



NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A13020021

Page 1 of 1

NSF OIG received an allegation that a funded NSF proposal (Proposal¹) contained copied text. Our inquiry identified plagiarism in the proposal and determined the PI (Subject)² was responsible for the plagiarism, rather than the Co-PIs.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, which it deemed a significant departure from accepted practices, and took actions to protect the University's interests.

We reviewed the University's report and found it did not identify the accepted practices of the relevant research community or provide an analysis of its finding of pattern. Our independent investigation identified the standards of the Subject's relevant research community and further examined the University's evidence regarding pattern. We determined the Subject's plagiarism represented a significant departure from accepted practices of the Subject's professional societies and quantified the plagiarism found in another NSF proposal identified as containing copied text.⁵ We recommended actions to be taken to protect the federal interest. The Deputy Director 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.

¹ [REDACTED]
[REDACTED] Per the cognizant PO, the plagiarized sections were not material to the funding decision.

² [REDACTED]
³ [REDACTED]
⁴ [REDACTED]
⁵ [REDACTED]

National Science Foundation Office of Inspector General



Report of Investigation Case Number A13010021

January 29, 2015

**This Report of Investigation is provided to you
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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

Allegation: Plagiarism.

OIG Inquiry: OIG identified four sources from which 63 lines and four embedded references were copied into one funded NSF Proposal. Based on responses to our inquiry letters from the PI and Co-PIs, we modified our assessment to 78 lines and seven embedded references copied from five sources into the Proposal and determined the Subject was responsible. OIG referred the investigation to the Subject's institution.

**University
Investigation
and Action:**

The University concluded, based on a preponderance of the evidence, that the Subject recklessly committed plagiarism, deemed a serious deviation from community standards. It further found a pattern of plagiarism.

The Provost required the Subject to develop, obtain approval, and then present a workshop related to responsible conduct of research in STEM proposals; and to submit external research proposals to the University's research administration office three days before the internal deadlines, for a period of three years.

**OIG
Assessment:**

- **The Act:** Subject plagiarized 78 lines and seven embedded references into one NSF proposal.
- **Intent:** Subject acted recklessly.
- **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 of her professional societies.
- **Pattern:** Pattern of plagiarism identified.

**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 one year.
- Require assurances from the Subject for a period of one year.
- Require certification of attending a comprehensive responsible conduct of research training class within one year.

OIG's Inquiry

OIG conducted an inquiry into an allegation that a funded NSF proposal (Proposal¹) contained copied text. We reviewed the Proposal and found 63 unique lines and four embedded references copied from four sources.² The majority of the copied text was contained in the "Methods and Pedagogy" section.

We contacted the Proposal's PI (Subject)³ and Co-PIs (Co-PI1⁴ and Co-PI2⁵) regarding the allegations.⁶ Both Co-PIs asserted and provided documentary evidence that the PI was solely responsible for the portions of the Proposal containing the copied text, that the Proposal contained additional copied text, and that the Subject's other proposals also contained plagiarism.⁷

The Subject, in her response,⁸ confirmed their assertions. She said:

Having reviewed the proposal many times, I realize that I must take full responsibility for the language in the proposal and want you to know that none of my co-PIs had any responsibility for drafting any of the sections that contained any of the questionable passages. The proposal clearly contains a number of passages that were taken from other sources without proper quotation marks and in some cases proper footnotes or attribution. This was my fault.⁹

She attributed the plagiarism to her weak writing skills, her lack of training, and her health situation at the time of proposal preparation. She said she was primarily educated in the West Indies,¹⁰ was never instructed regarding use of quotation marks while a graduate student in the U.S.,¹¹ and came to academia from working in industry where "the cultural norms or established rules governing citations and quotations are only loosely followed and there was no opportunity for me to learn the correct way to attribute text from another source other than my own."¹² She added that she wrote the proposal while on maternity leave, after being diagnosed with a life-threatening pregnancy complication. She said she was the first woman in her department to take maternity leave and felt pressure to prove that her absence would not affect her obtaining tenure.¹³

¹Tab 1:

[REDACTED]

[REDACTED] Per the cognizant PO, the plagiarized sections were not material to the funding decision.

²Tab 2.

³[REDACTED]

⁴[REDACTED]

⁵[REDACTED]

⁶Tab 3.

⁷Tab 4, Co-PI1 and Co-PI2.

⁸Tab 4, Subject.

⁹Tab 4, Subject, Subject response, pg 1.

¹⁰[REDACTED]

¹¹[REDACTED]

¹²Tab 4, Subject, Subject response, pg 1.

¹³Tab 4, Subject, Subject response, pg 1-2.

