

1496110040
CLOSEOUT FOR M96001140

OIG received an allegation that an NSF proposal¹ submitted by the subject² contained plagiarized text. During our inquiry, we determined that the subject included plagiarized text in the NSF proposal and in several proposals he submitted to other federal agencies. In August 1997, OIG deferred the investigation to the university. The university determined that the subject's actions were misconduct in science. OIG accepted the university's report as being fair, accurate and complete, and incorporated the university's findings into its investigation report.

OIG's investigation report and NSF's Acting Deputy Director's 2 November 1999 letter describing his determination constitute the closeout for this case.

CC: IG, Integrity

¹ [Footnote redacted].

² [Footnote redacted].

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF THE
DEPUTY DIRECTOR

November 2, 1999

[REDACTED]

VIA CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Re: Notice of Misconduct in Science Determination

Dear [REDACTED]:

On February 19, 1999, the National Science Foundation's Office of Inspector General sent you a draft Investigation Report finding that you committed misconduct in science by plagiarizing text, graphics and tables from a book and a published paper into a proposal you submitted to NSF.

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 C.F.R. § 689.1(a).

Your proposal entitled [REDACTED] submitted to the Foundation on [REDACTED], includes extensive plagiarism from a book and a published paper. The record also indicates that you subsequently submitted a modified version of this proposal to NSF a second time and to the [REDACTED] Agency. Although the proposal included general references to the plagiarized texts, the references were entirely inadequate given the extent of plagiarized text. Your submission of a proposal that extensively copies ideas or words of others without adequate attribution, as described in the Investigation Report, is plagiarism and a serious deviation from accepted practices within the scientific community.

NSF regulations establish three categories of actions (Group I, II and III) that can be taken in response to a finding of misconduct. 45 C.F.R. § 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. Group II actions include restrictions on designated activities or expenditures; and special reviews of requests for funding. 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 and consultants.

In deciding what sanction is appropriate, NSF 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 the misconduct affects only certain funding requests or has implications for any application for funding involving the subject of the misconduct finding. 45 C.F.R. § 689.2(c).

I have also considered your responses to the OIG's Investigative Report in which you acknowledged your mistakes and indicated a willingness to accept the requirement that you certify that proposals you submit in the future comply with NSF's Misconduct in Science and Engineering regulations. I am also aware that you resigned from your position at the [REDACTED] as a result of your plagiarism and I have concluded that it is unnecessary to require department heads at other universities where you may work to provide separate certifications on your behalf.

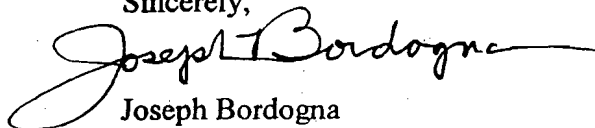
Accordingly, I take the following action:

- For three years from the date of this notice, if you or someone on your behalf submits any document associated with proposing, carrying out or reporting research to NSF, you must submit a copy of the document and a separate written certification that you have reviewed NSF's Misconduct in Science and Engineering regulation (45 C.F.R. Part 689) and that the document contains no plagiarized material, to the Associate Inspector General for Scientific Integrity, 4201 Wilson Boulevard, Arlington, Virginia 22230.

Procedures Governing Appeals

Under NSF's regulations, you have 30 days after receipt of this letter to submit an appeal of this decision, in writing, to the Director of the Foundation. 45 C.F.R. § 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. If you have any questions about the foregoing, please call Lawrence Rudolph, General Counsel, at (703) 306-1060.

