

NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A12100070

Page 1 of 1

During our proactive review, we identified a funded proposal (the grant) that contained text copied without apparent, appropriate attribution. We found additional copied text in other proposals by the PI, and we recommended NSF suspend the grant, which it did. We referred the allegation to the PI's university, which made a finding of research misconduct and required the PI to a) receive formal supervision for 2 years, which includes reviewing her proposals or manuscripts prior to submission; b) watch a training video on plagiarism and certify she understood it; and c) take a writing course. We concurred with the University's finding and recommended NSF make a finding of research misconduct; require the PI to take an RCR course; require the PI to provide certifications and assurances for 3 years; and prohibit the PI from serving as a reviewer for 3 years. The suspended award has since expired, resulting in \$79,050 put to better use. NSF made a finding of research misconduct and took the recommended actions. Accordingly, this case is ***closed*** with no further action taken. This Closeout Memorandum, NSF's adjudication, and OIG's report of investigation constitute the close material for this case.

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



DEC 08 2014

CERTIFIED MAIL—RETURN RECEIPT REQUESTED

[REDACTED]

Re: Notice of Research Misconduct Determination

Dear Dr. [REDACTED]

In 2011 while employed at [REDACTED] (“University”), you served as a Principal Investigator (“PI”) and primary author on a National Science Foundation (“NSF”) proposal that contained a significant amount of plagiarized material: approximately 160 copied lines of text from 7 sources without proper attribution. The plagiarism is part of a continuing pattern of behavior, as documented in the attached Investigative Report prepared by NSF’s Office of Inspector General (“OIG”).

Research Misconduct

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)

The OIG Investigative Report describes in detail the significant amount of plagiarized material contained in a funded proposal that you submitted to NSF. As a result of this finding, the OIG

reviewed three other proposals you prepared and discovered that you copied text and figures without attribution from numerous sources into all four proposals.

The University referred this matter to an ad hoc committee who conducted an investigation and concluded that plagiarism occurred in multiple proposals you prepared.

You bore primary responsibility for preparing the proposal submitted to NSF which contained plagiarized text. You acknowledge that you copied text without attribution, but indicate that you were unaware that copying text and figures warranted appropriate attribution because you considered the text as background information. 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 CFR § 689.2(c). Based on information in both the OIG Investigative Report and the University investigation, it is clear that you were aware of what constitutes plagiarism, but chose to disregard accepted practices in the research community, and plagiarize material nonetheless. While attending two separate universities, as part of your program, you were required to complete responsible conduct of research training courses. However, you failed to complete such training at either institution. You have knowingly disregarded required training that would have provided the information to protect against committing plagiarism. In total, you copied approximately 444 lines and 5 figures in four proposals. This pattern of plagiarism is documented in multiple proposals submitted to federal and private funding sources from 2011 to 2013. These facts permit me to conclude that, based on a preponderance of evidence, the 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 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 review 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 sanctions to impose for research misconduct, I have considered the seriousness of the misconduct, which indicates that you knowingly committed plagiarism by preparing and submitting multiple proposals containing copied text, one of which received NSF funding. I have also considered other relevant circumstances. See 45 CFR § 689.3(b).

Based on the foregoing, I am imposing the following actions on you:

- You are required to complete a comprehensive responsible conduct of research training course within one year from the date that the 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.

- For a period of three years from the date that the research misconduct determination becomes final, I am requiring that you submit contemporaneous certifications that any proposals or reports you submit to NSF do not contain anything that would violate NSF's research misconduct regulations.
- For a period of three years from the date that the 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 anything that would violate NSF's research misconduct regulations.
- For a period of three years from the date that the research misconduct determination becomes final, you are prohibited from participating as a peer reviewer, advisor, or consultant for NSF.

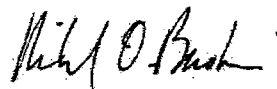
All certifications, assurances, and training documentation, should be submitted in writing to NSF's Office of the Inspector General, Associate Inspector General for Investigations, 4201 Wilson Boulevard, Arlington, Virginia 22230.

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 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, the decision on the finding of research misconduct will become final. For your information, we are attaching a copy of the applicable regulations.

