

NATIONAL SCIENCE FOUNDATION OFFICE OF INSPECTOR GENERAL OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

| Case Number: A12030018 | Page 1 of | 1 |
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We received notification from a University that one of its graduate students fabricated data and had been expelled from the department. We concurred with the University's conclusion and recommended NSF make a finding of research misconduct, debar the subject for 1 year, and take other actions; NSF concurred. This memorandum, NSF's adjudication, and OIG's report of investigation comprise the closeout. This case is *closed* with no further action taken.

NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230





CERTIFIED MAIL --RETURN RECEIPT REQUESTED



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

Dear Mr.

As a student at the control of the Control of the Control of the National Science Foundation ("NSF"). This research misconduct is documented in the attached investigative report prepared by NSF's Office of Inspector General ("OIG").

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

In addition to proposing your debarment, I am prohibiting you from serving as an NSF reviewer, advisor, or consultant to NSF until 2014. Furthermore, for one year after the expiration of your debarment period, I am requiring that you submit certifications, and that a responsible official of your employer submit assurances, that any proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material. Moreover, by December 1, 2014, you must certify the completion a comprehensive responsible conduct of research training course, and provide documentation of the program's content.

Research Misconduct and Sanctions other than Debarment

Under NSF's regulations, "research misconduct" is defined as "fabrication, falsification, or plagiarism in proposing or performing research funded by NSF ..." 45 CFR § 689.1(a). NSF defines "fabrication" as "making up data or results and recording or reporting them." 45 CFR § 689.1(a)(1).

A finding of research misconduct requires that:

- (1) There be a significant departure from accepted practices of the relevant research community; and
- (2) The research misconduct be committed intentionally, or knowingly, or recklessly; and
- (3) The allegation be proven by a preponderance of evidence.

45 CFR § 689.2(c).

Your admission of data fabrication permits me to conclude that your actions meet the applicable definition of fabrication, as set forth in NSF's regulations.

Pursuant to NSF's regulations, the Foundation must also determine whether to make a *finding* of research misconduct based on a preponderance of the evidence. 45 CFR § 689.2(c). After reviewing the Investigative Report and your admission of data fabrication, NSF has determined that, based on a preponderance of the evidence, your fabrication of data was committed intentionally and constituted a significant departure from accepted practices of the relevant research community. I am, therefore, issuing a finding of research misconduct against you.

NSF's regulations establish three categories of actions (Group I, II, and III) that can be taken in response to a finding of misconduct. 45 CFR § 689.3(a). Group I actions include issuing a letter of reprimand; conditioning awards on prior approval of particular activities from NSF; requiring that an institution or individual obtain special prior approval of particular activities from NSF; and requiring that an institutional representative certify as to the accuracy of reports or certifications of compliance with particular requirements. 45 CFR § 689.3(a)(1). Group II actions include award suspension or restrictions on designated activities or expenditures; requiring special reviews of requests for funding; and requiring correction to the research record. 45 CFR § 689.3(a)(2). Group III actions include suspension or termination of awards; prohibitions on participation as NSF reviewers, advisors or consultants; and debarment or suspension from participation in NSF programs. 45 CFR § 689.3(a)(3).

In determining the severity of the sanction to impose for research misconduct, I have considered the seriousness of the misconduct; my determination that it was committed intentionally; the fact that the misconduct had no impact on the research record; and the fact that the misconduct was an isolated incident. I have also considered other relevant circumstances. See 45 CFR §

Based on the foregoing, I am imposing the following actions on you:

- For one year from the end of your debarment period, you are required to submit certifications that any proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material.
- For one year from the end of your debarment period, you are required to submit assurances by a responsible official of your employer that any proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material.
- From the date of this letter through December 1, 2014, you are prohibited from serving as an NSF reviewer, advisor, or consultant.
- You are required to complete a comprehensive responsible conduct of research training course by December 1, 2014, and provide documentation of the program's content. The instruction should be in an interactive format (e.g., an instructor-led course, workshop, etc.) and should include a discussion of data fabrication.

All certifications, assurances, and training documentation should be submitted in writing to NSF's Office of Inspector General, Associate Inspector General for Investigations, 4201 Wilson Boulevard, Arlington, Virginia 22230.

