenced for twelve cases,⁷² but only six cases have completed the entire hearing process.⁷³ As a function of the current emphasis on settlement, ORI has not participated in a research misconduct hearing since October, 2000.⁷⁴

The new regulations change the current hearing process from one before a three-member panel, which may include up to two scientists, to one before a single Administrative Law Judge (“ALJ”) appointed by the DAB.⁷⁵ The ALJ may engage an expert in the type of science at issue in the case if either party requests that one be appointed, or if the ALJ determines that one is necessary, but that expert does not have decision-making authority.⁷⁶

67. See 42 C.F.R. §§ 93.400, 93.501 (2005).

68. Off. Res. Integrity, U.S. Dep’t Health & Hum. Servs., Handling Misconduct—Hearings, <http://ori.hhs.gov/misconduct/appeals.shtml> (last visited Nov. 15, 2006).

69. *Id.*

70. See *infra* note 75 and accompanying text.

71. Although the accused scientist is the party who is entitled to request a hearing, ORI may choose not to recommend a finding of misconduct if the respondent contests the finding and requests a hearing, and ORI does not believe that the evidence will support a finding of misconduct by the DAB.

72. See Robert C. Gallo, DAB Case No. A-93-91; Mikulas Popovic, DAB Case No. A-93-100; Evan Dreyer, DAB Docket No. A-2000-72 (2000); Rameshwar Sharma, DAB Docket No. A-93-50 (1993); Theresa Imanishi-Kari, DAB No. 1582 (1996); Catherine Kerr, DAB Docket No. A-95-123 (1995); Paul Langlois, DAB No. 1409 (1993); John Hiserodt, DAB No. 1466 (1995); Margit Hamosh, DAB Case No. A-93-56; Raphael Stricker, DAB Case No. A-93-91; Kimon Angelides, DAB No. 1677 (1999). Three misconduct cases were appealed to the DAB prior to the creation of ORI. See C. David Bridges, DAB No. 1232 (1991); Michael Sherer, DAB Case No. 89-24; Michael Trulson, DAB Case No. 91-106.

73. Margit Hamosh, Raphael Stricker, Maie Elkassaby, Evan Dreyer and Catherine Kerr withdrew their appeals after initiating the process. See DAB Docket Nos. A-93-56, A-93-31, A-93-168, A-97-2000 and A-95-123 respectively. ORI withdrew its case against Robert Gallo. See DAB Docket No. A-93-91, Ltr to C. Ford from C. Pascal (Nov. 12, 1993).

74. During the period 1996–2000, ORI made fifty-nine findings of misconduct. See ORI ANNUAL REPORTS, *supra* note 60 (listing links to the ORI Annual Reports for 1996, 1997, 1998, 1999, and 2000). From 2001 to December 15, 2005, ORI made fifty-two findings of misconduct. See *id.* (listing links to the ORI Annual Reports for 2001, 2002, 2003, 2004, and 2005). See also LAWRENCE J. RHOADES, OFF. RES. INTEGRITY, ORI CLOSED INVESTIGATIONS INTO MISCONDUCT ALLEGATIONS INVOLVING RESEARCH SUPPORTED BY THE PUBLIC HEALTH SERVICE: 1994–2003 (2004), *available at* <http://www.ori.dhhs.gov/documents/Investigations1994-2003-2.pdf>. Thus, the lack of hearings does not appear to be related to the number of misconduct findings made by ORI.

75. See 42 C.F.R. § 93.502 (2005).

76. See *id.* However, even if a party requests an expert, the ALJ is not required to appoint one. *Id.*

B. NSF Process and Changes Thereto

NSF has always offered a hearing if a proposed sanction against a respondent includes the possibility of being disbarred. When NSF revised its regulations in April, 2002, NSF indicated that in “structuring procedures in individual cases, NSF may take into account procedures already followed by other entities investigating or adjudicating the same allegation of research misconduct.”⁷⁷ To date, no individual has had a hearing afforded by NSF.⁷⁸

C. Associations

The role of associations in investigating and sanctioning members found guilty of misconduct is still evolving, but it appears that most professional societies have decided not to use their limited resources to pursue these cases.⁷⁹ The American Historical Association (“AHA”) has come full-circle on whether it should have any role in these cases. The AHA began inviting and adjudicating complaints beginning in 1986. Relevant AHA policies were articulated in statements issued in May, 1987,⁸⁰ and were subsequently amended several times, most recently in January, 2003.⁸¹ After investigating—or attempting to investigate, as in the case of Stephen Oates—a series of high profile cases,⁸² in May, 2003 the AHA announced that it would no longer investigate allegations of plagiarism or fraud against historians, but would devote its efforts to education.⁸³

In making this change, the AHA stated that (1) because its investigations were confidential, they had not been successful in making an impact on the profession,⁸⁴ (2) because only formal complaints were considered, obvious plagiarism and professional misconduct were not addressed, (3) the investigation process was complicated and time-consuming, and (4) it had no ability to impose sanctions for misconduct.⁸⁵ The president also noted that the AHA can only expel someone

77. 45 C.F.R. § 689.2(d) (2005).

78. See generally NSF OIG reports (on file with author).

79. See, e.g., Press Release, *supra* note 12.

80. There is no record online of the original statement of the AHA’s policies, only the most recent version is available online. Am. Hist. Ass’n, Statement of Standards of Professional Conduct (Jan. 6, 2005), available at <http://www.historians.org/pubs/Free/ProfessionalStandards.cfm>. AHA claims that the Statement on Standards of Professional Conduct is “[w]holly revised from an earlier statement adopted May 1987; amended May 1990, May 1995, June 1996, January and May 1999, May 2000, June 2001, and January 2003.” *Id.*

81. *Id.* The most recent amendment was adopted on January 6, 2005. The original policies were also amended in May 1990, May 1995, June 1996, January and May 1999, May 2000, and June 2001. *Id.* These amendments were briefly mentioned at the beginning of the current Statement on Standards of Professional Conduct. *Id.*

82. See Bartlett & Smallwood, *supra* note 11 (discussing the high-profile cases of Doris Kearns Goodwin and Stephen F. Ambrose).

83. See Press Release, *supra* note 12.

84. For example, in 2002, Dr. Judy Wu complained to the AHA that she had been plagiarized, and the AHA ruled in her favor but did not announce the disposition of the case on its website or otherwise publicize it. See Bartlett & Smallwood, *supra* note 11, at A10.

85. See Press Release, *supra* note 12.

from its organization—while others can apply more meaningful sanctions—and that such a limitation on the disposition of cases is a poor allocation of the association’s resources.⁸⁶ He added that a majority of scholarly societies in the humanities and social sciences have made the same decision not to use their limited resources to investigate allegations of misconduct.⁸⁷ Mark Frankel, the director of the Scientific Freedom, Responsibility, and the Law program at the American Association for the Advancement of Science, has suggested that associations investigate misconduct only if they have broad membership support and considerable resources with which to defend themselves in subsequent litigation.⁸⁸

Societies and associations that have sanctioned members for academic misconduct have been threatened by the members they sanctioned. For example, the American Philological Association (“APA”) found that member Martin Miller had plagiarized another member’s article, including a hand drawing of the original author, and publicly censured him.⁸⁹ The APA further notified the relevant journal that the article should be deleted from its listing because it was not an original work.⁹⁰ The journal, however, declined to retract the article, and the accused researcher threatened to sue the APA for defamation for publishing the finding in its newsletter.⁹¹ Shortly thereafter, the APA began requiring its fellows to sign a document acknowledging their obligation to comply with APA and National Endowment for the Humanities (“NEH”) regulations concerning research misconduct and releasing the APA from any liability for compliance with these procedures.⁹²

Nonetheless, associations and professional societies may have a constructive role in keeping the entities primarily responsible for investigations honest in their assessments. For example, in a case involving a Boston College (“BC”) theology professor accused of plagiarism in a book on ethics, the accuser notified the relevant publisher, State University of New York (“SUNY”) Press, and BC of the

86. *Id.*

87. See Thomas Bartlett & Scott Smallwood, *Mentor vs. Protégé*, CHRON. HIGHER EDUC., Dec. 17, 2004, at A14. Cf. Joey F. George et al., *Report of the Ad Hoc Committee on Member Misconduct to the AIS Council*, 11 COMM. ASS’N INFO. SYS. 54, 56 (2003). To see the guidelines for handling misconduct established by the AIS Research Conduct Committee, see AIS Research Conduct Committee—Process Guidelines (October 8, 2003) available at http://www.aisnet.org/conduct/Committee_Guidelines.htm.

