

NATIONAL SCIENCE FOUNDATION OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: A02100050 Page 1 of 1

We received an allegation that a Research Experiences for Undergraduates (REU) proposal¹ was plagiarized from a successful REU proposal² written by scientists at another institution. We compared the two proposals and found approximately 267 lines (roughly six and a half pages) of identical and/or substantially similar text. In response to our inquiry letter, the PI and the co-PI (the Subject³) stated that they obtained a copy of the source proposal from the author, made an electronic copy, and used this as the basis for their proposal. We referred the matter to the University.

After concluding there was substance to the allegation, the University withdrew the proposal and appointed an Investigation Committee to conduct the investigation. The Committee concluded that the Subject committed plagiarism constituting research misconduct. The University took action against the Subject by 1) reprimanding him, and, for a period of two years, 2) requiring that an institutional official certify to the accuracy of reports generated under any Federal awards and provide assurance of compliance with all relevant institutional policies, regulations and guidelines; 3) requiring that two institutional officials review all requests for Federal funding prior to submission; and 4) prohibiting him from serving as an NSF reviewer.

Consistent with the University's actions, we recommended NSF take the following actions:

- 1. Issue a letter of reprimand informing the Subject that NSF has made a finding of research misconduct against him.
- 2. For a period of two years, require that an institutional official submit to our office, in conjunction with any proposal submission involving the Subject as PI or co-PI, written assurance that the proposal adheres to the rules of proper scholarship and attribution as required by the NSF Grant Proposal Guide.
- 3. For a period of two years, prohibit the Subject from serving as an NSF reviewer, advisor, or consultant.
- 4. Require that the Subject complete ethics training.

NSF accepted our recommendations in full and issued a finding of research misconduct in a letter dated December 28, 2004. Our investigation report, NSF's letter, and this memo constitute the closeout for this investigation.

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NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230



DEC 28 2004

<u>CERTIFIED MAIL -- RETURN RECEIPT REQUESTED</u>

Dr. Department of

Re: Notice of Misconduct in Science Determination

Dear Dr.

On or about September 13, 2002, you submitted a proposal to the National Science Foundation ("NSF") entitled "

" As documented in the attached Investigative Report prepared by NSF's Office of Inspector General ("OIG"), your proposal contained plagiarized text.

Scientific 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 proposal contains verbatim and paraphrased text from a proposal that was previously submitted to NSF. By submitting a proposal to NSF that copies 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 acknowledge or credit the authors of the source proposal in your proposal. 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 and the University Committee Report, NSF has determined that, based on a preponderance of the evidence, your plagiarism was knowing 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 an isolated event and not part of a pattern; your willingness to accept responsibility for your actions; and the contrition that you demonstrated during the course of the investigative process. I have also considered other relevant circumstances. 45 CFR § 689.3 (b).

I find your plagiarism to be serious because the amount of text that you copied was substantial. This proposal received favorable comments from reviewers, and the review panel convened by NSF placed your proposal in the "fundable" range. It is quite likely that this proposal would have resulted in an award had the University not withdrawn it.

There are, however, several mitigating factors. First, you took responsibility for your actions in this matter, and cooperated fully with the University's investigation and the follow-up conducted by OIG. Second, the OIG investigated and expressly found that your actions were an isolated event and not part of a pattern. Third, you sent a letter to the authors of the source

proposal, as well as NSF, apologizing for your actions. Lastly, I have taken into account the measures the University has already implemented.

I, therefore, take the following actions:

- If you submit any proposals to NSF from the date of this letter until November 30, 2005, an official from your University must submit written assurance that the proposal adheres to the rules of proper scholarship and attribution as required by the NSF Proposal Grant Guide to the Office of Inspector General, 4201 Wilson Boulevard, Arlington, Virginia 22230.
- From the date of this letter until November 30, 2005, you are prohibited from serving as an NSF reviewer, advisor, or consultant.
- You are required to complete an ethics training course on plagiarism by November 30, 2005. You must certify in writing to the OIG that such training has been completed.

