

CLOSEOUT FOR M93010003

This case was brought to OIG on January 4, 1993 by Dr. [REDACTED], a program officer in the Division of [REDACTED] of the Directorate for Engineering. She had received a review alleging plagiarism in a proposal submitted by Dr. [REDACTED], Dr. [REDACTED], Dr. [REDACTED], and Dr. [REDACTED] of [REDACTED] (the subjects). Attached are the OIG investigation report, including its appendices; the memorandum from the Deputy Director of NSF to the Inspector General announcing her decision in this case; and the letter of reprimand from the Deputy Director to the subject. These documents explain the actions subsequently taken by OIG and NSF in this case.

cc: Deputy AIG-O, IG

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DEPUTY DIRECTOR

January 13, 1995

Personal and Confidential

[REDACTED]

Re: Notice of Misconduct Determination

Dear [REDACTED]

The National Science Foundation's Office of Inspector General (OIG) issued an Investigation Report on November 23, 1994, in which it found that you plagiarized certain material in a grant proposal you submitted to the Foundation. We have reviewed that report, and conclude that you have committed misconduct.

Misconduct and Proposed Action

Under NSF's regulations, "misconduct" is defined to include "[f]abrication, falsification, plagiarism, or other serious deviation from accepted practices in proposing, carrying out or reporting results from activities funded by NSF." 45 CFR §689.1(a). Your submission of a proposal that incorporated material from a published article without attribution constitutes plagiarism, regardless of whether or not you realized at the time that citations should have been provided.

In deciding what actions to take in response to a misconduct finding, NSF considers the seriousness of the misconduct; whether it was deliberate or careless; whether it was an isolated event or part of a pattern; and whether the misconduct affects only certain funding requests or has implications for any application for funding involving the subject of the misconduct finding. See 45 CFR §689.2(b). In this case, I believe that several factors mitigate the seriousness of your actions. The plagiarism was limited to all or parts of 32 lines in the background section of the proposal; the article from which material was plagiarized was referenced in several other places in the proposal; it appears that you did

not fully appreciate the gravity of your actions; and there is no evidence of a pattern of misconduct.

Because your [REDACTED] has required that you submit certifications to [REDACTED] officials for a period of two years, stating that you have properly cited any material in your proposals which is not original to you, we will not impose any additional requirements at this time. However, we will require that if, prior to July 27, 1996, you submit any proposals to NSF under the auspices of an institution other than the [REDACTED] you must also submit to the Assistant Inspector General for Oversight, Office of Inspector General, National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230, a copy of each such proposal, together with your separate written certification indicating that the proposal properly cites all material not original to you. This certification must be provided simultaneously with the submittal of the proposal to NSF.

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 §689.9(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 and of OIG's investigation report. If you have any questions about the foregoing, please call Lawrence Rudolph, Acting General Counsel, at (703) 306-1060.

Sincerely,



Anne Petersen
Deputy Director

Enclosures

NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



January 13, 1995

OFFICE OF THE
DEPUTY DIRECTOR

CONFIDENTIAL

To: Linda G. Sundro
Inspector General

From: Anne C. Petersen
Deputy Director

Re: Resolution of Misconduct Investigations

This is in response to your confidential investigation reports concerning the allegations of misconduct in science against Drs. [REDACTED] and [REDACTED]. In both instances, I concur with your recommendation for a finding of misconduct in science, and I am proceeding to take actions along the lines you suggested.

In reaching my decision on how to proceed, I have obtained input from both legal and scientific staff. Based on that input, I have concluded that the conduct described in your investigation report is covered by NSF's misconduct regulations and is clearly inappropriate. The minor modifications to your original recommendations for action were discussed between your staff and mine.

Dr. [REDACTED] will receive a letter of reprimand with a requirement for certain certifications on any proposal submitted to NSF prior to January 1, 1997, on which he serves as principal investigator or co-principal investigator. Dr. [REDACTED] will be responsible for obtaining the certifications and forwarding them with a copy of the proposal to the Assistant Inspector General for Oversight. A copy of the letter is attached.

Dr. [REDACTED] will also receive a letter of reprimand. Because the [REDACTED] has already required that he provide appropriate certifications to the institution before he may submit a proposal to NSF, we are taking no other action at this point. However, should he be principal investigator or co-principal investigator on a proposal to NSF submitted through another institution, Dr. [REDACTED] must provide to the Assistant Inspector General for Oversight a copy of the proposal and his personal certification that the proposal properly cites all material not original to him.

