



NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A05040021

Page 1 of 1

We received an allegation of apparent plagiarism in the subject's¹ submitted NSF proposal², and in research publications that acknowledged NSF support.³ The subject responded by assigning blame for the plagiarism to students who had assisted in the preparation of the proposal and the publications. The University investigation found no evidence to support the involvement of students, and discovered additional plagiarism in proposals that the subject alone had authored. The University made a finding of research misconduct, and moved to terminate the employment of the subject. The subject resigned his faculty position before the University action became final. We completed a report of investigation, and recommended that NSF send a letter of reprimand to the subject informing him that NSF has made a finding of research misconduct; and debar the subject from receiving Federal funds for a period of two years commencing on the date of NSF's finding of research misconduct; and prohibit the subject from serving as a reviewer of NSF proposals for the same period of two years; and require, for a period of two years after the debarment period, that the subject submit assurances to NSF OIG by a responsible official of his employer that any proposals or reports submitted by the subject to NSF do not contain plagiarized material; and complete an ethics training course, and certify its completion to NSF OIG. NSF agreed with the recommendations, and made a finding of research misconduct, debarred the subject for two years, required two subsequent years of certifications and assurances that proposals submitted do not contain plagiarized, falsified, or fabricated material, prohibited the subject from serving as an NSF reviewer for two years, and required the subject to attend an ethics training course on plagiarism.

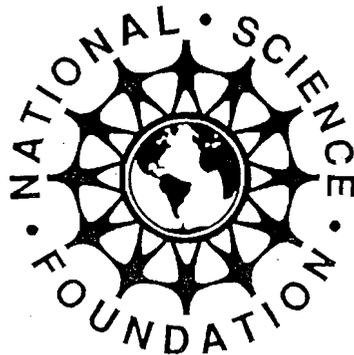
Accordingly, the case is **closed**.

¹ Professor Bhanu P. S. Chauhan [REDACTED]

² [REDACTED]

³ [REDACTED]

National Science Foundation Office of Inspector General



Confidential
Investigation Report
Case Number A05040021

30 March 2007

Executive Summary

Inquiry

OIG's inquiry established that:

- copied text appeared in the subject's NSF proposal; and
- copied text appeared in two of the subject's publications that acknowledge NSF support; and
- the subject claimed that his post-doctoral associate and graduate students provided the copied text.

Investigation

The Investigation Committee of the University:

- concluded that the subject plagiarized text into two NSF proposals and two publications that acknowledge NSF support; and
- established that the subject plagiarized text into three internal proposals submitted to the University; and
- refuted the subject's claim that the plagiarized text was provided to him by his post-doctoral associate and graduate students.

Conclusions

The subject plagiarized a total of 137 lines of text from uncited sources into two proposals submitted to the National Science Foundation, and a total of 148 lines of text into two research publications that cited NSF support. The Office of Inspector General (OIG) concludes that the subject's plagiarism constitutes research misconduct, and recommends NSF:

- send a letter of reprimand to the subject informing him that NSF has made a finding of research misconduct; and
- debar the subject from receiving Federal funds for a period of 2 years commencing on the date of NSF's finding of research misconduct; and
- prohibit the subject from serving as a reviewer of NSF proposals for the same period of two years; and
- require, for a period of 2 years after the debarment period, that the subject submit assurances to NSF OIG by a responsible official of his employer that any proposals or reports submitted by the subject to NSF do not contain plagiarized material; and
- complete an ethics training course, and certify its completion to NSF OIG.

OIG Inquiry

We received an allegation that the subject's¹ FY2005 NSF proposal² contained approximately 69 lines of text copied from uncited source documents.³ In assessing the allegation, we also discovered approximately 148 lines of apparent copied text in two of the subject's publications, each of which acknowledged NSF support.⁴ We wrote to the subject to obtain his perspective of the issue (Tab 1). The subject admits that the text is copied from the sources we identified (Tab 2). The subject stated that his post-doctoral research associate and his graduate students were responsible for the apparent plagiarism, and claimed that the copied text appeared in their research progress reports. The subject did not provide documents to support his explanation. We therefore concluded that there was sufficient substance to proceed to investigation. Consistent with our practice, we referred the investigation to the subject's University⁵ (Tab 3).

