

NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A11050037

Page 1 of 1

We received a substantive allegation that a PI (Subject)¹ plagiarized in an NSF Proposal.² We referred the investigation to the University³ which concluded the omission of quotation marks, indentations, and proximate citations for copied text were a stylistic choice that did not amount to plagiarism. The University took no action.

We could not accept the University's Report and conducted our own investigation. Our investigation revealed that the unattributed text represented a significant departure from accepted practices of the Subject's research community. Based on the preponderance of the evidence, we found that the Subject recklessly plagiarized in his NSF Proposal. The Deputy Director took actions based on our report.

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

¹

[REDACTED]

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DEPUTY DIRECTOR

JUN 06 2013

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

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

Re: Notice of Research Misconduct Determination

Dear [REDACTED]

In 2010, you submitted a proposal 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"), this proposal 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 proposal contained verbatim and paraphrased text copied from several source documents. By submitting a proposal 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 part of a pattern, and had minimal, if any, impact on the research record. I have also 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 June 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 June 1, 2015, you must submit assurances to the OIG 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 June 1, 2014, you must complete a responsible conduct of research training program, for which the instruction should be in an interactive format (e.g., an instructor-led course) and specifically include plagiarism. You must provide documentation of the program's content and proof of its completion to the OIG; and
- (4) Until June 1, 2014, you are prohibited from serving as a reviewer, advisor, or consultant for NSF.

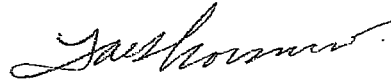
The certifications, assurances and written documentation of the training program should be submitted in writing to NSF's OIG, Associate Inspector General for Investigations, 4201 Wilson Boulevard, Arlington, Virginia 22230.

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] [REDACTED], Assistant General Counsel, at (703) 292-8060.

Sincerely,



Fae Korsmo
Senior Advisor

Enclosures

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



National Science Foundation • Office of Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

FEB 05 2013

To: Cora B. Marrett
Deputy Director

From: Allison C. Lerner *Allison C. Lerner*
Inspector General

Subject: Research Misconduct Investigation Report A11050037

Attached is our investigation report concerning an allegation of research misconduct against [REDACTED], an employee of [REDACTED]. On the basis of our investigation, we concluded that [REDACTED] plagiarized material submitted in one proposal to NSF.

We recommend that NSF find that [REDACTED] committed research misconduct and take additional actions, which we believe will adequately protect NSF's interests. Each of our recommended actions is described in detail in the report. The actions we recommend are consistent with previously adjudicated cases (A11010002, A10030018). The subject did not provide comments on our draft report.

If you have any questions about the investigation report or our recommended findings and disposition, I would be happy to discuss them with you. My staff point of contact for this matter is James Kroll at 703-292-5012.

Attachment

cc: Lawrence Rudolph, General Counsel
Kathryn Sullivan, Office of the Director's Liaison to OIG

National Science Foundation Office of Inspector General



Report of Investigation Case Number A11050037

February 5, 2013

**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.

OIG Inquiry: OIG identified 4 sources from which approximately 91 lines and 1 embedded reference were copied into an NSF proposal that had both a PI (Subject1) and co-PI (Subject2). During our inquiry, the subjects revealed more material, resulting in a revised total of 93 lines, 1 embedded reference, and 1 figure. Subject1 took responsibility for 87 lines of the material and Subject2 took responsibility for the remaining 6 lines and the figure. OIG referred investigation of the matter to only Subject1's home institution.

University Investigation: The University concluded that no research misconduct occurred. However we could not accept the report and commenced our own investigation.

**OIG
Assessment:**

- **The Act:** Subject1 plagiarized 87 lines from 3 sources into an NSF proposal.
- **Intent:** Subject1 acted at least recklessly.
- **Standard of Proof:** A preponderance of evidence supports the conclusion that Subject1 committed plagiarism.
- **Significant Departure:** Subject1's plagiarism represents a significant departure from accepted practices of the research community.
- **Pattern:** A moderate pattern of plagiarism was identified.