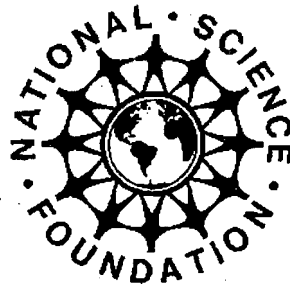
Sincerely,



Joseph Bordogna
Deputy Director

Enclosures

Confidential



Office of Inspector General

Investigation Report

OIG Case M96110040

MARCH 31, 1999

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REPORT OF INVESTIGATION INTO ALLEGATIONS OF MISCONDUCT IN SCIENCE

SUMMARY

The Office of Inspector General (OIG) has concluded that the subject¹ plagiarized text, graphics, and tables from a book (Book C)² and a published paper, specifically an abstract (Abstract C),³ into a proposal⁴ to NSF, and submitted modified versions of that proposal three times to two federal agencies.⁵ (See Table 1 summarizing the subject's copying with inadequate attribution.) Comparison of the subject's proposal and the source documents showed extensive, verbatim copying without adequate attribution of approximately 5 1/2 pages (121 lines of text, 7 figures and 1 table) from the book and the abstract. We conclude that the subject's actions constitute plagiarism. The evidence demonstrated that the subject was solely responsible for the plagiarism. These conclusions are based on our inquiry and an investigation performed by the University.

We recommend that NSF find that the subject committed misconduct in science and take the following actions as a final disposition in this case.

1. The subject should receive a letter of reprimand from the NSF Deputy Director informing him that he was found to have committed misconduct in science.
2. For 3 years, after the final disposition of this case, when proposals are submitted by the subject or on his behalf to NSF, he should be required to submit certifications to OIG that, to the best of his knowledge, they contain nothing that violates NSF's Misconduct in Science and Engineering regulation (45 C.F.R. part 689). Further, he should be required to ensure that his department chairperson, or equivalent, submits an assurance to OIG that, to the best of that person's knowledge, the submitted proposals do not contain any plagiarized materials and all source documents are properly cited.
3. The subject should be requested to send his certification and the University's assurances to NSF's Office of Inspector General, for retention in the Office's confidential file on this matter.

¹ [footnote redacted].

² [footnote redacted].

³ [footnote redacted].

⁴ [footnote redacted].

⁵ [footnote redacted].

BACKGROUND

OIG received an allegation that an NSF proposal (Proposal A)⁶ submitted by the subject and a colleague contained text plagiarized from the abstract of a published paper (Abstract A).⁷ While conducting an inquiry into this allegation, we received a second allegation that another NSF proposal (Proposal B(1))⁸ submitted by the subject contained plagiarized text from another publication's abstract (Abstract B).⁹ A third allegation involved more extensive amounts of plagiarism in another of the subject's proposals (Proposal C(1))¹⁰ to NSF. The third allegation of plagiarism is the primary focus of this investigation report.

In total, the subject included copied text without proper attribution in eight proposals to two federal agencies. (Table 1.) Of these eight proposals, four were modified versions of earlier NSF proposals that were subsequently resubmitted to NSF or submitted to [redacted].

We will present the evidence in the order it was evaluated: first by our inquiry, and then by the University's investigation committee.

⁶ [footnote redacted].

⁷ [footnote redacted].

⁸ [footnote redacted].

⁹ [footnote redacted].

¹⁰ See footnote 5.

