

CLOSEOUT FOR M92010003

This case was brought to the attention of OIG on January 13, 1992, by Dr. [REDACTED] program director for the [REDACTED] Program in the Division of [REDACTED] within the Directorate [REDACTED]. The program director had received an allegation of plagiarism from a reviewer, Dr. [REDACTED], an assistant professor of [REDACTED] at the University [REDACTED]. The reviewer alleged that a proposal he had received, [REDACTED], entitled, "[REDACTED]," contained text plagiarized from his dissertation. The proposal was submitted by Dr. [REDACTED] the subject, an assistant professor in the department of [REDACTED] at [REDACTED], [REDACTED].

OIG's investigation report and NSF's Deputy Director's October 28, 1994, Notice of Misconduct in Science Determination constitute the closeout for this case.

cc: Staff Scientist, Deputy AIG-Oversight, AIG-Oversight, IG

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NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



October 28, 1994

OFFICE OF THE
DEPUTY DIRECTOR

Personal and Confidential

Dr. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

Re: Notice of Misconduct in Science Determination

Dear [REDACTED]

In July, 1991, you submitted a proposal [REDACTED] to the National Science Foundation (NSF) for a project entitled "[REDACTED]". The proposal, as documented in the attached Investigative Report prepared by NSF's Office of Inspector General (OIG) and in the report prepared by the [REDACTED] at [REDACTED] contained 35 lines of text that were copied without attribution from Dr. [REDACTED] doctoral dissertation. These passages appear in the "Project Description" section of your proposal.

The OIG concluded that you committed plagiarism in your grant proposal. In response, you admitted that you had copied some material from the original author's dissertation and failed to provide a citation to the source. In defense of your actions, you stated that (1) you did not intend to misappropriate the original author's work, especially since you referenced two related papers by the same author in your proposal. (2) you used the material verbatim because you could not have expressed it better. and (3) you had called the original author, and your apology was accepted.

However, plagiarism involves using either the ideas or words of another person without attribution. The argument that the original written words cannot be improved upon is not a defense to plagiarism. The copied text should be marked off by indentation or quotation marks and a citation to the original work should accompany the text. The presence of references to other works by the same author does not substitute for citing the actual source document. In addition, your apology to, and acceptance by, the original author are not pertinent to the issue of whether plagiarism occurred.

Scientific Misconduct and Proposed Sanctions

Under NSF regulations, "misconduct" is defined to include "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 to NSF that extensively copies the work of others without attribution, as described in the Investigative Report, constitutes plagiarism and, consequently, I find that you have committed misconduct in science.

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 §689.2(a). Group I actions include issuing a letter of reprimand conditioning awards on prior approval of particular activities from NSF; and requiring certifications on the accuracy of reports or assurances of compliance with particular requirements. 45 CFR §689.2(a)(1). Group II actions include restrictions on designated activities or expenditures; and special reviews of requests for funding. 45 CFR §689.2(a)(2). Group III actions include suspension or termination of awards; debarment or suspension from participation in NSF programs; and prohibitions on participation as NSF reviewers, advisors or consultants. 45 CFR § 689.2(a)(3).

In deciding what response is appropriate, NSF has considered the seriousness of the misconduct; whether it was deliberate or careless; whether it was an isolated event or part of a pattern; and whether it affects only certain funding requests or has wider implications. See 45 CFR. §689.2(b). The record shows that you copied 35 lines virtually verbatim from [REDACTED] dissertation without attribution and that you knew it came from his work. However, the plagiarism occurred in the background and introductory sections of your proposal and not in the statement of work. In addition, the OIG investigation did not uncover any evidence of additional incidences of plagiarism.