88. See Bartlett & Smallwood, *supra* note 87, at A14–A15. See also Ned Kock, *A Case of Academic Plagiarism*, 42 COMMS. OF ASS’N FOR COMP. MACH., July 1999, at 96, 103 (discussing how an individual who was plagiarized was informed that academic and research associations lacked budgets to defend against an action brought by the accused plagiarizer).

89. See *Notice of Censure*, AMER. PHILOLOGICAL ASS’N NEWSL. (Amer. Philological Ass’n, Phila., Pa.), Apr. 2003, at 4, available at <http://www.apaclassics.org/Newsletter/2003newsletter/403news.pdf>.

90. *Id.* at 5.

91. *Id.* at 4.

92. See *Professional Matters*, AMER. PHILOLOGICAL ASS’N NEWSL. (Amer. Philological Ass’n, Phila., Pa.), Oct. 2004, at 7, available at <http://www.apaclassics.org/Newsletter/2004newsletter/1004news.pdf>.

allegations.⁹³ SUNY Press declined to take action, stating that the errors were “inadvertent and minor.”⁹⁴ However, after the Boston Psychoanalytic Society conducted an investigation and determined that plagiarism had occurred, and the plagiarized individual asked that the book be withdrawn, SUNY Press agreed to examine the charges again.⁹⁵

Editors and publishers, however, seem to be taking a larger role in these cases. The Committee on Publication Ethics (“COPE”) and the Council of Science Editors (“CSE”), in particular, have provided a forum for editors to seek guidance from other editors on how to handle cases involving allegations of misconduct.⁹⁶ The CSE editorial policy committee developed a white paper to provide guidance to its members on how to handle such cases.⁹⁷ Moreover, during an informal survey of the Council of Editors of Learned Journals, twelve editors indicated that they would be prepared to remove a plagiarizing article from an electronic database, publish a notice of explanation regarding the issue, and indicate that the plagiarizer was not eligible to submit further articles.⁹⁸

III. RECENT CASES

A. ORI cases

From 1989 through January, 1995, ORI and its predecessor agencies, the Office of Scientific Integrity (“OSI”) and the Office of Scientific Integrity Review (“OSIR”), closed ten cases in which it found misconduct.⁹⁹ From 1995 to the close of 2004, ORI closed an additional fourteen such cases.¹⁰⁰ Thus, ORI and its two

93. See Thomas Bartlett, *Theology Professor Is Accused of Plagiarism in His Book on Ethics*, CHRON. HIGHER EDUC., Jan. 21, 2005, at A10.

94. *Id.*

95. See *id.* BC also initiated an inquiry into the allegations. *Id.*

96. COPE and CSE act as a forum, not as in an actual online forum.

97. COUNCIL OF SCI. EDITORS, CSE’S WHITE PAPER ON PROMOTING INTEGRITY IN SCIENTIFIC JOURNAL PUBLICATIONS (2006), available at http://www.councilscienceeditors.org/editorial_policies/whitepaper/entire_whitepaper.pdf. See also *Committee Roundup*, 28 SCI. EDITOR 66 (2005), available at <http://www.councilscienceeditors.org/members/securedDocuments/v28n2p050.pdf>.

98. See Thomas Bartlett & Scott Smallwood, *Professor Copycat*, CHRON. HIGHER EDUC., Dec. 17, 2004, at A8.

99. See the cases of David Bridges, Lonnie Mitchell, James Freisheim, Leo Paquette, Mark Kowalski, L. Cass Terry, Jin Tong Wang, David Van Thiel, Herbert K. Naito and Gerald August (on file with author). A March 2005 FOIA response indicated that PHS plagiarism findings were also made in the following cases that predated the formation of ORI: Bhalla, OSI Case No. 113 (available through FOIA from ORI) (Univ. of Iowa); Everley, OSI Case No. 89-10 (available through FOIA from ORI) (Univ. of Pittsburgh); Cassell, OSI Case No. 89-20 (available through FOIA from ORI) (Univ. of Alabama); and Elmaleh, OSI Case No. 90-39 (available through FOIA from ORI) (Harvard found plagiarism in a grant application). See Parrish, *supra* note 2.

100. See Abdulahi, Yahya, 61 Fed. Reg. 39,461 (July 29, 1996) [hereinafter Abdulahi]; Farooqui, Jamal, 61 Fed. Reg. 16,803 (Apr. 17, 1996) [hereinafter Farooqui]; Landay, Alan, 60 Fed. Reg. 47,390 (Sept. 12, 1995) [hereinafter Landay]; Imam, S. Ashraf, 62 Fed. Reg. 66,372 (Dec. 18, 1997) [hereinafter Imam]; Rosales, Oscar, 60 Fed. Reg. 44,358 (Aug. 25, 1995)

predecessors have evaluated approximately 123 allegations of plagiarism over the years and determined that misconduct had occurred in twenty-four of them.¹⁰¹ Approximately ten percent of all those cases involving formal findings of research misconduct involved plagiarism.¹⁰²

In 1994, all the ORI plagiarism cases that were reported involved plagiarized material appearing in a grant application or a publication.¹⁰³ Since then, ORI has not limited plagiarism findings to those in grant applications and publications, but has also found the presentation of plagiarized material to a research group and to a mentor to constitute misconduct.¹⁰⁴ Further, ORI has made formal findings of plagiarism with respect to figures,¹⁰⁵ micrographs,¹⁰⁶ and DNA sequences.¹⁰⁷

As was the case in 1994, most of the allegations of plagiarism ORI has examined have involved plagiarized materials in grant applications.¹⁰⁸ Allegations of plagiarized material appearing in grant applications can derive from another grant application, including those obtained during the peer review process and those submitted by others in the same research group.¹⁰⁹ Allegations may also

[hereinafter Rosales]; Jacoby, David R., 66 Fed. Reg. 35,982 (July 10, 2001) [hereinafter Jacoby]; Karunakaran, Thonhi, 68 Fed. Reg. 46,642 (Aug. 6, 2003) [hereinafter Karunakaran]; Koltover, Ilya, 68 Fed. Reg. 61,811 (Oct. 30, 2003) [hereinafter Koltover]; Padgett, David A., 66 Fed. Reg. 54,012 (Oct. 25, 2001) [hereinafter Padgett]; Pandurangi, Raghoottama, 66 Fed. Reg. 40,288 (Aug. 2, 2001) [hereinafter Pandurangi]; Qian, Jin, 65 Fed. Reg. 41,468 (July 5, 2000) [hereinafter Qian]; Xiong, Momiao, 66 Fed. Reg. 63,709, (Dec. 10, 2001) [hereinafter Xiong]; Ramalingam, Tirunelveli, 69 Fed. Reg. 43,420 (July 20, 2004) [hereinafter Ramalingam]; Sultan, Ali, 69 Fed. Reg. 67,737 (Nov. 19, 2004) [hereinafter Sultan]. Note that a September 2004 ORI report identified eleven cases of plagiarism during those years. See RHOADES, *supra* note 74, at 7–8. However, that report characterized the Lupu case as a plagiarism case when the reported findings state the case involved fabrication, and the report does not include the Koltover and Kaunakaran cases which were publicly reported as formal findings of plagiarism. *Id.*

101. See ORI ANNUAL REPORTS, *supra* note 60 (listing links to the ORI Annual Reports from 1992 to 2004). A March 7, 2005 FOIA response reporting the number of plagiarism allegations and indicating that findings were made in the cases of Bhalla, Everley, Cassell and Elmaleh, although such findings were not announced in the Federal Register. See FOIA Request Number PHS 2K5-183, at 1 (on file with author).

102. See RHOADES, *supra* note 74 (analyzing ten years of the ORI between 1994–2003 and finding 6% of cases involved plagiarism and 4% involved falsification and plagiarism).

