

#### NATIONAL SCIENCE FOUNDATION OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

#### **CLOSEOUT MEMORANDUM**

Case Number: A08020005

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We received an allegation that an NSF PI had been sanctioned for plagiarism by an editor of a journal because one of his papers contained plagiarism, and that we should review the PI's NSF proposals for plagiarism. During our Inquiry, we reviewed one of the PI's proposals and found unattributed copied text. In response to our letter, the PI said another of his proposals may contain similar text, but did not identify which one. We found one proposal with the same copied text and another with additional copied text. Those proposals were funded, and the Program Officer said she would not have funded one of them had the copied text been known not to be original to the PI. We referred the matter to the Department of Justice, but it declined prosecution in lieu of administrative action.

During this time, the subject moved to another university. That university learned of the plagiarism in the journal paper and referred the matter to the grantee institution for investigation. At nearly the same time, we made our referral to the grantee for the investigation of the copying in the PI's proposals. The grantee concluded the subject's copying in the manuscript was plagiarism and made a finding of research misconduct. We concluded the subject's copying in the proposals represented plagiarism and recommended NSF make a finding of research misconduct and take additional actions. NSF concurred and took several actions in response. Accordingly, this case is closed with no further action taken. Our report, NSF's decision, and this Closeout Memorandum constitute the documents for the case closeout.

## National Science Foundation Office of Inspector General



# Confidential Report of Investigation Case Number A08020005

### 14 March 2012

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#### **Executive Summary**

Allegation:

Plagiarism.

OIG Inquiry: We found two NSF proposals contained text copied from multiple sources without proper citation; the proposals were funded. We received notification from the Subject's former university that it had received a similar plagiarism allegation and agreed an Investigation was warranted.

University Investigation: The University concluded the Subject committed research misconduct. As the Subject is no longer there, it could take no action other than to include its report in the Subject's file.

**OIG Investigation:** The University focused on documents other than the NSF proposals. Thus, we conducted our own Investigation and used the University's evidence to support a pattern of plagiarism.

<u>The Act</u>: The Subject plagiarized approximately 157 unique lines of text from 7 source documents into 2 NSF proposals.

Intent: We concluded the Subject acted intentionally.

Significant Departure: The Subject's plagiarism represents a significant departure from accepted practices.

Standard of Proof: A preponderance of the evidence standard supported our conclusion that the Subject committed research misconduct.

<u>Pattern</u>: The focus of the University's Investigation was the Subject's plagiarism of text from papers into a manuscript submitted for publication. We conclude the plagiarized text in the paper and other NSF proposals constitutes evidence of a pattern of plagiarism.

OIG Recommendations: Send a letter of reprimand to the Subject informing him that NSF has made a finding of research misconduct. We recommend that NSF require the Subject to:

- Certify for 2 years that any documents he submits to NSF are either entirely his own writing or are properly cited.
- Obtain assurances from his university's Research Integrity Officer, or appropriate official, for 2 years that any documents he submits to NSF are either entirely his own writing or are properly cited.
- Attend a course in research ethics, with content including proper citation practices, within 1 year.
- Prohibit the Subject from serving as a reviewer, advisor, or consultant on NSF proposals for 2 years.

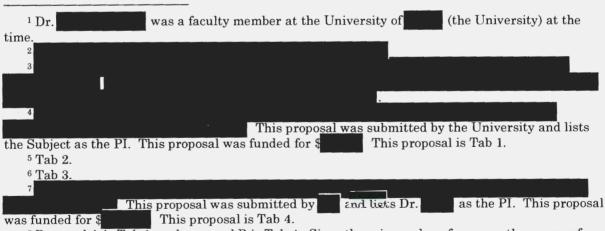
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#### OIG's Inquiry

Our office received a suggestion that we review the Subject's NSF proposals for plagiarism because the Subject had recently been censured for plagiarism by a professional society<sup>2</sup> for submitting a manuscript<sup>3</sup> (the manuscript) for publication that contained text plagiarized from other documents. We reviewed one of the Subject's then-recent proposals (proposal A)<sup>4</sup> and found approximately 67 lines of text copied from four sources. Subsequently, we sent the Subject our standard Inquiry letter,<sup>5</sup> and he responded<sup>6</sup> that he did not believe the copied text constituted plagiarism because either: (1) he had differentiated the text; (2) there were references to the sources; or (3) the text was common knowledge not requiring a citation. He also acknowledged that another of his NSF proposals had similar uncited text, but he did not identify which proposal it was. Consequently, we reviewed several of the Subject's other NSF proposals and identified another proposal (proposal B)<sup>7</sup> that contained significant text copied from one of the same sources. Proposal B contained approximately 122 lines of text copied from 4 Because of some overlap, the total copied text in the 2 proposals is approximately 157 unique lines of copied text from 7 sources.8 Both proposal A and proposal B had been funded.9