Based on the above facts, we will require that if you are the principal investigator or co-principal investigator on any proposal submitted to NSF prior to June 30, 1997, you must separately certify, in writing, that you reviewed NSF's Misconduct in Science Regulations (45 CFR Part 689) and that the grant application is free of any misconduct. In addition, you must submit a signed assurance from your department chair (or equivalent) stating that, to the best of the chair's knowledge, the proposal does not contain any plagiarized material. Both the written certification and assurance should be sent to the Assistant Inspector General for Oversight, 4201 Wilson Boulevard, Arlington, Virginia, 22230, at the same time the proposal is submitted to NSF.

Procedures Governing Appeals

You have 30 days after receipt of this letter to appeal this decision, in writing, to the Director of the Foundation. 45 CFR §689.9(a). Any appeal should be addressed to the Director of 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 Lawrence Rudolph, Acting General Counsel, at (703) 306-1060.

Sincerely,



Anne C. Petersen
Deputy Director

Enclosures

CONFIDENTIAL

NSF OIG INVESTIGATION REPORT

OIG Case Number M92010003

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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) committed plagiarism in a grant proposal he submitted to NSF. This conclusion is based on investigations performed by the subject's institution and OIG. OIG recommends that NSF make a finding of plagiarism, and that it take the following actions as a final disposition in this case. The subject should receive a letter of reprimand from the NSF Deputy Director. The subject should be told that NSF has made a finding of misconduct in science and that until June 1997, when proposals are submitted by the subject, as a principal investigator or co-principal investigator, to NSF, he is required to submit certifications to OIG at NSF that, to the best of his knowledge, they contain nothing that violates NSF's Misconduct in Science and Engineering Regulation (45 C.F.R. §689). The subject must ensure that his Department Chairperson, or equivalent, submits an assurance to OIG that, to the best of that person's knowledge, the subject's proposal does not contain any plagiarized material.

OIG'S INQUIRY

OIG received an allegation that a proposal submitted by the subject contained material plagiarized from Dr. [REDACTED] (the original author's) [REDACTED] Ph.D. dissertation. OIG conducted an inquiry into the allegation and found that in July 1991, while an Associate Professor at [REDACTED] at [REDACTED] (the institution), the subject submitted proposal [REDACTED] to the [REDACTED] Program at the National Science Foundation. The unfunded proposal requested \$[REDACTED] under the Research at Undergraduate Institutions Announcement (NSF 89-60) for a project entitled, "[REDACTED]". [REDACTED] The subject has since left the institution.

The information supplied to OIG indicated that 35 lines of text, broken into two passages, in the proposal were copied, virtually verbatim, from the dissertation. The first passage (7 lines) is in the dissertation section titled, "Introduction". The second passage (28 lines) immediately follows the "Introduction" and is titled, "Principle [sic] Flow Features." Three references cited in these passages also appear in the text transcribed into the subject's proposal. Both passages appear in the "Project Description" section of the subject's proposal. The first passage appears under the subheading "Introduction." The second passage is found in "Present State of Knowledge in Flow Features" which is part of the subsection "Relevant Background." See Tab A and Tab B for a copy of the relevant pages of proposal and dissertation respectively. The relevant text in both documents has been highlighted.

THE SUBJECT'S RESPONSE

In February 1992, OIG contacted the subject and requested his views on the allegation of plagiarism. In the subject's response (attached as Tab C), he admitted that he had copied the material from the original author's dissertation and that he had failed to provide a citation to the source document. As an explanation for the copying he notes his prior experience in and understanding of the field and said that in his own publications he

described those flow regimes, high heat transfer augmentation, and their applications in similar manners, but not in the same words, because [he] felt there were no better ways to put them in concise words. Nonetheless [sic], [he] admit[ted] that the said proposal contains a few lines and some words copied from the original author's dissertation.

The subject indicated that on page 5 of his proposal he had substituted the phrases "It is found" and "which was found to occur" for the source text phrases "we find" and "which frequently occurs" respectively. He claimed that he changed the phraseology to indicate that "third parties" had "researched and discovered these flow patterns," rather than himself.

The subject said that prior to submitting his proposal he had spoken with the original author, who

not only provided two journal papers . . . and detailed drawings of [the] swirl generator . . . used in his research, but gave many helpful comments so that I could develop a good proposal.

