



CLOSEOUT MEMORANDUM

Case Number: A13020023

Page 1 of 1

NSF OIG received an allegation that a PI (Subject)¹ copied text without adequate attribution into an NSF proposal (Proposal 1²). Our review identified plagiarism in Proposal 1 and an additional proposal the Subject authored (Proposal 2).³ We referred the matter to the University.⁴

The University's investigation concluded, based on a preponderance of the evidence, that the Subject recklessly committed plagiarism in Proposals 1 and 2 and a journal article,⁵ which it deemed a significant departure from accepted practices, and took actions to protect the University's interests.

We reviewed the University's report; our conclusion regarding intent differed from that of the University. We concluded that the Subject committed the plagiarism knowingly. We recommended actions to be taken to protect the federal interest. The NSF Chief Operating Officer concurred with our recommendations.

This memo, the attached Report of Investigation, and letters from NSF's Chief Operating Officer constitute the case closeout. Accordingly, this case is closed.

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Our interview with the PO determined the copied text was not material to the funding decision.

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National Science Foundation Office of Inspector General



Report of Investigation Case Number A13020023

November 18, 2014

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Executive Summary

Allegation: Plagiarism.

OIG Inquiry: OIG identified 14 sources from which 193 lines and 27 embedded references were copied into two NSF Proposals. OIG referred the investigation to the Subject's institution.

**University
Investigation
and Action:**

The University determined, by a preponderance of the evidence, that the Subject recklessly committed plagiarism in two NSF proposals and a journal article, deemed a significant departure from accepted practices.

The Committee recommended that the awarded proposal's funds, excluding graduate student support, be frozen; the Subject be excluded from receiving or applying for federal funds for one year; and the Subject implement a University-approved responsible conduct of research plan within one year. The University implemented the recommendations. The Subject subsequently was removed from the awarded project, and a new PI was named.

**OIG
Assessment:**

- **The Act:** Subject plagiarized 193 lines and 27 embedded references into two NSF proposals.
- **Intent:** Subject acted knowingly.
- **Standard of Proof:** A preponderance of evidence supports the conclusion that the Subject committed plagiarism.
- **Significant Departure:** The Subject's plagiarism represents a significant departure from accepted practices.
- **Pattern:** One journal article.

**OIG
Recommends:**

- Make a finding of research misconduct against the Subject.
- Send the Subject a letter of reprimand.
- Require certifications from the Subject for a period of two years.
- Require assurances from the Subject for a period of two years.
- Require certification of attending a comprehensive responsible conduct of research training class within one year.

OIG's Inquiry

OIG received an allegation that an awarded NSF proposal (Proposal 1¹) contained copied text. We reviewed Proposal 1 and found 104 lines and 11 embedded references copied from six sources.² Another proposal (Proposal 2³) by the same PI (Subject)⁴ also contained copied text: 89 lines and 16 embedded references from eight sources.⁵ The following chart illustrates the findings:

Sources	Proposal 1	Proposal 2
A (article)	5 lines, 2 embedded references	
B (article)	2 lines	
C (article)	48 lines, 9 embedded references	
D (article)	20 lines	
E (article)	22 lines	
F (article)	7 lines	
G (article)		5 lines
H (article)		28 lines, 8 embedded references
I (article)		12 lines
J (webpage)		8 lines
K (patent)		11 lines
L (article)		3 lines
M (article)		11 lines, 4 embedded references
N (article)		11 lines, 4 embedded references
Total	104 lines and 11 embedded references	89 lines and 16 embedded references

We contacted the Subject regarding the allegation.⁶ Though acknowledging inadequately cited text in some instances, she said that she “did not intentionally copy materials from these documents” and that “the allegations with respect to Sources A~N are inaccurate.”⁷ She explained her use of each source, stating she provided adequate citation for verbatim text when the reference was listed somewhere within the proposal.⁸ She noted that “there is no allegation on the originality and intellectual merits of the proposal,” but that instead “All the allegations are questioning about the similarity of the words and phrases in the motivation, literature surveys or related work section of the proposal.”⁹

¹Tab 1: [REDACTED]
 [REDACTED]
 [REDACTED] Our interview with the PO determined the copied text was not material to the funding decision.

² Tab 2, Sources A-F.

³ Tab 3: [REDACTED]
 [REDACTED] Declined.

⁴ [REDACTED]
 [REDACTED]

⁵ Tab 2, Sources G-N.

⁶ Tab 4.

⁷ Tab 5, GeneralResponse, pg 1. All quotations herein are *sic*.

⁸ Tab 5.

⁹ Tab 5, GeneralResponse, pg 2.

Based on the Subject's response, we concluded an investigation was warranted.

