

NATIONAL SCIENCE FOUNDATION OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A09030018 Page 1 of 1

OIG conducted an inquiry into an allegation that the Subject¹ submitted an NSF proposal containing copied text. During the inquiry we identified copied material in two NSF proposals. The Subject's response to our inquiry did not dispel the allegation, and we referred the matter to the Subject's institution for investigation.

The University concluded, based on a preponderance of the evidence, that the Subject "at least knowingly and most probably carelessly" committed plagiarism, deemed a significant departure from accepted practices, and took actions to protect the University's interests.

We adopted the University's findings in part, but could not accept the report in its totality in lieu of conducting our own investigation. We concluded, based on a preponderance of the evidence, that the Subject knowingly committed plagiarism, 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, and the Deputy Director's letter constitute the case closeout. Accordingly, this case is *closed*.

NATIONAL SCIENCE FOUNDATION 4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230



Dear Dr.

MAR 1 5 2011

CERTIFIED MAIL --RETURN RECEIPT REQUESTED



Re: Notice of Research Misconduct Determination

In 2008, you submitted two proposals 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 verbatim and paraphrased text, as well as figures and embedded references, copied from eight 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 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 you engaged in a pattern of misconduct, and that your misconduct had no 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 March 10, 2012, you must provide to the OIG certifications that any proposal or report that you submit to NSF as a PI or co-PI does not contain plagiarized, falsified, or fabricated material;
- (2) Until March 10, 2012, you must provide to the OIG assurances from your employer that any proposal or report that you submit to NSF as a PI or co-PI does not contain plagiarized, falsified, or fabricated material; and
- (3) No later than March 10, 2012, you must take a course on research ethics, with an

emphasis on proper citation and attribution, and certify to the OIG that you have completed such a course.

The certifications should be submitted in writing to the Foundation'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 Assistant General Counsel, at (703) 292-8060.

Sincerely,

Wanda Ward

Senior Advisor to the Director

Enclosures

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

National Science Foundation Office of Inspector General



Confidential Report of Investigation Case Number A09030018

27 October 2010

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 eight sources from which approximately 84 lines, four figures, and two embedded references were allegedly copied into two declined NSF proposals. OIG referred the matter to the Subject's home institution.

University Investigation and Action:

The University concluded, based on a preponderance of the evidence, that the Subject "at least knowingly and most probably carelessly" committed plagiarism, deemed a departure from accepted practices.

The University sent the Subject a letter of reprimand; required the Subject to complete ethics training immediately and every three years while affiliated with the University, and to ensure that his research team completes regular training; informed the Subject that future misconduct could result in termination; withheld discretionary pay or awards for three years from the Subject; and committed to ensuring that all of the Subject's proposals be reviewed, for at least three years, by the Subject's Director and Department Chair prior to submission.

OIG Assessment:

- The Act: The Subject committed plagiarism in two proposals, including 84 lines, four figures, and two embedded references, from eight sources.
- Intent: The Subject acted knowingly.
- Standard of Proof: A preponderance of evidence supports the conclusion that the Subject committed plagiarism.
- **Significant Departure:** The Subject's plagiarism represents a significant departure from accepted practices.
- Pattern: Additional proposals submitted by the Subject, including one submitted to NSF, contained plagiarism.

OIG Recommends:

- Make a finding of research misconduct against the Subject.
- Send the Subject a letter of reprimand.
- Require certifications from the Subject for a period of 1 year.
- Require assurances from the Subject for a period of 1 year.
- Require certification of attending an ethics class within 1 year.

OIG's Inquiry

OIG conducted an inquiry into an allegation that the Subject¹ submitted an NSF proposal (Proposal 1²) containing copied text. Our initial analysis of Proposal 1 found approximately 53 lines, three figures, and one embedded reference allegedly copied from five sources.³ We examined four other proposals the Subject submitted. While two of the proposals contained *de minimis* plagiarism, the other two proposals (Proposals 2⁴ and 3⁵) – which were identical in title and content – contained 31 lines, one figure, and one reference allegedly copied from three sources.⁶ Because Proposals 2 and 3 were identical, we will only refer to proposal 2 in our analysis.