103. See Parrish, *supra* note 2.

104. See Koltover, *supra* note 100.

105. See Ramalingham, *supra* note 100; Sultan, *supra* note 100; Qian, *supra* note 100; Pandurangi, *supra* note 100.

106. See, e.g., Koltover, *supra* note 100; Sultan, *supra* note 100; Pandurangi, *supra* note 100.

107. See Karunakaren, *supra* note 100.

108. See Parrish, *supra* note 2.

109. See OFF. RES. INTEGRITY, U.S. DEP'T HEALTH & HUM. SERVS., OFFICE OF RESEARCH INTEGRITY 1996 HIGHLIGHTS 44 (1997), available at http://ori.dhhs.gov/documents/annual_reports/ori_annual_report_1996.pdf [hereinafter ORI ANNUAL REPORT 1996]. Farooqui plagiarized materials in a PHS grant application from a grant application a different researcher had submitted to NSF. *Id.* Farooqui obtained the other researcher's application from a colleague while the application was undergoing confidential peer review. *Id.* See also OFF. RES. INTEGRITY, U.S. DEP'T HEALTH & HUM. SERVS., SCIENTIFIC MISCONDUCT 28 (1998), available at http://ori.dhhs.gov/documents/annual_reports/ori_annual_report_1997.pdf [hereinafter ANNUAL

include plagiarism of a publication or an unpublished paper, or use of data by someone not listed on the grant application or excluding a co-investigator.¹¹⁰ Since 1994, ORI has made formal findings of misconduct in twelve cases involving plagiarized material in a grant application.¹¹¹

Only one of the more recent ORI cases involved plagiarized material in a publication: the case of Alan Landay.¹¹² There, the accused researcher was found to have committed plagiarism at least five times over a five-year period.¹¹³ The instances comprised a half-paragraph to three pages in review papers and one page in the literature section of a paper.¹¹⁴ The university found a pattern of plagiarism.¹¹⁵ Despite the admission and finding of a pattern, ORI found Landay guilty of only two instances of plagiarism—which were, interestingly, those involving PHS support—and he was simply required to certify the originality or proper attribution of publications or grants for a period of two years.¹¹⁶

B. NSF Cases

From 1989 through December, 2000, NSF closed approximately 110 cases that involved allegations of verbatim plagiarism, sixteen of which resulted in findings of misconduct.¹¹⁷ As of December, 2004, NSF had closed thirty-four cases with findings of misconduct based on plagiarism or intellectual theft.¹¹⁸ NSF has noted

REPORT 1997]. Imam plagiarized material in a grant application from a different researcher's independent grant application that he obtained from a colleague. *Id.*

110. *See, e.g.*, ORI ANNUAL REPORT 2002, *supra* note 65, at 73. The respondent allegedly plagiarized ideas and words from a publication by another investigator, and then included the material in a grant application. *Id.* *See also* ORI ANNUAL REPORT 2004, *supra* note 65, at 55. The case involved allegations that the respondent plagiarized a potential research idea from a colleague in his department and included the idea in a grant application, though no misconduct was found. *Id.*

111. *See* Abdulahi, *supra* note 100 (publication); Xiong, *supra* note 100 (confidential proposal); Sultan, *supra* note 100 (multiple publications); Farooqui, *supra* note 100 (confidential grant application); Imam, *supra* note 100 (confidential proposal obtained during review); Jacoby, *supra* note 100 (publication); Koltover, *supra* note 100 (plagiarized a graduate student); Pandurangi, *supra* note 100 (publication); Padgett, *supra* note 100 (unpublished experiments by another researcher); Rosales, *supra* note 98 (published articles); Qian, *supra* note 98 (published text); Ramalingam, *supra* note 100 (publication).

112. *See* Landay, *supra* note 100.

113. *Id.*

114. *Id.*

115. *Id.*

116. *Id.*

117. *See* Letter from Darlene Christian, Freedom of Info. Officer, Dep't of Health & Human Servs., to author (Jan. 14, 2005) (on file with author). More recent years are not included in this statistic because only a limited number of cases are available for those years through the Freedom of Information Act, presumably because the cases had not closed when the most recent FOIA request of November 29, 2005 was submitted. To provide a parallel with the statistics previously provided on ORI cases, between 1989 and December 1994, the NSF closed four cases with a misconduct finding. *Id.* Between January 1995 and December 21, 2004, NSF closed thirty cases with a misconduct finding. *Id.*

118. These statistics are calculated from observations the author has made throughout her legal experience.

that approximately seventeen percent of the allegations received by their offices involve allegations of verbatim plagiarism and twenty-three percent involve allegations of intellectual theft.¹¹⁹ In 1994, all four of NSF's findings of plagiarism involved grant applications.¹²⁰ A review of all of NSF's closed cases indicates that, in addition to examining or inferring the intent of an individual, NSF has conducted a quantitative¹²¹ and qualitative analysis of the text that was copied and whether a pattern of copying exists.¹²²

A review of all the cases in which misconduct was found and premised on verbatim plagiarism reveals that NSF based its findings on the fact that the plagiarism was "extensive," either because of the quantity of material plagiarized or because the plagiarism spanned multiple proposals or papers.¹²³ The smallest amount of copying that supported a finding of misconduct premised on verbatim plagiarism was twenty-two lines.¹²⁴ In one case, the twenty-two lines appeared in the "Experimental Design and Methods" section, which the institution viewed to be substantial and which added a new analytical method to the proposal.¹²⁵ Moreover, the same material had appeared in another proposal submitted to the National Institutes of Health ("NIH").¹²⁶ In a second case involving twenty-two lines, the accused researcher copied from a confidential grant proposal.¹²⁷

The cases in which NSF did not find misconduct, despite the author's and submitting scholar's certification of originality and the existence of verbatim text

119. OFF. OF INSPECTOR GENERAL, NAT'L SCI. FOUND., SEMIANNUAL REPORT TO THE CONGRESS 40 (Sept. 2002), *available at* <http://www.nsf.gov/pubs/2002/oigseptember2002/pdfversions/oigsept2002.pdf> [hereinafter FALL 2002 OIG REPORT].

120. *See* OFF. OF INSPECTOR GENERAL, NAT'L SCI. FOUND., SEMIANNUAL REPORT TO THE CONGRESS (Sept. 1994), *available at* <http://www.nsf.gov/pubs/stis1995/oig11/oig11.txt> [hereinafter FALL 1994 OIG REPORT].

121. The quantitative analysis includes an analysis of how many of the lines were copied and its proportion in regard to the plagiarized work and the original work. *See, e.g.*, OFF. OF INSPECTOR GENERAL, NAT'L SCI. FOUND., CONFIDENTIAL INVESTIGATION REPORT, CASE A02020007 (on file with author). The exact number of lines of plagiarized text, figures, and references were counted to arrive at a total amount of plagiarized material.

122. *Id.*

123. *See, e.g.*, OIG Case No. 98-02 (on file with author) (90% taken from un-attributed sources); 92-07 (on file with author) (2/3 of proposal copied); OIG Case No. 91-04 (on file with author) (250 lines copied in one proposal; 200 lines copied in another proposal); OIG Case No. 95-29 (on file with author) (majority copied); OIG Case No. 02-50 (on file with author) (267 lines copied from a proposal). *Cf.* OIG Case No. 02-47 (on file with author) (finding plagiarism of text and figures in two proposals by the university to be misconduct; NSF declined to make a finding noting that the university's sanctions sufficiently protected the NSF's interests).

124. *See* OFF. OF INSPECTOR GENERAL, NAT'L SCI. FOUND., SEMIANNUAL REPORT TO THE CONGRESS 18 (Sept. 1999), *available at* <http://www.nsf.gov/pubs/2000/oigseptember1999/oigseptember1999.pdf> (reporting OIG Case No. 98-10) [hereinafter FALL 1999 OIG REPORT].

