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National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

October 23, 2013

VIA EMAIL

Re: FOIA Request No. 13-27

This letter responds to your Freedom of Information Act (FOIA, 5 U.S.C. § 552) request, which we received on September 9, 2013 via the NSF FOIA Officer, for “a copy from the NSA [sic] Office of Inspector General of each MANAGEMENT IMPLICATION REPORT produced during the timeframe January 1, 2008 to present. I request review for release of each entire Management Implication Report, not just the summary published in the Semi Annual Report.”

We enclose all non-exempt responsive records. Information within the records that is exempt from disclosure under one or more of FOIA exemptions (b)(4) (confidential commercial information), (b)(6) (records the disclosure of which would constitute a clearly unwarranted invasion of personal privacy), and/or (b)(7)(C) (records the disclosure of which could reasonably be expected to constitute an unwarranted invasion of personal privacy) has been redacted.

Two other responsive records have been withheld in their entirety because the records are covered by one or more of FOIA exemptions (b)(5) (pre-decisional deliberative agency records) and/or (b)(6) (records the disclosure of which would constitute a clearly unwarranted invasion of personal privacy).

If you are not satisfied with my decision, you may appeal to the Assistant Inspector General for Legal, Legislative, and External Affairs, Ken Chason, by writing to him at the National Science Foundation, 4201 Wilson Boulevard, Arlington VA 22230. Alternatively, you may appeal directly to the General

Counsel of the Foundation, at the same address.¹ If you wish to appeal to either the Assistant Inspector General or the General Counsel, you must file your appeal within ten business days of receipt of this letter. If you submit an appeal to the Assistant Inspector General and his decision is negative, you may then appeal to the General Counsel. All appeals will be acted on within 20 business days after receipt.

For your information, Congress excluded three discrete categories of law enforcement and national security records from the requirements of the FOIA. See 5 U.S.C. § 552(c) (2006 & Supp. IV (2010)). This response is limited to those records that are subject to the requirements of the FOIA. This is a standard notification that is given to all our requesters and should not be taken as an indication that excluded records do, or do not, exist.

Sincerely,

A handwritten signature in black ink that reads "Stephen W. Bross". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

Stephen W. Bross, J.D.
Investigative & FOIA Attorney

Enclosures

¹ For appeals to NSF's General Counsel, note the requirements of 45 C.F.R. § 612.9(a): "You must make your appeal in writing and it must be received by the Office of the General Counsel within ten days of the receipt of the denial (weekends, legal holidays, and the date of receipt excluded). Clearly mark your appeal letter and the envelope 'Freedom of Information Act Appeal.' Your appeal letter must include a copy of your written request and the denial together with any written argument you wish to submit."



National Science Foundation • 4201 Wilson Boulevard • Arlington, Virginia 22230
Office of the Inspector General

March 18, 2010

To: Cora B. Marrett, Acting Deputy Director
From: Peggy L. Fischer, Assistant Inspector General for Investigations
Subject: Selection Process for [REDACTED] Division Director

We received several allegations that an NSF Assistant Director (the AD),¹ a temporary NSF employee hired through the Intergovernmental Personnel Act, has participated in the selection of a Division Director (DD)² for the division that determines funding to the AD's home institution (the Institution),³ thereby creating a conflict of interests (COI). Both before the selection process began and in its final stages the AD sought advice from the NSF Designated Agency Ethics Official (DAEO) about his participation in the hiring process of a senior executive with oversight responsibility of the Institution. The AD acted contrary to the DAEO's clear advice.

These circumstances raise concerns both about violation of COI laws and regulations and NSF policies, and potential weaknesses in NSF processes. In this memo, we address the facts only as they relate to NSF processes designed to prevent or mitigate COI. We will separately address any potential violation of conflicts laws and regulations.

Based on our process review, we recommend that:

- NSF evaluate its process for the selection of this DD, and assess if there is a need to implement a process to mitigate any potential appearance of, or actual, COI issues created by the AD's role in hiring the selected candidate for DD; and
- NSF revise Manual 14 to include explicit instructions requiring IPA's with selection authority to seek advice from the DAEO regarding participation in any hiring that raises potential conflicts. NSF should consider implementing mechanisms to ensure that HRM can conduct hiring actions consistent with DAEO advice.

Thank you for your consideration. If you have any questions or require additional information, please contact me at extension 4889 or at pfischer@nsf.gov. Please advise me by April 18, 2010, of the status or results of the administrative resolution of this matter.

¹ [REDACTED] is the Assistant Director of the [REDACTED] Directorate.

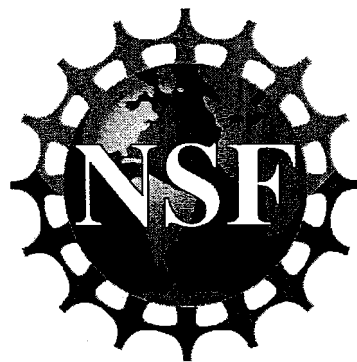
² The Division of [REDACTED] now the Division for [REDACTED] ([REDACTED]).

³ The AD was Director of the [REDACTED] which is funded through [REDACTED]

Enclosed on CD: Memorandum and Appendices

Copy: Allison Lerner, Inspector General
 Lawrence Rudolph, General Counsel
 Karen Santoro, Designated Agency Ethics Official
 Anthony Arnolie, Director, Office of Information & Resource Management
 James Lightbourne, Office of the Director's Liaison to OIG

National Science Foundation Office of Inspector General



Confidential Memorandum Case Number A-10010009

03/18/2010

Please note this report contains confidential personal information, and it should be disclosed only to individuals who must have knowledge of its contents to facilitate NSF's assessment and resolution of this matter. Unauthorized disclosure may result in personal criminal liability under the Privacy Act, 5 U.S.C. § 552a(i)(1).

Context:

We received several allegations that an NSF Assistant Director (the AD),¹ a temporary NSF employee hired through the Intergovernmental Personnel Act, participated in the selection of a Division Director (DD)² for the division that determines funding to the AD's home institution (the Institution),³ thereby creating a conflict of interests.

The AD previously served as the Director of the Institution, which receives the vast majority of its funding through the federal government, primarily from NSF. The AD's Directorate, into which the DD is being hired, provides the majority of the NSF funding to the Institution.

According to news reports, when the AD was hired by NSF, he resigned his position as Director of the Institution (although continuing to remain an employee of that Institution), and NSF put procedures in place to manage his perceived conflicts and to ensure he would not participate in or influence the selection of grants to the Institution. Congress expressed interest and concern about these procedures.⁴

We reviewed relevant documents and emails and interviewed the Designated Agency Ethics Official (DAEO)⁵ to evaluate both the allegations and to understand NSF's process of providing and acting on DAEO's advice. Below we summarize the regulatory and policy framework and discuss in detail the events that led to our conclusions and recommendations.

NSF's Regulatory and Policy Framework for Addressing Potential Conflicts of Interests:

We found several regulations and policies applicable to the circumstances described above. Relevant materials are found in:

- Executive Order 12731 of October 17, 1990—*Principles of Ethical Conduct for Government Officers and Employees*,
- 5 C.F.R. PART 2635—*Standards of Ethical Conduct for Employees of the Executive Branch*,
- NSF's Manual 15, *Conflicts of Interest and Standards of Conduct*, and
- NSF's Manual 14, *Personnel Manual*.

Below is a description of the applicable materials from these documents.

¹ [REDACTED] is the Assistant Director of the [REDACTED] Directorate (the Directorate).

² The Division of [REDACTED] ([REDACTED]), now the Division for [REDACTED] ([REDACTED]).

³ The AD was Director of the [REDACTED], which is funded through [REDACTED].

⁴ Appendix A.

⁵ Karen Santoro is NSF's DAEO.

Executive Order 12731

NSF employees, including, special government employees, are federal employees and as such have certain duties. As stated in Executive Order 12731 of October 17, 1990 – “Principles of Ethical Conduct for Government Officers and Employees,” those duties include:

To ensure that every citizen can have complete confidence in the integrity of the Federal government, each employee⁶ shall respect and adhere to the fundamental principles of ethical service as promulgated under sections 201 and 301 of this order. . . . [Part 1, Section 101]

In turn, §101 (n) states:

Employees shall endeavor to avoid any action creating the *appearance* that they are violating the law or the ethical standards promulgated pursuant to this order. [Emphasis added].

5 C.F.R. PART 2635—Standards of Ethical Conduct for Employees of the Executive Branch

These Standards provide further guidelines for federal employees.⁷ Specifically, with regard to business relationships, 5 C.F.R. § 2635.502 *Personal and business relationships* states:

- (a) *Consideration of appearances by the employee.* Where an employee knows that a particular matter involving specific parties is likely to have a direct and predictable effect on the financial interest of a member of his household, or knows that a person with whom he has a covered relationship is or represents a party to such matter, and where the employee determines that the circumstances would cause a reasonable person with knowledge of the relevant facts to question his impartiality in the matter,⁸ the employee should not participate in the matter unless he has informed the agency designee of the appearance problem and received authorization from the agency designee in accordance with paragraph (d) of this section.

⁶ “Employee means any officer or employee of an agency, including a special Government employee.” Sec. 503 (b) of E.O. 12731.

⁷ 5 C.F.R. § 2635.102(h): *Employee* means any officer or employee of an agency, including a special Government employee. It includes officers but not enlisted members of the uniformed services. It includes employees of a State or local government or other organization who are serving on detail to an agency, pursuant to 5 U.S.C. 3371, *et seq.*

⁸ To date, several NSF employees “with knowledge of the relevant facts” have come forward to both the DAEO and NSF OIG to question the AD’s impartiality in this matter.

NSF's Manual 15, *Conflicts of Interest and Standards of Ethical Conduct*

This Manual⁹ contains NSF-specific guidance on conflict of interests and standards of conduct

[NSF employees] and the NSF should avoid or minimize actual or **apparent** conflicts of interest for two principal reasons.

(1) The success of the NSF in performing its functions depends on the effectiveness of its decision-making processes. If judgments are warped or biased because of conflicting interests, that effectiveness is compromised.

(2) The NSF must earn the confidence of the scientific, engineering, and educational communities, of the Congress, and of the general public in the integrity, effectiveness, and evenhandedness of its decision-making processes. It will not do so if these processes are seen to be compromised by conflicts of interest.¹⁰ [Emphasis added]

We note that NSF Manual 15 contains no advice, restrictions, or process by which the DAEO can formally evaluate, or restrict an individual's role in a hiring process or communicate this information to the relevant branches in HRM.

NSF's Manual 14, *Personnel Manual*

NSF Manual 14 asserts that NSF employees are responsible for knowing all statutes and implementing regulations relating to their NSF position¹¹ and contains copious information about the process for hiring and selection of new employees.¹² It does not contain any advice or instruction on whether and how hiring officials should seek advice about potential or actual conflicts of interests and recusals. Further it provides no process for the DAEO, as a representative of the Office of Government Ethics and the client agency, to ensure that such conflicts are managed or eliminated in order to ensure the integrity of the agency hiring practices.

Conflicts of Interests Procedures

Conflicts of Interests (COIs) procedures are typically set up to ensure that an objective, third party can review and suggest restrictions on activities to avoid or mitigate conflicts of interests. NSF requires each grantee institution to have

⁹ NSF Manual 15, *Conflicts of Interest and Standards of Ethical Conduct*, (July 2007).

¹⁰ Manual 15, §2 (b).

¹¹ Chapter I, Personal Management Policy, Section 143, "NSF Employee Conduct," (June 19, 1996)

¹² Chapter II, Employment: Section 150 "Appointment/Approval Process for Excepted Position Actions," Section 250 "Competitive Recruitment Procedures," and Section 260 "Applicant Inquiries" (September 20, 1991).

policies and procedures in place to address PI financial conflicts of interest,¹³ NSF's procedure generally has three key steps: disclosure, objective evaluation, and enforcement. These steps are found in NSF's requirements that:¹⁴

- "An institutional conflict of interest policy should require that each investigator disclose to a responsible representative of the institution all significant financial interests of the investigator,"
- "An institutional policy must designate one or more persons to review financial disclosures, determine whether a conflict of interest exists, and determine what conditions or restrictions, if any, should be imposed by the institution to manage, reduce or eliminate such conflict of interest,"¹⁵
- "The institutional policy must include adequate enforcement mechanisms, and provide for sanctions where appropriate," and
- "The institutional policy must include arrangements for keeping NSF's Office of the General Counsel appropriately informed if the institution finds that it is unable to satisfactorily manage a conflict of interest."

NSF requires that each submitting Institution certify on the cover page of each NSF proposal that it has a system to manage conflicts consistent with its policy.

NSF itself has extensive internal protections for managing the financial conflicts associated with IPAs making programmatic funding decisions that adhere closely to the disclosure and advice model above.¹⁶ Further, all NSF employees are required to disclose, on an annual basis, their financial holdings that may pose conflicts of interests. These disclosures are objectively evaluated by the DAEO and her staff, who provide advice based on their evaluations.¹⁷ Individuals who fail to adhere to this advice, and whose interests are subsequently deemed to be conflicts of interests can be subject to action under the federal conflict of interest laws. The DAEO may refer potential violations of conflicts laws to the Office of Inspector General for investigation and potential referral to the Department of Justice. Here NSF adheres to the disclosure, objective evaluation, and enforcement model.

¹³ *Proposal and Award Policies and Procedure Guide* (Guide), Part II "Award & Administration Guide (AAG)," Chapter IV, "Grantee Standard", Section A "Conflict of Interests Policies." (January 2010).

¹⁴ Bullets drawn from *Guide*, Part II, AAG, Chapter IV, Sections A (2), A (4), A (5), and A (6).

¹⁵ One of the examples of conditions NSF provides is "disqualification from participation in the portion of the NSF-funded research that would be affected by significant financial interests," *Guide*, Part II AAG, Chapter IV, Section A (4)d.

¹⁶ As described on p. 4 (and Appendix B), the AD has substantive conflicts with the Institution and his NSF position. NSF is apparently managing these financial conflicts by ensuring the AD does not make funding decisions regarding the Institution. We note the AD has attended his required annual COI briefing as well.

¹⁷ See NSF Manual 15.

Similarly, NSF has extensive protections to ensure that reviewers (*ad hoc* and panel) are aware of COI issues and disclose them to Program Officers (POs) so that they can be evaluated and decisions enforced (the typical evaluation centers on whether or not a reviewer can provide an objective assessment of a proposal or must be recused). For *ad hoc* reviewers, NSF guidance states:

If you have any relationships with the organization or the persons submitting this proposal, please consider whether they could be construed as creating a conflict-of-interest for you. Please describe in your own words any relationship that might be so construed, in separate correspondence that should be included when you submit your review. Regardless of any such relationships, we would like to have your review unless you believe that you cannot be objective.¹⁸

For Panel reviewers, POs are required to "ensur[e] that, before serving on the panel, each panelist has signed NSF Form 1230P, 'Conflict-of-Interests and Confidentiality Statement for NSF Panelists.' This includes people who submit an independent review for only one proposal and also participate in the panel discussion only for that one proposal. They must sign Form 1230P and are subject to the same conflict-of-interest rules as reviewers who participated in the whole panel."¹⁹ At the beginning of the panel meeting, POs are to apprise panelists of the potential for conflicts-of-interest by reading the following statement:

"If, when we come to consider any particular proposal, you recognize that you have a relationship with the organization or persons submitting the proposal that could be construed as creating a conflict-of-interest, please let me know. I'll ask you to describe the relationship in your own words and will determine from your description what to do about the situation. You must not participate in reviewing any application in which you or a member of your immediate family or any organization of which you are or may become a part has a financial interest. Otherwise, we'll often just make a note in the file to consider when making final recommendations."²⁰

At the beginning of each panel meeting, POs are warned that they are to remind panelists of NSF conflict-of-interest rules. The POs record their evaluations of any disclosures on the NSF Review Record. The Record can be annotated with a "C" to indicate a reviewer possessed, in the PO's evaluation, a "disqualifying

¹⁸ *Proposal and Award Manual*(PAM), NSF Manual 10, Chapter V, "Merit Review Process, Part C., "Information for Reviewers", 2. "Identifying Reviewers' Conflicts and Maintaining Confidentiality", a, "Ad Hoc Reviewers."

¹⁹ PAM, NSF Manual 10, Chapter V, "Merit Review Process, Part C., "Information for Reviewers", 2., "Identifying Reviewers' Conflicts and Maintaining Confidentiality", b., "Panel Reviews," (1).

²⁰ PAM, NSF Manual 10, PAM, NSF Manual 10, Chapter V, "Merit Review Process, Part C., "Information for Reviewers", 2. "Identifying Reviewers' Conflicts and Maintaining Confidentiality", b, "Panel Reviews," (3).

conflict-of-interest (COI) based on NSF Manual 15, *NSF Conflicts of Interest and Standards of Ethical Conduct*.²¹ With regard to *ad hoc* reviewers, NSF again adheres to the disclosure, objective evaluation, and enforcement model.

OIG Evaluation of the Events²²

The hiring events described below took place over the course of 11 months. In April 2009, the AD asked the DAEO for advice about the extent to which he could participate in the selection of an SES employee, a Section Head (SH), who would have oversight of awards to the Institution. He noted, by name, the current SH's plans to retire. In response to his April email, the DAEO told the AD,²³

I do not think the Foundation could overcome the perception that your involvement would result in a hire that would manage the [Institution] awards in the manner that benefits your home institution rather than the Government. You should stay away from this.

Shortly after the AD received this advice, the Directorate initiated a search to fill a DD position that supervised the SH. The DD also has responsibilities for funding decisions made to the Institution. Although we could not find documentary evidence that the AD sought the DAEO's opinion on the appropriateness of his involvement in the DD selection, it would appear the DAEO's advice with respect to the SH hire would reasonably apply to the AD's role in selecting the DD. This is a reasonable conclusion given that the DD also has responsibility for funding decisions made to the Institution, and the potential for the perception that involvement by the AD in the hire of an individual responsible for funding the Institution was self-serving.

As can be seen from the Table in Appendix B, the AD was directly involved in the months' long search and evaluation of candidates for the DD position, as well as the ultimate selection of the new DD. In addition, HRM designated the AD as the selecting official. HRM was not advised by the AD that there was any reason he should not be the selecting official and was not aware the DAEO had advised the AD to stay away from a similar hire to avoid a perceived COI.

In late January 2010, after the AD had contacted his preferred candidate and reference checks were initiated,²⁴ the DAEO received concerns about the AD's role in the hiring process. The DAEO subsequently informed the AD she had received

²¹ PAM, NSF Manual 10, Chapter VI "Processing Proposals at the Program, Division and Directorate", B. "Documentation in Proposal Files", 4., "Review Record", C. Procedures, 2. "Proposal Reviewed/Not Reviewed/Conflict-of-Interest".

²² A Table summarizing the emails referred to in this summary is found at Appendix B.

²³ The AD's query and the DAEO's response are Appendix B, Tab 1.

²⁴ Appendix B, Tab 9.

these complaints and she reminded him of the appearance problem presented by his participation in the selection process saying:²⁵

I wish to reiterate directly to you my prior advice, i.e., that you refrain from any involvement whatsoever in this selection. . . . I believe your involvement in any part of the selection process while you are an IPA detailee from [the Institution], including communications with actual or prospective candidates about the position, would raise concerns and questions regarding the integrity of the Foundation's program or operations, and might be perceived as benefitting your home institution.²⁶

The AD asked the SH to follow up with the DAEO and explain the selection process.²⁷ Much of the SH's explanation focused on minor details of the candidate interviews such as the number of questions and the length of the interviews. Parts of the SH's explanation are unclear, incomplete, and appear incorrect. For example,

- The SH said he told the AD he "had to accept the recommendation of the teams [evaluation panels] without knowing anything about the candidates that were considered. [The AD] was provided with a summary of the strengths and weaknesses of the recommended candidates, only. [The SH] noted to [the AD] if he wanted additional information about the field of candidates, it would be provided, but he could no longer be the selecting official." *In reality, HRM identified the AD as the selecting official and provided him with the evaluation panel's results including information on the field of candidates.*²⁸
- The SH's explanation omits any discussion of the AD's active participation in the hiring process. *In reality, the AD interviewed the candidates,²⁹ solicited and evaluated staff feedback,³⁰ and suggested additional candidates for consideration.*³¹
- The explanation also states the AD "remains unaware of the outcomes of the interview process." *In reality, the email traffic preceding this exchange with the DAEO shows that the AD participated in the interviews, made a preliminary selection that was being vetted, and had received feedback on that selection from the NSF Director.*³²

²⁵ Appendix B, Tab 12.

²⁶ As we have noted, the AD's initial (April) request for advice concerned the SH position. In our discussion with the DAEO, she said there may have been some confusion about to which position her April advice was applicable, but her January advice was specifically regarding the selection of a DD in response to concerns she had received about the AD's role in that selection.

²⁷ Appendix B, Tab 13. As can be seen from the email traffic in the Table, the SH and Deputy AD were assisting the AD in his selection process.

²⁸ Appendix B, Tab 3.

²⁹ Appendix B, Tabs 6-7.

³⁰ Appendix B, Tab 8.

³¹ Appendix B, Tab 4.

³² Appendix B, Tab 8.

On the basis of this explanation, the DAEO concurred with the approach being followed as she concluded it was without guidance, recommendation, or selection on the part of the AD. As the above bullets illustrate, our review shows the AD was, in fact, actively involved in each stage of the hiring process.

Shortly after the DAEO's response, the SH responded by clearly stating "[the AD] has selected, in his mind, one candidate as the best fit for the position . . . [, and he would like to contact both] interviewed candidates to discuss *his decision*; meet with [the Division] staff to announce *his decision*; and issue a memo to the [Directorate]" announcing *his decision*. [Emphasis added.]³³ It is clear from this exchange that not only was the AD aware of the outcome of the interview process; he had selected which candidate he wished to fill the DD position and had acted as the selecting official. In response, the DAEO informed the SH and Deputy AD (DAD)³⁴ that in order to address appearance concerns, it was her understanding the DAD would be the selecting official.³⁵ In February 2010, almost 11 months after this process had begun, and after the AD's full involvement from the beginning as the selecting official, the DAD formally forwarded the selection paperwork to HRM.

OIG Conclusions

Given the heightened attention paid to the AD's potential conflicts of interests upon his arrival at NSF, the AD should have been acutely aware of the need to identify and address potential conflicts associated with his role as AD. Under these circumstances, it would have been prudent for him to seek and rigorously adhere to the DAEO's advice regarding any potential such conflicts, including the selection of the DD responsible for funding the AD's home Institution.

Instead, although the AD sought advice from the DAEO on a related hire, he does not appear to have sought her advice on the DD hire, nor did he follow the advice she had given on the related hire, which was clearly applicable to the DD hire. The AD did not recuse himself from the DD selection process, failed to inform HRM that the DAEO had advised him to have no involvement in a similar hire affecting the Institution, and was actively involved in each stage of the DD selection process. When the DAEO, in response to complaints about the AD's role in the DD selection process, advised the AD to have no involvement in the DD hire, the AD failed to inform the DAEO of the significant role he had already played in that hire. In light of the foregoing, it is possible that reasonable people could question the integrity of the DD selection, given the appearance of a conflict of interests raised by the AD's active involvement in that process. The last-minute substitution of the DAD as the selection official does not appear sufficient to mitigate the appearance of a conflict of interests that concerned the DAEO, given the leading role the AD played throughout the DD selection process.

³³ Appendix B, Tab 14.

³⁴ [REDACTED]

³⁵ Appendix B, Tab 15.

