NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A12060044

We received an allegation that the Subject[1] submitted an NSF proposal[2] the majority of which contained copied text. NSF funded the proposal. The Subject's response to our inquiry placed responsibility for the copied text on a foreign collaborator. We subsequently interviewed the NSF Program Director, reviewed the Program Announcement requirements, and referred the matter to the University[3] as an inquiry. The University's inquiry and limited investigation concluded that the Subject was not responsible for the copied text and thus did not commit plagiarism.

We found the University's conclusion accurate and complete relative to its interests. However, given our mission to protect the NSF and the federal interest, we initiated our own investigation. Our investigation concluded, based on a preponderance of the evidence, that the Subject recklessly committed plagiarism in submitting, under his own name, material authored by a foreign collaborator who was previously unknown to him, without reasonably reviewing the document. We concluded the act constituted a significant departure from accepted practices within his research community.

We recommended actions to be taken to protect the federal interest. The Senior Advisor to the Director concurred with our recommendations.

Additionally, we informed the University of our concern regarding its receipt of the award, and the University chose to reimburse the award to NSF, in the amount of $50,000.

This memo, the Report of Investigation, and the letter from the Senior Advisor to the Director to the Subject constitute the case closeout. Accordingly, this case is ***closed***.

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1 [redacted]

2 [redacted]

3 [redacted].

National Science Foundation
Office of Inspector General

Report of Investigation
Case Number 12060044

September 24, 2013

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.

OIG Inquiry: OIG identified seven sources from which approximately 154 lines and 40 embedded references in one funded NSF Proposal. OIG referred inquiry of the matter to the Subject's University.

University Inquiry: The University concluded the Subject did not commit plagiarism.

OIG Investigation and Assessment:

- **The Act:** Subject submitted a proposal to NSF containing 154 lines and 40 embedded references copied from seven sources in one NSF proposal. The proposal was largely written by a collaborator previously unknown to the Subject.
- **Intent**: Subject acted recklessly.
- **Standard of Proof:** A preponderance of evidence supports the conclusion that Subject recklessly committed plagiarism.
- **Significant Departure:** Subject's plagiarism represents a significant departure from accepted practices.
- **Pattern:** None.

OIG Recommends:

- Make a finding of research misconduct against Subject
- Send Subject a letter of reprimand.
- Require certifications from Subject for a period of one year.
- Require assurances from Subject for a period of one year.
- Require completion of a responsible conduct of research training program within one year.

OIG's Inquiry

OIG conducted an inquiry into an allegation of plagiarism within a funded NSF collaborative proposal (Proposal).[1] Our review identified 163 lines of text and 41 out of 45 cited references copied from eight sources.[2] In total, nine out of 12 pages were entirely plagiarized: the entire background and "Statement of Scientific or Technical Problem" sections, as well as the majority of the "Project Description" and "Detailed Plan of Work" sections.

We contacted the PI (Subject)[3] about the allegation.[4] He responded that his collaborator, an Egyptian scientist (ES)[5], suggested they submit a collaborative proposal.[6] He said the ES "prepared the principal portion of the proposal, with a pending portion to be provided by me."[7] The Subject said he "judged [the draft proposal he received] to be meritorious [and] hence decided to participate as a collaborator."[8] He said "I was not aware of plagiarism until now. If I had known about the copied texts, I would not have participated in the proposal."[9]

To support his contention that the ES wrote the majority of the Proposal, the Subject provided a copy of the draft proposal he received from the ES[10] and a copy of the supplemented proposal he provided to the ES containing the Subject's contribution.[11] The Subject said he authored the section concerning the U.S. group's work, the second package (W2) section, attributed to Reference 40, our Source 5.[12] He noted W2 "is a technical procedure that could appear in any literature."[13] Although acknowledging he did not demarcate the text, he said "Given the explicit attribution for the procedures, though without quotations marks, I cannot be adjudged as plagiarism under strict definition of the term."[14]

With regard to the other source documents, the Subject noted that ES co-authored Source 8. The Subject concluded:

> While I admit that it was my oversight not examining with care the major portions of the proposal written by [the ES] since I did not know him professionally and personally, my input to the proposal was rather limited to a specific section. I hasten to add that I should

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[1] Tab 1: [redacted] Awarded [redacted]. Effective [redacted] All funds were expended.
[2] Tab 2.
[3] [redacted]
[4] Tab 3.
[5] [redacted]
[6] Tab 4, Response Letter, pg 1. All quotations here in are *sic*.
[7] Tab 4, Response Letter, pg 1.
[8] Tab 4, Response Letter, pg 1.
[9] Tab 4, Response Letter, pg 2.
[10] Tab 4, [redacted] doc.
[11] Tab 4, [redacted] doc.
[12] Tab 4, Response Letter, pg 1.
[13] Tab 4, Response Letter, pg 1.
[14] Tab 4, Response Letter, pg 2.

