



NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A12030012

Page 1 of 1

Closeout

We conducted an inquiry into an allegation that a graduate student (Subject¹) copied a very large amount of text into an NSF funded dissertation.² In the inquiry response, the Subject accepted responsibility for the copying, stating that, at the time he wrote the Dissertation, he was not aware that text describing previously conducted research required rewording. We referred an investigation of the co-PI's actions to the University.³ The Subject's interview revealed that the preponderance of evidence supported the Subject's claim that he had been unsure whether text summarizing others' work, even if paraphrased, should be quoted. Because the University concluded that the text was also inadequately cited and that the Subject did not invest due diligence in rewording due to time pressures, it determined that the Subject had recklessly plagiarized; we agreed with its assessment.

We recommended actions to protect the federal interest and the Deputy Director concurred with our recommendations.

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



National Science Foundation Office of Inspector General



Report of Investigation Case Number A12030012 January 17, 2014

**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

- Allegation:** Plagiarism in an NSF-funded dissertation.
- OIG Inquiry:** OIG identified 561 lines of text, 24 figures, and 37 embedded references copied from 40 sources into an NSF funded dissertation. The Subject stated that he was not aware that text from other sources had to be reworded if it was cited.
- University Investigation and Action:** The University concluded that the Subject recklessly plagiarized and determined that he must certify completion of RCR training and submit a corrected dissertation to [REDACTED] and to the University's library.
- OIG's Assessment:**
- **The Act:** The Subject plagiarized 561 lines and 37 embedded references from 40 sources into 1 NSF-funded dissertation.
 - **Intent:** The Subject acted recklessly.
 - **Significant Departure:** The Subject's actions are a significant departure from the accepted practices of the research community.
 - **Standard of Proof:** The preponderance of the evidence supports the conclusion regarding the act and intent, and therefore a finding of research misconduct.
- OIG Recommendation:**
- Send the Subject a letter of reprimand notifying him that NSF has made a finding of research misconduct.
 - Require the Subject to certify compliance with the requirements imposed by the University.
 - Require the Subject to certify completion of an RCR course.
 - Require the Subject to submit certifications for 2 years.
 - Require the Subject to submit assurances from his employer for 2 years.
 - Bar the Subject from participating as a reviewer, advisor, or consultant for NSF for a period of 2 years.

OIG's Inquiry

Our inquiry into plagiarism in an NSF-funded¹ dissertation² (the Dissertation) found 561 lines of text identical or substantially similar to that in 40 alleged sources,³ along with 37 embedded references and 24 inadequately cited figures. In the Subject's⁴ response⁵ to our inquiry letter,⁶ he took responsibility for the copying, stating that, at the time he wrote the Dissertation, he was not aware that text describing previously conducted research required rewording. He also stated that his advisor had called him several months before the Subject received our inquiry letter to request that the Subject revise the Dissertation. "[H]e told me that I can not just directly copy the sentences ... and I need to revise them or put the double quotation marks on them if I don't change the words."⁷ The Subject attached revised versions of his Dissertation to his response.

Nevertheless, the original document contained an extremely large amount of plagiarism and we determined there was enough substance to conduct a full investigation into the Subject's actions. We referred an investigation to the Subject's university⁸ (University).⁹

Because the Subject stated he had asked his advisor if a simple citation of the copied figures was sufficient and his advisor had reportedly stated it was, we also sent the University a revised markup of the Dissertation that removed questions about the 24 abovementioned figures.¹⁰

The University's Investigation^{11 12}

Consistent with its policy,¹³ the University appointed an investigation committee (Committee) to investigate the allegation. The Committee interviewed one group and 4 individuals in connection with this investigation: a group of Chinese researchers including two post-doctoral researchers, three Assistant Professors, and two Associate Professors; the Subject's dissertation advisor¹⁴; the Graduate Director¹⁵ during the time the Subject was completing the Dissertation; a member of the Subject's dissertation committee¹⁶; and the Subject.

¹ [REDACTED] entitled, [REDACTED] [REDACTED]. (Awarded)

² Tab 1, Ph.D. thesis entitled, [REDACTED]

³ Tab 2.

⁴ [REDACTED]

⁵ Tab 4.

⁶ Tab 3.

⁷ Tab 4, Inquiry Response, p. 1.

⁸ [REDACTED]

⁹ Tab 6 contains the referral letter.

¹⁰ Tab 7, Revised Dissertation Markup.