Table 1. Listing of the Subject's Proposals with Inadequate Attribution

| Subject's Proposal No. | Submittal Date | Source Document | Extent of Plagiarism |
|---|----------------|-----------------|--|
| [redacted] Proposal A | [redacted] | Abstract A | <ul style="list-style-type: none"> • 12 lines • Includes 3 general references¹¹ to the author at various points in the copied passage |
| [redacted] Proposal B(1) | [redacted] | Abstract B | <ul style="list-style-type: none"> • 11 lines • Includes 2 general references to the author at various points in the copied passage |
| [redacted] Proposal B(2) | [redacted] | Abstract B | <ul style="list-style-type: none"> • 11 lines • Includes 2 general references to the author at various points in the copied passage |
| [redacted] Proposal C(1) | [redacted] | Book C | <ul style="list-style-type: none"> • 5 pages (66 lines of text, 7 figures, and portions of one table) • Includes 1 general reference to the author in the copied passage |
| | | Abstract C | <ul style="list-style-type: none"> • 13 lines • Includes 1 general reference to the author in the copied passage |
| [redacted] Proposal C(2) | [redacted] | Book C | <ul style="list-style-type: none"> • 5 1/2 pages (103 lines of text, 7 figures, 1 full table) • Includes 1 general reference to the author in the copied passage |
| | | Abstract C | <ul style="list-style-type: none"> • 18 lines • Includes 1 general reference to the author in the copied passage |
| [redacted] Proposal C(3) ¹² | 1996 | Book C | <ul style="list-style-type: none"> • *5 pages (66 lines of text, 7 figures, and portions of one table) • *Includes 1 general reference to the author |
| | | Abstract C | <ul style="list-style-type: none"> • *13 lines • *Includes 1 general reference to the author in the copied passage |
| [redacted] Proposal C(4) | 1997 | Book C | <ul style="list-style-type: none"> • *5 pages (66 lines of text, 7 figures, and portions of one table) • *Includes 1 general reference to the author in the copied passage |
| | | Abstract C | <ul style="list-style-type: none"> • *13 lines • *Includes 1 general reference to the author in the copied passage |
| [redacted] Proposal D | [redacted] | Abstract D | <ul style="list-style-type: none"> • 8 lines • Includes 4 general references to the author at various points in the copied passage |

¹¹ The "general references" provided by the subject mention the source material, but do not distinguish between the text of the source material and the original text of the subject. [redacted] (Proposal text identical to source text is italicized.)

¹² In the "Extent of Plagiarism" column, items marked with an asterisk (*) are based on the admissions of the subject and the documentation provided in his self-evaluation. These materials are part of the administrative record of this case and are available for review. The original text of these [redacted] proposals was not available.

OIG'S INQUIRY

Evaluation of the Initial Allegations

After receiving the first allegation of plagiarism, we compared the subject's Proposal A with the alleged source material, Abstract A. We found 12 lines of text in the background section of Proposal A that were identical or substantially similar to Abstract A. Although the copied paragraph contained three general references¹³ to Abstract A, the 12 lines of copied text did not provide adequate attribution¹⁴ to the original text to show that it have been copied from the abstract. For comparison purposes, we have included copies of Proposal A (Appendix 1), and Abstract A (Appendix 2). We have highlighted in green the 12 lines of text common to both documents, with general references highlighted in pink.

After receiving the second allegation of plagiarism, we compared the subject's Proposal B(1) with the alleged source material, Abstract B. We found that 11 lines in the background section of Proposal B(1) were identical or substantially similar to Abstract B. As in the first allegation, the cited text begins with a general reference to the abstract, but does not provide adequate attribution to the author of Abstract B. We have included copies of Proposal B(1) (Appendix 3) and Abstract B (Appendix 4). We have highlighted in green the 11 lines of text common to both documents, with the general reference highlighted in pink.

Subject's Response to OIG's Inquiry

We sent letters to the subject and his co-PI to obtain explanations for the text that was copied without adequate attribution. (Appendix 5 and 6, respectively.) The co-PI responded to our letter with a phone call shortly after receiving our letter, and sent us a written response (Appendix 7), explaining that he was not responsible for cited sections of Proposal A. In contrast, the subject did not respond to our letter, claiming that he had not received it.¹⁵ The subject responded to our second letter by stating that "the wording [in the proposals] is too close from [sic] the original sources." (Appendix 8.) He also noted that the copied text was in the background section of the proposal and not in the experimental or data analysis section, suggesting a lesser importance to his mistakes. He did not respond to our question regarding other instances of plagiarism.¹⁶

¹³ See footnote 11.

¹⁴ We use the words "inadequate attribution," in this report, to indicate the subject's practice of copying materials and only providing general references to the original author. The subject is expected to distinguish the copied text using methods, such as variable fonts, indentation or quotation marks, to differentiate copied material and original material in a document.

