

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

#### CLOSEOUT MEMORANDUM

Case Number: A13020030 Page 1 of 1

#### Closeout

We investigated an allegation of plagiarism in a collaborative NSF Proposal<sup>1</sup> with two PIs (Subject1<sup>2</sup> and Subject2<sup>3</sup>) at different institutions. Both agreed that the Subject2 bore responsibility for all sections of the Proposal that contained copied text.

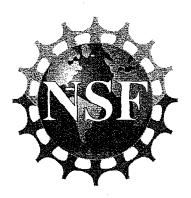
OIG interviewed the cognizant Program Officer, who agreed that Subject2 was the researcher whose relevant sections were plagiarized. The PO found that most of Subject2's contribution to the Proposal was plagiarized, making Subject2's part of the collaboration unviable. The PO determined that the collaborative project was also severable such that Subject1 could continue his portion of the project independent of Subject2.

We referred an investigation to Subject2's University<sup>4</sup>, which concluded that research misconduct occurred; some of the plagiarism was committed knowingly and some intentionally. Before the investigation was complete, Subject2 resigned his faculty position and moved to another country. The institution decided to terminate the award early and return the funds expended by Subject2, resulting in approximately \$40,000 in federal funds put to better use and more than \$26,000 recovered.

We found allegations against Subject1 unsubstantiated. We concluded, based on a preponderance of the evidence, that Subject2 intentionally plagiarized into his NSF Proposal and submitted a Report of Investigation to NSF. The Chief Operating Officer within the Office of the Director took actions based on our report.

This memo, the attached Report of Investigation, and the Chief Operating Officer's letter constitute the case closeout. Accordingly, this case is <u>closed</u> with no further action taken.

## National Science Foundation Office of Inspector General



# Report of Investigation Case Number A13020030

August 19, 2014

### 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-in-an NSF-proposal. —

**OIG Inquiry:** 

OIG identified a collaborative NSF Proposal (with two PIs, Subject1 and Subject2) containing approximately 70 lines of text and 9 embedded references from 4 sources. During our inquiry, both PIs agreed that Subject2 was responsible for all copied text and OIG referred an investigation to only Subject2's university.

University
Investigation and
Action:

The University identified an unattributed image that Subject2 copied into hisproposal. It concluded that Subject2 intentionally plagiarized and took the following actions: 1) the formal assignment of a faculty mentor, 2) required RCR training, 3) pre-screening of the Subject's next 4 proposals using plagiarism software, and 4) repayment by the Subject of all grant monies related to faculty salary already spent.

The University repaid ~\$26K that had already been spent and terminated the award early, resulting in an additional ~\$40K put to better use.

**OIG** Investigation:

OIG found 216 additional lines of copied text while reviewing 4 more NSF Proposals. We also interviewed the award's PO, who determined that the copied sections were material to the funding decision.

OIG's Assessment:

- The Act: Subject2 plagiarized 286 lines and 1 figure from 9 unique sources into 5 NSF Proposals.
- Intent: Subject2 acted intentionally.
- **Significant Departure:** Subject2's actions are a significant departure from the accepted practices of the research community.
- Standard of Proof: The preponderance of the evidence supports the conclusion regarding the act and intent, and therefore a finding of research misconduct.

## OIG Recommendation:

- Send Subject2 a letter of reprimand notifying him that NSF has made a finding of research misconduct.
- Require Subject2 to certify completion of an RCR course.
- Require Subject2 to submit certifications for 3 years.
- Require Subject2 to submit assurances from his employer for 3 years.
- Bar Subject2 from participating as a reviewer, advisor, or consultant for NSF for a period of 3 years.

#### OIG's Inquiry

Our inquiry into plagiarism-in-an NSF Proposal (Proposal) found 70-lines of apparently copied text and 9 embedded references from 4 sources. The two subjects, collaborative PIs from different universities (Subject1 and Subject2) replied to our inquiry letter, agreeing that Subject2 was responsible for all portions of the Proposal containing copied text. Subject2 admitted to the copying and accepted responsibility for the act. He stated that he had believed that grant proposals did not require the same attribution practices afforded a publication.

