



NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A08100051

Page 1 of 1

Our investigation determined that the Subject¹ recklessly plagiarized text into two NSF proposals. NSF made a finding of research misconduct by the Subject; sent a letter of reprimand to the Subject; required the Subject to submit certifications to the Assistant Inspector General for Investigations (AIGI), NSF OIG for three years; required the Subject's employer to submit assurances to the AIGI of NSF OIG for three years; prohibited the Subject from serving as a reviewer of NSF proposals for two years; and required the Subject to provide certification to the AIGI within one year of the finding that she has completed a course in ethics covering research misconduct.

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

¹ [REDACTED]

National Science Foundation Office of Inspector General



Confidential Report of Investigation Case Number A-08100051 28 January 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

OIG's inquiry established that:

- copied text appeared in two of the Subject's NSF proposals

University's investigation established that:

- the Subject recklessly plagiarized text into proposals submitted to NSF;
- the Subject's actions were a significant departure from the standards of her research community, and
- the Subject committed research misconduct

OIG concludes that:

- **Act:** The Subject copied approximately 150 lines of text into two NSF proposals, without proper attribution; the Subject therefore committed plagiarism.
- **Intent:** The Subject's plagiarism was reckless.
- **Standard of Proof:** A preponderance of the evidence supports the conclusion that the Subject's acts were a significant departure from accepted practices, and therefore constitute research misconduct.

OIG recommends that NSF:

- Make a finding of research misconduct by the Subject;
- Send a letter of reprimand to the Subject;
- Require that the Subject submit certifications to AIGI, NSF OIG for 3 years that any submissions made to NSF do not contain falsified, fabricated, or plagiarized material;
- Require that the Subject's employer submit assurances to AIGI, NSF OIG for 3 years that any submissions made to NSF do not contain falsified, fabricated, or plagiarized material;
- Prohibit the Subject from serving as a merit reviewer of NSF proposals for 2 years; and
- Require the Subject to provide certification to NSF OIG of attendance at a course in responsible conduct of research within 1 year of the finding of research misconduct.

OIG's Inquiry

We assessed an allegation that the Subject's¹ NSF proposals² contained copied text. Our review revealed that two of the Subject's proposals contained approximately 150 lines of text copied from 29 potential sources. We wrote the subject to obtain her perspective of the allegation (Tab 1). She replied (Tab 2) that she copied material from the indicated sources, but asserted that she properly provided citations for all copied material, or that no citations were needed. The Subject did not address the absence of quotation marks or other distinguishing features for any of the copied text. The Subject's reply did not dispel the allegation, and we referred the investigation to the Subject's University³ (Tab 3).

University's Inquiry and Investigation

Pursuant to its policy, the University conducted an inquiry and issued a report (Tab 4). During the inquiry, the Subject was asked for an explanation of each of the instances of apparently copied text in the proposals. In their assessment of her responses, the inquiry committee found "a reasonable basis for concluding that the allegations above fall within the definition of Research Misconduct in [University] Policy and, based on the inquiry committee's review of the evidence and records that it considered, the allegations may have substance."⁴ As a result, the University appointed three faculty members to serve as an investigation committee (IC). The University sent us the IC report and supporting documents (Tab 5) when it completed its investigation

The IC concluded that the Subject committed plagiarism in her NSF proposals. The cover letter stated "The investigation committee's final report . . . concludes that, based on a preponderance of the evidence examined, the [Subject] has committed research misconduct. Specifically, the committee found that the [Subject] committed 45 instances of reckless plagiarism and five instances of intentional falsification which constitute research misconduct."⁵

The IC considered each instance of copied text in the Subject's two proposals separately. For the first proposal,⁶ the IC stated:

After our review of these 14 instances (identified as A1-H1), we believe that one (D2) should be considered *careless plagiarism* and the other thirteen should be considered *reckless plagiarism*. The former is a table that, except one column which was omitted from the original source, is identical to the original source. Although the [Subject] appropriately cited the source of the information in the

1

2

Both proposals were declined. Annotated proposals and potential source documents are included at Tab 1 along with the letter to the Subject.

3

⁴ Inquiry report, cover letter, page 1 (Tab 4).

⁵ IC report, cover letter, page 1 (Tab 5).

6

table, it should have been identified as "reprinted" rather than "adapted" or perhaps as "reprinted in part."