> not be excused for willingly collaborating with someone whom I do not know.[15]

We reviewed the Subject's response and removed Source 8 from analysis. We confirmed that, though Reference 40 was our Source 5, the copied text was not adequately cited. We also noted that the draft proposals the Subject provided were undated, and therefore needed additional information to conclusively corroborate his statements.

As part of our normal practice, we examined two other NSF proposals the Subject submitted as PI.[16] We determined that the other proposals did not warrant further review. Consequently, our inquiry focused solely on the now 154 lines and 40 embedded references copied from seven sources in the Proposal, as illustrated below:

Source	Proposal (Awarded)
1 (article)	35 lines; 11 embedded references
2 (article)	28 lines; 19 embedded references
3 (article)	22 lines; 3 embedded references
4 (article)	14 lines; 2 embedded references
5 (article)	11 lines; 1 embedded reference
6 (article)	21 lines
7 (article)	23 lines; 4 embedded references
TOTAL	154 lines; 40 embedded references

Because the copied text constituted nearly the entire Proposal, we interviewed the Proposal's Program Director (PD)[17] to determine whether the copied text was material to NSF's funding decision. The PD unequivocally said the copied text was material to *her* decision, noting that the Proposal did not require external review because it requested less than $50,000. Specifically, she stated:

> My overall assessment is that there is very little original material in [the Subject]'s NSF proposal. Although the proposal is fully referenced in terms of secondary references, the omission of primary references is of significant concern. Moreover, there is nothing about the presentation of the text that has been derived from primary references (e.g., quotes, italics, offsets) to indicate that the PI is using verbatim language. Had I been aware of the extent to which the intellectual content, the rationale, and the proposed methodologies were derived from unattributed sources, I would not have funded this proposal.[18]

The PD added that she expects such proposals to result from collaboration between the U.S. and non-U.S. collaborators, and that, given the Proposal was in the Subject's area of study, he

[15] Tab 4, Response Letter, pg 2.
[16] [redacted]
[17] [redacted]
[18] PD's statement available upon request.

should have known the Proposal contained plagiarism, or at least meticulously reviewed the draft Proposal sent by the ES. She said the Subject and his University[19] were liable for the submitted content.

Our review of the U.S.-Egypt Program Announcement (Announcement) confirmed the PD's statements. It stated that proposals "should be jointly developed by interested experts of both countries and reflect a true intellectual collaboration. Ideally, the Egyptian and U.S. participants will already be familiar with each other, at a minimum, or already enjoy a working relationship."[20] The Announcement also contained the following explicit statement about plagiarism:

> Plagiarism is 'the appropriation of another person's ideas, processes, results or words without giving appropriate credit.' A proposal that is shown to include plagiarism would not be considered for support, and the submitting scientist(s) may be subject to further adverse actions through the US and Egyptian Government agencies and/or their institutions.[21]

Based on the Subject's response, the PD's statements, and the Announcement, we referred the matter to the University as an inquiry, emphasizing its need to assess the truthfulness of the Subject's inquiry response.[22]

University Inquiry and Limited Investigation

The University accepted the referral and convened a Committee, whose initial inquiry determined "that substantial components of the proposal were deliberately plagiarized" but that the inquiry alone was insufficient to "rule out [the Subject]'s involvement in this deliberate plagiarism."[23] Per its policy,[24] the University moved to a limited investigation, which resulted in a Report with attachments.[25]

During the limited investigation, the Committee obtained and reviewed the Subject's email correspondence with ES, including those containing the previously undated drafts.[26] It "determined that while [the Subject] participated on a proposal to NSF that contained large sections of plagiarized material, he himself did not commit the plagiarism."[27] Specifically, the Report stated:

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[19] [redacted]
[20] Tab 4, prog_US-Egypt.pdf, pg 6.
[21] Tab 4, prog_US-Egypt.pdf, pg 15.
[22] Tab 5.
[23] Tab 6.
[24] Tab 7.
[25] Tab 8.
[26] Tab 9. There is a gap in the email record, due to a server replacement and a University directive asking that faculty save emails elsewhere during that period. The gap corresponds to the period when unfinished drafts were exchanged.
[27] Tab 10, pg 1.

