



NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A09040029

Page 1 of 1

NSF OIG received an allegation that a Subject¹ submitted an NSF proposal containing plagiarism. Our inquiry determined the Subject submitted two declined and one awarded proposal to NSF containing copied material. We referred the matter to the Subject's University.²

The University's investigation concluded, based on a preponderance of the evidence, that the Subject intentionally committed plagiarism, deemed a significant departure from accepted practices, and took actions to protect the University's interests.

We adopted the University's findings. Additionally, we determined that the plagiarized text in the awarded proposal was material to NSF's decision to fund the proposal, constituting a material false statement. We referred the matter to the U.S. Attorney's office, which declined prosecution in lieu of administrative action. We recommended NSF immediately suspend the award and NSF accepted this recommendation.

At the conclusion of our full investigation, we recommended additional actions to be taken to protect the federal interest. These actions included terminating the award. The Senior Advisor to the Director concurred with our recommendations. The Deputy Director denied the Subject's request that NSF amend the imposed actions. The award was subsequently terminated.

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

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NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DEPUTY DIRECTOR

JUL 16 2012

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

[REDACTED]

Re: Decision on Response to Research Misconduct Determination

Dear Dr. [REDACTED]

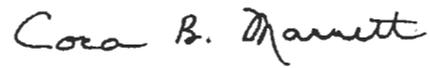
On April 16, 2012, Dr. Wanda Ward, Senior Advisor to the Director, issued a Notice of Research Misconduct Determination (“Notice”) against you. This Notice was issued based on NSF’s finding that you submitted three proposals to NSF that contained plagiarized material. In this Notice, NSF: (1) required you to submit certifications and assurances with any proposals or reports filed with NSF until April 1, 2015; (2) ordered you to complete an ethics training course, including a discussion of citation practices, by April 1, 2013; and (3) expressed its intent to terminate your active award. Although you did not appeal NSF’s research misconduct finding against you, you requested that NSF amend the actions that it imposed on you as a result of this finding. This letter constitutes NSF’s response to your request.

I am compelled to deny your request. First, NSF does not believe it is appropriate to reduce the duration of the certification and assurance requirement imposed upon you. The very nature of NSF’s research misconduct process is such that NSF’s actions routinely begin after those imposed by the subject’s university. In addition, it is common for NSF’s actions to remain in place after similar actions by a university have expired. In fact, in determining the appropriate actions to take in connection with a research misconduct finding, NSF considers the actions that have been taken previously by the subject’s institution. In this case, the three-year certification and assurance requirement imposed upon you by NSF is consistent with other similar cases, and is commensurate with the misconduct in which you engaged.

Second, NSF believes that your employing institution is the appropriate entity to provide assurances. While a plagiarism detection company theoretically could provide an assurance related to plagiarism, it likely would be unable to certify that the proposal or report at issue is free of falsification and fabrication – an integral component of NSF's assurance requirement.

Thus, the actions set forth in the April 16, 2012, Notice remain in effect. If you have any questions about the foregoing, please contact [REDACTED], General Counsel, at (703) 292-8060.

Sincerely,

A handwritten signature in cursive script that reads "Cora B. Marrett".

Cora B. Marrett
Deputy Director

NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DIRECTOR

APR 16 2012

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

[REDACTED]

Re: Notice of Research Misconduct Determination

Dear Dr. [REDACTED]

From 2008-2009, you served as a Principal Investigator ("PI") on three proposals submitted for funding to the National Science Foundation ("NSF"). As documented in the attached Investigative Report prepared by NSF's Office of Inspector General ("OIG"), these proposals contained plagiarized material.

Research Misconduct and Proposed Sanctions

Under NSF's regulations, "research misconduct" is defined as "fabrication, falsification, or plagiarism in proposing or performing research funded by NSF ..." 45 CFR § 689.1(a). NSF defines "plagiarism" as "the appropriation of another person's ideas, processes, results or words without giving appropriate credit." 45 CFR § 689.1(a)(3). A finding of research misconduct requires that:

- (1) There be a significant departure from accepted practices of the relevant research community; and
- (2) The research misconduct be committed intentionally, or knowingly, or recklessly; and
- (3) The allegation be proven by a preponderance of evidence.