¹⁵ We sent our first letters to the subject and the co-PI on the same day, by overnight courier to the same Department, and the same building. We contacted the overnight carrier to track the delivery of the letter to the subject, and the carrier reported that the letter addressed to the subject had been delivered and signed for by University staff one day after it was sent.

¹⁶ It was later determined that the subject had submitted three additional proposals without providing adequate attribution. See footnote 22.

Third Allegation

While waiting for the subject's response, we received the third allegation alleging that the subject plagiarized text from a published book (Book C) into the background portion of the project description section of his Proposal C(1). We found approximately 5 pages of text, graphics, and tables in Proposal C(1) that were identical or substantially similar to those in Book C. The subject included a general reference to the book near the beginning of the copied text, but did not provide adequate attribution to the text written by the book's author. The only changes he made to the text were those needed to incorporate that text smoothly into his proposal.

After reviewing other NSF proposals submitted by the subject, we discovered that an earlier version of Proposal C(1) was submitted in 1995 (Proposal C(2)).¹⁷ Proposal C(2) includes larger sections of text copied without adequate attribution, including 103 lines of text, 7 graphics and an entire table. We have included copies of Proposal C(2) (Appendix 9) and the relevant portions of Book C (Appendix 10). We have highlighted the lines of text common to C(2) and the source document in green, general references in pink, and text that is found in C(2) but not in C(1) in orange. Additional highlighting in yellow will be discussed in a later section.

Conclusion of OIG's Inquiry

After reviewing all of the evidence and the subject's response to our inquiry letters, we concluded that there was sufficient substance to the allegations of plagiarism to warrant an investigation. Consistent with NSF's position that awardee institutions bear primary responsibility for preventing and detecting misconduct, we informed the University of the allegations, and at its request, we agreed to delay any possible investigation by our office until the University had completed its own, independent investigation. We formally deferred the investigation of this case to the University in a letter of [redacted]. (Appendix 11.)

UNIVERSITY'S INVESTIGATION

The University's policy (Appendix 12) states, "[c]onduct, inconsistent with the ethical conduct of research and considered to be misconduct shall include: (1) serious deviation, such as fabrication, falsification, misrepresentation, or arbitrary or biased selection of data, from commonly accepted practice in proposing or conducting research or in reporting the results of research; and (2) plagiarism or appropriating the data of another individual and presenting it as if it were one's own."¹⁸ The University's misconduct policy requires that it conduct an inquiry before it initiates an investigation.¹⁹ On [redacted], the University's inquiry committee recommended that the "allegations merit further investigation." (Appendix 13.)

The University convened an investigation committee that provided its written report (Appendix 14) to the administration on [redacted]. To come to its conclusions, the committee

¹⁷ See footnote 4.

¹⁸ Appendix 12, p.1.

¹⁹ Appendix 12, p.2.

reviewed the documents provided as attachments to our [redacted] letter (see Appendix 11 for a list of these materials). In addition, the committee conducted the following assessments:

- 1) two interviews with the subject and one interview with the co-PI;
- 2) an assessment of the allegations contained in our letter of [redacted];
- 3) a search for additional instances of plagiarism, including:
 - a) a "limited analysis" of all of the subject's proposals submitted while he was employed at the University;
 - b) a request for a self-evaluation by the subject of all of his grant proposals;
 - c) a "limited, computer-assisted comparison" of the subject's NSF proposals to cited source documents;
 - d) a "limited perusal" of the subject's doctoral dissertation and peer-reviewed publications; and,
- 4) an assessment of the subject's response to our first letter.

The committee based their recommendation on five conclusions. After each conclusion (listed below), we include references to sections of the investigation report that support the committee's decisions.