The letters to Drs. [REDACTED] and [REDACTED] are being dispatched simultaneously with this memorandum. We expect to inform the institutions of the actions taken once the thirty day period for appeal is ended. Should an appeal be lodged, we will inform the institution of the final outcome following resolution of the appeal.

cc: Lawrence Rudolph, Acting General Counsel
[REDACTED]

OCF
1/18/95

REPORT OF INVESTIGATION INTO AN ALLEGATION OF MISCONDUCT IN
SCIENCE AND ENGINEERING

SUMMARY

The Office of Inspector General (OIG) has determined that Dr. [REDACTED] (the subject) of the [REDACTED] committed plagiarism in a proposal he submitted to NSF. This conclusion is based on an investigation performed by the subject's university. OIG recommends that NSF find that the subject committed misconduct and take the following action as a final disposition in this case. The subject should be told that NSF has made a finding of misconduct and should receive a letter of reprimand from the NSF Office of the Director. Until July 27, 1996, the subject should be required, in the event that he submits a proposal under the auspices of a grantee organization other than his current university, to inform that organization that it must certify that, to the best of its knowledge, he has properly cited any material not original to him. Because the subject's university has required him to submit a certification to them for a period of two years stating that he has properly cited "any material not original to him in all proposals," we believe that it is unnecessary for NSF to impose its own certification requirement on the subject's proposals emanating from the university.

OIG'S INQUIRY

OIG received an allegation that the subject committed plagiarism in his proposal to NSF, [REDACTED], entitled [REDACTED]. The proposal was submitted to the [REDACTED] in July, 1992, and was declined by NSF in March, 1993.

OIG examined the subject's proposal and an article by [REDACTED] and [REDACTED]. We determined that the first three sentences of Section 3.1 of the subject's proposal (page 7) and large portions of the second, third, and fourth paragraphs of Section 3.2 (page 8) were identical or substantially similar to material in the article. The text in question spanned all or part of 32 lines in the proposal. OIG noted that the article was cited in the proposal, but that the proposal did not indicate that the relevant passages in the proposal use language taken directly from the article and not original to the proposal itself. Copies of the relevant portions of the proposal and the article appear in Appendices 1 and 2, respectively, with the germane sections highlighted and the corresponding passages in the two documents numbered in the margins.

OIG wrote to the subject and his co-principal investigators requesting their comments and explanations concerning this matter. In his reply (Appendix 3), the subject took sole responsibility for the content of the proposal and explained that he had "not plagiarized any ideas. . ." but had "used the language from this article to discuss the motivation for the proposed problem and describe some of the previously published work" (emphasis omitted). He added that he believed when he submitted the proposal that the grammatical changes he had made in the original text made quotation inappropriate and that he "may have erred by using parts of sentences verbatim without proper citation." He offered to apologize to the authors of the paper for using their language without proper citation.

OIG reviewed the other proposals that the subject had submitted to NSF and did not find evidence of plagiarism from the article.

THE UNIVERSITY'S INVESTIGATION

OIG decided that there was sufficient substance to the allegation to warrant an investigation. We notified the subject's university, which asked that we delay our investigation while it undertook its own. On August 5, 1994, the university's Director of Research transmitted the investigating committee's report and a cover letter (Appendix 4) to OIG. He subsequently sent OIG a copy of the Provost's final disposition of this case (Appendix 5).

The committee reviewed the documentary record of OIG's inquiry. It also reviewed the proposal and the article in their entirety and interviewed the subject and the three co-principal investigators listed on the proposal.

The committee concluded that the subject incorporated into his proposal material that was nearly identical or substantially similar to material from the article. It further concluded that the subject "did not properly indicate ... that these passages were essentially verbatim from the article." The committee noted that "the problem was limited to the background/previous work section of the proposal" and that the subject "did list the article in the proposal bibliography and referenced it in the text." It did not find evidence of plagiarism elsewhere in the proposal.

