

NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A08090044

Page 1 of 1

Our inquiry determined that an allegation of plagiarism in three NSF proposals¹ submitted by the PI (subject)² appeared to be substantive. The Institution³ conducted an investigation and concluded that the PI plagiarized text into the three proposals. The Institution concluded the subject's actions were research misconduct. We concurred with the Institution and recommended NSF make a finding of research misconduct.

This memo, the attached Report of Investigation, and the Deputy Director's decision letter constitute the case closeout. Accordingly, this case is closed.

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A-9

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DIRECTOR

April 18, 2011

CERTIFIED MAIL –RETURN RECEIPT REQUESTED



Re: Notice of Research Misconduct Determination

Dear [REDACTED]:

From 2003 - 2008, you submitted three proposals to the National Science Foundation ("NSF") entitled, [REDACTED], [REDACTED], and [REDACTED]. As documented in the attached Investigative Report prepared by NSF's Office of Inspector General ("OIG"), these proposals contained plagiarized material.

Research 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 proposals contained verbatim and paraphrased text copied from nineteen source documents. By submitting proposals to NSF that copied 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. 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, NSF has determined that, based on a preponderance of the evidence, your plagiarism was committed knowingly 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, and our determination that it was committed knowingly. I have also considered the fact that you engaged in a pattern of misconduct, that your misconduct had no impact on the research record, and that you have taken positive steps to ensure that you do not repeat this behavior. In addition, I have considered other relevant circumstances. 45 CFR § 689.3(b).

After assessing the relevant facts and circumstances of this case, I am taking the following actions against you:

- (1) Until April 15, 2013, you must provide to the OIG certifications that any proposal or report that you submit to NSF as a PI or co-PI does not contain plagiarized, falsified, or fabricated material;
- (2) Until April 15, 2013, you must provide to the OIG assurances from your employer that any proposal or report that you submit to NSF as a PI or co-PI does not contain plagiarized, falsified, or fabricated material; and

- (3) No later than April 15, 2012, you must take a course on research ethics, with an emphasis on proper citation and attribution, and certify to the OIG that you have completed such a course.

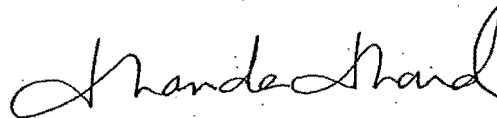
The certifications and assurances should be submitted in writing to the Foundation's OIG, Associate Inspector General for Investigations, 4201 Wilson Boulevard, Arlington, Virginia 22230.

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,

A handwritten signature in cursive script, appearing to read "Wanda Ward".

Wanda Ward
Senior Advisor to the Director

Enclosures

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

National Science Foundation Office of Inspector General



Confidential Report of Investigation Case Number A08090044 15 December 2010

**This Confidential Report of Investigation is provided to you
FOR OFFICIAL USE ONLY.**

It contains protected personal information, the unauthorized disclosure of which may result in personal criminal liability under the Privacy Act, 5 U.S.C. § 552a. This report may be further disclosed within NSF *only* to individuals who *must* have knowledge of its contents to facilitate NSF's assessment and resolution of this matter. This report may be disclosed outside NSF *only* under the Freedom of Information and Privacy Acts, 5 U.S.C. §§ 552 & 552a. Please take appropriate precautions handling this confidential report of investigation

Executive Summary

Allegation: Plagiarism

OIG Inquiry:

- Three unfunded NSF proposals contained text copied from multiple source documents.
- We referred the allegation to the Subject's Institution for investigation.

Institution Investigation and Actions:

- The Institution's inquiry determined a formal investigation was warranted.
- The Investigation Committee concluded a preponderance of the evidence proved the Subject acted intentionally and knowingly when she plagiarized text in the NSF proposals.
- The Vice President for Research recommended to the President (the adjudicator) that the Subject be terminated.
- The final adjudication has not as yet been completed.

OIG Assessment:

We concur with the Institution that the Subject plagiarized text into three NSF proposals.

The Act: The Subject plagiarized a total of 155 lines of text into three NSF proposals from 19 source documents.

Intent: The Subject acted knowingly.

Standard of Proof: The preponderance of the evidence supports the conclusion that the Subject knowingly plagiarized these materials into her NSF proposals.