University Inquiry and Investigation

We referred the investigation to the University.¹⁰ Its Inquiry Committee interviewed the Subject, reviewed materials she authored, and determined an investigation was warranted.¹¹

The University convened an Investigation Committee (Committee), which produced a Report.¹² It concluded, by a preponderance of the evidence, that the Subject committed plagiarism in a "reckless" or "very reckless" manner in two NSF proposals and a journal article,¹³ which it deemed a significant departure from accepted practices of her professional association.¹⁴

The Committee used the definition and framework of plagiarism employed by the Subject's primary professional association,¹⁵ noting the Subject is an editor-in-chief of one of the association's major journals.¹⁶ It concluded the Subject committed Level 3 plagiarism, defined as "Uncredited Verbatim Copying of Individual Elements (Paragraph(s), Sentence(s), Illustration(s), etc.) Resulting in a Significant Portion (up to 20%) within a paper."¹⁷ It said that, despite refusing to directly answer whether she committed plagiarism, the Subject's own categorization during her Committee interview of some of the annotated text in her proposals as Level 3-5 plagiarism was "an implicit admission of plagiarism."¹⁸

Regarding intent, the Committee concluded the Subject's plagiarism was "at a minimum reckless" resulting from her process of student advisement.¹⁹ It said the Subject's students and postdocs summarized research in slides, often using copied text from various sources with proper citation. The Subject would then cut and paste material from these slides, often without the citation, into class notes, which she subsequently used to prepare proposals.²⁰ The Committee, however, classified two instances of plagiarism as "very reckless:" the Subject misrepresenting her relationship with a technology company in Proposal 1²¹ and her misrepresenting others' work as her own in Proposal 2.²²

¹⁰ [REDACTED] Tab 6 contains the referral letter. Tab 7 contains the University's research misconduct policy.

¹¹ Tab 8, Inquiry Report, pg 3.

¹² Tab 9. Tab 12 contains additional materials the University provided in response to queries.

¹³ [REDACTED]

¹⁴ [REDACTED] Tab 12 contains the plagiarism detection report for and an annotated version of this article.

¹⁵ [REDACTED]

¹⁶ [REDACTED]

¹⁶ Tab 9, Final Draft, pg 4-5.

¹⁷ Tab 9, Final Draft, pg 4.

¹⁸ Tab 9, Final Draft, pg 4-5.

¹⁹ Tab 9, Final Draft, pg 5.

²⁰ Tab 9, Final Draft, pg 5.

²¹ Tab 9, Final Draft, pg 6-7.

²² Tab 9, Final Draft, pg 7-8.

The Committee found the Subject exhibited a pattern of plagiarism. Specifically, it found the Subject committed Level 3 plagiarism in “considerable portions” of a journal article.²³

The Committee concluded “the plagiarized text [in the proposals] could have resulted in an unfair advantage in a competitive funding process.”²⁴ It asserted that “problem formulation is an intellectual act and the articulation and framing of compelling problems is a contribution in and of itself.”²⁵ It also asserted that “sections of the proposals that we reviewed could be easily construed by reviewers in their assessment of the proposal quality and expertise of the researchers.”²⁶

Lastly, the Committee said the Subject “was very remorseful for this act, claimed to have changed her proposal preparation practices since, and was highly believable in her testimony.”²⁷ It “believe[d] that this situation will not be repeated by her in the future.”²⁸

University Adjudication

The Committee recommended that Proposal 1’s funds, excluding graduate student support, be frozen, No Cost Extension requests be unallowable, and the disposition of remaining funds be determined by the University; that the Subject be excluded from receiving or applying for federal funding for one year; and that the Subject implement a University-approved responsible conduct of research plan within one year.²⁹ The University upheld the recommendations³⁰ and subsequently removed the Subject from the awarded project, requesting and receiving NSF approval for a change in PI.³¹

OIG’s Assessment of the University Report

OIG invited the Subject’s comments on the University Report.³² She replied that she had no additional comments to provide.³³

OIG assessed the Report for accuracy and completeness, and found the Report to be generally accurate and complete. We disagreed however with the Committee’s conclusion regarding intent, and conclude the Subject acted knowingly, rather than recklessly.

²³ Tab 9, Final Draft, pg 5.

²⁴ Tab 9, Final Draft, pg 9.

²⁵ Tab 9, Final Draft, pg 9.

²⁶ Tab 9, Final Draft, pg 9.

²⁷ Tab 9, Final Draft, pg 9.

²⁸ Tab 9, Final Draft, pg 9.

²⁹ Tab 9, Final Draft, pg 10. The Subject completed a responsible conduct of research online course on [REDACTED] (Tab 12, [REDACTED]).