The committee stated that the subject was "negligent" and "did not act recklessly, knowingly, and purposefully." It concluded that the subject, at the time of his act, "did not appreciate that he was making a mistake" and "that he now understands that his action was unacceptable." It attributed the subject's action to "carelessness on his part and unawareness of what constitutes

plagiarism in this context."

The committee recommended that the subject "be required to sign a certification to the effect that he has properly identified (by quotation marks and appropriate citation) any material not original to him in all proposals to any sponsoring organizations sent by [the university] on his behalf. This procedure is to be in place for a period of two years commencing immediately. It will be jointly monitored by the Office of [REDACTED] Research and the Division of Sponsored Research."

The Provost found that the subject "has engaged in misconduct" and stated that the subject's action was "plagiarism under the standards of [his] professional community." He accepted the committee's recommendation that for two years the subject certify that he had properly cited material included in his proposals. In addition, the Provost sent the subject a letter of reprimand and required that for two years the subject file a similar certification for work he submitted for publication.

OIG'S ANALYSIS

For NSF to make a finding of misconduct, a preponderance of the evidence must show that the subject committed culpable acts with a culpable state of mind. OIG believes that the preponderance of the evidence indicates (1) that the subject committed acts that are misconduct under NSF's Regulation on Misconduct in Science and Engineering, and (2) that he did so with a culpable state of mind. This section addresses these two issues in turn.

Act

By his own admission, the subject incorporated material from the article into his proposal without attribution. Both he and his co-principal investigators agree that he was solely responsible for doing so.

NSF's Regulation on Misconduct in Science and Engineering defines misconduct in part as "serious deviation from accepted practices in proposing" research. The regulation specifically mentions only three examples of misconduct, and one of these is plagiarism. Scientists generally consider plagiarism a serious violation of professional standards.

Plagiarism is generally understood to involve using the words or ideas of another person without giving appropriate credit. In this case, all or part of 32 lines in the subject's proposal, spanning several paragraphs, contain plagiarized material. OIG believes that failing to give credit for this amount of material is

a serious deviation from accepted practice and fits NSF's definition of misconduct. The subject's university reached this same conclusion. OIG believes that NSF should clearly endorse the university's finding.

State of Mind

OIG believes that the preponderance of the evidence indicates that the subject was at least grossly negligent.¹ We believe that, in some respects, the subject was knowing. He certainly knew that he had not himself written the material from the article, and he knew that he had not indicated who had written it. Even if we were to accept the investigating committee's conclusion that the subject was not aware of how to reference the excerpts from the article properly, we would conclude that he was grossly negligent and not merely careless. Scientists must know how to propose and report research as well as how to conduct it. Part of this knowledge is knowledge of how to cite the sources of the words and ideas that go into their writings. The subject, as his curriculum vitae indicates, is a senior faculty member with numerous publication credits. This was his eighth proposal submission to NSF alone. A senior scientist who believes that he does not need to indicate that his NSF proposal incorporates the words of a published article lacks knowledge that is central to a core moral competence in his community, i.e., knowledge of how to credit the work of other scientists and avoid misappropriating credit for oneself. The subject's failure to acquire such knowledge,

¹ OIG believes that when the investigating committee called the subject's action "negligent" and "careless," it misapplied the labels. It certainly did not mean that the subject inadvertently omitted to indicate the source of his words or that his omission was only a minor transgression of established scholarly practice. In the subject's letter to OIG (Appendix 3), he indicates that when writing his proposal "since [he] made minor modifications to these sentences" he "felt it was inappropriate for me to enclose them in quotes or use indentation." His statement thus makes clear that the omission was not inadvertent. OIG believes that the committee's conclusion "that the accused has engaged in scientific misconduct" is evidence that it does not view this as a minor transgression.

We interpret the committee's report as concluding that the subject did not appreciate the gravity of his act when he committed it and did not inquire into proper citation practices when he decided to adapt material from the article for his own use. OIG concludes that, even by the account most favorable to the subject, the subject was grossly negligent.

especially at this advanced stage in his career, is egregious, and cannot be dismissed as merely careless.

OIG's Conclusion Regarding Misconduct in Science

OIG concludes that a preponderance of the evidence supports the finding that the subject incorporated text from a published article by other authors into his NSF proposal without giving due credit and that he was at least grossly negligent in doing so. OIG therefore concludes that the subject committed misconduct as defined in NSF's Regulation on Misconduct in Science and Engineering and recommends that NSF make a finding to that effect.