45 CFR § 689.2(c).

Your proposals contained 246 unique lines of text copied from 20 source documents, as well as 12 embedded references. By submitting proposals to NSF that copied the ideas or words of another without adequate attribution, as described in the OIG Investigative Report, you

misrepresented someone else's work as your own. Your conduct unquestionably constitutes plagiarism. I therefore conclude that your actions meet the definition of "research misconduct" set forth in NSF's regulations.

Pursuant to NSF regulations, the Foundation must also determine whether to make a *finding* of misconduct based on a preponderance of the evidence. 45 CFR § 689.2(c). After reviewing the Investigative Report, NSF has determined that, based on a preponderance of the evidence, your plagiarism was committed intentionally and constituted a significant departure from accepted practices of the relevant research community. I am, therefore, issuing a finding of research misconduct against you.

NSF's regulations establish three categories of actions (Group I, II, and III) that can be taken in response to a finding of misconduct. 45 CFR § 689.3(a). Group I actions include issuing a letter of reprimand; conditioning awards on prior approval of particular activities from NSF; requiring that an institution or individual obtain special prior approval of particular activities from NSF; and requiring that an institutional representative certify as to the accuracy of reports or certifications of compliance with particular requirements. 45 CFR § 689.3(a)(1). Group II actions include award suspension or restrictions on designated activities or expenditures; requiring special reviews of requests for funding; and requiring correction to the research record. 45 CFR § 689.3(a)(2). Group III actions include suspension or termination of awards; prohibitions on participation as NSF reviewers, advisors or consultants; and debarment or suspension from participation in NSF programs. 45 CFR § 689.3(a)(3).

In determining the severity of the sanction to impose for research misconduct, I have considered the seriousness of the misconduct, and our determination that it was committed intentionally. I have also considered the fact that your misconduct was part of a pattern of plagiarism, and that the plagiarism played an integral role in the funding of your BRIGE proposal. In addition, I have considered other relevant circumstances. 45 CFR § 689.3(b).

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

- (1) Until April 1, 2015, you must provide certifications to the OIG that any proposal or report you submit to NSF as a PI or co-PI does not contain plagiarized, falsified, or fabricated material;
- (2) Until April 1, 2015, you must obtain, and provide to the OIG, assurances from a responsible official of your employer that any proposal or report you submit to NSF as a PI or co-PI does not contain plagiarized, falsified, or fabricated material;
- (3) By April 1, 2013, you must attend an ethics training course, including a discussion of citation practices, and provide a certificate of attendance to the OIG that you have completed such a course; and

(4) Your current award [REDACTED] in connection with your proposal entitled, [REDACTED] will be terminated.

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

Procedures Governing Appeals

Under NSF's regulations, you have 30 days after receipt of this letter to submit an appeal of this decision, in writing, to the Director of the Foundation. 45 CFR § 689.10(a). Any appeal should be addressed to the Director at the National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230. If we do not receive your appeal within the 30-day period, this decision will become final.

For your information, we are attaching a copy of the applicable regulations. If you have any questions about the foregoing, please call [REDACTED] Assistant General Counsel, at (703) 292-8060.

Sincerely,



Wanda Ward
Senior Advisor to the Director

Enclosures

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

National Science Foundation Office of Inspector General



Confidential
Report of Investigation
Case Number A09040029
December 6, 2011

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

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

Executive Summary

Allegation: Plagiarism.

OIG Inquiry: OIG identified 19 sources from which approximately 200 lines and 16 embedded references were copied into 2 declined and 1 awarded NSF proposals. OIG referred investigation of the matter to the Subject's home institution.

**University
Investigation
and Action:**

The University concluded, based on a preponderance of the evidence, that the Subject intentionally committed plagiarism, deemed a departure from accepted practices. It also found that four proposals the Subject submitted to other entities and the Subject's dissertation contained plagiarized text.

The University required the Subject to: inform the Co-PI of one of the NSF proposals of the charges and investigatory findings; complete a course on responsible conduct of research and ensure each of her graduate students also completes a course; submit to a University administrator for review all publication manuscripts and proposals she intends to submit to external entities; and encourage the use of plagiarism detection software for both her work and the work of her students.

**OIG
Assessment:**

- **The Act:** The Subject plagiarized 246 lines and 12 embedded references, from 20 sources into 3 NSF proposals.
- **Intent:** The Subject acted intentionally.
- **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 additional proposal the Subject submitted during the course of the investigation contained plagiarism.