The subject said on receiving OIG's letter he had called the original author and apologized for copying text from his dissertation without attribution. According to the subject, the original author accepted his apology and said that the copying was an understandable error.

While admitting that he had failed to properly reference the source document for the copied material, the subject said

I could not believe myself [sic] of not properly referencing in those sections, yet included on page 8 of the proposal as references are [the original author's] two key papers . . . which were basically written out of the . . . dissertation. Since 8 months have passed since a submittal [sic] of the proposal I can only speculate why I failed to recognize the source of these materials in those said sections. I could have oversighted [sic] because of [my experience and understanding of the field] and because two papers were included as references.

The papers the subject referred to contain the work described in the dissertation. Although some of the wording in these papers and the dissertation is similar, the text in the subject's proposal is identical to that in the dissertation, not to that in the papers.

The subject felt that his knowledge of the field, his prior use of similar terminology, his citation of two related papers by the original author, and the original author's acceptance of his apology adequately explained the copying without attribution. He stated,

in conclusion, I did not have any intention whatsoever in misappropriating [the original author's] work nor discrediting his research, but I failed to exercise [sic] in clearly indicating the source of referenced materials due to my carelessness.

He noted that

This is my first proposal that I submitted to NSF since I began teaching at [the institution] in 1988. I toiled to write this proposal for many months. Nonetheless I am deeply regretful that this incident happened and I wish to voluntarily withdraw the proposal from consideration. This action is taken in the hope to resolve this matter as soon as we can and move on to a brighter future.

OIG'S REVIEW OF THE SUBJECT'S STATEMENT

Frequently individuals who are the subjects of inquiries into allegations of plagiarism argue that their copying did not constitute plagiarism either because the copied text did not contain new ideas, or because it expressed commonly held ideas that could not be improved by rewording. This argument fails to comprehend that plagiarism involves using *either* the words *or* the ideas of another person without attribution. Any text copied from another author should be marked off by quotation marks or indentation. A citation to the original work must accompany the text, and must be included in the reference list. The argument that the original writer's words cannot be improved upon is not a defense for plagiarism.

OIG did not find the subject's statements about his knowledge of the field, his prior use of similar terminology, his citation of two related papers by the original author, and the original author's acceptance of his apology persuasive. OIG concluded that an investigation into the allegation was required. Consistent with NSF's position that awardee institutions bear primary responsibility for preventing and detecting misconduct OIG informed the institution of the allegation and, at its request, OIG agreed to delay its investigation into this allegation until the institution had completed its own, independent, investigation. OIG formally stated its deferral of the investigation in a May 1992 letter. Attached to that letter were copies of the relevant portions of the subject's proposal and the original author's dissertation and of the correspondence between OIG and the subject.

THE INSTITUTION'S INQUIRY AND INVESTIGATION

The institution's policy for handling scientific misconduct specifies a three-step process: inquiry, investigation, and resolution. In September 1992, the institution informed OIG that it

had completed an inquiry which "confirmed [OIG's] finding that a full investigation is warranted." A five-person committee was appointed to conduct the investigation. The investigating committee completed and filed its report (Tab D) with the Vice President for Academic Affairs in November 1992.

According to the report, the committee reviewed the materials attached to OIG's formal deferral letter, reviewed the subject's proposal, and attempted to interview the subject. In a telephone conversation with one committee member the subject declined to be interviewed, orally or in writing, by the committee "indicating that as his personal life was in transition, he did not have the time or desire to respond . . . he further indicated to [the committee member] that he would be comfortable to stand on his letter of response to NSF." The committee did not research the allegation beyond the materials supplied by OIG and developed its finding based on that material.

The committee found that the text identified by OIG had been taken "directly from page 1 of the [original author's] dissertation" and "verbatim from pp. 2-4 of the [original author's dissertation]." Because OIG made no allegations about any other section of the proposal the committee concluded that "those sections dealing with the original ideas of the subject . . . were not contaminated by plagiarism or scientific theft."

