



NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A11010007

Page 1 of 1

OIG conducted an inquiry into an allegation of plagiarism within an NSF proposal (Proposal 1).¹ During the inquiry we identified copied material in two NSF proposals.² The Subject's³ response to our inquiry did not dispel the allegation, and we referred the matter to the Subject's University⁴ for investigation.

The University concluded, based on a preponderance of the evidence, that the Subject recklessly committed plagiarism, deemed a significant departure from accepted practices. It took no action because the Subject was no longer employed at the University.

We reviewed the Report and determined we could not accept the report in totality in lieu of conducting our own investigation. We concluded, based on a preponderance of the evidence, that the Subject knowingly committed plagiarism in two NSF proposals, deemed a significant departure from accepted practices, and recommended actions to be taken to protect the federal interest. The Deputy Director concurred with our recommendations.

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

¹ [REDACTED] (Declined).

² [REDACTED]

³ [REDACTED] (Declined).

⁴ [REDACTED]

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DEPUTY DIRECTOR

DEC 05 2012

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

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

Re: Notice of Research Misconduct Determination

Dear Dr. [REDACTED]:

In [REDACTED] you served as a Principal Investigator ("PI") on two proposals submitted for funding 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 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 101 unique lines of text copied from nine source documents, as well as 29 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 knowingly 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 knowingly. I have also considered the fact that your misconduct was part of a pattern of plagiarism. 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 December 1, 2013, 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 December 1, 2013, 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; and
- (3) By December 1, 2013, you must complete an ethics course, which includes discussion on citation practices, and provide written proof to the OIG that you have completed such a course.

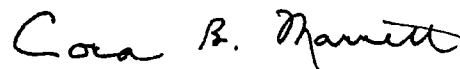
The certifications, assurances, and written proof of attendance should be submitted in writing to NSF's OIG, Associate Inspector General for Investigations, 4201 Wilson Boulevard, Arlington, Virginia 22230.

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,

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

Cora B. Marrett
Deputy Director

Enclosures

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

National Science Foundation Office of Inspector General



Confidential Report of Investigation Case Number A11010007 August 06, 2012

**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 nine sources from which approximately 101 lines and 29 embedded references were copied into two unfunded NSF proposals. OIG referred investigation of the matter to Subject's home institution.

**University
Investigation
and Action:**

The University concluded, based on a preponderance of the evidence, that Subject recklessly committed plagiarism, deemed a departure from accepted practices. However, because the Subject was no longer employed at the University, the University took no action against him.

**OIG Investigation
and Assessment:**

- **The Act:** Subject plagiarized 101 lines and 29 embedded references from nine sources in two NSF proposals.
- **Intent:** Subject acted knowingly.
- **Standard of Proof:** A preponderance of evidence supports the conclusion that Subject committed plagiarism.
- **Significant Departure:** Subject's plagiarism represents a significant departure from accepted practices.
- **Pattern:** Significant plagiarism was identified in one non-NSF proposal.

**OIG
Recommends:**

- Make a finding of research misconduct against Subject
- Send Subject a letter of reprimand.
- Require certifications from Subject for a period of 1 year.
- Require assurances from Subject for a period of 1 year.
- Require Subject to complete an ethics course, which includes discussion on citation practices, within 1 year and provide certification of its completion to OIG.

OIG's Inquiry

OIG conducted an inquiry into an allegation of plagiarism within an NSF proposal (Proposal 1).¹ We reviewed the Proposal and identified 58 lines and 22 embedded references copied from six sources.² We reviewed six other proposals³ the PI (Subject)⁴ submitted and found 43 lines and 7 embedded references from four sources⁵ copied into one other proposal (Proposal 2).⁶

We contacted the Subject about the allegation.⁷ In his response, the Subject acknowledged he inadequately cited "several sources of material included in the proposals" and said it was an "honest error."⁸ Explaining his actions, he wrote:

I want to stress that I did not intend to improperly cite any information that I used or to not give proper credit to any original source. The central ideas underpinning my proposal are my own original ideas and I have not copied them from anywhere or anyone. Any improper citations or missing citations were completely inadvertent and do not rise to the level of recklessness required to sustain a finding of misconduct. Due to my very high workload, I was rushed, careless and simply failed to do a complete citation of all my sources. At times, since I am a non-native English speaker, it is necessary that I research phrases and concepts that I have trouble constructing. I do this through previously written papers and web pages if I cannot rephrase them.⁹

The Subject said he is "professionally embarrassed and grateful that NSF identified the mistakes so that [he] could immediately withdraw" a similar proposal submitted to the Department of Energy (DOE).¹⁰ He concluded:

I take responsibility for my actions and am resolved, both personally and professionally, to redouble my efforts and take better care in the future. If the NSF wishes me to certify to this effect I am willing to do so.¹¹

¹ Tab 1: [REDACTED] entitled "[REDACTED]" (Declined).

