



CLOSEOUT MEMORANDUM

Case Number: A10100077

Page 1 of 1

We reviewed an allegation of plagiarism in two NSF proposals¹ the Subject² submitted. After receiving the Subject's explanation for the alleged plagiarism, we found sufficient substance to warrant referral of an investigation to the Subject's university.³

The university conducted an investigation under its policies and procedures concluding that the Subject committed "significant acts of plagiarism," some of which were knowing and others reckless as part of a pattern of plagiarism. The university prohibited the Subject from submitting proposals and imposed internal certifications for the remainder of his contract. The university also chose not to renew his contract. The Subject resigned from the university shortly thereafter.

We concurred with the university that the Subject's actions constituted knowing plagiarism and forwarded our investigation report (attached) to the Deputy Director. We recommended NSF send a letter of reprimand, require certification of remedial training, require certifications and assurances for 3 years that materials submitted to NSF do not contain research misconduct, and bar the Subject for 3 years from serving NSF as a peer reviewer, advisor or consultant. NSF accepted our recommendations.

This case is closed.

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NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DEPUTY DIRECTOR

JUL 16 2012

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

[REDACTED]

Re: Notice of Research Misconduct Determination

Dear [REDACTED]:

In 2010, you served as a Principal Investigator ("PI") on two proposals submitted for funding to the National Science Foundation ("NSF") entitled, [REDACTED] and [REDACTED]. 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 229 unique lines of text, 37 embedded references and one figure copied from nineteen 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 your misconduct was part of a pattern of plagiarism. In addition, I have considered other relevant circumstances. 45 CFR § 689.3(b).

After assessing the relevant facts and circumstances of this case, I am taking the following actions against you:

- (1) Until July 1, 2015, you must provide certifications to the OIG that any proposal or report you submit to NSF as a PI or co-PI does not contain plagiarized, falsified, or fabricated material;
- (2) Until July 1, 2015, you must obtain, and provide to the OIG, assurances from a responsible official of your employer that any proposal or report you submit to NSF as a PI or co-PI does not contain plagiarized, falsified, or fabricated material;
- (3) By July 1, 2013, you must complete a comprehensive responsible conduct of research training course within one year, and provide documentation of the program's content to the OIG. The instruction should be in an interactive format (e.g., an instructor-led course) and should specifically include a discussion on plagiarism and citation practices; and
- (4) Until July 1, 2015, you are prohibited from serving as a reviewer, advisor, or consultant for NSF.

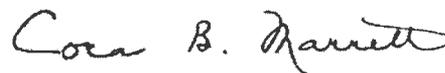
The certifications, assurances, and training documentation should be submitted in writing to NSF's OIG, Associate Inspector General for Investigations, 4201 Wilson Boulevard, Arlington, Virginia 22230.

Procedures Governing Appeals

Under NSF's regulations, you have 30 days after receipt of this letter to submit an appeal of this decision, in writing, to the Director of the Foundation. 45 CFR § 689.10(a). Any appeal should be addressed to the Director at the National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230. If we do not receive your appeal within the 30-day period, this decision will become final.

For your information, we are attaching a copy of the applicable regulations. If you have any questions about the foregoing, please call [REDACTED] Assistant General Counsel, at (703) 292-8060.

Sincerely,



Cora B. Marrett
Deputy Director

Enclosures

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

National Science Foundation Office of Inspector General



Confidential Report of Investigation Case Number A-10100077 1 March 2012

**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 two declined NSF proposals.

OIG Inquiry: We reviewed two of the Subject's NSF proposals and identified 229 lines and 1 figure apparently copied from 19 different Internet accessible sources. The Subject admitted to some of the copying and asserted that his inclusion of embedded references provided adequate attribution. He also asserted that he had never seen some of the sources before our inquiry, although we could identify no other sources with that specific language. Accordingly, we referred an investigation to the University.

University Investigation and Action: The University conducted an investigation and concluded by a preponderance of evidence: the Subject committed "significant acts of plagiarism," which were a significant departure from accepted practices; some of the Subject's actions were knowing while others were reckless; and the Subject's actions were part of a pattern. For the remainder of the Subject's contract, he is barred from submitting proposals and must certify to the University that any manuscripts submitted for publication do not contain plagiarism. The University also declined to renew his contract.