³⁰ Tab 9, Letter from [REDACTED]

³¹ Information received via University correspondence, with eJacket verification.

³² Tab 10.

³³ Tab 11.

The Committee's determination of reckless intent relied on its understanding that the Subject inserted into her proposals material her students provided her through a flawed system of advisement.³⁴ Our determination instead is based on the Subject's own actions or inactions in preparing proposals bearing her name. We noted that the Subject's reliance on student-provided material was not raised either during our initial inquiry or the University's inquiry. Her inquiry response to our office indicated that she was responsible for taking inappropriately cited notes from papers she read in 2008-2009.³⁵ Similarly, the Inquiry Report states:

[The Subject] admitted that in preparing the proposals she cut-and-pasted text from source documents. She claimed that she had intended to modify the text and to provide appropriate attribution. She also expressed the opinion that these cut-and-pasted segments covered concepts in a concise fashion that would be difficult to improve. In completing the preparation of the proposal these segments were not modified significantly, and not attributed. [The Subject] indicated that some of these segments were not taken from her class notes and were cut-and-pasted solely for the preparation of the proposals.³⁶

The Inquiry Report further states that "In response to a direct question, [the Subject] indicated that graduate students and post-doctoral researchers did not contribute to the preparation of her proposals."³⁷ We therefore disagree with the Committee's "assessment that [the Subject] developed and used a research and education process with her students and postdocs that resulted in numerous reckless instances of plagiarism"³⁸ and instead find that the Subject herself acted knowingly in inserting material that at one time did include citations into her proposals without citations.

OIG's Assessment

A finding of research misconduct by NSF requires (1) there be a significant departure from accepted practices of the relevant research community, (2) the research misconduct be committed intentionally, or knowingly, or recklessly, and (3) the allegation be proved by a preponderance of the evidence.³⁹

The Acts

³⁴ The Report's finding that the Subject acted recklessly due to her system of advisement appears to contradict its own explanation. The Report said the student-prepared slides "included proper citations to the work that that [sic] has been copied into the presentations" and that it was later in the process, "during the proposal writing," that the Subject failed to ensure proper citations were included in the final proposal (Tab 9, Final Draft, pg 5). This statement seemingly indicates that it was the Subject's own actions that led to insertion of inadequately cited material.

³⁵ Tab 5, GeneralResponse, pg 2.

³⁶ Tab 8, Inquiry Report, pg 2.

³⁷ Tab 8, Inquiry Report, pg 3.

³⁸ Tab 9, Final Draft, pg 5.

³⁹ 45 C.F.R. §689.2(c).

OIG's investigation concluded that the Subject plagiarized 193 lines and 27 embedded references from 14 sources into two NSF proposals. We also concluded that the Subject's actions constituted a significant departure from accepted standards of the Subject's professional association.

Intent

Based on our investigatory review, as described above, we conclude that the Subject knowingly copied material into Proposals 1 and 2.

Standard of Proof

OIG concludes that the Subject's actions and intent were proven based on a preponderance of the evidence.

OIG concludes by a preponderance of the evidence that the Subject knowingly plagiarized, thereby committing an act of research misconduct.⁴⁰

OIG's 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.⁴¹

Seriousness

The Subject's actions are a violation of the standards of scholarship and the tenets of general research ethics. Copied text serves to misrepresent one's body of knowledge, presenting reviewers with an inaccurate representation of a proposal's respective merit.

Pattern

Plagiarism was identified in two proposals and a published journal article indicative of a pattern of behavior.

Aggravating Factor

The University's Inquiry Committee asked the Subject whether a pattern of plagiarism would be found in her other proposals or publications. Its inquiry report states "She discounted the

⁴⁰ 45 C.F.R. part 689.

⁴¹ 45 C.F.R. § 689.3(b).

possibility of such similarities appearing in her publications because she uses a different approach to writing of papers and she indicated the one does not need to provide such extensive background."⁴² Both the Inquiry and Investigation Committees however identified a journal article containing considerable plagiarism.

Subject's Response to OIG's Draft Investigation Report

- We sent the Subject a copy of our draft report. She did not respond to our letter.

Recommendation

Based on the evidence, OIG recommends that NSF:

- Send the Subject a letter of reprimand notifying her that NSF has made a finding of research misconduct.⁴³
- Require the Subject certify her compliance with the requirements imposed by the University as a result of its investigation.
- Require the Subject certify to the Assistant Inspector General for Investigations (AIGI) her completion of a responsible conduct of research training program and provide documentation of the program's content within 1 year of NSF's finding.⁴⁴ The instruction should be in an interactive format (*e.g.*, an instructor-led course) and specifically include a discussion of appropriate citations practices.