Debarment

Regulatory Basis for Debarment

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

- (b) Violation of the terms of a public agreement or transaction so serous as to affect the integrity of an agency program, such as
 - (1) A willful failure to perform in accordance with the terms of one or more public agreements or transactions;
 - (3) A willful violation of a statutory or regulatory provision or requirement applicable to a public agreement or transaction; or
- (d) Any other cause of so serious or compelling a nature that it affects your present responsibility.

In any debarment action, the government must establish the cause for debarment by a preponderance of the evidence. 2 CFR § 180.850. In this case, you admitted that you intentionally fabricated data, and provided this data to an NSF-funded PI. Thus, your action supports a cause for debarment under 2 CFR §§ 180.800(b) and (d).

Length of Debarment

Debarment must be for a period commensurate with the seriousness of the causes upon which an individual's debarment is based. 2 CFR § 180.865. Having considered the seriousness of your actions, as well as the relevant aggravating and mitigating factors set forth in 2 CFR § 180.860, we are proposing your debarment for one year.

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

Appeal Procedures for Finding of Research Misconduct

Under NSF's regulations, you have 30 days after receipt of this letter to submit an appeal of this finding, in writing, to the Director of the Foundation. 45 CFR § 689.10(a). Any appeal should be addressed to the Director at the National Science Foundation, 4201 Wilson Boulevard, Arlington, Virginia 22230. If we do not receive your appeal within the 30-day period, the decision on the finding of research misconduct will become final. For your information, we are attaching a copy of the applicable regulations.

Procedures Governing Proposed Debarment

The provisions of 2 CFR Sections 180.800 through 180.885 govern debarment procedures and decision-making. Under our regulations, you have 30 days after receipt of this notice to submit, in person or in writing, or through a representative, information and argument in opposition to this debarment. 2 CFR § 180.820. Comments submitted within the 30-day period will receive full consideration and may lead to a revision of the recommended disposition. If NSF does not receive a response to this notice within the 30-day period, this debarment will become final. Any response should be addressed to Lawrence Rudolph, General Counsel, National Science Foundation, Office of the General Counsel, 4201 Wilson Boulevard, Room 1265, Arlington, Virginia 22230. For your information, we are attaching a copy of the Foundation's regulations on non-procurement debarment and FAR Subpart 9.4.

Should you have any questions about the foregoing, please contact General Counsel, at (703) 292-

, Assistant

Sincerely,

Fae Korsmo Senior Advisor

Enclosures: Investigative Report Nonprocurement Debarment Regulations FAR Regulations 45 CFR Part 689

NATIONAL SCIENCE FOUNDATION

4201 WILSON BOULEVARD ARLINGTON, VIRGINIA 22230





CERTIFIED MAIL -- RETURN RECEIPT REQUESTED



Re: Notice of Debarment

Dear Mr.

On 2013, the National Science Foundation (NSF) issued you a Notice of Proposed Debarment and Notice of Research Misconduct Determination ("Notice") in which NSF proposed to debar you from directly or indirectly obtaining the benefits of Federal grants for a period of one year. As reflected in the Notice, NSF proposed to debar you because you fabricated data and submitted that data to a Principal Investigator funded by NSF. In that Notice, NSF provided you with thirty days to respond to the proposed debarment.

The period for submitting a response to NSF has elapsed, and NSF has not received a response from you. Accordingly, you are debarred until 2015.

Debarment precludes you from receiving Federal financial and non-financial assistance and benefits under non-procurement Federal programs and activities unless an agency head or authorized designee makes a determination to grant an exception in accordance with 2 CFR 180.135. Non-procurement transactions include grants, cooperative agreements, scholarships, fellowships, contracts of assistance, loans, loan guarantees, subsidies, insurance, payments for specified use, and donation agreements.

In addition, you are prohibited from receiving Federal contracts or approved subcontracts under the Federal Acquisition Regulations at 48 CFR subpart 9.4 for the period of this debarment. 2 CFR 180.925. During the debarment period, you may not have supervisory responsibility, primary management, substantive control over, or critical influence on, a grant, contract, or cooperative agreement with any agency of the Executive Branch of the Federal Government.

Please note that, in the Notice, NSF also took the following actions against you, which continue to remain in effect:

- For one year from the end of your debarment period, you are required to submit certifications that any proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material;
- For one year from the end of your debarment period, you are required to submit assurances by a responsible official of your employer that any proposals or reports you submit to NSF do not contain plagiarized, falsified, or fabricated material;
- You are prohibited from serving as an NSF reviewer, advisor, or consultant through December 1, 2014; and
- You are required to complete a comprehensive responsible conduct of research training course by December 1, 2014 and provide documentation of the program's content. The instruction should be in an interactive format (e.g., instructor led course, workshop, etc.) and should include a discussion of data fabrication.