University's Inquiry and Investigation

The University convened an Investigation Committee (IC) to review the matter. At the conclusion of its investigation, we received a copy of the IC report,⁶ and a letter that describes adjudicative action proposed by the University (Tab 4). Based on our review of the report, we conclude that the IC followed reasonable procedures in its investigation, and that its report is accurate and complete. The IC interviewed the subject, the subject's post-doctoral research associate, and his graduate students, and assessed the proposals, source documents, and laboratory documents related to the case.

The IC examined the subject's FY 2005 NSF proposal. The subject had explained to us that some apparently copied text originated in materials given to him by others. These individuals denied to the IC that they had done so, and the IC found no documentary evidence to support the subject's explanation. For some sections of the proposal, the subject does not implicate his colleagues, but instead suggested to the IC that the similarities in the text was coincidental.⁷ The IC concluded otherwise, and determined that the subject plagiarized the text (a total of 69 lines) into the FY 2005 NSF proposal.

In addition, the IC examined the subject's FY 2002 NSF proposal⁸ to determine if there was a pattern of behavior, and in response to the subject's insistence that the FY 2005 proposal

¹ Professor Bhanu Chauhan [REDACTED]
[REDACTED]

³ The alleged source documents are listed in the letter sent to the subject (Tab 1).
⁴ [REDACTED]
[REDACTED]

⁶ The report includes a voluminous appendix related to proposed disciplinary action. The full appendix is available for inspection.

⁷ Investigation committee report, page 5 (Tab 4).

⁸ [REDACTED]
[REDACTED] This proposal was declined for funding.

uniquely contained duplicated material. The IC determined that text was copied verbatim into the FY 2002 proposal from three uncited publications (Tab 5). The IC report stated that the subject was the sole author of the proposal. The IC concluded that the subject plagiarized the text (a total of 68 lines) into the FY 2002 NSF proposal.⁹

The IC also examined the publications of the subject that acknowledged NSF support which appear to contain duplicated text, and which are described in our initial inquiry letter to the subject. The IC concluded that the subject plagiarized a total of approximately 148 lines of text into these publications.¹⁰

The IC examined internal University proposals submitted by the subject. The examination revealed additional instances of duplicated text. The IC separately concluded that the subject plagiarized text into three internal proposals.¹¹

With respect to NSF interests, the IC concluded, by a preponderance of the evidence, that the subject copied text into two publications that acknowledged NSF support, and into two proposals submitted to NSF. The IC concluded that these actions were a significant departure from accepted practices, and that these actions were committed recklessly. The IC concluded that these actions constituted professional misconduct, according to University policy. The University proposed termination of the subject's employment, based on the professional misconduct found by the IC, the additional plagiarism apparent in the internal proposals of the subject, and other conduct unrelated to this investigation.¹²

OIG's Assessment

A finding of research misconduct by NSF requires that (1) there be a significant departure from accepted practices of the relevant research community, that (2) the research misconduct be committed intentionally, or knowingly, or recklessly, and that (3) the allegation be proved by a preponderance of the evidence.¹³

The Acts

The subject plagiarized a total of 137 lines of text into two NSF proposals, and a total of 148 lines of text into two research publications that acknowledged NSF support. The IC report stated¹⁴ "Each researcher/scientist is expected to contribute to science using his/her original

⁹ Investigation committee report, page 8 (Tab 4).

¹⁰ Investigation committee report, page 5 (Tab 4).

¹¹ The IC examined the subject's internal proposals submitted in 2001, 2002, and 2005 to a [REDACTED] Award Program (see appendix to the IC report). The IC identified plagiarism in all three internal proposals. The subject's internal proposals and the source documents for the plagiarism identified by the IC are included in an appendix to the IC report, available for inspection. We did not verify the completeness of the IC's assessment of the subject's internal proposals.

¹² The University considered the subject's plagiarism in the three internal proposals, the subject's offer to voluntarily exclude himself from submitting proposals to NSF, and other actions by the subject. These issues are laid out in the appendix to the IC report, available for inspection.

¹³ 45 C.F.R. §689.2(c).

