



NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A02100048

Page 1 of 1

NSF received a proposal¹ that was alleged to include text plagiarized from multiple published papers. The PI did not write the proposal, but submitted it on behalf of the subject,² who worked in the PI's laboratory. Our Report of Investigation was provided to NSF's Deputy Director, who made a finding of research misconduct and imposed sanctions. This Memorandum, our Report of Investigation, and the NSF Deputy Director's letter reflecting his decisions constitute the closeout for this case. Accordingly, this case is closed.

¹ (redacted).

² (redacted).

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DEPUTY DIRECTOR

JAN 31 2005

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

Dr.

Re: Notice of Misconduct in Science Determination

Dear Dr.

On or about July 10, 2002, I submitted a proposal that you authored to the National Science Foundation ("NSF") entitled

As documented in the attached Investigative Report prepared by NSF's Office of Inspector General ("OIG"), the proposal contained plagiarized text.

Scientific Misconduct and Proposed Sanctions

Under NSF's regulations, "research misconduct" is defined as "fabrication, falsification, or plagiarism in proposing or performing research funded by NSF ..." 45 CFR § 689.1(a). NSF defines "plagiarism" as "the appropriation of another person's ideas, processes, results or words without giving appropriate credit." 45 CFR § 689.1(a)(3). A finding of research misconduct requires that:

- (1) There be a significant departure from accepted practices of the relevant research community; and
- (2) The research misconduct be committed intentionally, or knowingly, or recklessly; and
- (3) The allegation be proven by a preponderance of evidence.

45 CFR § 689.2(c).

Your proposal contains verbatim and paraphrased text from several source documents, including two papers that were published in an edition of *Plant Molecular Biology*. By submitting a proposal to NSF that copies the ideas or words of another without adequate attribution, as described in the OIG Investigative Report, you misrepresented someone else's work as your own. In addition, you failed to properly acknowledge or credit the authors of the

source documents in your proposal. Your conduct unquestionably constitutes plagiarism. I therefore conclude that your actions meet the definition of "research misconduct" set forth in NSF's regulations.

Pursuant to NSF regulations, the Foundation must also determine whether to make a *finding* of misconduct based on a preponderance of the evidence. 45 CFR § 689.2(c). After reviewing the Investigative Report and the University Committee Report, NSF has determined that, based on a preponderance of the evidence, your plagiarism was knowing and constituted a significant departure from accepted practices of the relevant research community. I am, therefore, issuing a finding of research misconduct against you.

NSF's regulations establish three categories of actions (Group I, II, and III) that can be taken in response to a finding of misconduct. 45 CFR §689.3(a). Group I actions include issuing a letter of reprimand; conditioning awards on prior approval of particular activities from NSF; requiring that an institution or individual obtain special prior approval of particular activities from NSF; and requiring that an institutional representative certify as to the accuracy of reports or certifications of compliance with particular requirements. 45 CFR §689.3(a)(1). Group II actions include award suspension or restrictions on designated activities or expenditures; requiring special reviews of requests for funding; and requiring correction to the research record. 45 CFR §689.3(a)(2). Group III actions include suspension or termination of awards; prohibitions on participation as NSF reviewers, advisors or consultants; and debarment or suspension from participation in NSF programs. 45 CFR § 689.3(a)(3).

In determining the severity of the sanction to impose for research misconduct, I have considered the seriousness of the misconduct; our determination that it was *knowing*; the determination that it was an isolated event and not part of a pattern; your willingness to accept responsibility for your actions; and the contrition that you demonstrated during the course of the investigative process. I have also considered other relevant circumstances. 45 CFR § 689.3 (b).

I find your plagiarism to be serious; however, the amount of text that you copied is relatively small. In addition, there are several additional mitigating factors that we considered. First, although you failed to provide proper attribution to the authors of the source documents with respect to the text copied, you did cite to these sources in your paper, thereby lessening the impact that your conduct had on the research record. Second, the OIG investigated and expressly found that your actions were an isolated event and not part of a pattern. Lastly, you admitted your error and displayed contrition for your actions.