Significant Departure: We concur with the Institution in concluding the Subject's copying represents a significant departure from community standards.

OIG Recommendations:

- Send a letter of reprimand to the Subject informing her that NSF has made a finding of research misconduct;
- Require the Subject to certify any proposals she submits to NSF for a period of 2 years contain no plagiarized, falsified, or fabricated material;
- Require the Subject to provide assurances that any proposals she submits to NSF for a period of 2 years contain no plagiarized, falsified, or fabricated material; and
- Direct the Subject to provide verification of her completion of an ethics course within one year.

OIG's Inquiry

Our analysis of three NSF proposals,¹ two submitted by Scientist 1² as the sole PI (Proposals 2 and 3) and one submitted by Scientist 2³ as PI and Scientist 1 as co-PI (Proposal 1), revealed about 155 lines of text apparently copied from 19 source documents.⁴ We initiated our inquiry by writing to each of the scientists.⁵

In their responses⁶, Scientist 2 indicated that all text identified as copied material was written by Scientist 1 (The Subject). In the Subject's response, she stated:

I am distressed by the allegations as I have not intentionally or consciously plagiarized material. For all three proposals I did not copy material from any document without citing a source.⁷

The Subject further explained that she: 1) cited her sources; 2) had never seen several of the source documents; 3) thought some of the material was fairly common language; 4) used some material from the original references just as these were cited in the source documents; and 5) could not tell what the original sources were for some of the web materials so she did not know how to reference them.⁸

Since the Subject's response did not dispel the allegation, we determined there was sufficient substance to warrant an investigation, and referred the investigation to the Subject's Institution.⁹

Institution's Investigation

The Institution, following its Policy,¹⁰ opened an inquiry that determined a formal investigation was warranted.¹¹

¹ NSF Proposal [REDACTED]

[REDACTED] All three proposals were declined for funding.

² [REDACTED], Assistant Professor, [REDACTED]

³ [REDACTED]

⁴ Source documents include 17 web pages, one awarded NSF Proposal, and one journal article.

⁵ Tab A.

⁶ Tab B.

⁷ Tab B, subject's response, page 1.

⁸ Tab B, pages 1 and 2.

⁹ Referral Letter to the [REDACTED] (the Institution) Tab C.

¹⁰ Tab D, Ethics in Research Policy.

¹¹ Tab D, Inquiry Conclusion Notification.

The Investigation Committee's Draft Report¹² (the Report) included a thorough analysis of the evidence in this case. The Committee's evaluation concluded that the Subject:

does not dispute the fact that she copied text from someone else's work without properly attributing the text and distinguishing it from her own material. Rather she argues that (a) several of the instances of alleged plagiarism represent cases of common knowledge (e.g. evidentiary material M1 – M5), (b) citation of source documents was provided (e.g. evidentiary material A6), and (c) she was ignorant of the definition of plagiarism vis-à-vis scientific misconduct.^[13]

In reviewing the Subject's explanations, the Committee further determined that, with respect to several instances of the Subject's alleged plagiarism, the material in question could have been considered common knowledge "if it were not for the fact that [the Subject] copied the material word-for-word from the source documents in question."¹⁴ With respect to some citations provided within the paragraphs of copied text, the Committee determined that "the text in question is copied essentially word-for-word from the source document without indication that the copied material is a direct quotation, which is plagiarism."¹⁵ Finally, with respect to the Subject's claim of ignorance about plagiarism, the Committee stated that

ignorance is no defense against the charge of plagiarism. Indeed, the Board was surprised that a scientist/educator with [the Subject's] experience would not understand the definition of plagiarism. The Board also disapproved of suggestions that her mentor(s) shared some responsibility for this misconduct (see [the Subject's] letter to the Board dated 12 June 2009).^[16]

The Committee concluded the preponderance of the evidence supported a conclusion that the Subject committed plagiarism, which was a significant departure from the accepted practices, and the actions were intentional and knowing.¹⁷ The Committee also determined that a "pattern of plagiarism existed,"¹⁸ but this pattern did not have an impact on the research record. Finally, with respect to the awarded NSF proposal identified as a source document, the Committee discovered the proposal had been placed on a website about the time the Subject's proposal was submitted. The Committee noted it was

somewhat mollified about its potential impact on the peer review system because the putative source, rather than being the original proposal, might have been a website that was developed after NSF proposal [1] was funded.^[19]

¹² Tab D, Draft Report to [REDACTED].