1) The committee finds that significant portions of the proposal were plagiarized.
2) The committee concludes that [the Subject] contributed one section to the proposal and that this section was not plagiarized, although we believe that he could have chosen a different way of describing experimental details that would more clearly connect to the reference from which they were taken and which was provided in the proposal.
3) The committee is satisfied that [the Subject] has provided strong evidence for his version of events.
4) The university will not be initiating further investigation of [the Subject] on this issue at this time.
5) The university stands ready to cooperate fully with the NSF should, unlike the committee, you conclude that an investigation is warranted.[28]

The University pledged it "will undertake to educate and inform faculty about their responsibility to carefully review proposals they participate in, particularly those that are in collaboration with investigators with whom they are not familiar or with whom they have had little interaction in the past, as was the case in this incident."[29]

OIG's Independent Review

We reviewed the Report and found the University's conclusions accurate and complete relative to its interests. We also found that it produced an acceptable evidentiary record. The University's investigation looked into the question of whether the Subject himself authored the plagiarism in the Proposal and found that he had not. We agree with this assessment. However, given our mission to protect the Federal interest, we initiated our own investigation into the awarding of U.S. funds to a U.S. institution based on an almost entirely plagiarized Proposal a U.S. PI submitted.

OIG's Investigation

We re-reviewed the Announcement under which the Subject submitted his Proposal, focusing on its statement that proposals "should be jointly developed by interested experts of both countries and reflect a true intellectual collaboration. Ideally, the Egyptian and U.S. participants will already be familiar with each other, at a minimum, or already enjoy a working relationship."[30] We determined the Subject did not adhere to these guidelines: He did not jointly develop the project with the ES; the Proposal did not reflect a true intellectual collaboration; nor was he already familiar with the ES. Instead, the Subject himself

[28] Tab 8, pg 4.
[29] Tab 8, pg 4.
[30] Tab 4, prog_US-Egypt.pdf, pg 6.

acknowledged that he blindly accepted the product of a non-native English speaker whom he did not know and submitted it to NSF without any sort of meaningful review. He did this despite prevalent grammatical, spelling, and punctuation errors contained in ES's emails to him[31] and despite, as the PD's asserted, the Subject's familiarity with the area of science. In doing so, the Subject's lack of due diligence caused his own culpability for the act.

We reviewed two proposals the Subject submitted following initiation of our inquiry and did not identify copied text.[32] However, our review of the Proposal's final report, which the Subject submitted six months after receiving our initial inquiry letter, identified 53 lines and 16 embedded references copied from four sources,[33] suggesting that, even after our notification, the Subject did not carefully review material he submitted to NSF related to the Proposal. We informed the Subject of our investigation, provided him with a copy of the Report and attachments on which to comment, asked him to address the new plagiarism allegation and additional questions, and requested he provide a current CV.[34]

In his response, the Subject said "I firmly dispute the allegation that the final report submitted after the inquiry contains copied text."[35] He said the ES authored the sections containing plagiarism, and that he submitted those sections, prior to receiving our inquiry letter, in a previous annual report. He provided corroborating documents[36] and said that, since our inquiry letter, he is extra cautious when reviewing documents bearing his name. He provided his CV and asserted that he knows plagiarism is misconduct, did not take a research ethics courses, and does not regularly use a style manual, but has one for occasional use. Information from the University also confirmed that the Subject, as a faculty member, was not required to undergo responsible conduct of research training.[37]

Discussions with NSF officials confirmed that the annual report did auto-populate into the document in which the Subject entered his final report text, although they said the Subject could have reviewed and modified its content. Given the pending inquiry, the Subject might have been expected to have more thoroughly reviewed any and all material the ES provided to him