Should you have any questions about the foregoing, please contact [REDACTED], Assistant General Counsel, at (703) 292-[REDACTED]

Sincerely,

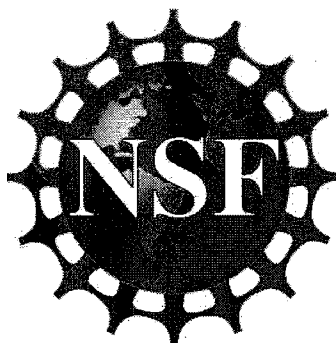


Richard O. Buckius
Chief Operating Officer

Enclosures:
Investigative Report
45 CFR Part 689

Sensitive

National Science Foundation Office of Inspector General



Report of Investigation Case Number A12100070

September 8, 2014

**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

An OIG review identified a funded proposal that contained text copied without apparent, appropriate attribution. Based on our inquiry, we referred the allegation to the PI's university. The University made a finding of research misconduct and required the PI to a) receive formal supervision for 2 years, which includes reviewing her proposals or manuscripts prior to submission; b) watch a training video on plagiarism and certify she understood it; and c) take a writing course. We concur with the University's finding and recommend NSF make a finding of research misconduct; require the PI to take an RCR course; require the PI to provide certifications and assurances for 3 years; and prohibit the PI from serving as a reviewer for 3 years. During our Inquiry, we recommended NSF suspend the PI's grant pending the outcome of the Investigation, and it did so. The award has since expired.

OIG's Inquiry and Referral

Through a proactive review of 2011 funded proposals, we identified an NSF-funded proposal (proposal A)¹ that contained approximately 160 lines of copied text from 7 sources and including 42 embedded citations.² Four of the sources were neither cited nor referenced in the proposal and while three were listed in the reference section, none of the copied text was distinguished from the Subject's own text.

In the Subject's response to our inquiry letter,³ she acknowledged that she plagiarized in proposal A.⁴ She said she was unaware that her copying was not allowed. She provided OIG with an additional source (source 8) of approximately 45 lines of copied text within proposal A.⁵ In addition, the Subject acknowledged another pending NSF proposal (Proposal B)⁶ contained text not properly cited; she provided the source document from which she had copied.

We reviewed the material provided by the Subject and added the 45 lines of text copied from source 8 to proposal A, bringing the total number of copied lines to 205. Based on what the Subject provided on proposal B, together with our analysis, we conclude proposal B has approximately 86 lines of text and 2 figures copied from

¹ [REDACTED]

² Tab 1 contains proposal A and its source documents.

³ Tab 2

⁴ Tab 3

⁵ Tab 1, source 8 was provided by the Subject.

⁶ Tab 4; [REDACTED]

[REDACTED] was submitted by the University and lists the Subject as the PI. Tab 2 contains proposal B and its source documents.

14 sources without appropriate attribution.⁷ Given the Subject's reasoning regarding copying without attribution, we considered the likelihood of finding plagiarism in her other proposals was high, so we reviewed her two other NSF proposals. We found approximately 104 lines of copied text from 9 sources in proposal C⁸ and approximately 47 lines and 3 figures copied from 5 sources into proposal D.⁹

Because proposal A was funded, the plagiarized text was substantial, and occurred in areas other than the introduction, we asked the Program Officer (PO)¹⁰ if his funding decision would have been altered if the copied material were known to be not original to the Subject. In consultation with another PO,¹¹ he concluded the proposal would not have been funded had they been aware of the extent of the copied text. In fact, the PO told us one of the reviewers had commented on the strength of the background section of the proposal in comparison to the relatively weaker section describing the proposed research. Accordingly, OIG recommended suspending proposal A,¹² and NSF concurred.¹³

University Investigation and Adjudication

Based on our Inquiry, we concluded an Investigation was warranted, so we referred the matter to the University.¹⁴ The University appointed an Inquiry Committee that concluded an Investigation should be conducted. The University concurred and appointed an *Ad Hoc* Committee (the Committee) for the Investigation.

The Subject had submitted two proposals to other funding organizations (one federal agency and one private foundation). After NSF suspended proposal A, the Subject, in discussion with her department Chair and other University staff, withdrew the two pending proposals. Additionally, the Subject withdrew proposal B.

⁷ Tab 4 contains the highlighted proposal with seven sources identified by OIG, and seven additional sources provided by the Subject.

⁸ Tab 5; [REDACTED] was submitted by the University and lists the Subject as the PI. Tab 3 contains proposal C and its source documents.

⁹ Tab 6; [REDACTED] was submitted by the Subject for a post-doctoral researcher position at [REDACTED]. Tab 4 contains proposal D and its source documents.

¹⁰ [REDACTED] was listed as the primary PO for proposal A.

¹¹ [REDACTED] told us that because of the nature of the [REDACTED] program, those proposals are reviewed by a group of POs, and then assigned to a particular program. He consulted with [REDACTED], who wrote the review summary.

