

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

### CLOSEOUT MEMORANDUM

**Case Number: A10020013** 

Page 1 of 1

We identified a significant amount of apparently plagiarized text in a NSF proposal<sup>1</sup> submitted by a PI<sup>2</sup> and CoPI<sup>3</sup> from the same university.<sup>4</sup> During our inquiry we learned that a third university faculty member<sup>5</sup> had prepared a substantial portion of the proposal including the alleged plagiarism. The faculty member did not appear named as an author of the proposal. We referred the matter to the university, which completed an investigation finding that the third faculty member had committed research misconduct.

The attached report of investigation and NSF's Notice of Research Misconduct Finding summarize the details of our investigation.

Accordingly this case is *closed*.

## National Science Foundation Office of Inspector General



# Confidential Report of Investigation Case Number A-10020013

7 July 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**

Allegation:

Plagiarism in an NSF proposal.

**OIG** Inquiry:

We contacted a PI (Subject 1) and coPI (Subject 2) about 123 lines of apparently copied text with embedded references and 1 copied figure. They indicated that a research assistant professor named as senior personnel in the budget, but not named as an author, drafted the proposal. We contacted the research assistant professor (Subject 3) about 60 lines of the apparently copied text, because the remaining 63 of the lines appeared to come from his publications. We referred the matter to the University for investigation.

University Investigation and Action:

The University conducted an investigation, finding:

- Subject 1 and Subject 2 did not commit research misconduct; and
- Subject 3 committed research misconduct by recklessly plagiarizing in the proposal.

The University has required Subject 3 to:

- complete the University responsible conduct of research program with encouragement to seek additional training afterward; and
- submit all written papers and proposals for a period of two years to his supervisor for review and certify that none of the material in those papers and proposals is copied.

OIG's Assessment:

The evidence did not support a finding of research misconduct for Subject 1 and Subject 2. The evidence does support a finding with respect to Subject 3.

- The Act: The research assistant professor plagiarized 69 lines of text with 4 embedded references and 1 figure from 5 published articles.
- **Significant Departure:** The act was a significant departure from accepted practices.
- Intent: The research assistant professor acted recklessly.
- Standard of Proof: The preponderance of the evidence supports finding the research assistant professor recklessly plagiarized from published articles.

OIG Recommendation:

- Send Subject 3 a letter of reprimand;
- Require Subject 3 to certify completion of research ethics training within 1 year of the finding of research misconduct;
- For 2 years, require Subject 3 to certify each time he submits to NSF that the submission does not contain research misconduct;
- For 2 years, require Subject 3 to submit assurances by a responsible official of his employer that each of his submissions to NSF does not contain research misconduct; and
- For 2 years, bar Subject 3 from serving as an NSF reviewer, advisor, or consultant.

#### OIG's Inquiry

We reviewed the Proposal in response to concerns about apparently unattributed copied text from published articles. In total, we identified 123 lines of apparently copied text with 17 embedded references and 1 figure from 6 sources (Sources A through F). Approximately 63 lines of the allegedly copied material appeared to come from Source A, whose first author appeared in the Proposal budget as senior personnel as a research assistant professor and whose biographical sketch was included in the Proposal. However, there appeared to be insufficient evidence to indicate that the Source A author was, in fact, a contributing author on the Proposal as required by the NSF *Grant Proposal Guide (GPG)*.

We contacted the PI (Subject 1)<sup>5</sup> and the coPI (Subject 2)<sup>6</sup> for their perspective on the apparently copied material.<sup>7</sup> Both identified the Source A first author (Subject 3)<sup>8</sup> as the "primary author" of the Proposal.<sup>9</sup> Subject 1 and Subject 2 each asserted that Subject 3's inclusion as senior personnel sufficiently attributed authorship of the Proposal (either whole or in part) to Subject 3, who Subject 1 characterized as a "soft-money" faculty member.<sup>10</sup> Both also pointed out the inclusion of Subject 3's biographical sketch in the Proposal as indicative of authorship.<sup>11</sup> Both said they had discussed the allegation with Subject 3 and his supervisor in another unit of the University where Subject 3 is employed before submitting their responses to us.<sup>12</sup> This discussion appears to have taken place outside of the research misconduct procedures at the University.<sup>13</sup>

We contacted Subject 3 with respect to the material apparently copied from Sources A through F.<sup>14</sup> He replied that he was the primary author of the Proposal<sup>15</sup> and identified an additional source (Source G) from which he also copied 6 lines.<sup>16</sup> He indicated that the material we identified as coming from Source D actually came from Source E and that he believed he had provided appropriate citations.<sup>17</sup>