¹³ Tab D, Draft Report to [REDACTED], page 3.

¹⁴ Ibid, page 3 and 4.

¹⁵ Ibid, page 4.

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

¹⁹ Ibid, page 5.

The Subject responded to the Committee's report²⁰ and the Committee forwarded its report and the Subject's response to the Vice President for Research (VPR), who, according to the Institution's Policy, is the official responsible for recommending sanctions to the Institution's President. The VPR wrote to the President with his recommendation that the Subject be terminated.²¹ The President of the University concurred with the VPR's recommendation.

OIG's Assessment

Upon receipt of the Report, we wrote the Subject informing her of our independent investigation and asked if she had additional comments concerning the Report. The Subject responded indicating that she never received formal training regarding plagiarism and that some of the proposals were written when she had very little experience in grant writing.²²

We evaluated the Report and accept it as accurate and complete, and we conclude the Institution followed reasonable procedures in its investigation. The Committee was thorough in assessing the evidence and fair in its evaluation. The only aspect of the Institution's investigation that we do not agree with is its determination of the level of intent with which the Subject acted, which it characterized as intentional and knowing. We discuss our conclusions below.

NSF's Research Misconduct Regulation states that a finding of misconduct requires:

- (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 the evidence. [45 CFR § 689.2(c)]

The Act

Reviewing the Subject's inquiry response to our office and the Institution's investigation, we determined the Subject copied verbatim text, totaling 155 lines into three unfunded NSF proposals, without proper attribution. The text came from 19 source documents, one of which was an awarded NSF proposal that we determined had been placed on a website about 8 months prior to the Subject's submission of Proposal 1.²³ The total amount of copied material represents about 4 pages of text.

²⁰ Tab D, [REDACTED] response to Draft Report.

²¹ Tab D, August 27, 2009, Letter to the President.

²² Tab E.

²³ Using the *waybackmachine* (<http://www.archive.org/web/web.php>) we discovered source document A, the NSF awarded proposal, had been made available online on [REDACTED]. The subject's proposal was submitted [REDACTED]. See Tab F for a copy of waybackmachine information.

Proposal	Lines Copied	Source Documents
1	35	3
2	60	8
3	60	8
Total	155	19

Intent

During the investigation, the Subject claimed she was ignorant of proper citation practices, a statement that the Institution's Investigation Committee did not accept. The Committee argued that ignorance was no defense against a charge of plagiarism. Furthermore, it considered surprising the claim that a scientist and educator with the Subject's experience did not understand appropriate citation methods for text written by others. We conclude, therefore, the Subject had both experience in writing and submitting proposals and an understanding of NSF's expectations.²⁴

Further, the Subject received both her master's and doctorate at a well-known university. In addition, she is involved in many activities related to education and editing, and has many publications in established and respected journals.²⁵ Therefore, she had a reasonably extensive background in research citation practices. Based on our review of the evidence and her overall experience, we conclude the Subject knowingly copied the text into her NSF proposal.

Standard of Proof

Based on our review and the review of the Institution's Investigation Committee, we concluded that the preponderance of the evidence indicates that the Subject copied text into her proposals without appropriately distinguishing that text from her own work. Further, OIG concludes, as did the Committee, that the Subject's behavior significantly deviates from accepted practices.

Because the preponderance of the evidence proves that the Subject knowingly copied text into three NSF proposals, OIG concludes that the Subject's actions constitute plagiarism and therefore research misconduct.

²⁴ The subject has submitted 4 proposals to NSF over the past 6 years, two as PI and two as co-PI.

²⁵ Subject received a Ph.D. in [REDACTED]. She was a postdoctoral research associate in the [REDACTED] from 2000 to 2003 and a Research Scientist at [REDACTED]. She became an assistant professor at [REDACTED]. She is a panelist and committee member of the [REDACTED] which, among other things, works to "increase opportunities for girls in science, technology, engineering and math (STEM) through the [REDACTED]." [Biosketch, page 1, Tab G]. She is the chair of the [REDACTED] as well as other educational support activities. (See Biosketch) In addition, she is the editor of [REDACTED] (see Tab G). She mentors PhD and MS students. She has published 4 papers as the lead author in [REDACTED], as well as papers in the [REDACTED].