125. *Id.*

126. *Id.*

127. *See* OIG Case No. 02-07 (on file with author). The respondent contested, stating that only fifteen lines were copied. *See also* OFF. OF INSPECTOR GENERAL, NAT'L SCI. FOUND., INVESTIGATION REPORT A0202007, at n.32 (Feb. 6, 2004) (on file with author).

overlaps, suggest that NSF will not find misconduct when the amount copied is not qualitatively or quantitatively significant.¹²⁸

C. U.S. Non-ORI/NSF Cases

There have been a series of allegations involving non-ORI and non-NSF funded researchers. In contrast to the plagiarism occurring in grant applications, most of these cases involved plagiarism in a publication.¹²⁹ The cases of Stephen Ambrose, Doris Kearns Godwin, George Carney, Laurence Tribe, and Charles Olgletree, Jr. all involved plagiarism of a prior author's publication.¹³⁰ A Trinity International University law dean was dismissed for plagiarizing parts of an article that was published in the school's law review.¹³¹ An editor at History News Networks gets so many tips about purported plagiarism that he investigates only well-known authors.¹³²

Further, some allegations of plagiarism cases that are not under PHS or NSF jurisdiction are not investigated or are investigated only informally. For example, after Ned Kock learned that his work had been plagiarized, he contacted the journal that published the article.¹³³ Kock noted that neither the journal nor the institution conducted an investigation.¹³⁴ Eventually, the institution learned that the issue had been discussed at a professional meeting and, according to Kock, forced the plagiarizing individual to resign; however, it is unclear whether it ever conducted a formal misconduct investigation.¹³⁵

128. See, e.g., OFF. OF INSPECTOR GENERAL, *supra* note 124, at 25 (finding that "it was questionable whether the subject's alleged misappropriation [less than one page of background material], given the amount and character of the material involved, was sufficiently serious to be misconduct in science"); OIG Case No. 99-50 (available through FOIA from NSF) (regarding verbatim sentences in the background of a proposal, concluding "although this is a deviation from accepted practices, it does not rise to the level of misconduct in science according to NSF's definition"); OIG Case No. 98-25 (available through FOIA from NSF) (finding five lines of verbatim sentences in the background of the proposal, but "OIG concluded that the amount of material that the subject used without proper attribution, the background function of this material in the subject's proposal, and the inclusion of a citation to the article, taken together, made this matter insufficiently serious to be misconduct in science"); OIG Case No. 98-05 (available through FOIA from NSF) (finding eighteen lines of text copied in the background section was not misconduct); OIG Case No. 97-46 (available through FOIA from NSF) (finding two paragraphs and a mathematical formula copied, but that the "deviation was not sufficiently serious to proceed to an investigation"); OIG Case No. 97-23 (available through FOIA from NSF) (finding an entire paragraph of non-sequential text copied in the background, but concluding that given the "small amount, the nature of the PI's use of that text" although a deviation, was not a serious deviation).

129. Bartlett & Smallwood, *supra* note 11.

130. *Id.*

131. Ana Marie Cox & Richard Monastersky, *Trinity International Dismisses Law Dean Over Plagiarism Charges*, CHRON. OF HIGHER EDUC., Sept. 7, 2001, at A17.

132. Bartlett & Smallwood, *supra* note 11.

133. Kock, *supra* note 88, at 96-97.

134. *Id.* at 104.

135. *Id.*

D. International Cases

Although the United States has provided the most extensive collection of reported cases of misconduct, other countries have begun establishing processes and policies for responding to allegations of misconduct, and a few of those cases have attracted significant attention.

Poland faced its first major misconduct case in 1997.¹³⁶ The case involved plagiarism of an article from the *Danish Medical Bulletin* in the Polish journal *Przegląd Lekarski*.¹³⁷ It eventually led to the discovery of over thirty plagiarized papers by the same individual, Andrzej Jendryczko.¹³⁸ Jendryczko admitted to the plagiarism and apologized.¹³⁹ Unfortunately, however, the case raised questions within the scientific community as to whether Poland has an adequate process for responding to allegations of misconduct.

Similarly, a senior Indian university official and a graduate student were found guilty of plagiarizing an article published six years earlier by a Stanford University professor.¹⁴⁰ The Committee on Publication Ethics (“COPE”), a volunteer committee of editors generally from the United Kingdom and European countries, has reported twelve cases involving allegations of plagiarism that it has examined.¹⁴¹ There have been nineteen findings of misconduct by individuals at institutions of higher learning in the United Kingdom.¹⁴²

There also have been a number of cases involving Chinese¹⁴³ and Japanese¹⁴⁴ authors who have plagiarized sections of articles. In 2002, Beijing University issued a policy for responding to allegations of research misconduct when a faculty member was accused of plagiarizing an American textbook on anthropology.¹⁴⁵ Most of these cases have been discovered by journal editors who became suspicious when the English fluency of the writing varied significantly from

136. Zibigniew Zawadzki & Kamran Abbasi, *Polish plagiarism scandal unearthed*, *BMI.COM*, Feb. 28, 1998, <http://bmj.bmjournals.com/cgi/content/full/316/7132/645/i>.

137. *Id.*

138. *Id.*

139. *Id.*

140. Pallava Bagla, *India: Panel Finds Plagiarism by University Leader*, 299 *SCIENCE* 800 (2003), available at <http://www.sciencemag.org/cgi/reprint/299/5608/800b.pdf>. See also Shabnam Miwalla, *These Scientists Just Cut, Paste, and Submit*, *TIMES INDIA*, Oct. 7, 2002, available at <http://timesofindia.indiatimes.com/cms.dll/articleshow?artid=24498714>.

141. See Plagiarism, Committee on Publication Ethics, <http://publicationethics.org.uk/cases/onezeronine> (last visited Nov. 16, 2006) (listing hypertext links to information about twelve cases).

142. *Id.*

143. From 1990 to 2005, the National Science Foundation of China found misconduct in sixty cases, thirty-four percent of which involved plagiarism. See Gong Yidong, *China Science Foundation Takes Action Against 60 Grantees*, 309 *SCIENCE* 1798, 1798–99 (2005), available at <http://www.sciencemag.org/cgi/reprint/309/5742/1798a.pdf>.

144. See *Science Council of Japan Addresses Misconduct*, *ORI NEWSL.* (Off. Res. Integrity, U.S. Dep’t Health & Hum. Servs., Rockville, Md.), Sept. 2003, at 6, available at http://ori.dhhs.gov/documents/newsletters/vol11_no4.pdf.

145. See Ding Yimin, *Scientific Misconduct: Beijing U. Issues First-Ever Rules*, 296 *SCIENCE* 448 (2002), available at <http://www.sciencemag.org/cgi/reprint/296/5567/448.pdf>.

paragraph to paragraph.¹⁴⁶

E. Sanctions and Conclusions

1. ORI

The sanctions imposed by ORI for a finding of plagiarism typically have been a three-year exclusion from both seeking federal funds and serving on a PHS advisory committee.¹⁴⁷ Other sanctions include a plan for supervision,¹⁴⁸ certification of originality,¹⁴⁹ and certification of originality endorsed by an institutional official.¹⁵⁰ The longest sanction imposed for plagiarism was the five-year exclusion in the *Jacoby* case.¹⁵¹

Sanctions imposed by institutions have included a formal apology,¹⁵² exclusion from being a principal investigator,¹⁵³ exclusion from being a reviewer,¹⁵⁴ certification that an application does not contain plagiarized material,¹⁵⁵ monitoring,¹⁵⁶ supervisor certification that publication and applications do not contain plagiarized materials,¹⁵⁷ attending an ethics course,¹⁵⁸ serving as a co-

146. Letter from Marty Blume, Editor-In-Chief, Am. Physical Soc’y, to author (Jan. 27, 2005) (on file with author).

147. See Ramalingam, *supra* note 100 (barring Ramalingam from seeking federal funds or advising on any Public Health Service Board for three years); Sultan, *supra* note 100 (barring Sultan from seeking federal funds or advising on any Public Health Service Board for three years); Findings of Scientific Misconduct, 61 Fed. Reg. 39,461 (Dep’t Health & Hum. Servs. July 29, 1996) (barring Yahya Abdulahi from seeking federal funds or advising on any Public Health Service Board for three years).

PHS has imposed a broader range of sanctions for findings of misconduct for cases not involving plagiarism. Such sanctions have included recovery of grant monies, restriction of activities under an award, suspending or terminating an award, and letters of apology, correction or retraction. See Off. Res. Integrity, Dep’t Health & Hum. Servs., Handling Misconduct—Administrative Actions (2006), available at http://ori.dhhs.gov/misconduct/admin_actions.shtml.

148. See PHS Administrative Action Detail Listing, <http://silk.nih.gov/public/CBZ1BJE.@WWW.ORIDTLS.HTML> (requiring supervision for three years, among other sanctions, for Ilya Koltover) (last visited Nov. 20, 2006); Findings of Scientific Misconduct, 66 Fed. Reg. 40,288 (Dep’t Health & Hum. Servs. Aug. 2, 2001) (requiring supervision for three years of Raghootama S. Pandurangi).