¹⁴ Investigation Committee report, page 6 (Tab 4).

ideas, hypotheses, results, and conclusions in his/her own words (unless properly referenced to indicate the sources). The plagiarism found in [the subject's] NSF grant proposal and two publications is far too extensive to be considered acceptable in the scientific community." The IC concluded that the subject's actions explicitly constitute a departure from the accepted standards of the relevant research community. We concur.

Intent

A finding of research misconduct requires that the actions by the subject be, at a minimum, reckless. The IC report concluded that the extent of copied text by the subject in a number of different proposals and publications, prepared over a period of years, provided sufficient evidence that the actions of the subject, by a preponderance of the evidence, were reckless.¹⁵

We conclude, however, that the subject's actions were knowing. The subject implicated his colleagues for the copied text, but the IC concluded that his colleagues were not involved, and that the subject was solely responsible. The subject claimed that some of the copied text was merely "coincidental,"¹⁶ when, in fact, the duplication was verbatim. The subject also claimed that the copied text was a one-time occurrence.¹⁷ In fact, his practice of copying text extended over a period of years, as evidenced in the subject's FY 2002 NSF proposal, and in internal proposals submitted in the period of 2001 through 2005. Such actions are knowing and not merely reckless.

Standard of Proof

The IC concluded, by a preponderance of the evidence, that 1) the subject copied text into his submitted proposal, and that 2) his actions represent a significant departure from accepted practices.¹⁸ We conclude, by a preponderance of the evidence, that in offering multiple lines of text written by others as his own, in circumventing the effort required to prepare his own proposals and publications, in providing those duplicated words as emblematic of his own understanding of the research field, and in exhibiting these practices in two different NSF proposals submitted years apart, the subject seriously departed from standards of the research community. We conclude that the subject knowingly committed plagiarism, and therefore the subject committed research misconduct.

OIG's Recommended Disposition

When deciding what appropriate action to take upon a finding of misconduct, NSF must consider: (1) How serious the misconduct was; (2) The degree to which the misconduct was

¹⁵ Investigation committee report, page 7 (Tab 4).

¹⁶ Investigation committee report, page 5 (Tab 4).

¹⁷ Investigation committee report, page 7 (Tab 4).

¹⁸ Investigation committee report, page 6 (Tab 4).

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.¹⁹

Seriousness

Our original inquiry identified 69 lines of plagiarized text in the subject's FY 2005 NSF proposal, all from uncited sources. The IC established that an additional 68 lines of plagiarized text appeared in the subject's FY 2002 NSF proposal. The IC also concluded that the subject plagiarized in two research publications.²⁰ As a result, the reputations of the subject's coauthors have been tarnished. The subject's acts of plagiarism are a serious breach of the standards of scholarship that underlie scientific research.

Degree of Intent

The extent of plagiarism by the subject dispels his explanation of recklessness or carelessness. Instead, the subject's misappropriation of the words of others and their presentation, without including citation, into his own work is characteristic of his knowing intent to plagiarize into proposals submitted over a period of years, and in two of his research publications from the same period.

Pattern

In addition to proposals submitted to NSF, the IC examined proposals submitted by the subject for internal funding programs within the University, and found verbatim plagiarism in all three of the internal proposals.²¹ The IC considered this finding as evidence for a pattern of behavior by the subject. We concur with the IC's assessment of a pattern of plagiarism by the subject, according to the chronology summarized here:

Submission date	Description	Lines of plagiarized text
November 2001	University internal proposal	14 lines ²²
July 2002	FY 2002 NSF proposal	68 lines
October 2002	University internal proposal	22 lines
April 2003	[REDACTED] paper	138 lines
November 2004	[REDACTED] paper	10 lines ²³
January 2005	FY 2005 NSF proposal	69 lines
April 2005	University internal proposal	15 lines

¹⁹ 45 C.F.R. § 689.3(b).

²⁰ Corrections were published: [REDACTED]

²¹ The IC report appendix includes copies of the internal proposals and source documents, with the duplicated text highlighted and cross-referenced.

²² The extent of plagiarized text for each of the subject's internal proposals listed was determined by the IC.

²³ The duplicated text appears in the supplementary material for the publication.