All certifications and assurances should be submitted in writing to NSF's Office of Inspector General, Associate Inspector General for Investigations, 4201 Wilson Boulevard, Arlington, Virginia, 22230.

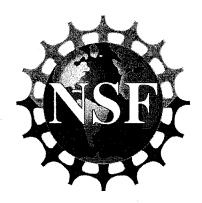
Should you have any questions about the foregoing, please contact at (703) 292-8060.

Sincerely,

Cora B. Marrett Deputy Director

or B. Marrett

National Science Foundation Office of Inspector General



Report of Investigation Case Number A12030018

July 3, 2013

This Report of Investigation is provided to you FOR OFFICIAL USE ONLY.

It contains protected personal information, the unauthorized disclosure of which may result in personal criminal liability under the Privacy Act, 5 U.S.C. § 552a. This report may be further disclosed within NSF only to individuals who must have knowledge of its contents to facilitate NSF's assessment and resolution of this matter. This report may be disclosed outside NSF only under the Freedom of Information and Privacy Acts, 5 U.S.C. §§ 552 & 552a. Please take appropriate precautions handling this report of investigation.

Executive Summary

Allegation:

Fabrication

University Investigation: The University concluded the Subject, a student, committed research misconduct and dismissed him from the program. We concurred with the University's assessment of the facts.

The Act: The Subject fabricated data in an internal report.

Intent: We concluded the Subject acted purposefully.

<u>Significant Departure</u>: The Subject's fabrication represents a significant departure from accepted practices.

<u>Standard of Proof</u>: A preponderance of the evidence standard supports our conclusion that the Subject committed research misconduct.

Pattern: There is no evidence of a pattern of fabrication.

OIG Recommendations:

- Send a letter of reprimand to the Subject informing him that NSF has made a finding of research misconduct.
- Require the Subject to complete a responsible conduct of research training program and provide documentation of content within 1 year. The instruction should be in an interactive format (e.g., an instructor-led course) and specifically include fabrication.
- Debar the Subject for 1 year.

For a period of 1 year immediately following the debarment period:

- Require for each document (proposal, report, etc.) to which the Subject contributes for submission to NSF (directly or through his advisor or institution),
 - o The Subject submit a contemporaneous certification that the document does not contain plagiarism, falsification, or fabrication.
 - o The Subject submit a contemporaneous assurance from his advisor or responsible official that the document does not contain plagiarism, falsification, or fabrication.
- Prohibit the Subject from serving as a reviewer, advisor, or consultant for NSF.

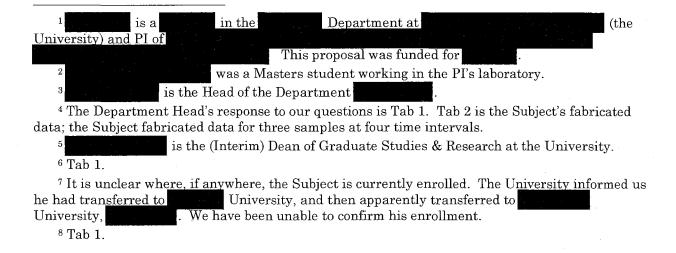
University's Investigation and Action

NSF was notified that one of its PI's¹ students² (the Subject) had fabricated data. We contacted the PI for additional information. The PI said he had been frustrated with the Subject's work ethic, and the Subject had not been able to work toward their mutually agreed-upon goals. After the PI expressed his frustration to the Subject, the Subject presented the PI with some graphical data, purportedly the results of an experiment he conducted. The PI was surprised the Subject had been able to generate the data in such a short amount of time, checked the instrument on which the Subject supposedly conducted the experiment to generate the data, and learned it had not been used recently. The PI confronted the Subject, who admitted he fabricated the data. The PI dismissed the Subject from his lab and reported the incident to his Department Head.³ The PI stated the fabricated data were not submitted to NSF; in fact; they were not disseminated beyond those involved in the investigation.

