

CLOSEOUT FOR M98030010

In [redacted] 1998 the Office of Inspector General ("OIG") was informed of allegations of plagiarism and violation of confidentiality of peer review against a university professor¹ (the "subject"). Our inquiry determined that there was substance to the allegations and we deferred the investigation to the University. The University determined that the same plagiarized text was included in several versions of a [redacted] proposal, which was later funded. The University determined that the subject's actions were misconduct in science. OIG accepted the University's report as being fair, accurate and complete, and incorporated the University's findings into its investigation report.

OIG's investigation report and NSF's Acting Deputy Director's [redacted] letter describing his determination constitute the closeout for this case.

CC: IG, Integrity

¹ [Footnote redacted].

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



December 10, 1999

OFFICE OF THE
DEPUTY DIRECTOR

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

[REDACTED]

Re: Notice of Misconduct in Science Determination --
[REDACTED]

Dear [REDACTED]:

In October, 1997, your client, [REDACTED], submitted a proposal to the Division of [REDACTED] at the National Science Foundation entitled [REDACTED]. As documented in the attached Investigative Report prepared by NSF's Office of Inspector General (OIG), [REDACTED] proposal contained plagiarized text.

Scientific Misconduct and Proposed Sanctions

Under NSF's regulations, "misconduct" is defined to include "plagiarism, or other serious deviation from accepted practices in proposing, carrying out, or reporting results from activities funded by NSF." 45 CFR. §689.1(a).

[REDACTED] proposal contains verbatim and paraphrased text and formulas from an NSF proposal which he reviewed¹. By submitting a proposal to NSF that copies the ideas or words of another without adequate attribution, as described in the Investigation Report, he misrepresented someone else's work as his own. This constitutes plagiarism as well as a serious deviation from accepted practices within the scientific community. I therefore conclude that [REDACTED] committed misconduct in science under NSF's regulations.

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 §689.2(a). Group I actions include issuing a

¹ NSF sent [REDACTED] entitled [REDACTED] on [REDACTED] for confidential peer review.

letter of reprimand conditioning awards on prior approval of particular activities from NSF; and requiring certifications on the accuracy of reports or assurances of compliance with particular requirements. 45 CFR §689.2(a)(1). Group II actions include restrictions on designated activities or expenditures; and special reviews of requests for funding. 45 CFR §689.2(a)(2). Group III actions include suspension or termination of awards; debarment or suspension from participation in NSF programs; and prohibitions on participation as NSF reviewers, advisors or consultants. 45 CFR § 689.2(a)(3).

In deciding what response is appropriate, NSF has considered the seriousness of the misconduct, whether it was deliberate or careless; whether it was an isolated event or part of a pattern; and whether the misconduct affects only certain funding requests or has implications for any application for funding involving the subject of the misconduct finding. See 45 C.F.R. §689.2(b).

A mitigating factor is that a relatively small portion of the proposal was plagiarized. However, the plagiarism is more serious because [REDACTED] plagiarized from a proposal which he received in confidence as a peer reviewer.

[REDACTED] has already taken several steps to address [REDACTED] misconduct, including the imposition of a two-year probationary period. I, therefore, take the following action:

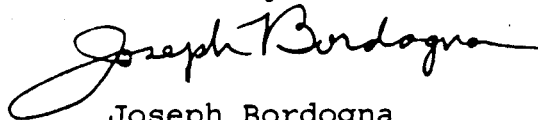
- If [REDACTED] submits any proposals to NSF within two years from the date of this letter, he must simultaneously submit a copy of the proposal along with a separate written certification to the Office of Inspector General, 4201 Wilson Boulevard, Arlington, Virginia 22230. The certification shall state that he has reviewed NSF's Misconduct in Science Regulation (45 C.F.R. Part 689) and that the proposal contains no plagiarized material.
- For the same time period, if [REDACTED] submits a proposal to NSF, he must ensure that his Department chairperson or the equivalent simultaneously submits an assurance to Office of Inspector General that, to the best of that person's knowledge, the proposal does not contain any plagiarized material.
- [REDACTED] is excluded from serving as an NSF peer reviewer, adviser or panelist until two years from the date of this letter.