Our review of the facts of this case and NSF's processes for the management of conflicts of interests raises a question as to how conflicts of interests that arise in hiring decisions are identified and addressed. NSF does not appear to have written guidance on this subject and in practice appears to rely solely on the conflicted individual's awareness of the possible conflict and self recusal to address such situations. Although this report focuses on one particular hire, the issue of conflicts of interest in hiring decisions is of potentially broader concern for NSF because of its extensive use of IPAs as executives: nearly the totality of NSF research directorate senior management (ADs and DDs) is comprised of IPAs, each with his or her own set of selection official conflicts that must be managed.³⁶ In light of the foregoing, greater clarity on how conflicts of interests in hiring decisions should be handled is warranted.³⁷

Recommendations:

To address any credibility issue within the research community, as well as within NSF, that may have arisen as a result of the AD's involvement in the DD selection, we recommend:

- NSF evaluate its process for the selection of this DD, and assess if there is a need to implement a process to mitigate any potential appearance of, or actual, COI issues created by the AD's role in hiring the selected candidate for DD.

To ensure that all NSF staff understand how to identify and address conflicts of interests that arise in the hiring process, we recommend:

- NSF revise Manual 14 to include explicit instructions requiring those with selection authority to seek advice from the DAEO regarding participation in any hiring that raises potential conflicts. NSF should consider implementing mechanisms to ensure that HRM can conduct hiring actions consistent with DAEO advice.

³⁶ Considering the filled (non-vacant) positions in the seven research directorates (BIO, CISE, EHR, ENG, GEO, MPS, and SBE), NSF has 5/5 (100%) of the ADs as IPAs and 15/21 (71%) of the DDs as IPAs.

³⁷ We note NSF has a similar situation in the Division of [REDACTED] ([REDACTED]) where it recently hired an AD of the [REDACTED] as the Division Director for [REDACTED]—the Division that provides NSF funding to his home institution. The [REDACTED] DD presumably would be the selecting official for Program Officers, including those with oversight authority of his home institution.



National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

JAN 06 2012

To: Cora B. Marrett
Deputy Director

Michael L. Van Woert
Executive Officer/Director NSB Office

From: William J. Kilgallin *William J. Kilgallin 6 Jan 2012*
Acting Assistant Inspector General for Investigations

Subject: OIG Review of the Special Handling of Proposals Submitted by NSB
Members and Nominees (OIG Case No. A11080057)

The Inspector General Act requires the Office of Inspector General (OIG) to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations.¹ Consistent with that responsibility, we are providing this Management Implication Report, which is based on a recent review of how proposals for NSF funding submitted by National Science Board (NSB) members are handled.

This report outlines NSF's current rules pertaining to proposals submitted by NSB members and nominees, the background and results of our review, and recommendations. If you have any questions or wish to discuss these recommendations further, please feel free to contact Dr. Jim Kroll by telephone at 703-292-5012 or email at jkroll@nsf.gov. Please advise me of your actions by February 6, 2012.

cc: Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG

¹ The Inspector General Act of 1978, as amended 5 U.S.C. App. § 2(2).

National Science Foundation
Office of Inspector General



Management Implication Report
OIG Tracking No. A11080057

January 6, 2012

I. Introduction

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations.¹ Consistent with that responsibility, OIG is providing this Management Implication Report.

Our office received information that two proposals² submitted by current National Science Board (NSB) members did not undergo the special handling process detailed in the Proposal and Award Manual (PAM). We reviewed these matters and determined that, while no misconduct occurred, both situations reflected inconsistent and inadequate implementation of the PAM's stated process. Given our findings, we proactively reviewed other proposals submitted by NSB members and similarly found procedural lapses. As discussed below, based on these reviews, we compiled recommendations intended to prevent future such occurrences.

This report outlines NSF's current rules for special handling of proposals submitted by NSB nominees or members. It then summarizes our reviews of NSB member proposals. Last, it recommends ways to ensure special handling of these proposals. We ask that NSF and NSB consider our recommendations, particularly given the current focus on transparency and accountability.

II. Current NSF Policies and Procedures

The PAM, NSF Manual #10, Chapter IV.D.1., details the mandatory process for special handling of proposals submitted by NSB nominees and members.³ Based on PI and Co-PI information, an electronic flag is to be generated⁴ for any NSB nominee or member proposal, to indicate that the proposal requires special handling. The flag is intended to freeze the automated review system to ensure special handling and to signal to the Program Officer (PO) to notify the Directorate's conflicts official and the NSB office. In brief, the special handling procedures for proposals submitted by NSB nominees or members require that:

¹ The Inspector General Act of 1978, as amended, 5 U.S.C. App. § 2(2).

² Within this MIR, we use 'proposal' to mean documents the PIs are required to submit to NSF; we use 'award' to mean funded proposals; and we use 'eJacket' to mean the electronic record of proposal and award documents.

³ Tab 1 contains the relevant pages of the current PAM (effective June 6, 2011). Every PAM archived on Inside NSF contains similar special handling requirements.

⁴ The PAM does not state explicitly how the flag is generated. DIS informed us the PI/Co-PI's information is input to the Proposal and Reviewer System (PARS) which then populates a Conflict of Interest (COI) page on eJacket.

- 1) All new, full proposals submitted by NSB nominees or members, even those generally exempted by PAM Chapter V.B.2.h.-p,⁶ need to undergo external review.
- 2) A substitute negotiator is to be named and no direct contact is to be made with the NSB nominee or member.
- 3) If recommended for an award, the proposal is to undergo Board review,⁷ which is to be documented in a memo from the NSB office and uploaded to eJacket. If recommended for decline, no further special handling is required.

The PAM does not specifically address how to handle proposals submitted by NSB consultants. An NSB member can remain as a consultant after the end of the member's term until replaced by a new member; many choose to do so.

III. Summary of OIG's Review

The NSB office informed us that an NSB member (Member 1), who submitted a proposal before his appointment to NSB, received an NSF award without Board review. It asked us to review the matter. Our review indicated no misconduct occurred in the funding of this proposal and that this situation encompassed a rare case in which an individual was not an NSB nominee when the proposal was submitted but became a nominee late in the proposal review process.

However, in reviewing the above issue, our office became aware of a similar situation involving another NSB member (Member 2), in which a workshop proposal he submitted as Co-PI did not undergo external review before the PO recommended it be awarded. Our review again determined that no misconduct occurred. Specifically, Member 2 had informed the NSB office before submitting the proposal and received erroneous guidance⁸ regarding the proposal's need for special handling.⁹ Once brought to his attention, Member 2 removed himself as Co-PI,¹⁰ after which the award was made. Accordingly no award was made to an NSB member outside of the proper procedure.

Our review of this second issue identified additional matters of concern related to the special handling of NSB members' proposals. First, our interview with the PO called into question PO training on the subject; the PO, who is an IPA, said he did not know about special procedures for proposals submitted by NSB nominees or members.¹¹ He also said that he did not recall whether a flag was present in the original proposal's eJacket, and that even if it had been, he likely would have processed the proposal like any other as he is unclear what the flags indicate. Second, although we could not be

⁶ Tab 1.

⁷ The Board review provides Board members with an opportunity meant to evaluate the merit review process; the Board does not review the proposal for scientific merit.

⁸ Member 2 was told the proposal did not require special review.

⁹ Had the submitter not been an NSB reviewer, the proposal would have been excluded from merit review.

¹⁰ While Member 2 is no longer a Co-PI and his name does not appear on the cover sheet, he is still named a Co-PI on the title portion of the Project Summary page and is still named conference chair. When asked, the PO said the University resubmitted the document and he had not noticed Member 2 was still named Co-PI within the proposal.

¹¹ Indeed, the PO, who said he had been with NSF for approximately a year, said he was not certain what the NSB was.

certain whether the flag was ever present,¹² we noted that when a flag is present for an NSB member, the text states the COI is because he/she is a current NSF employee. No special language indicates his/her NSB affiliation, which is problematic, given the need for special handling of NSB-related proposals. Third, in discussing the matter with employees in the Division of Grants and Agreements (DGA), the NSB office, and the Division of Information Systems, it became clear that though agency employees rely on the correct information being inputted into PARS, there were differences of understanding as to who is responsible for inputting this information and at what point in the process the information is to be uploaded.

Based on our findings, we examined additional proposals submitted by current Board members to see if there were systemic issues related to the handling of NSB member proposals. We reviewed eJacket materials for proposals submitted by current NSB members for the past four years or the duration of the member's appointment, if less than 4 years. Of the 20 current NSB members,¹³ eight members had 15 proposals meeting our criteria.¹⁴ Of these eight members, policies regarding special handling of NSB member proposals were not followed for nine proposals. We identified the following:

- One current NSB member's name does not trigger a flag indicating the need for special handling.
- The eJackets for four submitted proposals do not include the requisite substitute negotiator letter.
- A PO made direct contact with an NSB Member, despite there being a substitute negotiator identified in eJacket materials.
- The eJacket of an NSB Member's award lacked documentation of Board review.

We have included a chart detailing these findings in Tab 2. Our review indicated systemic problems related to the handling of NSB members' proposals.

IV. Conclusion and Recommendations

Based on the review detailed above, we recommend that NSF and NSB work together to take actions to ensure that appropriate special handling processes for NSB members are identified and adhered to. Such actions include:

1. Standardizing the process for inputting NSB member affiliation into PARS. Because the PO and DGA rely on these flags, entering the flag into the system consistently and promptly would ensure proper processing of a proposal by even a recent NSB nominee or member;
2. Creating a unique COI flag indicating NSB affiliation in PARS to differentiate NSB members from other current employees. This flag, like others, should auto-populate into eJacket;
3. Ensuring that the proposed NSB flag generates a link to the appropriate PAM section on eJacket's COI page, making it simple for POs to locate the correct procedures for handling

¹² No flag is currently required as Member 2 is no longer a named PI or Co-PI.

¹³ Current as of October 25, 2011.

¹⁴ Member 1 is included as one of these eight members.

proposals submitted by NSB nominees and members. This would assist POs, who might be unfamiliar with the special handling procedures, to easily find the appropriate reference;

4. Identifying an individual official responsible for inputting the COI flag into PARS and ensuring that he/she actually performs this function;
5. Creating a compliance checklist for proposals submitted by NSB nominees and members within eJacket to assist the POs and DGA. Because NSB nominees and members as a whole submit few proposals, the related policies may be unfamiliar to the cognizant PO and DGA official. This compliance checklist would auto-populate into eJacket for relevant proposals and would need to be complete before the recommendation to award can be forwarded to DGA;
6. Requiring NSB nominees and members to inform the NSB office before submitting a proposal; the information provided should include the solicitation number and the name of the cognizant PO.¹⁶ The NSB office should then proactively contact the cognizant PO and inform him/her of the NSB affiliation and how to process the proposal;
7. Identifying all current awards to NSB members. NSB should review each award to determine if and how the process deviated from expected procedures. If a deviation is identified, we recommend it take appropriate remedial action;
8. Determining whether the PAM process for special handling of proposals by NSB nominees and members applies to NSB consultants. If it is decided that proposals by NSB consultants are to follow the same procedure, NSF should enact language and processes to that effect in the PAM; and,
9. Consulting with current Board members and determining any additional actions necessary to ensure the special handling processes are followed.

If you have any questions or wish to discuss these recommendations further, please feel free to contact Jim Kroll at 703-292-5012 or jkroll@nsf.gov. Please advise me of your responses to these recommendations by February 6, 2012.

¹⁶ The NSB office informed us that, even when it is informed that a member is submitting a proposal, determining the appropriate PO is often challenging.

NATIONAL SCIENCE FOUNDATION

4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



OFFICE OF
INSPECTOR GENERAL

OCT 31 2008

To: Anthony Arnolie
Director, OIRM/OAD

From: Dr. Peggy Fischer *Peggy Fischer*
Associate Inspector General for Investigations

Subject: Violations of NSF's Computer Use Policies Erodes Professional Workplace

Please note: This report contains confidential personal information and it should be disclosed only to individuals who must have knowledge of its contents to facilitate NSF's assessment and resolution of this matter. Unauthorized disclosure may result in personal criminal liability under the Privacy Act, 5 U.S.C. § 552a(i)(1).

The purpose of this memorandum is to notify you of information identified during the course of a number of investigations we recently conducted involving individual NSF employees found to have violated NSF computer use policies. While we have previously notified you of the individual misconduct of four NSF employees,¹ I feel it is also important that the inappropriate interaction between these employees and questions concerning numerous other individuals both inside and outside NSF, be brought to your attention. By reviewing the emails of just these four individuals, we were able to identify a significant amount of pornographic material that has been shared within NSF. Some of these emails date from May 1999, and others are as recent as September 2008. We have not conducted a complete link analysis to determine the full extent of inappropriate exchanges beyond the four individuals at NSF. Rather, we examined the exchanges by the four individuals to highlight to NSF management how potentially pervasive such misconduct may become in the absence of effective and proactive management measures to establish and continually reinforce a completely professional workplace environment.

¹ [REDACTED] OIG-I-08010004; [REDACTED]
[REDACTED] OIG-I-08020014; [REDACTED] OIG-I-08050035; [REDACTED]
[REDACTED] OIG-I-08040025.

Background

Recent OIG investigations determined that the four NSF employees circulated and shared sexually explicit material with one another, with other NSF employees and contractors,² and with unknown individuals outside NSF via email exchanges, using NSF IT resources in clear violation of NSF policy. The email communications between these employees show the ease with which they passed offensive images and videos between themselves and the confidence they felt that no one would make any effort to monitor their inappropriate use of NSF computer systems.

Evidence

Our investigations uncovered a 2002 email from NSF employee [REDACTED] to NSF employees [REDACTED] and [REDACTED], as well as a number of non-NSF employees.³ The subject of the email was: "R. Kelly picsXXX", which contained sexually explicit images in the attachment. We also found that [REDACTED] forwarded a 2006 email from his NSF account to the email address [REDACTED].⁴ That email was originally sent by NSF employee [REDACTED] in 2004 to [REDACTED] and seventeen others, including NSF employees [REDACTED], [REDACTED], [REDACTED], and [REDACTED]. The subject was "You gonna love this – caution!!!" It contained a weblink and a note that read, "You can thank me later, open with caution!!! Open alone/in private!!!!."

We also found a 2004 email from NSF employee [REDACTED] to eleven individuals, including NSF employees [REDACTED], [REDACTED], and [REDACTED]. [REDACTED] forwarded the same email to NSF employee [REDACTED] [REDACTED] forwarded the email to the address [REDACTED]. The subject line of the email was "ASS4DAZ".⁵ It contains 21 sexually explicit images. [REDACTED] had also saved eight separate emails,⁶ each containing sexually explicit

²

³ Attached at Tab 1. Copy of email with 5 sexually explicit images included.

⁴ Attached at Tab 2. Website link identified in email is no longer valid.

⁵ Attached at Tab 3. Copy of email with 21 sexually explicit images included.

⁶ Attached at Tab 4. Emails found in [REDACTED] stored email folder included: 1) Email from [REDACTED] Subject: Garcelle Beauvais playboy August 2007 from the Jamie Foxx show (includes 6 sexually explicit images); 2) Email from [REDACTED] Subject: Candice Jai (includes 11 sexually explicit images); 3) Email from [REDACTED] Subject: remember this? (includes 1 sexually explicit video file); 4) Email from [REDACTED] Subject: FW: Believe it or not #2 (includes 1 sexually explicit video file); 5) Email from [REDACTED] Subject: FW: Open in private! (includes 1 sexually explicit video file); 6) Email from [REDACTED] Subject: FW: test (includes 20 sexually explicit images); 7) Email from [REDACTED] Subject: test 2 (includes 31 sexually explicit images); and 8) Email from [REDACTED] Subject: Air Zoom (includes 17 sexually explicit images).

images and videos⁷, which were sent to [REDACTED] from various NSF employees, including [REDACTED], [REDACTED], [REDACTED], and [REDACTED].

One of the emails sent from [REDACTED] to [REDACTED] was also sent to NSF employees [REDACTED] and [REDACTED]. This 1999 email, with the subject title "FW: Open in private!", contained a sexually explicit bestiality video involving a woman and a dog.

Similarly, our review of email correspondence belonging to NSF employee [REDACTED] identified a 2008 email sent from a NSF employee [REDACTED], titled "Never get that drunk."⁸ It included 3 sexually explicit images. We also found that [REDACTED] sent a 2005 email,⁹ containing a sexually explicit video to NSF employee [REDACTED]. The subject of this email was "The Janet Video ***Open carefully***".

In addition, our review of email correspondence belonging to [REDACTED] resulted in the identification of three additional inappropriate emails, all sent in 2008, from NSF employee [REDACTED] to [REDACTED]. The subject of the first¹⁰ was "Luv2Lick" and contained 8 sexually explicit images; the second,¹¹ "The Tryout XXX", contained a sexually explicit video; and the third¹² contained yet another sexually explicit video, entitled "Subway BJ."

The activity of exchanging sexually explicit material appears to have been a long standing practice amongst these NSF employees. We found such emails dated as far back as May 1999 and as recently as September 2008. The behavior of these NSF employees appears to have ceased only when one of them became the subject of an OIG investigation.

NSF Policy Analysis

Pursuant to NSF policy regarding *Personal Use of NSF's Technology and Communication Resources* contained in NSF Bulletin 04-11 ("NSF's Personal Use Policy"),¹³ NSF staff members are authorized to use NSF technology and communication resources for occasional personal use. However, this policy creates express limitations on personal use, citing the Federal CIO Council's 1999 Model Policy/Guidance on "Limited Personal Use" ("Model Policy"),¹⁴ for examples of inappropriate uses.

According to Section IV of the Model Policy:

"Employees are expected to conduct themselves professionally in the workplace and to refrain from using government office equipment for activities that are inappropriate. Misuse or

⁷ Copies of the sexually explicit videos are not provided with this memorandum. OIG maintains copies if needed for administrative purposes by management.

⁸ Attached at Tab 5. Copy of email with 3 sexually explicit images included.

⁹ Attached at Tab 6. Email included 1 sexually explicit video file.

¹⁰ Attached at Tab 7. Copy of email with 8 sexually explicit images included.

¹¹ Attached at Tab 8. Email included 1 sexually explicit video file.

¹² Attached at Tab 9. Email included 1 sexually explicit video file.

¹³ See Tab 10. Copy of NSF Bulletin 04-11 and the current revised policy, NSF Bulletin 08-18, Personal Use Policy for NSF Technology and Communication Resources.

¹⁴ See Tab 11. Copy of Federal CIO Council's 1999 Model Policy/Guidance on "Limited Personal Use"

inappropriate use of government office equipment includes ... Using government office equipment for activities that are illegal, inappropriate, or offensive to fellow employees or the public ... and ... the creation, download, viewing, storage, copying, or transmission of sexually explicit or sexually oriented materials.”

NSF Information Technology Security training includes a section called “User Responsibilities-Rules of Behavior.”¹⁵ NSF users agree to comply with the rules, one of which states:

“I understand that NSF IT resources, including e-mail accounts, are for authorized Government use only and in accordance with NSF policy, any activity that would discredit NSF, including seeking, transmitting, collecting, or storing defamatory, discriminatory, obscene, harassing, or intimidating messages or material is not permitted.”

Breach of Ethical Conduct Rules and Regulations¹⁶

The NSF Personnel Manual states that:

NSF employees are expected to adhere to basic standards of integrity and decency. NSF employees must not engage in criminal, dishonest, immoral or any other conduct that is prejudicial to the Government. (Section 143)

The Principles of Ethical Conduct for Government Employees states, in pertinent part:

Employees shall endeavor to avoid any actions creating the appearance that they are violating the law or the ethical standards promulgated pursuant to this order. (Executive Order 12674 (n)).

These principles are embodied in NSF Manual 15, Part I, Section 3 and Section 14.

Ethics regulations promulgated by Office of Government Ethics state:

An employee shall use official time in an honest effort to perform official duties. (OGE Regulations, 5 CFR Section 2635.705)

This regulation is embodied in NSF Manual 14, Part V, Section 56(d).

OIG Recommendations

OIG has provided NSF management with a series of Reports of Investigation on individual employee misconduct such as that described in this Memorandum. We have also brought to NSF's attention the related systemic policy issues in two Management Implication Reports. This memorandum does not attempt to fully investigate any individual misconduct. Rather, it addresses the broader management challenges presented by such misconduct and notes the

¹⁵ See Tab 12. Copy of NSF IT Security “User Responsibilities-Rules of Behavior.”

¹⁶ These provisions do not apply to the two identified NSF contractors.

corrosive effect such misconduct has upon NSF's efforts to create and maintain a professional workplace environment. Management needs to take more effective measures to establish and maintain a professional workplace in NSF and take affirmative, vigorous, and visible steps to detect and eliminate such misconduct throughout the workplace.¹⁷

In our review of selected e-mails we identified a group of NSF employees who abused NSF's computer systems over an extended period of time. Through that review we also identified a number of other employees and contractors who may also be violating NSF's policies regarding the personal use of NSF's IT resources.¹⁸ Of the twenty-one NSF employees and two NSF contractors discussed in this Memorandum, over half work or worked in [REDACTED]. Whether or not a thorough link analysis would indicate how many of these employees were participating as a group in this behavior over an extended period of time, the investigative results to date are sufficient to show that this inappropriate behavior by a group, groups, or individuals warrants close attention by management. There is a demonstrated willingness on the part of some NSF employees and contractors to flout NSF regulations, charge NSF for time spent pursuing their prurient interests, and conduct their inappropriate activities – all apparently without fear of detection by management or NSF's computer security systems. NSF's IT policies, as well as its desire for a professional workplace, are undermined by such misconduct in the absence of continual reinforcement by management of its expectations for professional, responsible behavior by its staff.

NSF recently installed internet filters, which was a good first step. While, as noted above, we have not conducted a complete link analysis, there appears to be significant evidence of an undercurrent within NSF in which employees have been able to exchange emails containing sexually explicit material for at least ten years with little fear of detection or disciplinary action. Such conduct adversely affects the professional workplace environment at NSF.

Based upon the above, OIG recommends that:

- a) NSF take steps to determine the scope of any individual's participation in activities deemed to constitute misconduct¹⁹ and determine appropriate administrative actions to be taken;
- b) NSF take steps to ensure management oversight of personal use of computer systems, security systems, and employee training,

¹⁷ We note that a July 2008 MSPB Report, "Alternative Discipline: Creative Solutions for Agencies to Effectively Address Misconduct," identifies measures that may be appropriate to safeguard NSF's workplace environment from this type of activity. They include leave donation to a transfer program in lieu of suspension, community service in lieu of suspension, conducting research on their misconduct and briefing others on such, and public apologies to those affected by the misconduct. Such measures could both deter similar misconduct and demonstrate NSF's commitment to a completely professional workplace. The MSPB report can be found at:

<http://www.mspb.gov/netsearch/viewdocs.aspx?docnumber=373026&version=373689&application=ACROBAT>.

¹⁸ This memorandum is not a report of investigation and is not provided to support administrative action against any of the fifteen additional current NSF employees and two NSF contractors identified herein.

¹⁹ While it is proper for NSF management to inquire into and take action regarding employee misconduct of this type, if criminal misconduct, such as child pornography, is uncovered or suspected it must immediately be reported to OIG.

- c) NSF consider expanding its recently implemented internet filtering software to include email filtering software, and
- d) NSF consider development of a formal policy on alternative discipline,²⁰ and establish a training program thereon, so that managers are aware of these alternatives and can employ them in appropriate situations.

Please notify us of what actions NSF plans to take in response to these recommendations by **December 01, 2008**. I would be happy to talk with you to discuss these issues. If you have any questions, please contact [REDACTED] of my staff at (703) 292-[REDACTED] or [REDACTED]@nsf.gov.

cc: Christine Boesz, Inspector General
Kathie Olsen, Deputy Director, NSF
Joseph Burt, Division Director - OIRM/HRM

²⁰ We note that some measures employed in the past by NSF fall within the description of "alternative disciplinary measures" in the aforementioned MSPB report. We suggest, however, that NSF address alternative measures as distinct from traditional disciplinary measures.