To define the standards of the research community with regard to material submitted as part of a collaboration, we first reviewed the very style manual the Subject himself said he occasionally uses. In a section entitled "Guard against Inadvertent Plagiarism," the manual states: "Whenever you submit a paper with your name on it, you implicitly promise that its research, reasoning, and working are yours – unless you specifically attribute to someone else."[38] The "Supplementary Guidelines on Responsibilities of Coauthors and Collaborators" of the society[39] in whose journals the Subject frequently publishes,[40] similarly states:

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[31] Tab 9.
[32] [redacted]
[33] Tab 10 contains the Final Report, submitted [redacted] and the sources.
[34] Tab 11.
[35] Tab 12, pg 2.
[36] Tab 12, Attachments.
[37] Tab 13, pg 1.
[38] Turabian, et al. *A Manual for Writers of Research Papers, Theses, and Dissertations, Eighth Edition.* 2013: 81.
[39] [redacted]

> All collaborators share some degree of responsibility for any paper they coauthor. . . .
>
> While not all coauthors may be familiar with all aspects of the research presented in their paper, all collaborations should have in place an appropriate process for reviewing and ensuring the accuracy and validity of the reported results, and all coauthors should be aware of this process. . . .
>
> Any individual unwilling or unable to accept appropriate responsibility for a paper should not be a coauthor.[41]

Lastly, the style guide for another society[42] in which the Subject is involved states "It is the responsibility of each author to ensure the quality and integrity of the research that is reported."[43] Accordingly, we determined, the Subject violated accepted practices of his relevant research community by submitting, under his own name, material provided to him by a foreign collaborator, with whom he was unfamiliar personally or professionally, without adequate review.

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.[44]

The Acts

The Subject submitted, as PI, an NSF Proposal containing extensive plagiarism – 154 lines and 40 embedded references, plagiarized from seven sources. Although the evidence indicates the Subject himself authored only one section of the Proposal, he submitted a document provided to him by a non-native English speaking colleague whom he admittedly did not know professionally or personally, without performing any due diligence of reasonably reviewing the document. He did this despite receiving emails from the colleague containing numerous grammatical/spelling errors which should have raised his awareness of the colleague's weak command of the language. As a result, the Proposal, which was almost entirely plagiarized, received funding. As explained above, we conclude the act constitutes a significant departure from accepted practices within his research community.

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[40] [redacted]
[41] [redacted]
[42] [redacted]
[43] [redacted]
[44] 45 C.F.R. §689.2(c).

Intent

The Subject acted particularly reckless in submitting, under his own name, material authored by an ES who was previously unknown to him, without adequately reviewing the materials provided.

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, recklessly plagiarized, thereby committing an act of research misconduct.[45]

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.[46]

Seriousness

The Subject's actions are particularly serious. The Proposal the Subject submitted, which was nearly entirely plagiarized and therefore misrepresented his own body of knowledge, received funding. The PD clearly stated she would not have funded the Proposal were she aware of the plagiarism, meaning her funding of this Proposal caused others who presented their own original ideas in their own words to not receive funding. Additionally, the Proposal was in clear violation of the program announcement requirements, in that it contained plagiarism and was not a product of true collaboration between colleagues.

Pattern

We did not identify a pattern of plagiarism.

Recommendation

Based on the evidence, OIG recommends NSF:

[45] 45 C.F.R. part 689.
[46] 45 C.F.R. § 689.3(b).

- Send the Subject a letter of reprimand notifying him that NSF has made a finding of research misconduct.[47]
- Require the Subject 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.[48] The instruction should be in an interactive format (*e.g.*, an instructor-led course) and specifically include information related to collaborations.

For a period of 1 year as of the date of NSF's finding:

- Require for each document (proposal, report, etc.) to which the Subject contributes for submission to NSF (directly or through his institution),
  - the Subject to submit a contemporaneous certification to the AIGI that the document does not contain plagiarism, falsification, or fabrication.[49]
  - the Subject to submit contemporaneous assurances from a responsible official of his employer to the AIGI that the document does not contain plagiarism, falsification, or fabrication.[50]