OIG's Assessment:

- **The Act:** The Subject copied 229 unique lines of text with 37 embedded references and 1 figure into 2 declined NSF proposals.
- **Significant Departure:** The Subject's actions were a significant departure from accepted practices.
- **Intent:** The Subject acted knowingly.
- **Standard of Proof:** A finding of plagiarism is supported by the preponderance of the evidence.
- **Pattern:** The Subject's prior publications and dissertation demonstrate a pattern of similar copying with embedded references.

OIG Recommendation:

- Send the Subject a letter of reprimand notifying him that NSF has made a finding of research misconduct.
- Require the Subject to certify completion of a RCR training program and provide documentation of the program's content within 1 year.
- Require the Subject to submit a certification for each proposal, report, or other document he submits to NSF for 3 years.
- Require the Subject to submit assurances from a responsible official of his employer for each proposal, report, or other document he submits to NSF for 3 years.
- Bar the Subject from being a NSF reviewer, advisor, or consultant for 3 years.

OIG's Inquiry

We assessed two proposals (Proposal 1¹ and Proposal 2²) for alleged plagiarism. We identified 19 apparent source documents (Sources A through S),³ none of which were shared in common between the two proposals. The sources included published articles, new service items appearing in online newspaper editions (e.g., Associated Press), manufacturer's literature, and other web pages. The apparent copying is summarized below:

Proposal	Source	Lines	Embedded references ⁴	Figures
1	A	22	13	
	B	14	5	
	C	14		
	D	13	5	
	E	10	3	
	F	8	1	
	G	8		
	H	6	1	
	I	6	2	
	J	6	1	
	K	4		
	L	2	1	1
	M	4		
2	N	28	5	
	O	22		
	P	14		
	Q	42		
	R	4		
	S	2		
TOTALS		229	37	1

We contacted⁵ the Subject,⁶ who is the sole PI on Proposal 2 and the PI on Proposal 1 with a single CoPI.⁷ He admitted to copying from some of the sources and indicated that he had

¹ Tab 2 [REDACTED]
³ Tab 3 [REDACTED]

Tabs 4 – 22.

⁴ An embedded reference is a citation that is copied from the source material together with the copied text and represents the intellectual effort of the source author's selection and synthesis of material from the relevant literature.

⁵ Tab 1. The Inquiry Letter

⁶ [REDACTED]

included the “original sources” (*i.e.*, embedded references).⁸ He also asserted that he had not seen some of the other sources we identified prior to receiving our letter.⁹

Because his response did not fully explain the unattributed text, we referred¹⁰ an investigation to the University¹¹ to obtain a full assessment of the allegation.

The University’s Investigation¹²

The University completed an investigation under its policies and procedures,¹³ including conducting its own inquiry wherein it concurred with our assessment that a detailed investigation was warranted.¹⁴ In addition to the materials we provided as part of the referral, the University investigation committee (the Committee) considered the Subject’s testimony,¹⁵ three of the Subject’s recent publications,¹⁶ the Subject’s Ph.D. dissertation,¹⁷ an internal proposal submission, and the professional code of conduct for a professional society¹⁸ to which the Subject belongs.

The Committee concluded that all passages of allegedly copied material we identified in the inquiry “did indeed constitute plagiarism.”¹⁹ The Committee further noted that the plagiarism included those passages which the Subject asserted he had provided the original sources (*i.e.*, the embedded references).²⁰ The Committee found the copying to be a significant departure from the accepted practices of the relevant research community, based on its own expertise as well as the professional society’s code of conduct.²¹

Furthermore, the Committee found that the copying in Proposals 1 and 2 was part of a pattern of copying as demonstrated by copied text identified in the three publications it examined (Articles 1 through 3)²² as well as the Subject’s dissertation.²³ The Committee found that approximately 40% of Article 2 consisted of the text from Article 1 thereby raising concerns of

⁷ [REDACTED] is the CoPI on Proposal 1 and was also the Subject’s dissertation advisor. We did not contact him as part of our inquiry in light of indicators suggesting that the Subject was responsible for the copying in question.

⁸ Tab 27 at 334. The Subject’s Inquiry Response.

⁹ Tab 27 at 334.

¹⁰ Tab 23. The Referral Letter.

¹¹ [REDACTED].

¹² Tab 26 – 34, The University’s Investigation Report and Appendixes.

¹³ Tab 24. The University Research Misconduct Policy.

¹⁴ Tab 25.

¹⁵ Tab 28, Transcript of the Subject’s Inquiry Testimony; and Tab 34, Transcript of the Subject’s Investigation Testimony.