NATIONAL SCIENCE FOUNDATION
OFFICE OF INSPECTOR GENERAL
OFFICE OF INVESTIGATIONS

CLOSEOUT MEMORANDUM

Case Number: I09090058

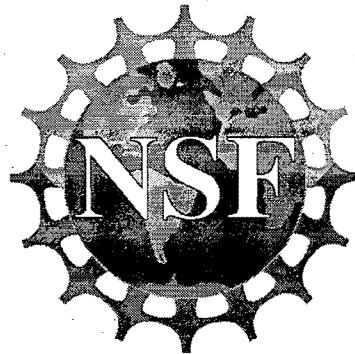
Page 1 of 1

We received an allegation that a NSF graduate research fellow¹ had falsely certified on the fellowship application that she was not delinquent on federal debt. The certification page stated that the certification was required by law to be made in order to receive fellowship funds. Our review determined that the false certification was intentional, but that it was uncertain whether the certification was still a required condition to receipt of fellowship funds. We referred the matter to NSF who concluded that the certification is no longer mandatory, and as a result, amended the certification page. NSF also terminated the fellowship, recovered the unspent fellowship funds, and revised its procedures with regard to submission of an application.

Accordingly, this case is closed.

¹ [redacted]

National Science Foundation Office of Inspector General



Confidential Report of Investigation Case Number I09090058

5 May 2010

This Confidential Report of Investigation is the property of the NSF OIG and may be disclosed outside NSF only by OIG under the Freedom of Information and Privacy Acts, 5 U.S.C. §§ 552 & 552a.

Executive Summary

Allegation The Subject falsely certified on two Graduate Research Fellowship (GRF) applications that she was not delinquent on federal debt. She was awarded the GRF the second time she applied.

The Subject The Subject is a graduate student at the University.

OIG Investigation The certification page of the GRF application states that by law, an applicant for a GRF must certify to non-delinquency on federal debt before NSF is permitted to authorize fellowship funds. The Subject admitted in an interview that she certified to non-delinquency despite having defaulted on a federal loan she received from the Department of Education (DoEd) in [REDACTED]. Upon receipt of the GRF, the Subject self-disclosed to NSF that she had defaulted on the DoEd loan. After a review, we have been unable to determine the origin of the non-delinquency certification and are uncertain whether this certification is still required.

DOJ Assessment DOJ declined to prosecute.

OIG Assessment The Subject falsely certified on her GRF application that she was not delinquent on federal debt.

OIG Recommends OIG recommends that NSF determine what action, if any, is appropriate under the circumstances.

I. Introduction

OIG recommends that NSF consider taking appropriate action regarding a Graduate Research Fellowship¹ (the GRF), awarded to the Subject.² By the terms of the GRF, the Subject, a graduate student at an institution,³ was awarded three years of living expenses plus three years of tuition to be spent over a five-year period. The Subject is currently in the first year of the GRF. This is the first GRF that the Subject has received.

The GRF application's certification page states:

There are three certifications which must by law be made before the National Science Foundation can authorize funds for a fellowship award. These concern 1) controlled substances; 2) delinquency on Federal debt; and 3) debarment and suspension.

The Subject certified to non-delinquency, but in fact she was and is currently delinquent and has defaulted on a guaranteed student loan she received from the Department of Education in [REDACTED]. The evidence indicates that the Subject made this false certification knowingly.

It is unclear to OIG whether any, and if so which, law, rule, regulation, or policy currently requires NSF to mandate that its fellowship recipients certify that they are not delinquent on federal debt. Consequently, OIG recommends that NSF verify the legal necessity and/or desirability of this certification in conjunction with its review of the Subject's specific actions, in order to determine what action, if any, may be appropriate for NSF to take in this matter.

II. Factual Summary

The Subject applied for a Graduate Research Fellowship in [REDACTED]. Although she did not receive a fellowship, according to the GRF Program Director⁴, [REDACTED]

[REDACTED]⁵ The Subject applied again in [REDACTED], and this time received the award.⁶ In both the [REDACTED] and [REDACTED] applications, the Subject checked the certification that stated:

- ☐ I am not delinquent on repayment of any Federal debt.

The top of the certification page states that NSF cannot, by law, authorize funds for a fellowship until this certification is made.

The certification page also contains the following warning regarding false statements:

1 [REDACTED]
2 [REDACTED]
3 [REDACTED]
4 [REDACTED]

⁵ See Program Solicitation, Part III, page 6.

⁶ The [REDACTED] application and award letter are at Tab 1.

By electronically signing this request, I am certifying that the statements made herein are true and complete to the best of my knowledge; and agreeing to accept the obligation to comply with NSF award terms and conditions if the request is granted. Willful provision of false information in this request and its supporting documents or in reports required under an ensuing award is a criminal offense (U.S. Code, Title 18, Section 1001).⁷

It is impossible to submit an application for a GRF without making the required certifications. The applications are electronic, and if the applicant does not check all of the certifications, the applicant receives a message that states: "Certification is incomplete. You must read and agree to all of the terms and conditions below before your application can be submitted."⁸

The Subject was notified on [REDACTED], of her successful application, and began receiving fellowship funds on [REDACTED].⁹

In [REDACTED], the Subject contacted an NSF staff member¹⁰ and apparently stated that she had made the above certification regarding her lack of delinquency in error.¹¹ The staff member then contacted appropriate program personnel so that they could assess the effect of this disclosure on the award. The Subject sent an email to the GRF program on [REDACTED], informing the program of her error.¹² We understand that absent this self-disclosure by the Subject, this information would never have come to light as the program does not verify that the certifications are accurate.

After OIG was informed, we interviewed the Subject by telephone.¹³ She told us that, since [REDACTED], she has struggled to pay back a Department of Education guaranteed student loan of \$[REDACTED]. She stated that the initial reason for her difficulty in repaying this loan had to do with severe health problems¹⁴ that rendered her unable to work and thus unable to make the monthly payments. The loan went into default. The Subject stated that when she got back on her feet, the amount of the monthly payments were more than she could afford, and the loan continued in default. The Subject stated that while she has been making payments over the years, such payments have not been sufficient to satisfy the creditors assigned by the Department of

⁷ The certifications pages for both the [REDACTED] GRF applications, signed by the Subject, are at Tab 2

⁸ See Tab 3 for the email from the GRF Program Director confirming this.

⁹ The GRF, funded at \$121,500, has two components, tuition payments and living expenses. Both components are to be paid for any of 3 years over a 5-year period. Both components are paid by the recipient's University from funds sent to the University by NSF. The Subject's fellowship is \$10,500 in tuition for each of the 3 years, and \$2500 per month in living expenses for these same three years. The Subject is in her first year of GRF and the University pays her \$1250 every two weeks. According to the Subject, she received her first check on [REDACTED], and has received funds every two weeks thereafter, for a total of approximately \$[REDACTED] as of [REDACTED] year. See Tab 4 for the MOI of OIG's telephone interview of the Subject and the MOI of a conversation with the GRF Program Director.

¹⁰ The Subject spoke to [REDACTED] has no involvement in the GRF program, but apparently knows the Subject in another capacity.

¹¹ [REDACTED] has not been interviewed.

¹² This Email is at Tab 5.

¹³ See Tab 4

¹⁴ The Subject told us she had [REDACTED]

Education. Currently, with interest and penalties, the Subject stated that she owes the federal government approximately \$248,000. Subsequently, the Subject provided paperwork that indicates that the loan balance is approximately \$260,000.¹⁵

The Subject stated that she read the certification page on both her [REDACTED] GRF applications. When asked why she certified to non-delinquency, the Subject stated that she did so because she was making some payments on the loan, and was making an effort to pay the loan back. When we asked why she changed her mind about the propriety of making the certification given her efforts to repay, she stated that when she learned she received the GRF in [REDACTED], she looked again at the certification page and felt "uncomfortable". She wanted to be "ethically correct", and so decided to notify the staff member at NSF.

III. Legal Issues

OIG is unable to determine which specific law or regulation, if any, currently requires the certification at issue here.¹⁶ The origin of the requirement appears to be the 1985 version of OMB Circular A-129, and NSF Standard Operating Guidance 1989-01, which is now archived but does not appear to have been rescinded.¹⁷ Since 1988, however, OMB Circular A-129 has not contained language requiring this certification as it applies to all federal awards. Further, the version of OMB Circular A-129 in effect at the time the fellowship was made, and still in effect, contains language that appears significantly more limited in scope, in that it applies only to loan and credit programs. Such programs are different from fellowships.¹⁸ OMB Circular A-110, 2 CFR Section 215.22(h)(2), referenced in Paragraph 22 of the governmentwide Research Terms and Conditions, may provide a basis, but the requirement does not appear mandatory. A brief review of the policies of other federal agencies does not provide clarity, either.

IV. Recommendations

As a result of the ambiguity discussed above, OIG recommends that NSF undertake a fresh review of the current state of the law, regulation, and policy to verify that the federal loan delinquency certification is required, and if not, whether NSF still wishes to require it.

Regarding the Subject, whether or not any law, regulation, or policy actually required the non-delinquency certification, it was nonetheless still a part of the fellowship application that the Subject submitted to NSF and to which the Subject admittedly falsely certified.¹⁹ However, given the uncertainty discussed above, the Subject may have been untruthful about a fact that, as a matter of law and policy, may no longer be a bar to receipt of fellowship funds. As a result, NSF may no longer consider this untruth relevant or material to its fellowship decision. Further,

¹⁵ The Subject provided us with the materials attached at Tab 6.

¹⁶ Neither the NSF Policy Office nor the GRF program knew the source of the requirement.

¹⁷ The SOG is at Tab 7. We have not been able to obtain a copy of the 1985 OMB Circular A-129, but from related documents, we have been able to ascertain that the requirement appears to be contained in Paragraph 6 of the 1985 version of OMB Circular A-129 dated May 9, 1985. Also at Tab 7 is a paper version of the GRF Application where a reference to OMB Circular A-129 appears.

¹⁸ The relevant page addressing loan delinquency from the current OMB Circular A-129 is at Tab 8.

¹⁹ OIG referred this matter to the Department of Justice as a possible violation of 18 U.S.C. §1001, false statements to the federal government, and the Department of Justice declined to prosecute.

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the false certification would not have come to light absent the Subject's self-disclosure. OIG recommends that NSF review the totality of the circumstances surrounding the Subject's actions, in conjunction with its verification of the current state of the law, to determine whether it should take any action regarding the Subject.

V. The Subject's Response to the Draft Report of Investigation

The Subject had no comments to the draft Report of Investigation.

[REDACTED]

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NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

DIRECTORATE FOR EDUCATION AND
HUMAN RESOURCES

Division of Graduate Education

MEMORANDUM

DATE: July 23, 2010

TO: Cora Marrett, Director (Acting)
National Science Foundation

FROM: James Lightbourne, Director
Division of Graduate Education

J. Lightbourne, II
7/23/10

RE: OIG Case Number: I09090058

In its investigation of case number I09090058, the OIG concluded that [REDACTED] a recent recipient of a Graduate Research Fellowship award, falsely certified on her GRF application that she was not delinquent on the repayment of a Federal debt. The OIG recommended that NSF determine what action, if any, is appropriate under the particular circumstances of Ms. [REDACTED]

Because there were legal issues involved in this matter, we met with representatives from OGC to elicit their views on the OIG report. OGC indicated that you had asked them to review whether NSF was required by law to have GRF applicants submit a debt delinquency certification at the time of application, as the certifications page suggests. OGC informed us that NSF was no longer legally obligated to require GRF applicants to complete such a certification. Thus, to dispel any confusion, we have amended the certifications page to eliminate any suggestion that NSF is compelled by law to require such a certification. In the coming months, we also plan to discuss whether continuing to require such a certification of our fellowship applicants is appropriate from a policy standpoint.

With that context, we reviewed the particular circumstances of [REDACTED]'s case to determine what action to take with respect to her award. Ms. [REDACTED] concedes that, at the time of application, she was delinquent on paying back a guaranteed student loan that she had received from the Department of Education in the [REDACTED] time-frame. She indicated that she certified on her GRF application that she was not delinquent because she had been making payments on the loan, and was engaged in a bona fide effort to pay it back. After receiving the

GRF award in [REDACTED] however, she re-reviewed the certifications page, and felt uncomfortable about her certification of no delinquent debt. As a result of her uneasiness, she contacted NSF in [REDACTED] one month after receiving her first installment of the award, to inform us about her mistake.

After extensive deliberation, we have concluded that it is appropriate to terminate the fellowship. It is clear that Ms. [REDACTED] did not provide an accurate response to the question of whether she was delinquent on the repayment of a Federal debt. Had she provided an accurate response at the time of submitting her application, she would not have been eligible to be considered for a GRF award. Thus, to preserve the integrity of the application process, and as a matter of equity, the fellowship will be terminated effective September 1, 2010.

However, we also recognize that Ms. [REDACTED] came forward voluntarily to inform NSF of her false certification. She also cooperated freely with the OIG's investigation. In light of Ms. [REDACTED] actions in this regard, we have opted not to request that Ms. [REDACTED] reimburse NSF for the GRF funds that she has received from NSF up to this point.

We have already notified Ms. [REDACTED] and her home institution about our decision.

We hope that this resolves the matter. Should you have any questions or concerns about the foregoing, however, please do not hesitate to contact me.

James Lightbourne

NATIONAL SCIENCE FOUNDATION
Grant Letter

Award [REDACTED]

PI Name: None, None

Award Date:
Award No.
Amendment No.

July 28, 2010
[REDACTED]
002

Dr. [REDACTED]
President
The [REDACTED]

Dear Dr. [REDACTED]

By letter dated [REDACTED], as amended the sum of \$40,500 was awarded to
The [REDACTED] under the direction of your
coordinating official for support of the project entitled:

"Graduate Research Fellowship Program."

This Amendment supersedes Amendment 001:

This award may no longer be used to support your graduate student, [REDACTED]
[REDACTED] NSF will be terminating her fellowship as of September 1, 2010.
NSF has already communicated this to the fellow.

Except as modified by this amendment, the grant conditions remain unchanged.

The cognizant NSF program official for this grant is Gisele T. Muller-Parker
(703) 292-7468. The cognizant NSF grants and agreements official contact is
Pamela A. Hawkins (703) 292-4814.

Sincerely,

Kathleen C. Baukin
Grants and Agreements Officer

CFDA No. 47.076
[REDACTED]



National Science Foundation • 4201 Wilson Boulevard • Arlington, Virginia 22230

Office of the Inspector General

JUN 04 2010

To: Cora Marrett
Acting Deputy Director

From: Peggy L. Fischer *Peggy L. Fischer*
Assistant Inspector General for Investigations

Subject: Hatch Act Activities in OLPA

I09100061

I. Background

In November 2008, the Office of Inspector General (OIG) received an allegation that two [REDACTED] employees¹ in the Office of Legislative & Public Affairs (OD/OLPA), violated the Hatch Act² as a result of activities undertaken, on official time and using government equipment, in support of then-Senator Obama's presidential campaign. Pursuant to OIG Investigations procedures, we conducted an initial inquiry to assess whether there was sufficient merit to the allegation to warrant referral of the matter to the Office of Special Counsel (OSC). Our initial inquiry suggested that political activity was, in fact, conducted and that such activity may well have been in violation of the Hatch Act. We referred our inquiry to OSC for consideration and investigation.

In December 2009, OSC filed a complaint for disciplinary actions with the Merit Systems Protection Board against one of the two employees, an OLPA [REDACTED]. A press release³, dated December 10, 2009, stated that "an investigation conducted by OSC found evidence that the National Science Foundation (NSF) employee engaged in activity supporting President Barack Obama's 2008 Presidential campaign while he was on duty and in the federal workplace." That complaint is still pending final resolution.

With regard to the second employee, on April 8, 2010, OSC notified an OLPA [REDACTED] [REDACTED] via letter⁴ that its investigation determined he had violated the Hatch Act "by

¹ [REDACTED]

² 5 U.S.C. § 7321 – 7326

³ Tab 1 – 12/10/09 OSC Press Release

⁴ Tab 2 – 04/08/10 OSC letter to [REDACTED] This letter is provided to you for information and determination of whether [REDACTED] conduct may have violated any NSF policy, such as NSF Bulletin No. 08-18, Personal Use Policy for NSF Technology and Communication Resources.

sending partisan political e-mails while on duty and in a federal building.” The letter went on to state that “although [OSC had] concluded that the [REDACTED] engaged in prohibited political activity in violation of the Hatch Act, [OSC had] decided not to pursue disciplinary action.” By way of this memo we are transmitting a copy of the OSC reprimand provided to the [REDACTED] for your review and evaluation for any further action by NSF. We note that when asked, OSC stated that the Merit Systems Protection Board has exclusive authority to determine whether a violation of the Hatch Act has occurred and to impose disciplinary action for that violation (5 C.F.R. § 734.102(a) & (b)). This authority may limit NSF’s abilities to take any further action.

The Office of Legislative and Public Affairs is unique within NSF in its visibility and frequent interaction with Congress, other Federal agencies, state and local governments, and the media. As such, employees within OLPA are exposed to much more political activity in the conduct of their duties. While annual Hatch Act training may be sufficient for the majority of agency employees, the above-referenced recent activities within OLPA suggests that within that office there is a need for regular, additional training and sensitivity for the rules concerning political activities by members of the Executive Branch.

II. Recommendations

We recommend that NSF proactively take steps to strengthen an awareness of what activities are considered inappropriate under the Hatch Act by:

- (a) reviewing Hatch Act training records to ensure all OLPA employees are current with mandatory training;
- (b) prominently displaying Hatch Act provisions⁵ throughout the agency and particularly throughout the OLPA work areas; and
- (c) implementing additional training on Hatch Act provisions for all OLPA personnel.

If you have any questions or wish to discuss these recommendations further, please contact [REDACTED] by telephone at x [REDACTED] or email at [REDACTED]@nsf.gov. Please advise me of your actions with regard to the recommendations for heightened training and any additional actions related to the [REDACTED] by July 6, 2010.

cc: Allison C. Lerner, Inspector General
James H. Lightbourne, Office of the Director’s Liaison to OIG

Attachments:

- 1. OSC press release
- 2. OSC reprimand of [REDACTED]

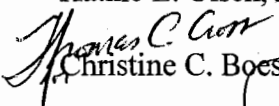
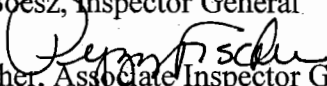
⁵A poster is available at http://www.osc.gov/documents/hatchact/post_hal.pdf

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

28 January 2008



OFFICE OF
INSPECTOR GENERAL

To: Kathie L. Olsen, Deputy Director
Through:  Christine C. Boesz, Inspector General
From:  Peggy L. Fischer, Associate Inspector General, Investigations
Re: Clarification of NSF's Expectation for Proper Scholarship

OIG's experience investigating serious research misconduct cases and the increase in the number of such cases in recent years indicate that revisions to the text of *Grant Proposal Guide (GPG)* Chapter I.D.3 are appropriate to ensure that PIs are fully informed of NSF expectations of scholarship, particularly with regard to data presentation and proposal preparation.

Background

Subjects of our investigations frequently assert to us that text, data, figures, graphs, and images should not be held to the standards of published peer reviewed publications, often viewing them as a private or less formal means of communication. However, proposals are requests for limited federal funding upon which NSF relies on the PI's scholarship to evaluate.

A brief paragraph in *GPG* Chapter I.D.3 discusses NSF's current expectations for proper scholarship and provides useful guidance to PIs as they prepare their proposals. This expectation, with only slight modifications, has been in each proposal guide since 1983.¹ The current language states:

NSF expects strict adherence to the rules of proper scholarship and attribution. The responsibility for proper attribution and citation rests with authors of a proposal; all parts of the proposal should be prepared with equal care for this concern. Authors other than the PI (or any co-PI) should be named and acknowledged. Serious failure to adhere to such standards can result in findings of research misconduct. NSF policies and rules on research misconduct are discussed in the AAG Chapter VII.C, as well as CFR Part 689.²

¹ *Grants for Research and Education in Science and Engineering (GRESE)* NSF 83-57 rev.1/87, page 2.

² *GPG*, NSF 04-23 and its successor document *Proposal and Award Policies and Procedures Guide (Part I - Proposal Preparation and Submissions Guidelines GPG)* NSF 08-1 Chapter I.D.3.

While the *GPG* explains that proper attribution includes identifying any author of the proposal other than the PI, the current guidance is silent concerning the scholarly presentation of data, figures, graphs, and images.

The rules of proper scholarship and the research misconduct regulation extend beyond the scope of appropriate attribution and plagiarism to fabrication and falsification. Over the past 25 years, journals, societies, and researchers have developed increasingly more detailed explanations of proper scholarship. Thus, we are recommending NSF update the *GPG* language to provide additional clarification of proper scholarship with regard to proposals. Our recommendations concern two areas where we have observed the issue arise: data presentation and proposal presentation.

I. Data Presentation

In the past few years, OIG has seen an increase in the number of data fabrication/falsification cases.³ The allegations in a number of these cases have been substantiated as research misconduct, and NSF has taken action against the subjects including: debarments and requirements for certifications, assurances, publication retraction, and ethics training classes.⁴

NSF's current *GPG* guidance does not reflect the results of the research and publishing communities' efforts to establish standards for reporting how data, figures, graphs and images are obtained and processed (Tab A). Research journals have become more explicit about their expectations for data presentation, and some have specifically cautioned researchers about the manipulation of high-resolution images and accurate color representation (Tab B). *GPG* Chapter I.G.1 addresses the mechanics of providing images in proposals based on NSF's abilities to reproduce such images in printed format for reviewers. Accurate reproduction of images for the merit review process is a legitimate concern, which may be remedied to a large extent through electronic review. Indeed, doctored images and data can cause significant diversion of review efforts and precious research resources (Tab C). Modifying *GPG* Chapter I.D.3 to require PIs to provide sufficient detail about the origin and/or manipulation of data presented in any form (e.g., tabular, graphical, photographic) consistent with current standards would allow PIs to present even rough preliminary data in a manner that informs reviewers and facilitates objective funding decisions.

II. Proposal Preparation

Separately, when confronted with allegations of research misconduct, subjects frequently claim that they did not realize that proposals should be prepared with the same care as manuscripts for publication. They also claim they view proposals as private, less formal undertakings. Both claims are, at best, misunderstandings of NSF's expectations for the scholarship expected in written submissions. In the worst cases, the absence of a clearer statement of NSF expectations could be used to excuse intentional behavior. Modifying *GPG* Chapter I.D.3 to equate proposals

³ Such cases include alterations to photos, images produced from scientific equipment, figures, graphs, and numerical data.

⁴ The cases include A03070041, A03040018, A03020009, and A04050037.

with peer-reviewed manuscripts would diminish any misunderstanding on the PIs part by eliminating the perception that a different, lower standard exists for submissions to NSF.

Recommendation:

We recommend that NSF revise the current scholarship language to instruct PIs that proposals are to be prepared with the same care as manuscripts for publication. One potential way to revise the language could be:

NSF expects strict adherence to the rules of proper scholarship and attribution. The responsibility for proper attribution and citation rests with authors of a proposal. Authors other than the PI (or any co-PI) must be named and acknowledged. All parts of the proposal, (e.g. text, data, figures and images) must be prepared with the level of scholarship expected of a published research paper. Serious failure to adhere to such scholarship can result in allegations of fabrication, falsification or plagiarism and findings of research misconduct.

If you have any questions or wish to discuss this recommendation further, please feel free to contact me by e-mail or at extension 4889. Thank you for your consideration. Please advise me of management's response to this recommendation by February 19.

cc: Thomas N. Cooley, Chief Financial Officer and Director, BFA

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230



OFFICE OF
INSPECTOR GENERAL

MAR 19 2009

To: Cora B. Marrett, Deputy Director
From: Peggy L. Fischer, Associate Inspector General for Investigations
Subject: Evaluation of, and Recommendations for Improving, NSF's
Management of the Transit Subsidy Program

Please note: This report contains confidential personal information and it should be disclosed only to individuals who must have knowledge of its contents to facilitate NSF's assessment and resolution of this matter. Unauthorized disclosure may result in personal criminal liability under the Privacy Act, 5 U.S.C. § 552a(i)(1).