Procedures Governing Appeals

Under NSF's regulations, your client has 30 days after receipt of this letter to submit an appeal of this decision, in writing, to the Director of the Foundation. 45 CFR §689.9(a). Any appeal should be addressed to the Director at the National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230. For your information we are attaching a copy of the applicable

regulations. If you have an questions about the foregoing,
please call Lawrence Rudolph, General Counsel, at (703) 306-1060.

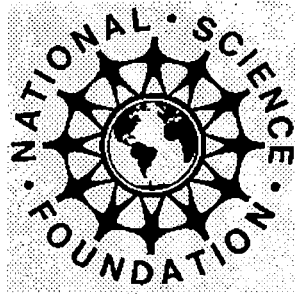
Sincerely,

A handwritten signature in cursive script, reading "Joseph Bordogna". The signature is written in dark ink and is positioned above the printed name and title.

Joseph Bordogna
Deputy Director

Enclosures

Confidential



Office of Inspector General

Investigation Report

OIG Case M98030010

21 SEPTEMBER 1999

REPORT OF INVESTIGATION INTO ALLEGATIONS OF MISCONDUCT IN SCIENCE

SUMMARY

The Office of Inspector General (OIG) has concluded that [redacted] (the "subject"), an Associate Professor of [redacted] from [redacted] (the "University"), plagiarized from a proposal that he received from the National Science Foundation (NSF) for confidential peer review into proposals he submitted to NSF and to the [redacted]. The University conducted an inquiry and investigation into the allegation, and found the subject violated the confidentiality of peer review when he plagiarized that material, hence, misconduct in science. The subject has acknowledged his responsibility for the plagiarism and violation of confidentiality of peer review. We concur with the University's finding.

We recommend that NSF find that the subject committed misconduct in science and take the following actions as a final disposition in this case.

1. The subject should receive a letter of reprimand from the NSF Deputy Director informing him that he committed misconduct in science.
2. For 2 years after the final disposition of this case, when proposals are submitted by the subject or on his behalf to NSF, he should be required to submit certifications to OIG that, to the best of his knowledge, they contain nothing that violates NSF's Misconduct in Science and Engineering regulation (45 C.F.R. part 689).
3. For the same period, the subject should be required to ensure that his department chairperson, or equivalent, submits an assurance to OIG that, to the best of that person's knowledge, the submitted proposals do not contain any plagiarized materials and all source documents are properly cited.
4. For the same period, the subject should be prohibited from participating in peer review for NSF.

OIG'S INQUIRY

OIG received allegations that an NSF proposal¹ submitted by the subject contained text and ideas plagiarized from a proposal² he had received from NSF for confidential peer review (the "source proposal").³ During our inquiry, we found no evidence of substantive intellectual theft in the subject's NSF proposal, but identified 22 lines of substantially similar text, formulas, and references in its experimental design and methods section. Four references within the copied text were identical to those used in the source proposal, with one curious exception. The page and volume numbers on the subject's reference #94 were incorrect, and actually corresponded with the page and volume numbers of the subsequent reference in the source proposal. This error supports the inference that the subject had possession of the source proposal while preparing his proposal, and incorrectly transcribed the reference information.

In a response to our inquiry letter,⁴ the subject did not specifically address the textual material that appeared both in his proposal and the source proposal. He contended that the equations that were used from the source proposal to be "standard equations," and that he "used the form of the standard equations presented in the reviewed proposal in my proposal just as I would use a standard equation from the literature."⁵ He responded to our question about the common references by stating that these references "are commonly found in [the] literature" and that "no new information was taken from the reviewed proposal."⁶ He admitted being "influence[d]" by the proposal, and that there were "more similarities between the two proposals than [he would] like."⁷

After reviewing the evidence and the subject's response to our inquiry letter, we concluded that his explanations about the similarities between the two proposals

¹ The subject submitted [redacted] on [redacted]. The subject was the PI. The proposal requested [redacted] for 3 years of research support. It was [redacted]. (See Appendix 1: Subject's NSF Proposal. Sections that are copied verbatim are highlighted in yellow; sections that are paraphrased are in pink.)