149. See Koltover, *supra* note 100; Padgett, *supra* note 100; Xiong, *supra* note 100.

150. See Landay, *supra* note 100; Padgett, *supra* note 100; Xiong, *supra* note 100.

151. *Jacoby*, *supra* note 100. He was found guilty of fifteen instances of plagiarism, falsification of an image during the investigation, and forging an institutional official’s signature after the investigation. *Id.*

152. See Xiong, *supra* note 100.

153. *Id.*; see also Farooqui, *supra* note 100.

154. See Farooqui, *supra* note 100.

155. See Xiong, *supra* note 100.

156. See Rosales, *supra* note 100.

157. *Id.*

158. See Xiong, *supra* note 100.

instructor on breakout groups for ethics discussions,¹⁵⁹ and writing a formal essay on plagiarism.¹⁶⁰ One physician was reprimanded and fined by the relevant state medical board in connection with a finding that he was guilty of plagiarism.¹⁶¹

Nonetheless, more recent settlement agreements, including the *Sultan* settlement,¹⁶² suggest several aspects of these agreements that have evolved since the mid-1990s. In the *Sultan* case, Ali Sultan, an assistant professor of immunology at Harvard School of Public Health, plagiarized text and three figures—results of an immunofluorescence assay, a phosphor image, and a Northern blot analysis—from published papers.¹⁶³ He also falsified experimental results and fabricated portions of an e-mail from a post-doctoral student to implicate the student in the plagiarism.¹⁶⁴ Sultan resigned from Harvard shortly after the conclusion of the inquiry and his admission of wrongdoing.¹⁶⁵

The *Sultan* settlement highlights several new features in concluding a misconduct case. First, neither ORI nor the institution conducted an investigation because the accused researcher not only admitted to committing plagiarism, but he also admitted that the plagiarism constituted scientific misconduct.¹⁶⁶ In the past, ORI would have compelled the institution to conduct an investigation regardless of whether there was an admission.¹⁶⁷

Second, ORI required the institution to enter the settlement agreement with ORI and Sultan.¹⁶⁸ In the past, ORI and the respondent, and perhaps respondent's counsel, constituted the parties to the agreement.¹⁶⁹ However, it appears that when an institution foregoes an investigation, the institution must execute the settlement

159. *Id.*

160. *Id.*

161. See Michael Lasalandra, *State Board Reprimands, Fines Doc for Plagiarism*, BOSTON HERALD, April 7, 1998, at 23 (reporting that Mark M. Kowalski was fined \$5,000 and reprimanded for plagiarism and false statements regarding the disciplinary charges against him).

162. See Sultan, *supra* note 100.

163. *Id.*

164. *Id.*

165. See Sultan, *supra* note 100 (describing the three-party Voluntary Exclusion Agreement of October 19, 2004).

166. A number of cases included admissions during the inquiry phase not only of the plagiarism, but also that the plagiarism constituted misconduct. See, e.g., Xiong, *supra* note 100; Sultan, *supra* note 100.

167. See, e.g., Yao, Zhenhai, 67 Fed. Reg. 57,239 (Dep't Health & Hum. Servs. Sept. 9, 2002) (showing that for there to be a settlement based on an admission, ORI conducts the following analysis: (1) Is the signed admission a confession of all the allegations brought against the respondent?; (2) Is there evidence of wrongdoing beyond the scope of the allegations brought forward and therefore beyond the scope of the confession?; (3) Does the confession acknowledge that the respondent engaged in misconduct knowingly, and with intent to deceive the funding community, the institution on behalf of whom the grant was submitted and the scientific community?; (4) Does the respondent understand that a confession may make him liable to governmental sanctions as well as sanctions from the University?).

168. See Sultan, *supra* note 100.

169. See, e.g., Yao, *supra* note 167; Ruggiero, Karen M., 66 Fed. Reg. 64,266 (Dep't Health & Hum. Servs. Dec. 12, 2001) (indicating that, in fact, there have only been six Voluntary Exclusion Agreements in which the institution was also a signatory).

agreement.¹⁷⁰ Third, although Dr. Sultan fabricated documents during the inquiry and attempted to defer blame to another party, he received the standard three-year exclusion.¹⁷¹

Finally, in the past, when a physician was found guilty of misconduct, the settlement agreement always indicated that the exclusion from contracting or subcontracting and non-procurement programs did not preclude reimbursement by the federal government for medical services provided.¹⁷² Dr. Sultan's settlement agreement did not provide for this exclusion, so it is unclear whether Harvard, or any other employer, can continue to receive reimbursement for his medical services.¹⁷³

2. NSF

Although NSF does not require intent for a finding of misconduct,¹⁷⁴ NSF does consider intent in assessing sanctions.¹⁷⁵ In 2002, NSF specified the types of possible consequences attached to a finding of misconduct, with the minimum restrictions categorized as Group I actions and the most severe penalties included in Group III actions.¹⁷⁶ Group I sanctions include a letter of reprimand, a certification requirement of compliance with particular policies, a requirement of special approval, and institutional official representative certification of the accuracy of reports or certification of compliance.¹⁷⁷ Group II sanctions include suspension or restriction of awards, prohibition of serving as a reviewer, and correction of the research record.¹⁷⁸ Group III sanctions include termination of an award, debarment, or exclusion from providing services to NSF.¹⁷⁹ In the plagiarism cases assessed under the post-April 2002 definition, Group I and Group III sanctions have been imposed.¹⁸⁰

170. See, e.g., Sultan, *supra* note 100 (executing a three-party Voluntary Exclusion Agreement). See also Yao, *supra* note 167 (executing a Voluntary Exclusion Agreement).

171. See Sultan, *supra* note 100.

172. See, e.g., Voluntary Exclusion Agreement and Settlement Between Mitchell H. Rosner and ORI (May 5, 1993) (available through FOIA from ORI).

173. See Sultan, *supra* note 100.

174. See 45 C.F.R. § 689.2(c) (2006) (stating that a finding of research misconduct requires that the misconduct be committed "intentionally, knowingly, or recklessly").

175. See e.g., NSF Closeout Memoranda (available through FOIA from NSF, OIG) (citing cases in which there was a finding of scientific misconduct).

176. See 45 C.F.R. § 689.3 (2006).

177. See, e.g., OIG Case No. 99-41 (available through FOIA from NSF); OIG Case No. 99-38 (available through FOIA from NSF); OIG Case No. 99-33 (available through FOIA from NSF).

178. See, e.g., OIG Case No. 98-10 (available through FOIA from NSF).

179. See, e.g., OIG Case No. 01-37 (available through FOIA from NSF) (proposing an eighteen-month voluntary exclusion reached by settlement after three year debarment).

180. See, e.g., OIG Case No. 02-07 (available through FOIA from NSF) (group I), OIG Case No. 02-19 (available through FOIA from NSF) (debarred for a year).

3. Non-PHS/NSF Cases

In contrast, when the plagiarism does not occur in PHS- or NSF-funded research, the sanctions imposed by institutions appear to have been relatively modest. Although some of the plagiarizers have been fired and others demoted,¹⁸¹ most appear to have continued at their institutions.¹⁸²

F. Litigation—False Claims, Theft of Intellectual Property, and Copyright Infringement

A series of litigated cases has involved allegations of plagiarism. Often the cases present a variety of legal theories that involve a combination of False Claims Act issues (if the plagiarism was in a grant application), copyright infringement (if the case involved a publication), and theft of intellectual property.¹⁸³ Further, individuals have been known to bring suit while making allegations of plagiarism,¹⁸⁴ file claims stating that they were unfairly sanctioned after a finding of plagiarism,¹⁸⁵ and sue for false accusations of plagiarism.¹⁸⁶

1. Civil Lawsuits Alleging Plagiarism

In *United States ex rel. Berge v. University of Alabama*,¹⁸⁷ Pamela Berge filed a *qui tam* action asserting false statements in grant applications premised on the University of Alabama-Birmingham's ("UAB") theft of her intellectual property, because it did not disclose her work as the true origin of the work they cited.¹⁸⁸ Berge had been a visiting graduate student at UAB and had used UAB's database on cytomegavirus ("CMV"). After she left UAB and returned to Cornell, she attempted to publish her study results, but was rejected by various journals.¹⁸⁹ At a meeting of the Society for Epidemiological Research, Berge heard a presentation by another graduate student, Karen Fowler, who had been working with the UAB database, and believed that her work had been plagiarized.¹⁹⁰ UAB conducted two investigations and concluded that no plagiarism had occurred.¹⁹¹ Berge then initiated the *qui tam* action, which included a pendant state law claim.¹⁹² After a

181. Scott Smallwood, *The Fallout*, CHRON. HIGHER EDUC., Dec. 17, 2004, at A12 (discussing, among others, the case of Brian Van DeMark of the US Naval Academy, who was demoted and lost \$10,000 in salary but was not fired).