The committee reviewed the subject's response to OIG's letter of inquiry noting his statement that the "infraction occurred because of his 'carelessness', his claim that he had copied the material "because he 'could not have expressed it better', and his statement that the original author told him he understood "the pressures under which [the subject] was operating"

The committee found that "an act of scientific misconduct has taken place" and that the original author's position did not have "any pertinence to [the committee's] position." They concluded that, because the copied material was in the introduction,

the infraction does not represent scientific theft of data or the misrepresentation of original scientific ideas[; however,] it does represent a clear and serious violation of the principles of respectful treatment of sources understood as basic to the integrity of the academy. The committee [did] not find the [subject's] pleas of a 'careless mistake' convincing.

Because the subject had left the employ of the institution, the committee recommended that its report "be placed in [the subject's] permanent record."

In January 1993, the institution provided OIG with a copy of the investigation report and in the cover letter (Tab E) stated:

Based on their work, we have made a finding of culpability on [the subject's] part. However, because [the subject] resigned from his faculty position before

the investigation was completed, we could not implement discipline. The report will be placed in his [institutional] personnel file.

In February 1994, the institution informed OIG that the report had been placed in his personnel file.

OIG'S REVIEW OF THE INSTITUTION'S INVESTIGATION REPORT

NSF's Misconduct in Science and Engineering regulation (45 C.F.R. §689) states that "after receiving a report from an external investigation by an awardee institution . . . OIG will assess the accuracy and completeness of the report and whether the investigating entity followed usual and reasonable procedures. It will either recommend adoption of the findings in whole or in part or . . . initiate a new investigation." (45 C.F.R. §689.8(a))

To be considered misconduct in science, the act in question must meet certain culpable level-of-intent and evidentiary burden-of-proof criteria. Once an act has been determined to be misconduct in science and engineering OIG must then consider the level of intent, any evidence of a pattern, and the act's relevance to NSF proposals and awards when making recommendations for any actions necessary to protect NSF interests.

The institution's investigation report did not specify the burden of proof used by the committee or the culpable level of intent attributed to the subject's actions, and did not review the subject's work for further instances of plagiarism. OIG contacted the institution to seek information about any committee deliberations on these issues but was unable to obtain sufficient information to resolve outstanding questions. In some cases OIG can clarify an investigation report by requesting further information from the investigating committee. This added information can then permit OIG to accept the report in lieu of its own investigation. However the circumstances of this case, notably the departure from the institution of the subject as well as the departure of one of the committee members and the current sabbatical of another, indicated that this was not the most efficient way to resolve the allegation.

OIG concluded that the institution's investigation report was not, in itself, sufficient to meet all of the criteria above and opened its own investigation.

OIG'S INVESTIGATION

OIG's Review of the Subject's Response:

In the following analysis each point raised by the subject that bears on OIG's conclusion is numbered for easy reference. The subject stated:

1. that he had copied "a few lines and some words copied from [the original author's] dissertation" without attribution,

2. that he knew the information in the copied material well and could not think of a better way to state it,
3. that he had provided a reference to two of the complainant's papers in his proposal. He noted that the original author had provided him with these references, detailed drawings, and helpful comments,
4. that in his proposal he had indicated that the work described in the copied text was performed by another individual because it was written as if another had done the work; he had not claimed it as his own,
5. that he had spoken with the original author who claimed to understand his error,
6. that this was the first proposal he had submitted to NSF since he began working at the institution, and
7. that he wanted to voluntarily withdraw his proposal from consideration.

OIG analysis of each of these points is as follows:

1. The Extent of the Copying:

OIG reviewed the original author's papers that he had provided to the subject. These papers contain a paraphrased version of the text from the original author's dissertation that was copied verbatim into the subject's proposal. Thus, the subject correctly identified the original author's dissertation as the source document.