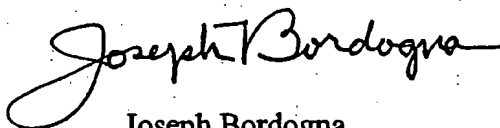
I, therefore, am requiring that, if you submit a proposal to NSF from the date of this letter until May 14, 2007, an official from your university must provide written assurance that the

proposal adheres to the rules of proper scholarship and attribution as required by the NSF Proposal Guide. Such assurance should be sent to the Office of Inspector General, 4201 Wilson Boulevard, Arlington, Virginia 22230.

Procedures Governing Appeals

Under NSF's regulations, you have 30 days after receipt of this letter to submit an appeal of this decision, in writing, to the Director of the Foundation. 45 CFR §689.10(a). Any appeal should be addressed to the Director at the National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230. If we do not receive your appeal within the 30-day period, this decision will become final. For your information we are attaching a copy of the applicable regulations. If you have any questions about the foregoing, please call [REDACTED], Assistant General Counsel, at (703) 292-8060.

Sincerely,

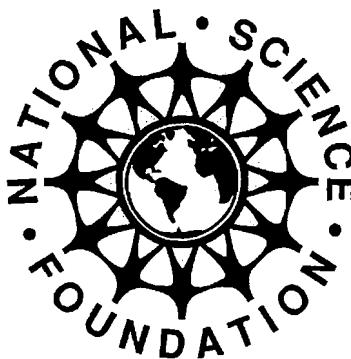


Joseph Bordogna
Deputy Director

Enclosures

- Investigative Report
- 45 C.F.R. 689

National Science Foundation Office of Inspector General



Confidential
Investigation Report
Case Number A02100048

30 September 2004

Summary

The Office of Inspector General (OIG) has concluded a proposal submitted to NSF by the PI contained approximately 44 lines of text plagiarized from multiple sources. Although the PI submitted the proposal, the proposal's author was not listed as the PI or co-PI. As a result of its investigation, the university employing the author and PI found the author engaged in research misconduct, and the PI did not sufficiently fulfill her responsibility as PI. It reprimanded both and took additional steps to ensure the author does not work for the university in any research capacity or claim any association with the university for a period of two years. We recommend NSF send a letter of reprimand to the author informing him he has committed research misconduct. We recommend NSF require, for 3 years from the resolution of this case, the author provide certification that his submissions to NSF are properly referenced and accurate.

OIG Inquiry

We received an allegation that a proposal,¹ submitted by the PI,² contained text plagiarized from multiple papers.³ We wrote to the PI to ask about the copied text.⁴ In her response, she said she had written none of the proposal; she was merely a "sponsor" for a research associate (RA) in her laboratory.⁵ She said the RA wrote the proposal, but, due to university policy, he was unable to submit it; thus, she submitted it under her name as the sole Investigator.

The PI said she discussed the allegation with the RA. The RA identified additional text he had copied into the proposal without, as the PI described it, "sufficiently" rewording" it.⁶ The PI had a general knowledge of the research area, but was not sufficiently familiar with the publications cited in the proposal to be aware of any overlap between the papers and the proposal.

Because neither the PI nor the RA provided sufficient explanation for the uncited text, the PI did not accept responsibility for the text in her proposal, and the alleged author was not listed as an author of the proposal, we determined there was sufficient substance to warrant an investigation. Accordingly, we referred the investigation to the university and deferred our investigation pending receipt of the university's report.

¹ (redacted). The proposal is Appendix (A).

² (redacted).

³ It was alleged the PI copied text from multiple sources, including at least two papers appearing in the (redacted) *Plant Molecular Biology* (redacted).

⁴ Our letter, and the PI's response, is Appendix (C).

⁵ (redacted).

⁶ Appendix (C), PI's response, p. 2.