BACKGROUND

A Government Accountability Office (GAO) audit¹ noted some Inspectors General had previously reported instances of fraud, waste, and abuse of the federal transit benefits program in their respective agencies. Based on these findings, GAO investigated allegations that federal employees were abusing their transit subsidies. GAO also identified potential, systemic weaknesses that let employees abuse the program. Specifically, GAO found federal employees were fraudulently selling their benefits on websites such as eBay and Craigslist. In addition, GAO found employees were overestimating their transit costs and were either selling the extra Metrochecks or giving them away to family and friends. GAO identified internal weaknesses in several agency programs; these weaknesses include failure to verify employee status and eligibility before issuing Metrochecks, not requiring employees to estimate and certify their commuting costs, and not requiring employees to indicate their home address so commuting costs could be verified.

Applicable NSF Policies

- NSF Bulletin 01-31: Public Transportation Subsidy Program (PTSP) describes how the transit subsidy program operates.

¹ GAO-07-724T, FEDERAL TRANSIT BENEFITS PROGRAM: Ineffective Controls Result in Fraud and Abuse by Federal Workers. This Testimony was released 24 Apr 07.

- NSF Bulletin 01-07: NSF Pre-Tax Parking Benefit Program allows NSF employees to claim both a transit subsidy and pre-tax parking benefits.

OUR METHODOLOGY

We reviewed the GAO report and decided to examine NSF's transit benefit program. We interviewed the program personnel, collected benefit data on all NSF employees participating in the transit benefit program, and analyzed the data for risk factors. Because it was not possible to identify individuals who might be selling Metrochecks from public web pages, we focused on potential overstatement of commuting costs.

We estimate commuting to NSF from any location in Arlington County should not be more than \$54.² It therefore seemed likely that employees claiming significantly more than this amount were overstating their commuting costs, so we reviewed certifications of Arlington County residents who claimed their commuting cost significantly exceeded this amount. We recognize this is not a representative sample of the total program. We selected this sample because it provides a snapshot of how the program operates and because it is a feasible way to find such individuals who are likely taking advantage of the system. It is certainly possible residents living outside of Arlington County may be abusing the system by receiving the transit subsidy but driving to work. However, we have no easy way to verify whether any given individual is actually using public transportation to commute to NSF, so we did not ensure the integrity of claims outside of Arlington County.

We focused on the 18-month time period from January 2006 through July 2007. Thirty-three NSF employees lived in Arlington County and participated in the program during this period. From the sample of 33 Arlington participants, 28 declared their commuting cost was \$72 or more per month. However, many of those 28 individuals who signed up never followed through and received any transit subsidy. Of the ones who did receive the transit subsidy, only 11 individuals received more than \$54/month. We selected 8 of the 11 program recipients who met the above criteria, plus 2 who averaged \$54 or less per month in received subsidies (but who certified their commuting cost was greater than \$54) for a total of 10 participants we planned to interview. We interviewed 5 transit subsidy recipients

² Ballston is located at a Metro Station with a bus hub, so NSF is accessible by public transportation utilizing either subway or bus. During the 18-month period we studied, the one-way bus fare was \$1.35 (transfer between busses is free). The subway fare from most Arlington County Metro stations to Ballston was also \$1.35. Therefore, a round trip to work and back would be \$2.70/day. We used an average of 20 working days per month, for an approximate cost of \$54/month for Arlington County commuters.

from this group of 10 (the other 5 employees left NSF before we completed our data analysis).

WHAT WE LEARNED

Programmatically, we learned NSF was aware of the GAO report and quickly responded to it with several improvements suggested in the report. NSF created and implemented a new certification form that informs benefit recipients the transit subsidy is for the individual's commute to and from NSF, it is not to be used for parking or local travel, even if it is official business, and may not be transferred to anyone else.³ The form asks recipients to categorize their commute expense by type (subway, bus, or vanpool). The form is valid for 3 years or until a change in commute impacts the requested benefit.⁴ During the period of our review, NSF required a photo ID to pick up the Metrochecks. NSF subsequently moved to eliminate Metrochecks and currently requires eligible recipients to participate in the Smart Benefits program, in which the commuter electronically transfers the benefit to a SmarTrip card at a Metro station. The NSF transit program also attempted to verify recipient travel costs, but was prohibited from doing so.⁵

Regarding the five individuals we interviewed,⁶ we learned everyone who met our search criteria was claiming and receiving too much transit subsidy.⁷ Several recipients were using the extra amount for personal transportation costs. Several recipients were using their transit subsidy to cover transportation costs for local trips on official business. Despite the information on some of the certifications, none of the recipients we interviewed told us they knew they were not supposed to use their transit benefits for official travel. None of the recipients knew they could adjust the amount they put on their SmarTrip card at the Metro station to take less than the claimed benefit (for example, if they were on vacation or had taken alternate transportation to NSF). Several recipients said they did not do the

³ The transit program changed the form a couple of times (we found three different versions, including the current version). The current version, NSF 1590 (03/07), available from <http://www.inside.nsf.gov/oirm/das/ssb/ps/ptsp.jsp>, no longer includes the warning that the subsidy can not be used for official travel or for parking.

⁴ The current form (NSF 1590) contains no statement about the duration of the certification.

⁵ The program staff told us it asked for employee addresses to verify the claims on the certification forms, but the employee union argued the program should not have the addresses, as they are private information.

⁶ The summaries of interviews with these five recipients are in the Appendix.

⁷ Note: the two recipients selected who averaged less than \$54/month were among the five that left NSF before we could interview them.

calculations of their commute for their certifications, but asked the program staff to calculate it for them.⁸

CONCLUSIONS AND RECOMMENDATIONS

As noted above, the transit program was aware of the results of GAO's audit and responded by implementing many of its recommendations, such as creating a new certification form, verifying eligibility status and identity before distribution of benefits, and attempting to verify recipient claims. Accordingly, we conclude NSF's process for managing the transit subsidy program is generally effective and efficient. However, we believe several changes will help NSF improve its management and avoid potential abuse of the program.

As noted in the Appendix, three of the five people we interviewed said they did not calculate their monthly subsidy they then certified, but asked the program staff to do it for them. In each case, the certified commute cost was incorrect and overstated, but the program could not independently verify commuting costs because it did not have access to employees' addresses. We question the value of a certification if the individual certifying does not calculate his/her own travel costs. *Therefore, we recommend NSF require recipients to calculate their own commuting costs for the transit certification.*

Furthermore, in keeping with the above recommendation, *we recommend NSF and the Employee Union agree to allow the program to independently verify recipients' certified costs.* To help ensure eligible employees are claiming the correct amount, *we recommend the NSF transit program verify recipients' claims by using their home addresses to validate the estimated travel cost.* The home address should be added to the certification form as requested information. While a federal employee does have a privacy interest in his home address *vis-à-vis* requests under the Freedom of Information Act,⁹ we note the GAO Report identifies (i) a home address as a "critical element" on a transit benefit application, and (ii) five federal agencies that already require such information. Further, GAO used home address information itself to investigate and to report on transit subsidy abuse.¹⁰

We noted that none of the recipients we interviewed were aware of the proper use of the subsidy with regard to official travel; this information was provided on the back

⁸ The program staff acknowledged it would assist employees by using Metro's Trip Planner to help calculate commute costs, but the staff's calculations were based on information provided by the recipients.

⁹ See *DOD v. FLRA*, 510 U.S. 487, 500 (1994).

¹⁰ In order to develop its position on this matter, we suggest that the Agency consult with OGC.

of previous versions of the certification forms, but not the current one.¹¹ However, since all the information required of the recipient, including signature, is on the first page of a two-page form, it may be that recipients simply do not read the second page (on those earlier forms in which the information was present). *We recommend NSF add the information about the transit subsidy not being for official travel to the current form and move the printing and signing of the recipient's name to the end of the form after all the information has been presented.*

Additionally, we recommend NSF add a question to its FAQ page to inform recipients they can reduce the amount of their benefit at the Metro vending machine if they are away from the office or are taking alternative transportation to work.

Although NSF does not formally require departing employees to remove themselves from the program, the program personnel checks the list of departing employees and removes them from the list of eligible recipients. However, given the high rate of turnover for NSF's numerous rotators, the potential for change of address by benefit recipients, and the possibility of transit rate increases, *we recommend NSF require annual, rather than tri-annual, certifications, and the certification form should reflect it is valid for 1 year.*

Regarding the employees we believe filed false transit subsidy certifications, we contacted an Assistant United States Attorney, who declined prosecution in lieu of appropriate agency action. *We recommend that NSF take the appropriate action for each individual case.*

To summarize, we recommend NSF:

- 1) Not provide calculations of commute costs or fill out the certification form, but rather inform recipients to use WMATA's Trip Planner.
- 2) Require employees to provide their home address on the certification form so the program can conduct independent checks of certification amounts against those addresses.
- 3) Add additional information about the restrictions of the subsidy and move the information about the approved uses and certification to precede the required printing and signing of the recipient's name on the form.
- 4) Go to an annual certification.

¹¹ This question is addressed in the FAQ: <http://www.inside.nsf.gov/oirm/das/ssb/ps/metro.jsp>.

- 5) Finally, in addition to any action NSF may take regarding the individuals discussed in the Appendix, we recommend NSF ask them to recertify to the correct amount of their commute and reduce their benefit accordingly.

Please respond by 20 April 2009. We would be glad to discuss any of the issues raised in this memorandum. My point of contact is [REDACTED], [REDACTED] [REDACTED], x [REDACTED], [REDACTED]@nsf.gov.

This memorandum contains recommendations for improvement for the NSF Transit Subsidy Program. It also contains sensitive information about employees regarding their participation in the program. To limit the distribution of this information to only those who you determine need to know, we are providing you with this memorandum and request that you provide relevant information to Transit Program managers and supervisors as you deem appropriate. Please inform us of other individuals who will receive this information

Copy: Thomas C. Cross, Interim Inspector General

James H. Lightborne, Office of the Director's Liaison to OIG

Appendix

Regarding the five employees (in alphabetical order), we learned:

- [REDACTED] initially signed up for a benefit of \$100/month, but realized he had significant money left over each month. He reduced his benefit to \$80/month (which is still more than his \$54 monthly commuting costs) to have less left over. When asked how he arrived at \$80 as the corrected commute cost, he said he did not know what his actual commuting cost was, so he asked NSF transit staff to calculate his benefit amount. [REDACTED] puts the \$80 transit subsidy on his SmarTrip card each month (he averaged \$80/month during the 18-month period), but said he only uses it for commuting to NSF. He does not know if his card is nearing the maximum \$300 limit, or if he has already reached it and only thinks he is still adding the subsidy, but his card must be at the maximum if he is not using the excess \$26/month for personal use. During the 18 months, his excess benefit was \$468.¹²
- [REDACTED] began receiving the maximum transit benefit when he was either walking or driving to work. One (sometimes two) nights a week, he would stay with his family in Maryland, commuting to and from the [REDACTED] metro station. During the 18-month period, he used his transit benefit (an average \$94/month) to commute to his second, part-time job (unaffiliated with NSF) and for personal use on the weekends. His current transit benefit is \$104/month (he does not know how he calculated it). After the period of our study, he told us he moved to Maryland, so it appears he is currently in compliance with his claimed benefit. During the 18 months, his excess benefit was approximately \$936 (assuming he commuted to Maryland 1.5 times per week).¹³
- [REDACTED] [REDACTED] [REDACTED] requested \$95/month for a commute that was approximately \$54/month. When asked how she calculated her commute costs, she took her daily cost, multiplied by 30 and added \$5 for travel to a monthly meeting for an interagency working group (she averaged \$63/month during the 18 months because she did not take the benefit for several months early in 2006). She used some of this extra benefit for her official travel to the working group (approximately \$5/month) and the rest for personal travel (approximately \$4/month). During the 18 months, her excess benefit

¹² Our Memorandum of Investigation (MOI) summarizing our interview with him is Attachment 1. Because [REDACTED] did not admit to using any of the excess subsidy for personal use, we did not ask him to complete an affidavit.

¹³ Our MOI for [REDACTED] and his affidavit is Attachment 2.

(including both office and personal travel) was \$162, of which only \$72 was for personal travel.¹⁴

- [REDACTED] has been receiving the maximum benefit since the program began. Her certification (\$110/month) of the maximum benefit is double her commuting cost of approximately \$54/month—during the 18-month period, she averaged \$107/month. When asked how she calculated her commute cost, she said she did not do the calculation herself; she said NSF transit staff both calculated her commute costs and completed her certification form for her. She used the excess benefit for personal trips on the weekend and for training away from the office. During the 18 months, [REDACTED] excess benefit was \$1008.^{15,16}
- [REDACTED] claims \$80/month for her approximately \$54/month commute. When asked how she calculated her commute cost, she replied she did not do it, but rather NSF transit staff did that for her. During the period in question, [REDACTED] was converting the Metrochecks into tokens (she averaged \$67/month for the 18 months). Because of the excess benefit, she would eventually have enough tokens to cover her monthly commute without having to turn in her Metrochecks. When she reached this situation, she twice gave the extra Metrochecks to her cousin. During the 18 months, [REDACTED] excess benefit was \$234.¹⁷

¹⁴ Although included herein, we considered [REDACTED] excess subsidy benefit *de minimis* (it was approximately \$4/month plus an additional \$5/month of official travel). Our MOI for [REDACTED] is Attachment 3.

¹⁵ Our MOI for [REDACTED] and her affidavit is Attachment 4.

¹⁶ We note [REDACTED] abuse of the program is particularly egregious if one extrapolates her excess benefit over the lifetime of the program.

¹⁷ Our MOI for [REDACTED] and her affidavit is Attachment 5.

NATIONAL SCIENCE FOUNDATION


4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



OFFICE OF
INSPECTOR GENERAL

AUG 29 2008

To: Kathie L. Olsen, Deputy Director

From: Peggy L. Fischer, Associate Inspector General for Investigations 

Subject: Recommendations for Improving Disclosures of Conflict of Interests (COI)

BACKGROUND

OIG receives allegations of conflict of interests (COI) violations regarding NSF's merit review process. In the course of resolving these complaints, we noticed an inconsistency in how NSF handles COI disclosures for *ad hoc* (or mail or FastLane) reviewers and panelists.¹ Panelists are given NSF Form 1230P² and a COI briefing before discussing proposals. Form 1230P provides examples of what may constitute a COI and asks panelists to certify that they have read the list of affiliations and relationships and have none that would prevent them from performing their panel duties. In contrast, *ad hoc* reviewers are simply asked to notify the program official if they "have an affiliation or financial connection with the organization or person submitting this proposal that might be construed as creating a" COI.³ In contradistinction to Form 1230P, there is no guidance or examples on FastLane for the *ad hoc* reviewer as to what may constitute a potential affiliation or financial COI.

We have observed this lack of information can create problems for both the reviewer and the program official in charge of the review, and we consider it a weakness for NSF's well-regarded merit review system. For example, NSF's *ad hoc* reviewers are less likely to be able to inform NSF program officials as to whether they have any professional or financial relationships that could constitute a COI or even the appearances of a COI. This lack of information for mail reviewers, together with NSF's statement to *ad hoc* reviewers that unless they "attach a [COI] statement, [NSF] shall assume that you have no conflicting affiliations or interests" creates a

¹ We recognize panelists become temporary government employees during the course of their panel service and *ad hoc* reviewers do not, and we are not referring to the legal requirements associated with panelists.

² Tab 1.

³ FastLane; see Tab 2.

situation in which NSF will not be informed of some potential COIs that could taint NSF's merit review.

HHS/NIH

The National Institutes of Health (NIH) is similar to NSF in that it receives tens of thousands of proposals a year that undergo merit review. NIH also has panel and *ad hoc* reviewers. NIH handles panelists similarly to NSF. Before the review, the panelists are given a Pre-Review Certification Form⁴ and asked to read, sign, and return it. At the start of a panel meeting, there is a formal COI briefing. After the reviews are completed, the panelists are asked to sign a Post-Review Certification Form⁵ acknowledging they did not participate in any reviews in which they might have had a COI.

It is our understanding that NIH has no FastLane equivalent, so there isn't electronic review *per se* (NIH has an electronic commons, including its Internet Assisted Review). NIH sends paper copies of proposals for mail review, and the reviewers receive a COI form (the pre-certification form, Tab 3) with the proposals, and they are asked to return the COI form with their reviews. Regardless of the type of proposal, NIH allows reviewers to electronically post their reviews on its Internet Assisted Review site. If reviewers choose this option, they are asked to check a box certifying they don't have a COI, in accordance with the pre-certification form they received with the proposals.

In response to an HHS OIG report,⁶ NIH has recently implemented additional measures to improve managing financial COIs.⁷ To assist PIs, it is enhancing its outreach program to raise awareness, expanding its FAQ web page, and creating a web-based tutorial. NIH is also taking steps to improve its program officer's ability to monitor COI disclosures by centralizing the collection of all COI disclosures and creating a training module detailing internal procedures.

COMPARISON OF NSF FORM 1230P WITH NIH PRE- AND POST-CERTIFICATION FORMS

- NSF form 1230P and both NIH forms provide financial and associational definitions of a COI⁸ and define the time frame for which a particular relation is considered to be potentially conflicted.⁹

⁴ NIH/OER/OEP 1/12/2005. It addresses COI, confidentiality, and non-disclosure for reviewers of grant applications. See Tab 3.

⁵ NIH/OER/OEP 1/12/2005. See Tab 4.

⁶ National Institutes of Health: Conflicts of Interest[s] in Extramural Research was issued in January 2008; OEI-03-06-00460.

⁷ See Tab 5; <http://nexus.od.nih.gov/nexus/nexus.aspx?ID=81&Month=6&Year=2008>.

⁸ We note NSF's definitions tend to be more specific than the NIH ones. We believe the generality of NIH's definition has advantages. As an example, we recently discussed with OGC a COI complaint we had regarding a professional relationship in which a reviewer did not disclose to his program official he edited a compendium for which he and the PI were contributing authors. Because NSF has defined co-editing, but not editing-authoring, as a potential COI, it appeared the

- The certifications the panelists are asked to sign are different in content. NSF reviewers certify they have no affiliation or relationship that would prevent them from performing panel duties and will not divulge confidential information. NIH reviewers certify they have disclosed all relevant COI; have destroyed or returned all materials; will not divulge confidential information; and will refer all inquiries about the review to the designated NIH official.
- The certifications the reviewers are asked to sign are very different in warning. NSF's FastLane for *ad hoc* reviewers is silent about failure to disclose known COIs, but warns them there could be administrative sanctions for unauthorized disclosure of confidential information. NSF's Form 1230P certification does not provide any warning for providing false information or failing to disclose known COIs, but warns panelists unauthorized disclosure of confidential information would result in sanctions. Thus, NSF's reviewers may incorrectly perceive there are no consequences for not disclosing COIs; in contrast, NIH reviewers are informed their pre- and post-certification means they are bound under penalty of perjury (18 U.S.C. §1001) to their statements.
- In comparing NSF's process to NIH's, we note certain differences, which are set out in the following Table:

	NSF <i>ad hoc</i> reviewer (FastLane)	NSF panelist (1230P)	NIH panelist
Clear Explanation of Familial COI	No	Yes	Yes
Clear Explanation of Appearance of COI	Unclear	Yes	Yes
Clear Explanation of Editor-author COI (footnote 8)	No	unclear	Yes

CONCLUSIONS AND RECOMMENDATIONS

We have reviewed the way NSF handles panel and *ad hoc* reviewers. We conclude NSF's process for handling COIs, particularly with regard to *ad hoc* reviewers, can be significantly improved. *Ad hoc* reviewers using FastLane receive little guidance

reviewer did not have a COI under NSF's rules. If NSF's rules were written more generally, it would include more potentially biasing relationships. Additionally, because the reviewer was an *ad hoc* reviewer, he was not provided with any guidance or examples about what relationships could constitute a COI, nor was he asked to provide any certification.

⁹ NSF considers collaborators conflicted for 4 years and co-editors conflicted for 2 years. NIH considers all professional associates conflicted for 3 years.

to determine whether they have a COI. Additionally, the lack of information is compounded by NSF's assumption that unless otherwise stated, no COIs exist. We conclude if NSF made some minor changes to its Form 1230P and broadened its use to include FastLane reviewers, its reviewers would better understand NSF's expectations regarding COI and confidentiality and have greater trust in NSF's merit review system.

Accordingly, we recommend NSF:

- Improve its Form 1230P by (i) including in the certification language that reviewers are certifying that, to the best of their knowledge, they have disclosed all COIs and (ii) incorporating a 18 U.S.C. §1001 warning about the consequences of violating the certification.
- Incorporate more helpful information for *ad hoc* reviewers. Specifically, we recommend NSF provide an improved Form 1230P (described above) into FastLane, and require *ad hoc* reviewers to check a box indicating their certification before having access to proposals.
- Follow NIH's example to better inform its community and its program officials about COIs by creating a COI FAQ web page and creating web-based tutorials for both PIs and NSF program officials.

Please respond by 26 Sep 2008. We would be glad to discuss any of the issues raised in this memorandum. You may contact [REDACTED], [REDACTED], at x[REDACTED] or [REDACTED]@nsf.gov.

Copy: Larry Rudolph, General Counsel
James Lightbourne, Senior Advisor for the Integration of Research & Education
Jean Feldman, Head, Policy Office
Christine C. Boesz, Inspector General

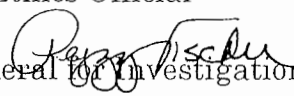
NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



OFFICE OF
INSPECTOR GENERAL

FEB 04 2009

To: Karen T. Santoro, Designated Agency Ethics Official

From: Peggy Fischer, Associate Inspector General for Investigations 

Subject: Comments on Your Response to our Recommendations for
Improving disclosures of Conflict of Interests (COI)

Thank you for your 8 October response to our 29 August memo recommending improvements in the conflict of interests (COI) disclosure process for NSF's merit reviewers. Our recommendations were focused on ensuring reviewers (panelists and/or *ad hoc* reviewers) were apprised of situations that could be construed as COIs and had ample opportunity to disclose to NSF such situations. Improving this information and disclosure process can improve NSF's merit review system by ensuring its objectivity. We are concerned you have chosen not to implement any of our recommendations, and we are taking this opportunity to provide you with expanded rationale for your reconsideration.

First, we recommended NSF:

Improve its Form 1230P by (i) including in the certification language that reviewers are certifying that, to the best of their knowledge, they have disclosed all COIs and (ii) incorporating a 18 U.S.C. §1001 warning about the consequences of violating the certification.

Our recommendation was based upon our view of the importance of informing reviewers of the potential seriousness of false statements, not on whether OGE uses, or did not require NSF to use, such a warning in 1993. It is our view that it is only fair to inform reviewers they are legally liable for material omissions. A warning simply raises reviewers' awareness of the importance of providing accurate information. It is important that reviewers are aware that there are potential legal consequences for knowing omissions, thus likely increasing the accuracy of the disclosures. We agree with you that reviewers should not be prosecuted for inadvertent or unintentional omissions. Only subjects who act

with culpable intent can be criminally prosecuted, precluding prosecution of inadvertent or unintentional omissions. All NSF proposals and annual and final reports have long contained such warning, with no resultant decrease in submissions. NIH uses such a warning on the form completed by its reviewers, and we are unaware of any evidence that it has hindered NIH's ability to find reviewers for its proposals.

Second, we recommended that NSF:

Incorporate more helpful information for *ad hoc* reviewers. Specifically, we recommend NSF provide an improved Form 1230P (described above) into FastLane, and require *ad hoc* reviewers to check a box indicating their certification before having access to proposals.

We do not recommend collecting specific COI information, merely a certification by the *ad hoc* reviewer of compliance with a COI prohibition. We are unaware that implementing this recommendation would require OGE approval. Would you provide a citation to this OGE prohibition so we may understand more fully the prohibition?