In our review of the other 13 instances, we determined that the plagiarism was reckless. This determination was made not only on the amount of text (length) included in the proposal that was verbatim, but also as a result of the [Subject]'s description of the process used to develop the proposal. As will be outlined below in the findings of fact, the [Subject] reported that in her haste to put together the proposal, she cut and pasted material from previous proposals and inserted material from colleagues without verifying the originality of the material and in most cases never consulting the original resources.⁷

For the second proposal⁸, the IC identified five instances of intentional falsification and 32 instances of reckless plagiarism. The IC stated:

Instances D1, D2, D4, I1 and J1 were classified as falsifications, as in these instances the [Subject] made claims that lead the reader of the proposal to believe that she conducted research that in fact she did not perform. For example, in J1 she described a historical event ("our research"), which did not occur as portrayed (see pages 39-43 of the Hearing transcript). The remaining instances were classified as plagiarism because blocks of copied text appeared in the proposal, but were not enclosed in quotation marks. Some of the instances (B2 *ibid*, B3, D1, D2, D4, I1, I2, J1, K1 *ibid*, L4, L5, M1 O1 [sic], P1, Q1, R1, T1, S1 and U1) were also unattributed.⁹

The IC concluded that falsification occurred because text copied by the Subject contained the words "we" or "our." The IC established that the Subject was not personally involved in the research described or the literature review results described, and the statements in these instances were therefore falsifications.

The Subject admitted to the IC that many of the instances of copied text were results of "cut and paste," from the literature, web sites, or from project/proposal documents provided to her by colleagues.¹⁰ The IC prepared tables that detail each instance of plagiarism and falsification in the Subject's two NSF proposals in order to specify the source of the copied text as from publications, conference presentations, web documents, or from the Subject's colleagues. Specifically for the Subject's second¹¹ proposal, the IC report stated:

Even though this is a sole-authored application, the [Subject] certified that the application was her original work but claimed to have secured portions of text from colleagues or from a previous proposal. In sworn testimony, she said that

⁷ IC Report, pages 4-5 (Tab 5). The IC report uses the same annotation codes on proposals sent to the Subject and to the University in the referral letter.

⁸ [REDACTED]

⁹ IC Report, page 10 (Tab 5).

¹⁰ IC Report, page 7 (Tab 5).

¹¹ [REDACTED]

she used some of the unattributed text to convey a more scientific language in the application (page 42 of the Hearing transcript, lines 6-17).

“But in trying to use language that is more appropriate, I think in situations, there was slippage and not careful analysis of how the statements are worded, not so much that we did not come up with those ideas; we didn't come up with objectives similar to that; we didn't develop ideas; we didn't review the literature; or we didn't actually find those things to happen. But in attempting to write with language that is more scientific or more relevant to this particular area, there was some slippage in terms of citation and quotation of the material.”

She stated that she felt that it was better to use the words of others "rather than using my own wording" (page 43, line 6).¹²

The IC concluded that the Subject committed research misconduct:

We also identified several different levels of plagiarism in the two proposals submitted to the National Science Foundation. We identified one instance of careless plagiarism, 45 instances of reckless plagiarism, and five instances of intentional falsification. Taken together, there is a preponderance of evidence for research misconduct.¹³

The IC examined the Subject's Ph.D. thesis, publications, and additional proposals for evidence of potential plagiarism using commercial software.

However, the software identified several examples of 1-2 sentences of text which were verbatim or near verbatim copies of text also found in the published works of others. In some cases, the source of the verbatim or near verbatim text was cited following the text while in other cases no citation was provided; however, in no cases were the verbatim or near verbatim texts enclosed in quotation marks. These examples were found in the [Subject's] Ph.D. thesis and in several additional publications. The Committee interprets these examples as evidence of potential plagiarism or, at least, inadequate paraphrasing. The Committee concludes that the practice of repeating verbatim and/or near verbatim text without proper attribution or distinguishing the text from the original text authored by the [Subject] may represent a pattern.¹⁴

In her response to the draft IC report, the Subject accepts the finding of careless plagiarism, but disputes all findings of reckless plagiarism and falsification. The Subject claimed that the duplicated texts were results of "honest error,"¹⁵ and "carelessness, haste, and

¹² IC Report, page 19 (Tab 5).

¹³ IC Report, page 20 (Tab 5).

¹⁴ IC Report, page 20 (Tab 5).