#### University's Investigation

We were notified by the University that it had received a similar allegation of plagiarism from the Subject's current university (CU). 10 CU learned of the finding of plagiarism from the professional society that censored the Subject for the



<sup>8</sup> Proposal A is Tab 1, and proposal B is Tab 4. Since there is overlap of sources, the sources for both are Tab 5. The proposals are highlighted by color and numbered to identify the source.

<sup>9</sup> Because the proposals were funded and based on several other factors, we referred the case to the appropriate United States Attorney's Office. After a considerable delay, the Office decided not to accept the case.

During this time, the Subject was a faculty member at university. We understand from the University that he is no longer employed there. The Subject cooperated with the University's Investigation by corresponding via email.

manuscript and, since the manuscript was authored while the Subject was at the University, CU notified the University of the allegation and asked the University to evaluate it.<sup>11</sup> CU also informed the University that the Subject had submitted several proposals to NSF, which the University should consider reviewing. Likewise, in our referral, <sup>12</sup> we asked the University to evaluate proposals A and B.

The University conducted an investigation, <sup>13</sup> and its full investigative committee (FIC) focused primarily on the manuscript, although it reviewed three of the Subject's NSF proposals (proposals C-E) for evidence of a pattern. <sup>14</sup> However, the FIC did not address the plagiarism in proposals A and B as we requested. The FIC concluded the manuscript contained significant text in the body of the document copied from other sources that were not cited. The Subject acknowledged he should have cited the text, but said he was in a rush to prepare the manuscript. He also pointed out that he had included a reference in the bibliography, but the FIC determined there is no way for a reader to know the true author of the text if the source is not cited in the body (only listed in the bibliography) and the text distinguished in some manner. The FIC concluded the Subject's numerous minor changes to the plagiarized text showed he took the time to integrate the plagiarized text with his own and, thus, demonstrated that he intentionally plagiarized.

Regarding the three NSF proposals it examined as part of a pattern, the FIC concluded the copying in proposal C consisted of minor duplicative fragments that did not rise to the level of plagiarism. It concluded the copying found in proposal D was primarily self-plagiarism with only a small amount (approximately 6 lines) copied from another source. It determined there was substantial copying in proposal E (approximately 60 lines 15 from 2 sources).

The University provided the Subject with the FIC's report. He responded <sup>16</sup> that he was very regretful that some text was not rephrased or appropriately attributed, but disagreed that his plagiarism was intentional. He said he has since studied current standards and understands them now, so his previous plagiarism was due to carelessness and ignorance. He notes he cooperated with the University

After the editorial investigation, the Subject was found to have inappropriately reused another's text without credit, which violated the society's standards. Accordingly, in May it prohibited the Subject from publishing in any of its journals for 2 years. It apparently did not inform the Subject of the finding and prohibition, and he continued to publish in those journals. In the society realized its error and informed the Subject of its finding and moved the ban from 30 Sep — 30 Sep

<sup>&</sup>lt;sup>12</sup> Tab 7.

<sup>&</sup>lt;sup>13</sup> Tab 8 contains the adjudicator's decision (p.1), the FIC report (pp. 2-20), and the Subject's response to the FIC report as Exhibit #1 (pp. 21-23).

<sup>(</sup>proposal E, declined). (proposal E, declined).

<sup>&</sup>lt;sup>15</sup> This line count is OIG's and is based on indented text, so is approximately 16% higher than it would be for normally formatted text. We measured the indentation and divided that by the normal text width to calculate the 16%..

<sup>&</sup>lt;sup>16</sup> Tab 7, Exhibit #1 to the FIC report; pp. 21-23.

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investigation. His response did not address NSF proposals A and B (except to say he thought he could use his previous text in them), but since the FIC report did not focus on them, his lack of response is not surprising.