As we noted in our memorandum, independently of how NSF asks *ad hoc* reviewers to inform program managers of COIs, NSF requires no verification that *ad hoc* reviewers have even read NSF's request to disclose COIs, creating the default assumption that no COIs exist. We suggested it would be more prudent, in the absence of a disclosure, to ask *ad hoc* reviewers to check a box affirmatively indicating they do not have a COI that would prevent them from performing their review duties. We note three of the four stages of the reviewing process you mentioned take place already. Thus, the new step (the *ad hoc* reviewer reading a sentence, pausing briefly to make a conscious COI assessment, and checking a box—or, after making the COI assessment, deciding that s/he has a COI and should not review that proposal after all)—is not overly burdensome. To the contrary, the small extra effort to check the box is far outweighed by the added surety NSF gains in the objectivity of its review process. Again, we point out NIH has already implemented this without significant adverse consequences.

Our third recommendation to NSF was to:

Follow NIH's example to better inform its community and its program officials about COIs by creating a COI FAQ web page and creating web-based tutorials for both PIs and NSF program officials.

We agree that NSF provides several avenues for COI training for program officers, which are principally directed toward program officers avoiding COIs themselves. NSF's commendable commitment to the training and education of not only its staff, but also the support it provides to the community it serves, should not be premised on whether or not there is a legal requirement to do so. There is currently a dearth of COI training resources for reviewers, which NSF can rectify.

While NIH and NSF have different missions and legal authorities, that difference, in and of itself, is not relevant to the substance of our recommendations. NSF and NIH both ask the research community to review tens of thousands of basic research proposals each year through panels and individually. In fact, they probably rely on a substantially overlapping pool of reviewers; thus, there are NSF reviewers who are already familiar with and comply with the COI recommendations we are making. NSF and NIH have an interest in ensuring their reviewers understand what constitutes a potential COI and in having those COIs disclosed to the program officials. NIH instructs reviewers to certify they have disclosed all relevant COIs and returned or destroyed all review materials; NIH provides PIs with a false-statement warning indicating possible consequences for material omissions; NIH asks reviewers to check a box indicating they are not aware of any COIs; and NIH provides a FAQ about COIs to help them understand the complexities of COI issues. These are tried and proven practices that we believe would serve NSF well in avoiding potential COI problems with reviewers.

In conclusion, we request that you consider the additional information herein and the benefits these actions could provide to NSF's objective review of proposals in revisiting your conclusions. We believe not taking actions based on our recommendations leaves NSF at risk for not adequately identifying COI risks and assisting reviewers in avoiding them.

Please let us know if you have any questions or seek additional information. My point of contact in this matter is [REDACTED]. He may be reached at extension [REDACTED] or by e-mail at [REDACTED]@nsf.gov. We would appreciate a response by March 15, so that we may include our discussion and the resolution of our recommendations in the upcoming Semiannual Report to Congress.

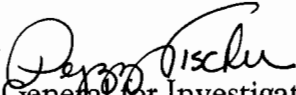
cc: Cora Marrett, Acting Deputy Director
Larry Rudolph, General Counsel
James Lightbourne, Senior Advisor for the Integration of Research & Education
Jean Feldman, Head, Policy Office
Thomas Cross, Interim Inspector General

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

26 June 2008



To: Dr. Kathie L. Olsen
Deputy Director

From: Dr. Peggy L. Fischer 
Associate Inspector General for Investigations

Subject: Policy on Use of the NSF Seal/Logo

I. Background

NSF makes various versions of its seal/logo available on its website. The "NSF Logo Use" page represents that the NSF logo is "available electronically" to the "public who wish to provide a link to an NSF website or acknowledge NSF assistance."¹ However, the "NSF Logo Use" page links to the "NSF Logo" page, which contains the actual seal/logo images and represents that they are available to "the public who wish to reproduce the NSF logo," without apparent restriction.²

Misuse of federal agency logos/seals potentially violates three federal criminal statutes³; misuse of the logo/seal to support the impersonation of a federal official also

¹ "Use of NSF Logos," http://www.nsf.gov/policies/logo_use.jsp (last visited 06/18/08).

² "NSF Logos," <http://www.nsf.gov/policies/logos.jsp> (last visited 06/18/08).

³ 18 U.S.C. § 506(a)(2) ("Whoever ... knowingly uses ... any such ... forged, counterfeited, mutilated, or altered seal or facsimile thereof to or upon any ... document ... shall be fined under this title, or imprisoned not more than 5 years, or both."); 18 U.S.C. § 701 ("Whoever ... possesses any ... insignia, of the design prescribed by the head of any department or agency of the United States for use by any officer or employee thereof, ... except as authorized under regulations made pursuant to law, shall be fined under this title or imprisoned not more than six months, or both."); and 18 U.S.C. § 1017 ("Whoever ... wrongfully affixes or impresses the seal of any department or agency of the United States, to or upon any ... document ... with knowledge of its fraudulent character ... shall be fined under this title or imprisoned not more than five years, or both.").

violates the criminal false personation statute.⁴ To discourage misuse of NSF's logos/seals that could result in criminal liability, NSF should add language to its website to clarify allowable uses and prohibit misuse.

Other federal agencies with policies regarding use of their seal/logo have more restrictive policies than what is listed on NSF's website.⁵ Some agencies (e.g. HHS) restrict their seals/logos to official agency use only, barring use by the private sector (including grantees, vendors, and contractors). Others allow use of the logos by grantees but explicitly restrict commercial use (e.g. CIA) or use that would imply endorsement (e.g. NIH, CPSC).

II. OIG Investigations

Since the inception of our office, we have investigated a half-dozen cases of misuse of NSF's seal/logo. In every case, the subjects used the NSF seal/logo to add verisimilitude to their impersonation of NSF officials or researchers affiliated with NSF. One person used the NSF seal/logo to fabricate faux NSF letterhead, in order to represent that a NASA entity was an NSF-funded FFRDC entitled to discounted computer prices—he pled guilty to a federal misdemeanor charge. Another individual created a website called NSFfunding.com with the NSF seal/logo on every page, claiming that he was acting at NSF's behest to investigate wrongdoing by numerous officials conspiring to squelch his research findings—the Department of Justice (DOJ) contacted the webhost, with the result that the website was removed and DOJ declined further prosecution. More recently, a subject used NSF's seal/logo (copied from NSF's website) extensively over several years to convince women that he was an NSF official in charge of a research project in which he sought their participation—he pled guilty to a federal felony charge.

III. Conclusion

While nothing on NSF's website implies that NSF's seal/logo can be used to misrepresent employment by or affiliation with NSF, we believe it would be helpful for

⁴ 18 U.S.C. § 912 ("Whoever falsely assumes or pretends to be an officer or employee acting under the authority of the United States or any department, agency or officer thereof, and acts as such, ... shall be fined under this title or imprisoned not more than three years, or both.")

⁵ ARC, "Use of ARC Logo," <http://tinyurl.com/6yn886> (last visited 06/09/08); CIA, "Use of the Central Intelligence Agency Seal," <http://tinyurl.com/594jfw> (last visited 06/09/08); CFTC, "Use of CFTC Seal," <http://tinyurl.com/6x4yjm> (last visited 06/09/08); Corporation for National and Community Service, "Logos," <http://tinyurl.com/5fga6x> (last visited 06/09/08); HHS, "May a private sector grantee/vendor/contractor affix the HHS logo to its communication product?," (last visited 06/09/08); NIH, "Graphics and Logos," <http://tinyurl.com/6jh4pd> (last visited 06/09/08).

NSF to clearly prohibit such misuse, while specifying what use is appropriate. Accordingly, we recommend that NSF:

- (1) Explicitly prohibit use of NSF's seals/logos in a manner that falsely implies employment by or affiliation with NSF; and
- (2) Explicitly limit use of NSF's seals/logos to recipients of NSF support for the sole purpose of acknowledging NSF support.

If you have any questions, please contact Dr. Montgomery Fisher, Esq., by telephone at 4987 or email to mfisher.

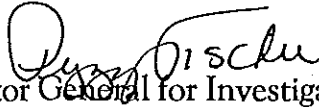
Copies to: Dr. Christine C. Boesz, Inspector General
Deborah H. Cureton, Associate Inspector General for Audit
Thomas N. Cooley, Chief Financial Officer
James H. Lightbourne, Senior Advisor



National Science Foundation • 4201 Wilson Boulevard • Arlington, Virginia 22230
Office of the Inspector General

March 29, 2010

To: Cora B. Marrett
Acting Deputy Director

From: Peggy L. Fischer 
Assistant Inspector General for Investigations

Subject: Policy on Use of the Conflict-of-Interests Module in eJacket

I. Background

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations.¹ Consistent with that responsibility, OIG is providing this Management Implication Report regarding conflict of interests (COI) recusals for NSF staff.

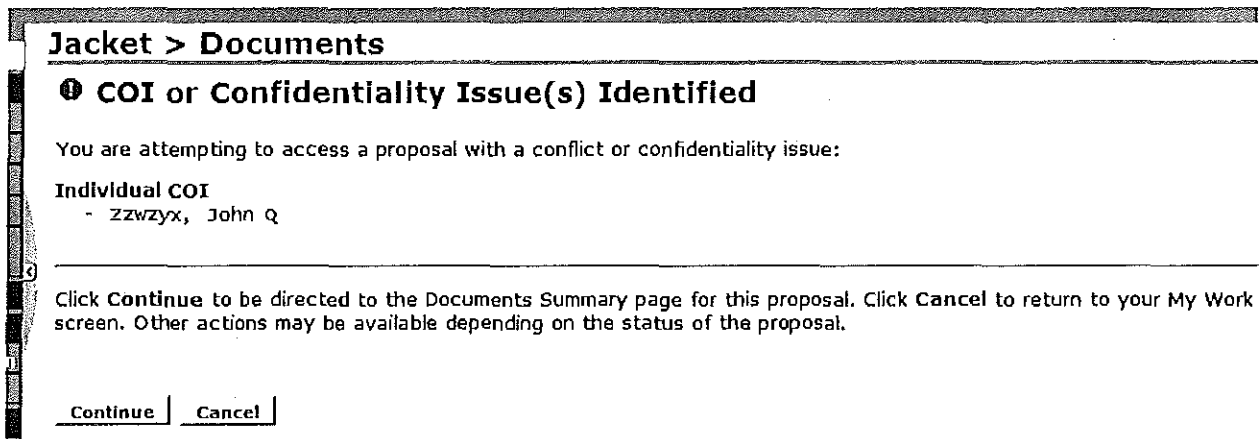
Traditionally, each NSF program division handled COI recusals manually, with each staff member being responsible for informing the division's conflicts official about proposals/awards, individuals, and institutions from which the staff member should be recused because of an actual or possible appearance of a COI. eJacket provides NSF staff with a single, web-based application to process proposals and manage awards electronically, and it includes a COI Module to facilitate recusals:

The eJacket Conflicts of Interest (COI) Module will allow NSF staff, on a voluntary basis, to declare and load any institutional, individual or proposal conflicts they have into eJacket. The application will then validate proposal-related user actions within eJacket against the declared Conflicts, generating warnings when Conflicts are encountered.²

¹ 5 U.S.C. App. § 2(2).

² eJacket Users Guide v.4.7 (<http://tinyurl.com/mb4k4m>), p.209.

The warning appears immediately if the eJacket user calls up a proposal or award and the user has a COI with the institution, individual, or proposal:

The screenshot shows a web interface with a title bar "Jacket > Documents". Below it is a section header "❶ COI or Confidentiality Issue(s) Identified". The main text reads: "You are attempting to access a proposal with a conflict or confidentiality issue:". Underneath, it says "Individual COI" followed by a bullet point: "- Zzwzyx, John Q". At the bottom, there is a paragraph of instructions: "Click Continue to be directed to the Documents Summary page for this proposal. Click Cancel to return to your My Work screen. Other actions may be available depending on the status of the proposal." Below this text are two buttons: "Continue" and "Cancel".

Jacket > Documents

❶ COI or Confidentiality Issue(s) Identified

You are attempting to access a proposal with a conflict or confidentiality issue:

Individual COI

- Zzwzyx, John Q

Click **Continue** to be directed to the Documents Summary page for this proposal. Click **Cancel** to return to your My Work screen. Other actions may be available depending on the status of the proposal.

The user has the option of clicking the "Continue" button and proceeding to work with the proposal or award.

Since the COI Module would appear to significantly reduce the likelihood that program staff would inadvertently engage in conduct that would constitute a COI, we reviewed the use of the Module by NSF's divisions.

II. Review of Use of the COI Module

We reviewed data from eJacket about active awards, to see which had any conflicts (Institutional, Individual, or Proposal) entered in the COI module. Our objective was to ascertain which divisions are not using the COI module, so we could follow up to find out why.

We queried 6 directors of divisions that made more than 100 awards and had 4 or fewer COIs entered into the module.³ Four of the 6 DDs said they had been unaware of the module and their divisions would use it henceforth. When we reviewed the use of the module later, the data confirmed that there were indeed significantly more conflicts entered in the module by those divisions' staff members.

One DD said they still primarily rely on manual recusals because use of the module is "voluntary," but he encouraged his program officers (POs) to use the eJacket module—even though that requires him to monitor two COI systems. The sixth DD explained that, while her program officers are free to use the eJacket module, they are all required to

³ See attached table. We initially queried the awards database in March 2009, and then followed up in December 2009.

continue to use the division's manual system because (1) rather than establish a "hard stop," the module merely pops up a COI warning which the PO can bypass, while the manual system (in the DD's view) ensures that POs never see such proposals; (2) the eJacket module is less comprehensive because it relies on institution codes, and many institutions have multiple codes which are difficult to locate and plug into the module; (3) some collaborators on projects who are not PIs or co-PIs would not be flagged by the module; and (4) use of the module is duplicative of their extant manual system.

These responses were interesting because they suggest that NSF could do more to (a) provide information about the module to NSF staff, and (b) solicit feedback from actual users who may, as with the sixth DD, have legitimate suggestions for improvements. If all staff were informed about and required to use the eJacket COI module—just as they are required to use eJacket's other functions—then neither unawareness nor duplication would be an issue. Staff members could consult with their division conflicts official or OGC to ensure they enter the appropriate institution codes. Finally, NSF should assess whether it would be preferable to have the module provide a hard stop rather than just a warning; however, if NSF continues with the easily-bypassable warning, the COI module should be modified to notify the user's supervisor whenever a user overrides the COI warning, so the official could assess the circumstances.⁴ While the issue of non-PI-or-co-PI collaborators remains, we do not see how the manual systems could be any better at catching those, since divisional conflicts officials do not read proposals: for those unusual situations, we believe the PO is responsible for recognizing the conflict and effecting recusal.

III. Conclusion

The eJacket COI module is well crafted to avoid COI situations for NSF staff, and NSF should take full advantage of it. Mandatory use of the module is also consistent with NSF's final transition to eJacket as the official record for proposal actions,⁵ since documentation of staff recusals are potentially vital information to establish that a proposal was handled properly. Accordingly, we recommend that NSF:

- (1) Make use of the eJacket COI module mandatory;

⁴ In a recent case we investigated, a program officer (PO) asked another PO (who was an IPA) to handle her awards while she was on vacation. The second PO subsequently reviewed and approved a report for an award to his home institution, because he mistakenly felt his temporary responsibility for handling his colleague's awards somehow trumped his conflict. A hard stop in the COI module would have prevented this completely, while notification to the supervisor would have allowed it to be readily addressed.

⁵ <http://tinyurl.com/yd9chqn>.

- (2) Ensure that all relevant NSF staff are trained in the use of the module;
- (3) Ensure that institution codes are easy to identify; and
- (4) Modify the Conflict warning function to either preclude staff from taking actions on proposals and awards for which they have conflicts, or provide notice to supervisors when the warning is bypassed.

Please respond to these recommendations by April 31, 2010. If you have any questions, please contact Monte Fisher by telephone at 4987 or email to mfisher.

Copies to: Allison C. Lerner, Inspector General
Karen Santoro, Designated Agency Ethics Official
James H. Lightbourne, Office of the Director's Liaison to OIG

Attachment

NSF Divisions' Use of the eJacket COI Module ⁶					
Division	Number of FY08 Awards (queried 3/09)	Number of FY08 COI Declarations (queried 3/09)	OIG Requested Info from DD / DD Responded	Number of FY09 Awards (queried 12/09)	Number of FY09 COI Declarations (queried 12/09)
AIL	3			1	
ANT	166	1	✓/✓	184	8
ARC	117		✓/x	223	
AST	191	34		307	4
ATM/AGS	315	44		416	106
BCS	588	71		698	90
BIO	1			2	
CBET	533	60		698	
CCF	549	9		500	
CHE	452	25		636	33
CMMI	548	436		755	125
CNS	481	38		649	127
CSE	2			1	
DACS	2			3	
DBI	276	49		367	12
DEB	412	169		576	15
DFM	4			3	
DGA	1				
DGE	101	2	✓/✓	157	24
DIAS	2			9	
DIS	2	2		4	2
DMR	443	34		547	73
DMS	972	4		1151	29
DOB	1			1	
DRL	236	8		266	16
DUE	698	4		774	3
EAR	591	26		680	21
ECCS	304		✓/✓	394	
EEC	109	2	✓/✓	206	24
EF	70	27		51	6
EFRI	14			23	124
ENG	3			6	
EPS	13	4		29	10
GEO	38	2		36	5
HRD	118	7		148	
HRM	4			6	
IIP	499	3	✓/✓	572	26
IIS	451	44		591	22
IOS	326	88		534	61
LPA	5			1	
MCB	251	7		351	37
MPS	2				
NCO	1				
NNCO	1				
NSB	1				
O/D	2				
OCE	475		✓/✓	561	2
OCI	122	8		170	7
OGC	1			1	

⁶We queried NSF's database (report server) in March 2009, counting the total number of COI declarations identified with awards made in FY 2008 by each NSF division; in December 2009 we queried to count the total number of COI affiliations identified with awards made in FY 2009.

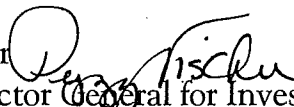
NSF Divisions' Use of the eJacket COI Module ⁶					
Division	Number of FY08 Awards (queried 3/09)	Number of FY08 COI Declarations (queried 3/09)	OIG Requested Info from DD / DD Responded	Number of FY09 Awards (queried 12/09)	Number of FY09 COI Declarations (queried 12/09)
OIA	20	1		7	102
OIG	9			7	
OISE	384	5		403	21
OPP	3				
PHY	301	5		485	13
REC	1	1			
SBE	35			59	35
SES	517	36		631	33
SRS	8			7	



National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

June 2, 2010

To: Cora B. Marrett
Acting Deputy Director

From: Peggy L. Fischer 
Assistant Inspector General for Investigations

Subject: Reviewer Information in eJacket *PRO 4060011*

On March 29th we forwarded a Management Implication Report to you regarding eJacket and conflict of interests (COI) recusals for NSF staff. Since then, we have become aware of a related issue that should also be addressed.

NSF endeavors to ensure that external merit reviewers are free of conflicts of interests with the proposals they review.¹ While NSF primarily relies on self-disclosure of possible conflicts by the reviewers,² program officers are also expected to use information available to them. Information known to program officers includes information in eJacket about the reviewer's organization: for example, if a panelist is from the same organization as one proposal's PI, the program officer should ensure that that panelist is recused from reviewing that proposal.

It has come to our attention that the reviewer information displayed for proposals in eJacket, including older proposals, is generally derived from the reviewer's *current* information. For example, Professor ■ was at the ■ from ■ ■ ■, and is now at Wright State University. The reviews and Form 7s in eJacket for *all* of the proposals that Professor ■ reviewed while at ■ now show her as having been affiliated with Wright State: Professor ■'s vita is at Tab A and the Form 7 for a proposal she reviewed in 2001 is at Tab B.³ As a result, if one looks at eJacket to ascertain how a proposal was reviewed, it may show a false-positive COI (because the PI

¹ Proposal and Award Manual (PAM) V.B.6.

² PAM V.C.2.

³ We have redacted identifying information from these screenshots.

was from Wright State and Professor ■ reviewed his proposal while she was still at ■) or it may mask a COI that did exist (because the PI was from ■ and Professor ■ reviewed his proposal while she was still at ■).

eJacket is the official record for NSF proposal actions,⁴ and documentation of reviewer affiliations and recusals are potentially vital information to establish that a proposal was handled properly. Accordingly, we recommend that NSF ensure that the reviewer information for proposals in eJacket accurately represents the correct information at the time the proposals were reviewed.

Please respond to these recommendations by July 2, 2010. If you have any questions, please contact Monte Fisher by telephone at 4987 or email to mfisher.

Attachments

Copies to: Allison C. Lerner, Inspector General
Karen Santoro, Designated Agency Ethics Official
James H. Lightbourne, Office of the Director's Liaison to OIG

⁴ <http://tinyurl.com/yd9chqn>.

Dr. [REDACTED]

Professor: [REDACTED] Wright State University
Director: [REDACTED]

Academic Positions

2009 –

Wright State University

2007 –

Wright State University,
Dayton, OH

2001 – present

My Work

Search

Jackets

Project Reports

Letters of Intent

Site Visit Reports

Reviews/Panel
Summaries

Jacket

Documents Summary

Administration

Assignment

Sharing

Routing

Delegation

Revision

Data Maintenance

General Information

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R&D Allotment

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Awd Recommend Data

Abstract

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Convert Email

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Context Statements

eCorrespondence

Old eCorrespondence

Compose Letter

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Batch Queue

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PO Batch Preferences

Meetings

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COV List

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Documents

Conflicts

Grant Access

Facilities

GPRA Report Status

GPRA Reporting

FPR Administration

Jacket > Review
Summary

Jacket Contents: Documents Summary

ID

Title

PI

Institution

IIP - 01

Review Record

PROPOSAL NO :

INSTITUTION :

PRINCIPAL INVESTIGATOR :

NSF PROGRAM :

PROPOSAL TITLE :

REVIEWER	NSF I.D. GENDER DISCIPLINE PIN	CO-OWNER PGM ELEMENT	DATES: SENT DUE RETURNED	REVR(R) PANELIST(P) OR BOTH(B)	REVD(R) NOT REVD(N) COI(C) LATE(L)	REVR RATING
1. [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	R	R	Fair
2. [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	R	R	Good
3. [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	R	R	Fair
4. [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	R	R	Fair
5. [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	R	R	Fair
6. Dr. [REDACTED] Wright State University, Cent Dayton, OH 45435-0001	[REDACTED]	[REDACTED]	[REDACTED]	R	R	Very Good
7. [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	R	R	Very Good
8. [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	P	N	
9. [REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	B	R	R

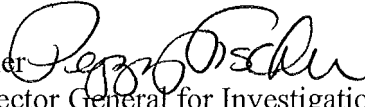
NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230

July 14, 2008



OFFICE OF
INSPECTOR GENERAL

To: Kathie L. Olsen
Deputy Director

From: Peggy L. Fischer 
Associate Inspector General for Investigations

Subject: Employee Use of NSF Communication Resources

Background

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency and effectiveness in the administration of agency programs and operations and to prevent and detect fraud and abuse in these programs and operations.¹ Consistent with that responsibility, OIG is providing this Management Implication Report which is based on a number of employee misconduct cases OIG has investigated in the past 2 years. The facts and circumstances of those cases raise significant issues related to employee use of NSF's electronic communications resources, to the efficacy of NSF's IT Security Awareness Training, and to NSF's implementation of its policies prohibiting gender discrimination, offensive work environments, and retaliation. Below is a brief summary of the cases and the management implications identified as a result of OIG's investigations.

I06100037 - Subject used NSF computer and communication resources to access, view, download, and save pornographic photographs and videos. The Subject had taken the NSF IT Security Awareness Training.