182. *Id.*

183. See False Claims Act, 31 U.S.C. § 3729 (2000).

184. See, e.g., *United States ex rel. Berge v. Bd. of Trs. of the Univ. of Ala.*, 104 F.3d 1453 (4th Cir. 1997). See also *infra* Section F.1 (discussing lawsuits alleging plagiarism).

185. See *infra* Section F.2.

186. See *infra* Section F.3.

187. *Berge*, 104 F.3d 1453.

188. *Id.* at 1456.

189. *Id.*

190. *Id.*

191. *Id.*

192. *Id.* at 1455 (reversing the verdict for a state law claim of conversion of intellectual property).

jury trial, Berge was awarded \$1.66 million.¹⁹³ UAB appealed, and the Fourth Circuit, finding that the purported misrepresentations did not occur or were not material, reversed the trial court's ruling.¹⁹⁴ Further, the Fourth Circuit concluded there was no conversion of intellectual property under Alabama law, which was pre-empted by U.S. Copyright law.¹⁹⁵

In *Phinney v. Perlmutter*,¹⁹⁶ Dr. Carolyn Phinney was invited to consult on a project with Dr. Marion Perlmutter.¹⁹⁷ Dr. Phinney subsequently made allegations that Dr. Perlmutter plagiarized her work by taking credit for her research materials, used it in a federal grant without giving her appropriate credit, and also frustrated Dr. Phinney's ability to publish her work and get it funded.¹⁹⁸ Dr. Phinney further alleged that she was retaliated against when she brought forward the allegations.¹⁹⁹ In 1993, a jury found in her favor and awarded her \$1.1 million on the counts of fraud and whistleblower retaliation.²⁰⁰ The University of Michigan appealed, but the verdict was upheld.²⁰¹ The case was settled for \$1.67 million.²⁰²

In *Dookeran v. Mercy Hospital*,²⁰³ Dr. Dookeran was the director of clinical oncology trials and research for the Mercy Cancer Institute ("MCI").²⁰⁴ The director of MCI, Dr. Zaren, asked Dr. Dookeran to write and submit a grant application for the National Surgical Adjuvant Breast and Bowel Project ("NSABP").²⁰⁵ However, Dr. Zaren and Dr. Dookeran refused to submit the application because they did not believe that Mercy Hospital ("Mercy") had committed appropriate resources to ensure the safety of patients.²⁰⁶ Mercy administrators ordered them to submit the application, but both refused.²⁰⁷ While Dr. Dookeran was on vacation, Mercy representatives obtained the grant application, removed Dr. Dookeran's name, and inserted that of another principal investigator.²⁰⁸ When Dr. Dookeran asserted a charge of scientific misconduct, ORI and Mercy declined to make a formal finding of misconduct.²⁰⁹ ORI noted that the grant sought information about institutional capabilities and did not seek original research ideas from an investigator, and an institution has authority, before

193. *Id.* at 1455.

194. *Id.* at 1459–62.

195. *Id.* at 1462–65.

196. 564 N.W.2d 532 (Mich. Ct. App. 1997).

197. *Id.* at 540.

198. *Id.* at 541.

199. *Id.*

200. *Id.*

201. *Id.*

202. Philip J. Hilts, *University Forced to Pay \$1.6 Million to Researcher*, N.Y. TIMES, Aug. 10, 1997, § 1, at 13.

203. 281 F.3d 105 (3d Cir. 2002).

204. *Id.* at 107.

205. *Id.*

206. *Id.*

207. *Id.*

208. *Id.*

209. *Id.*

and after the submission of an award, to name or substitute an appropriately qualified investigator.²¹⁰ Consequently, Dr. Dookeran brought an action alleging breach of contract, defamation, tortious interference, and theft of intellectual property.²¹¹ In response, Mercy terminated Dr. Dookeran and he filed a retaliation claim.²¹² Dr. Dookeran's claim of retaliation under the False Claims Act failed because the application was for a grant from the NSABP and not an application for a grant of federal funds.²¹³

In *Kauffman v. University of Michigan*,²¹⁴ C.W. Kauffman, an engineering professor, alleged that an administrator, David Hyland, stole his intellectual property when Hyland plagiarized an educational grant proposal that he had written.²¹⁵ Kauffman claimed that the administrator had submitted the application without including him in the project.²¹⁶ The application was later funded, and Kauffman alleged that he was excluded from use of the resulting resources.²¹⁷ In 2000, Kauffman filed suit alleging theft of intellectual property, plagiarism, fraud, denial of due process, and whistleblower retaliation.²¹⁸ The court dismissed all but the whistleblower claim, and Kauffman voluntarily withdrew the claim, while appealing the dismissal of the other claims.²¹⁹ The case is still pending.

In *Demas v. Levitsky*,²²⁰ a graduate student at Cornell University sued a member of her Ph.D. committee and Cornell University on numerous allegations, including fraud, misappropriation of her ideas, breach of contract, negligence, and defamation.²²¹ Demas claimed that Levitsky, a Cornell faculty member, submitted a grant application based on her Ph.D. dissertation and did not include her on the application.²²² Cornell did not find that plagiarism or misconduct had occurred.²²³ In February 2002, the state appellate court dismissed several of the claims, stating that Cornell could not be held vicariously liable for actions by Levitsky that were unrelated to the furtherance of Cornell's business.²²⁴ The case is still pending.

210. Compare with the case of Mark Kowalski, *supra* note 99, who plagiarized a grant application for an AIDS study even though he did not participate in the research. ORI and the institution both made findings of misconduct.

211. *See Dookeran*, 281 F.3d at 106.

212. *Id.* at 107.

213. *Id.* at 109. The district court granted summary judgment to defendants on the ground that Dookeran was not engaged in protected conduct under the FCA, and declined to exercise supplemental jurisdiction to decide the pendent state law claims.

214. *Kauffman v. Univ. of Mich. Regents*, No. 257711, 2006 WL 1084330 (Mich. Ct. App. Apr. 25, 2006).

215. *Id.* at *1.

216. *See id.*

217. *See id.*

218. *See id.* at *1–*4.

219. This information is based on the author's observations.

220. 738 N.Y.S.2d 402 (N.Y. App. Div. 2002).

221. *Id.* at 407.

222. *Id.* at 405–06.

223. *See* Scott Smallwood, *After a Professor Took Credit for a Graduate Student's Research, Cornell Found Little Amiss*, CHRON. HIGHER EDUC., Apr. 12, 2002, at A10.

224. *Demas*, 738 N.Y.S.2d at 409–10. *See also* Smallwood, *supra* note 223, at A11.

Plagiarism, on its own, typically is not a basis for legal action, but copyright infringement is.²²⁵ Copyright law protects “original works of authorship fixed in any tangible medium of expression,”²²⁶ but does not protect “any idea, procedure, process, system, method of operation, concept, principle, or discovery. . . .”²²⁷ Thus, three distinctions emerge between copyright infringement and plagiarism.