¹¹ Tab 8, The University's Investigation Report.

¹² Tab 9, Attachments to the University Report

¹³ See Tab 10, Procedure [REDACTED]. Because the Dean declared a conflict-of-interest and recused himself, oversight of the matter was transferred to the Provost.

¹⁴ [REDACTED]

¹⁵ [REDACTED]

During the Subject's interview, the Committee questioned him about his knowledge of quotation marks. The Subject claimed at the time of the interview that he now understands that he has to rewrite or place quotation marks around anything that cannot be restated. He claimed to be still unsure whether paraphrased text should be in quotes because the ideas belong to another. The Committee questioned the instances where the Subject copied text which itself summarized others' work,¹⁷ asking him whether he had even read the original and, if he had, why he had chosen to use another's characterization in lieu of his own.¹⁸ He stated that he had felt it more important to cite the author of the ideas than the text. They also asked him about a 4.5 page section of copied text in the Dissertation that came from source B, a short article. A Committee Member estimated it amounted to 30 or 40 percent of the article¹⁹ asking, "What were you thinking when you took such a massive fraction of a paper...?"²⁰ He answered that he had previously thought the purpose of a literature review was to take all the important papers on a topic and organize relevant parts of them so that the reader knows what has been previously done, but he did not think rephrasing the text was important.²¹

In the interview with the group of Chinese researchers, the Committee found that opinions varied as to whether citations alone were sufficient, but the answers suggested that it was not an acceptable practice in China either, particularly among newly graduated researchers.²² The Committee wrote, "Our Chinese consultants had difficulty understanding how a doctoral student would not know that it is inappropriate to copy verbatim without at least a citation if not quotes, indentation or paraphrasing."²³

In order to examine the Subject's assertion that, in China, placing one citation to a source at the beginning or end of a paragraph was sufficient attribution, the Committee reviewed several instances of copied text in the Dissertation and found that regardless of custom, this manner of citation was not the Subject's actual practice. Specifically, it found many instances where the Subject did not provide a citation to copied text at all.

Evidence surfaced during the Subject's interview that caused the Committee to rethink his explanation regarding his ignorance of the need to adequately cite copied text. For example, "██████ claimed that the double quotation mark did not exist in the Chinese lexicon. However, all of the Chinese discussants knew of the double quotation mark and claimed that no reasonable person would not know it, suggesting that ██████ was trying to misguide the Committee. If he was trying to misguide the Board, then we can reasonably expect he tried to misguide his thesis committee by not using double quotations."²⁴ In addition, the Subject used quotation marks in the Dissertation for proverbs. Further, the copied text lacked even adequate citation.²⁵ The Committee stated that the Subject's actions were a result "of a combination of cluelessness,

¹⁷ Tab9, Page 87, Interview Transcript. [Page 23 of PDF]

¹⁸ Tab9, Page 88, Interview Transcript. [Page 23 of PDF]

¹⁹ Tab9, Page 89, Interview Transcript. [Page 23 of PDF.]

²⁰ Tab9, Page 90, Interview Transcript. [Page 24 of PDF.]

²¹ Tab9, Pages 91, 94, Interview Transcript. [Page 24-25 of PDF.]

²² Tab 8, Report, p. 8. [Page 9 of PDF.]

²³ Tab 8, Report, p. 12. [Page 13 of PDF.]

²⁴ Tab 8, Report, p. 11. [Page 12 of PDF.]

²⁵ Tab 8, Report, p. 11. [Page 12 of PDF.]

laziness and time pressure²⁶ and that “[h]is advisor was not very effective in directing him concerning these issues.”²⁷

By majority vote, the Committee determined that the Subject’s actions were reckless and a significant departure from accepted practices of his research community, rising to the level of research misconduct. The Report did not state the standard of proof that the Committee used. However, the University’s policy requires that a finding of research misconduct “be proven by a preponderance of the evidence.”²⁸ In terms of pattern, the report highlights a portion of the Subject’s interview in which he stated it was unlikely that any of his prior joint publications contained plagiarism because so many people were concurrently revising it over a long period of time. The Committee concluded that the copying in the Dissertation did not have a strong impact on the research record because the Dissertation “is not likely to be looked at by many people, and because most of [the sections of copied text] appear in the background chapter.”²⁹ The Committee recommended that the Subject revise his Dissertation and “make every attempt to replace the revised Dissertation for the original one in the [REDACTED] collection”³⁰ as well as the one in the library of the University.