OIG contacted the Subject about the allegation.⁷ In his response,⁸ he explained that Proposals 1 and 2 were "highly interdisciplinary in nature." As such, he asked his "interdisciplinary research team" – undergraduate, graduate and postdoctoral students from a variety of fields – "to help [him] with the background literature search," and "to summarize the search results in a draft form that would be included in the introduction session [sic]." ¹⁰

I considered this exercise as a part of their professional training to be involved in a proposal preparation process. On the other hand, I was fully occupied with the organization of proposed ideas, writing preliminary results, research and educational plan. Unfortunately, I failed to notify my fellow members about the consequence of plagiarism in the context of preparing proposal materials. However, my group members are fully aware of plagiarism in the context of research manuscript preparation. ¹¹

The Subject acknowledged the proposals "unintentionally" contained material "copied from the source documents but not properly distinguished and attributed." He noted all of the copied material appeared in the proposals' background sections and that many segments included

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Tab 1:

PI=Subject (Declined).

Tab 2: Sources A-E.

Tab 3:

PI=Subject (Declined).

PI=Subject (Declined.)

PI=Subject (Declined.)

Tab 2: Sources F-H.

Tab 4.

Tab 5.

Tab 5, pg 1.

Tab 5, pg 1.
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reference citations.¹⁴ The Subject accepted responsibility: "Realizing this as a fault on behalf of the PI, I sincerely apologies [sic] for this incidence [sic]."¹⁵

OIG reviewed the Subject's response and concluded it did not dispel the allegation because the Subject acknowledged his proposals included inadequate citation, and failed to name those he claimed authored the material.

The following chart summarizes the allegedly copied text in each proposal:

Source	Proposal 1 (Declined)	Proposal 2 (Declined)
A (Autiolo)	 	(Decineu)
A (Article)	28 lines; 1 figure	
B (Article)	2 lines; 1 figure	
C (Article)	8 lines; 1 embedded reference	
D (Article)	8.5 lines	
E (Article)	6.5 lines; 1 figure	
F (Newsletter)		20 lines
G (Article)	V	10 lines; 1 figure
H (Article)		1 line; 1 embedded reference
	53 lines; 3 figures;	31 lines; 1 figure;
Total (UNIQUE)	1 embedded reference	1 embedded reference

Based on the extent of allegedly plagiarized material, we concluded there was sufficient evidence to proceed with an investigation.

University Investigation

Consistent with our policy, OIG referred the matter to the University¹⁶ and informed the Subject we had done so.¹⁷ The University, consistent with its policies,¹⁸ conducted an investigation and produced an Investigation Report (Report) with attachments.¹⁹ The University subsequently provided supplemental documents responding to our request for clarification of the Report's conclusions.²⁰

The Investigation Committee (Committee) determined, based on a preponderance of the evidence, ²¹ that the allegations of research misconduct were "accurate and validated" and that the Subject "acknowledged to the Committee members that he was at fault," noting, "I did not have time to carefully review every sentence of every proposal." He said he "never read the

¹⁴ Tab 5, pg 1.

¹⁵ Tab 5, pg 1.

¹⁷ Tab 6

^{18 77 1 7}

¹⁹ Tab 8. Due to the length of the Report and attachments, we divided materials received as one unit into four units. Tab 8 contains files labeled Report Part 1, Report Part 2, Report Part 3, and Report Part 4.

[&]quot; Tab 9.

²¹ Tab 8, Report Part 1, pg 7. (Page numbers reflect the page number generated by the .pdf format.)

²² Tab 8, Report Part 1, pgs 6-7.

²³ Tab 8, Report Part 4, pg 47.

guidelines" regarding appropriate citation and had "no idea [NSF] require[s] same format of publication for journals [sic]."²⁴ He further claimed his proposal submissions to NSF were earlier versions of the final draft, which he could no longer locate, but which did include additional references.²⁵ Lastly, he explained that his post-doc wrote much of the proposal, and incorporated certain figures and background information from the post-doc's own published papers on work not conducted in the Subject's lab.²⁶

The Committee concluded the Subject's actions represented a significant departure from accepted practices of the relevant research community.²⁷ It further stated, "actions by the [Subject] . . . represent a research misconduct action which violates all existing rules and directives relating to the responsible conduct of research."²⁸

Regarding intent, the Report stated:

The Committee reached a consensus that plagiarism actions committed by the [Subject] were done at least knowingly and most probably carelessly, as he did not make an effort to verify the information contained in some portions of the technical content of the two proposals. However, the Committee also agreed that the alleged plagiarism actions may not necessarily have been done intentionally by the [Subject].²⁹

When asked for clarification, the Committee said it made its determination because

the [Subject] omitted to invest the necessary time and effort in reviewing the proposal content, which was prepared by his post-doc, as it relates primarily to the proposal background section as well as some areas of the methodology/project description[.]³⁰

and because of the Subject's

incorrect representation of preliminary results, as if those results would have been obtained at the [Subject]'s laboratory (at [the University]), when in fact those were preliminary results obtained from research done at another laboratory where the [Subject]'s post doc used to work, and they were in addition already published results.³¹

²⁴ Tab 8, Report Part 4, pg 47.

²⁵ Tab 8, Report Part 4, pg 47.

²⁶ Tab 8, Report Part 4, pg 47.

²⁷ Tab 8, Report Part 1, pg 7.

²⁸ Tab 9, pg 2.

²⁹ Tab 8, Report Part 1, pg 7.

³⁰ Tab 9, pg 2.

³¹ Tab 9, pg 2.

To determine pattern, the Committee examined grant proposals the Subject submitted to funding agencies from 2004 to 2009. ³² It "identif[ied] a pattern of behavior by the [Subject] where in some cases, introductory and background included plagiarized material," ³³ which only sometimes included cited references, and never included quotation marks. ³⁴ It concluded:

it appears that the [Subject] is dependent on his research team (including his post-docs) to provide introductory sections of proposals and that his team members have not been properly trained regarding use of background material.³⁵

Asked to provide specific examples of the pattern it identified, the Committee provided OIG with its analysis of five proposals, ³⁶ which included an NSF proposal the Subject submitted after receiving our inquiry letter and sending his response to our office. ³⁷ Its findings ³⁸ indicated substantive copying, the instances of which

were consistent enough as to validate what seems to be a pattern by the [Subject] as it related to not providing proper attributions of all ideas or materials included on some sections of the proposal narrative and the presence of extensive copying of passages of text from other sources, which should have required quotation marks and/or proper citations.³⁹

Lastly, the Committee determined the Subject's action impacted other researchers in that

previously published work from another lab that was performed by a post-doc currently working in the [Subject]'s lab was described as the "preliminary results" of the [Subject]'s lab. While some "ownership" of these results may have followed the post-doc when he joined the "[Subject]'s" lab, this neglects the "ownership" of these results by the other research collaborators of this post-doc at the time the earlier work was performed. In this way, an unfair advantage in the competition for research funding may have resulted. ⁴⁰

(Funded);

(Funded);

(Declined);

Pending).

³² Tab 8, Report Part 4, pgs 27-33. The Committee reviewed 35 proposals, of which 6 were funded, 6 were pending, 21 were declined, and 2 were submitted during the investigation.

³³ Tab 8, Report Part 1, pg 7.

³⁴ Tab 8, Report Part 1, pg 7.

³⁵ Tab 8, Report Part 1, pg 7.

³⁶ Tab 9, pgs 3-6. The proposals included: one sent to the

³⁷ This will be discussed further below.

³⁸ Tab 9, pgs 3-6.

³⁹ Tab 9, pg 6.

⁴⁰ Tab 8, Report Part 1, pg 8.

Since the proposals were declined and it was unknown whether other research collaborators submitted competing proposals, the Committee classified the impact as limited.⁴¹

The Committee recommended that:

- The Subject be sent a written disciplinary letter, a copy of which would be sent to his Director, Department Chair and College Dean, summarizing the allegations, the findings and recommended actions, and the Subject be required to acknowledge in writing receipt of the letter.
- The Subject complete responsible conduct of research (RCR) training.
- The Subject complete RCR training every three years while affiliated with the University.
- The Subject ensure his research team, collaborators, and subcontractors complete RCR training, and annually provide a list of his team members to the University.
- The Subject be made aware that future research misconduct could result in termination.
- The Subject not receive discretionary pay increases or University research recognition awards for three years.
- All of the Subject's proposals, for at least three years, be reviewed by the Subject's Director and Department Chair prior to submission.⁴²

University Adjudication

A University Official⁴³ issued the letter of reprimand, in which he also informed the Subject that the University adopted the Committee's recommendations.⁴⁴

OIG's Assessment of the Investigation and Report

The University provided OIG with its Report, and OIG invited the Subject to provide comments.⁴⁵ The Subject opted not to respond.