¹⁶ Tabs 29–31.

¹⁷ Tab 32. The University provided us a copy of the dissertation and we reciprocated by providing a similarity report produced by one of our routine detection tools. We did so without providing any interpretation of the report.

¹⁸ The Geological Society of America.

¹⁹ Tab 26 at 329.

²⁰ Tab 26 at 329.

²¹ Tab 26 at 331.

²² Tab 29, Article 1 [REDACTED] Tab 30, Article 2 [REDACTED]

[REDACTED]; and Tab 31, Article 3 [REDACTED]

Tab 26 at 331.

duplicate publication.²⁴ The Committee identified approximately 90 lines of copied text from four sources in Article 2 (noting similar copying in Article 1) and over 60 lines of copied text from five sources in Article 3. The Committee's assessment of the dissertation found "over 1000 words . . . as having come from other sources besides" the Subject.²⁵

The Committee found that "a preponderance of evidence supports the conclusion that significant acts of plagiarism occurred."²⁶ The Committee also concluded that "the impact on the research record was negligible" with respect to Proposals 1 and 2.²⁷

The Committee concluded that the plagiarism in Proposals 1 and 2 constituted "some level of knowing and reckless action" without further specificity.²⁸ Particularly, the Committee noted "a lack of understanding by the Subject, based on his inconsistent statements regarding 1) the need for quotation marks when copying text verbatim, 2) the need for citation when paraphrasing, and 3) his confusion about handling embedded references."²⁹ The Committee noted a disconnect between the Subject's statements about being rushed to prepare the proposal and "the significant amount of time . . . he had been working on the proposals."³⁰ The Committee found "fraudulent" to be "too strong a characterization," which we interpret as the Committee excluding purposeful (*i.e.*, intentional) as a supported level of intent.³¹

The Committee recommended: a finding of research misconduct against the Subject with a letter of reprimand; the Subject be required to attend training and possibly give a lecture or workshop on ethics; and a certification requirement with the possible inclusion of mentoring by another faculty member.

The University's Actions

The Deciding Official³² concurred with the Committee's finding that "significant acts of plagiarism occurred" and the "pattern of plagiarism indicates knowing and reckless actions" as supported by the preponderance of the evidence. The Deciding Official recommended to the University President that the University: 1) not renew the Subject's employment at the end of his contract;³³ 2) ban the Subject from submitting proposals for external funding; and 3) require certifications from the department chair for any manuscript the Subject submits for publication during the remainder of his employment.³⁴ The University President accepted the Deciding Official's recommendations,³⁵ which the University has now implemented.³⁶

²⁴ Tab 26 at 329. Duplicative publication is commonly described as a questionable research practice but does not fall within NSF's research misconduct definition.

²⁵ Tab 26 at 329.

²⁶ Tab 26 at 331.

²⁷ Tab 26 at 332.

²⁸ Tab 26 at 332.

²⁹ Tab 26 at 331.

³⁰ Tab 26 at 331.

³¹ Tab 26 at 331.

³² [REDACTED] Vice President for Research.

³³ As of the writing of our report, the Subject has left the University and moved to another state.

³⁴ Tab 37.

³⁵ Tab 38.

³⁶ Tabs 38 and 39.

OIG's Assessment

We reviewed the University investigation report and conclude that the University investigation was accurate, complete and in accordance with reasonable procedures.³⁷

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.³⁸

The Act

We concur with the Committee that the Subject copied the material identified during our inquiry into his two NSF proposals without appropriate attribution to the sources he used. We also concur that the copying is a significant departure from the accepted practices of the relevant research communities the Committee identified, as well as the standards of proper scholarship expected of NSF PIs.³⁹ Thus, the preponderance of the evidence supports finding that the Subject copied 229 lines with 37 embedded references and 1 figure without appropriate attribution.

Intent

In our assessment, the preponderance of the evidence weighs in favor of finding the Subject acted knowingly despite his apparent lack of training in citation practices at the U.S. institution granting his doctoral degree. Many of the copied passages are substantially contiguous text with selective editing by the Subject indicating more than thoughtless cut-and-paste assembly of the proposals. The Subject's admitted knowledge of the need to use quotation marks when copying text verbatim and the need to provide citation to sources when paraphrasing weigh against a finding of simple recklessness. His acknowledged failure to seek sufficient guidance in response to his "confusion" weighs strongly in favor of finding knowing intent, particularly in light of the Committee's determination that time constraints were not as pressing as the Subject asserted. However, his "confusion" as described by the Committee regarding the mechanics of paraphrasing and handling embedded references appears genuine and mitigates against finding purposeful action. Thus, we conclude the Subject acted knowingly.