The Deciding Official³¹ accepted the Committee’s report and recommendation and additionally required that the Subject certify in writing that he had completed RCR training. He indicated that the penalty for noncompliance would be the revocation of the Subject’s Ph.D. degree.³²

We noted that in the Subject’s response to the Committee’s report, he objected to their characterization that he claimed in his interview that Chinese did not have quotation marks, stating that he simply meant that he had never noticed them before.³³ He also expressed that he did not mean to imply that it was Chinese practice to place a citation at the beginnings and ends of copied paragraphs; rather, he had meant to express that citing at the beginning of a sentence or end of a paragraph had been his own understanding of proper citation at the time.³⁴

OIG’s Assessment

We assessed the Report for accuracy and completeness and whether the University followed reasonable procedures in its investigation.³⁵ We found that the general procedures were reasonable, the report was reasonably complete, and the University provided an acceptable evidentiary record. We were therefore able to accept the University’s investigation in lieu of conducting our own.

²⁶ Tab 8, Report, p. 13. [Page 14 of PDF.]

²⁷ Tab 8, Report, p. 13. [Page 14 of PDF.]

²⁸ Tab 10, Policy, p. 3. [Page 3 of PDF.]

²⁹ Tab 8, Report, p. 12. [Page 13 of PDF.]

³⁰ Tab 8, Report, p. 13. [Page 14 of PDF.]

³¹ [REDACTED]

³² Tab 9, Letter to Subject, p. 1.

³³ Tab 8, Report, Attachment A, p. 2. [Page 16 of PDF.]

³⁴ Tab 8, Report, Attachment A, p. 1. [Page 15 of PDF.]

³⁵ 45 C.F.R. §689.9(a).

A finding of misconduct requires that: (1) there be a significant departure from accepted practices of the relevant research community, (2) the research misconduct be committed intentionally, or knowingly, or recklessly, and (3) the allegation be proven by a preponderance of the evidence.³⁶

The Act

The Subject admitted his responsibility for the 561 lines of text copied from 40 sources into his NSF-funded Dissertation. The Subject's unattributed copying is consistent with NSF's definition of plagiarism.³⁷

Intent

The Committee found that the Subject acted recklessly.³⁸ We concur with the Committee's assessment. The Committee stated, "The use of direct quotes is relatively uncommon in scientific papers in his field. However, paraphrasing is expected."³⁹ This lends credence to a conclusion that, given the Subject's lack of experience in single-author academic writing and possible confusion related to an educational background outside of the United States, the Subject was not fully knowledgeable of his field's expectations with regard to paraphrasing, or may not have known what qualified as a sufficient paraphrase. Further, as the Committee's report states, the Subject "admitted that he was in a hurry and implicitly reckless in putting his dissertation together."⁴⁰

Standard of Proof

The preponderance of the evidence supports that the Subject recklessly plagiarized and that his actions were a significant departure from the accepted practices of the relevant research community. We therefore conclude that the Subject's actions constitute 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.⁴¹

³⁶ 45 C.F.R. 689.2(c).

³⁷ 45 C.F.R. 689.1(a)(3)

³⁸ Tab 8, Report, p. 12. [Page 13 of PDF.]

³⁹ Tab 8, Report, p. 11. [Page 12 of PDF.]

⁴⁰ Tab 8, Report, p. 12. [Page 13 of PDF.]

⁴¹ 45 C.F.R. 689.3(b).

Seriousness

The amount of text copied by the Subject is a great deal more than in other cases our office has investigated; however, the copying constitutes 20-30% of the Dissertation, comparable to 2-3 pages of an NSF Proposal. At the same time, some of the copying is egregious, such as pasting approximately half of Source B, a journal article, directly into his Dissertation. A dissertation is partially intended to represent proof of a scholar's ability to synthesize prior research relevant to the project at hand, and the Ph.D. degree hinges significantly on the completion of the dissertation. In addition, the funding he received renders his work representative of NSF's endeavors, threatening the agency's reputation. We therefore consider his extensive plagiarism moderately serious.

Pattern and Impact on the Research Record

The Subject has no other sole-authored work and there appears to be no pattern of plagiarism. We also agree with the Committee that the Dissertation may be somewhat less likely to have been read by others than a journal article,⁴² thereby reducing impact on the research record.

