

NATIONAL SCIENCE FOUNDATION OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A13030037 Page 1 of 1

We investigated an allegation of plagiarism in proposals submitted to NSF. We concluded that the Subject¹ knowingly plagiarized text into five NSF proposals, that these actions were a significant departure from the standards of the research community, and therefore constituted research misconduct.

We recommended that NSF make a finding of research misconduct, require the Subject to complete a responsible conduct of research program, provide three years of certifications and assurances for future documents submitted to NSF, and that NSF bar the Subject from service for three years from participating as a peer reviewer, advisor, or consultant for NSF.

NSF accepted the recommendations, with the exception that NSF did not bar the Subject from participation as a peer reviewer, advisor or consultant.

This memo, the attached Report of Investigation and the letter from NSF, constitute the case closeout. Accordingly, this case is *closed*.

NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230

SEP 2 3 7015



CERTIFIED MAIL-RETURN RECEIPT REQUESTED



Re: Notice of Research Misconduct

Dear

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 three 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 three 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, as a "University"), you served as the Principal Investigator on two NSF proposals, both of which received funding. As documented in the attached investigative report prepared by OIG, 124 lines and 2 figures were copied into the two proposals.

The University Investigation Committee ("IC") conducted an investigation and made a determination that you knowingly committed plagiarism. The University recommended that you be assigned a mentor for one year, banned you from submitting proposals for one year, and that subsequent proposals be subject to internal review for plagiarism. In addition, the University required that you take a Responsible Conduct of Research ("RCR") course and audit or enroll in a course on research writing and the ethical conduct of research. The University president went one step further and requested you consent to a demotion from your tenure position or termination if you refused demotion, as the NSF proposals you submitted were a strong factor in your tenure decision.

You acknowledged that the proposals submitted to NSF contained unattributed copied text. During the investigations, you stated that you used copied text as placeholders in draft versions and intended to correct the copied text, but inadvertently submitted the draft versions with the unattributed copied text to NSF. The OIG requested you provide a copy of the correct version, which you intended to submit to NSF. You failed to provide a copy. OIG did obtain a copy of the correct version from the IC. The proposal, which was a word document, indicated a creation and last modified date of November 20, 2013, which was after the initial IC interview on November 11, 2013. Therefore, your explanations are not credible. This information permits me to conclude that your actions meet the applicable definition of plagiarism as set forth in NSF's regulations. The University also determined, by a preponderance of the evidence, that you committed plagiarism in two NSF proposals and a NIH proposal, and deemed this a significant departure from standards in the profession.

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 investigative report and the IC report, 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 at 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.

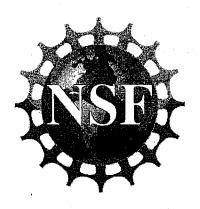
Sincerely,

Richard O. Buckius

Chief Operating Officer

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

National Science Foundation Office of Inspector General



Report of Investigation Case Number A-13030037

January 29, 2015

This 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 report of investigation.

Executive Summary

OIG's inquiry established that:

• copied text appeared in the Subject's funded NSF proposal.

University's investigation committee concluded that:

- the Subject plagiarized text into two NSF proposals, and an NIH proposal; and
- the Subject's plagiarism was knowing, and a significant departure from the standards of the research community; and,
- the Subject's plagiarism constituted research misconduct.

OIG's investigation established that:

- the Subject plagiarized in two NSF proposals; and
- the Subject also plagiarized in a proposal submitted to NIH.

OIG concluded that:

- Act: The Subject plagiarized approximately 124 lines of text and two figures into two funded NSF proposals.
- Intent: The Subject acted knowingly.
- Standard of Proof: A preponderance of the evidence supports the conclusion that the Subject's acts were a significant departure from the standards of the research community, and therefore constitutes research misconduct.
- Pattern: The Subject's repeated plagiarism is evidence of a pattern of behavior.

OIG recommends that NSF:

- Send the Subject a letter of reprimand notifying him that NSF has made a finding of research misconduct.
- 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.
- For a period of three years, require for each document submitted to NSF (proposal, report, etc.) to which the Subject contributes (directly or through his institution),
 - o the Subject submit a certification to the AIGI that the document does not contain plagiarism, falsification, or fabrication; and
 - o the Subject submit an assurance from a responsible official of his employer to the AIGI that the document does not contain plagiarism, falsification, or fabrication.
 - O Bar the Subject from participating as a peer reviewer, advisor, or consultant for NSF.