First, copyright infringement operates on a standard of strict liability, so a copier’s intent is usually not a factor.²²⁸ Second, copyright protection only extends to the expression, not the ideas behind the words used.²²⁹ Lastly, providing appropriate attribution to the original source, even if it is the same original author who has simply assigned the copyright to a third party, does not vitiate a finding of copyright infringement.²³⁰ Thus, even if a researcher cited the source from which he copied, such copying can still constitute copyright infringement.²³¹

Several cases have explored the relationship between copyright infringement and plagiarism. In *Weissmann v. Freeman*,²³² a researcher and his assistant employed a practice of recycling a syllabus they used to teach a course.²³³ When the instructors had a disagreement, the assistant revised the syllabus and filed for copyright protection.²³⁴ When the researcher recycled the syllabus consistent with their prior practice, the assistant filed a complaint alleging copyright infringement of the revisions.²³⁵ Reversing the District Court’s findings, the Second Circuit found that the researcher was not a coauthor and had therefore infringed the work.²³⁶ Montefiore Medical Center, however, noting the prior practice and implied consent, declined to institute a formal finding of plagiarism.²³⁷

Although few cases involving allegations of plagiarism result in a successful monetary recovery based on copyright infringement, the potential exposure of such claims has publishers taking an active role in response to such allegations. Thus,

225. See, e.g., *Weissman v. Freeman*, 684 F. Supp. 1248 (S.D.N.Y. 1988), *aff’d in part, rev’d in part*, 868 F.2d 1313 (2d Cir. 1989).

226. 17 U.S.C. § 102(a) (2000).

227. 17 U.S.C. § 102(b) (2000).

228. 17 U.S.C. § 501(a) (2000). The one instance where intent is a factor is for allegations of “willful infringement.” 17 U.S.C. § 506(a)(2) (2000).

229. 17 U.S.C. § 102(b) (2000).

230. See, e.g., *Soc’y of Survivors of the Riga Ghetto, Inc. v. Huttenbach*, 535 N.Y.S.2d 670 (N.Y. Sup. Ct. 1988).

231. For example, Dr. Sabit Adanur published a textbook that incorporated ninety-three pages of text from a handbook written thirty years earlier by Ernest Kaswell. Herbert Pratt, *Book Review, CHEMIST*, Sept./Oct. 1996, at 17, 18. Dr. Adanur acknowledged that the textbook relied on Kaswell’s handbook “to a certain extent.” *Id.* Nevertheless, Kaswell sued Dr. Adanur. This information is based on the author’s observations.

232. *Weissman*, 684 F. Supp. 1248.

233. *Id.* at 1254–55.

234. *Id.* at 1251.

235. *Id.*

236. *Weissman v. Freeman*, 868 F.2d 1313 (2d Cir. 1989). See also Scott Jaschik, *Critics Charge Yeshiva U. Tried to Get a Former Professor to Alter Testimony to Congress on Academic Misconduct*, *CHRON. OF HIGHER EDUC.*, May 9, 1990, at A20.

237. See Montefiore Medical Center Investigation Panel, *In the Matter of Leonard Freeman*, ORI Case No. 90-08 (available through FOIA from ORI).

when the University of California Press discovered that an author had plagiarized one of its books into a volume published by British Press, the British publisher withdrew the book.²³⁸ Similarly, when another author complained to his publishing journal that his article had been plagiarized, the journal wrote to the plagiarizing individual, referred to the statutory damages for copyright infringement under U.S. Copyright law,²³⁹ and the plagiarizer signed a letter admitting and apologizing for what he had done.²⁴⁰

Further, as previously noted, duplicative publication is not scientific misconduct although it may be copyright infringement.²⁴¹ Respondents typically are required to provide notice to editors when they are found to have engaged in duplicative publication of the same writing in different published forums.²⁴² In NSF Case Number 97-21, an author had published at least five sets of essentially duplicative research papers in different journals.²⁴³ The university determined that republishing material in conference proceedings that had previously been published in a refereed archived journal, was “the fringe area of acceptable practice,” but was not misconduct.²⁴⁴ With respect to the republishing of material in two separate, first-tier journals, the university found that “it goes way beyond the acceptable standards of scientific practice within [the respondent’s] field,” but because it did not have significant negative consequences and it was an isolated lapse in judgment, the university found it did not constitute misconduct.²⁴⁵ Nonetheless, the author published apologies in both journals.²⁴⁶

2. Individuals Contesting Plagiarism Sanctions

A number of individuals have sued or appealed, which indicates that they were unfairly sanctioned after a finding of plagiarism was made.²⁴⁷ In the case of Mary Zey, Zey accused a former assistant professor and associate professor of plagiarizing her data in a 1998 paper.²⁴⁸ The investigation panel, however, determined that Zey was guilty of plagiarism because she did not include the assistant as a co-author and had thus plagiarized his work.²⁴⁹ Texas A&M’s provost announced Zey was being fired for “flagrant and serious scientific

238. See Peter Monaghan, *Hot Type*, CHRON. HIGHER EDUC., Dec. 17, 2004, at A23.

239. See Kock, *supra* note 88, at 103.

240. *Id.*

241. Parrish, *supra* note 2.

242. *Id.*

243. See NSF Case No. 97-21 (available through FOIA from NSF).

244. *Id.*

245. *Id.*

246. *Id.*

247. See *infra* notes 248–258 and accompanying text. See also March 13, 1993 request for Hearing on Sanctions imposed in Freisheim (on file with author). See OIG Case No. 02-07 (available through FOIA from NSF).

248. See Scott Smallwood, *Professor Accused of Plagiarism Gets to Keep Her Job*, CHRON. HIGHER EDUC., May 17, 2002, at A14.

249. *Id.*

misconduct.”²⁵⁰ Zey appealed claiming that her due process rights had been violated because the University had not followed its own procedures and she was being retaliated against for being the party who first raised the plagiarism charges.²⁵¹ A different faculty subcommittee found Dr. Zey not guilty of plagiarism and found she should not be fired.²⁵² The university president reversed the termination sanction and allowed her to keep her job.²⁵³ In another case, the University of Arizona fired a tenured professor for alleged scientific misconduct.²⁵⁴ A faculty panel had found Marguerite Kay guilty of the misconduct charges and the university president concurred with its findings.²⁵⁵ Kay filed suit alleging denial of her property interest, breach of contract, back pay and compensatory and punitive damages.²⁵⁶ The case was dismissed and Dr. Kay appealed.²⁵⁷ The Ninth Circuit affirmed the dismissal.²⁵⁸

3. Individuals Suing for Unfounded Allegations of Plagiarism

In *Grigorenko v. Pauls*,²⁵⁹ an associate professor at Yale claimed that two other members of her research team had falsely accused her of plagiarism and had misrepresented the evidence regarding their allegations.²⁶⁰ The district court dismissed the state law claim, stating that the allegedly false information had not been “published” under the state law definition, despite its circulation to twelve individuals.²⁶¹

Finally, two math professors at Columbia College in Chicago brought a lawsuit alleging defamation against two professors who had accused them of plagiarizing an article.²⁶² The accusers had circulated a report alleging the plagiarism to thirty

250. *Id.*

251. Elizabeth Taylor, *A&M Professor Fired Amid Charges of Plagiarism*, DAILY TEXAN, July 18, 2001, available at http://tspweb02.tsp.utexas.edu/webarchive/07-18-01/PF2001071801_s01_Zey.html.

252. See Smallwood, *supra* note 248, at A14.

253. *Id.* See Scott Smallwood, *The Fallout: What Happened to Six Scholars accused of Plagiarism*, CHRON. HIGHER EDUC., Dec. 17, 2004, at A12, reporting the case of Jamil Hanafi at Northern Illinois University where he was discovered to have plagiarized portions of his dissertation. He resigned, then sued, but lost. Roger Shepherd sued New York Parson's school of Design stating he was wrongly terminated for plagiarism. *Id.* See also the 1999 case regarding a materials scientist who sued the University of Dayton when he was fired for plagiarism. David Glenn, *Judge or Judge Not?*, CHRON. HIGHER EDUC., Dec. 17, 2004, at A16. Klinge of Ithaca College sued when he was demoted and his salary cut for plagiarism. *Id.*

254. See Courtney Leatherman, *Judge Says U. of Arizona Was 'Arbitrary and Capricious' in Firing a Tenured Professor*, CHRON. HIGHER EDUC., June 11, 1999, at A18.

255. *Id.*

256. *Id.*

257. See *id.*; *Kay v. Likins*, 160 F. App'x 605 (9th Cir. 2005).

258. *Id.*

259. 297 F. Supp. 2d 446 (D. Conn. 2003).

260. *Id.* at 448.