Based on our inquiry, we concluded that Subject1 was not involved in research misconduct and we make no recommendations about Subject1 in this report. However, Subject2 admitted to copying text verbatim into the Proposal without attribution, part of which occurred in a relatively significant area, and we therefore referred<sup>7</sup> an investigation to his university (University<sup>8</sup>).

#### The University's Investigation9

The University appointed a committee <sup>10</sup> (Committee) to investigate the allegation. The Committee reviewed the annotated NSF proposal and found that inadequately cited text had been copied "in the section reviewing the state of the art [in Subject2's field]. Additionally, in the Educational Impact section (Section 4) of the proposal, [Subject2] appropriated another person's ideas and methods by copying paragraphs from another NSF proposal without giving proper credit."<sup>11</sup>

The Committee "had concerns regarding the source of the data shown" in one of the Proposal's figures and stated that Subject2 "indicated that he had indeed copied figure 6, in its entirety, from an online source." The Committee included a copy of Subject2's email in which he admitted he did not cite the figure. The Committee determined that the sections of copied passages describing Subject2's field were copied knowingly. However, the Committee concluded that sections copying specific "aspects of an experimental plan, and especially using

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(Awarded:
  Tab 2.
<sup>3</sup> Subject1:
                                                             ), Associate Professor at
Subject2:
                                                                    Assistant Professor at
<sup>4</sup> Tab 3, Subject2 Inquiry Letter.
<sup>5</sup> Tab 4, Subejct2 Inquiry Letter Response.
<sup>6</sup> Tab 4, Subejct2 Inquiry Letter Response, Response to allegation letter, p. 2.
<sup>7</sup> Tab 5 contains the referral letter.
<sup>9</sup> Tab 7, The University's Investigation Report.
<sup>10</sup> See Tab 6, University Research Misconduct Policy.
<sup>11</sup> Tab 7, University Report, Committee Report p. 2, Marked as #4 by University, [p. 12 of the PDF].
<sup>12</sup> Tab 7 University Report, p. 2, Marked as #4 by University, [p. 12 of PDF].
<sup>13</sup> Tab 7 University Report, p. 2, Marked as #4 by University, [p. 12 of PDF].
<sup>14</sup> Tab 7 University Report, Appendix C [p. 20 of PDF].
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the data of another researcher,"<sup>15</sup> were "used in such a way as to convey a sense of [Subject2's] knowledge as well as his current research capabilities, both for personal gain"<sup>16</sup> and therefore, this copying was done intentionally. Though the Committee concluded the two types of sections were copied with differing levels of intent, they determined that Subject2's overall act was committed intentionally. <sup>17</sup> In addition, in the cover letter to our office, a University Official concluded that Subject2 "conducted these acts of plagiarism intentionally."<sup>18</sup>

The University also reviewed publications, grant proposals, and Subject2's dissertation. The committee concluded there was evidence of plagiarism in about half of Subject2's grant proposals, constituting a pattern. As a result of this investigation, the University also returned grant funds to other organizations to which Subject2 had submitted plagiarized proposals. They did not, however, find plagiarism outside of grant proposals. Since no evidence of plagiarism was found in either [Subject2's] dissertation or his publications, the panel believed that his actions likely had no significant impact on the research record, subjects, or the public. However, the actions of [Subject2] have certainly negatively affected research collaborators at [the University] as well as at other institutions.

The Committee recommended the following sanctions: 1) the formal assignment of a faculty mentor, 2) RCR training, 3) screening of Subject2's next four proposals with software prior to submission to funding agencies, and 4) "the repayment, over time, of all grant monies related to faculty summer salary already spent from the recalled extramural sources." The RIO and the Dean<sup>23</sup> agreed with the Committee's recommendations and submitted them<sup>24</sup> to two University Officials. A cover letter to our office by one of the two officials also reiterated the recommendations, though a final decision letter officially imposing the sanctions was not included with the report. <sup>26</sup>

During the investigation, Subject2 submitted an apology to the University and notified them that he was resigning his position; he did not pay back the money he had received from the NSF grant. In the final report, two University Officials<sup>27</sup> recommended that the University return to NSF the funds already spent.