OIG Inquiry

We assessed an allegation of plagiarism in a proposal (Proposal 1) submitted to NSF. We wrote to both the PI (Subject) and the Co-PI. The Co-PI responded that he had an advisory role for the Proposal 1 and did not participate in its composition. The explanation is reasonable given the type of proposal, and we did not pursue further inquiry with the Co-PI. The Subject responded that he submitted an early version of the Proposal 1 by mistake. He stated that he used sections of copied text as placeholders in that early version, and he had paraphrased and properly cited the text in the final version of the proposal. The Subject stated that none of the copied text was technically constrained language, and that he was not aware of any other submitted proposals with copied text. The Subject did not provide copies of the final corrected version of the proposal in response to our inquiry letter.

The Subject's response did not dispel the allegation of plagiarism. Our further inquiry also revealed apparent copied text and figures in a second funded NSF proposal (Proposal 2). We referred an investigation to the university, and provided annotated copies of both proposals. 8

University investigation

The university appointed an investigation committee (IC) and at the conclusion of its process, the university provided us a copy of its investigation report and supporting documents. The IC examined documents provided in our referral, and examined other proposals of the Subject. The IC, accompanied by the assistant general counsel for the university system, interviewed the Subject during which the Subject said that, as an engineer, he would use the However, in responding to related questions posed during the interview, he stated at various times that he "probably" used the subject said that a copy of it, 14 and he is

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Our inquiry letter to the Subject is at Tab 1.

The Co-PI's response email is at Tab 2.
The Subject's response is at Tab 3.

(Proposal 2). The apparently copied text and figures appears in parts of the proposal that fall within area of expertise.
The referral of investigation letter and supporting documents are at Tab 4.
The university's investigation report and supporting documents are at Tab 5.
The transcript was provided as Exhibit 4 in the university report of investigation (Tab 5). Page numbers provided in the footnotes of this report refer to transcript page numbers.

Transcript, page 14, lines 17-25 (Tab 5).
Transcript, page 16, line 16 (Tab 5).
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Transcript, page 44, lines 8-11 (Tab 5).

regarding proper citation. 15 The Subject unfamiliar with the details of the stated he has had no formal training on proper citation practices. 16

The Subject asserted to the IC that he did not know he had submitted the incorrect version of the proposal until he received the inquiry letter from NSF OIG.¹⁷ The Subject explained that the copied text in his proposals appeared within "placeholders" he put in the proposals, ¹⁸ and that while he meant to do so, he sometimes did not replace or rewrite the placeholder material. 19 The Subject indicated to the IC that he sent the wrong version of Proposal 1 to NSF. 20 He provided a "corrected" copy of Proposal 1 to the IC during the interview, and stated that placeholder text had been rewritten.²¹ The interview transcript contains a statement by a member of the IC committee that the date on the Proposal 1 "corrected" version was 2011.²² However, the IC report does not describe an examination of the corrected version.²³ The Subject stated that the copied text was background information,²⁴ and that once he rewrote it in his own words, a citation would not be required.²⁵ The Subject agreed that the proposal version submitted to NSF, reviewed and funded, contained the placeholder texts copied verbatim from the sources.²⁶

For Proposal 2, the Subject stated that he sent the material to the PI without proper citations, and then he (the Subject) "apparently did not change that."²⁷ Despite this admission, the interview transcript also noted that the jump drive provided to the IC contains the "corrected" version of Proposal 2.²⁸ The IC report did not discuss Proposal 2 further, other than to conclude that the Subject had committed plagiarism within the proposal. The IC did not interview the PI or other Co-PI of Proposal 2.

The IC assessed for a pattern of plagiarism by examining an NIH proposal submitted in 2009, and concluded that it also contained plagiarized text. The university report contains a copy of the output from plagiarism-checking software, with suggested sources flagged by the software. 29 The IC therefore identified two sources of copied text, as indicated by the software, but did not annotate the sources or the proposal to indicate copied text.

¹⁵ Transcript, page 48, lines 4-7 (Tab 5).

¹⁶ Transcript, page 23, lines 3-4 (Tab 5).

¹⁷ Transcript, page 42, lines 12-14 (Tab 5).

¹⁸ The copied sections of text appeared most often in introductory and background sections of the proposals.

¹⁹ Transcript, page, lines 16-25, and page 30, line 1 (Tab 5).

²⁰ Transcript, page 18, lines 12-18, as well as other instances (Tab 5).

²¹ Transcript, page 53, lines 1-8 (Tab 5).

²² Transcript, page 52, lines 10-12 (Tab 5).

The transcript states specifically (page 52, lines 10-14, Tab 5) that "corrected" versions of the proposal were provided to each committee member for review and evaluation. ²⁴ Transcript, page 27, lines 12-22 (Tab 5).

²⁵ Transcript, page 29, lines 17-19 (Tab 5).

²⁶ Transcript, pages 29-30, lines 25, 1 (Tab 5).

²⁷ Transcript, page 39, line 18-19.