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. 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,

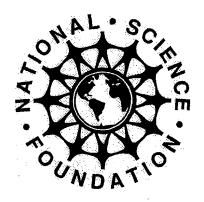
Joseph Bordogna Deputy Director

Enclosures

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

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National Science Foundation Office of Inspector General



Confidential Investigation Report Case Number A02100050

June 7, 2004

Summary

The Office of Inspector General (OIG) has concluded that the Subject¹ plagiarized a successful proposal written by scientists at another institution into his National Science Foundation (NSF) proposal. As a result of its investigation, the Subject's University found that the Subject committed research misconduct under its policy. The University reprimanded the Subject, and, for a period of two years, required that an institutional official certify to the accuracy of reports generated by the Subject under any of his Federal awards and provide assurance of compliance with all relevant institutional policies, regulations and guidelines; required that two institutional officials review all his requests for Federal funding prior to submission; and prohibited him from serving as an NSF reviewer.

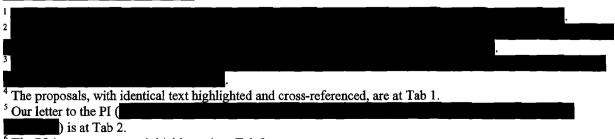
We recommend that NSF take the following actions as a final disposition in this case:

- 1. Issue a letter of reprimand informing the Subject that NSF has made a finding of research misconduct against him.
- 2. For a period of two years, require that an institutional official submit to OIG, in conjunction with any proposal submission involving the Subject as PI or co-PI, written assurance that the proposal adheres to the rules of proper scholarship and attribution as required by the NSF Grant Proposal Guide.
- 3. For a period of two years, prohibit the Subject from serving as an NSF reviewer, advisor, or consultant.
- 4. Require that the Subject complete ethics training.

OIG's Inquiry

We received an allegation that a Research Experiences for Undergraduates (REU) proposal² was plagiarized from a successful REU proposal³ written by scientists at another institution. We compared the two proposals and found approximately 267 lines (roughly six and a half pages) of identical and/or substantially similar text.⁴

We wrote to the Principal Investigator (PI) requesting his perspective on the allegation.⁵ In response, we received a letter signed by the PI and the co-PI (the Subject).⁶ The PIs stated that they obtained a copy of the source proposal from the author, made an electronic copy, and used this as the basis for their proposal. According to the PIs, "We scanned this proposal in order to use its organizational structure for our own proposal. We added our own material and systematically went about deleting the material from the original proposal. However, in our haste, we neglected to edit our final proposal properly to eliminate any remaining parts of [the



⁶ The PIs' response to our initial letter is at Tab 3.

source] proposal." Our analysis of the proposals and the PIs' response indicated that the allegation had substance, and we formally referred the allegation to the University.

The University's Investigation

Following its procedures, the University first conducted an inquiry. After concluding that there was substance to the allegation, the University decided to withdraw the proposal, and appointed an Investigation Committee to conduct the investigation. The Committee investigated whether the PIs committed plagiarism by failing to attribute text used in their NSF proposal to the original authors of that text. The Committee examined relevant documents and interviewed the PIs and nine other witnesses, including administrative officers and colleagues.

The Committee considered the PIs' explanation that they scanned in the source proposal to facilitate using it as a guide, that they intended to delete all source material from their proposal prior to submission, and that in their haste to submit the proposal, they neglected to perform a final review. The PIs characterized their failure to remove the source material as an "oversight." The Committee did not find this explanation credible. The Committee observed that there were "35 passages of commonality between the two proposals," and that "if the final check had been made and the [source] material excised, there would be little left that was theirs."

Regarding the Subject's participation in the process, the Committee's report does not distinguish the respective roles of the PIs. However, the Committee elicited testimony bearing on this issue. When asked whether he and the PI were equally involved in the development of the proposal, the Subject stated:

... [the PI] took the initiative and when he presented me with a convincing argument that this is a program that we have a good chance of getting funding for, I went for it but I don't – there's no way that I'm going to shy away from the fact that I'm also responsible for what happened. I've said it, I've signed that letter, and when we worked on the proposal we worked together. [12]

More specifically, the Subject was present when the source proposal was scanned:

He took the initiative, he talked to the program manager, got a copy of those previous abstracts and then got that proposal copy and stuff like that, but I was there when it was scanned and I was working on the proposal from that point on, so I'm not going to say that this was done without my knowledge.^[13]

⁷ Tab 3.