- 1) The subject was responsible for all the acts of alleged copying in our [redacted] letter. (Appendix 14, *Invest. Report*, p.5-6.) The committee concluded that none of proposals referenced by OIG had "sufficient indication that the material was copied, even though the original sources were sometimes cited." (Appendix 14, *Invest. Report*, p.5.)
- 2) The subject was responsible for additional acts of a similar nature beyond the allegations in our letter of [redacted], including:
 - additional verbatim copying²⁰ into Proposal C(2) of an abstract (Abstract C) (Appendix 16);
 - verbatim copying of another abstract (Abstract D) into Proposal D (Appendices 18 and 17, respectively);²¹ and,
 - resubmissions of proposals with plagiarized text to NSF and to US EPA.²² (Appendix 14, *Invest. Report*, p.6, 9.)
- 3) The committee concluded that "[i]n all cases . . . these acts constitute[d] plagiarism and, hence, misconduct in science." (Appendix 14, *Invest. Report*, p.2.) They stated that this finding was demonstrated beyond a reasonable doubt. (Appendix 14, *Invest. Report*, pp.8, 10 -11.)

²⁰ See Appendix 9; yellow highlighting is used to show text common to both documents. The subject made 1 general reference to Abstract C, but did not distinguish text that was original to the author.

²¹ The investigating committee discovered that the subject's NSF proposal, [redacted] included 8 lines of verbatim plagiarism from an abstract of a paper written by B. [redacted] The plagiarized section of text included 4 general references to the author, but does not distinguish copied text.

²² Proposal C(1) was a resubmittal of an earlier NSF proposal, [redacted] Modified versions of this proposal were submitted to the [redacted] (Proposals C(3) and C(4)). Proposal B(1) was a resubmittal of an earlier NSF proposal, (Proposal B(2) [redacted]).

- 4) Because of the repeated acts of plagiarism, the committee concluded that the subject showed a "reckless disregard for [the] careful preparation of [his] proposals." (Appendix 14, *Invest. Report*, p.7.) They concluded that this finding was demonstrated beyond a reasonable doubt. (Appendix 14, *Invest. Report*, pp.7, 10-11.)
- 5) The repetitive pattern and extent of several instances of plagiarism led the committee to conclude that the subject's actions were knowing and willful. The committee stated that this finding was demonstrated by clear and convincing evidence. (Appendix 14, *Invest. Report*, pp.7, 10-11.)

The committee concluded that

Plagiarism is one of the most serious ethical offenses in science and engineering, as evidenced by its explicit inclusion in NSF's [definition of plagiarism]. This committee has found that [the subject] did indeed commit plagiarism in proposing research. [The subject]'s *goal* may have been to save time in writing proposals. However, the plagiarism is so extensive that the committee does not believe it reasonable to consider [the subject's explanation of lack of time] as a mitigating factor. . . . Given the seriousness of its conclusions, the committee recommends that the [University] administration consider appropriate disciplinary action against [the subject].²³

ACTIONS BY THE UNIVERSITY

The Dean of the College of [redacted] received the committee's report and forwarded it to the [redacted]. The committee recommended that the University consider taking appropriate disciplinary action against the subject. In his forwarding letter, the Dean of [redacted] recommended that the University initiate proceedings required by the contract between the University and the American Association of University Professors (the Union). The subject signed a separation agreement on [redacted], and submitted a letter of resignation [redacted], effective [redacted]. (Appendix 18.)

OIG'S CONCLUSION REGARDING MISCONDUCT IN SCIENCE

NSF defines misconduct in relevant part as "[f]abrication, falsification, plagiarism, or other serious deviation from accepted practices in proposing, carrying out, or reporting results from activities funded by NSF." (45 C.F.R. § 689.1(a)(1).) For NSF to make a finding of misconduct in science, a preponderance of the evidence must show that the subject committed a bad act associated with NSF-funded activities, and that the bad act was committed with a culpable state of mind (e.g., willful, knowing, or gross negligence) (45 C.F.R. § 689.2(d)).