I07070023 - Subject used NSF computer and communication resources to access, view, and download pornographic material and copyrighted movies. The Subject completed 3 years of IT Security Awareness Training.

I08020014 - Subject used NSF computer and communication resources to access, view, and download pornographic photographs and videos to his R drive. The Subject completed 4 years of IT Security Awareness Training.

I08020012 - Subject used NSF computer to save inappropriate personal photographs on the R: drive. Subject had completed 6 years of IT Security Awareness Training.

I08010004 - The Subject used NSF computers and communication resources to download and install peer-to-peer file sharing software, view pornographic images and videos, and save these to his R: drive. Some e-mails containing pornographic material were forwarded by the Subject to others. The Subject had completed 5 years of IT Security Awareness Training.

¹ The Inspector General Act of 1978, as amended, 5 U.S.C. App. § 2(2).

I08050031 - Subject used NSF computers and communication resources to access pornographic web sites. The Subject had completed 5 years of IT Security Awareness Training.

OIG is currently investigating three additional cases involving employees' use of NSF communications resources and computer facilities for similar, inappropriate purposes.

These cases implicate two distinctly different sets of NSF policies and procedures addressing:

- (1) electronic communications resources, and
- (2) workplace environment.

Recommendations regarding improvements in each area are made below.

I. NSF's Electronic Communications Resources

a. Applicable NSF Policies on Electronic Resources

NSF has three policies which are implicated by the behavior of the individuals in these cases: NSF Bulletin No. 04-11, *Personal Use Policy for NSF Technology and Communication Resources*; NSF Bulletin No. 04-15, *Peer-to-Peer File Sharing Policy*; and NSF Bulletin 05-07, *Information Systems Security Awareness Training*.² The first two policies set out limited permissible personal use of NSF technology and communications resources. They are discussed in depth in NSF's electronic IT Security Awareness Training (IT Training).

The IT Training contains several pages of specific information about the NSF policies and acceptable uses. It explicitly states that visiting pornographic sites, downloading videos, and using peer-to-peer software are not permissible.³ The IT Training provides the following Rules of Behavior:

I understand that NSF IT resources, including e-mail accounts are for authorized Government use only and in accordance with NSF policy. Any activity that would discredit NSF, including seeking, transmitting, collecting or storing defamatory, discriminatory, obscene, harassing or intimidating messages or material is not permitted.⁴

Further, in order for NSF employees to view the possible consequences of violating these rules, they must open an optional hyperlink⁵ which articulates the consequence for noncompliance as follows:

Noncompliance with the Rules of Behavior may result in disciplinary action and removal from access to NSF systems or applications. Misuse of Privacy Act data may result in civil or criminal prosecution.

² Tab 1: NSF Bulletins 04-11, 04-15, and 05-07

³ Tab 2: *Using IT Resources: Internet*

⁴ Tab 3: *Using IT Resources: Rules*

⁵ Tab 4: Noncompliance Statement

Finally, NSF Bulletin 04-11 merely states that “a supervisor or component may limit or revoke personal use of agency resources for any business reason.”

Given the investigations described above, OIG is concerned about the efficacy of NSF’s IT Training for both communicating the acceptable uses and restrictions NSF places on its computer and communication resources to NSF employees and for deterring related misconduct.

Recommendations:

OIG recommends that NSF:

- 1) consider additional ways to strengthen, reinforce, and more effectively communicate its expectations and restrictions described in its policies,
- 2) revise the main pages of the IT Training (not in optional hyperlinks) and the NSF policies to explicitly state the range of administrative and legal consequences, including possible removal and referral to the Department of Justice, for violation of the policies, and
- 3) revise the conclusion of the IT Training to require specific selection of a certification by each trainee stating that (s)he understands and agrees to abide by the relevant NSF policies, and understands the consequences for violating them.⁶

b. Reasonable Computer Resource Utilization

Other than articulating expectations within Bulletins 04-11 and 04-15, NSF does not currently take affirmative steps to restrict employee access to inappropriate websites.⁷ Such restrictions would work to prevent the subsequent downloading, saving, and sharing of inappropriate material. In response to our query, OIG learned that many federal agencies employ internet filtering software to restrict employee access to inappropriate sites.

NSF restricts the size of employees’ e-mail inboxes, but does not restrict the volume or type of personal material that NSF employees can save to NSF’s servers or to employee computer C: drives, nor does it routinely survey these drives to proactively eliminate inappropriate files. OIG learned that, to control personal employee use, some agencies have taken steps to:

- place limits on server storage available to individual employees (which can be increased on documented need and advance approval),
- limit storage space designated for personal use,
- restrict personal file storage to only the individual computer C: drives, and
- routinely screen and delete image and music files.

Previously, NSF provided OIG with data that showed that the R: drives of the top 10% of users with the largest R: drives contained from 11 to 62 gigabytes of data. When looking at storage of

⁶ Similarly the in-class training should be adapted to obtain similar certifications from attendees.

⁷ We understand that in the past few weeks, partly because of the number of pornography cases being investigated, NSF has taken steps to purchase internet filtering software and that it is projected to be installed by the end of the fiscal year. OIG encourages NSF to do so promptly and to ensure that the software produces reports on attempts to access inappropriate sites (such as pornography or gambling sites). NSF should provide OIG with information that implicates potential civil or criminal violations (such as attempts to access child pornography sites).

only media files (audio, video, or image), the R: drives of the top 1% of users' R: drives contain 2.7 to 43.5 gigabytes of data.^{8,9} Large R: drive storage is available without justification or advance permission, causing NSF to constantly increase server storage space.¹⁰ Absent controls or limits on the volume of personal use storage, NSF's costs will continually increase, diverting precious funds and resources from NSF's official business. The cases above demonstrate that NSF's current policies and their implementation are not sufficient to deter either inappropriate web access or use of NSF resources.¹¹

Recommendations:

OIG recommends that NSF:

- 4) immediately take steps to preclude employee access to sites determined to be inappropriate;
- 5) ensure that the installed internet filtering software produces regular reports which are reviewed by management to detect employee attempts to access inappropriate sites, and that any that implicate civil or criminal wrongdoing are referred immediately to OIG;
- 6) consider a size limit to the server space available for personal use;
- 7) consider limiting personal storage to only computer C: drives, and
- 8) consider implementing regular screening of R: drives and computer C: drives for inappropriate content.

II. The Workplace Environment

All of the cases above have the potential to implicate Title VII's prohibition against gender discrimination by creating a hostile workplace environment¹² because the behaviors described in these cases can severely and adversely alter the work environment of others. While most of the cases above create this possibility, one of them (I08050031) apparently created an offensive, hostile work environment. In that case, a senior manager was frequently accessing pornographic sites on his NSF computer. His computer monitor was positioned such that coworkers could see the images when entering his office or when viewing reflections off the framed photographs in his office.

⁸ Tab 5: Data on top 10% was provided to OIG on by NSF July 10, 2007. Data on top 1% of users sorted for media files only was provided by NSF on August, 30, 2007.

⁹ 16% of the individuals who possess these large media files have been the subjects of OIG investigations. The cases have resulted in agency actions against those individuals. We have not reviewed the files of the remainder to determine if they contain inappropriate materials. We note that the IT Training states that "personal use is allowed at the discretion of your supervisor" but we are unaware of any process at NSF for seeking advance permission for such use (Tab 6: *Using IT Resources: Personal Use*).

¹⁰ We note that the C: drive on each employee computer can hold gigabytes of data. This seems more than sufficient for the storage of *de minimus* personal use material.

¹¹ In addition to the cases noted above, we are currently investigating a case in which an employee is using NSF communication facilities to send sexually explicit pictures of himself to others and to public websites.

¹² NSF policy OD 06-01 defines harassment as "any unwelcome verbal or physical conduct based on one of the protected bases that is so objectively offensive as to alter the conditions of the individual's employment. Harassment unreasonably interferes with the performance of an employee and can create an intimidating, hostile, or offensive work environment." (Tab 7)

Employees reported¹³ to OIG that:

- “I was unaware that his viewing habits were common knowledge amongst the Directorate. . . . She told me that she saw something she would have rather not seen and decided that it would be best to return to the office. I am sending this anonymously for fear of backlash from other senior staff members.”
- The subject’s viewing could be seen by people going into his office and returning “shocked and disgusted” and his “behavior created an uncomfortable work environment.”
- “The pictures are not normal . . . I am sickened by these images. . . . As a professional, I am disturbed at others who know about this speak about it in such a cavalier manner.”

Our investigation determined that the subject’s behavior continued for at least 2 years. It does not appear that any of the offended employees raised concerns with their supervisors, other supervisors, or the Office of Equal Opportunity Programs (OEOP).

a. Finding OEOP

In exploring why such troubling issues were not raised to management, we noted that OEOP information is available via a number of avenues, including but not limited to: the NSF Announce channel, posters in common areas, presentations (including those at program management seminars), and required training. However, we encountered significant difficulties finding information about OEOP on the internal and external NSF websites as well as the employee directory. We determined, that until extremely recently,¹⁴ it was extremely difficult to find NSF’s OEOP website.

Internally, to access the OEOP website one had to:

- select the “organizations” tab on the internal website;
- already know that OEOP is within the Office of the Director (OD) because OEOP is not listed as an organization;
- select the “internal web site” link for OD;
- scroll down to the O/D Staff Office Web Pages to OEOP, and
- Click on the OEOP link, which takes one to the OEOP EXTERNAL NSF web site.

If one starts at the external NSF web site, one currently has to conduct a web search for “oeo” (or some version of this), or know either that the No FEAR Act¹⁵ or the Office of Director links will take one to the OEOP website. Searching via the staff directory for OEOP, by using the names

¹³ Tab 8: Copies of allegations received by OIG, and MOI of interview with confidential source.

¹⁴ Within the last week, because of concerns expressed about the difficulties finding the OEOP website, OEOP was added to the Office of Director list of organizations with active links to OEOP’s external and internal webpages (which are virtually identical).

¹⁵ Absent explanation, the lay website reader is likely not to understand the meaning of “No FEAR Act Data” and “No FEAR Act Notice.”

of OEOP staff to get to the OEOP website, is also difficult. Unlike many other NSF organizations, where links to the organization's web page are provided when the individual contact information is displayed, while the OEOP organizational hyperlink is displayed, it does not work.

The NSF external OEOP site states, "We encourage all NSF employees to utilize this home page as an additional resource for knowledge and improving quality of life issues in the workplace, and to serve as a guide in the area of EEO."¹⁶ It may be that the difficulties employees encounter in finding the information on the OEOP web page significantly hindered efforts by employees to discreetly learn how to report concerns and allegations and alleviate fears of retaliation. They do not create the impression that employees are "encouraged" by NSF to use the resources available at OEOP.¹⁷

Finally, the issues discussed above raise questions about the efficacy of NSF's implementation of the No FEAR Act. The accuracy of data compiled to ensure accountability regarding enforcement of antidiscrimination laws, ensuring whistleblower protection, protection from retaliation, and ensuring appropriate discipline for violators, can be questioned. Further, in an environment where employees are concerned about retaliation, the data reported with regard to the number of complaints, their status, and employee discipline may underrepresent the actual data that would have been reported if this information were more easily accessible and in the absence of fear of retaliation.¹⁸

Recommendation:

- 9) NSF should revise both the internal and external OEOP webpages to make them more conducive for NSF employees to raise their concerns.

b. Hostile Workplace and Gender Discrimination

We recently completed one investigation¹⁹ and are investigating another²⁰ that raised the potential of both an offensive and hostile workplace, and gender discrimination (sexual harassment) issues.

In the completed investigation matter, the supervisor characterized his intimate and sexual relationship with his direct subordinate as "asymmetric," explaining that he pursued the physical relationship more vigorously than did his subordinate. The subordinate described the

¹⁶ <http://www.nsf.gov/od/oeo/>

¹⁷ In this context, we note that the Ethics Resource Center's *National Government Ethics Survey: an Inside View of Public Sector Ethics 2007* determined that 23% of federal employees observe abusive behavior (page 19) yet only 2% will use a hotline while 83% would tell a supervisor or higher management (page 20). Cases involving supervisors and higher management officials are, therefore, clearly harder to report. Thus, the accessibility and navigability of the OEOP website is critical to the maintenance of NSF's reputation as a "best place to work in the federal government" (see Tab 9 or http://bestplacetowork.org/BPTW/rankings/index.php?t=scores_small&c=index). It ensures that issues, such as those raised in this Report, are addressed before they have the opportunity to fester and create misperceptions about management's desire to enforce its policies.

¹⁸ Tab 10: *No FEAR Act Notice*

¹⁹ I07120049

²⁰ An individual is alleged to be listening to pornographic videos audible to other employees.

relationship as a "burden" at times, but that she felt she needed to "meet a need." She pointed to weekend email correspondence initiated by the supervisor as an "imposition." On occasion, the subordinate had expressed to the supervisor that she was uncomfortable with the relationship, but the supervisor had stressed how important the relationship was to him. She stated that it was her choice; she had not felt any pressure to engage in the relationship. The supervisor acknowledged that at the end of many days, he would go into the subordinate's NSF office and they would engage in a "goodnight kiss." Further the supervisor had asked the subordinate if the act of him performing her performance reviews was acceptable. She believed that he would write a fair review, but she didn't know of any alternative either. The supervisor stated that if the subordinate had found it unacceptable, he would have tried to talk to her about her concerns. They said they were only intimate while on NSF-supported travel and she said that a "minority" of the trips had been extended for the purpose of facilitating their personal relationship.²¹ The subjects did not reveal their relationships to their supervisors. Their omissions created an environment in which NSF decision making regarding personnel and travel was not based on a full set of facts.

This situation created the foundation for potential gender discrimination/sexual harassment complaints and hostile workplace.

Recommendations:

OIG recommends that NSF consider:

- 10) Whether guidelines and training should be developed regarding the appropriate disclosure and management of non-peer relationships that to a third party would bring into question objective decision making. Such guidelines and training might be designed to ensure both that NSF's policies prohibiting discrimination and hostile workplace environments are observed and that business decisions are not tainted by such relationships;
- 11) Whether guidelines and training should be developed to assist managers in addressing allegations or knowledge of such relationships between non-peer staff supervised by the manager; and
- 12) Whether tighter controls on the approvals of travel orders and travel expense reports should be adopted so that no NSF employee can self-approve travel orders or expense reports.

If you have any questions or wish to discuss these recommendations further, please feel free to contact me by e-mail or at extension 4889. Please advise me of management's responses to these recommendations by August 14, 2008.

cc: Christine Boesz, Inspector General
Anthony Arnolite, Director, Office of Information and Resource Management
George Strawn, Chief Information Officer
Andrea Norris, DIS Director and Deputy Chief Information Officer
James Lightbourne, Acting Director, Office of Equal Opportunity Programs

²¹ Tab 11: Redacted interviews of supervisor and subordinate.


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OFFICE OF
INSPECTOR GENERAL

September 4, 2008

To: Anthony A. Arnolie
Director, Office of Information and Resource Management

From: Peggy L. Fischer 
Associate Inspector General for Investigations

Subject: Employee Use of NSF Communication Resources

Thank you for your response to our 14 July 2008 memorandum¹ that contained three broad categories of recommendations, including:

- a) Personal use of NSF communication resources, and oversight of such use,
- b) Visibility and perceived security of reporting concerns to OEOP, and
- c) Management of the workplace environment.

Your 29 August 2008 memorandum provided some clarifications and aspirational goals with regard to these three areas. It failed, however, to provide the level of specific information required for OIG to consider your memorandum a complete management response. Below, we have reproduced our 14 July 2008 recommendations, our understanding of your response, and our specific requests for additional details.

I. NSF's Electronic Communications Resources

a. Applicable NSF Policies on Electronic Resources

OIG recommended that NSF:

- 1) consider additional ways to strengthen, reinforce, and more effectively communicate its expectations and restrictions described in its policies,
- 2) revise the main pages of the IT Security Awareness Training and the NSF policies to explicitly (not in optional hyperlinks) state the range of administrative and legal consequences, including possible removal and referral to the Department of Justice, for violation of the policies, and
- 3) revise the conclusion of the IT Security Awareness Training to require specific selection of a certification by each trainee stating that (s)he understands and

¹ Tab 1.

agrees to abide by the relevant NSF policies, and understands the consequences for violating them.²

Your response indicated that, at some point in FY09, NSF will transition to government-wide training with an NSF module and that it is "*anticipated*" that the training would include "clearly defined Rules of Behavior – and consequences for not following the rules – which employees and contractors must accept in order to get credit for completing the training."

While your explanation is helpful, in the absence of a detailed plan it is unclear how this new training would (a) substantively improve upon the content of the current IT Security Awareness Training (which currently defines Rules of Behavior and consequences³), and (b) respond to recommendations 2 and 3.

As I alerted you, on 29 August OIG forwarded to NSF management for action two new pornography cases that contained information relevant to your response to our 14 July 2008 memorandum. In the first case, the employee subject has worked at NSF for almost 20 years and has taken 6 years of IT Security Awareness Training. Despite this, OIG's investigation found that he was spending significant amounts of time viewing pornographic videos and images on his NSF computer during work hours.⁴ OIG received allegations he was listening to these videos at such a volume that another employee complained, thus again raising concerns about hostile workplace.

Attached to this memorandum is the report of investigation for the second pornography case that OIG is forwarding to NSF management for action.⁵ In this case, an employee had been previously reprimanded for using NSF resources to access pornography. Evidence in OIG's investigation showed that the subject employee received emails containing pornographic images from another NSF employee.⁶ OIG's investigation determined that the subject send such e-mails after his reprimand. Further, even after the subject was interviewed by OIG, during which he stated he knew his behavior violated NSF's policies, he continued to access pornographic websites from his NSF computer during NSF duty hours.

Thus, it appears that NSF's prohibitions against such inappropriate use of employee time and government computers are not taken seriously by all NSF staff.

OIG recommends that NSF immediately revise its policies, consistent with recommendations 2 and 3 above, and that it immediately distribute the revised policies to all NSF employees.

² Similarly, the in-class training should be adapted to obtain similar certifications from attendees.

³ Tab 2 (pages from the current NSF electronic IT Security Awareness Training).

⁴ Tab 3. This case is referenced in footnote 20 of OIG's 14 July 2008 memorandum.

⁵ Tab 4. This case is identified in footnote 11 of OIG's 14 July 2008 memorandum.

⁶ Those e-mails were also sent to at least three other NSF employees, two of which were subjects of cases previously sent to NSF for action.

b. Reasonable Computer Resource Utilization

OIG recommended that NSF:

- 4) immediately take steps to preclude employee access to sites determined to be inappropriate;
- 5) ensure that the installed internet filtering software produces regular reports that are reviewed by management to detect employee attempts to access inappropriate sites, and that any that implicate civil or criminal wrongdoing are referred immediately to OIG;
- 6) consider a size limit to the server space available for personal use;
- 7) consider limiting personal storage to only computer C: drives, and
- 8) consider implementing regular screening of R: drives and computer C: drives for inappropriate content.

Regarding recommendations 4 and 5 above, your response indicates that NSF is "acquiring a web filtering product." Please provide the details about NSF's plan regarding this product including, but not limited to:

- a) The product's ability to block access to inappropriate sites dynamically,
- b) NSF's plan for active management of the product to maintain its effectiveness over time,
- c) The product's actual installation date, and
- d) The details and timing of the reports that will be provided to OIG regarding conduct that is believed to constitute civil or criminal wrongdoing.

Regarding recommendation 6, NSF policy allows *de minimus* personal use of government computers.⁷ It appears from your response that NSF establishes no upper limit to *de minimus* use. OIG is concerned because, as described in our 14 July 2008 memorandum, NSF's data showed that the top 10% of users with the largest R: drives stored from 11 to 62 gigabytes of data. When looking at storage of only media files (audio, video, or image), the R: drives of the top 1% of users contained 2.7 to 43.5 gigabytes of data. This seems far beyond any definition of *de minimus* use. OIG certainly agrees that NSF has legitimate business needs for a wide range of file formats and sizes. However, 16% of the individuals who possess these large media files have been the subjects of OIG investigations and punitive action by NSF.

The IT Security Awareness Training states that "personal use is allowed at the discretion of your supervisor."⁸ In your response you stated, "consistent with NSF policy, we believe that the appropriate way to address any particular concerns about inappropriate or excessive personal use

⁷ NSF Bulletin 04-11 states "The technology and communication resources specified below are authorized for occasional personal use (excluding private business use) when the additional cost to the government is negligible and when the personal use is of reasonable duration and during personal time as much as possible so there is no interference with official business." The cases forwarded to NSF for action show that not all employees have a consistent understanding of "occasional personal use," "reasonable duration," "personal time," or the volume of information storage that is acceptable.

⁸ Training segment "Using IT Resources: Personal Use."

is best handled as a management matter between supervisors and employees.” It is unclear from this statement how NSF intends to provide oversight of personal use to allow supervisors to proactively anticipate or manage such situations, and what NSF policies and procedures describe how an employee seeks and obtains advance permission for such use.

Please confirm:

- a) whether NSF management approves of providing unlimited storage of personal material on available NSF drives (and if not, what storage size is acceptable),
- b) what mechanisms NSF currently uses to provide oversight on personal use to ensure “occasional personal use,” “reasonable duration,” “personal time,” and advanced supervisor permission for personal use.

We found no specific responses to recommendations 7 and 8 and request such.

II. The Workplace Environment

a. Finding the Office of Equal Opportunity Programs (OEOP) on NSF’s Websites

OIG recommended that NSF:

- 9) revise both the internal and external OEOP webpages to make them more conducive for NSF employees to raise their concerns.

You commented that those seeking OEOP can find that office by inserting the word “equal” into NSF’s “robust search engines.” Given the employee-expressed concerns regarding retaliation, inequity, and fear of reporting, OIG strongly recommends that NSF reconsider this search engine vehicle as the primary electronic means for finding OEOP.

OIG notes that, if one uses the Inside NSF Staff Directory,⁹ selects “Office of Equal Opportunity Programs,” and presses Search, nothing is found. If one uses the Inside NSF Internal Services directory,¹⁰ there is no listing for OEOP. If one happens to know the name of an OEOP staff member and finds his/her listing in the Staff Directory, and then clicks on the hyperlink to “OEOP,” nothing is found. If one does succeed in finding the OEOP homepage,¹¹ it misidentifies the office’s Director as the previous Director who is now on detail. These problems and the slow pace of updating the OEOP information on NSF web pages convey a poor impression of NSF’s concern for the important mission of OEOP, and draw into question your assertion that “we are doing an excellent job of conveying information about OEOP to our employees,” as well as the accuracy of NSF’s No FEAR Act data.

In connection with recommendation 9, OIG expands its recommendation to include:

Immediately make operational all web links to OEOP and correct the misinformation, Include OEOP within the NSF website organization drop down menu, and

⁹ <http://www.inside.nsf.gov/staffdirectory.do>

¹⁰ http://www.inside.nsf.gov/int_services.do

¹¹ <http://www.inside.nsf.gov/od/oeo/>

Add a direct hyperlink to OEOP on both the internal and external web pages.

b. Hostile Workplace and Gender Discrimination

OIG recommended that NSF consider:

- 10) Whether guidelines and training should be developed regarding the appropriate disclosure and management of non-peer relationships that to a third party would bring into question objective decision making. Such guidelines and training might be designed to ensure both that NSF's policies prohibiting discrimination and hostile workplace environments are observed and that business decisions are not tainted by such relationships;
- 11) Whether guidelines and training should be developed to assist managers in addressing allegations or knowledge of such relationships between non-peer staff supervised by the manager; and
- 12) Whether tighter controls on the approvals of travel orders and travel expense reports should be adopted so that no NSF employee can self-approve travel orders or expense reports.

OIG found no specific details or implementation timeframes in your response for these last 3 recommendations. OIG requests specific details about the procedures and policies NSF management will adopt to ensure that such non-peer relationships are disclosed and managed to ensure objective decision making and expenditure of funds.