Subject's Response to Draft Investigation Report

We provided the Subject with a copy of our draft report and attachments for comment.[51] The Subject submitted a response[52] in which he argued that our report "contains a confusion of two separate issues: the accusation of my authoring plagiarism, which has been resolved by the University's assessment that OIG agreed with, and the assessment on the reckless act of submitting a proposal without thorough review."[53] He said he wished the report more clearly indicated that he himself "did not author any plagiarized texts, but submitted an NSF proposal containing texts copied by a foreign colleague."[54] While we agree that the Subject was not the author of the plagiarized text, he did submit, as a collaborative proposal, a document almost entirely written by the ES and did so despite emails from the ES which displayed a lack of command of the English language. The stated goals of the U.S.-Egypt Program Announcement[55] indicate that submitted proposals should be a product of joint collaboration between the U.S. and the non-U.S. scientists, rather than simply the work of the non-U.S. collaborator. The Subject's very submission under this Announcement is in itself an act of "appropriation of another person's ideas, processes, results or words without giving appropriate credit," thus constituting plagiarism.[56]

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[47] A Group I action 45 C.F.R. 689.3(a)(1)(i).
[48] This action is similar to Group I actions 45 C.F.R. 689.3(a)(1).
[49] This action is similar to 45 C.F.R. 689.3(a)(1)(iii).
[50] A Group I action 45 C.F.R. 689.3(a)(1)(iii).
[51] Tab 14.
[52] Tab 15.
[53] Tab 15, pg 2.
[54] Tab 15, pg 2.
[55] See footnote 20 herein.
[56] 45 C.F.R. 689.1(a)(3).

The Subject raised one other issue we will herein address. He argued that Source 5, the only copied material identified in the portion he himself authored, should be removed from the analysis and the total line counts changed accordingly. While we acknowledge the inclusion of Source 5 material, which does include a form of citation and reference, is less egregious than the other portions of plagiarized material, we maintain that the Subject did not clearly demarcate the verbatim Source 5 text from text he himself authored. Ensuring adequate citation of verbatim text requires the material to include quotations, citations, and reference; the absence of even one of those three elements constitutes inadequate citation.

Accordingly, the Subject's response did not provide adequate reason for OIG to change its original determinations and recommendations.

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

OFFICE OF THE DIRECTOR

FEB 25 2014

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

[redacted]

Re: Notice of Research Misconduct Determination

Dear Dr. [redacted]

You served as Principal Investigator on a proposal for funding to the National Science Foundation (NSF) entitled, [redacted] 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;

(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 to NSF contained substantial copied material: 154 lines and 40 embedded references copied from seven sources. While you maintained that the copied material was included by your non-US collaborator, you, as PI, should have reviewed the proposal bearing your name before submitting it, and should have known, as an expert in the field of study, that the material was copied.[1]

Your submission of a proposal with substantial copied material constitutes plagiarism and meets the applicable definition of "research misconduct" set forth in NSF's regulations. Pursuant to NSF's 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, in particular the OIG's analysis of your other proposal, NSF has determined that, based on a preponderance of the evidence, this plagiarism resulted from your recklessness and constituted a significant departure from accepted practices of the relevant research community. I am, consequently, 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 the determination that it was the result of recklessness. I have also considered other relevant circumstances. 45 CFR 689.3(b).

After assessing the relevant facts and circumstances of this case and NSF's regulations, I am taking the following actions:

- Within one year of the date of this notice, you must complete a responsible conduct of research training program, for which the instruction should be an interactive format (e.g., an instructor-led course) and which specifically includes plagiarism. You must provide documentation of the program's content and proof of its completion to the OIG; and

[1] NSF's Program Announcement (PA) explicitly stated that proposals "should be jointly developed by interested experts of both countries and reflect a true intellectual collaboration." The PA also contained an express warning to avoid submitting plagiarized material.

- For a period of one year from the date of this notice, you are required to submit certifications to the OIG that any proposal or report you submit to NSF as a Principal Investigator (PI) or co-PI does not contain plagiarized, falsified or fabricated material.
- For a period of one year from the date of this notice, you are required to submit assurances to the OIG from a responsible official of your employer that any proposal or report you submit to NSF as a Principal Investigator (PI) or co-PI does not contain plagiarized, falsified or fabricated material.

All certifications and assurances should be submitted in writing to NSF's Office of Inspector General, 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 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 [redacted] at (703) 292-8060..

Sincerely,

Fae Korsmo
Senior Advisor to the Director

Enclosures:
Investigative Report
45 CFR Part 689