In our evaluation of the alleged misconduct, we have focused on the plagiarism included in Proposal C(2) and the associated resubmittals, because of the extensive amount of copied material contained in those proposals. Although the other instances of copying include

²³ See Appendix 14, *Invest. Report*, p.11.

inadequate attributions of authorship, we do not think these instances rise to the level of misconduct in science. Rather, we see these other instances of copying as evidence of a pattern of inappropriate behavior, reflecting the subject's persistent disregard for proper attribution.

We deferred allegations of plagiarism for investigation to the University and received the University's report of its investigation. We believe the Report is fair, accurate, and complete.²⁴ The University's committee concluded that the subject had committed misconduct in science when he copied text without proper attribution into 8 proposals from 5 sources. The committee determined that the subject's actions were knowing and willful. They determined that the subject's misconduct was not an isolated event, but reflected a pattern. The committee's conclusions were supported by evidence collected by OIG's inquiry, interviews with the subject, and comparative assessments of the subject's proposals. We have used the investigating committee's report and conclusions as the basis for our own conclusions about misconduct in science.

The Act - Plagiarism

The subject admitted to the investigating committee that he copied material from Book C (103 lines of text, 7 figures and a table) and Abstract C (18 lines of text) into his Proposal C(2) without providing adequate attribution, and resubmitted the proposal with modifications three times (once to NSF and twice to [redacted]). He was unsure about the exact method used to copy the material, but mentioned that he periodically downloaded original text of abstracts from commercial databases, using a program [redacted] and also regularly scanned printed material using various types of software. We agree with the committee's conclusion that the evidence supports the conclusion that the subject represented the copied text in his NSF proposals as his own and copied the materials without the permission of the authors.²⁵

State of Mind - Plagiarism

We believe the subject acted culpably when he copied material from Book C and Abstract C into his Proposal C(2) without providing adequate attribution, and later resubmitted modifications of this proposal three times. The University committee "believe[d] that [the subject] acted recklessly, knowingly *and* willfully. . . . At the very least, the failure to adequately identify copied material adequately was inadvertent, the result of not having time to correct his rough drafts. Had this happened only once, perhaps it could have been viewed as being careless, and nothing more. However, the fact that it happened repeatedly constitutes evidence . . . that [the subject] showed a reckless disregard for careful preparation of his proposals. In addition, the extent of the copied material in [Proposal C(2)] and its revision, [Proposal C(1)] provides strong indication that the copying was done knowingly and willfully."²⁶

²⁴ The subject sent OIG a letter in late [redacted] 1999 describing, generally, his experience at the University and the investigation process. (Appendix 15.) We requested that the subject provide documentation of issues he raised regarding the fairness of the investigation process and the accuracy of the report. We have not received any documentation from the subject on these issues.

²⁵ The University believed that its conclusions were supported beyond a reasonable doubt. This exceeds the evidentiary standard required by NSF's misconduct regulations -- a preponderance of the evidence.

²⁶ Appendix 14, p.7.

Copying is inherently a knowing activity. The purpose of his actions, although not directly discussed by the subject, appears to be convenience. He submitted an average of 11 proposals and pre-proposals each year, according to the investigating committee. The subject selectively copied text from the source documents, modifying words only to the extent necessary to alter the tone or disguise the source of the text. Despite the effort involved in carefully reading, selecting, and modifying different passages from Book C and Abstract C, the subject failed to offset any of the copied text. Therefore, we conclude that the subject acted at least knowingly.

OIG's Conclusion about the Plagiarism

We conclude that the subject committed plagiarism when he knowingly copied a total of 5 1/2 of material from two separate documents (Book C and Abstract C) into his Proposal C(2) without providing adequate attribution to the original authors. We consider the copying of 18 lines from the abstract to be plagiarism, in this case, because of the integration of the abstract text into the larger section of text plagiarized from Book C. His action was a serious deviation from accepted practices in the scientific community, hence, misconduct in science.

OIG'S RECOMMENDED DISPOSITION

Under § 689.2(b) of NSF's misconduct in science and engineering regulation, when deciding what actions are appropriate when misconduct is found, NSF officials should consider any evidence of a pattern, the seriousness of the misconduct, the intent with which the subject acted, and finally its relevance to other funding requests or awards involving the University or individual.