Despite Subject 3's admission that he was the primary author of the Proposal, none of the subjects' responses adequately addressed the Proposal's submission by Subject 1 and Subject 2

```
Tab 15.A through Tab 15.F.

Tab 15.A.

NSF GPG Section I.D.3.

Tab 7 at 000072–000077.

Tab 9 at 000124 and 000133.

Tab 9 at 000124, 000127 and 000135.

Tab 9 at 000127 and 000135.

Tab 9 at 000127 and 000135.

Tab 9 at 000078–000080.

Tab 7 at 000078–000080.

Tab 9 at 000136.

Tab 9 at 000136.
```

as the explicitly identified authors. Therefore, we found sufficient substance to refer an investigation to the University to address: 1) whether Subject 1 and Subject 2 committed plagiarism by failing to identify explicitly the actual author of the proposal; and 2) whether Subject 3 committed plagiarism with respect to the text copied from Sources B, C, E, F, and G.

#### The University's Investigation 18

The University appointed an ad hoc committee (the Committee)<sup>19</sup> to investigate the allegations. In addition to the annotated Proposal, annotated sources, and copies of our correspondence with the subjects, the Committee considered its interviews with each of the three subjects and Subject 3's supervisor at the unit of the University where Subject 3 is employed, <sup>20</sup> during which they received supplementary materials. The Committee also interviewed administrative staff with respect to relevant University policies and members of the University research community to assess proposal writing practices with respect to identifying authors other than PIs and CoPIs in NSF proposals. The Committee addressed its findings separately with respect to each of the subjects.

Subject 1 The Committee found that Subject 1 did not commit plagiarism.<sup>21</sup> The Committee based this conclusion on: the free exchange of information between Subject 1 and Subject 3 with the mutual intent to submit a proposal to NSF and therefore no "appropriation" of Subject 3's words by Subject 1; no intent on Subject 1's part to withhold appropriate credit from Subject 3; Subject 1's statement that he would have included Subject 3 as a PI/CoPI if Subject 3 had agreed; and Subject 1's lack of awareness of the *GPG* instruction to identify authors other than the PI/CoPI.

**Subject 2** The Committee found that Subject 2 "did not participate in the actual writing of any of the NSF Proposal, did not have an opportunity to review or sign-off on the NSF Proposal's submission [as required by University policy], and did not know the NSF Proposal had been submitted."<sup>22</sup> Subject 3's testimony to the Committee also confirmed that Subject 2 was not involved in writing those sections of the Proposal.<sup>23</sup>

"committed plagiarism by recklessly copying text from other sources without proper indication that the text was taken verbatim." The Committee found Subject 3's plagiarism to be a significant departure from accepted practices and concluded "he knew he was copying someone else's material word-for-word." In its consideration of mitigating factors, the Committee noted a deficiency in Subject 3's training since coming to the United States for his postdoctoral work, noting that Subject 3 had received no responsible conduct of research training at his previous institutions nor had he received such training at the University. However, the Committee contrasted the lack of training with Subject 3's expressed belief at the time that proposals do not

<sup>&</sup>lt;sup>18</sup> The University's Investigation Report and Appendixes (Tab 1-Tab 14).

<sup>&</sup>lt;sup>19</sup> Curricula vitae available on request.

Tab 2 at 000010-000011.

<sup>&</sup>lt;sup>22</sup> Tab 2 at 000010.

<sup>&</sup>lt;sup>23</sup> Tab Tab 12 at 000169.

CONFIDENTIAL

require the same "higher standard" of preparation as journal articles. <sup>27</sup> The Committee also found that Subject 3's "failure to use quotation marks around copied text but proper attribution of the source material place [sic] immediately adjacent to the copied text to be an important mitigating circumstance" and indicative of an absence of deceptive intent. <sup>28</sup> The Committee also noted that the Proposal was Subject 3's first proposal for federal funding. <sup>29</sup> Thus, the Committee concluded that Subject 3's plagiarism was reckless.

The Subjects' Responses to the University's Draft Investigation Report

The three subjects each had the opportunity to provide comments to the Committee's draft report. Subject 1, Subject 2 and Subject 3 each responded with typographical corrections and clarifications of fact that resulted in no substantive changes to the report.<sup>30</sup>

#### The University's Actions

The Deciding Official<sup>31</sup> accepted in full the Committee's findings and recommended actions:<sup>32</sup>

- Neither Subject 1 nor Subject 2 committed research misconduct;
- Subject 3 "did commit plagiarism by recklessly copying text from other sources without proper indication that the text was taken verbatim;"
- Subject 3 is required for two years to submit all of his written papers and proposal to his supervisor in the school for review and certify that none of the text was plagiarized; and
- Subject 3 is required to certify his completion of the Fall 2011 responsible conduct of research course at the University.