Impact on the research record

Neither of the two NSF proposals containing plagiarized text was funded by NSF. The research record now includes the subject's two research publications with plagiarized text, followed by the publication corrections. The impact of the plagiarism in these publications includes harm to the reputations of the subject, his original co-authors, their institution, and those that relied on the publication.²⁴ The IC report noted that the corrections to the publications were submitted without the apparent knowledge of the coauthors, and notes that their associations with plagiarized materials may be harmful to their careers. The IC report concluded that the plagiarism in the NSF proposals seriously undermines the reputation and research integrity of the subject.²⁵ We concur.

Other relevant factors

In his responses to us, the subject stated that his graduate students and post-doctoral research associate were responsible for the plagiarism found in his NSF proposal, and in his research publications acknowledging NSF support. These individuals denied their involvement, and the IC found no support for the subject's claims. The IC concluded, and we concur, that the subject's attempts to implicate his students and associates were dishonest. In his responses to us, the subject pledged to undertake corrections of the plagiarism in his research publications acknowledging NSF support, and did so.²⁶

Subject's response to this report

We sent a draft copy of this report to the subject. We received no comments.

Recommendation

NSF OIG recommends that NSF:

- send a letter of reprimand to the subject informing him that NSF has made a finding of research misconduct; and
- debar the subject from receiving Federal funds for a period of 2 years commencing on the date of NSF's finding of research misconduct; and
- prohibit the subject from serving as a reviewer of NSF proposals for the same period of two years; and
- require that the subject submit assurances to NSF OIG by a responsible official of his employer that any proposals or reports submitted by the subject to NSF do not contain plagiarized, falsified, or fabricated material for a period of 2 years after the end of the debarment period; and
- complete an ethics training course, and certify its completion to NSF OIG.

²⁴ The subject's 2003 publication has been cited a total of six times (2 independent researcher citations, 3 self-citations, and 1 correction). The subject's 2005 publication has been cited a total of eight times (5 independent researcher citations, 2 self citations, and 1 correction).

²⁵ Investigation committee report, page 9.

²⁶ The corrections to the publications are listed in Footnote 20.

NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



AUG 27 2007

OFFICE OF THE
DEPUTY DIRECTOR

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

Dr. Bhanu P. Chauhan

Re: Notice of Proposed Debarment and Notice of Research Misconduct Determination

Dear Dr. Chauhan:

In 2005, the College submitted a proposal to NSF entitled, [REDACTED] which you were identified as the Principal Investigator. In addition, in 2002, you served as the Principal Investigator on a proposal submitted to NSF entitled, [REDACTED]. Moreover, in 2003 and 2005, respectively, the [REDACTED] and the [REDACTED] published two papers you wrote that acknowledged NSF support. As documented in the attached investigative report prepared by NSF's Office of Inspector General ("OIG"), each of these documents contained plagiarized text.

In light of your misconduct, this letter serves as formal notice that the National Science Foundation ("NSF") is proposing to debar you from directly or indirectly obtaining the benefits of Federal grants for a period of two years. During your period of debarment, you will be precluded from receiving Federal financial and non-financial assistance and benefits under non-procurement Federal programs and activities. In addition, you will be prohibited from receiving any Federal contracts or approved subcontracts under the Federal Acquisition Regulations ("FAR"). Lastly, during your debarment period, you will be barred from having supervisory responsibility, primary management, substantive control over, or critical influence on, a grant, contract, or cooperative agreement with any agency of the Executive Branch of the Federal Government.

In addition to proposing your debarment, I am prohibiting you from serving as an NSF reviewer, advisor, or consultant until September 1, 2009. Furthermore, for two years after the period of debarment expires, I am requiring you to certify that any proposals or reports that you submit to NSF do not contain plagiarized, falsified, or fabricated material. For this same period of time, you must submit assurances by a responsible official of your employer that any such proposals or reports do not contain plagiarized, falsified, or fabricated material. Lastly, by September 1, 2008, you must complete an ethics training course on plagiarism, and certify in writing to the OIG that you have done so.

Research Misconduct and Sanctions other than Debarment

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).

Each of the publications identified previously contains verbatim and paraphrased text from other source documents. By submitting proposals to NSF or by publishing papers that copy 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. In addition, you failed to properly acknowledge or credit the authors of the source documents in your proposals and publications. Your conduct unquestionably constitutes plagiarism. I therefore conclude that your actions meet 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, 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; our determination that it was *knowing*; the determination that it was several instances of misconduct, as opposed to an isolated incident; and your attempts to cover up your misconduct. I have also considered other relevant circumstances. 45 CFR § 689.3(b).