The Subject said that, since receiving our letter, she re-reviewed the Proposal and identified additional copied text.¹⁴ She also reviewed her pending NSF proposals and similarly found improperly cited material. Based on her findings, she withdrew an NSF proposal before review¹⁵ and advised the PI on another NSF proposal to which she had contributed¹⁶ to withdraw the proposal. Lastly, she said her portion of a funded multi-PI proposal contained copied material.¹⁷

The Subject acknowledged that "It is clear to me now that some of the text should have had quotation marks and were improperly cited and now that I get it, it will never happen again."¹⁸ She noted that "In general, the material that was copied was for the most part, of rather minor significance (and a very small part) of my NSF grant proposal," adding "that the idea for the proposal project and the approach is original and my own. . ."¹⁹ She said she hoped we "will treat these errors as being the result of carelessness, intense time pressures, and a lack of proper training, and not the result of any malicious intent or recklessness."²⁰

We reviewed the responses and re-annotated the proposal.²¹ We identified 78 unique lines and seven embedded references copied from five sources, as illustrated below.

Source	Proposal
A (website)	4 lines
B (press release)	5.5 lines
C (article)	45 lines and 4 embedded references
D (PowerPoint)	7.5 lines
E (dissertation)	16 lines and 3 embedded references
Total	78 unique lines and 7 embedded references

We concluded there was sufficient evidence to proceed to an investigation limited to the Subject.

University Inquiry and Investigation

We referred the investigation to the University.²² The University conducted an inquiry, which "determined that the allegation against [the Subject] raises a legitimate question of misconduct warranting further investigation by the University."²³

¹⁴ Tab 4, Subject, Subject response and Attachments.

¹⁵ [REDACTED]

¹⁶ [REDACTED]

¹⁷ [REDACTED]

¹⁸ [REDACTED] Although the proposal contained copied text, the total amount of copied text was de minimis and warranted no further action.

¹⁹ Tab 4, Subject, Subject response, pg 1.

²⁰ Tab 4, Subject, Subject response, pg 2.

²¹ Tab 4, Subject, Subject response, pg 4. The Subject requested that, in lieu of a University referral, she voluntarily exclude herself from submitting NSF proposals for one year, complete a technical writing course, and check all future NSF proposals with plagiarism detection software. Per our regulation, however, we referred the matter (Tab 5).

²² Tab 6.

²³ [REDACTED] Tab 7 contains the referral letter. Tab 8 contains the University's RM policy.

The University convened an Investigation Committee (Committee), which produced a Report.²⁴ The Committee concluded "based on a preponderance of the evidence, that [the Subject] did, in fact, commit research misconduct via plagiarism and that this misconduct, while committed neither knowingly nor intentionally, was committed recklessly."²⁵ It added that "According to community standards, [the Subject] seriously deviated from how a reasonable person would act in the circumstances."²⁶

The Committee said the Subject "acknowledged that plagiarism did, in fact, occur. . ."²⁷ and "has taken full responsibility for all portions of the proposal that are not properly quoted, cited or attributed to outside sources."²⁸ It said the Subject explained that "she misunderstood when it was necessary to use quotations and how to properly cite both quotes and paraphrased materials,"²⁹ and that "she believed that citing to the original source, and not subsequent utilized sources, was sufficient citation."³⁰

The Subject told the Committee that her manner of proposal preparation contributed to the plagiarism. She said, "she took notes and cut and pasted text from the internet over various dates failing to keep track of web addresses from which text was obtained."³¹ She said she submitted the Proposal the day it was due, while on maternity leave, and "forgot which portions of text had been taken from internet sources and did not properly attribute sources for those portions of text."³² The Subject "expressed her regret over the mistakes that she made in [the Proposal] and stated that she was 'adamant' that she would 'learn from this experience.'"³³

The Committee examined 12 proposals for which the Subject served as sole PI and found "for at least 4 such proposals, an approximate 25-27% similarity in content to something that was published elsewhere."³⁴

The Committee concluded that the Subject "has taken, and will continue to take, steps to bring her research and scholarship into compliance with community standards, norms and applicable rules and regulations" and "can continue to have a productive career in research and scholarship in her field."³⁵

²³ Tab 9, pg 2.

²⁴ Tab 10.

²⁵ Tab 10, Report, pg 8

²⁶ Tab 10, Report, pg 8

²⁷ Tab 10, Report, pg 3.

²⁸ Tab 10, Report, pg 3.

²⁹ Tab 10, Report, pg 4

³⁰ Tab 10, Report, pg 4

³¹ Tab 10, Report, pg 5.

³² Tab 10, Report, pg 6.

³³ Tab 10, Report, pg 6.

³⁴ Tab 10, Report, pg 7. Tab 10, Exhibits, Exhibit 5, identifies the four proposals containing plagiarism, all of which were declined, as: NSF [REDACTED]

[REDACTED] Tab 10, TurnItIn reports, contains the plagiarism detection software reports.

³⁵ Tab 10, Report, pg 8.

University Adjudication

The University provided the Subject and her attorney with a copy of the Report. They did not contest the Report, but did "ask only that the committee consider modifying its report to conclude that the mistakes were the result of carelessness rather than recklessness and that these mistakes should not be found to rise to the level of research misconduct."³⁶

The Standing Committee on Conduct affirmed the Report's findings and recommended that the Provost, in adjudicating the matter, "strongly consider the possibility of incorporating measures to assist the subject in better managing the process of drafting research proposals and the possibility of offering campus-wide training and/or workshops on the research conduct issues which have given rise to this investigation."³⁷

The Provost,³⁸ in adjudicating the matter, required that the Subject develop, obtain approval, and then present a workshop related to responsible conduct of research in STEM proposals, to be held during academic year 2015-2016. He also required that, for a period of three years, the Subject submit external research proposals to the University's research administration office three days before the already-required, earlier internal deadlines.³⁹

OIG's Assessment of the University Investigation Report

OIG invited the Subject's comments⁴⁰ on the University Report. She chose not to respond.