<sup>&</sup>lt;sup>15</sup> Tab 7, University Report, Committee Report, p. 2, Marked as #4 by University, [p.12 of PDF]. <sup>16</sup> Tab 7, University Report, Committee Report, p. 3, Marked as #4 by University, [p.13 of PDF]. <sup>17</sup> Tab 7, University Report, Committee Report, p. 4, Marked as #4 by University, [p.14 of PDF]. <sup>18</sup> Tab 7, University Report, Letter from VPR to NSF OIG, p. 1 [p. 1 of PDF]. <sup>19</sup> Tab 7, University Report, Committee Report p. 3, Marked as #4 by University, [p. 13 of the PDF]. <sup>20</sup> Conversation with , Director, Office of Research September 10, 2013. <sup>21</sup> Tab 7 University Report, p. 3, Marked as #4 by University, [p. 13 of PDF]. <sup>22</sup> Tab 7, University Report, Letter from VPR to NSF OIG, p. 1 [p. 1 of PDF] and Letter from RIO to Provost, p. 1 [p. 2 of PDF]. Tab 7, University Report, Letter from RIO to Provost, p. 1 [p. 2 of PDF] and Letter from Dean to RIO, p. 1, Marked as #6 by University [p. 26 of PDF]. , Vice President for Research and Provost Tab 7, University Report, Letter from VPR to NSF OIG, p. 1 [p. 1 of PDF]. Vice President for Research.

#### OIG's Assessment

We assessed the Report-for-accuracy and-completeness and whether the University followed reasonable procedures in its investigation. We found that the general procedures were reasonable and the report was complete. For the most part, the University also provided an acceptable evidentiary record, but we were not able to completely accept their conclusions with regard to pattern. For example, though they supplied software analysis reports to us, we were not able to determine which factors were used to conclude that 5 out of the 11 grant proposals contained plagiarism. We also could not determine how much copied text the University concluded was in the proposals, or how much was copied from identified sources. We therefore accepted the University's overall conclusion and evidence, though we supplemented their report with our own review of Subject2's other NSF Proposals for a pattern of copying text. We sent Subject2 a notification of our investigation<sup>29</sup> and a copy of the University's report and he replied that he did not disagree with the University's conclusions.<sup>30</sup>

We reviewed Subject2's two CAREER proposal submissions<sup>31</sup> and found that they each contained approximately 18 lines of copied text with 4 embedded references from 2 sources. <sup>32</sup> We also reviewed two other sole-authored NSF proposals of Subject2's, a submission to an initiative for early career faculty (Initiative Proposal<sup>33</sup>) and a regular program submission (Program Proposal<sup>34</sup>). In the Initiative Proposal, we found 77 apparently copied lines from 3 sources. In the Program Proposal, we found approximately 103 lines of apparently copied text with 4 embedded references from 6 sources, <sup>35</sup> one of which was the same online awarded NSF Proposal used as a source for the Broader Impact section in the Proposal. <sup>36</sup>

. In addition, we interviewed the cognizant NSF Program Officer (PO) for the award<sup>37</sup> and requested an evaluation of whether plagiarism in the Proposal would have been material to the funding decision. The PO noted that 2 of the 3 pages describing Subject2's proposed research for the collaboration were copied without attribution. Further, Subject2 appeared to have plagiarized about half of his portion of the Broader Impact section, a major element in NSF's awarding formula, from an awarded proposal available online. The PO concluded that the copied text rendered the Subject's part of the collaborative research unviable and an award would never have been made if the plagiarism had been known. Because of this, he strongly felt that the University should return all of the money from Subject2's award.<sup>38</sup> The PO also stated that the two parts of

the collaboration were independent enough that NSF could continue the grant to Subject1's university for Subject1 to pursue his part of the research.

Independently, the University called our office to express that it was interested in terminating the grant and returning the unspent funds to the government. A University official worked with an Officer in NSF's Division of Grants and Agreements to end the grant early, resulting in approximately \$40,000 of funds put to better use. The University also returned approximately \$26,000 that had been expended during the award period to the federal government.