The Department Head interviewed the Subject, who again admitted that he fabricated the data he provided to the PI. He provided the Department Head with the electronic file with the fabricated data. The Department Head, in consultation with the Graduate Committee recommended expelling the Subject from the department.⁴ This recommendation was sent to the Dean.⁵ The Dean dismissed the Subject from the department graduate program.⁶ The Dean also placed a hold on the Subject's account, preventing him from further course registration. Subsequent to the Dean's action, the Subject transferred to another university, but apparently left there as well.⁷

OIG's Assessment

We agree with the University about its evaluation of the evidence and its conclusions. The PI confirmed the equipment had not been used to generate data. When confronted by the PI about this fact, the Subject admitted fabricating the data. The Subject repeated his admission in front of the Department Head.⁸ We



conclude these facts establish that, by a preponderance of the evidence, the Subject fabricated the data he presented to the PI.

We conclude the Subject acted intentionally to fabricate the data in response to the PI's frustration with his efforts. The Subject had been made aware of the department's expected ethical conduct during his Department New Student Orientation.⁹

NSF's Research Misconduct Regulation states that a finding of misconduct requires: (1) there be a significant departure from accepted practices of the relevant research community; (2) the research misconduct be committed intentionally, or knowingly, or recklessly; and (3) the allegation be proven by a preponderance of the evidence.¹⁰

The Act

The Subject fabricated data representing three samples and also a graphical representation of the data. Given the PI's confirmation that the equipment was not used, together with the Subject's admission, we concluded data for all three samples were fabricated.

Intent

The PI informed the Subject he was not performing his research tasks as expected. Subsequently, the Subject presented the PI with data, intended to persuade the PI that he was working on the research project. Thus, the Subject acted in response to the PI's criticism, which we concluded represents acting purposefully (intentionally).

Significant Departure

Using the preponderance of evidence standard, we conclude the Subject intentionally fabricated data three samples. Fabricating data strikes at the core of scientific research. The University concluded the act was so serious as to warrant expulsion. We concluded the Subject's fabrication is a significant departure from accepted standards.

OIG's Recommended Disposition

In deciding what actions are appropriate when making a finding of research misconduct, NSF must consider several factors. These factors include how serious the misconduct was; degree of intent; whether it was an isolated event or part of a pattern; its impact on the research record; and other relevant circumstances.¹¹

⁹ Tab 1.

¹⁰ 45 C.F.R. §689.2(c).

^{11 45} C.F.R. §689.3(b).

Seriousness

As we noted above, we concluded the preponderance of evidence standard supports the conclusion that the Subject acted purposefully when he fabricated data and presented it to the PI. The seriousness is mitigated by the Subject's willingness to admit his misconduct to both the PI and the Department Head.

Pattern

Thanks to the PI's skepticism and rapid subsequent action to limit the exposure of the fabricated data (it was not disseminated), the Subject did not have an opportunity to fabricate additional data. Thus, there is no pattern of fabrication.

Impact on the Research Record

The effect on the research record as a result of the Subject's actions was minimal. As noted above, the PI's rapid response when the Subject provided his fabricated data means "[t]hese fabricated data were never disseminated in any public venue or project report." 12

The Subject's Response

The Subject did not respond to our draft report.

Recommendations

Because the Subject has apparently transferred to several schools, it is possible for him to associate himself with another NSF project. Accordingly, based on the evidence, we recommend NSF take the following actions as a final disposition in this case:

- Send a letter of reprimand to the Subject informing him that NSF has made a finding of research misconduct.
- Require that the Subject complete a responsible conduct of research training program and provide documentation of content within 1 year. The instruction should be in an interactive format (e.g., an instructor-led course) and specifically include fabrication.
- Debar the Subject for 1 year. 13

For a period of 1 year immediately following the debarment period:

• Require for each document (proposal, report, etc.) to which the Subject contributes for submission to NSF (directly or through his advisor or institution),

¹² Tab 2. The PI's note on the fabricated data the Subject gave him.

¹³ A Group III action 45 C.F.R. 689.3(a)(3)(iii).

Sensitive

- The Subject submit a contemporaneous certification that the document does not contain plagiarism, falsification, or fabrication.
- o The Subject submit a contemporaneous assurance from his advisor or responsible official that the document does not contain plagiarism, falsification, or fabrication.
- Prohibit the Subject from serving as a reviewer, advisor, or consultant for NSF.

The Subject's certifications, assurances, and proof of a RCR program completion should be sent to the Assistant Inspector General for Investigations (AIGI) for retention in OIG's confidential file on this matter.