I, therefore, take the following actions:

- For two years from the end of your debarment period, you are required to certify that proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material.
- For two years from the end of your debarment period, you are required to submit 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.
- From the date of this letter through September 1, 2009, you are prohibited from serving as an NSF reviewer, advisor, or consultant.
- You are required to complete an ethics training course on plagiarism by September 1, 2008. You must certify in writing to the OIG that such training has been completed.

Debarment

Regulatory Basis for Debarment

Pursuant to 2 CFR 180.800, debarment may be imposed for:

- (b) Violation of the terms of a public agreement or transaction so serious as to affect the integrity of an agency program, such as –
 - (1) A willful failure to perform in accordance with the terms of one or more public agreements or transactions; or

- (3) A willful violation of a statutory or regulatory provision or requirement applicable to a public agreement or transaction

In any debarment action, the government must establish the cause for debarment by a preponderance of the evidence. 2 CFR 180.850. In this case, you knowingly plagiarized data in two grant proposals submitted to the Foundation, and two papers published in scientific journals. Thus, your actions support a cause for debarment under 2 CFR 180.800(b).

Length of Debarment

Debarment must be for a period commensurate with the seriousness of the causes upon which an individual's debarment is based. 2 CFR 180.865. Generally, a period of debarment should not exceed three years but, where circumstances warrant, a longer period may be imposed. 2 CFR 180.865. Having considered the seriousness of your actions, as well as the relevant aggravating and mitigating factors set forth in 2 CFR 180.860, we are proposing debarment for a period of two years.

Appeal Procedures for Finding of Research Misconduct and Procedures Governing Proposed Debarment

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.

Procedures Governing Proposed Debarment

The provisions of 2 CFR Sections 180.800 through 180.885 govern debarment procedures and decision-making. Under our regulations, you have 30 days after receipt of this notice to submit, in person or in writing, or through a representative, information and argument in opposition to this debarment. 2 CFR 180.820. Comments submitted within the 30-day period will receive full consideration and may lead to a revision of the recommended disposition. If NSF does not receive a response to this notice within the 30-day period, this debarment will become final.

Any response should be addressed to Lawrence Rudolph, General Counsel, National Science Foundation, Office of the General Counsel, 4201 Wilson Boulevard, Room 1265, Arlington, Virginia 22230. For your information, we are attaching a copy of the Foundation's regulations on non-procurement debarment and FAR Subpart 9.4.

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

Sincerely,



Kathie Olsen
Deputy Director

Enclosures:

Investigative Report

Nonprocurement Debarment Regulations

FAR Regulations

45 CFR Part 689

NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DEPUTY DIRECTOR

NOV 20 2007

CERTIFIED MAIL --RETURN RECEIPT REQUESTED

Dr. Bhanu Chauhan



Re: Debarment

Dear Dr. Chauhan:

On August 27, 2007, the National Science Foundation ("NSF") sent you a Notice of Proposed Debarment in which NSF proposed to debar you from directly or indirectly obtaining the benefits of Federal grants for a period of two years. The Notice sets forth in detail the circumstances giving rise to NSF's decision to propose your debarment. In that Notice, NSF provided you with thirty days to respond to the proposed debarment.

Over thirty days have elapsed and NSF has not received a response. Accordingly, you are debarred until November 1, 2009. Debarment precludes you from receiving Federal financial and non-financial assistance and benefits under non-procurement Federal programs and activities unless an agency head or authorized designee makes a determination to grant an exception in accordance with 2 CFR §180.135. Non-procurement transactions include grants, cooperative agreements, scholarships, fellowships, contracts of assistance, loans, loan guarantees, subsidies, insurance, payments for specified use, and donation agreements.

In addition, you are prohibited from receiving Federal contracts or approved subcontracts under the Federal Acquisition Regulations ("FAR") at 48 CFR Subpart 9.4 for the period of this debarment. 2.CFR § 620.115. During the debarment period, you may not have supervisory responsibility, primary management, substantive control over, or critical influence on, a grant, contract, or cooperative agreement with any agency of the Executive Branch of the Federal Government.