² Tab 2: Sources A-F.

³ [REDACTED] Though we identified some copied text within these proposals, we determined it was de minimis in nature.

⁴ [REDACTED]

⁵ Tab 2: Sources G-J.

⁶ Tab 3: [REDACTED] entitled "[REDACTED]" (Declined).

⁷ Tab 4.

⁸ Tab 5, pg 1.

⁹ Tab 5, pg 2.

¹⁰ Tab 5, pg 3.

¹¹ Tab 5, pg 3.

We reviewed the Subject's response and determined the response did not dispel the allegation. Most notably, he acknowledged that he copied text without adequate attribution. Additionally, citations to the copied text he did include in the proposal were not clearly linked to the text we annotated. Based on our inquiry, we concluded there was sufficient evidence to proceed to an investigation.

The following chart summarizes the copied material in Proposals 1 and 2:

Source	Proposal 1 (Declined)	Proposal 2 (Declined)
A (article)	15 lines 17 embedded reference	
B (article)	12 lines	
C (article)	11 lines	
D (article)	6 lines	
E (article)	8.5 lines 5 embedded references	
F (article)	5.5 lines	
G (article)		13 lines
H (article)		12 lines
I (article)		10 lines 7 embedded references
J (article)		8 lines
Total (UNIQUE)	58 lines; 22 embedded references	43 lines; 7 embedded references

University Inquiry and Investigation

Consistent with our policy, we referred the investigation to the University.¹²

The University convened an Investigation Committee (Committee), which produced a Report with attachments.¹³ It reviewed the materials we provided and "all available proposals submitted through the University's Office of Research and Sponsored Projects."¹⁴ It concluded, based on the preponderance of evidence, that the Subject committed plagiarism "with reckless disregard for standard expectations that the work of others will be cited as such to acknowledge their authorship."¹⁵ It noted that, though "there was some evidence that suggested the plagiarism was committed knowingly," it "was uncertain as to whether there was a sufficient amount of evidence" to make that determination.¹⁶

¹² [REDACTED] Tab 6 contains the referral letter. Tab 7 contains the University's research misconduct policy.

¹³ Tab 8.

¹⁴ Tab 8, University Report, pg 5. (Page numbers for Tab 8 follow those generated by Adobe PDF and not printed page numbers.)

¹⁵ Tab 8, University Report, pg 6.

¹⁶ Tab 8, University Report, pg 6.

The Committee also found a pattern of plagiarism," in that the Subject had "plagiarized other people's work in all the [nine] proposals that were reviewed by the committee."¹⁷ It concluded however that his actions did not have a significant impact on the research record.¹⁸

Lastly, the Committee informed us that the Subject "completed mandatory compliance training in Research Integrity and Ethics in the Fall semester 2007."¹⁹

University Adjudication

The University said it took no action because the Subject "is no longer any [sic] employee of University; his appointment ended on June 30, 2011."²⁰ It also said it would contact the Office of Naval Research (ONR) because an ONR proposal it reviewed by the Subject contained plagiarism.

OIG's Assessment of the University Investigation Report

We reviewed the Report and assessed it for accuracy and completeness. We did not find the Report to be complete. Specifically, the Report failed to identify the standards of the Subject's research community. Additionally, the University did not follow reasonable procedures in conducting its investigation in that it failed to interview the Subject.²¹ Nonetheless, the University did produce an acceptable evidentiary record with respect to the matters it did address, such as pattern, and our additional analysis of pattern below is based in its findings. Accordingly, we could not accept the report in totality in lieu of conducting our own investigation.

OIG's Investigation

As part of our investigation, we first contacted the Subject, provided him with a copy of the Report and attachments, offered him the opportunity to comment on the Report, and asked him to address our questions.²²

The Subject, who provided his CV, said he wrote the proposals himself. He said he tried to get editing assistance, but received no reply from colleagues and previously had bad experiences with professional editors who lacked scientific knowledge.²³ He said that some of

¹⁷ Tab 8, University Report, pg 6. Proposals and sources are identified in folders within Tab 8.

¹⁸ Tab 8, University Report, pg 7.

¹⁹ Tab 8, University Report, pg 8.

²⁰ Tab 8, University Report, pg 1

²¹ The University provided no indication of having attempted to interview the Subject.

²² Tab 9 contains Letters 1 and 2. The Subject said he did not receive Letter 1, which we sent to his University address; we subsequently sent Letter 2.