OIG found that 35 lines of text and three references were copied from the original author's dissertation. This amount of virtually verbatim copying without offset or attribution is not equivalent to the subject's statement of "a few lines and some words."

2. The Subject's Knowledge of the Field:

The subject cited his intimate knowledge of the field and the fact that he could not think of a better way to state the information in the copied text as reasons for using the text. While they may be adequate reasons for copying text they are not adequate reasons for failing to offset and attribute the text to the original source.

3. The Use of Citations to Other Works by the Original Author:

The presence of references to other works by the author of the dissertation in the subject's proposal is not a substitute for citing the source document. OIG found that the citations to the other works by the original author were provided as general references to work in the field; they were not provided as citations for the copied material.

It seems from the subject's statement that the original author provided him with "two journal papers . . . detailed drawings of [a] swirl generator . . . [and] provided many helpful comments so that I could develop a good proposal" that the subject should also have provided the original author with an acknowledgment. No such acknowledgment is found in the proposal.

4. Phrase Changes:

The subject stated that he had changed two selected phrases (numbers 1 and 2 below) in the copied material to indicate that others had performed the described work. OIG's review of the proposal found an additional phrase change (number 3) made by the subject. The phrases are underlined in the materials found as Tabs A and B. The phrases are:

- | | | | |
|----|---------------------------|----|--|
| A. | "we find" | to | "it is found" |
| B. | "which frequently occurs" | to | "which was found to occur" |
| C. | "by prior investigators" | to | "by the proposer and other investigators." |

OIG found that the first two phrase changes occur within two paragraphs which extend over 1.5 pages that summarize the current understanding of the problem and cite three references. The "we" appearing in the dissertation text appears to refer to the common scientific understanding in the field rather than a specific research group. OIG concluded that neither phrase-change A nor B significantly altered the meaning of the original text.

Phrase-change C incorporated the subject as one of the investigators responsible for the research being described. The paragraph containing this sentence in the source document does not contain any citations. However in the subject's proposal, OIG found that this sentence was followed by a sentence written by the subject which provided citations to his publications. These changes indicate that the subject knew that the preceding text was not his own and that he modified it to suit his needs.

In our view, the subject's comments about his knowledge of the field, the presence of citations to the original author's published papers, and the phrase changes demonstrate that he does not fully understand the concept of plagiarism or the methods for providing proper attribution to source documents.

5. The Subject's Conversation with Original Author:

According to the subject's statement to OIG he was introduced in 1990 to the original author who provided him with copies of his publications and his dissertation. OIG confirmed this information with the original author and learned that the subject and the original author had discussed the subject's plans to submit a proposal to NSF. OIG further confirmed that in the course of these discussions the original author provided the subject with copies of his dissertation

and several publications. According to the original author, the subject never asked for permission to copy material from his dissertation and he never gave permission to the subject to copy the material.

The original author told OIG that he felt uncomfortable during his later conversation with the subject about the allegation of plagiarism and had not wanted to be confrontational. He therefore told the subject he understood the pressures young PIs were under. He did not condone the copying without attribution. OIG agrees with the institution's position that the original author's feelings about the plagiarism were not relevant to any assessment of the allegation.

6. Proposal [REDACTED] was the First NSF Proposal Submitted by the Subject:

The subject claimed that [REDACTED] was the first proposal he had submitted since he had been employed by the institution in 1988. [REDACTED] was, in fact, the second proposal submitted by the subject. The first was an equipment proposal [REDACTED] on which he was listed as a co-PI. OIG reviewed this proposal and found that it did not contain any material that was copied from the original author's dissertation.

7. Withdrawal of Proposal [REDACTED]

Contrary to the subject's statement the proposal was not withdrawn by the subject's institution from consideration. The proposal was declined by NSF based on the evaluated merit of the proposed work.

Subject's Response to the Draft Investigation Report

OIG sent a draft of this report to the subject with a request for comments and, after 30 days, had not received any response from the subject. His failure to respond is consistent with the statement he made when responding to our request for comments on the institution's report. The subject requested that we not send "more letters or committee findings [requesting his] response or information in the future . . . [he] will not contend with [NSF's] future findings and recommendations."