**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 3 years.
- Require assurances from the Subject for a period of 3 years.
- Require certification of attending an ethics class within 1 year.
- Terminate the Subject's NSF award.

OIG's Inquiry

OIG conducted an inquiry into an allegation that the Subject¹ submitted an NSF proposal containing copied text. At the time,² the Subject had submitted 3 proposals to NSF. We reviewed each proposal and found that Proposal 1³ contained 78 unique lines of copied text and 5 embedded references from 10 sources; Proposal 2⁴ contained 74 unique lines of copied text and 5 embedded references from seven sources; and Proposal 3⁵ contained 48 unique lines of copied text and 6 embedded references from six sources.⁶

We contacted the Subject about the allegation.⁷ In her response,⁸ the Subject wrote

of the 19 sources from which I am alleged to have plagiarized, I did not copy any of the identified language in 12 (Sources B, D, E, H, I, J, L, M, O, P, Q and R), copied some, but not all of the identified language in two (Sources F and N) and copied the identified language in five (Sources A, C, G, K, and S) (often with direct or embedded citations which did not comport with the attribution standards as I now understand them, but with no attempt to misappropriate this material as my own).⁹

She further stated "nearly all of the alleged plagiarized material appears in the general introductory and literature review sections of the Proposals, and is comprised of very basic, general background information that is common in the relevant research community."¹⁰ She provided documents to corroborate that the annotated text is common in her field. She claimed she acted in "honest error" since, as a non-native English speaker raised and educated in China, she misunderstood the rules of plagiarism as they apply to proposals.¹¹ She also explained she was under time pressures, submitting "Proposals 2 and 3 to NSF within a period of only two weeks."¹² She stated she "can state unequivocally that there is no additional text in any of the Proposals that was copied from another source but not properly distinguished and attributed."¹³ The Subject concluded:

1 [REDACTED]
2 [REDACTED]
3 Tab 1: [REDACTED]
4 Tab 2: [REDACTED]
5 Tab 3: [REDACTED]

⁶ Tab 4 contains Sources A-S.

⁷ Tab 5.

⁸ Tab 6.

⁹ Tab 6, pg 11. (Page numbers here and throughout the report correspond to those assigned by Adobe in the.pdf file.)

¹⁰ Tab 6, pg 1.

¹¹ Tab 6, pg 1.

¹² Tab 6, pg 9.

¹³ Tab 6, pg 11.

I fully acknowledge that the responsibility for proper attribution and citation in the Proposals is my own, however I was simply not experienced enough and had not received enough training in this area to avoid making some errors in this regard. . . . I acknowledge and regret the mistakes I made, and most assuredly will not make them again, nor do anything else to compromise the flawless record of academic integrity I have amassed to this point in my young career.¹⁴

We reviewed the Subject's response, determined the annotated text from Sources B-D is often used without attribution, and re-annotated Proposals 1 and 2 accordingly.¹⁵ In general, however, the response did not dispel the allegation and there was sufficient evidence to proceed with an investigation. Most crucially, the Subject acknowledged copying material without citation, and could not corroborate that other sources contained commonly used language.

The following chart summarizes the copied material in Proposals 1-3:

Source	Proposal 1 (Awarded)	Proposal 2 (Declined)	Proposal 3 (Declined)
A (report)	36 lines	44 lines	
B (article) ¹⁶	2 lines		
C (article)	2 lines, 1 embedded reference	2 lines, 1 embedded reference	
D (article)	2 lines		
E (article)	8 lines	8 lines	
F (article)	12 lines, 2 embedded references		
G (article)	11 lines, 2 embedded references		
H (article)	3 lines		
I (article)	2 lines	2.5 lines	
J (article)	2 lines		
K (article)		3 lines, 3 embedded references	
L (article)		12 lines	
M (article)		2 lines, 1 embedded reference	
N (article)			34 lines, 5 embedded references
O (article)			2 lines, 1 embedded reference
P (article)			2 lines
Q (article)			4 lines
R (article)			2 lines
S (article)			4 lines
Total (UNIQUE)¹⁷	78 lines, 5 embedded references	74 lines, 5 embedded references	48 lines, 6 embedded references

¹⁴ Tab 6, pg 2.