OIG'S RECOMMENDED DISPOSITION

Under §689.2(b) of NSF's misconduct in science and engineering regulation, upon making a finding of misconduct, NSF, in determining what actions it should take, must consider the seriousness of the misconduct. This includes considering the state of mind with which the subject committed misconduct and whether the misconduct "was an isolated event or part of a pattern." We have already explained why we conclude that the subject's action is a serious deviation from accepted practice and hence is misconduct; this section explains OIG's recommended actions in light of our assessment of the seriousness of the subject's misconduct, i.e., of how serious this instance of plagiarism is in relation to other instances.

OIG believes that misappropriating credit is unacceptable in the scientific community. One factor affecting seriousness is the character of the material that is misappropriated. The most serious misappropriations of credit are those that involve taking credit for the original ideas of another scientist. Far less serious are those that involve taking credit for original combinations of words that contain no original ideas. Between these extremes are misappropriations that take credit for novel selection, organization, and juxtaposition of familiar ideas and, in so doing, potentially leave a misleading impression about the author's knowledge or competence.

The subject's misappropriation in this case falls into this middle category. By not appropriately citing and quoting the article, the subject implicitly took credit for the words and organization of ideas in the article. A scientist reading the subject's proposal would assume that the subject had himself organized the ideas in the background section and that he possessed the command of the literature necessary to produce a focused synthesis of the relevant research. Indeed, the reviewer who made the plagiarism allegation raised doubts about the subject's command

of a certain portion of the literature based in part on the reviewer's observation that the only references to this portion of the literature came from the plagiarized article. The subject's plagiarism invited other reviewers, who lacked accurate information about who developed the text in question, to draw incorrect inferences about the subject's expertise and, as a result, make mistaken evaluations of the proposal. OIG believes that a misrepresentation of credit that could cause a reviewer to form a mistaken impression of the PI's command of relevant literature is a serious matter, even when compared to many other instances of plagiarism.

Several circumstances somewhat mitigate the seriousness of the offense:

1. The subject's plagiarism was, in the words of the investigating committee, "limited to the background/previous work section of the proposal and did not involve the balance of the proposal wherein [the subject] develops his proposed research concept and approaches."
2. The subject made reference to the article from which he plagiarized in several places in his proposal; one such reference occurs in a sentence that appears directly after the largest block of plagiarized material.
3. The subject's action may have been grossly negligent rather than "deliberate," and there is evidence that he did not fully appreciate the gravity of the offense when he committed it.
4. The subject admitted his wrongdoing and took sole responsibility for it.
5. There is no evidence that the subject's action is part of a pattern of misappropriating credit for the work of others.

In response to the subject's misconduct and to emphasize the importance that NSF places on giving due credit to the work of others, we recommend that the subject be sent a letter of reprimand, which is a Group I action (see §689.2(a)(1)(i)).

The subject's university has required him to submit a certification to them for a period of two years stating that he has properly cited "any material not original to him in all proposals." We believe that this certification adequately protects NSF's interest and makes it unnecessary for NSF to impose its own certification requirement on the subject's proposals emanating from the university. We recommend that until July 27, 1996, NSF require

the subject, if he submits a proposal under the auspices of a grantee organization other than his current university, to inform that organization that it must certify that, to the best of its knowledge, he has properly cited any material not original to him. This is also a Group I action (see §689.2(a)(1)(iii)).

OIG believes that, by making the grantee organization, and not only the subject, responsible for implementing the certification that NSF requires, NSF would be acting in the spirit of §689.3(a) of NSF's Regulation on Misconduct in Science and Engineering. This section states that "awardee institutions bear primary responsibility for prevention and detection of misconduct" and that NSF relies on these institutions to "take action necessary to ensure the integrity of research." By requiring institutional action, NSF is not sanctioning the institution--it is enlisting its cooperation and recognizing its responsibility to ensure the integrity of research. Where a researcher has committed misconduct, the institution cannot immediately assume that the researcher will thereafter behave in ethically appropriate ways. Rather, the institution needs to take an active role in monitoring the researcher's NSF submissions and upholding the ethical standards of the scientific community. Making certifications the responsibility of the institution as well as the researcher is one way of recognizing the importance of institutions in preventing misconduct.