OIG's Conclusion Regarding Misconduct in Science:

The institutional investigating committee concluded that the subject's actions "represent a clear and serious violation of the principles of respectful treatment of sources understood as basic to the integrity of the academy." The committee rejected the subject's argument that he made a "careless mistake". After receiving the investigation report the institution made a "finding of culpability," concluding that the subject was responsible for the plagiarism.

For NSF to make a finding of plagiarism, the preponderance of the evidence must show that the subject committed the act (copying without attribution or offset) with a culpable state of mind (such as willful, knowing, or grossly negligent) (45 C.F.R. § 689.2(d)). Comparison of the proposal and the dissertation revealed 35 lines of text and three references in common, with no offsetting or citation in the proposal. The subject admitted that he copied the material without attribution. Thus, a preponderance of the evidence clearly supports the conclusion that the subject copied another's work without offset or proper attribution.

Some allegations of plagiarism arise because subjects have failed to carefully reference notes made during literature reviews and have subsequently confused those notes with their original thoughts. This is not such a case. OIG learned that prior to submitting his proposal the subject had been in frequent contact with the original author to discuss the subject's proposal ideas. The original author provided the subject with copies of his dissertation, publications and relevant drawings. Given the type and extent of exchanges the subject had with the original author, OIG concluded that he must have known that the text in question was the original author's writing. The subject copied the original author's text without attribution and not only failed to request or obtain the original author's prior permission to use of the text but also failed to provide the original author with an acknowledgement. The subject also altered selected phrases in the copied material to fit it into his proposal. In our view these facts establish, by a preponderance of the evidence, that the subject acted knowingly. However, OIG believes that this finding is mitigated by the fact that the subject does not fully understand the concept of plagiarism and lacks a good command of English.

Therefore OIG concluded that a preponderance of the evidence supports the finding that the subject plagiarized material from a source document and that his actions were knowing. OIG concluded that the subject committed misconduct in science.

EVIDENCE OF A PATTERN AND RELATION TO OTHER NSF AWARDS OR PROPOSALS:

To determine if there was evidence of a pattern of plagiarism OIG considered the following evidence:

1. OIG compared the original author's dissertation with the subject's proposal and could not find additional instances of copying.
2. The subject has submitted only two proposals to NSF, the proposal in question and one submitted as a co-PI on a group research equipment request. This older proposal was submitted prior to his conversations with the author of the dissertation and did not contain any material copied from it.
3. OIG reviewed the subject's resume and the publication record he submitted with his proposal. OIG also reviewed a publication by the subject that he provided with his

response to OIG. The subject's publication is derived from his own dissertation. Because his research interests lie in the same narrow field as the author of the dissertation the similarities between the ideas in the proposal and the dissertation are a reflection of their common research interests, not further evidence of plagiarism.

On the basis of the review of the subject's proposal history, the timing of his conversations with the original author, and the subject's publication record, OIG concluded that the proposal in question is the only document containing copied text from the dissertation.

RECOMMENDED DISPOSITION

Under § 689.2(b) of NSF's misconduct in science and engineering regulation, "[i]n deciding what actions are appropriate when misconduct is found, NSF officials should consider: (1) How serious the misconduct was; (2) Whether it was deliberate or merely careless; (3) Whether it was an isolated event or part of a pattern; (4) Whether it is relevant only to certain funding requests or awards involving an institution or individual found guilty of misconduct." In this case the copying was extensive, but it involved material in the introductory and background sections, not in the statement of work. We believe the evidence supports a finding that the subject acted knowingly. Our review uncovered no evidence of additional plagiarism of the dissertation by the subject in his paper or his other NSF proposal. Therefore, we recommend two actions by NSF in response to the misconduct in science by the subject: the subject should be sent a letter of reprimand, which is a Group I action (see § 689.2(a)(1)(i)). Because of the extent of the plagiarism, the subject's poor understanding of the concept of plagiarism, and the likelihood that, without adequate oversight and training, the subject may commit future acts of plagiarism, we recommend that the subject be required, for the next three years, to have his NSF proposals reviewed and certified by his department chairperson (or equivalent), which is a Group II action (see § 689.2(a)(2)(ii)). Because the plagiarism was not in the proposal's statement of work and it occurred in only one proposal we do not believe this case warrants a Group III action (see § 689.2(a)(3)).