¹⁵ IC Report, Appendix 3, Subject's response, page 1 (Tab 5).

detrimental reliance.”¹⁶ The Subject stated: “I still don't know how and when to use quotation marks or how to properly cite direct quotes.”¹⁷

The IC recommended the following actions:

First, we urge [the Subject] to confidentially notify her collaborators for the "leadership" proposal . . . of the charges as well as the findings of the Committee. It is possible that one of the collaborators or another [University] faculty member may use the text from this proposal in future writings. Thus, they need to be informed that the document is tainted by plagiarism. Second, we urge the Office of the Provost to identify and notify any [University] officials that it deems essential to *preventing* future occurrences of plagiarism by [the Subject] and her collaborators. Third, although we were unable to document how [the Subject] actions specifically influenced the public welfare, we commend the National Science Foundation's vigilant review of proposals and ask that Purdue University be informed of any known instances where [the Subject's] actions have compromised the University or the public welfare.¹⁸

The University Provost (Tab 6) followed the recommendations of the IC, and 1) required the Subject to notify her coPIs of the findings of research misconduct on their shared proposal; 2) required the Subject to complete a specified responsible conduct of research course, and 3) required that the Subject submit manuscripts and proposals for review and analysis of possible plagiarism before submission for a period of three years.

OIG's Assessment

On receipt of the University's IC report, we invited the Subject to comment; the Subject did not respond. We concluded that the IC report was accurate and complete, and that the University followed reasonable procedures. We therefore accepted the report in lieu of our own investigation. A finding of research misconduct by NSF 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 proved by a preponderance of the evidence.¹⁹

The Subject admitted to us, and to the IC, that she copied material into her proposal. The IC found most of her actions to be reckless plagiarism, and a significant departure from the standards of her community²⁰, and therefore made a finding of research misconduct. The IC concluded that falsification occurred because text copied by the Subject contained the words “we” or “our,” but the Subject was not personally involved in the research described. However, the definition of falsification reads “manipulating research materials, equipment, or processes, or

¹⁶ IC Report, Appendix 3, Subject's response, page 2 (Tab 5).

¹⁷ IC Report, Appendix 3, Subject's response, page 5 (Tab 5).

¹⁸ IC Report, page 20 (Tab 5).

¹⁹ 45 C.F.R. §689.2(c).

²⁰ The IC Report, page 3 (Tab 5) states that guidance was taken from The National Academies, and the book *On Being a Scientist* (Third Edition), 2009.

changing or omitting data or results such that the research is not accurately presented in the research record.”²¹ We conclude that the Subject’s use of the first person plural in the proposal text does not meet the definition of falsification.

Acts

The Subject plagiarized approximately 150 lines of text from 29 different sources²² into two NSF proposals, without the use of quotation marks or other differentiation, and often without citation or reference to the source of the duplicated material. The NSF Grant Proposal Guide is clear: *NSF expects strict adherence to the rules of proper scholarship and attribution. The responsibility for proper attribution and citation rests with authors of a proposal; all parts of the proposal should be prepared with equal care for this concern.*²³ In offering text written by others as her own words, and those words as representative of her own understanding of the research field, the Subject significantly departed from accepted standards of the research community as established by the University IC.

Intent

The Subject admitted that she copied text into her proposals,²⁴ but asserted that the lack of citations was careless, or that citations were not needed. However, the University IC concluded that the absence of quotation marks or other differentiating features for the copied text, and the lack of citation and reference, confirm her actions as reckless plagiarism. We concur with the IC’s conclusion.

Standard of Proof

The IC concluded by a preponderance of the evidence that the Subject’s reckless acts constituted plagiarism. We concur, and because these actions represent a significant departure from accepted practices, we therefore conclude that her 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.²⁵

²¹ 45 C.F.R. §689.1(a)(2).

²² The sources include ten publications and 19 web sites. A list of sources for each proposal is included at Tab 1.

²³ NSF Grant Proposal Guide, Chapter 1, Section D.3.

²⁴ Subject interview transcript, pages 20 and 27 (Tab 5).

²⁵ 45 C.F.R. § 689.3(b).

Seriousness

The Subject copied approximately 150 lines of text from 29 sources into her NSF proposals. In so doing, the Subject presented that text to NSF proposal reviewers as her own. The Subject's actions represent a serious departure from NSF's expectations of standards of scholarship. Although this is not the most egregious case our office has seen, we believe it serious enough to warrant the recommendations outlined below.