⁸ Our referral letter to the University is at Tab 4.

⁹ The Committee's Investigation Report is at Tab 5. The attachments to the Report are available on request.

¹⁰ Tab 3.

¹¹ Tab 5, p. 8.

¹² Tab 7, p. 5.

¹³ Tab 7, p. 5.

Neither of the PIs was able to tell the Committee precisely which sections each of them worked on after the source proposal was scanned. The Subject characterized his contribution in general terms: "My English is better than [the PI's], so I did a lot of the rewording." ¹⁴

In addition to investigating the PIs' use of text from another institution's proposal, the Committee investigated the possible use of text from two successful NSF proposals submitted by University faculty. The Committee did not find that the Subject was involved in copying the first proposal. ¹⁵ Text from the second proposal was contributed by the author of that proposal, who gave the PIs permission to use it.

Based upon a preponderance of the evidence and testimony provided by witnesses, the Committee found that:

- 1. [The PI] and [the Subject] plagiarized from the [source] document.
- 2. [The PI] and [the Subject] *knowingly* committed research misconduct. Their action constitutes a significant departure from accepted practices of the [University] research community.^[17]

The Committee recommended:

- 1. That [the PI] be barred from applying for any federal grant for two years; that he be barred from serving as a PI, co-PI, participant, or senior personnel member on any federal grant for two years; that he be barred from serving as an NSF reviewer for two years; that he withdraw from participation in any pending federal application.
- 2. That [the Subject] be barred from applying for any federal grant for two years; that he be barred from serving as a PI, co-PI, participant, or senior personnel member on any federal grant for two years.^[18]

The Committee noted that "the differential recommendations regarding [the PI] and [the Subject] reflect the Committee's assessment of relative culpability." 19

Subject's Response to the University's Investigation Report

The Subject raised three concerns in his response to the draft Investigation Report.²⁰ First, he objected to the mention of his name in a discussion of other proposal-related issues at the University, on the grounds that he was not involved in these issues. Second, he requested that witnesses interviewed by the Committee be asked to sign a confidentiality agreement. Third, he objected to the recommended actions against him, on the grounds that "this recommendation



²⁰ The Subject's response to the Committee's Investigation Report is at Tab 8.

goes beyond the frame work laid out by the [University] Research Misconduct Policy in that it includes federal agencies not related to the subject proposal."²¹

We received a final copy of the Investigation Report from the Vice-Provost for Research. The Report does not contain any response to the Subject's letter.

University Action against the Subject

On December 12, 2003, the University informed the Subject of the actions to be taken against him. ²² The University took action against the Subject by 1) reprimanding him, and, for a period of two years, 2) requiring that an institutional official certify to the accuracy of reports generated under any Federal awards and provide assurance of compliance with all relevant institutional policies, regulations and guidelines; 3) requiring that two institutional officials review all requests for Federal funding prior to submission; and 4) prohibiting him from serving as an NSF reviewer. These actions were effective December 1, 2003.

Upon our receipt of the adjudication, we sent the Subject a copy of the University's Investigation Report and invited him to submit additional comments to us.²³ In reply, the Subject sent us a copy of his response to the adjudication.²⁴ This response provided no new substantive information.

OIG's Assessment

We believe that the Committee's Investigation Report is accurate and that the Committee followed reasonable procedures. Accordingly, we accept the Investigation Report in lieu of our own investigation of the Subject. However, we supplemented the Committee's investigation in two ways, as discussed below. First, we examined the proposal reviews to help us assess the seriousness of the Subject's misconduct. Second, because the Committee did not determine whether the misconduct was an isolated event or part of a pattern, we also examined the Subject's most recent NSF proposal.

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 (45 C.F.R. §689.2(c) (2002)).

The Act

The PI and the co-PI (the Subject) stated that they scanned in a successful NSF proposal written by scientists at another institution. This electronic copy became the first version of their proposal, which they then proceeded to modify. Our comparison of the two proposals shows that approximately 267 lines of the original proposal, amounting to roughly six and a half pages of

²¹ Tab 8.

²² The Deciding Official's adjudication letter to the Subject is at Tab 9.