²⁸ Transcript, page 53, lines 12-13

²⁹ The NIH proposal is part of Exhibit 14 in the university report (Tab 5). The proposal was submitted to Turnitin on March 25, 2014. The IC report does not explain why assessment of the NIH proposal was delayed until well after the Subject interview, which occurred on November 13, 2013.

The IC concluded the Subject knowingly plagiarized in two NSF proposals, 30 that the plagiarism was a significant departure from accepted practices of the engineering and academic research communities,³¹ and that its conclusion was supported by a preponderance of the evidence.³² Based on its evaluation of the other proposals and articles written by the Subject, the IC concluded that the Subject's plagiarism was part of a pattern of behavior.³³

The IC recommended the Subject be assigned a mentor for one year to assist with research, publications, and grant-writing, ³⁴ the Subject not be allowed to submit proposals to external funding agencies for one year, ³⁵ and for two additional years, the Subject's proposals to external funding agencies be examined for plagiarism. ³⁶ The IC also recommended that the Subject must complete a course in the responsible conduct of research,³⁷ the Subject audit or enroll in a course on research writing and the ethical conduct of research, ³⁸ and the Dean of the Subject's college write a recommendation at the end of three years for placement in the Subject's personnel file.3

The university President took the following actions: 1) the Subject should resign his position as Associate Professor, and 2) in the absence of the Subject's resignation, he will be terminated.⁴⁰ The adjudication letters make specific mention of the fact that the Subject's NSF proposals, which were found to contain plagiarized material, were used for documentation of his scholarly activities during his tenure evaluation.

OIG Investigation

We contacted the Subject to solicit his comments on the university report. The Subject responded⁴¹ that it was not his intention to refer to others' works without citation, and he just used the sections of copied text as placeholders. He stated that the copy of his corrected proposal (presumably with the correct citations and/or paraphrasing) was "not accepted by the committee."42 The Subject stated the plagiarism identified by the IC in his NIH proposal was either self-citation, or that copied text identified by the IC was clearly indicated in the proposal as derived from a search result. Finally, the Subject claimed that it is unfair that his career at the university is over because of the investigation of his careless mistake in his proposals.⁴³

University report of investigation, page 19 (Tab 5).

University report of investigation, page 18 (Tab 5).

³² University report of investigation, page 21 (Tab 5).

University report of investigation, page 22 (Tab 5).

³⁴ University report of investigation, page 26 (Tab 5).

³⁵ University report of investigation, page 27 (Tab 5).

³⁶ University report of investigation, page 27 (Tab 5).

³⁷ University report of investigation, page 27 (Tab 5).

³⁸ University report of investigation, page 28 (Tab 5).

³⁹ University report of investigation, page 28 (Tab 5).

⁴⁰ University report of investigation, page 1 (Tab 5). The adjudication letter does not explicitly state that the university made a finding of research misconduct against the Subject.

⁴¹ The Subject's response is at Tab 6.

We asked the Subject for an explanation, and for a copy of the "corrected" version of the proposal, but received no response.

⁴³ Subject's response (Tab 6).

We assessed the "corrected" version of Proposal 1. Because the Subject chose not to provide a copy of the "corrected" version, we contacted the university to receive copies of the versions provided to the IC during the interview of the Subject. Because the Proposal 1 file (a Word document) provided by the university displayed a file date <u>after</u> the IC interview with the Subject, we cannot establish the dates for creation and editing of this file. ⁴⁴ The Subject stated during his interview that corrected versions were prepared contemporaneously with the version submitted to NSF; the IC did not ask any question specific to this point. The file provided by the university was compared with the Word file created from the project description of Proposal 1. ⁴⁷ Changes in the "corrected" version occur exclusively in the portions of the proposal highlighted as potential plagiarism in our inquiry letter to the Subject. The text is altered or paraphrased in these portions of the proposal. ⁴⁸

We independently assessed the Subject's NIH proposal identified in the IC report.⁴⁹ Contrary to the claim of the Subject in his response to the University report, none of the copied text in the NIH proposal identified in the IC report was indented in the proposal. The software report included with the IC report indicates text in the proposal copied from a source that includes the Subject as author,⁵⁰ but fails to differentiate this text/source from text plagiarized from others. Finally, the IC did not annotate of the NIH proposal and source documents.

We identified three sources of plagiarized text in the NIH proposal.⁵¹ The presence of plagiarized text in the NIH proposal confirmed a pattern of behavior by the Subject. The plagiarism in the NIH proposal, as shown by our assessment, is not self-plagiarism, as claimed by the Subject. The IC report did not raise the issue of plagiarism in the NIH proposal because it was examined after their interview with the Subject.

A finding of research misconduct by NSF requires that 1) there be a significant departure from accepted practices of the relevant research community, that 2) the research misconduct be committed intentionally, or knowingly, or recklessly, and that 3) the allegation be proved by a preponderance of the evidence.⁵²

⁴⁴ The file provided by the university has a created and last modified date of November 20, 2013. The interview of the Subject occurred on November 11, 2013.