Degree to which the Act was Reckless

The Subject recklessly copied text into her NSF proposals. Her claims that citation and references in her proposals were adequate, or that they were not needed, and her claim to not know about the proper use of quotation marks, are not convincing. The IC noted that the Subject administers a class at the University²⁶ in which plagiarism is clearly identified as an unacceptable practice. The Subject notes that she has herself encountered student plagiarism from students in her classes.²⁷ The Subject is a coPI on a proposal to NSF which contains multiple uses of quotation marks, and proper citation and reference practices.²⁸ We do not find it credible that the Subject could (as claimed) carelessly insert copied text from 29 separate sources into her proposals. Such actions minimally rise to the level of reckless.

Pattern

The Subject plagiarized text into two NSF proposals. The IC examined the Subject's publications and her Ph.D. dissertation,²⁹ and found limited evidence of similar cut-and-paste plagiarism. There is no evidence for plagiarism in a third proposal submitted to NSF on which the Subject is coPI.³⁰ We note that this third proposal contains examples of the proper use of quotation marks and citations when using the exact words of others, contrary to the Subject's claim not to know about proper use of quotation marks. The Subject's pattern of plagiarism appears limited to the two NSF proposals that are the focus of this investigation.

Impact on the Research Record

The Subject's proposals were declined, and the impact on the research record is minimal.

²⁶ Subject interview transcript, page 75 (Tab 5).

²⁷ Subject interview transcript, page 75 (Tab 5).

²⁸

²⁹

³⁰

Subject's comments on draft Report

We provided a copy of the draft Report of Investigation to the Subject, and invited comments. We received no comments.

Recommendation

We recommend that NSF:

- Make a finding of research misconduct by the Subject;
- Send a letter of reprimand to the Subject;³¹
- Require for three years that the Subject certify to the AIGI³² that any submissions made to NSF do not contain falsified, fabricated, or plagiarized material;³³
- Require for three years that the Subject submit an assurance from a responsible official of her employer to the AIGI, that any submissions made to NSF do not contain falsified, fabricated, or plagiarized material;³⁴
- Prohibit the Subject from serving as a peer reviewer of NSF proposals for 2 years;³⁵
- Require the Subject to provide certification to NSF OIG of attendance at a course in responsible conduct of research within 1 year of the finding of research misconduct.³⁶

³¹ A letter of reprimand is a Group I action, 45 C.F.R. § 689.3(a)(1)(i).

³² The AIGI is the Assistant Inspector General for Investigations.

³³ A certification from the subject is analogous to listed Group I actions, 45 C.F.R. § 689.3(a)(1).

³⁴ Assurance from the subject's employer is analogous to listed Group I actions, 45 C.F.R. § 689.3(a)(1).

³⁵ Prohibition from service as a reviewer for NSF is a Group III action, 45 C.F.R. § 689.3(a)(3)(ii).

³⁶ A responsible-conduct-of-research course requirement is analogous to Group I actions, 45 C.F.R. § 689.3(a)(1).

List of Tabs

Tab 1. OIG inquiry letter to Subject, with annotated proposals and source documents.

Tab 2. Subject's response to letter, and attachments.

Tab 3. Referral of investigation to the Subject's university.

Tab 4. University inquiry report.

Tab 5. University investigation report; Subject interview transcript.

Tab 6. University Provost adjudication letter.

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DIRECTOR

JUN 21 2011

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Re: Notice of Research Misconduct Determination

Dear [REDACTED]:

In 2008, you submitted two proposals to the National Science Foundation ("NSF") entitled, [REDACTED]

[REDACTED] As documented in the attached Investigative Report prepared by NSF's Office of Inspector General ("OIG"), these proposals contained plagiarized material.

Research Misconduct and 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 verbatim and paraphrased text copied from several source documents. 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 recklessly 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 recklessly. I have also considered the fact that your misconduct was not part of a pattern, and had no impact on the research record, as well as 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 June 1, 2014, 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 June 1, 2014, 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) You are prohibited from serving as an NSF reviewer, advisor, or consultant until June 1, 2013; and
- (4) By June 1, 2012, you must provide certification to the OIG of your attendance at a course in the responsible conduct of research.

The certifications and assurances 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,

A handwritten signature in cursive script, appearing to read "Wanda Ward".

Wanda Ward
Senior Advisor to the Director

Enclosures:

Investigative Report
45 C.F.R. Part 689