The University's Actions

Investigation

The university's Vice Chancellor (VC)⁷ asked a Dean⁸ to carry out the investigation. The Dean appointed an Administrative Review Committee of three professors. The committee reviewed the material provided by us as well as additional material to determine if there was additional, undisclosed, copied text and to assess evidence of a pattern. The committee interviewed the PI, the RA, and several administrative staff to learn how the proposal was prepared and submitted.⁹

Regarding the plagiarized text, the committee concluded:

the instances of plagiarism in [the PI's] proposal were substantial (~35 out of ~108 lines in the Background section) and real, but minor in terms of impact. Specifically, the plagiarism is strictly one of sentences and phrases and in no case involves the misappropriation of other scholars' ideas or contributions. . . . [The RA] introduced the plagiarism into the proposal, and he admits to it. At the time the proposal was submitted, [the PI] was unaware that plagiarism had occurred, and she did not contribute to it. However, as PI, she must accept responsibility for the content of the proposal.^[10]

The committee did not find any evidence of a pattern of plagiarism by the RA. However, the committee found other issues of concern associated with the RA's preparation of the proposal. The RA had used an incorrect, non-official title and salary in several sections of the proposal. The RA also, apparently, altered an email to obfuscate a criterion for PI eligibility he did not meet. The committee concluded:

each 'incident'—plagiarism, use of an elevated title, failure to correct the line item in the budget, selective editing of email—by itself is not an egregious violation of professional standards and behavior, but taken together, they constitute a pattern and leave an impression of an individual with a loose sense of professional ethics.^[11]

The committee recommended the Dean reprimand the RA, coupled with a warning about the likely serious consequences of a repeat occurrence. It recommended an official reprimand be given to the PI about her responsibilities as PI and adherence to university rules. The committee also made several recommendations internal to the university to help researchers who are applying for funding.

⁷ (redacted).

⁸ (redacted) is the Dean of Life Sciences.

⁹ The committee's report is Appendix (D).

¹⁰ Appendix (D), report, p. 3.

¹¹ *Ibid.*, p. 13.

Subjects' Responses

The PI and RA responded to the committee report.¹² The PI agreed with the findings of fact, but wanted to clarify her role as PI. She noted she had little time to review the proposal, and, even if she had had adequate time, she likely would not have detected the plagiarism. She suggested the problem in the budget was traceable to NSF and would have been eliminated if NSF changed its deadline for summer submissions. The RA said he did not understand what plagiarism was when he wrote the proposal, although he does now. Regarding his requested salary inflation in the budget, he thought his salary had increased from \$53,000 to \$75,000. He said it was a mistake to use his incorrect title. He said he was sorry for his mistake and will be more careful in the future.

Adjudication

The VC and Dean¹³ accepted the committee's findings and recommendations. The university's adjudication raised several questions. It was not clear what standard of proof was used and how apparently contradictory statements by the Committee¹⁴ were resolved. It was not clear whether the adjudicator made a finding, and, if so, took any action. We wrote the VC, who clarified his adjudication by providing the requested information.¹⁵ The Dean sent letters of reprimand to the RA and PI.¹⁶

OIG's Assessment

We believe the committee followed reasonable procedures and accept its report as accurate and complete; we also accept it in lieu of conducting our own independent investigation. We note, however, in our review of the university's investigation, we found approximately nine additional lines text the RA copied that the university had not identified, bringing the total to 44 lines from four research papers. While the RA included some references to the papers from which he copied, the attribution was insufficient to indicate the text was copied verbatim from the source.

¹² The PI's and RA's responses to the university report are Appendix (E).

¹³ Acting Dean (redacted) replaced Dean (redacted).

¹⁴ For example, the committee said the RA's plagiarism was not an egregious violation of professional standards (p. 13 of its report, Appendix (D)), but, nonetheless, concluded his citation practice significantly departed from those professional standards (p. 10 of its report).

¹⁵ Our letter and the VC's (the adjudicator's) response are Appendix (F). The adjudicator did not find the committee's language contradictory and concluded the RA's act was a significant departure that warranted a finding, but given the nature and extent of the plagiarism, was not egregious enough to warrant more severe action.

¹⁶ The letters are Appendix (G). Neither the committee nor adjudicator concluded the PI's action was misconduct; nonetheless, she received a stern letter of reprimand for her failure to meet the responsibilities of a PI as specified in university policy and her failure to provide the expected mentoring to the RA. The letter will remain in the PI's personnel file for 5 years.