Mitigating Factors

Although the amount of plagiarism in the case is extensive, we do consider two mitigating factors. First, in our communications with the Subject, it became clear he had a limited understanding of plagiarism based on his previous academic experience. Second, we agree strongly with the committee that the Subject received inadequate guidance from his mentor regarding the need to adequately paraphrase and/or cite material used from other authors.

Recommendations

Based on the evidence, OIG recommends that NSF:

- Send the Subject a letter of reprimand notifying him that NSF has made a finding of research misconduct.⁴³
- Require the Subject to certify completion of the requirement imposed by the University that he submit a corrected and approved dissertation to the [REDACTED] repository and to the University's library.
- Require the Subject to certify to 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.⁴⁴ The instruction should be in an interactive format (e.g., an instructor-led course) and specifically include instruction on plagiarism.

⁴² Tab 8, Report, p. 12. [Page 13 of PDF.]

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

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

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

- Bar the Subject from participating as a peer reviewer, advisor, or consultant for NSF.⁴⁵
- Require for each document (proposal, report, etc.) to which the Subject contributes for submission to NSF (directly or through his institution),
 - the Subject to submit a contemporaneous certification to the AIGI that the document does not contain plagiarism, falsification, or fabrication.⁴⁶
 - the Subject to submit contemporaneous assurances from a responsible official of his] employer to the AIGI that the document does not contain plagiarism, falsification, or fabrication.^{47 48}

Subject's Response to OIG's Draft Investigation Report

The Subject reviewed a copy of the draft version of the ROI and did not have any comments to add.⁴⁹

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

⁴⁶ This action is similar to 45 C.F.R. 689.3(a)(1)(iii).

⁴⁷ A Group I action 45 C.F.R. 689.3(a)(1)(iii).

⁴⁸ All certification should be sent to the Assistant Inspector General for Investigations at NSF/OIG.

⁴⁹ Tab 11, Subject Response.

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



May 2, 2014

OFFICE OF THE
DEPUTY DIRECTOR

CERTIFIED MAIL --RETURN RECEIPT REQUESTED



Re: Notice of Research Misconduct Determination

Dear [REDACTED]:

During your graduate career at [REDACTED], NSF provided funding in support of your dissertation. As documented in the attached Investigative Report, NSF's Office of Inspector General (OIG) concluded that your dissertation 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;
- (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 NSF funded dissertation included substantial copied material: 561 lines of text, 24 figures, and 37 embedded references copied from 40 sources. Your inclusion of copied material in your dissertation constitutes plagiarism and meets the applicable definition of "research misconduct" 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 CFR 689.2(c). After reviewing the Investigative Report, in particular the amount of copied

material and the admitted haste with which you undertook your work, NSF has determined that, based on a preponderance of the evidence, you acted recklessly and that your actions constituted a significant departure from accepted practices of the relevant research community. I am, consequently, 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 as well as other relevant circumstances. 45 CFR 689.3(b).

After assessing the relevant facts and circumstances of this case and NSF's regulations, I am taking the following actions:

- Within one year of the date of this notice, you must complete a responsible conduct of research training program, for which the instruction should be an interactive format (e.g., an instructor-led course) and which specifically includes plagiarism. You must provide documentation of the program's content and proof of its completion to the OIG;
- You are required to certify completion of the requirement imposed by [REDACTED] that you submit a corrected and approved dissertation to the [REDACTED] repository and the [REDACTED] library; and
- For a period of two years from the date of this notice, you are required to submit 1) assurances from a responsible official of your employer to the AIGI that any document you submit to NSF, directly or through your institution, does not contain plagiarized, falsified or fabricated material, and 2) a contemporaneous certification to the AIGI that any document you submit to NSF, directly or through your institution, does not contain plagiarism, falsification, or fabrication.

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

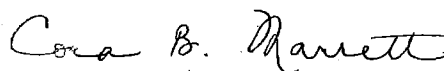
Procedures Governing Appeals

Under NSF's regulations, you have 30 days after receipt of this letter to submit an appeal of this

finding, in writing, to the Director of the Foundation. 45 CFR 689.10(a). Any appeal should be addressed to the Director at the National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230. If we do not receive your appeal within the 30-day period, the decision on the finding of research misconduct will become final.

For your information, we are attaching a copy of the applicable regulations. Should you have any questions about the foregoing, please contact [REDACTED]

Sincerely,



Cora B. Marrett
Deputy Director

Enclosures:
Investigative Report
45 CFR Part 689