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>41</sup>

#### The Act

Subject2 copied 286 lines of improperly attributed text into 5 of his NSF proposals. Subject2's unattributed copying is consistent with NSF's definition of plagiarism.<sup>42</sup>

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

According to the award's PO, Subject2 copied two-thirds of his technical part of the collaborative and approximately half of his Broader Impact statement. Such a large percentage is indicative of intent to deceive NSF reviewers and possibly even his collaborator. We concur with the Committee's assessment that that Subject2 acted intentionally.

#### Standard of Proof

The preponderance of the evidence supports that Subject2 intentionally plagiarized and that his actions were a significant departure from the accepted practices of the relevant research community. We therefore conclude that Subject2's actions constitute research misconduct.

#### **OIG's Recommended Disposition**

When deciding what appropriate action to take upon a finding of misconduct, NSF must consider:

(1) How serious the misconduct was; (2) The degree to which the misconduct was knowing, intentional, or reckless; (3) Whether it was an isolated event or part of a pattern; (4) Whether it had a significant impact on the research record, research subjects, other

Director, Office of Research

<sup>,</sup> NSF Grants and Agreements Officer.

<sup>&</sup>lt;sup>41</sup> 45 C.F.R. 689.2(c). <sup>42</sup> 45 C.F.R. 689.1(a)(3).

researchers, institutions or the public welfare; and (5) Other relevant circumstances.<sup>43</sup>

#### Seriousness

The copied sections comprise a substantial percentage of Subject2's contribution to a collaborative effort, essentially nullifying the legitimacy of his contribution to the Proposal. Further, his presentation of copied material, including material from a previously awarded NSF proposal, caused NSF reviewers and an NSF Program officer to make an award.

Moreover, Subject2's actions negatively affected his collaborator, Subject1, by initially raising questions regarding Subject1's reputation as well as impacting the continuity of the project and Subject1's research funds.

We conclude that Subject2's actions are very serious.

#### Pattern and Impact on the Research Record

The University Committee concluded that there was no plagiarism in Subject2's dissertation or published articles and, therefore, no impact on the research record. The Committee did conclude that he had plagiarized in 5 out of 11 grant proposals.<sup>44</sup>

Out of the 4 additional NSF proposals we reviewed, 2 were found to have significant copied text, along with a relatively small amount in 2 CAREER proposals. All five of the NSF Proposals sole-authored by Subject2 that were reviewed for the investigation contained copied text. While we agree with the University that the impact on the research record is limited, we find that Subject2 has exhibited behavior indicative of a strong pattern of copying others' text verbatim into his grant proposals.

#### Recommendations

Based on the evidence, OIG recommends that NSF:

- Send Subject2 a letter of reprimand notifying him that NSF has made a finding of research misconduct.<sup>45</sup>
- Require Subject2 to certify to the Assistant Inspector General for Investigations (AIGI) his completion of a responsible conduct of research training program and provide documentation of the program's content within 1 year of NSF's finding. The instruction should be in an interactive format (e.g., an instructor-led course) and specifically include instruction on plagiarism.

<sup>&</sup>lt;sup>43</sup> 45 C.F.R. 689.3(b).

<sup>&</sup>lt;sup>44</sup> Tab 7 University Report, p. 3, Marked as #4 by University [p.13 of PDF].

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

<sup>&</sup>lt;sup>46</sup> This action is similar to Group I actions 45 C.F.R. 689.3(a)(1).

For a period of 3 years as of the date of NSF's finding:

- Bar Subject2 from participating as a peer reviewer, advisor, or consultant for NSF. 47
- Require for each document (proposal, report, etc.) to which Subject2 contributes for submission to NSF (directly or through his institution),
  - Subject2 to submit a contemporaneous certification to the AIGI that the document does not contain plagiarism, falsification, or fabrication.<sup>48</sup>
  - Subject2 to submit contemporaneous assurances from a responsible official of his employer to the AIGI that the document does not contain plagiarism, falsification, or fabrication.<sup>49</sup>

#### Subject2's Response to OIG's Draft Investigation Report<sup>50</sup>

We sent a copy of the draft report to the Subject and he replied that he agreed with its conclusions, as well as stating that he apologized for his "role in the matter." <sup>51</sup>

<sup>&</sup>lt;sup>47</sup> A Group III action 45 C.F.R. 689.3(a)(3)(ii).