² The source proposal, [redacted], entitled [redacted]. The proposal requested [redacted] for 3 years of research support, [redacted]. (See Appendix 2: Source Proposal. Sections that are copied verbatim are highlighted in yellow; sections that are paraphrased are in pink.)

³ We later learned that the subject's NSF proposal was a modification of an earlier proposal that was funded by [redacted]. (See University's Investigation.) In his response to our inquiry, he implied that he had relied on the source document when revising his NSF proposal. He did not admit that he had included this same material in two prior [redacted] proposals. He described the development of his technical approach dating back to a [redacted] NSF proposal, without mentioning the intervening [redacted] proposals.

⁴ See Appendix 3: OIG's Inquiry Letter.

⁵ See Appendix 4: Subject's Response to OIG's Inquiry Letter, p.19.

⁶ *Id.*, p.20.

⁷ *Id.*, p.21.

were inadequate and there was substance to the allegation. Therefore, we formally deferred the investigation of this case to the University in [redacted].⁸

UNIVERSITY'S INVESTIGATION

In [redacted], we received the University's investigation report (the "report").⁹ The report found that before submitting his NSF proposal, the subject had copied the same material into an [redacted] proposal.¹⁰

The investigation committee (the "committee") reported that the subject "deliberately used a form of an equation evidently unique to the reviewed proposal because he anticipated that the author of that proposal would review his proposal."¹¹ The subject admitted that he paraphrased parts of the source proposal, but contended that the equations and the references were general knowledge in the field, and therefore, copying them did not constitute plagiarism.¹²

After completing their investigation,¹³ the committee unanimously determined that the subject "committed misconduct in science by plagiarizing, i.e., extensive copying/paraphrasing, the wording of a portion of the proposal that the [subject] reviewed."¹⁴ In addition, they stated that his violation of the confidentiality of peer review "strik[es] at the very fabric of the peer review process"¹⁵ and constitutes "scientific misconduct." The committee determined that the subject's actions were "purposeful."¹⁶

⁸ See Appendix 5: OIG's Deferral Letter. After being notified by the University of the inclusion of the same material in an [redacted] proposal, [redacted] opened its own misconduct case.

⁹ See Appendix 6: Committee's Investigation Report.

¹⁰ *Report*, p.1. The subject submitted three versions of a proposal to [redacted]; the second and third versions included the identical sections of plagiarized material as the subject's NSF proposal. The subject's first [redacted] proposal ([redacted]) was submitted on [redacted] and was [redacted]. The subject was sent the source proposal for review by NSF on [redacted]. The subject submitted the second version of his [redacted] proposal ([redacted]), which included the material plagiarized from the source proposal, on [redacted]. The subject submitted his NSF proposal, containing the same plagiarized material, on [redacted]. The third version of his [redacted] proposal ([redacted]), which was submitted on [redacted] and included the same plagiarized material, [redacted]. Although the subject significantly reorganized his [redacted] proposal between the second and the third versions, he retained the plagiarized material intact.

¹¹ *Id.*, p.9. The subject stated: "It comes down to the basic statement that I did use that equation in his format knowing that [the author of the source document] was going to review this proposal." *Id.*, p.3.

¹² *Id.*, p.5.

¹³ The investigation included 6 deliberative meetings of the committee, 2 investigative hearings, an interview with the subject's department head, and review of the subject's aforementioned proposals to [redacted] and NSF, the source proposal, correspondence between the subject and NSF, written and oral statements by the subject to the inquiry and investigation committees, and various NSF OIG Semiannual reports. *Id.*, pp.2-3.

¹⁴ *Report*, p.9.

¹⁵ *Id.*, p.11.