¹⁵ Tab 7.

¹⁶ For reasons explained below, we include in this chart line counts from Sources B-D.

University Inquiry and Subject's Response

Consistent with our policy, we referred the investigation to the University.¹⁸ The University, consistent with its policies,¹⁹ conducted an inquiry and produced an Inquiry Report,²⁰ which stated the committee "voted unanimously in the affirmative that the investigation criteria . . . were met for each of the alleged instances of plagiarism designated (A) through (S)."²¹

In her response to the Inquiry Report, the Subject stated: "While I respect and appreciate the work of the inquiry committee, I strongly disagree with its conclusions and recommendations. I remain steadfast in my conviction that I have not committed any acts of research misconduct."²² Specifically, she argued: "I have maintained all along, and continue to maintain, that even in the rare instances where copying occurred, such copying did not constitute plagiarism."²³

University Investigation

The University convened an Investigation Committee (Committee), which conducted interviews and reviewed evidentiary documents, including position papers the Subject wrote in her defense and proposal drafts. The Committee produced an Investigation Report (Report), which it provided to our office with attachments.²⁴

Based on the Subject's statements, the Committee reported that the Subject had not read NSF's research misconduct policy or grant proposal guide despite signing NSF's proposal submission form certifying that the work was her own and that she would abide by NSF's policies;²⁵ and had not read the University's policies on research misconduct, despite having signed a University contract that she learn, understand, and carry out its policies.²⁶ It also reported that the Subject said "I think that this is my misunderstanding, probably, that in the science and engineering world, it's okay to copy, you know, sentences that's, you know, common knowledge." She agreed that she felt it was okay to appropriate other people's words, when it was general knowledge without giving them credit depending on the nature of the sentence;²⁷ that she ensures she cites the most important papers and scholars in her literature review;²⁸ and that she thought citation standards for grant proposals were lower because one must write

¹⁷ Although material from some sources was repeated within a given proposal, the material was counted only once within each individual proposal.

¹⁸ [REDACTED] Tab 8 contains the referral letter.

¹⁹ Tab 9.

²⁰ Tab 10.

²¹ Tab 10, pg 9. The inquiry committee included Sources B-D in its analysis.

²² Tab 10, pg 11.

²³ Tab 10, pg 10.

²⁴ Tab 11-12.

²⁵ Tab 11, pg 6-7.

²⁶ Tab 11, pg 6.

²⁷ Tab 11, pg 7.

²⁸ Tab 11, pg 8.

multiple proposals due to the low funding rates.²⁹ Additionally, it reported that the Subject's stated method of writing proposals included having the "references at hand" and being "'influenced by' the references while writing," and "memoriz[ing] passages, paraphrase[ing] sections, or retyp[ing] sections from sources without attribution."³⁰

The Committee questioned the Subject about each segment of copied text. For some sources, she acknowledged she used language from the sources. For others, she provided explanations such as: the text being introductory and/or common knowledge; having used a different source than the one we identified; feeling constrained by the "limited ways to express" certain ideas;³¹ and not having copied the text but rather simply being very familiar with the material.

Particularly interesting was her explanation regarding Source A, a workshop summary from which she appropriated the majority of copied text in Proposals 1 and 2.³² This material appeared in the introduction, literature section, project summary, and the first sentence of the research plan.³³ She explained she thought citation rules differed for a workshop summary; the summary contained "common fundamental knowledge" in her field; and she had "committed many portions of it to memory."³⁴ The Committee however noted that she **had** properly quoted and cited another workshop summary³⁵ and questioned how she could memorize a source's exact words, but not the name of the source itself.³⁶

The Committee examined Sources B-D and "found that all of these instances of alleged plagiarism, and additional instances in the same proposals not identified by the NSF IG, represented research misconduct."³⁷ Specifically, it found four sources from which it concluded the Subject had copied the material we identified as from Sources B-D as well as copied additional material it identified during its investigation.³⁸ The Committee also found additional material copied from Source J in Proposal 1.³⁹ The Committee noted that its identification of additional copied material contradicted the Subject's response to our office in which she stated "unequivocally" that the Proposals did not contain additional copied text.⁴⁰

²⁹ Tab 11, pg 9

³⁰ Tab 11, pg 7.