¹² Tab 7

¹³ Tab 8

¹⁴ Tab 9

The Committee imaged the Subject's laptop computer, and it found a variety of the Subject's proposals and papers. In addition to the proposals we provided, the Committee used its plagiarism software to identify potentially plagiarized material in documents written by the Subject.¹⁵ The Committee "found varying degrees of unattributed copying in most but not all of the documents".¹⁶ While most of her proposals contained copying, only one of her papers, a review article, contained significant copying. It is noteworthy that an early version of a recently submitted manuscript showed "widespread unattributed copying", but the final manuscript did not.¹⁷

During the Committee's interview with the Subject¹⁸ about her proposal writing process, she said she began with a literature search. If she found a paper that was useful, *i.e.*, it "expressed very clearly what I wanted to say", she would include it in her proposal.¹⁹ She did not think it was necessary to reference it because "that reference wouldn't add anything to the understanding of the reader", who was "just trying to understand what my research is about and what I'm proposing to do. And so how is letting him or her know that I got this text from this other paper, how is that going to help him understand better my project"?²⁰

The Subject told the Committee that language issues contributed to her decision to copy, and she did not know that it was not allowed for her to do so. She distinguished copying figures from a publication, which she said she always cited, with those taken from the web, which she did not think needed citation.²¹

The Committee examined whether the Subject had received any RCR training.²² It found that although she should have received RCR training, she said she had not. Specifically, while a graduate student at University A,²³ the Subject indicated she was only told by her advisor that cited papers needed to be referenced in the body of text as well. She had minor involvement with drafting the IGERT proposal for her graduate funding, but she was more substantially involved with writing a proposal for NIH funding. She received some guidance from her group, and from her advisor, but she said she did not receive any RCR training in connection with either grant. Similarly, when she was a post-doc at University B,²⁴ she stated she had not received any RCR training even though the University's web

¹⁵ Tab 10, B-the University's report, p. 13 (all page numbers refer to the page of the pdf) lists the documents the Committee found on the Subject's laptop that it ran through its plagiarism software. The results are Tab 10, Exhibits to the Investigative Report.

¹⁶ *Id.*, B, p. 13

¹⁷ *Id.*, p. 15

¹⁸ A transcript of the Committee's interview of the Subject is in Tab 10, Transcript

¹⁹ Tab 10, B, p. 15

²⁰ *Ibid.*

²¹ *Id.*, p. 16

²² *Id.*, pp. 17-19

²³ [REDACTED]

²⁴ [REDACTED]

page for her program said it was required. The Committee contacted both University A and B to ask whether they had any documentation of the Subject completing RCR training; neither did.

The Committee concluded the subject's copying without attribution constituted intentional plagiarism.²⁵ The Committee concluded the Subject's plagiarism was a significant departure from accepted community practice. The Committee concluded the Subject's plagiarism in multiple proposals, albeit not her papers, represented a pattern of plagiarism consistent with her description of her proposal preparation process.

In determining recommended corrective action, the Committee noted the Subject has taken steps to prevent future plagiarism in her proposals. She has begun using plagiarism software to check her writing, and said she has discontinued using copy and paste.²⁶ The Committee recommended the Subject receive formal supervision at least two years. The Committee recommended the Subject watch a video discussing plagiarism and certify that she has watched and understood this presentation. Finally, the Committee recommended the Subject take one or more writing courses.

The Subject responded to the University's draft report.²⁷ The University adjudicator considered the Committee's report and the Subject's comments in accepting the Committee's findings and recommendations.²⁸

OIG's Assessment

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; (2) the research misconduct be committed intentionally, or knowingly, or recklessly; and (3) the allegation be proven by a preponderance of the evidence.²⁹

We concluded the University's procedures were reasonable, and its report was accurate and complete.³⁰ Accordingly, we accept the University's investigative effort and report. Both the University and OIG use preponderance of the evidence as the standard of proof.

The Subject copied text and figures without attribution from numerous sources into four proposals. The Subject acknowledged she copied without attribution; the Committee and University concluded the Subject's unattributed

²⁵ Tab 10, B, pp. 20-25, Committee's discussion of its findings and recommendations.

²⁶ Tab 11, p. 3

²⁷ Tab 10, C-Subject's comments on University's draft report

²⁸ Tab 10, D-University's adjudication

²⁹ 45 C.F.R. §689.2(c)

³⁰ 45 C.F.R. §689.9(a)

copying was plagiarism. OIG concurs and concludes the Subject's copying of text and figures without attribution meets NSF's definition of plagiarism.