The University's adjudicator<sup>17</sup> accepted the FIC's findings and noted that since the Subject was no longer at the University, the only action taken was to place a copy of the report in the Subject's file.

#### **OIG's Assessment**

We agree with the University about its evaluation of the evidence and its conclusions. As noted above, the University focused primarily on the plagiarism in the manuscript, which was written without NSF support. Thus, we cannot consider this plagiarism as the primary act and, accordingly, we use the FIC's findings about it, and proposals C-E, as evidence of a pattern. We rely on our own assessment of proposals A and B, which showed that, similar to the Subject's copying in the manuscript, the Subject copied significant sections of text into proposals A and B without distinguishing the text and without citation to the source near the copied text.<sup>18</sup>

NSF's Research Misconduct Regulation states that a finding of misconduct 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 proven by a preponderance of the evidence.<sup>19</sup>

#### The Act

The Subject copied approximately 157 unique lines of text from 7 sources into 2 proposals. 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." Consequently, by failing to appropriately distinguish verbatim copied text from his own original text, the Subject presented the work of others as his own and, thus, failed to give appropriate credit to the actual authors.

<sup>17</sup> Interim Vice Provost for Research stated in the cover letter that the Provost has reviewed and accepted the FIC findings.

<sup>&</sup>lt;sup>18</sup> Also similar to the FIC's observation, we found substantial reuse of the Subject's own text from his other publications, but since NSF's research misconduct policy does not prohibit this we did not include any of that text in our line counts or analysis. Likewise, we did not use any of the FIC's identified self-plagiarism in our assessment of evidence of a pattern.

<sup>19 45</sup> C.F.R. §689.2(c).

<sup>&</sup>lt;sup>20</sup> NSF Grant Proposal Guide, Chapter 1, Section D.3.

The table below shows the total number of plagiarized lines of text in the proposals submitted to NSF. Because of some textual overlap, we consider 157 of the 189 total lines to be unique.

Proposal	Lines	Sources	
A	67	4	
В	122	4	
C	N/A		
D	5*	1	
E	52*	2	

[Proposals C-E are the proposals the FIC examined for pattern. The asterisk indicates line counts on indented lines that have been converted to a full-margin count.]

#### Intent

We concur with the FIC's assessment that the Subject did not just hastily copy and paste from various sources into his manuscript, and we observe his proposals exhibit the same characteristics. There are numerous instances where the Subject made minor changes to integrate the copied text into his own, particularly the inclusion of references that create the appearance of appropriate citation. As he indicated to OIG, and reiterated in his response to the University, the Subject said his actions were merely careless ignorance in not rephrasing the wording. However, as the FIC noted, the extensiveness of his copying would require more than simple rewording: the text should have been distinguished and appropriately cited. Additionally, the Subject did not cite several of the sources so the reader would assume the plagiarized text was his own. We conclude the Subject copied intentionally.

#### Significant Departure

Using the preponderance of evidence standard, we conclude the Subject intentionally copied unattributed text into proposals A and B without appropriately distinguishing the text from his own work. In doing so, the Subject significantly departed from the accepted practices of his research community and NSF. Indeed, this case began based on the Subject's censure by his community for engaging in plagiarism. A major scientific publisher in the Subject's field states, "Plagiarism in any form is unacceptable and is considered a serious breach of professional conduct." Accordingly, we conclude that the Subject intentionally plagiarized and, hence, committed research misconduct.

<sup>&</sup>lt;sup>21</sup> See the "A Plagiarism FAQ" on IEEE's website: http://www.ieee.org/publications standards/publications/rights/plagiarism FAQ.html.

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#### OIG's Recommended Disposition

In deciding what actions are appropriate when making a finding of research misconduct, NSF must consider several factors. These factors include how serious the misconduct was; degree of intent; whether it was an isolated event or part of a pattern; its impact on the research record; and other relevant circumstances.<sup>22</sup>

#### Seriousness

As we noted above, we concluded the preponderance of evidence standard supports the conclusion that the Subject acted intentionally when he plagiarized material into his proposals. Plagiarism violates research integrity and is a significant departure from accepted practices in the research community. We conclude the amount of plagiarized material is sufficiently serious to warrant a finding of research misconduct.