²³ Tab 10, Response Letter, pg 2.

the seven proposals the University reviewed were nearly identical to one another, as they were resubmissions of previous proposals.²⁴ He explained:

In order to save time because of my heavy teaching load at [the University], I was using the same template (I am not sure whether I was using the right one) in my proposals and copying and pasting from one proposal (my own proposal) to another one (my proposal). . . . Therefore any mistakes happened [sic] in the first ones would automatically appear in the other ones (chain reaction).²⁵

The Subject acknowledged he had a flawed understanding of plagiarism before receiving our inquiry letter. He said:

I thought that copying someone's results, ideas, whole paper including Figures and Tables or copying a book or a chapter of a book (including Figures and Tables) are considered as a plagiarism. I did not know that using someone's words, sentences, and a small paragraph or rephrasing someone's paragraph or sentences in INTRODUCTION, BACKGROUND, or METHOD sections (since they are commons and mostly used) are considered as a plagiarism. Also I did not know that using someone's references is considered as a plagiarism.²⁶ [sic]

He developed this understanding, he said, by "reading published papers a lot," in which he

. . . noticed that most papers' introduction/background section or references sections were almost the same. Most scientists and even well known ones were using the same words, sentences or styles in their introduction/background sections. Therefore I had concluded from these papers in literature that using the same words, sentences or small paragraphs in introduction/background or method sections was not considered as a plagiarism.²⁷

Accordingly, he added: "All these mistakes appeared my proposals were due to my ignorance and careless and I did not intend to make these mistakes recklessly, knowingly or intentionally."²⁸ [sic]

The Subject said the only training he received was the PowerPoint course the University offered, but questioned the efficacy of that training.²⁹ Specifically, he wrote: "Please note that

²⁴ Tab 10, Response Letter, pg 3.

²⁵ Tab 10, Response Letter, pg 2-3.

²⁶ Tab 10, Response Letter, pg 1. Emphasis as in original.

²⁷ Tab 10, Response Letter, pg 1.

²⁸ Tab 10, Response Letter, pg 2.

²⁹ Tab 10, Response Letter, pg 2. Tab 8, University Report, Attachment 9, contains the PowerPoint training.

the plagiarism section of this power point [sic] training mentions only about Plagiarism and Violation of Confidential Peer Review. . . . The training does not specifically explain plagiarism.”³⁰ He concluded that “In my opinion this training is not very informative and missing very important information and should not be considered as training.”³¹

Lastly, the Subject stated that he “requested an interview with the investigation committee but my request was not granted for some reasons, which are not clear to me.”³² He added: “The University never attempted to schedule an interview with me in spite of my willingness.”³³

Our review of the Subject’s response reiterated his original acknowledgement of having copied material without attribution. It also reiterated his previous assertion that the plagiarism was committed carelessly, which he attributed to a flawed understanding and a lack of adequate training.

To better assess the Subject’s level of intent as well as to define the standards of the Subject’s research community, we reviewed the ethical guidelines of the University and of a leading professional association in the Subject’s field. The University, in its policies, provides only the federal definition of plagiarism.³⁴ However, the society³⁵ that oversees journals in which the Subject has published³⁶ and of which he is a referee has more explicit policies regarding plagiarism. The society’s “Supplementary Guideline on Reference in Publications” states:

Authors have an obligation to their colleagues and the physics community to include a set of references that communicates the precedents, sources, and context of the reported work. Proper referencing gives credit to those whose research has informed or led to the work in question, helps to avoid duplication of effort, and increases the value of a paper by guiding the reader to related materials. It is the responsibility of authors to have surveyed prior work in the area and to include relevant references.³⁷

Accordingly, we determined, the Subject violated accepted practices of his relevant research community by not crediting others’ contributions properly, practices he was expected to know.

³⁰ We note that the PowerPoint slides do include the federal definition of plagiarism, but that the slides seemingly do not provide explication on the definition.

³¹ Tab 10, Response Letter, pg 2. The Subject further said that faculty knowledge of the PowerPoint training was confirmed via five questions, whose answers were provided.

³² Tab 10, Response Letter, pg 2.

³³ Tab 10, Response Letter, pg 2.

³⁴ Tab 7.

³⁵ [REDACTED]

³⁶ [REDACTED]

³⁷ [REDACTED] The policy was adopted in April 2004.

We subsequently reviewed the Subject's educational and professional history.³⁸ Although the Subject received his undergraduate education outside the U.S.,³⁹ he received his graduate education in the U.S.⁴⁰ Additionally, after earning his Ph.D. in 2002, the Subject served as a postdoctoral fellow⁴¹ and an assistant professor⁴² in the U.S. Further, all of the publications the Subject lists on his CV are English language publications, and almost all are U.S.-based journals. Given his professional experience and publication record, the Subject reasonably was expected to have known he was not providing adequate attribution of other authors' text.