<sup>48</sup> This action is similar to 45 C.F.R. 689.3(a)(1)(iii).

<sup>&</sup>lt;sup>49</sup> A Group I action 45 C.F.R. 689.3(a)(1)(iii).

<sup>&</sup>lt;sup>50</sup> Tab 11.

<sup>&</sup>lt;sup>51</sup> Tab 11, p. 1.

#### NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230



FEB 2 6 2015

#### VIA EMAIL

Re: Notice of Research Misconduct

While you were employed at the contained ("University") you submitted proposals to the National Science Foundation ("NSF"), which contained 286 lines, one figure and nine unique sources of copied text in five NSF proposals, one of which was funded.

The University appointed an Investigating Committee ("IC") to conduct an investigation and concluded that you intentionally plagiarized text and that there was a pattern of this conduct.

The NSF's Office of Inspector General ("OIG") conducted a separate investigation in this matter and concluded that research misconduct occurred. A copy of the OIG Investigative Report is attached.

#### Research Misconduct

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)

The IC identified text and one figure that you copied verbatim from an online source. The IC concluded that you were solely responsible for the plagiarized text in a collaborative proposal and that the plagiarism was intentional. The IC also examined publications, other grant proposals and your dissertation and concluded that you plagiarized in approximately half of the grant proposals, showing a pattern of plagiarism. The IC recommended sanctions including RCR training, pre-submission screening of proposals, repayment of the salary you received from the grants, and formal assignment of a faculty mentor.

OIG accepted the IC's report and investigated further, looking at two CAREER proposals and two additional sole-authored NSF proposals (all four declined). In total, you plagiarized 286 lines and one figure from nine unique sources in five NSF proposals. Some of the copied text in the proposals also appeared in your publications.

Pursuant to NSF's regulations, the Foundation must determine whether to make a *finding* of research misconduct based on a preponderance of the evidence. 45 CFR § 689.2(c). Based on information in both the OIG Investigative Report and the University's conclusion, it is clear that you were not granted permission by the authors of the source documents to copy material from the publications. In addition, your acknowledgement that your proposal contained copied material permits me to conclude that, based on a preponderance of the evidence, the 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 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 actions to impose for research misconduct, I have considered the seriousness of the misconduct, which indicates that you intentionally committed plagiarism in the submission of proposals to NSF; that there is a pattern of plagiarism; and that the plagiarism led to the termination of your award. You apologized for the plagiarism, but resigned and failed to repay the money you received as salary under the award, as recommended by the University IC. The University returned funds in the amount of \$66,000 to NSF. I have also considered other relevant circumstances. See 45 CFR § 689.3(b).

Based on the foregoing, I am imposing the following actions on you:

- You are required to complete a comprehensive responsible conduct of research training course within one year from the date that the research misconduct determination becomes final, and provide documentation of the program's content. The instruction should be in an interactive format (e.g., an instructor-led course, workshop, etc.) and should include a discussion of plagiarism.
- For a period of three years from the date that the research misconduct determination becomes final, I am requiring that you submit contemporaneous certifications that any proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material.
- For a period of three years from the date that the research misconduct determination becomes final, you are required to submit contemporaneous assurances by a responsible official of your employer that any proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material.
- For a period of three years from the date that the research misconduct determination becomes final, you are prohibited from participating as a peer reviewer, advisor, or consultant for NSF.

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

Appeal Procedures for Finding of Research Misconduct

Under NSF's regulations, you have 30 days after receipt of this letter to submit an appeal of this finding, 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, the decision on the finding of research misconduct will become final. For your information, we are attaching a copy of the applicable regulations.

Should you have any questions about the foregoing, please contact and Assistant General Counsel, at (703) 292-

Sincerely,

Richard O. Buckius Chief Operating Officer

Enclosures: Investigative Report 45 CFR Part 689