¹⁶ *Id.*, p.10

ACTIONS BY THE UNIVERSITY

The [redacted] received the committee's report and forwarded it to the [redacted]. In its report, the committee recommended that the University take the following actions with regard to the subject:

1. A formal letter of reprimand from the [redacted] should be issued to the subject and placed in the subject's personnel file;
2. The subject should be placed on probation for 2 years during which:
 - a) for the first year, the subject will not submit any proposals as a PI or co-PI;
 - b) during the second year, the subject will certify that all proposals he submits as PI or co-PI are free of scientific misconduct;
 - c) during the second year, the head of the Department of [redacted] will certify that any proposal submitted by the subject is free from scientific misconduct;
 - d) the subject will assemble and read scientific misconduct policy statements, will meet with the [redacted] annually to provide evidence that he has increased his understanding and knowledge of misconduct policies, and the [redacted] will certify annually as to whether the subject has successfully accomplished this task; and
 - e) the subject will not participate as a peer reviewer for any proposal, internal or external to the University.¹⁷

The [redacted] accepted the committee's report and recommended, in addition to the actions suggested by the committee, that the [redacted] award be terminated and all expenditures under the [redacted] award repaid to [redacted].¹⁸ The subject appealed the decision to impose the additional action.¹⁹ The President of the University denied the subject's appeal, and supported the additional action against the subject.²⁰

OIG'S CONCLUSION

We believe the University's investigation report is fair, accurate, and complete in its evaluation of the facts. We have used the report as the basis for our own conclusions about misconduct in science.

A finding of misconduct in science by NSF against a subject requires that the subject both committed a bad act and did so with a level of culpable intent that justifies taking action against the subject. In order to make a finding of misconduct; the subject

¹⁷ *Id.*, pp.12-13.

¹⁸ See Appendix 7: [redacted].

¹⁹ See Appendix 8: Appeal by the Subject.

²⁰ See Appendix 9: President's Decision on Appeal.

must have acted, minimally, with gross negligence. NSF's standard of proof in evaluating each element of misconduct in science is a preponderance of the evidence.

The Act

The subject ultimately admitted that he plagiarized text, formulas, and references from a proposal he received from NSF for confidential peer review into the proposals he submitted to NSF and [redacted].²¹

The quantity of material copied and paraphrased is substantial but not extensive; however, the fact that the source document was a proposal the subject received for peer review makes the subject's act more serious. The committee viewed this violation as "very serious, striking at the very fabric of the peer review process."²² The peer review system has been described as a process that "strives to provide fair (unbiased), careful, and honest evaluation of scientific research. It also can only operate effectively when authors trust that their manuscripts will be handled in a responsible, objective and fair fashion."²³

The committee determined that the subject's actions were contrary to accepted practices in the scientific community, as reflected in the opinion of the Head of the [redacted] Department. The department head stated that, within his department, plagiarism is considered scientific misconduct and is an unacceptable practice.²⁴

Intent

The committee concluded that the subject acted "purposely." They stated that "[p]rimary evidence for this conclusion is based on the [subject's] admission that he used the form of the equation in the reviewed proposal because he assumed that the author of that proposal would review his proposal."²⁵

With regard to the subject's intent, we find it troubling that when he responded to our inquiry letter, at a time when we were unaware of his [redacted] proposals, the subject dissembled in his explanation to us about the drafting process that led to the incorporation of plagiarized materials from the source proposal into his NSF proposal.²⁶ At that time, although he referred to his actions as "unintentional"²⁷ and

²¹ *Report*, pp.4-6.

²² *Id.*, p.11.

²³ David B. Resnik, *The Ethics of Science: an introduction*, p.46.

²⁴ *Report*, p.6.

²⁵ *Id.*, p.10.

²⁶ See Footnote 3.

²⁷ See Appendix 4: Subject's Response to OIG's Inquiry Letter, p.1.

“lazy”,²⁸ he omitted telling us that he had previously copied this same material into an [redacted] proposal, and its later revision.

We are further persuaded of the correctness of the committee’s conclusion after noting that the subject’s addition of the plagiarized description of the source author’s analytical method followed [redacted] rejection of his earlier proposal, of which a reviewer particularly noted a weakness in the analytical method. The plagiarized section, although relatively small in length, added a new analytical method to his proposal that reduced the uncertainty of his results.²⁹

OIG’s Conclusion

We conclude that a preponderance of the evidence supports the conclusion that the subject committed plagiarism when he knowingly inserted 22 lines of verbatim and paraphrased text, formulas, and references from the source proposal into his [redacted] proposal, and subsequently submitted the same plagiarized material in proposals to NSF and [redacted]. The subject’s plagiarism is more serious because he violated the confidentiality of peer review by using information gathered while participating as an NSF reviewer.