**OIG
Recommends:**

- Make a finding of research misconduct against Subject1.
- Send Subject1 a letter of reprimand.
- Require certifications from Subject1 for a period of 2 years.
- Require assurance from Subject 1's employer for a period of 2 years.
- Require proof of completion by Subject1 of an RCR training program within 1 year.
- Bar Subject1 from participating as a reviewer, advisor, or consultant for NSF for a period of 1 year.

OIG's Inquiry

OIG conducted an inquiry into an allegation of plagiarism in an NSF proposal (Proposal).¹ We reviewed the Proposal and identified 91 lines and 1 embedded reference apparently copied from four sources without quotation marks or any other differentiation.² We contacted the PI³ (Subject1) and the co-PI⁴ (Subject2) about the allegation.⁵

In their joint response letter,⁶ Subject1 and Subject2 admitted that they copied text verbatim into the Proposal, believing that a citation in the vicinity of sections of copied text was adequate.⁷ Subject2 also disclosed more copied material they believed might not have been properly attributed, and we determined that an additional 1 figure and 2 lines were not cited properly. We noted that none of the 5 sections of copied text were accompanied by an immediate citation to the source text. In one instance, a page and a half of copied text from a source (Source B) was cited several lines prior to the copied material. Based on the subject's response, the total count was 93 lines with Subject1 taking responsibility for 87 lines and Subject2 taking responsibility for 6 lines.

The Subjects stated, "We mistakenly believed that this was appropriate so long as the sources were properly cited. We now understand that this is not appropriate."⁸ As attachments to their response, they also provided us evidence that some authors of the alleged sources re-used portions of their writing in later articles and that other researchers publish paraphrases of text the subjects copied verbatim. They appeared to believe both mitigated the act of copying. They also defended the apparent copying from Wikipedia by stating that Wikipedia cited the same sources they did.

Even accurate citation without demarcation of a verbatim section of text does not adequately reflect that another researcher's exact words are being used. Further, for one section of text, the nearby citation does not reference the publication from which the text came (Source A) and most of the other copied text was not referenced at all to the source of the written work.

Based on our inquiry, we concluded that Subject2's actions did not rise to the level of research misconduct and we make no recommendations about Subject2 in this report. However, we also concluded that there was sufficient evidence to proceed to an investigation of Subject1's actions because he accepted responsibility for the bulk of the apparently copied text.

¹ Tab 1: [REDACTED], entitled [REDACTED]
[REDACTED]

² Tab 2.
[REDACTED]

³ [REDACTED]

⁴ [REDACTED]
[REDACTED]

⁵ Tab 3.

⁶ Tab 4.

⁷ Tab 4, page 1.

⁸ Tab 4, p.1.

University Investigation

Consistent with our policy, we referred the investigation to Subject1's University.⁹ The Provost, consistent with University policy,¹⁰ assigned a professor¹¹ (the University Investigator) to conduct the investigation. After reviewing the materials, the University Investigator reported his conclusions to the Provost¹² (the Director). The Provost provided a Report¹³ to our office.

The University Investigator did not find that research misconduct had occurred and the Provost concurred. He stated that, in his experience, he finds it common "to copy complex methods descriptions verbatim to ensure that all details are correct," provided the material is cited.¹⁴ For the approximately 62 lines (or 1.5 pages) of copied text from Source B, the University Investigator concluded, "Stylistically it might have been appropriate to include additional citations, however, I am convinced that a rational person would deduct [sic] all the following material comes from the reference to [the authors]. Again, stylistically, it would perhaps have made it clearer if the copied material had appeared between quotation marks. Ultimately, I regard the omissions of additional citations and quotation marks to be minor...."

The University Investigator concluded that "The omissions are subjective and a matter of style, i.e. the reference in the beginning of the method description without repeating citations throughout the method descriptions, and perhaps the authors' not choosing to use quotation marks. In my experience, similar omissions are commonly made in journal articles. I regard these omissions to be minor and they could in no way be interpreted as willful...."¹⁵ He further concluded that "The main issue is therefore not about the "copying" of such material, but of whether or not sufficient credit was given."¹⁶

OIG's Investigation

Based on our review of the University report, we determined there were several indications that the University did not sufficiently evaluate evidentiary details. For example, the University Investigator stated that the citation for a section of copied text was referenced at the beginning. However, while a citation located several lines before the copied text shares some authors with the alleged source in question, the citation was not the source¹⁷ of the copied text. Further, the cited reference did not contain the full text in question.