OIG Recommended Disposition

When deciding what appropriate action to take upon a finding of misconduct, NSF must consider:

(1) How serious the misconduct was; (2) The degree to which the misconduct was knowing, intentional, or reckless; (3) Whether it was an isolated event or part of a pattern; (4) Whether it had a significant impact on the research record, research subjects, other researchers, institutions or the public welfare; and (5) other relevant circumstances. [45 C.F.R. §689.3(b)]

Seriousness

Plagiarism strikes at the very heart of research integrity and is an unacceptable practice within the research community. In addition, the NSF policy in existence at or near the time of the Subject's proposals provided that

NSF expects strict adherence to the rules of proper scholarship and attribution. The responsibility for proper attribution and citation rests with authors of a proposal; all parts of the proposal should be prepared with equal care for this concern. Serious failure to adhere to such standards can result in findings of research misconduct. NSF policies and rules on misconduct in science and engineering are discussed in *Grant Policy Manual* (GPM) Section 930 as well as in 45 CFR Part 689. [GPG section I.B. (10/2003)]

The Subject's actions are a violation of the standards of scholarship long established by NSF.²⁶ The extent of the plagiarism is significant as is the Subject's failure to appropriately distinguish her own text from text that was copied.

Degree of Intent

The act of plagiarism is generally an act done knowingly. Given the Subject's statements, her submissions of several proposals and her education and publishing history, it is clear the Subject knew what NSF expected the author of the proposals to do. In claiming that she was unaware of

²⁶ As early as 1976, in the *Grants for Scientific Research* (NSF application guide for principal investigators), NSF instructed proposal submitters that "A proposal should be self-contained and written with the care and thoroughness accorded papers prepared for publication." (NSF76-38, page 2) Since that time, that concept has appeared and been expanded upon in each successive iteration of this guide. The current *Grant Proposal Guide* states that the proposal "should be prepared with the care and thoroughness of a paper submitted for publication. . . . NSF expects strict adherence to the rules of paper scholarship and attribution. The responsibility for proper scholarship and attribution rests with the authors of the proposal; all parts of the proposal should be prepared with equal care for this concern. Authors other than the PI (or co-PI) should be named and acknowledged. Serious failures to adhere to such standards can result in findings of research misconduct. NSF policies and rules on research misconduct^[here NSF provides the definition of research misconduct] are discussed in the AAG Chapter VII.C, as well as 45 CFR Part 689." NSF 10-01 Grant Proposal Guide I.D.3.

proper scholarship standards, she failed to take responsibility for her actions. Although the Institution's Investigation Committee stated that the Subject's actions could be interpreted as intentional, we believe the preponderance of the evidence cannot support such a conclusion. The evidence does support a conclusion that the Subject's actions were distinctly knowing.

Pattern

The Subject submitted three proposals to NSF that contained plagiarized text. The Subject's practice of plagiarizing text into multiple proposals was part of a pattern of behavior.

Impact on the research record

There is no evidence of any impact on the research record as a result of the plagiarism in the proposals the Subject submitted to NSF.

Recommendations

Based on the evidence, OIG recommends that NSF:

- Send a letter of reprimand to the Subject informing her that NSF has made a finding of research misconduct;²⁷
- Require the Subject to certify that proposals she submits to NSF do not contain plagiarized, falsified, or fabricated material for 2 years;²⁸
- Require the Subject to provide assurances from a responsible official that proposals she submits to NSF do not contain plagiarized, falsified, or fabricated material for 2 years;²⁹
- Direct the Subject to attend a course in research ethics within 1 year of the final disposition of the case and certify to NSF's OIG that she has done so.³⁰

The Subject's certifications and proof of an ethics course should be sent to the Assistant Inspector General for Investigations for retention in OIG's confidential file on this matter.

²⁷ This is a Group I action, 45 CFR §689.3(a)(1).

²⁸ This is equivalent to a Group I action, 45 CFR §689.3(a)(1).

²⁹ This is a Group I action, 45 CFR §689.3(a)(1).

³⁰ This is equivalent to a Group I action, 45 C.F.R. §689.3(a)(1).