If you have any questions or wish to discuss OIG's request for specific information regarding the original 12 recommendations, please feel free to contact me by e-mail or at extension 4889. Please note this memo contains four additional recommendations. They are reproduced below and are numbered as 13 through 16.

- 13) Immediately revise NSF policies consistent with recommendations 2 and 3 above, and distribute the revised policies to all NSF employees,
- 14) Immediately make operational all web links to OEOP and correct the misinformation on its webpage,
- 15) Include working links to OEOP within the external and internal NSF website organization drop down menu, and
- 16) Add a hyperlink to OEOP on both the internal and external web pages.

Please provide the additional information requested and advise me of management's responses to the additional recommendations by 30 September 2008.

cc: Christine Boesz, Inspector General
Kathie Olsen, Deputy Director
George Strawn, Chief Information Officer
Andrea Norris, DIS Director and Deputy Chief Information Officer
James Lightbourne, Acting Director, Office of Equal Opportunity Programs

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10 February 2009



To: Anthony A. Arnolie
Director, Office of Information and Resource Management

From: Peggy L. Fischer 
Associate Inspector General for Investigations

Subject: IT Security Awareness Training

I. Background

In our 14 July 2008 memorandum "Employee Use of NSF Communication Resources," we reviewed the efficacy of NSF's electronic IT Security Awareness Training (IT Training) in conveying important elements of NSF policies on the use of electronic resources. We recommended that NSF: "(1) consider additional ways to strengthen, reinforce, and more effectively communicate its expectations and restrictions described in its policies; (2) revise the main pages of the IT Training (not in optional hyperlinks) and the NSF policies to explicitly state the range of administrative and legal consequences, including possible removal and referral to the Department of Justice, for violation of the policies; and (3) revise the conclusion of the IT Training to require specific selection of a certification by each trainee stating that (s)he understands and agrees to abide by the relevant NSF policies, and understands the consequences for violating them." In your 29 August 2008 response, you said:

In FY09, the Foundation will transition to the government-wide Security Awareness Training module, which will include an NSF-specific component It is anticipated that this new training will include clearly defined Rules of Behavior—and consequences for not following those rules—which employees and contractors must accept in order to get credit for completing the training.

Our 4 September 2008 memo noted that this response failed to offer any specifics about how the new training would address our recommendations.

On 25 September 2008, NSF issued a revised Bulletin No. 08-18, "Personal Use Policy for NSF Technology and Communication Resources" (Personal Use Policy); the new and former policies are attached at Tab A. The new policy added an explicit provision titled "Enforcement": "Violation of this policy could result in disciplinary action up to and including removal and/or civil or criminal penalties, including personal financial liability for the cost of improper use." Your 2 October 2008 memo noted this change, and stated with regard to the coming revised training, "To the extent that we are able to customize and augment the training, we will make every effort to include the revisions you have recommended."

II. The New IT Security Awareness Training Modules

The new IT Training modules are now available. The first module is apparently the standardized federal government-wide presentation. The second module is NSF-specific, and in our view requires significant changes to respond to our previous recommendations. Because the second module is solely devoted to NSF, it appears there are no restrictions to NSF's abilities to augment the training. The government-wide module also contains errors, which we address in an Appendix.

A. The NSF Module

The NSF module compresses all of the important rules, culled from various NSF IT policies, into a single screen, with the effect of de-emphasizing them. Tab B shows screen 16 of the NSF module, which lists the "Rules of Behavior"—the screen directs the user to:

Scroll to read the Rules of Behavior. Click the "I Agree" button of the screen to acknowledge that you have read and will comply with the Rules.

All of the "Rules" are displayed in a very small font packed into a single subwindow on the screen. That subwindow must be manually scrolled to be read fully. The user is required to check the "I Agree" button before the module will proceed to the next screen. Unfortunately, although the user is instructed to scroll through the text, the user does not have to do so to click on the "I Agree" button and move on to the remaining slides in the module. As a result, the following critical points on the lower part of that subwindow are likely to be missed:

PROTECTION of RESOURCES

- I understand that I am responsible for recognizing and safeguarding all sensitive information in my control, including personally identifiable information (PII)* such as Social Security Numbers. I will prevent inappropriate access, use, or disclosure of sensitive NSF information in electronic or hard copy formats, whether onsite at NSF or at a remote location.
- I will ensure appropriate protections when storing, transporting, transferring, e-mailing, remotely accessing, or downloading sensitive information, including Personally Identifiable Information (PII), per NSF policy requirements. I will ensure proper disposal of sensitive information when its use is no longer required.
- I will ensure compliance with NSF policy for the encryption of sensitive data.

INDIVIDUAL ACCOUNTABILITY

- I understand that failure to comply with the Rules of Behavior or other requirements of NSF policy may result in disciplinary action, sanctions, personal liability, or criminal penalties.

(*) The term "personally identifiable information" refers to information which can be used to distinguish or trace an individual's identity, such as their name, social security number, biometric records, etc. alone, or when combined with other personal or identifying information which is linked or linkable to a specific individual, such as date and place of birth, mother's maiden name, etc.

As a user of NSF electronic resources, I acknowledge and will comply with the Rules of Behavior.

We are particularly concerned about this information being missed because, as noted in each of our investigation reports on employee indulgence in pornography, each subject had taken the IT Security Awareness training at least once, and some had taken it annually for several years.

The relevant screens from the previous IT Training, shown in Tab C, were inadequate but they more effectively conveyed aspects of this essential information than does the new version. Furthermore, the new module provides no linkage to the NSF policies that are the source of the rules, or specific examples of conduct that violates the rules. The previous IT Training provided a hyperlink to the IT Security Policies website (see the first page of Tab C), as well as specific examples of inappropriate use and a direct hyperlink to the Personal Use Policy (see the third page of Tab C). The current NSF module provides neither—not in the text of any of the slides, nor the non-functional "Resources" tab at the top of every slide. In fact, it contains no mention of the Personal Use Policy.

Accordingly, we recommend the Rules of Behavior be presented in smaller, easily readable increments. At the very minimum, each of the groups of rules ("OFFICIAL USE," etc.) should be on its own single screen—the final single screen, with the acknowledgement and "I Agree" button for all of the rules, should be the rule listed under the heading "INDIVIDUAL RESPONSIBILITY."

In addition, under the group heading "SYSTEM ACCESS," the word "inherent" should be deleted because it adds ambiguity, suggesting the existence of some other variety of right to privacy, when the important point is that there is no right to privacy. Also, the following language should be added: ". . . no right to privacy in any aspect of my use of NSF electronic resources, including but not limited to any information" Under the group heading "SYSTEM ACCESS," we believe that experience has taught

that the prohibition on pornography requires greater emphasis—accordingly, the word “obscene” should be deleted in the second bullet, and a third bullet should be added with the following text: “I will not seek, transmit, collect, or store obscene, pornographic, or sexually inappropriate material.” Finally, under “INDIVIDUAL ACCOUNTABILITY,” “or criminal penalties” should be changed to “and/or criminal penalties.”

We also recommend the following corrections in other components of the NSF module:

Examples: Include specific examples of unacceptable uses.

“Resources”: Provide actual resources when this tab is clicked.

Hyperlinks: Provide hyperlinks for all URLs.

Screen 7: Add the following language: “covered by the Privacy Act may result in disciplinary action or civil or criminal penalties.”

Screen 15: In “oig@nsf.gov and” replace “and” with “or.”

Screen 15: Replace the second URL with <http://www.inside.nsf.gov/oig/liaison0908.pdf>.

B. The Government-Wide Module

There are also several errors in the government-wide module 1, which we suggest that NSF endeavor to have corrected. Relevant screenshots are attached at Tab D, and the errors are discussed in the Appendix at Tab E.

III. Conclusion and Recommendations

The new IT Training does not respond to our previous recommendations, and is in some ways less efficacious than the previous version. We recommend the following changes to the NSF module to make the IT Training a genuinely useful means of conveying important information to NSF employees and contractors regarding the use of NSF’s electronic communication resources:

1. Provide references and hyperlinks to the Personal Use Policy and other NSF IT policies.
2. Include specific examples of unacceptable uses.

3. Provide resources when the "Resources" tab is clicked.
4. Provide hyperlinks for all URLs.
5. Screen 16: Present the Rules of Behavior in smaller, easily readable increments. At the very minimum, each of the groups of rules ("OFFICIAL USE," etc.) should be on its own single screen—the final single screen, with the acknowledgement and "I Agree" button for all of the rules, should be the rule listed under the heading "INDIVIDUAL RESPONSIBILITY."
6. Screen 16: In the first bullet under "SYSTEM ACCESS," delete "inherent."
7. Screen 16: In the first bullet under "SYSTEM ACCESS," add "any aspect of my use of NSF electronic resources, including but not limited to" between "no right to privacy in" and "any information."
8. Screen 16: In the second bullet under "SYSTEM ACCESS," delete "obscene," and add a third bullet that reads: "I will not seek, transmit, collect, or store obscene, pornographic, or sexually inappropriate material."
9. Screen 16: Under "INDIVIDUAL ACCOUNTABILITY," change "or criminal penalties" to "and/or criminal penalties."
10. Screen 7: Add "civil or criminal" between "disciplinary action or" and "penalties."
11. Screen 15: In "oig@nsf.gov and" replace "and" with "or."
12. Screen 15: In the second URL, replace "1106" with "0908".

Please respond by 20 March 2009. (There is no need to respond regarding our suggestions in the Appendix concerning the government-wide module, because we recognize that it is not within NSF's control.) We would be glad to discuss any of the issues raised in this memorandum. My contact point for these issues is Monte Fisher, at 4987 or mfisher.

Copies: Thomas C. Cross, Interim Inspector General
Cora B. Marrett, Acting Deputy Director
George Strawn, Chief Information Officer
Andrea T. Norris, Director, Division of Information Systems

I. Background

NSF's Independent Research/Development (IR/D) program provides an important benefit to qualified agency employees, allowing them to stay involved in their research while working at NSF. The program does this, in part, by providing travel funds to permit Visiting Scientists, Engineers, and Educators (VSEEs) and Intergovernmental Personnel Act appointees (IPAs) to travel to and from their home institutions, participate in activities at other institutions, and attend domestic and international conferences. It also permits other employees to engage in active research programs. NSF does not maintain a single fund for IR/D travel, instead each organization provides IR/D funds based on availability.

II. Current NSF Policies

NSF's policies and procedures with regard to the IR/D program are found in Chapter III, Subchapter 700 in NSF's Personnel Manual¹ and NSF Bulletin No. 06-02.² We provide a brief overview of these policies below.

1. NSF Personnel Manual Chapter III Subchapter 700, "Independent Research/Development"

NSF's Division of Human Resource Management (HRM) administers the IR/D program, which is principally used by VSEEs and IPAs. IR/D activities cannot exceed 50 days per year, and are considered "official duties." Those wishing to participate in this program must submit official IR/D applications ("IR/D plans") for proposed IR/D travel to their respective Office or Division Directors.³ The IR/D plan must provide a description of the IR/D activities and their relation to the applicant's official duties at NSF. Further, the IR/D proposal contains a section entitled "Time requested away from NSF" in which the applicant is asked to include detailed information, such as the number of trips and their approximate start and end dates. In addition, another section of the IR/D plan requires the applicant to provide the estimated costs of the proposed activities.

NSF's IR/D policy then provides for several layers of review for IR/D plans. Supervisors must ensure that their organizations have sufficient funds available to pay for the proposed activities; Office or Division Directors review and approve IR/D plans from employees in their organizations; and, the Office of General Counsel (OGC) reviews approved IR/D plans to address conflict-of-interests, patent, and copyright issues that may arise from the IR/D activities. Once approved, IR/D plans are maintained exclusively in paper copy with the official record residing with the NSF Academy.

¹ Tab 1, updated February 6, 2003.

² Tab 2, updated February 21, 2006.

³ Tab 3, Independent Research/Development (IR/D) Proposal.

2. NSF Bulletin No. 06-02, “Independent Research/Development Travel for Visiting Scientists, Engineers, and Educators and Intergovernmental Personnel Act employees”

This bulletin outlines the requirements pertaining to travel under the IR/D program for VSEEs and IPAs. There are two categories: individuals who have relocated to NSF⁴ with a household move (all VSEEs and some IPAs), and those IPAs who have not relocated to NSF and receive a per diem allowance. With the latter, the permanent residence is considered the home institution.

Individuals who have relocated to NSF are entitled to all official travel expenses when they visit their home institutions. Individuals who have not relocated to NSF are only entitled to round-trip transportation, $\frac{3}{4}$ M&IE on the first and last days of travel, and ground transportation to and from the airport. Each authorization for IR/D travel must include a statement that the trip is IR/D-related and that the IPA or VSEE has received a per diem allowance or relocated to NSF. In order to be reimbursed for IR/D expenses, the individual must have approval of the IR/D plan by a supervisor, the NSF Academy, and OGC.

III. Results of Review

Of the approximate 248 individuals who received IR/D travel funds in FY 2007, we examined the travel documents for 22 of the highest individual users of IR/D travel funds.^{5,6} We determined that half of the 22 had one or more issues related to IR/D travel. We identified the following issues:

1. Lack of Sufficient Detail in IR/D Plans

We found that several individuals’ IR/D plans failed to include sufficient detail regarding the number, purpose, dates, and locations of trips, and related cost information such as registration fees. As a result of this lack of detail, it was not always possible to estimate the costs of the proposed travel or the expected duration of absences, or to track the travel ultimately funded back to the approved IR/D plan. We found that:

- A. Six of the 22 individuals whose records we reviewed used IR/D funds for nonconference related domestic and international travel that were not referenced in their IR/D plans.⁷
- B. Three of the 22 used IR/D funds for many more trips, or longer trips, than initially included in their IR/D plans.
- C. Three of the 22 used IR/D funds for domestic and international conferences not included in their IR/D plans.

⁴ Per NSF guidelines, the permanent residence location is considered to be NSF and the local commuting area.

⁵ See Tab 4, IR/D Proactive Review Subject Information, for a full description of travel issues in each case.

⁶ See Tab 5, IPA Award Amounts Relevant to FY 2007, for award information on 19 of the 22 individuals. Two of the 22 individuals we looked at were VSEEs, and one was a permanent employee.

⁷ One of these individuals went on a site visit that may or may not have been IR/D-related. Site visits are permitted if they are IR/D-related, but this was difficult to determine as the trip was not proposed in the IR/D plan.

- D. Three of the 22 did not provide specific information regarding conference travel, such as no differentiation between domestic and international conference travel and no specification of which conferences would be attended in their IR/D plans.
- E. Two of the 22 provided no information in the Traveler Comments section⁸ of the Travel Authorization and Expense Report indicating the reasons for and dates of IR/D trips.

Some individuals had more than one of the IR/D-related issues described in A-E above. We concluded that the general nature of approved IR/D plans we reviewed and the lack of detail in the associated travel requests results would make it difficult for NSF management to effectively monitor related expenditures and ensure accountability.

2. IR/D Travel Funds Spent on Non-IR/D-Related Activities

Three of the 22 individuals whose records we reviewed used IR/D travel funds (including funds for hotel, meals, and transportation) for events that appeared to be official representational activities related to their NSF positions and unrelated to their IR/D plans or professional development. Such events included NSF-sponsored conferences, workshops, and other large group meetings, that appear more appropriately to have been charged to non-IR/D funds.

As an example of such unrelated travel, while we were conducting our review we learned of a temporary employee who had submitted a travel authorization in FedTraveler in an attempt to use IR/D funds, in part, to travel to a university with the purpose of setting up his laboratory in connection with his post-NSF appointment. This travel was not proposed in his IR/D plan, and its purpose, setting up a post-federal employment laboratory, would not have been in accordance with applicable policies.⁹ The employee's other IR/D trips were, however, consistent with his IR/D plan.

3. Disparity Between Actual Costs and Proposed Costs for IR/D Participants¹⁰

Nine of the 22 individuals whose records we reviewed spent more in IR/D costs than was proposed in their IR/D plans. These additional costs ranged from \$147 to \$14,192 above that projected in the plan. Ten of the 22 individuals examined spent less than what was proposed in their IR/D plans, while the cost difference for the remaining three individuals could not be calculated because one IR/D plan could not be obtained and the other two lacked any breakdown of costs.

⁸ For most individuals, the Traveler Comments section of the Travel Authorization and Expense Report contained one or two sentences describing the purpose and specifics of a particular trip.

⁹ The PER Manual explains that, "The NSF Independent Research/Development (IR/D) Program permits employees to maintain their professional competencies and individuals performing temporary service with NSF, such as through Intergovernmental Personnel Act (IPA) assignments, to maintain their involvement with their professional research." Manual 14, Chapter III, section 710.

¹⁰ See Tab 6, IR/D Participant Costs-Proposed Versus Actual for FY 2007, for a table of proposed and actual NSF costs for each IR/D participant examined in our review.

4. Lack of Centralized Budgeting and Tracking of IR/D Funds

We examined how IR/D spending is tracked by NSF. We contacted the Office of Budget, Finance, and Award Management (BFA) and learned that there is no program element code in the Enterprise Information System (EIS) for IR/D travel and EIS does not track IR/D travel expenditures. We also learned from BFA that FedTraveler could track IR/D travel expenses, but this method limits NSF management's abilities to easily review such expenses because NSF supervisors do not have direct access into FedTraveler databases. We also searched EIS in an effort to review how IPA funds are expended in each directorate and division for FY 2007.¹¹ We found that the available information is limited to the lump sum of all IPA expenditures, from which the individual division or directorate level IR/D expenditures cannot be extracted.¹²

In addition, to understand how divisions track IR/D expenditures, we contacted three of the divisions with the highest IR/D spending in FY 2007, which included the Divisions of Civil, Mechanical and Manufacturing Innovation, Information and Intelligent Systems, and Behavioral and Cognitive Sciences.¹³ We learned that in all three divisions, an individual¹⁴ is tasked with maintaining a spreadsheet tracking IR/D costs. The spreadsheet is strictly for tracking costs and internal management purposes. The costs are not compared to the budgeted amounts approved in individual IR/D plans. No other NSF organization has access to the individual division level IR/D expense information. Consequently, there is no overall tracking of IR/D expenditures at NSF and no standard or best practices for how divisions should budget, monitor, or manage IR/D spending. We believe that NSF's oversight of its program funds would be enhanced by monitoring the budgeting and expenditure of IR/D travel funds.

IV. Recommendations

We recommend that NSF review all IR/D plans and travel records for at least the past 12 months to determine whether:

1. The travel was NSF-related or IR/D-related, and within the scope of the described IR/D plan; and
2. The actual cost was consistent with the proposed cost.

The issues we identified during our review raise significant internal control concerns with respect to training and oversight involving the IR/D program. Accordingly, we are referring a review of the IR/D program to the OIG Office of Audit (OA) including such issues as: training for IR/D participants on the program's purpose and the appropriate charging of IR/D and non-IR/D travel costs;¹⁵ improved internal controls on the preapproval and subsequent review of

¹¹ The only program element code in EIS that relates to IPA funds is 9199, "Undistributed Panel/IPA Funds," which includes all funding for IPA travel as well as all other IPA costs and all costs associated with review panels.

¹² Tab 7, Spreadsheet of IPA Funds for FY 2007.

¹³ Tab 8, Top Spending NSF Organizations for FY 2007 IR/D Travel to Home Institution.

¹⁴ These individuals included a Financial Operations Specialist and a Deputy Division Director.

¹⁵ Incoming staff are informed of IR/D policies at program manager seminars, but NSF does not currently have any NSF Academy training programs on IR/D travel.

IR/D travel and for over-budget travel; ¹⁶ individual certifications on the consistency of requested travel with the approved IR/D plan; improved mechanisms for Foundation-wide electronic tracking of IR/D plans and expenses; and an assessment equity/parity of IR/D plans of permanent staff and non-permanent staff.

Attachments on CD:

Tab 1:	NSF Manual 14, Chapter III, Subchapter 700, Updated February 6, 2003
Tab 2:	NSF Bulletin No. 06-02, Updated February 21, 2006
Tab 3:	IR/D Proposal Forms
Tab 4:	IR/D Proactive Review Subject Information
Tab 5:	IPA Award Amounts Relevant to FY 2007
Tab 6:	IR/D Participant Costs- Proposed Versus Actual for FY 2007
Tab 7:	Spreadsheet of IPA Funds for FY 2007
Tab 8:	Top Spending NSF Organizations for FY 2007 IR/D Travel to Home Institution

¹⁶ At a minimum, no plan should be approved unless all of the information requested on the form is provided, including the approximate number and duration of the trips, sufficient justification for each trip demonstrating a nexus to the stated IR/D objectives, reasonably-based estimates of the total cost for each trip, and, the trip destination, to distinguish between travel to the participant's home institution and other travel.



PR-8

National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

JUN 17 2010

To: Cora Marrett
Acting Deputy Director

From: Peggy L. Fischer *Peggy Fischer*
Assistant Inspector General for Investigations

Subject: Math and Science Partnership Awards for Human Subjects Research
(OIG Tracking No. PR09060012)

I. Introduction

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations.¹ Consistent with that responsibility, OIG is providing this Management Implication Report based on a proactive review of Math and Science Partnership (MSP) awards involving human subjects research.

In the past, the Directorate for Education and Human Resources (EHR), within which resides the MSP program, has had difficulty with its awardees properly documenting projects that involve human subjects research. This documentation includes information on the proposal Cover Sheet and Action Processing Forms (APFs), the timely submission of Institutional Review Board (IRB) approval or exemption with regard to human subjects research, and information about human subjects research in project reports.

Our current review was completed as a follow-up to a previous OIG review of MSP awards involving human subjects that was the focus of a November 22, 2005, memorandum.² NSF took significant action in response to this previous memorandum.³ As a result of the current review, we conclude that significant progress has been made involving compliance with NSF's human subjects requirements and NSF could take action to further improve MSP awardee compliance. This report outlines NSF's current rules for human subjects research, our past efforts to encourage enforcement of these rules, the results of the current review, and two recommendations to improve compliance.

¹ 5 U.S.C. App. § 2(2).

² See Tab 1, "Tracking NSF-Funded Research Involving Human Subjects."

³ See Tab 2, NSF's 31 January 2006 Response to OIG's Management Implication Report on Tracking Human Subjects.

II. Current NSF Policies

NSF's policies and procedures with regard to the documentation of human subjects research derive from NSF's 1991 adoption of the *Common Rule on the Protection of Human Subjects* at 45 C.F.R. part 690, the Proposal and Award Manual (PAM), the Grant Proposal Guide (GPG), the Award & Administration Guide (AAG), and the grant conditions.⁴

These documents provide instructions concerning required human subjects research documentation on the proposal Cover Sheet, APF, IRB approval/exemption, and project reports as follows:

A. NSF Proposal Cover Sheet

Page 1 of the proposal Cover Sheet contains a section applicable to human subjects research. Institutions must check the "Human Subjects" box if such research is anticipated.⁵ Institutions that have submitted a "Federalwide Assurance" and received a "Human Subjects Assurance Number" should include this information on the Cover Sheet.⁶ If the IRB has already determined that the research is exempt, the "Exemption Subsection" should be included. Proposals involving human subjects must also either provide an "IRB App[roval] Date" or indicate that such approval is "pending" if IRB review has not yet occurred.

B. APF

Two boxes in the APF are relevant to human subjects research. The Program Officer (PO) must check the "Human Subjects" and either "I.R.B" or "Exempt" checkboxes in Box 42, "Special Certifications." When the PO completes Box 42, FastLane automatically fills in Box 19, "Fields of Application," with "Human Subjects" and a "Code" of 0116000. Proper completion of the APF ensures that NSF can track the project as human subjects research.

C. IRB Approval/Exemption

The institution must provide information on its IRB approval or exemption of the project to the PO before the human subjects work of an award can begin. If a PO decides to fund an award in the absence of IRB approval or exemption, the PO must inform the Grants Officer so that language can be put into the award letter indicating that the human

⁴ Materials from these sources are attached at Tabs 3, 4, 5, 6, and 7, respectively.