The IC failed to ask about the creation date for the "corrected" version of Proposal 1.

⁴⁶ The document provided by the university is at Tab 7.

The comparison was made with WCopyfind software. The comparison is shown in Tab 7.

⁴⁸ The documents contain colored text that is identical in the project description text and the corrected version text. Text that is not colored is different in the two documents.

We asked the university for a copy of the NIH proposal itself, since the investigation report contains only the printout for the Turnitin assessment of the NIH proposal. The original full (and declined) NIH proposal is at Tab 8; it was submitted in February 2009.

⁵⁰ Source 1 as indicated in the Turnitin software report.

The annotated Proposal 1nd sources we identified are included at Tab 8. Page numbers refer to those in the full NIH proposal file. We identified a total of about 28 lines of text copies from three sources. None of the copied text appears in quotation marks; one of the sources appears in the reference list of the NIH proposal.

52 45 C.F.R. §689.2(c).

The Act

Approximately 124 lines of copied text, and two copied figures, appear in the Subject's two NSF proposals, drawn from nine identified sources. Neither the text nor the figures are differentiated with quotation marks or by other means, and in most instances the source is not cited in the reference list for the proposal.

Level of intent

The IC found a level of knowing intent; the Subject acknowledged during the university investigation that he copied verbatim text from the source documents when composing his proposals. The Subject asserts, however, that his plagiarism was unintentional as he did not understand the requirements for appropriate citation, and intended to use the copied text as placeholders. We do not find this explanation credible, based in part on the Subject's admitted lack of citation for copied text and figures in Proposal 2, and the Subject's plagiarism in the NIH proposal. We conclude the Subject's intent was knowing.

Significant departure

The IC concluded that the Subject was aware of citation standards published by a professional organization for his profession, and that the Subject's plagiarism was a significant departure from the accepted practices of the relevant research community. The Subject asserted that he was careless in preparation of his NSF proposals, or that he submitted the wrong versions. We agree with the IC that the Subject's verbatim copying of text without the use of quotation marks and citations was a significant departure from the accepted standards of the relevant research community.

Preponderance of evidence

The Subject admitted that the copied text and figures in the NSF proposals were taken from the indicated sources, thereby meeting the preponderance of evidence standard. The Subject disputed the IC findings about plagiarism in the NIH proposal, but a comparison of the NIH proposal with the sources we identified in our independent assessment shows, by a preponderance of the evidence, that text in the NIH proposal was also copied.

Based on the Subject's actions, which are a significant departure from accepted practice and which were committed with knowing intent, and established by a preponderance of the evidence, we conclude that the Subject committed research misconduct.

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.⁵³

Seriousness

The extent of copied text in the Subject's two funded NSF proposals is significant, and the fact that figures were also copied and presented in the proposals as the Subject's own composition, elevates the significance.

Pattern

The Subject's plagiarism was part of an established pattern of proposal composition in which significant blocks of text (with embedded references) were copied verbatim, or with minor changes. The Subject attributes the plagiarism to his practice of using placeholders; this practice would seem to increase the chances that unattributed copied text would appear in his proposals and publications. The Subject's plagiarism occurred over a period of several years, establishing a pattern of behavior.

Impact on the Research Record

The Subject's plagiarism appeared in two NSF proposals, both of which were funded. We conclude that the plagiarism appears in parts of the proposal that are not central to the proposed research, and therefore that the plagiarism did not substantially affect the decision to fund the work.

Subject's Comments on Draft Report of Investigation

We provided a copy of the draft report of investigation to the Subject and invited comments. The Subject did not respond.

OIG's Recommendations

We recommend that NSF:

- Send the Subject a letter of reprimand notifying him that NSF has made a finding of research misconduct.54
- 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. 55
- For a period of three years, require for each document (proposal, report, etc.) to which the Subject contributes for submission to NSF (directly or through his institution),

 ^{53 45} C.F.R. § 689.3(b).
 54 A Group I action 45 C.F.R. 689.3(a)(1)(i).

⁵⁵ This action is similar to Group I actions 45 C.F.R. 689.3(a)(1).

the Subject submit a certification to the AIGI that the document does not contain plagiarism, falsification, or fabrication;⁵⁶ and the Subject submit an assurance from a responsible official of his employer to

- the AIGI that the document does not contain plagiarism, falsification, or fabrication.⁵⁷
- Bar the Subject from participating as a peer reviewer, advisor, or consultant for NSF. 58

This action is similar to 45 C.F.R. 689.3(a)(1)(iii).
 A Group I action 45 C.F.R. 689.3(a)(1)(iii).
 A Group III action 45 C.F.R. 689.3(a)(3)(ii).