OIG assessed the Report and its supplementary documents for accuracy and completeness, and found the Report to be accurate but incomplete. Specifically, the Report did not adequately identify the standards of the Subject's research community, or precisely assess the Subject's level of intent. However, the University did follow reasonable procedures in conducting its investigation, and produced an acceptable evidentiary record with respect to the matters it addressed. Therefore, we adopted the findings in part, but could not accept the report in its totality in lieu of conducting our own investigation.

⁴¹ Tab 8, Report Part 1, pg 8.

⁴² Tab 8, Report Part 1, pgs 9-10.

Assistant to the Provost.

⁴⁴ Tab 9, pgs 8-9.

⁴⁵ Tab 10.

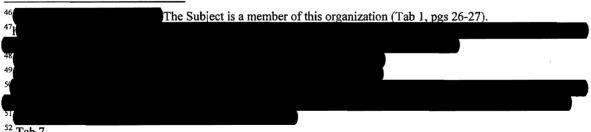
OIG's Investigation

The Report determined the Subject's action is a significant departure from the standards of his research community; however, the Report does not identify these standards. We therefore examined the ethical guidelines of the leading professional association in the Subject's field. The association has an Ethics Committee, whose website contains the association's code of conduct and publications' ethical guidelines. The publication guidelines clearly state: "An author should identify the source of all information quoted or offered, except that which is common knowledge." Additionally, the website contains specific information including statements on

Further, another professional society of which the Subject is a member similarly provides guidance on scientific integrity and plagiarism in its publications and at various conferences. Lastly, the Subject's employer has a research misconduct policy. The Subject's actions fall well short of the standards in each case and are thus clearly a significant departure from the standards of the Subject's research community.

The Report was similarly vague in specifying the Subject's level of intent, stating that his actions were performed "at least knowingly" "most probably carelessly" and "not necessarily . . . intentionally." To determine the Subject's level of intent, we reviewed his educational and professional history. The Subject received his undergraduate and graduate education outside the U.S. However, after earning his Ph.D. in 1998, the Subject served as postdoctoral fellow, research assistant professor, and assistant professor at his current U.S. institution. Further, all of the Subject's publications and all the journals for which he serves as reviewer listed on his Biographical Sketches are English language publications in English language journals. Given his professional experience and publication record, one may reasonably conclude that the Subject knew he was not providing adequate attribution of other authors' text.

We next examined the Report's statement that the Subject included material in the proposals' preliminary results sections detailing projects conducted by his post doc in another institution's lab. We identified copied material in both proposals⁵⁶ that was included in the proposals' preliminary results sections, contradicting the Subject's claim that the copied material was all introductory information. Additionally, this material, as written, seemed to misrepresent



³² Tab 7.

⁵³ Tab 8, Report Part 1, pg 7.

⁵⁴ The Subject received his B.S., M.S., and Ph.D. from institutions in

⁵⁵ Tabs 1 and 3 contain the Subject's Biographical Sketches.

⁵⁶ Proposal 1 contained material from Source E in the preliminary results; Proposal 2 contained material from Source H in the preliminary results.

the work as work the Subject himself conducted. Such misrepresentation suggests an action done knowingly, rather than a simple neglect to carefully review "every sentence of every proposal." ⁵⁷

Finally, we examined the Subject's own statements and noted he provides somewhat contradictory explanations regarding his actions. He said he was unaware of the citation obligations for NSF proposals, yet supposedly wrote final drafts, which he now cannot locate, that would have met NSF standards by including references. Additionally, he acknowledges the proposals were actually written mostly by his post-doc. ⁵⁸ These accounts, coupled with the Subject's acceptance of full responsibility despite claiming he himself did not write the proposals, similarly suggest the Subject acted knowingly.