THE ACT

The RA admitted he copied text without providing appropriate attribution. The RA's admission is sufficient for us to conclude a preponderance of the evidence shows that the RA copied, without acceptable attribution, approximately 44 lines of text from published sources.¹⁷

[T]he committee concluded that the non-original material was not properly cited to the author(s) of the material, and further that the citation practice in the NSF proposal departed significantly from the desired and practiced standard of scholarship for publication in [the RA's] and [PI's] field of science.^[18]

We concur with the committee that the RA's copying represents a significant departure from the accepted standards in the RA's field.

INTENT

The committee assessed the RA's intent in copying text from the papers into the proposal as knowing. The committee noted "[h]e does know what plagiarism is and he admits that he copied some text from articles because he could not write it better himself."¹⁹ We conclude the RA's other misrepresentations in the proposal—incorrect title and salary—go to the RA's general state of mind during preparation of the proposal, in which "[t]he committee notes that there is intent to deceive in the misuse of title, and possibly in allowing an inappropriate salary to be listed on the budget."²⁰ We concur with the committee's assessment and conclude a preponderance of evidence shows the RA acted knowingly when he copied uncited text into the proposal. Hence, we conclude the RA's action is plagiarism and constitutes research misconduct.

OIG's Recommended Disposition

In deciding what actions are appropriate when making a finding of research misconduct, NSF must consider several factors. These factors include how serious the misconduct was; the degree to which the misconduct was knowing, intentional, or reckless; whether it was an isolated event or part of a pattern; whether it had significant impact on the research record; and other relevant circumstances.²¹

Given the amount of plagiarized text, the existence of some references to the papers from whence the text came, and the RA's admission, we do not consider the RA's actions to be as serious as other cases we have investigated. However, it is

¹⁷ We note the subject admitted to copying approximately 35 lines. As noted on p. 3 of this ROI, we found an additional 9 lines of copied text, bringing the total to approximately 44 lines of copied text.

¹⁸ Appendix (D), report p. 10.

¹⁹ *Ibid.*, p. 11; emphasis added.

²⁰ *Ibid.*, p. 12.

²¹ 45 CFR § 689.3(b).

still serious enough to warrant a finding and action by NSF. Having no evidence to the contrary, we also accept the university's conclusion that the RA's actions were isolated and not part of a pattern.

Therefore, we recommend NSF send a letter of reprimand to the RA.²² This action mirrors the university's action. We also recommend NSF require the RA provide certifications to OIG, for 3 years from the resolution of this matter, that his submissions to NSF are properly referenced and accurate.²³ This 3-year period consists of 2 years the RA cannot use the university's affiliation plus a 1-year transition period back to the university.

RA's Response

The RA responded to our draft Report of Investigation. We do not find his rebuttal convincing; consequently, our recommendations stand. His primary point is that, as a foreign-born scientist, using English represents an obstacle.²⁴ He wrote he did not know what plagiarism was when he wrote the proposal. As we noted in the Intent section of this Report, the RA used that excuse with the committee, which, similarly, did not find it credible (see fn. 19 and associated text). Furthermore, while the RA did receive his B.S. and M.S. in Korea, he received his Ph.D. in the United States in 1992 and has successfully worked in the U.S. for the past 12 years. In addition to the research training he received as a graduate student, he has completed two post-doctoral tenures at two American universities, and he has demonstrated a sufficient enough command of English and publishing practices to have published more than fifteen research papers in six different journals.

²² This is a Group I action; 45 CFR § 689.3(a)(1)(i).

²³ This is a Group I action; 45 CFR §689.3(a)(1).

²⁴ The RA also suggested there was no reason for him to plagiarize. We disagree and note the RA admitted to the committee he copied some text because he could not write it better (see fn. 19 and associated text). The RA noted we referred to him as RA in this Report although he was not appointed to an RA position. We used RA solely as an acronym for research associate to denote that he was an associate of the PI who performed research, rather than as a formal title.