³¹ Tab 11, pg 31.

³² The Subject told the Committee she wrote Proposal 2 before Proposal 1 and used some of its text in Proposal 1 (Tab 11, pg 13).

³³ Tab 11, pg 13

³⁴ Tab 11, pg 12-13.

³⁵ Tab 11, pg 14.

³⁶ Tab 11, pg 12. The Subject responded that she did memorize the source itself, or at the very least knew which paper or group of papers text came from, but did not think she needed to cite the source (tab 11, pg 8).

³⁷ Tab 11, pg 1.

³⁸ Tab 11, pg 15-18. Three of the sources were named in Proposals 1 and 2's Works Cited sections; the fourth source was one of the documents the Subject provided us during the inquiry to corroborate use of common language.

³⁹ Tab 13 contains Proposals 1-3 and the four sources, with newly identified material highlighted in yellow.

⁴⁰ Tab 11, Pg 18.

The Committee noted a number of contradictions in the Subject's statements.⁴¹ First, the Subject claimed it was her practice to cite foundational studies; however, she did not always follow her own stated practice.⁴² Second, the Subject's responses to the Committee's questions often contradicted those she provided to our office.⁴³ For example, it noted the Subject had not provided our office the explanation she used repeatedly with the Committee that "she had likely copied, or memorized or been influenced by or informed by a source or a group of sources, but in many cases did not remember the specific source or the copied text."⁴⁴ Last, despite claiming in a position paper that she has now "a clear understanding of the definition of research misconduct as well as the consequence of any deviation from the applicable standards,"⁴⁵ the Subject plagiarized text⁴⁶ and "misrepresented the data of others to support her statements" in that same paper.⁴⁷

The Committee concluded, based on the preponderance of evidence, that the Subject committed research misconduct when she "intentionally appropriated the words of others (expression of ideas) without proper citation of the original sources identified by NSF and the four additional sources identified by the Committee."⁴⁸

The Committee concluded the Subject acted intentionally. It wrote:

the appropriation of the expression of ideas from many sources is extensive and widespread, and her description of the process of writing the proposals taking the expression of ideas from many sources for each section and consciously deciding not reference [sic] these sources indicates the intention to claim credit of the words of others as her own.⁴⁹

The Committee determined the Subject "did not forget to cite the sources, but stated that she reviewed her proposals to make sure that she had used the citations she had intended"⁵⁰ and labeled as "fiction" her claim that she had 'memorized' parts of the text, had been 'influenced by' or 'informed by' sources.⁵¹ Lastly, the Committee noted that "Some plagiarized text

⁴¹ In general, the Committee found a "lack of candor displayed by the Subject," which it deemed an aggravating factor (Tab 11, pg 40). It concluded that "her responses at the hearing and the position papers submitted to the Committee for consideration throughout the process demonstrate her continuing unwillingness to acknowledge the plain meaning of the standard"(Tab 11, pg 41). The Subject contested this assessment and the University's appeal committee determined it was possible to interpret the Subject's behavior a different way: "that she presented a fairly consistent if somewhat confusing explanation of her behavior that admitted responsibility for her actions while simultaneously arguing the errors were 'honest' and too minor to constitute misconduct" (Tab 11, pg 81).

⁴² Tab 11, pg 29.

⁴³ Tab 11, e.g., pg 28.

⁴⁴ Tab 11, pg 41.

⁴⁵ Tab 11, pg 42.

⁴⁶ Tab 11, pg 42

⁴⁷ Tab 11, pg 43.

⁴⁸ Tab 11, pg 39.

⁴⁹ Tab 11, pg 40.

⁵⁰ Tab 11, pg 40.