The subject’s conduct breached two fundamental NSF policies. The proposal evaluation form submitted by the subject sets out NSF’s policy for protecting the confidentiality of peer review, and it states that reviewers should not “copy, quote or otherwise use material from this proposal.”³⁰ NSF also prohibits plagiarism, and when he submitted his proposal to NSF the subject certified that “the text and graphics herein, . . . unless otherwise indicated, are the original work of the signatories or individuals working under their supervision.”³¹ When the subject copied material from the source proposal, he violated the first policy, and when he copied it into his own proposal, he violated the second.

OIG’S RECOMMENDED DISPOSITION

Under § 689.2(b) of NSF’s misconduct in science and engineering regulation, when deciding what actions are appropriate when misconduct is found, NSF officials should consider any evidence of a pattern, the seriousness of the misconduct, the intent with which the subject acted, and finally its relevance to other funding requests or awards involving the University or the subject.

²⁸ *Id.*, p.19.

²⁹ See Appendix 10: [redacted] Written Review of Subject’s first [redacted] Proposal and the Subject’s Subsequent Revision. We note that on page 13 of the subsequent revision, the subject explained that “the modifications of this proposal from the original submission are indicated by bold-face bracketing.” The plagiarized text is entirely within the bold-faced, bracketed sections.

³⁰ See Appendix 11: Subject’s Proposal Evaluation Form Submitted for the Source Proposal.

³¹ See Appendix 1: Subject’s NSF Proposal, Certification Page, NSF Form 1207 (10/97).

Evidence of a Pattern

The subject submitted the plagiarized material in three proposals – two to [redacted] and one to NSF. Although the subject edited text surrounding the plagiarized section and reorganized sections within the proposals, no changes were made to the plagiarized text. Therefore, we do not contend that there is a pattern of plagiarism, but instead view his continued use of the plagiarized material as an unprofessional practice of utilizing the work of others without providing adequate attribution.

Seriousness

On a scale of the varieties of misconduct in science, we believe the amount of plagiarism in this case is small. In our view, however, plagiarism derived from violation of confidentiality of peer review is sufficiently serious to warrant significant action by NSF to bolster the community's confidence in NSF's peer review process.

Recommended NSF Action

We conclude the subject violated the confidentiality of peer review when he plagiarized text, formulas, and references from the source proposal; that this behavior was a serious deviation from the practices of both the subject's research community as well as the broader scientific community; and that it violated NSF's expectation of how proposals should be reviewed and prepared.

The University's actions in this matter reflect local, community-based standards, which we are not charged to evaluate. The University's actions will amply protect NSF's interests in this case so long as the subject remains at the University. However, to protect the Federal interests if the subject relocates to a new institution, we recommend that NSF take the following actions as a final disposition in this case:³²

1. The subject should receive a letter of reprimand from the NSF Deputy Director informing him that he committed misconduct in science.³³
2. For 2 years after the final disposition of this case, when proposals are submitted by the subject or on his behalf to NSF, he should be required to submit certifications to OIG that, to the best of his knowledge, they contain nothing that violates NSF's Misconduct in Science and Engineering regulation (45 C.F.R. part 689).³⁴

³² We believe that NSF should consider coordinating certifications and assurances with [redacted], to ensure proper protection of federal interests.

³³ This is a Group I action (see 45 C.F.R. § 689.2(a)(1)(i)).

³⁴ This is a Group II action (see 45 C.F.R. § 689.2(a)(2)(ii)).

3. For the same period, the subject should be required to ensure that his department chairperson, or equivalent, submits an assurance to OIG that, to the best of that person's knowledge, the submitted proposals do not contain any plagiarized materials and all source documents are properly cited.³⁵
4. For the same period, the subject should be prohibited from participating in peer review for NSF.³⁶

³⁵ This is a Group II action (see 45 C.F.R. § 689.2(a)(2)(ii)).

³⁶ This is a Group III action (see 45 C.F.R. § 689.2(a)(3)(iii)).