CONCLUSION AND RECOMMENDATION

It is considered plagiarism to use the words of another person without permission or attribution. In deciding whether plagiarism occurred, neither the subject's intimate knowledge of the field nor the subject's difficulty stating the same concept in his/her own words is a consideration. NSF's commitment to proper attribution is evidenced by the statement on the proposal cover sheet that requires PIs to certify that "the text and graphics herein as well as any accompanying publications or other documents, unless otherwise indicated, are the original work of the signatories or individuals working under their supervision." This certification was added to the proposal form in October 1992, after the subject's proposal was submitted, but it merely formalized NSF existing expectation for submitted proposals. Without applying the accepted conventions of offset and attribution, copied text in proposals would be considered as originating

with the submitting PI. Failure to provide proper attribution can inappropriately influence a reviewer's assessment of the submitting PI's capabilities and the rating of the proposal.

The evidence shows that the subject copied 35 lines of text and 3 references from the original author's dissertation without indicating that they were copied or referencing the source document. The copied material appeared in the introduction and background research sections of the proposal's project description. There was no evidence that material in the statement of work had been copied.

The subject did not have prior permission from the original author to use this material, nor did the subject's proposal contain an acknowledgment to the original author. The subject attempted to portray the extent of copying as minimal by describing it as a "few lines and some words;" his former institution disagreed with this assessment. OIG agrees with the institution's conclusion. OIG concluded that the subject had not adequately addressed the allegation of plagiarism or the seriousness of this offense. OIG believes that the subject's statements indicate that he does not fully understand the concept of plagiarism, and without adequate oversight and instruction is likely to commit future acts of plagiarism.

After its independent investigation, the subject's former institution concluded that he had committed misconduct in science, but because of his departure it could not impose a sanction greater than placing the investigation report in his personnel file. This action does not adequately protect NSF's interests.

OIG concurs with the subject's former institution that his actions "represent a clear and serious violation." In our view, a preponderance of the evidence supports the conclusion that the subject has seriously deviated from accepted practice in the scientific community and committed misconduct in science in the form of plagiarism. The subject acted knowingly. OIG found no evidence that material from the original author's dissertation had been plagiarized into the subject's earlier proposal submission.

Therefore OIG recommends that the Deputy Director of NSF find that the subject has committed misconduct in science, and specifically plagiarism, under NSF's definition of misconduct in science and engineering. Given the circumstances of this case, OIG feels that the government's interest will be adequately protected if the following actions are taken:

- (1) NSF should send a letter of reprimand to the subject stating that it has concluded that he committed misconduct in science, specifically plagiarism.
- (2) NSF should require that, if, prior to June 1997, the subject is a principal investigator or co-principal investigator on a proposal submitted to NSF for funding, the subject will ensure that his department Chairperson (or equivalent) has signed an assurance stating that, on the basis of the Chairperson's reading of the proposal and to the best of the Chairperson's knowledge, the proposal does not contain any plagiarized material.

- (3) NSF should require that, if, prior to June 1997, the subject is a principal investigator or a co-principal investigator on a proposal submitted to NSF for funding, he will certify in writing that he has recently reviewed NSF's Misconduct in Science Regulation (45 C.F.R. §689), that the grant application is free of any misconduct, and that the grant application has been reviewed as described above.

The Chairperson's assurance and the PI's certification will be sent to the Assistant Inspector General for Oversight in NSF's Office of Inspector General, to be placed in that office's file on this matter.