OIG assessed the Report for accuracy and completeness, and did not find the Report to be complete. Although the Report found the Subject's actions seriously deviated from community standards, it did not identify the accepted practices of the relevant research community. Also, the Report presented the plagiarism detection software results without analysis or review. For these reasons, we could not accept the report in its totality in lieu of conducting our own investigation.

OIG's Investigation

We examined the accepted practices of the Subject's research community by reviewing the policies of professional societies and journals with which the Subject self-associated.⁴¹ One such professional society⁴² has extensive "Publishing Ethics"⁴³ that state "Authors should not engage in plagiarism – verbatim or near-verbatim copying, or very close paraphrasing, of text or results from another's work."⁴⁴ Another professional society's "Policy on Publication Ethics and

³⁶ Tab 11.

³⁷ Tab 12, pg 3.

³⁸ [REDACTED]

³⁹ Tab 13.

⁴⁰ Tab 14.

⁴¹ Tab 15.

⁴² [REDACTED]

⁴³ [REDACTED]

⁴⁴ [REDACTED]

Responsibilities" states "Plagiarism is defined as the act of using the work of another and passing it off as one's own. Such behavior constitutes unethical scientific behavior and is never acceptable."⁴⁵ Lastly, the publisher⁴⁶ of two journals⁴⁷ [REDACTED] "is a member of the Committee on Publication Ethics (COPE) and abides by its Code of Conduct and aims to adhere to its Best Practice Guidelines."⁴⁸ Its website states:

All journals published by [x] are committed to publishing only original material, i.e., material that has neither been published elsewhere, nor is under review elsewhere. Manuscripts that are found to have been plagiarized from a manuscript by other authors, whether published or unpublished, will incur plagiarism sanctions.⁴⁹

We conclude that the Subject herself violated the accepted practices of her research community by not properly acknowledging text authored by others.

We then reviewed the University's evidence regarding pattern of plagiarism, focusing on the NSF proposal identified as containing copied text.⁵⁰ We found approximately 61 lines of copied text, consistent with a pattern of plagiarism the Subject herself identified in her inquiry response. Of note, however, was our review of a more recent proposal the Subject submitted to NSF.⁵¹ This proposal, submitted during the investigatory process, contained no plagiarism.

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.⁵²

The Acts

OIG's investigation concluded that the Subject plagiarized 78 lines and seven embedded references into one funded NSF proposal. We also concluded that the Subject's actions constituted a significant departure from accepted standards within the Subject's research community.

45 [REDACTED]

46 [REDACTED]

47 [REDACTED]

48 [REDACTED]

49 [REDACTED]

50

Tab 10, Exhibits, Exhibit 7: [REDACTED]

51 [REDACTED]

52

45 C.F.R. §689.2(c).

Intent

We concur with the University's assessment that the Subject committed plagiarism recklessly.

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 recklessly plagiarized, thereby committing an act of research misconduct.⁵³

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.⁵⁴

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

In her inquiry response, the Subject herself identified a pattern of plagiarism within her NSF proposals. The Report and our own review confirmed this pattern.

Subject's Response to OIG's Draft Investigation Report

We sent the Subject's attorney a copy of our draft report. He informed us that his client would not be providing a further response.

⁵³ 45 C.F.R. part 689.

⁵⁴ 45 C.F.R. § 689.3(b).

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.⁵⁵
- Require the Subject to 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.⁵⁶ The instruction should be in an interactive format (e.g., an instructor-led course) and specifically include the topic of plagiarism.

For a period of 1 year 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 to submit a contemporaneous certification to the AIGI that the document does not contain plagiarism, falsification, or fabrication.⁵⁷
 - 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.⁵⁸

⁵⁵ A Group I action 45 C.F.R. 689.3(a)(1)(i).

⁵⁶ This action is similar to Group I actions 45 C.F.R. 689.3(a)(1).

⁵⁷ This action is similar to 45 C.F.R. 689.3(a)(1)(iii).

⁵⁸ A Group I action 45 C.F.R. 689.3(a)(1)(iii).

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DIRECTOR

OCT 21 2015

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 one year 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 one year 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 faculty member in the [REDACTED] at the [REDACTED] you plagiarized 78 lines and 7 embedded references from 5 sources in one funded NSF proposal. During the University's investigation you acknowledged and took responsibility for the plagiarism in the NSF funded proposal. The facts identified by the OIG and your admission permit 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 misconduct based on a preponderance of the evidence. 45 C.F.R. § 689.2(c). Based on information in both the OIG report and the University investigation, the preponderance of the evidence shows that you were responsible for the plagiarism, acted recklessly, 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 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 action to impose for research misconduct, I have considered the seriousness of your 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