The Subject said she was unaware that her copying of text and figures in her proposal writing preparation required appropriate attribution to the original authors, particularly if she considered the material as background. She acknowledged that she knew she was copying from others' documents and, indeed, she sought out such documents while doing her literature search. Further, because she did not think quotation, references, and citation were required, she purposefully omitted them. She did not, in general, treat her publications similarly, demonstrating she did not treat her proposals in accordance with the same community standards her papers received. Thus, we concur with the University the Subject acted with a culpable state of mind.

The Act

As described above, the Subject copied approximately 444 lines of text and 5 figures into 4 proposals. We conclude the Subject, by not citing the sources from which she copied, and not distinguishing that text from her own, failed to provide appropriate credit to the authors she copied. Therefore, we conclude the Subject's act meets NSF's definition of plagiarism.

Intent

The Subject acknowledged she would copy text and figures, that were useful to the point she was trying to make, in her proposals and did not include appropriate credit because she was under the misunderstanding such credit was not required. The Committee and University concluded her plagiarism was intentional; we concur.

Significant Departure

The Subject plagiarized approximately 444 lines of text and 5 figures into 4 proposals, which the Committee, "based on its experience and expertise", concluded was clearly a significant departure from accepted practice in the relevant research community.³¹ We concur with the Committee and University.

Accordingly, since we conclude the Subject intentionally plagiarized, and the plagiarism was a significant departure from accepted standards, we conclude the Subject committed research misconduct.

OIG's Recommended Disposition

In deciding what actions are appropriate when making a finding of research misconduct, NSF should consider several factors,³² two of which we discuss below.

³¹ Tab 10, B, p. 21

³² 45 C.F.R. §689.3(b)

Pattern

The Committee noted the Subject "included plagiarized material in multiple proposals submitted to federal and private funding sources in 2011 through 2013. . . . These submissions demonstrate a pattern of plagiarism consistent with the [copy]-and-paste writing process [the Subject] described to the Committee, a process she is making significant efforts to change."³³ We concur with the Committee and University.

Impact on the Research Record

The effect on the research record as a result of the Subject's actions is mild. Proposal A was funded, and the Committee noted an associated, potential impact on NSF's expenditure of funds, reviewers' time, and University resources. Additionally, Proposal A, which includes substantive plagiarism (approximately 205 lines of plagiarized text), is available to the public through a Freedom of Information Act request. Proposal B was withdrawn and proposals C-D were withdrawn, so they have minimal impact.

The Subject's Response

The Subject responded to the draft ROI making three main points.³⁴ The first was her disagreement about the impact on the research record. She argued that since her publications from the grant were free from plagiarism, and neither her findings nor research were falsified or fabricated, other researchers were not affected. She thought the impact was minimal, rather than moderate. While we do not disagree with the Subject on those facts, our assessment reflects that Proposal A was funded, so the impact on the research record is greater than if it were not funded. Nevertheless, in light of the Subject's comments, we changed our assessment of impact to mild.

We made a minor change in this ROI (p. 5) to reflect the Subject's assertion that she has discontinued the use of copy-and-paste during her writing. The Subject objected to our standard language in the draft recommendations requiring certification and assurance against plagiarism, falsification, and fabrication, arguing that she did not commit falsification or fabrication, so would unfairly be grouped with those who have. We did not change our recommendations, but we do not object if instead of the standard language, NSF wishes to require the Subject to provide certifications and assurances that her submitted documents do not contain anything that would violate NSF's research misconduct regulation.

³³ Tab 10, B, p. 23

³⁴ Tab 11

Recommendations

Based on the evidence, we recommend NSF:

- Send the Subject a letter of reprimand notifying her that NSF has made a finding of research misconduct.³⁵

- Require the Subject to certify to the Assistant Inspector General for Investigations (AIGI) his completion of a responsible conduct of research training program and provide documentation of the program's content within 1 year of NSF's finding.³⁶ The instruction should be in an interactive format (*e.g.*, an instructor-led course) and specifically include plagiarism.

For 3 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.³⁷
 - 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.³⁸
- Bar the Subject from participating as a peer reviewer, advisor, or consultant for NSF.³⁹

³⁵ A Group I action 45 C.F.R. 689.3(a)(1)(i)

³⁶ This action is similar to Group I actions 45 C.F.R. 689.3(a)(1).

³⁷ This action is similar to 45 C.F.R. 689.3(a)(1)(iii).

³⁸ A Group I action 45 C.F.R. 689.3(a)(1)(iii).

³⁹ A Group III action 45 C.F.R. 689.3(a)(3)(ii).