We reviewed the University's website to determine what guidance is provided to faculty regarding research integrity. Although their website addresses issues such as data management,

⁹ [REDACTED]. Tab 5 contains the referral letter.

¹⁰ See Tab 6, [REDACTED]. Because the Dean declared a conflict-of-interest and recused himself, oversight of the matter was transferred to the Provost.

¹¹ [REDACTED]

¹² [REDACTED]

¹³ Tab 7.

¹⁴ Tab 7, page 2.

¹⁵ Tab 7, page 3.

¹⁶ Tab 7, page 1.

¹⁷ We had provided the source during our referral.

plagiarism is not addressed. In contrast, the University's website contains numerous links for students to assist them in avoiding plagiarism. For example, a page providing students guidance on avoiding plagiarism states that to submit

a paper or comparable assignment that is not truly the product of your own mind and skill is to commit plagiarism. To put it bluntly, plagiarism is the act of stealing the ideas and/or expression of another and representing them as your own. It is a form of cheating and a kind of academic dishonesty that can incur severe consequences. . . .

A second obvious form of plagiarism is a word-for-word copying of someone else's work, in whole or in part, without appropriate acknowledgement . . .

Any such verbatim use of another's work must be acknowledged by (1) **appropriate indentation or enclosing all such copied portions in quotation marks and by (2) giving the original source in a footnote.** As a general rule, you should make very little use of directly quoted matter in your research paper. If you do not know how to footnote properly, ask your instructor for guidance.¹⁸

Were we to accept the University's analysis of the Subject's actions, we would be led to believe that students are held to a higher standard when submitting class assignments than professors are when submitting proposals to NSF. We find the University's conclusion inconsistent with both its own definition of plagiarism and NSF's. Accordingly, we could not accept the Report in lieu of conducting our own investigation and OIG contacted Subject1 to notify him.¹⁹

We noted that the University Investigator stated, "While it might have been better stylistically to have the material taken from the [author's] publication appear in quotation marks, in my opinion, no rational person would ever question the source of the material as it appears."²⁰ He further stated that "the implications are minor and in no way would change readers' interpretation of the source of the material that was submitted in the Applications."²¹ To address this perspective, we received opinions from two scientists that work in Subject1's research area. Both experts independently concluded that most of the text we identified, including some of the equation material, lacked proper attribution. Due to previous familiarity, both recognized the text from the alleged sources without our providing them, yet both determined that the manner in which the copied text was presented would normally be interpreted as material composed in the Subjects' own words.

We also noted that Subject1 has authored several articles in publications overseen by Institute of Electrical and Electronics Engineers (IEEE).²² The IEEE manual²³ indicates that the

¹⁸ See Tab 8, a page entitled [REDACTED]

¹⁹ 45 C.F.R. §689.9(b).

²⁰ Tab 7, page 2.

²¹ Tab 7, page 3.

²² Out of 10 publications possible on the Subject's biographical sketch for [REDACTED], he chose to list [REDACTED] IEEE publications. The Grant Proposal Guide says these publications should be: "a list of: (i) up to five publications most

appropriate placement of the citation is a basic factor when evaluating plagiarism.²⁴ More importantly, the manual leaves no doubt that quotation marks or other devices of differentiating text are required: "Credit notices or references are not sufficient to deflecting a charge of plagiarism if quotation marks or offset text have not been used to identify the specific material being copied."²⁵ Therefore, the standards of his research community are very similar to those of most other research communities and require copied text to be quoted or offset.