²³ Our letter to the Subject inviting comments is at Tab 10.

²⁴ The Subject's comments on the adjudication are at Tab 11.

text, were unchanged or closely paraphrased. The Subject told the Committee that he was present when the source proposal was scanned and that he reworded parts of the scanned proposal because his English was better than the PI's. Copying or closely paraphrasing text original to another author without attribution or any other form of acknowledgment is an act of plagiarism.

NSF's Grant Proposal Guide clearly states:

NSF expects strict adherence to the rules of proper scholarship and attribution. The responsibility for proper attribution and citation rests with authors of a proposal; all parts of the proposal should be prepared with equal care for this concern. Serious failure to adhere to such standards can result in findings of misconduct in science. [25]

Furthermore, the Subject signed the University's internal proposal review form, certifying that:

The attached proposal (i) is complete in its technical content, (ii) adheres to the rules of proper scholarship, including specifically the proper attribution and citation for all text and graphics, (iii) is in accordance with specifications established by the sponsoring agency.^[26]

The Subject clearly did not adhere to the rules of proper scholarship and attribution when he committed his act. We concur with the University's assessment that the Subject copied material from the source proposal. His act constitutes a significant departure from accepted practices of the research community.

Intent

The PIs stated that they intended to use the source proposal as a guide, and that they scanned it "in order to use its organizational structure for our own proposal." They stated that "it was never our intention to use the material from the successful proposal," and characterized the absence of any citation of the source material as an "oversight." We agree with the Investigation Committee that this explanation "strains credibility."

In terms of organizational structure, REU proposals require six sections: (a) Overview, (b) Nature of Student Activities, (c) The Research Environment, (d) Student Recruitment and Selection, (e) Project Evaluation and Reporting, and (f) Results from Prior Support.²⁹ If the PIs had intended to use only the organizational structure of the source proposal, they could have typed these six headings and used their own text. Instead, the PIs appropriated a successful REU proposal and reused not merely the organizational structure, but as much of the original text as they could.

²⁵ NSF 02-2, section I.B.

²⁶ The Subject's proposal certification is at Tab 1.

²⁷ Tab 3.

²⁸ Tab 5, p. 8.

²⁹ NSF 02-136, "Research Experiences for Undergraduates (REU)".

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Where the guidelines called for an "Overview" discussing the objectives of the REU site, the PIs were able to reuse two entire pages of the source proposal with only a few changes in the source text. To this they added two new paragraphs, one describing a proposed seminar on research ethics. For the second section, "Nature of Student Activities," they were able to reuse two and a half pages of the source proposal. In the required subsection "Example Project Descriptions," they were able to reuse only the introductory paragraph from the source proposal. They did so and deleted the rest. The third section, "The Research Environment," requires a discussion of the PI, the faculty, and the institution. Here they found only a few sentences that could be reused; they deleted the rest. In the fourth section, "Student Recruitment and Selection," they paraphrased four of the five source paragraphs. In the fifth section, "Project Evaluation and Reporting," they were able to reuse the entire source (approximately one page). The final section, "Results from Prior Support," was necessarily specific to the PIs. They replaced the original text with one sentence of their own.

REU proposals may also include an "Optional Ethics Component" for up to \$4,000 in additional funding each year. The PIs chose to include this component, which is attached as an appendix to their proposal. According to the Committee's Report, the director of the University ethics center contributed a write-up for this part of the proposal. The Subject testified that "[the write-up] wasn't long enough and I had to add some stuff to it and try to edit it some ..." It follows that the Subject was familiar with the proposed ethics activities. As summarized in the body of the proposal, "Issues to be addressed in these seminars include: research involving the use of human subjects; research integrity; misconduct in research; conflicts of interest; intellectual property, mentoring, and the social responsibilities of researchers." We conclude that the Subject was aware of ethical standards while he was working on the proposal.

The Investigation Committee concluded that the Subject acted knowingly. We concur.

Standard of Proof

We conclude that a preponderance of the evidence shows that the Subject committed research misconduct when he knowingly (1) participated in creating an NSF proposal from an electronic copy of another proposal, (2) edited the proposal without either distinguishing or removing all the copied text, (3) failed to provide any attribution or acknowledgement to the authors of the source proposal, and (4) as co-PI, participated in the submission of the proposal to NSF.