#### OIG's Investigation and Assessment

We found the University investigation to be accurate, complete and in accord with reasonable procedures. We concur with the Committee that a Subject 1's actions do not warrant a finding of research misconduct. We concur with the Committee that there is insufficient evidence to support any wrongdoing on the part of Subject 2, particularly given his lack of knowledge of the submission of the Proposal.

<sup>&</sup>lt;sup>24</sup> Tab 2 at 000011.

<sup>&</sup>lt;sup>25</sup> Tab 2 at 000011.

<sup>&</sup>lt;sup>26</sup> Tab 2 at 000007, 000011. Both Subject 3's undergraduate and graduate degrees are from the same institution outside the United States, followed by 5 years of postdoctoral work at three prominent U.S. research institutions before his current appointment at the University. In fact, in a separate communication following a review of its internal procedures, the University identified a gap in coverage in its own policy that required postdoctoral associates to take such training but not assistant research faculty.

<sup>&</sup>lt;sup>27</sup> Tab 2 at 000011.

<sup>&</sup>lt;sup>28</sup> Tab 2 at 000011.

<sup>&</sup>lt;sup>29</sup> Tab 2 at 000006.

<sup>&</sup>lt;sup>30</sup> Tab 14.

<sup>31</sup> 

<sup>&</sup>lt;sup>32</sup> Tab 1.

In summary, the alleged copying allocated to Subject 3 is:

Source <sup>33</sup>	Lines	Embedded References	Figures
В	33	1	
С	5		
Е	. 19		1
F	3	1	
G	<sub>1</sub> 6	2	
TOTAL <sup>34</sup>	66	3 ·	1

A finding of misconduct requires that: (1) there be a significant departure from accepted practices of the relevant research community, (2) the research misconduct be committed intentionally, or knowingly, or recklessly, and (3) the allegation be proven by a preponderance of the evidence.<sup>35</sup>

#### The Act

We concur with the University that Subject 3's actions with respect to copying material from Sources B, C, E (including the material in common with D), F, and G constitute plagiarism. We also agree with the Committee's finding that for Sources B, C, E, and F: 1) the source document appears in the Proposal reference list; 2) a citation appears in the Proposal text in the general vicinity of the copied material; and 3) there are no quotation marks or other means of offsetting the copied text. The Committee found the inclusion of the citation to the source "immediately adjacent to the copied text to be an important mitigating circumstance." However, Subject 3's placement of the citations suggests an effort on his part to attribute the source of the ideas but fails to address the source of the copied words (i.e., the expression of those ideas). Thus, we find that Subject 3's actions with respect to copying material from the identified sources into the Proposal satisfy the definition of plagiarism and are a significant departure from the accepted practices of the relevant research community.

#### <u>Intent</u>

We concur with the Committee that Subject 3 had a requisite level of intent (*i.e.*, at least reckless) for a finding of research misconduct. Thus, we conclude that Subject 3 had sufficient intent for a finding of research misconduct.

<sup>&</sup>lt;sup>33</sup> Subject 3 is an author on Source A; therefore, his reuse of that text does not meet the NSF definition of plagiarism.

<sup>&</sup>lt;sup>34</sup> The lines identified in Source D also appear in Source E and are therefore only counted once.

<sup>35 45</sup> C.F.R. 689.2(c).

<sup>&</sup>lt;sup>36</sup> 45 C.F.R. 689.1(a)(3), specifically the copying of "another person's ideas, processes, results, <u>or</u> words" [emphasis added].

#### Standard of Proof

The preponderance of the evidence supports a finding that Subject 3 plagiarized 66 lines of text from 5 sources (B, C, E, F, and G), including 1 figure and 4 embedded references, with at least reckless intent.

Based upon this evidence, we conclude Subject 3 committed 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.<sup>37</sup>

#### Seriousness

Subject 3's actions are of a moderate severity. The Proposal was Subject 3's first attempt at obtaining an NSF award and the copied material appeared as a part of his assessment of the relevant literature. The material he copied from Sources B, C, E, F, and G are in large part the methodology for the proposed work, albeit the actual work to be done was to further the body of knowledge represented in the source documents. Ultimately, NSF declined the Proposal minimizing direct harm to the government.