Further, Subject1 and Subject2 admit to copying verbatim text into the proposal. After receiving our inquiry letter, they spoke with "senior colleagues" in their department who subsequently informed them that the citation methods they used were insufficient to distinguish original work (composed text) from copied work.²⁶

We reviewed 7 of Subject1's other NSF proposals to determine if a pattern existed. Of these, we found approximately 25 apparently copied lines in an NSF CAREER proposal and its apparent re-submission.²⁷ More than half of the copied text was in the CAREER proposal's Educational Plan, copied verbatim from another author's ideas for promoting student engagement. In 2 other proposals,²⁸ we found approximately 45 lines of copied text per proposal, with one additionally having 4 embedded references and 2 apparently copied figures.

OIG's Assessment

A finding of research misconduct by NSF requires (1) there be a significant departure from accepted practices of the relevant research community, (2) the research misconduct be committed intentionally, or knowingly, or recklessly, and (3) the allegation be proved by a preponderance of the evidence.²⁹

The Acts

Our review found Subject1 copied 87 lines into the Proposal. OIG finds that Subject1's actions constitute plagiarism. Based on the opinion of experts and Subject1's own words, we also find that Subject1's acts constituted a significant departure from accepted practices.

closely related to the proposed project; and (ii) up to five other significant publications, whether or not related to the proposed project." (GPG I.C.2.f.i(c))

²³ Tab 9.

²⁴ Tab 9, page 1 of PDF.

²⁵ Tab 9, page 2 of PDF.

²⁶ Tab 4, page 1.

²⁷ [REDACTED]

²⁸ [REDACTED]

²⁹ [REDACTED]. We note that the latter is a collaborative and so has a second author.

²⁹ 45 C.F.R. §689.2(c).

Intent

OIG finds that Subject1 acted recklessly at a minimum. While Subject1 received his undergraduate degree outside the United States, he received his M.S. and Ph.D. in the U.S and has held an assistant professorship in the United States since 2006. He also has published numerous articles in professional journals which clearly define the professional expectations regarding appropriate attribution and citation. These facts suggest a reasonable person in his circumstances would have had knowledge of correct citation practices. By ignoring the conventions being used by others in his field of expertise, he recklessly copied and improperly attributed work by others.

Standard of Proof

OIG concludes that a preponderance of the evidence indicates that Subject1 knowingly plagiarized, thereby committing an act of research misconduct.³⁰

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.³¹

Seriousness

Copied text serves to misrepresent one's body of knowledge and one's ability to authoritatively express previous research to demonstrate expertise, presenting reviewers with an inaccurate representation of a proposal's respective merit. Two experts concurred that Subject1 appeared to claim the source authors' work by not quoting, offsetting text, or re-stating the ideas in his own words.

Pattern

Subject1 appears to have a moderate pattern of plagiarism. In addition to the 87 lines of plagiarized material in the original proposal, we found over 100 lines of apparently copied text in 4 other NSF proposals, part of which included copying an educational plan into an NSF CAREER proposal.

³⁰ 45 C.F.R. part 689.

³¹ 45 C.F.R. § 689.3(b).

Recommendations

Based on the evidence, OIG recommends NSF:

- Send a letter of reprimand to Subject1 informing him that NSF has made a finding of research misconduct;³²
- For a period of 2 years, require Subject1 to certify to OIG's Assistant Inspector General for Investigations (AIGI) that proposals or reports he submits to NSF do not contain plagiarized material;³³
- For a period of 2 years, require that Subject1 submit assurances by a responsible official of his employer to OIG's AIGI, that proposals or reports submitted by Subject1 to NSF do not contain plagiarized material;³⁴ and
- Require Subject1 to provide to OIG proof upon completion of a course in Responsible Conduct of Research (RCR), within 1 year.³⁵
- Bar Subject1 from participating as a reviewer, advisor, or consultant for NSF for a period of 1 year.³⁶

³² A letter of reprimand is a Group I action (45 C.F.R. §689.3(a)(1)(i)).

³³ Certification by an individual is a final action that is comparable to the final actions listed in 45 C.F.R. §689.3(a).

³⁴ Requirement for assurances is a Group I action (45 C.F.R. §689.3(a)(1)(iii)).

³⁵ Completing an ethics course is a final action that is comparable to the final actions listed in 45 C.F.R. §689.3(a).

³⁶ A Group III action 45 C.F.R. 689.3(a)(3)(ii).