⁵¹ Tab 11, pg 40.

sections in all three proposals were presented in bold font, italics, or in special colors to convey the contextual significance of the ideas associated with the text.”⁵²

The Committee determined the Subject’s action constituted a significant departure from accepted practices. It wrote:

Whether compared to normal expectations and practices with peer academic faculty at []⁵³ University or within the wider body of engineering or science colleagues in the United States, the quantitative level and qualitative nature of appropriation identified within [the Subject]’s three NSF proposals is unequivocally unacceptable. She stated that her personal standard developed from her own experience allowed her to appropriate the words of others without citation under a wide variety of conditions. The accepted [University] and NSF standards for the ethical conduct of research is simple; it contains no such exemptions.”⁵⁴

Additionally, although the Subject received her pre-doctoral education in China,⁵⁵ the Committee concluded she received her Ph.D. from a U.S. research institution,⁵⁶ and is involved in the University’s writing lab⁵⁷ and in U.S.-based academic societies,⁵⁸ all of which have a code of ethics and/or detail the repercussions of unethical scientific behavior.⁵⁹

To determine pattern, the University’s Research Integrity Officer (RIO)⁶⁰ examined the Subject’s Ph.D. thesis, publications, and other proposals.⁶¹ He concluded “that the behavior of including text authored by others without properly attributing the source of the text represents a pattern of behavior rather than an isolated event.”⁶² His determination was based on: 1) the additional plagiarism the Committee identified in Proposals 1-3; 2) the fact the Subject herself

⁵² Tab 11, pg 40. Based on the extent of plagiarism, the Committee wrote: “it was difficult for the Committee to determine if any of ideas [sic] presented in the remaining text originated with [the Subject]” (Tab 11, pg 40).

⁵³ [REDACTED]

⁵⁴ Tab 11, pg 40.

⁵⁵ The Subject received her Bachelor’s and Master’s degrees from [REDACTED]

⁵⁶ [REDACTED] We note that the Subject asked the Committee to consider that her Ph.D. advisor died suddenly two and a half years into her dissertation work (Tab 12, pg 187). She said her “dissertation reflects the understandings I developed from [him],” noting he “gave us the impression that it was acceptable to copy text from his papers, which we were extending, and to use the same text to describe the same experimental setup” (Tab 12, pg 203). She added: “We were led to believe that it was appropriate to copy the manual when describing software we used, and that attribution standards in NSF proposals are not as stringent as those applicable to journal articles or other works intended for broad distribution within the relevant academic community” (Tab 12, pg 203).

⁵⁷ [REDACTED]

⁵⁸ [REDACTED]

⁵⁹ Tab 11, pg 3-4.

⁶⁰ [REDACTED]

⁶¹ The documents examined are listed in Tab 11, pg 46-47, and contained in Tab 12, Documents Reviewed.

⁶² Tab 11, pg 2.

acknowledged plagiarism within her dissertation;⁶³ and 3) plagiarism he identified in four other reviewed proposals.⁶⁴

The RIO did not find plagiarism in the Subject's publications, which he concluded was "consistent with [the Subject's] stated understanding" that different standards applied to proposals and publications.⁶⁵ Accordingly, the RIO determined the impact of the Subject's actions "was limited due to the fact that all the instances identified were either in the Respondent's thesis or in proposals submitted as confidential documents to potential sponsors."⁶⁶

The Subject provided comments to the draft final Report⁶⁷ and subsequently appealed the Committee's finding.⁶⁸ The Appeal Committee "upheld the findings of the Investigation Committee."⁶⁹

University Adjudication

The University Provost⁷⁰ adjudicated the matter and required that the Subject inform the Co-PI of Proposal 3 about the allegation and the resolution so he does not use the plagiarized material in the future. Second, the Subject and each of the Subject's graduate students are required to complete a Responsible Conduct of Research (RCR) course. Third, until December 31, 2013, or the end of her University employment, whichever comes first, a University administrator must review all manuscripts and proposals the Subject wants to submit to external entities as author, PI, or Co-PI, via electronic plagiarism detection software. Last, the Provost encouraged the Subject to use the University's plagiarism detection software for her work and that of her students.⁷¹

OIG's Assessment

The University provided OIG with its Report, and OIG invited the Subject's comments.⁷² In her response,⁷³ the Subject argued "the investigation in this matter was substantively and procedurally flawed, and that the Report's finding of research misconduct is unsupported by the

⁶³ Tab 11, Pg 1. The Respondent submitted a statement to the University with a copy of her Ph.D. thesis stating that chapters of her thesis contain verbatim text from a published article, two other theses, and a software manual.

⁶⁴ Tab 11, pg 2. The four proposals (Tab 11, pg 46-47, #3, 4, 6, and 9) were submitted to the [REDACTED]

⁶⁵ Tab 11, pg 2.

⁶⁶ Tab 11, pg 2.

⁶⁷ Tab 11, pg 51-57.