Lastly, we re-examined the documents the University provided regarding its determination of pattern. We found that of the seven additional proposals⁴³ it had reviewed, three were NSF proposals that we had reviewed during our inquiry and in which we had identified de minimis plagiarism. The remaining four proposals were submitted to non-NSF entities. Based on the documents the University provided, we found that one of the four proposals⁴⁴ contained significant plagiarism, approximately 45 lines from three sources.⁴⁵ We concluded that, while all of the proposals the University reviewed contained copied text, only one involved more than a de minimis amount of such text.

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.⁴⁶

The Acts

Our review found the Subject plagiarized 101 unique lines of text and 29 embedded references, from nine sources into two unfunded proposals. By our own assessment, we concur with the Report that the Subject's actions constitute plagiarism, as described in NSF's definition. We further conclude that the acts constituted a significant departure from accepted practices.

Intent

Plagiarism is inherently a knowing act. Based on our investigatory review and the Subject's professional background, we conclude the Subject acted with a knowing intent in

³⁸ Tab 10 contains the Subject's CV.

³⁹ [REDACTED]

⁴⁰ [REDACTED]

⁴¹ [REDACTED]

⁴² The University.

⁴³ Tab 8, Proposals.

⁴⁴ [REDACTED] Tab 8, Proposals, Proposal H.

⁴⁵ The copied material did not duplicate materials copied into Proposals 1 and 2.

⁴⁶ 45 C.F.R. §689.2(c).

copying material from sources into his proposals. The Subject did not contest he included material from sources; he contested that he had not understood the definition of plagiarism. Further, the inclusion of an embedded reference indicates he copied the complete source into his proposal and/or that he knew the appropriated text required citation. Lastly, his education and research experience support our assessment that he knew that copying material without adequate citation constitutes plagiarism.

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, knowingly plagiarized, thereby committing an act of research misconduct.⁴⁷

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.⁴⁸

Seriousness

The Subject's actions are a violation of the standards of scholarship and the tenets of general research ethics and those within his research community. First, the extent of the plagiarism – approximately 101 unique lines and 29 embedded references within two unfunded NSF proposals from nine sources – is itself serious. Second, we note the copied text served to misrepresent the Subject's body of knowledge, causing reviewers to receive an inaccurate means of judging the proposals' respective merit.

Pattern

The Committee determined a pattern of plagiarism based on its finding of copied material in seven proposals. Our review of the University's documents identified significant plagiarism in one of the seven proposals, with the other six proposals containing de minimis plagiarism. We agree that the Subject exhibited a pattern of plagiarism, most evident in the proposal containing the significant plagiarism.

⁴⁷ 45 C.F.R. part 689.

⁴⁸ 45 C.F.R. § 689.3(b).

Recommendation

Based on the evidence, OIG recommends NSF:

- send a letter of reprimand to the Subject informing him that NSF has made a finding of research misconduct;⁴⁹
- require the Subject to certify to OIG's Assistant Inspector General for Investigations (AIGI) that proposals or reports he submits to NSF do not contain plagiarized material for 1 year;⁵⁰
- require that the Subject submit assurances by a responsible official of his employer to OIG's AIGI, that proposals or reports submitted by the Subject to NSF do not contain plagiarized material for 1 year;⁵¹ 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.⁵²

Subject's Response to Draft Investigation Report

We provided the Subject with a copy of our draft report and attachments for comment.⁵³ The Subject submitted a response,⁵⁴ in which he reiterated that he takes responsibility for his actions. His main assertion was that he had never before seen the guidelines for the professional society that we quoted in our report, and that these guidelines were adopted after his involvement as a referee for the society's publications.

We reviewed the Subject's response and determined that it did not provide adequate reason for OIG to change its original determinations and recommendations. First, as the Subject himself notes, he provides no documentation of the dates of his involvement as a referee, making it difficult to determine whether there existed a similar policy at that time. Second, the guidelines quoted in this report are current and, as one who currently publishes in those publications, the Subject is expected to become familiar with these guidelines. Last, our determination of intent is based on the Subject's overall professional experiences and publication record, which themselves indicate the Subject reasonably was expected to have known he was not providing adequate attribution of other authors' text.

⁴⁹ A letter of reprimand is a Group I action (45 C.F.R. §689.3(a)(1)(i)).

⁵⁰ Certification by an individual is a final action that is comparable to the final actions listed in 45 C.F.R. §689.3(a).

⁵¹ Requirement for assurances is a Group I action (45 C.F.R. §689.3(a)(1)(iii)).

⁵² Completing an ethics course is a final action that is comparable to the final actions listed in 45 C.F.R. §689.3(a).

⁵³ Tab 11.

⁵⁴ Tab 12.