For 2 years as of the date of NSF's finding:

- Require for each document (proposal, report, etc.) to which the Subject contributes for submission to NSF (directly or through her institution),
 - the Subject submit a contemporaneous certification to the AIGI that the document does not contain plagiarism, falsification, or fabrication.⁴⁵
 - the Subject submit contemporaneous assurances from a responsible official of her employer to the AIGI that the document does not contain plagiarism, falsification, or fabrication.⁴⁶

⁴² Tab 8, Inquiry Report, pg 2.

⁴³ A Group I action 45 C.F.R. 689.3(a)(1)(i).

⁴⁴ This action is similar to Group I actions 45 C.F.R. 689.3(a)(1).

⁴⁵ This action is similar to 45 C.F.R. 689.3(a)(1)(iii).

⁴⁶ A Group I action 45 C.F.R. 689.3(a)(1)(iii).

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

OCT 21 2015



OFFICE OF THE
DIRECTOR

CERTIFIED MAIL—RETURN RECEIPT REQUESTED

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Re: Notice of Research Misconduct

Dear Dr. [REDACTED]:

This letter serves as formal notice that the National Science Foundation (“NSF”) has made a finding of research misconduct pursuant to 45 C.F.R. Part 689. The basis for this finding is set forth in the attached report of the NSF Office of the Inspector General (“OIG”).

As a result of this finding, NSF is taking or imposing the following actions:

1. Issuance of a letter of reprimand. This letter documenting NSF’s finding of research misconduct also serves as your letter of reprimand.
2. You are required to complete a comprehensive responsible conduct of research training course within one year from the date after your research misconduct determination becomes final, and provide documentation of the program’s content. The instruction should be in an interactive format (e.g., an instructor-led course, workshop, etc.) and should include a discussion of plagiarism.
3. For a period of two years from the date after your research misconduct determination becomes final, you are required to submit contemporaneous certifications that any proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material. All certifications and assurances should be submitted in writing to the following e-mail address: certification@nsf.gov.

4. For a period of two years from the date after your research misconduct determination becomes final, you are required to submit contemporaneous assurances by a responsible official of your employer that any proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material. All certifications and assurances should be submitted in writing to the following e-mail address: certification@nsf.gov.

Research Misconduct

Under NSF's regulations, "research misconduct" is defined as "fabrication, falsification, or plagiarism in proposing or performing research funded by NSF ..." 45 C.F.R. § 689.1(a). Plagiarism is defined as "the appropriation of another person's ideas, processes, results or words without giving appropriate credit." 45 C.F.R. § 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 C.F.R. § 689.2(c).

According to the OIG report, while a faculty member in the [REDACTED] [REDACTED] you served as the Principal Investigator on two NSF proposals, one of which received funding. [REDACTED] conducted an investigation and made a determination that you committed plagiarism. During [REDACTED] investigation, you acknowledged inadequately cited text in some instances, but denied intentionally copying material. You refused to directly answer the allegation of plagiarism although your own categorization of annotated text in the proposals as level 3-5 plagiarism was an implicit admission of plagiarism. The two proposals contained 193 lines and 27 embedded references copied from 14 sources without proper citation. [REDACTED] determined you committed plagiarism and removed you as the Principal Investigator from the awarded project. This information permits me to conclude that your actions meet the applicable definition of plagiarism as set forth in NSF's regulations.

Pursuant to NSF's regulations, the Foundation must also determine whether to make a *finding* of research misconduct based on a preponderance of the evidence. 45 C.F.R. § 689.2(c). Based on information in both the OIG report and [REDACTED] investigation, the preponderance of the evidence shows that you were responsible for the plagiarism, acted knowingly, and your actions constituted a significant departure from accepted practices of your research community. Therefore, I am issuing a finding of research misconduct against you.

NSF's regulations establish a range of actions (Group I, II, and III) that can be taken in response to a finding of research misconduct. 45 C.F.R. § 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 C.F.R. § 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 C.F.R. § 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 C.F.R. § 689.3(a)(3).

In determining the severity of the actions to impose for research misconduct, I have considered the seriousness of your research misconduct as well as other relevant circumstances. 45 C.F.R. § 689.3(b). Based on these criteria, I am requiring the actions enumerated in paragraphs 1-4, above.

Appeal Procedures for Finding of Research Misconduct

Under NSF's regulations you have 30 days after receipt of this letter to submit an appeal of this finding, in writing to the Director of the National Science Foundation, Attention: Francisco Ruben, 4201 Wilson Boulevard, Arlington, Virginia 22230. 45 C.F.R. § 689.10(a). For your information, we are attaching a copy of the applicable regulations.

Sincerely,



Richard O. Buckius
Chief Operating Officer

Attachments:
OIG Report of Investigation
45 C.F.R. Part 689