Evidence of a Pattern

The University's investigation committee thought "the [evidence regarding the] allegations presented in [OIG's] [redacted] letter, by themselves, document a pattern of repeated misconduct."²⁷ After discovering five additional instances of copying with inadequate attribution by the subject, the committee noted that "these additional instances illustrate, in the committee's view, a repeated pattern of behavior."²⁸ The University concluded that all instances of copying with inadequate attribution were acts of plagiarism, and therefore, establish a pattern of misconduct. Instead, we find a pattern of unprofessional behaviors and practices that directly supported the act of plagiarism.

Although the copied sections varied in length and level of attribution, when viewed in the aggregate, the subject exhibits a clear behavioral pattern of copying without proper attribution. Copied text without proper attribution was found in 4 different proposals²⁹ submitted by the subject. These four proposals include 152 lines of text, 7 figures and 1 table.

²⁷ Appendix 13, p.8.

²⁸ *Id.*, at 9.

²⁹ It is important to note that these four proposals (A, B(2), C(2), D) are not resubmittals of previous proposals (i.e., B(1), C(1), C(3) or C(4)).

The subject's style of copying -- providing a general reference and copying large sections of text verbatim -- is common to all of these instances. The only difference between Proposals C(1-4) and the other proposals, is the extent of his copying. The plagiarism in proposals C(1-4) is part of a pattern of troubling behavior, a copying style that provides inadequate attribution to other's work.

In addition he admitted and discussed at length,³⁰ his practice of using digital technologies to gain access easily to original work of others and to include it efficiently in his own proposals. He admitted that he regularly utilized a process of downloading text from the Internet and utilizing optical scanners and optical character recognition software to incorporate the works of others into his own proposals. As described, his system had no safeguards for proper citation practices; instead it only facilitated his ability to mechanically copy others' work, thereby expediting a pattern of troubling behavior.

We find that the subject's actions reflect strong, clear evidence of an unacceptable pattern of behavior that is directly related to the identified plagiarism.

Seriousness

By portraying the work of other scientists as his own, the subject seriously deviated from the accepted practice, not only in his scientific community, but also in the wider scientific and [redacted] community. The subject's references to Book C and Abstract C are completely inadequate to indicate that he copied, essentially verbatim 121 lines of text, 7 figures, and a table into his Proposal C(2).

When a proposal author transcribes material, as the subject did in this proposal, he must mark it off from the other text in his proposal so that it is distinguishable by font, indentation, quotation marks or other means from the material he authored. Providing a citation, while necessary, is not sufficient. A citation to the source is sufficient only if an author uses the ideas drawn from another source, but describes them in his own words. In this case, the subject used the exact words of the authors and, therefore, was obligated to do more than simply provide a citation to the source. The fact that the subject included some citations to the sources makes this case less serious than those warranting the most serious actions (such as debarment).

The University fully supports this standard, and found that "[the subject] had *no legitimate justification* for failing to indicate that he was quoting the material in question. Copied text should essentially *always* be set off from surrounding text by quotation marks or other standard means (e.g., indentation or font). The *only* possible exceptions are short passages where the *wording itself* has become part of standard usage or in which, because of highly technical vocabulary, essentially only one wording is possible; e.g., some mathematical definitions. Neither of these exceptions is applicable here." (emphasis retained from the original text) (Appendix 14, *Invest. Report*, p.5.)

³⁰ *Invest. Report*, Appendix E, pp. 11-13, 26-28, 32-34, 37. This information is part of the administrative record and is available for review.

We believe that the extent of the plagiarism in Proposal C(2) makes this a serious matter. The subject copied approximately 5 1/2 pages of material from a textbook and a published paper, including text, graphics, and tables, with few modifications. The only modifications made to the text by the subject were those necessary to disguise the source of the material.³¹ This proposal was resubmitted three times, but despite the time lapses between the resubmittals, the subject did not make significant changes or citation corrections to the plagiarized text in any of the resubmittals.