³⁷ 45 C.F.R. 689.9(a).

³⁸ 45 C.F.R. 689.2(c).

³⁹ NSF *Grant Proposal Guide (GPG)* I.D.3 "NSF expects strict adherence to the rules of proper scholarship and attribution. The responsibility for proper scholarship and attribution rests with the authors of a proposal; all parts of the proposal should be prepared with equal care for this concern."; and II.C.2.e "Proposers must be especially careful to follow accepted scholarly practices in providing citations for source materials relied upon when preparing any section of the proposal."

Standard of Proof

We therefore conclude that the preponderance of the evidence supports finding the Subject's actions constitute knowing plagiarism in two declined NSF proposals.

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.⁴⁰

Seriousness

The Subject's actions constitute a substantial amount of nearly verbatim copying from multiple sources which he presented to NSF as his original work. The large number of embedded references misleads the reader regarding the Subject's knowledge of the state of the research field. Furthermore, the copied text represents the intellectual work product of the source authors as the Subject's own work. Thus, the Subject's knowledge of the state of the field and ability to perform the proposed work are therefore not accurately represented by the proposals.

Degree to which the Act was Knowing

As indicated above, the Subject's actions beyond simple cut-and-paste are indicative of knowing actions. Furthermore, the Subject has identified himself in his biographical sketch⁴¹ as a member of the editorial board of a professional society journal.⁴² The "Instructions for Authors" for that journal contains guidance with respect to submitting original work and citation/reference style.⁴³ As a journal editor, he has implicit responsibility for ensuring the scholarly integrity of the work submitted by others under the guidance of those instructions. Thus, his knowing presentation of others' work as his own is particularly troubling.

Pattern of Behavior

We concur with the Committee that the Subject's published articles and dissertation represent a pattern of plagiarism covering a span of at least four years.

⁴⁰ 45 C.F.R. 689.3(b).

⁴¹ Tab 2 at 67.

⁴² [REDACTED]

⁴³ Tab 42.

Impact on the Research Record

The Committee identified no federally-funded publications in the Subject's body of work containing plagiarized material. The three articles and dissertation establishing the pattern described above, however, do have some effect on the research record. Article 3 has been cited only once by other researchers. The Subject has self-cited Article 2 once, and we have identified no articles citing Article 1.⁴⁴ Thus, any effect appears minimal.

Other Considerations

As noted by the Committee, the Subject began to take steps during the investigation to educate himself and his students further in the appropriate attribution of copied and paraphrased materials.⁴⁵

Recommendations

Based on the evidence, OIG recommends that NSF:

- Send the Subject a letter of reprimand notifying him that NSF has made a finding of research misconduct.⁴⁶
- 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.⁴⁷ The instruction should be in an interactive format (e.g., an instructor-led course) and specifically include treatment of plagiarism and citation practices.

Also, for a period of 3 years 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 certification to the AIGI that the document does not contain plagiarism, falsification, or fabrication.⁴⁸
 - the Subject to submit assurances from a responsible official of his employer to the AIGI that the document does not contain plagiarism, falsification, or fabrication.⁴⁹
- Bar the Subject from participating as a peer reviewer, advisor, or consultant for NSF.⁵⁰

⁴⁴ Web of Science does not index the journal that published Article 1; however, given the overlap between Article 1 and Article 2, it is unlikely that Article 1 has been cited by other researchers.

⁴⁵ Tab 26 at 330.

⁴⁶ A Group I action 45 C.F.R. 689.3(a)(1)(i).

⁴⁷ This action is similar to Group I actions 45 C.F.R. 689.3(a)(1).

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

⁴⁹ A Group I action 45 C.F.R. 689.3(a)(1)(iii).

⁵⁰ A Group III action 45 C.F.R. 689.3(a)(3)(ii).

The Subject's Response to OIG's Draft Investigation Report⁵¹

The Subject provided brief comments to our draft report. He asserted that his actions were not knowing or intentional but rather the “result of my laziness to understand the proper citing of references and using quotes.”⁵² His other comments related to the University's decision not to review his contract.⁵³

The Subject's comments did not change our assessment of the allegations or recommended actions.

⁵¹ Tab 43.

⁵² Tab 43 at 534.

⁵³ Tab 43 at 534.