#### Degree of Intent

As we noted above, we concluded the Subject acted intentionally, which is a culpable level of intent. We noted the Subject has submitted papers to well-known professional journals published by the professional society.<sup>23</sup> The professional society has a clear policy concerning plagiarism, providing the subject ample opportunity to understand appropriate conduct. We conclude his actions were distinctly intentional.

#### Pattern

Because the FIC did not analyze proposals A and B, but focused primarily on the manuscript, over which we have no jurisdiction, we use the University's evidence of plagiarism to support a pattern of plagiarism. The FIC analyzed three NSF proposals (C-E) and found evidence, primarily in proposal E, to support evidence of a pattern of copying. We concur the Subject's copying in the manuscript and proposal E, as well as the original two proposals A and B, demonstrate a pattern of plagiarism.

#### Impact on the Research Record

The effect on the research record as a result of the Subject's actions was moderate. Proposals A and B, which had the largest amounts of copied text, were awarded, so both are available to the public through a Freedom of Information Act request. Proposal E, which also contains a significant amount of copied text, was declined.

#### Subject's Response

The Subject did not respond to our draft report.

<sup>&</sup>lt;sup>22</sup> 45 C.F.R. §689.3(b).

<sup>&</sup>lt;sup>23</sup> The journals are primarily IEEE.

#### Recommendations

Based on the evidence, we recommend NSF take the following actions as a final disposition in this case:

- (1) Send the Subject a letter of reprimand informing him that NSF has made a finding of research misconduct against him;<sup>24</sup>
- (2) Require the Subject to certify completion of a comprehensive responsible conduct of research (RCR) training program and provide documentation of the program's content within 1 year of NSF's finding. The instruction should be an interactive format (e.g., an instructor-led course, workshop, etc.) and specifically include a treatment of plagiarism;<sup>25</sup>
- (3) Require the Subject to certify that proposals he submits to NSF, for 2 years, are either entirely his own writing or are properly cited;<sup>26</sup>
- (4) Require the Subject to obtain assurances from his university's Research Integrity Officer, or appropriate official, for 2 years that any documents he submits to NSF are either entirely his own writing or are properly cited;<sup>27</sup>
- (5) Prohibit the Subject from serving as a reviewer, advisor, or consultant on an NSF proposal for 2 years.<sup>28</sup>

The Subject's certifications, assurances, and proof of a RCR program should be sent to the Assistant Inspector General for Investigations (AIGI) for retention in OIG's confidential file on this matter.

<sup>&</sup>lt;sup>24</sup> This is a Group I action (45 C.F.R. § 689.3(a)(1)(i)).

 $<sup>^{25}\,\</sup>text{This}$  is similar to a Group I action (45 C.F.R. § 689.3(a)(1)).

<sup>&</sup>lt;sup>26</sup> This is similar to a Group I action (45 C.F.R. § 689.3(a)(1)).

<sup>&</sup>lt;sup>27</sup> This is a Group I action (45 C.F.R. § 689.3(a)(1)(iii)).

<sup>&</sup>lt;sup>28</sup> This is a Group III action (45 C.F.R. § 689.3(a)(3)(ii)).

#### NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230



JUL 16 2012

#### CERTIFIED MAIL --RETURN RECEIPT REQUESTED

Dr.		

Re: Notice of Research Misconduct Determination

Dear Dr.

In 2006-07, you served as a Principal Investigator ("PI") on two proposals submitted for funding to the National Science Foundation ("NSF") entitled,

," and

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 approximately 157 unique lines of text copied from seven 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 intentionally and constituted a significant departure from accepted practices of the relevant research community. I am, therefore, issuing a finding of research misconduct against you.

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

In determining the severity of the sanction to impose for research misconduct, I have considered the seriousness of the misconduct, and our determination that it was committed intentionally. I have also considered the fact that your misconduct was part of a pattern of plagiarism, and that it had a moderate impact on the research record. 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 July 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 July 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) By July 1, 2013, you must complete a comprehensive responsible conduct of research training course, and provide documentation of the program's content to the OIG. The instruction should be in an interactive format (e.g., an instructor-led course) and should specifically include a discussion on plagiarism and citation practices; and
- (4) Until July 1, 2014, you are prohibited from serving as a reviewer, advisor, or consultant for NSF.

The certifications, assurances, and training documentation 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 products, Assistant General Counsel, at (703) 292-8060.

Sincerely,

Cora B. Marrett

Cora B. Marrett Deputy Director

#### Enclosures

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