⁶⁸ Tab 11, pg 58-79.

⁶⁹ Tab 11, pg 1. The appeal committee's report is included in Tab 11, pg 80- 84.

⁷⁰ [REDACTED]

⁷¹ Tab 14.

⁷² Tab 15.

⁷³ Tab 16.

evidence.”⁷⁴ She asked “that the Report’s finding of research misconduct be overturned, but that the corrective measures . . . remain in place.”⁷⁵

OIG assessed the Report for accuracy and completeness, and found the Report to be both accurate and complete. We further conclude the University followed reasonable procedures in conducting its investigation.⁷⁶ Indeed, we were highly impressed with the quality of the Report and attachments, and disagree with the Subject’s assessment of the University’s process and Report. We adopted the University’s findings in lieu of conducting our own investigation.

Our office did re-annotate Proposals 1 and 2 in light of the additional copied material the Committee identified.⁷⁷ We found an additional 28 lines and 10 embedded references copied in Proposal 1 and an additional 18 lines and 10 embedded references copied in Proposal 2. We include these newly identified segments in our total line and embedded reference count discussed below.

Additionally, our office did examine two NSF proposals⁷⁸ the Subject submitted during the course of the investigation. We found no substantive plagiarism in the most recent proposal she submitted. In the second proposal (Proposal 4), we identified 31 lines and 1 embedded reference that were inadequately cited from eight sources.⁷⁹ The Subject submitted Proposal 4 after the completion of the University’s inquiry report and during the University’s investigatory process.

Lastly, because Proposal 1 was funded, our investigation moved forward to determine if the plagiarized text had been material to NSF’s funding decision. We met with the cognizant NSF Program Officer (PO)⁸⁰ to assess the materiality of the plagiarized text. The PO unequivocally stated the plagiarized text in the section detailing the Subject’s proposed research was material to his decision to fund the proposal. Specifically, he said only 14 of the 60 proposals submitted to the program that cycle were funded. Furthermore, he stated that the Subject’s proposal was ranked 13th of 14 proposals chosen to receive funding, and given the ranking, had he known about the plagiarism in the section detailing the research plan, he would not have chosen to fund Proposal 1.⁸¹ The proposal was thus awarded due in part to plagiarized text and the fraudulent representation that using such text entailed. Accordingly, we determined

⁷⁴ Tab 16, pg 1.

⁷⁵ Tab 16, pg 3.

⁷⁶ The University’s appeal committee identified one deviation from University policy; the Subject was not provided the full amount of time to respond to the committee’s constitution. However, the appeal committee determined (Tab 11, pg 80-84), and we concur, that this did not significantly affect the investigation. The University and the Subject agreed that the Subject could provide evidence from witnesses and technical experts. Despite repeated reminders from University administration and the University delaying its process accordingly, the Subject did not produce the testimony. Additionally, the appeal committee, which upheld the finding, included a technical expert.

⁷⁷ Tab 13.

⁷⁸ [REDACTED]

⁷⁹ Tab 17 contains Proposal 4 and the eight sources.

⁸⁰ [REDACTED] Program Director of the [REDACTED] and both the current program director and the program director at the time of the funding decision.

⁸¹ Tab 18 contains a Memorandum of Investigation detailing the PO’s comments.

that the plagiarized text was material to the NSF PO's decision to fund the proposal, thus constituting a material false statement and violation of 18 U.S.C. §1001.⁸² We referred the violation to the U.S. Attorney's Office for the Eastern District of Virginia. The AUSA declined prosecution of the matter in lieu of administration action.⁸³

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.⁸⁴

The Acts

Our review found the Subject plagiarized 246 lines and 12 embedded references, from 20 sources⁸⁵ into 3 proposals, one of which was funded. OIG concurs with the Report that the Subject's actions constitute plagiarism. The Subject acknowledged that she had access to the source documents and never contended that the annotated language was her own. In offering an extensive amount of material composed by others as her own, the Subject seriously misrepresented her own efforts and presented reviewers with an incorrect measure of her abilities.

The Report found the Subject's acts constituted a significant departure from accepted practices. We concur with the University's assessment.