The Subject's Actions as an Isolated Event or Part of a Pattern

The Investigation Committee did not discuss whether the Subject's behavior was an isolated incident or part of a pattern. Accordingly, we examined a recent NSF proposal on which the Subject is co-PI.³³ We did not identify any text that was not properly attributed. Our assessment is that the Subject's misconduct appears to be an isolated event.

³⁰ Tab 5, p. 10.

³¹ Tab 7, p. 8.

³² Tab 1, C-2.

³³ We examined NSF proposal

Subject's Response

We sent our draft Report of Investigation to the Subject on April 16, 2004, and requested that he send us any comments by May 21.³⁴ The Subject responded to our draft Report in a letter dated May 11, 2004.³⁵ In his response, the Subject requested that our recommendations be aligned with those of the University. Specifically, he asked that (1) the period of NSF's actions not extend beyond the end of the University's actions (November 30, 2005), and that (2) we not recommend one year of debarment. The Subject also apologized to NSF for his role in this matter, informed us of his intention to apologize to the PIs of the source proposal, and stated that this matter has caused him to reflect on the proper conduct of research. On May 17, the Subject forwarded to us an e-mail message sent to the PIs that same day, to which was attached a signed letter of apology.³⁶

NSF's Misconduct Regulation states that severe misconduct is an independent cause for debarment (45 C.F.R. §689.2(e) (2002)). NSF's Debarment Regulation also states (45 C.F.R. §620.300):

The existence of a cause for debarment, however, does not necessarily require that the person be debarred; the seriousness of the person's acts or omissions and any mitigating factors shall be considered in making any debarment decision.

We believe the Subject has taken responsibility for his actions. Consistent with similar cases involving an unfunded proposal, an isolated incident and a written apology, we have therefore revised our Report to recommend that the Subject be required to complete ethics training in lieu of debarment. In consideration of the Subject's full cooperation with our investigation, we have also revised our other recommendations to replace "For two years from the resolution of this case" with the phrase "For a period of two years."

OIG's Recommended Disposition

In deciding what actions are appropriate when research misconduct is found, NSF must consider several factors. These factors include how serious the misconduct was; the degree to which the misconduct was knowing, intentional, or reckless; whether it was an isolated event or part of a pattern; whether it had significant impact on the research record, research subjects, other researchers, institutions or the public welfare; and other relevant circumstances (45 C.F.R. §689.3(b) (2002)).

We believe the amount of copied text is substantial and that the misconduct was very serious. Reviewers commented positively on sections of the proposal that remained nearly identical to the source proposal, and the review panel placed the proposal in the fundable range.³⁷ Had the University not withdrawn the proposal, it might well have resulted in an award. In the Subject's defense, his misconduct appears to be an isolated event. The Subject took responsibility for his

³⁴ Our letter to the Subject is at Tab 14.

³⁵ The Subject's response to the draft Report is at Tab 15.

³⁶ The Subject's e-mail message and letter of apology are at Tab 16.

³⁷ The proposal reviews and panel summary are at Tab 13. The Panel's rating of "Fund If Possible" placed the proposal in the fundable range.

role in this matter and expressed remorse during his interview with the Committee.³⁸ The Subject also apologized to NSF and sent a letter of apology to the PIs of the source proposal.

Consistent with the University's actions, we recommend that NSF take the following actions as a final disposition in this case:

- 1. Issue a letter of reprimand informing the Subject that NSF has made a finding of research misconduct against him. 39
- 2. For a period of two years, require that an institutional official submit to our office, in conjunction with any proposal submission involving the Subject as PI or co-PI, written assurance that the proposal adheres to the rules of proper scholarship and attribution as required by the NSF Grant Proposal Guide. 40
- 3. For a period of two years, prohibit the Subject from serving as an NSF reviewer, advisor, or consultant.41
- 4. Require that the Subject complete ethics training.

The Subject's testimony is at Tab 7.
A letter of reprimand is a Group I action.

⁴⁰ Assurance of compliance is a Group I action.

⁴¹ Prohibition from serving as a reviewer, advisor, or consultant is a Group III action.