261. *Id.*

262. See Ryan Adair, *Columbia Professors Awarded \$250,000 in Plagiarism Lawsuit*, COLUM. CHRON., Apr. 30, 2001, available at

members of Columbia's faculty and staff.²⁶³ The report stated that the accused scientists had "submitted papers for publication in which they misrepresented these ideas as their own, and without proper credit to the originators of these methods."²⁶⁴ Although an institutional investigation did not find that there had been misconduct, Columbia's insurance company settled the suit for \$250,000.²⁶⁵

IV. PLAGIARISM DETECTION SOFTWARE

The use of computer programs to detect plagiarism in the context of scientific misconduct has been well-known to those in the field, starting with Feder and Stewart's Plagiarism Detection Machine,²⁶⁶ which was used to bring an allegation of misconduct against historian Stephen Oates.²⁶⁷ Since then, a variety of programs have been used to detect plagiarism among students,²⁶⁸ which is believed to be more common with the expansion of the Internet,²⁶⁹ and which has raised concerns regarding copyright infringement and invasion of the student's privacy rights.²⁷⁰

Plagiarism screening tools may be either online services or stand-alone computer programs. Turnitin.com, EduTie.com, MyDropBox.com, and Glatt Plagiarism Services are examples of externally hosted services.²⁷¹ EVE2,

http://www.columbiachronicle.com/back/2001_spring/2001-04-30/campus1.html.

263. *Id.*

264. *Id.*

265. *Id.*

266. See Franklin Hoke, *Science Community Divided on Stewart-Feder Shutdown*, SCIENTIST, May 17, 1993, at 1. The program looked for thirty-character strings that were identical between sources.

267. Other historians, including Stephen Ambrose and Doris Kearns Goodwin, have since been accused of plagiarism. See Bartlett & Smallwood, *supra* note 11.

268. See, e.g., Glatt Plagiarism Services, <http://www.plagiarism.com> (last visited Nov. 20, 2006) (using an algorithm for detection based on the Cloze procedure wherein every fifth word is removed and the author is asked to supply the word, a task plagiarists have difficulty doing); Plagiarism.org, <http://www.plagiarism.org> (last visited Nov. 20, 2006) (detecting similarity by analyzing the structure and content of papers; Plagiarism.org is an affiliate of TurnItIn.com); TurnItIn, <http://www.turnitin.com> (last visited Nov. 20, 2006) (identifying plagiarism by comparing submitted papers to current and archived internet content, and comparing to previously submitted papers stored in a proprietary database); Copycatch, <http://www.copycatchgold.com> (last visited Nov. 20, 2006) (identifying copied portions of papers by using entire documents as a search item in an index of potentially related documents); and Eve2 Essay Verification Engine, <http://www.canexus.com/eve/index3.shtml> (last visited Nov. 20, 2006) (finding plagiarism by searching the internet using phrases from submitted papers).

269. See, e.g., OurWorld, <http://ourworld.compuserve.com> (last visited Nov. 20, 2006); Paper Store, <http://www.paperstore.net> (last visited Nov. 20, 2006); School Sucks, <http://www.schoolsucks.com> (last visited Nov. 20, 2006).

270. See Andrea Foster, *Plagiarism-Detection Tool Creates Legal Quandary*, CHRON. HIGHER EDUC., May 17, 2002, at A37 (discussing the copyright and privacy implications of submitting papers to plagiarism-detecting websites; vendors suggesting that students submit their work directly to the websites to circumvent copyright issues).

271. See, e.g., TurnItIn, <http://www.turnitin.com/static/home.html> (last visited Nov. 20, 2006); EduTie.com, <http://edutie.com/> (last visited Nov. 20, 2006); MyDropBox.com, <http://www.mydropbox.com/> (last visited Nov. 20, 2006); and Plagiarism.org,

CopyCatch Gold and Wcopyfind are examples of stand-alone services.²⁷² The legal issues involved in using this type of service include whether the submitted paper is an educational record which cannot be disclosed to a third party because of Federal Education Records Privacy Act (“FERPA”) requirements, and whether the use violates copyright law.²⁷³ One approach to resolve these concerns is to (1) ask the student to consent to the submission of the work to a service or (2) have the student submit the work directly to avoid FERPA concerns.

Plagiarism detection software also has raised issues regarding the existence of disparate standards for students and faculty in terms of what constitutes plagiarism.²⁷⁴ The number of students caught by these programs,²⁷⁵ and the punishments meted out to them, have grabbed headlines,²⁷⁶ and a number of studies have attested to the widespread problem among students.²⁷⁷

In contrast to their heavy use in cases involving students, these computer programs typically are not used to evaluate the work of faculty members suspected of plagiarism. Some opine that the programs simply identify suspect cases of plagiarism in published works and most research misconduct cases do not involve such allegations.²⁷⁸ Others note that some universities use this software only in the context of honor code violations.²⁷⁹ Recall that most research misconduct policies

<http://www.plagiarism.org> (last visited Nov. 20, 2006).

272. See e.g., Eve2 Essay Verification System, <http://www.canexus.com/eve/abouteve.shtml> (last visited Nov. 20, 2006); CopyCatchGold, <http://www.copycatchgold.com/copycatchesreview.htm> (last visited Nov. 20, 2006); and Louis A. Bloomfield, Software to Detect Plagiarism: Wcopyfind (July 20, 2005), <http://plagiarism.phys.virginia.edu/Wsoftware.html>.

273. See 20 U.S.C.A. § 1232g (West 2000 & Supp. 2006); 34 C.F.R. § 99 (2006).

274. See Scott Smallwood, *supra* note 248, at A14 (discussing the case of Mary A. Zey who was found by the Texas A&M University Provost, Ronald Douglas, to have committed scientific misconduct by plagiarizing a colleague’s work).

275. See Amy Argetsinger, *Technology Snares Cheaters at U-Va.; Physics Professor’s Computer Search Triggers Investigation of 122 Students*, WASH. POST, May 9, 2001, at A01. A University of Virginia physics professor, Louis Bloomfield, wrote a program to detect a six-word match between papers, and asked students to submit their papers electronically with the intention of running them through his own anti-plagiarism computer program. *Id.* It resulted in 122 students facing expulsion charges. *Id.*

276. See Richard Jerome & Pam Grout, *Cheat Wave*, PEOPLE WKLY., June 17, 2002, at 83. A high school teacher, Christine Pelton, failed twenty-eight students after they submitted plagiarized material. *Id.* at 83–84. When the school board reduced the percent of the course grade that the project would count for, the teacher and nine of her colleagues resigned in protest. *Id.*

277. See Donald L. McCabe, Linda Klebe Treviño & Kenneth D. Butterfield, *Cheating in Academic Institutions: A Decade of Research*, 11 ETHICS & BEHAV. 219 (2001) (finding that more than half of high school students admitted to using sentences from the Internet and fifteen percent turned in papers copied entirely from the Internet, while ten percent of college students admitted they borrowed fragments and five percent admitted large passages or entire papers).

278. Kathryn Bender, *Copyright and Plagiarism in the Digital World: Those Cunning Students X* (Nov. 2005) (unpublished manuscript, available from the National Association of College and University Attorneys’ Annual Meeting Binder).

279. *Id.*

would apply to students.²⁸⁰ Nonetheless, it would be an interesting exercise to submit grant applications to such software to determine the level of recycling. It should be noted that colleges and universities use software only in some allegations of plagiarism and not others; they use it against students and not faculty.²⁸¹ Finally, sanctions are imposed against students quickly and they may include dismissal from the institution or failure in the relevant course. In contrast, faculty members found guilty of plagiarism typically are not dismissed from the institution.

CONCLUSION

The definition of plagiarism as a form of research misconduct continues to evolve and cases considered by federal agencies continue to define its contours. It is unclear whether the new definitions of research misconduct and plagiarism adopted by ORI and NSF will change the outcome of pending and future cases. Further, the roles of the agencies, professional associations, and journals continue to evolve, with each appearing unsure of its role in the process. Some professional associations are taking a more active role, while others have given up the prosecutorial role to focus on education. Finally, it appears that individuals, frustrated with the lack of institutional or agency response to their allegations, are pursuing more cases through formal litigation.

280. See ORI ANNUAL REPORTS, *supra* note 60. See also Debra M. Parrish, *Scientific Misconduct and Findings Against Graduate and Medical Students*, 10 SCI. & ENGINEERING ETHICS 483 (2004); Bender, *supra* note 278.

281. Bender, *supra* note 278.