The subject's actions were also more serious because of his incomplete response to our initial inquiry. Questions about his credibility arose early in our inquiry, when he claimed that he never received our first letter sent by certified overnight mail.³² After receiving the second copy of our letter, despite the seriousness of the allegations, the subject was not forthcoming in his response. We find his reasons for not responding to be less than credible and think it shows an unacceptable disregard for the gravity of these allegations, consistent with his pattern of disregard for ethical citation practices. The University addressed this issue in their investigation report, and found the lack of response "disturbing".³³

We believe the members of the University investigation committee, as representatives of the scientific community, have provided a clear statement about the seriousness of the subject's actions. On the basis of the case we deferred, the University told us that the subject has agreed to resign from the University.

Recommended NSF Action

The recommended actions listed below take into account the University's disciplinary actions against the subject (i.e., resignation of the subject). We also considered the subject's level of experience and his inclusion of general references to the source of the copied text. For these reasons, we are not recommending debarment despite the extent of the plagiarism. We recommend that NSF's Deputy Director take the following actions to protect the government's interests:

1. The subject should receive a letter of reprimand from the NSF Deputy Director informing him that he was found to have committed misconduct in science.³⁴
2. For 3 years, when proposals are submitted by the subject or on his behalf to NSF, he should be required to submit certifications to OIG that, to the best of his knowledge, the proposals contain nothing that violates NSF's Misconduct in Science and Engineering regulation (45 C.F.R. Part 689). Further, he should be required to ensure that his department chairperson, or equivalent, submits an assurance to OIG that, to the best of that person's knowledge, the

³¹ As an example, the following two sentences are taken from the (1) the original text of Book C and (2) Proposal C(2). The text common to both is in italics. [redacted] (Proposal C(2), p.C-4)

³² The overnight courier provided evidence that a staff person in the subject's department had signed for two letters that were sent simultaneously to him and his co-PI. The co-PI, from the same Department, received our letter in the expected timeframe.

³³ Appendix 14, *Invest. Report*, p.10.

³⁴ This is a Group I action (see 45 C.F.R. § 689.2(a)(1)(i)).

submitted proposals do not contain any plagiarized materials and all source documents are properly cited.³⁵

3. The subject should be requested to send his certification and the University's assurances, as required in (2), to NSF's Office of Inspector General, for retention in the Office's confidential file on this matter.

We believe that these actions will adequately protect NSF's interests. Being that the subject has requested funding from other federal agencies, we believe that NSF should consider coordinating certifications and assurances with [redacted] or other federal agencies, to ensure proper protection of federal interests.

SUBJECTS RESPONSE TO THE DRAFT INVESTIGATIVE REPORT

On [redacted], we provided the subject a draft of this Investigation Report and requested that he provide us with any comments or corrections within 30 days ([redacted]). We specifically asked for further explanation and documentation regarding his comments about the University's investigation process (see footnote 24). We called the subject on [redacted] to determine if he had any comments on the report. He provided written comments on [redacted]. We spoke with him to clarify several issues, primarily to explain the meaning and implementation of debarment and assurance actions. As a result, the subject requested that NSF consider reducing the period for assurances to 2 years, and that NSF refrain from discussing these matters with other federal agencies. (Appendix 19.)

We considered the subject's requests for alternative agency actions and we concluded that the recommended disposition should not be changed. The recommended disposition is proportionate to the seriousness of the subject's misconduct and is consistent with prior agency actions in similar cases. We do not support the subject's request for non-disclosure to other federal agencies because of the significant pattern of unacceptable behavior exhibited by the subject that occurred in multiple submissions to other federal agencies. The recommendations in this Report remain unchanged from the draft provided to the subject.

³⁵ These are Group II actions (see 45 C.F.R. § 689.2(a)(2)(ii)).