Lastly, we re-reviewed the Subject's newest NSF proposal (Proposal 4)⁵⁹ that the Committee reviewed. Proposal 4 was submitted⁶⁰ two months after our inquiry letter and a month and a half after the Subject's response to our letter. We identified 33 lines, five references, and two figures copied from eight sources.⁶¹ However, most notable was the Subject's inclusion of text from sources OIG identified in its original inquiry letter – specifically, material from Sources F and G^{62} - and which the Subject acknowledged as inadequately cited in his subsequent response. This evidence confirms the Committee's determination regarding pattern, and suggests the plagiarism in Proposal 4 was done at least knowingly.

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.⁶³

The Acts

Our review found the Subject plagiarized 84 lines, four figures, and two embedded references, from eight sources into two unfunded proposals. OIG concurs with the Report that the Subject's actions constitute plagiarism, as defined by NSF. We further concur that the acts constitute a significant departure from accepted practices. In offering material composed by others as his own work in both the introductory and preliminary results sections, the Subject misrepresented his own efforts and presented reviewers with an incorrect measure of his abilities.

PI=Subject (Declined).

⁵⁷ Tab 8, Report Part 4, pg 47.

⁵⁸ Tab 8, Report Part 4, pg 47.

⁵⁹ Tab 11

⁶⁰ July 22, 2009.

⁶¹ Tab 11 contains Proposal 4 and source documents.

⁶² Tab 2 contains Sources F and G; Tab 11 contains identical sources labeled (Source F) and (Source G)

G).
⁶³ 45 C.F.R §689.2(c).

Intent

The University's report was ambiguous regarding level of intent. Based on our investigatory review, we conclude the Subject acted with a knowing intent in submitting proposals containing plagiarism. Specifically, as detailed above, the Subject's professional experience and publication record, inclusion of copied material within the proposals' preliminary results section, and his own contradictory statements support a finding that the Subject acted knowingly in submitting proposals containing inadequately cited or acknowledged material.

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.⁶⁴

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.⁶⁵

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 84 lines, four figures, and two embedded references, from eight sources into two unfunded proposals – is itself serious. Second, we note the copied text served to misrepresent the Subject's body of knowledge, inaccurately portraying the proposals' respective merit to the reviewers. Lastly, and most crucially, the Subject's inclusion of already published results of experiments conducted in another institution's lab as preliminary results he himself had obtained is an egregious misrepresentation of his prior research experience.

⁶⁴ 45 C.F.R. part 689.

^{65 45} C.F.R. § 689.3(b).

Degree to which Action was Knowing

OIG finds in this situation that the Subject acted knowingly. The Subject acknowledged his proposals contained inadequately cited material and a description of his post-doc's work as his own preliminary results. In submitting the proposals, the Subject knew of this misrepresentation. A reasonable person is expected to know that using verbatim text without demarcation, and representing the work of another laboratory as his own work, is not acceptable. We therefore find the Subject's actions to be inherently knowing.

Pattern

OIG concurs with the Report's identification of a pattern of plagiarism in the Subject's various proposals. Of note is our further analysis of Proposal 4, an NSF proposal the Subject submitted two months after being informed of the allegations by our office and a month and a half after his response to our letter. We find the plagiarism identified in Proposal 4 to be especially troubling since the Subject included text from sources OIG had identified in its original inquiry letter – specifically, material from Sources F and G⁶⁶ - and which the Subject acknowledged as inadequately cited in his subsequent response. The evidence strongly supports a finding of pattern within the Subject's actions.

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;⁶⁷
- require the Subject to certify to OIG's Associate Inspector General for Investigations (AIGI) that proposals or reports he submits to NSF do not contain plagiarized material for 1 year;⁶⁸
- 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;⁶⁹ 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 upon completion.⁷⁰

⁶⁶ Tab 2 contains Sources F and G; Tab 11 contains identical sources labeled (Source F) and (Source F)

⁶⁷ A letter of reprimand is a Group I action (45 C.F.R. §689.3(a)(1)(i)).

⁶⁸ Certification by an individual is a final action that is comparable to the final actions listed in 45 C.F.R. §689.3(a).

⁶⁹ Requirement for assurances is a Group I action (45 C.F.R. §689.3(a)(1)(iii)).

⁷⁰ Completing an ethics course is a final action that is comparable to the final actions listed in 45 C.F.R. §689.3(a).