#### <u>Degree of Intent</u>

Subject 3's degree of intent reasonably lies between reckless and knowing. As the Committee noted, he knew he was copying text from the sources into the Proposal. Although Subject 3 received his academic training outside the U.S., he received substantial postdoctoral training at prominent U.S. institutions<sup>38</sup> and published as first author, with numerous coauthors, in prominent English language journals. The absence of detectable plagiarism in the articles the Committee examined,<sup>39</sup> taken in consideration with his expressed belief at the time that journals required a "higher standard" than the Proposal he was submitting, suggests an egregiously reckless disregard of the standards of proper scholarship. NSF's expectations for proposals are enunciated in the *GPG* which calls for "strict adherence to the rules of proper scholarship and

<sup>39</sup> Tab 2 at 000011.

<sup>&</sup>lt;sup>37</sup> 45 C.F.R. 689.3(b).

<sup>&</sup>lt;sup>38</sup> This training included a writing course at one of those institutions, although Subject 3 told the Committee he did not recall receiving instruction in using quotations for copied text. See Tab 2 at 000006. See also Subject 3's biographical sketch, Tab 3 at 000041–000042.

CONFIDENTIAL

attribution." We conclude he was reckless in not adhering to the rules of proper scholarship. 40

#### Pattern of Behavior

There is no evidence to suggest that Subject 3's plagiarism was part of a pattern of conduct.

#### Impact on the Research Record

There is no evidence to support finding an impact on the research record.

#### Recommendations

Based on the evidence, OIG recommends that NSF:

- Send Subject 3 a letter of reprimand informing him that NSF has made a finding of research misconduct;<sup>41</sup>
- Require Subject 3 to certify to the Assistant Inspector General for Investigations (AIGI) completion of research ethics training, including the proper attribution and presentation of quoted and paraphrased material, within 1 year of the finding of research misconduct;<sup>42</sup>
- For 2 years, require Subject 3 to certify to the AIGI each time he submits a proposal or report to NSF that the proposal or report does not contain plagiarized, fabricated, or falsified material;<sup>43</sup>
- For 2 years, require Subject 3 to submit to the AIGI assurances by a responsible official of his employer each time he submits a proposal or report to NSF that the proposal or report does not contain plagiarized, fabricated, or falsified material;<sup>44</sup>
- For a period of 2 years, bar Subject 3 from serving as an NSF reviewer, advisor, or consultant.<sup>45</sup>

#### The Subject 3's Response to OIG's Draft Investigation Report

We provided Subject 3 with a draft investigation report for his review and comments. He responded that he had "no comment or objection." <sup>46</sup>

<sup>&</sup>lt;sup>40</sup> Had he not read the *GPG* at all, our conclusion remains the same in that it would be extremely reckless to submit a federal grant proposal for the first time without having read the instructions and guidance for doing so or seeking out assistance in preparing the Proposal.

<sup>&</sup>lt;sup>41</sup> A Group I action, 45 C.F.R. 689.3(a)(1)(i).

<sup>&</sup>lt;sup>42</sup> This action is not specified within the regulation. See 45 C.F.R. 689.3(a). It is similar to Group I actions contained in 45 C.F.R. 689.3(a)(1).

<sup>&</sup>lt;sup>43</sup> A Group I action 45 C.F.R. 689.3(a)(1)(iii).

<sup>&</sup>lt;sup>44</sup> A Group I action 45 C.F.R. 689.3(a)(1)(iii).

<sup>&</sup>lt;sup>45</sup> A Group I action 45 C.F.R. 689.3(a)(3)(ii).

<sup>46</sup> Tab Tab 16.

#### NATIONAL SCIENCE FOUNDATION 4201 WILSON BOULEVARD

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230



NOV 1 8 2011

#### CERTIFIED MAIL --RETURN RECEIPT REQUESTED



Re: Notice of Research Misconduct Determination

In 2009, you authored a proposal entitled,

On 2009, the submitted this proposal to the National Science Foundation ("NSF" or "Foundation"). 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, as well as embedded references and a figure, copied from multiple 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 not part of a pattern of misconduct, 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 November 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 November 1, 2013, you must provide 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 November 1, 2012, you must attend a training course on research ethics, including the proper attribution and presentation of quoted and paraphrased material, and provide a certificate of attendance to the OIG that you have completed such a course; and

(4) Until November 1, 2013, you are prohibited from serving as a merit reviewer, advisor, or consultant for NSF.

The certifications, assurances, and certificate of attendance should be submitted in writing to 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 and the foregoing, Assistant General Counsel, at (703) 292-5054.

Sincerely,

Wanda Ward

Senior Advisor to the Director

Lande Mr

#### **Enclosures**

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