Intent

The Report concluded the Subject acted intentionally in plagiarizing material in Proposals 1-3. It determined the Subject, based on her own statements, consciously chose which sources to cite and which not to cite. It further concluded the Subject did not even follow her own stated understanding of what material required citation. Additionally, it noted the Subject showed the significance of some of the plagiarized text by highlighting it via underlining, italics, or other formatting measures. Lastly, the Committee found the Subject's explanations regarding her actions often contradictory, suggesting she was not being wholly truthful in her testimony. We concur with the University's assessment that the Subject's actions were intentional.

⁸² 18 U.S.C. §1001. Statements or entries generally

(a) Except as otherwise provided in this section, whoever, in any matter within the jurisdiction of the executive, legislative, or judicial branch of the Government of the United States, knowingly and willfully--

(1) falsifies, conceals, or covers up by any trick, scheme, or device a material fact;

(2) makes any materially false, fictitious, or fraudulent statement or representation; or

(3) makes or uses any false writing or document knowing the same to contain any materially false, fictitious, or fraudulent statement or entry; shall be fined under this title, imprisoned not more than 5 years . . .

⁸³ Tab 19 contains a Memorandum of Investigation detailing our interaction with the AUSA.

⁸⁴ 45 C.F.R. §689.2(c).

⁸⁵ The 20 sources excludes Sources B-D our office identified and replaces them with the four sources the University identified (Tab 13).

Standard of Proof

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

OIG concludes that the Subject, by a preponderance of the evidence, intentionally plagiarized, thereby committing an act of research misconduct.⁸⁶

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.⁸⁷

Seriousness

The Subject's actions are a serious 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. The extent of the copied material is egregious. Additionally, as evidenced by the Subject's continued acts of plagiarism, e.g., within Proposal 4, the Subject seemingly still does not understand the seriousness of her actions and/or how to avoid further such acts. Lastly, three of the four NSF proposals that contained plagiarism⁸⁸ were submitted to programs that specifically seek researchers who will serve as role models and mentors for their diverse students; the Subject's actions within those proposals suggest that with her current understanding of plagiarism she could not serve fully in that role.

Degree to which Action was Intentional

As explained above, OIG finds that the Subject acted intentionally. The Subject acknowledged that she reviewed her proposals to ensure she cited certain authors and texts. As such, she made conscious decisions regarding what parts of the proposal to cite and what parts to include as her own. The fact that she provided contradictory statements during her testimony

⁸⁶ 45 C.F.R. part 689.

⁸⁷ 45 C.F.R. § 689.3(b).

⁸⁸ Proposals 2 and 4 were targeted to the [REDACTED], Proposal 1, which was awarded, was targeted to the [REDACTED] program.

suggests that she knew what she was doing was incorrect. We therefore conclude that her actions were distinctly intentional.

Pattern

The Committee identified plagiarism in four other proposals the Subject submitted, additional plagiarism in Proposal 1-3, and plagiarism in the Subject's dissertation. Additionally, we identified plagiarism in an NSF proposal the Subject submitted during the course of the investigation. We therefore conclude that the Subject had shown a pattern of plagiarism.

Recommendation

Based on the evidence, OIG recommends NSF:

- send a letter of reprimand to the Subject informing her that NSF has made a finding of research misconduct;⁸⁹
- require the Subject to certify to OIG's Assistant Inspector General for Investigations (AIGI) that proposals or reports she submits to NSF do not contain plagiarized material for 3 years;⁹⁰
- require that the Subject submit assurances by a responsible official of her employer to OIG's AIGI, that proposals or reports submitted by the Subject to NSF do not contain plagiarized material for 3 years;⁹¹ and
- require the Subject to complete an ethics course, which includes discussion on citation practices, within 1 year and provide certification of its completion to OIG upon completion.⁹²
- terminate the Subject's NSF award (Proposal 1).⁹³

⁸⁹ A letter of reprimand is a Group I action (45 C.F.R. §689.3(a)(1)(i)).

⁹⁰ Certification by an individual is a final action that is comparable to the final actions listed in 45 C.F.R. §689.3(a).

⁹¹ Requirement for assurances is a Group I action (45 C.F.R. §689.3(a)(1)(iii)).

⁹² Completing an ethics course is a final action that is comparable to the final actions listed in 45 C.F.R. §689.3(a).

⁹³ A termination is a Group III action (45 C.F.R. §689.3(a)(3)(i)).