⁵ See GPG II.D.7.

⁶ An institution must apply to the Office of Human Research Protections at the Department of Health and Human Services for approval of its procedures related to human subjects research, http://www.hhs.gov/ohrp/assurances/assurances_index.html.

subjects work cannot begin until a certification is sent to the PO stating that the research has been reviewed by an IRB and approved or declared exempt.⁷

D. Project Reports

The FastLane project report form contains a "Special Requirements" section which includes three categories, one of which is "Animal, Human Subjects, Biohazards."⁸ The project report form asks, "Has there been any significant change in . . . use of human subjects . . . from what has previously been approved?" If the PI selects "Yes" to this question, FastLane provides additional instructions: "Please indicate below how . . . use of human subjects . . . has changed and what further approvals, if any, have been obtained. If in doubt about the need for approvals, please contact the sponsored research office (or equivalent) at your institution." If no human-subjects-related changes have occurred in the project, "None" is the appropriate response to this section.

III. Previous OIG Review

In our 2005 review of MSP awards involving human subjects, we examined 62 awards. Some of the more important results of this review are as follows:

1. Only three of the 62 awards (5%) complied with all of NSF's requirements on the proper documentation of human subjects research.
2. Forty-seven of the 62 awards (76%) did not contain Cover Sheet information indicating that the research involved human subjects.
3. Fifty-three of the 62 awards (85%) had incomplete APFs, including many that were not marked as involving human subjects research.
4. Thirty-five of the 62 awards (56%) had IRB information filed after the award date.

We made several recommendations in our previous review, chief among them were to ensure the proper completion of the proposal Cover Sheets and APFs. In response, NSF received updated human subjects information from its awardees and formalized improved human subjects training for NSF staff through the NSF Academy. All POs are now required to address whether each proposal involves human subjects research and NSF has incorporated reminders for compliance with human subjects policy in outreach events, among other actions.

⁷ The required language is: "No human subjects may be involved in the project until the protocol has either been declared exempt or the protocol has been reviewed and approved by the organization's Institutional Review Board, and certification has been submitted to the cognizant NSF Program Officer" (PAM (Tab 4) VII.A.4(c)).

⁸ The other two types of "Special Requirements" are "Objectives and Scope" and "Special Reporting Requirements," which are not relevant here.

⁹ See Tabs 8, 9, and 10 for summary results of our current review.

IV. Results of Current OIG Review

We reviewed 56 MSP awards that were funded from June 1, 2006 to September 1, 2009, and of those 47 awards involved human subjects research.⁹ Of these 47 awards, 24 (51% of all the awards examined) had one or more issues related to the appropriate documentation of human subjects research.

A. NSF Proposal Cover Sheet

Nineteen of the 47 awards examined (40%) did not contain any Cover Sheet information indicating the research involved human subjects.¹⁰ Of the 24 awards that had one or more issues with human subjects documentation, 19 awards (79%) lacked the necessary Cover Sheet information, making it the most common issue found in our review.

We conclude that the proper completion of the proposal Cover Sheet is still a significant area of concern for MSP human subject awards.

B. APF

Only two of the 47 awards examined (4%) had incomplete APFs.¹¹

NSF's requirement that all POs complete this section of the APF has resulted in a significant improvement in NSF's ability to monitor funded human subjects research.

C. IRB Approval/Exemption¹²

Three of the 47 awards examined (6%) had IRB approval/exemption submitted after the effective date of the award. Each of these three awards included language in the award letters that indicated research involving human subjects could not begin until IRB approval/exemption was obtained and submitted to NSF.

An additional eight of the 47 awards examined (17%) did not have any IRB approval or exemption documentation on file in eJacket. Of these eight awards, six (75%) included language in the award letters that indicated research involving human subjects could not begin until IRB approval/exemption was obtained and submitted to NSF.

¹⁰ We determined that these awards involved human subjects research because the appropriate box had been checked on their APFs and the projects had received either IRB approval or an exemption. One award stated in the Project Description that it intended to use human subjects and that it would seek IRB approval, but this information was not included on the proposal Cover Sheet.

¹¹ These APFs had Box 19 filled out, identifying them as human subjects work, but Box 42, the "Special Certifications" box, was empty. This was highly unusual, and may have resulted from a computing error rather than the inability of the PO to insert the necessary information.

¹² See Tab 11, Issues with IRB Approval/Exemption.

We conclude that significant improvement has been made with regard to NSF's effort to track and notify awardees that human subjects research cannot begin without proper IRB approval.

D. Project Reports¹³

PIs for 28 of the 47 awards examined (60%) had submitted annual project reports at the time of our review, and of those 23 (82%) did not mention the use of human subjects anywhere in the report. Five awards with project reports (18%) mentioned the use of "human subjects" in the text of the reports, but none of the 28 reports included any information under the "Animal, Human Subjects, Biohazards" section of the "Special Requirements."¹⁴

We conclude that the "Special Requirements" sections of the project report are not being effectively utilized to track NSF projects involving human subjects research. Currently, if there are no changes to the funded human subjects work, the PI simply indicates "None." Further, it does not appear that this section is being used consistently to report changes in human subjects research. If PIs were instead required to briefly describe *both* the human subjects work conducted *and* any relevant changes/IRB approvals that occurred during the reporting period, this section could provide concise, meaningful information to Program Officers.

E. ARRA Awards¹⁵

Nine of the 47 awards examined (19%) received funding through the American Recovery and Reinvestment Act of 2009 (ARRA). The recipients of these awards must not only comply with the standard NSF award conditions but also with additional ARRA-specific requirements.¹⁶ Of these nine awards, five (56%) had issues that included incomplete Cover Sheets (4), incomplete APF information (2), and no IRB approval or exemption information in eJacket (3). One of the three ARRA awards without IRB approval/exemption information did not contain award letter language stating that human subjects work could not begin without the necessary approval.

We conclude that the ARRA awards examined in this review were not immune to the same lapses in proper human subjects documentation as the non-ARRA awards.

¹³ See Tab 12, Table of Project Report Results.

¹⁴ We did not extensively review the proposals and project reports to determine whether human subjects work was currently being done or was pending, but we found it interesting that so few reports mentioned any such work. Two of the awards with project reports did not have IRB approval or exemption documentation in eJacket, but it appeared from the reports that human subjects research had not yet begun in these awards.

¹⁵ See Tab 13, MSP Human Subjects Awards Funded Through ARRA.

¹⁶ See Reporting and Registration Requirements under Section 1512 of the American Recovery and Reinvestment Act of 2009, Public Law 111-5."

V. Recommendations

Overall, 23 of the 47 awards examined (49%) complied with all of NSF's requirements on human subjects research in the areas of Cover Sheet information, APFs, and IRB approval/exemption prior to the award. This is a marked improvement from the results of our 2005 review, but still evidences areas for improvement. We considered the errors found in the remaining 24 awards to be administrative in nature and readily correctable. Therefore we recommend that NSF:

1. Ensure that proposal Cover Sheets are properly and fully completed. This includes marking a proposal as one in which human subjects work is anticipated, even if IRB approval/exemption has not yet been requested or received. The complete Cover Sheet information will allow for easier identification and categorizing of the proposal by the PO as involving human subjects research.
2. Modify the "Special Requirements" section of the project reports to require PIs to briefly describe the human subjects work conducted, any changes to the proposed work, and IRB approvals where applicable. Such clarifications will make it easier for NSF to provide proper oversight on this sensitive area of research.

If you have any questions or wish to discuss these recommendations further, please feel free to contact Monte Fisher at 4987 or mfisher@nsf.gov. Please advise me of your responses to these recommendations within 30 days of the date of this memo.

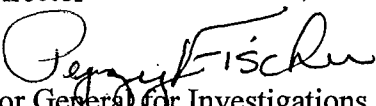
cc: Joan Ferrini-Mundy, Acting Assistant Director, Directorate for Education & Human Resources
Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG



National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

January 3, 2011

To: Cora B. Marrett
Acting Deputy Director

From: Peggy L. Fischer 
Assistant Inspector General for Investigations

Subject: OIG Review of NSF Refreshment Purchases for Panel Meetings
(OIG Tracking No. ~~PR09060012~~) 09080014

The Office of Inspector General (OIG) conducted a proactive review of food purchases made with National Science Foundation (NSF) purchase cards. NSF directorates and divisions hosting merit review panels and committees of visitors usually provide light refreshments during these sessions. Our review identified food-related purchases on NSF purchase cards that totaled nearly \$500,000 each in calendar years 2008 and 2009. These refreshments are purchased out of program funds and are in addition to the reimbursement NSF pays to panelists to cover all of their expenses.

This report describes our review of current NSF policies and refreshment purchases. It also contains recommendations for NSF to assess whether to continue providing extensive morning and afternoon refreshments, and, if it decides to do so, to centralize such purchasing.

We look forward to your comments and feedback. If you have any questions or wish to discuss these recommendations further, please feel free to contact Dr. Monte Fisher by telephone at 703-292-4987 or email at mfisher@nsf.gov. Please advise me of your actions by February 7, 2011.

cc: Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG
Martha A. Rubenstein, Director and Chief Financial Officer, Office of Budget, Finance, and Award Management

I. Introduction

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations. Consistent with that responsibility, OIG is providing this Management Implication Report based on a proactive review of food purchases made on NSF purchase cards.¹ The substantial flow of food and beverages daily into NSF from a wide variety of firms and the almost \$500,000 we identified in food purchases in 2009 raised concerns about the possibilities of fraud, waste, and abuse. From an investigative perspective, we were concerned that NSF staff might be using their NSF purchase cards for personal meals, making unauthorized food purchases, or receiving inappropriate benefits for the use of particular food vendors.

This report outlines NSF's current rules for reimbursing participants in an array of NSF panels and committees, the rules for providing refreshments at their meetings, and identifies a range of oversight and internal control concerns raised during our review of a sample of NSF divisions' refreshment purchases. In consideration of the current fiscal environment, NSF's practice of spending almost a half-million dollars a year to provide extensive free mid-morning and mid-afternoon "refreshments" to meeting attendees who already receive compensation for meals warrants reassessment. If NSF determines that continuing to provide refreshments is indeed prudent, it should evaluate how to do so in a manner that promotes consistency across divisions, ensures good value, and minimizes opportunities for fraud, waste, and abuse.

II. Current NSF Policies

NSF reimburses members of Proposal Review Panels, Advisory Committees, Committees of Visitors (COVs), Site Visits, and Real Time Conferencing for their time and expenses as follows:

- Most attendees receive "flat rate compensation" of \$480 for each meeting day and \$280 for each travel day.² NSF travel staff told us the \$480 compensation, which was established in 2000,³ is intended to cover an honorarium, hotel, local travel expenses, and all meals.⁴
- Federal government employees serving as panelists as part of their official duties receive their actual lodging and travel expenses plus \$71 for meals and incidental

¹ We limited our analysis of food purchase charges on these cards to those that were attributable to local panel and COV meetings.

² NSF Bulletin No. 01-03 (Updated July 2004), Tab 1, available at snipurl.com/15vy11.

³ NSF Bulletin No. 00-13 (July 25, 2000), Tab 2, available at snipurl.com/1cigi7.

⁴ NSF pays for attendees' transportation between their homes and the Foundation separately. There appears to be no written explanation of how the amount of flat rate compensation was calculated, and therefore there is no way to know whether the cost of breakfast, lunch, and dinner included in the flat rate took into account NSF's longstanding practice of providing gratis morning and afternoon refreshments. It is clear that NSF does not require attendees to reduce their flat rate payments by the cost of refreshments provided by NSF.

expenses.⁵ They also may partake of the gratis morning and afternoon refreshments.⁶

NSF Bulletin 00-04, *Conference Planning and Refreshments* (February 7, 2000) (Tab 3)⁷ cites the General Services Administration (GSA) definition of “conference” as a meeting, retreat, seminar, symposium, or event that involves attendee travel, and authorizes the sponsoring agency to provide light refreshments to participants. According to the Bulletin, the NSF Office of General Counsel advised that meetings of review panels, advisory committees, and COVs fall within that definition of “conference” for which light refreshments may be provided. The Bulletin states:

Light refreshments for morning, afternoon, or evening **breaks** are defined to include, but not be limited to, coffee, tea, milk, juice, soft drinks, donuts, bagels, fruit, pretzels, chips, cookies or muffins (excludes alcoholic beverages). GSA notes that the food and drink provided should be intended as a refresher, not a meal.⁸

The Bulletin notes that arrangements for light refreshments are to be coordinated through the appropriate Division/Office Head/AD Administrative Officer to ensure that they are procured by either the NSF VISA purchase card (up to \$3,000 per meeting) and/or purchase order. The Bulletin further states that NSF Divisions must fund the procurement of refreshments out of the same appropriation (program funds) that funded the meeting.

III. Results of Current OIG Review

Our review of J.P. MorganChase VISA purchase card records identified food-related purchases on NSF purchase cards that totaled more than \$500,000 in both calendar years 2008 and 2009.⁹ These food purchases included refreshments for local meetings as well as meetings or events held outside of the Washington, D.C. area and restaurant charges attributed to purchase card holders in the National Science Board Office or the Office of the Director. We limited our analysis to those purchase charges attributable to local panel and COV meetings. We interviewed 10 administrative staff from 8 NSF divisions in 6 directorates and the Office of the Director; we also interviewed 4 professional staff from DACS, DFM, and DAS (including the Agency Purchase Card Program Coordinator (APC)) responsible for making these purchases to determine NSF management’s role in purchase card oversight as well as the procedures followed by staff when purchasing panel refreshments.

NSF directorates and divisions hosting merit review panels and COVs usually provide refreshments during these sessions. Our review determined that refreshment purchase practices

⁵ Lodging expenses range from \$157 to \$211 for the D.C. area, depending on the month. Therefore, federal government attendees receive a total of \$228-\$282 per travel day plus actual travel costs

⁶ Available at snipurl.com/1993h3. The meal and incidental expense allowance is reduced to 75% of the per diem amount on the first and last days of travel, snipurl.com/1994gd.

⁷ Available at snipurl.com/1134ql.

⁸ Emphasis in original.

⁹ We did not review food purchases made with purchase orders which include panel and other meetings held at local hotels.

vary widely across the Foundation. Aside from the broad guidance provided to cardholders that purchases should be fair, reasonable, and equitably distributed among suppliers, as described below, we determined that there is no Foundation-level oversight or coordination of refreshment purchases, no general definition or understanding of what is “reasonable” for refreshment purchases, and no purchase card training specific to refreshment purchases. As a result, NSF divisions have developed a wide range of practices for these purchases.

A. Refreshment Purchasing Practices

NSF VISA purchase cards are the primary method used for making panel refreshment purchases. Overall responsibility for the NSF purchase card program is assigned to the APC,¹⁰ who is an employee of the Contracts Branch of the Division of Acquisition and Cooperative Support (DACS). In general, the APC: handles the contractual and administrative details with the GSA contracting officer; is responsible for training and disseminating policy and procedures for the purchase card program; processes all account set-up, maintenance, and cancellation activities; provides advice to cardholders and approving officials; and reviews and assesses monthly administrative reports on the program.¹¹ However, there is no APC oversight of the purchases made by individual cardholders; as a result, there is no NSF management-level review or monitoring of food purchases.

The proper use of each VISA purchase charge card is the responsibility of the card’s Approving Official. At NSF, an Approving Official may be a supervisor, management program officer, administrative officer, or other responsible person designated by the cardholder’s office. According to NSF VISA Purchase Card training, the Approving Official is responsible for ensuring that: transactions are authorized in advance of being made by the cardholder; transactions do not exceed the card holder’s authorized limits; and purchases are made in accordance with the guidance provided in the NSF Purchase Card Program Training Manual and advisory email notices sent throughout the year by the APC to cardholders and approving officials. Further, the Approving Official is responsible for ensuring that all documentation associated with his/her review of the transaction is clear, complete, and can stand on its own merits without further query by auditors or any other reviewing officials.¹²

We reviewed the NSF VISA Purchase Card Program training slides. According to the APC, select training slides from the 55-page document are used as talking points during his purchase card training sessions for individuals. Light refreshment purchases are mentioned in passing at the bottom of slide 37:

- **Light Refreshments**

... [The Federal Travel Regulation] allows the serving of light refreshments at agency sponsored conferences that involve attendee travel. GSA notes that the food and drink provided

¹⁰ Steven L. Strength is the current APC, Janelle Gosey is the Alternate APC.

¹¹ “Role of the Agency Program Coordinator,” Slide 11, NSF VISA Purchase Card Program training slides, Tab 4.

¹² “Role of the Approving Official,” Slide 9, NSF VISA Purchase Card Program training slides, Tab 4.

should be intended as a refresher, not a meal. One person must be in travel status and outside the local traveling area.¹³

This appears to be cursory guidance for an activity that costs NSF approximately \$500,000 each year. NSF staff that we interviewed supported this conclusion. They said they attended purchase card training, but the information they received was generic in nature and did not provide them with specific guidelines for refreshment purchases. Questions about requirements and individual purchases are made on a case-by-case basis and only when the contact with the APC is initiated by a purchase card holder. The APC provides information to purchase card holders on a question-and-answer basis, and the information is not widely disseminated among NSF's 300+ purchase cardholders. Therefore, there is little uniform guidance to ensure consistent decisionmaking when it comes to making refreshment purchasing decisions.

Division administrative staff responsible for placing refreshment orders told us that the choice of food vendor is strongly influenced by the program officer / program assistant responsible for the panel/meeting. In some cases, program officers direct administrative staff to place orders with specific vendors; in other cases, administrative staff members make panel refreshment arrangements subject to budgetary constraints established by their division.

NSF VISA Purchase Card Program training slide 34 states in part:

- Competition

[T]he prices paid must be considered fair and reasonable, and purchases must be equitably distributed among suppliers. You must rotate your vendors.¹⁴

As shown in Tab 5, the majority of NSF organizations purchase refreshments for panels and other activities from vendors in the Ballston area. For example, NSF organizations purchased approximately 57%, or \$286,330, of their refreshments from 13 vendors within two blocks of NSF's buildings. Forty-six percent of these purchases, or \$231,562, were made from neighborhood vendors such as Cosi, Mary's Café, Manhattan Bagel, Tivoli, etc. An additional 11% of food purchases, or \$54,768, were made from vendors located in Ballston Mall, including To Market To Market, Panera Bread, and Starbucks Coffee. The majority of these local establishments are fast food vendors, sandwich shops, and pastry shops. In contrast, 23%, or \$115,565, of food purchases were made from more distant vendors, which sometimes add additional delivery charges.

Despite the guidance to rotate vendors, we identified divisions that made virtually all of their purchases from a single vendor. For example:

- An administrative staff member in the Division of Biological Infrastructure explained that the decision to use a single vendor—the [REDACTED], totaling \$14,963 in 2009—evolved over time and has more to do

¹³ Tab 4. We note that this guidance is applicable to all federal agencies.

¹⁴ Tab 4.

with reliability and known cost than playing favorites. The administrative staff member noted that when she switched among different vendors, she spent more time following up on delayed deliveries and missed orders than she does now. She also stated that some of the earlier vendors she used did not show up on time and/or disrupted the panel during meetings.

- An administrative staff member in the Division of Information & Intelligent Systems (IIS) responsible for purchasing panel refreshments also utilized a single vendor, the [REDACTED] for most of 2009. The [REDACTED] was the most popular refreshment vendor among all NSF organizations in 2009, accounting for 10%, or \$50,398, of NSF's total food purchases. [REDACTED] The combined locations accounted for 18%, or \$90,104, of all NSF refreshment purchases in 2009. According to the IIS staff member, whose purchases from these successive entities totaled \$9,839 in 2009, he continued his working relationship with the owner when he relocated because the vendor's prices were reasonable and no delivery charges were involved.

- The Chemistry Division (CHE) made 80% of its food purchases from [REDACTED].

Such concentrated purchasing from one vendor does not appear consistent with GSA's guidance for "equitably distributed" and "rotation" principles articulated above. In the absence of a centralized office, with cardholders acting in isolation, it is difficult for NSF to ensure overall adherence to defined policy and guidelines, including consistency with GSA's "fair and reasonable" guidance.

B. Refreshment Purchases Costs

We queried the JPMorganChase PaymentNet purchase card database using food related merchant category codes¹⁵ for calendar year 2009. As shown in Tab 6, NSF divisions made approximately \$500,000 in food purchases from 35 vendors. Tab 7 shows the total amounts of credit card food purchases by NSF organizations in 2009.¹⁶ Our analysis showed wide ranges in prices per person, the purchase of substantial food that could be viewed as a meal, as well as some purchases that appeared to directly contravene the NSF and GSA guidance.

A comparison of two refreshment purchases is illustrative of the wide range of prices we identified: In January 2009, CISE/IIS placed a morning refreshment order with [REDACTED] for 60 panelists serving 4 panels for a total of \$765.48, which is \$12.76 per person.¹⁷ In March 2009, MPS/CHE placed a morning refreshment order with [REDACTED] for a single panel

¹⁵ Caterers; Eating Places, Restaurants; and Fast Food Restaurants.

¹⁶ Purchase card holders' organizations were identified via the NSF Outlook Global Address List; however, purchase card holders may make purchases across organizations.

¹⁷ The order included 3 large assorted "breakfast platters," 6 large fresh fruit bowls, 12 boxes of coffee, 1 box of hot water/tea bags, and 60 bottles of juice.

with 8 panelists for a total of \$247.50, which is \$30.94 per person.¹⁸ The [REDACTED] purchase also included a \$35.00 delivery fee.¹⁹ These examples demonstrate an \$18.18 per meeting participant difference between divisions for a single morning refreshment serving.

Morning refreshments typically include variations of bagels with condiments, pastries, donuts, fresh fruit, juice, and coffee, decaf, and hot water and teas, which can substitute for breakfast. Afternoon refreshments include cookies, brownies, and other pastries, fresh fruit, and coffee, soda, and bottled juices and water. Although some of the purchases above may appear excessive, they are consistent with the NSF and GSA guidance. On the other hand, certain purchases appeared to constitute meals, which is inconsistent with the idea of “light refreshments.” Our review identified a \$63 “breakfast” for 4 panelists as well as a panel for which \$10-12 “box lunches” were purchased for the panelists. In addition, NSF staff made \$12,492 in food purchases from [REDACTED], a vendor whose “catering” menu includes only box lunches, sub trays, and salad bowls.²⁰ Administrative staff told us that on occasion luncheon-type refreshments are purchased to keep the panelists from taking long lunch breaks. Such a practice is not consistent with the concept of “light refreshments,” nor is it appropriate for attendees who are provided with funds to purchase their own food.

NSF administrative staff responsible for making panel refreshment purchases also told us that, in the absence of specific NSF policy or guidance on “reasonable” costs, they generally felt they had no basis to question requests for specific providers or refreshments from more expensive vendors. The staff also noted that science assistants and/or program officers who did not agree with limitations they attempted to place on refreshment orders sometimes made changes to orders or made additional purchases without prior authorization, including adding to the quantity or type of food being ordered. According to one administrative staff member, this practice causes a great deal of tension between administrative and science staff because the administrative staff member’s name is on the order, and s/he is responsible for ensuring the order placed is identical to the one that was approved by the purchase card Approving Official. The administrative staff repeatedly told us that it would be very helpful to have more specific guidance and firm guidelines for panel refreshment purchases. Many of these staff concerns would be ameliorated if NSF guidance specified a standardized selection of appropriate items and quantities for morning and afternoon refreshments.

C. Potential Indicators of Waste, Fraud, and Abuse

Our review also assessed purchases for the potential of waste, fraud, or abuse. Typical indicators of possibly problematic transactions are late pre-approvals, inconsistent pre-approvals and invoices, late payment of invoices, handwritten changes to otherwise printed invoices, white-out on invoices, or late changes to already placed orders. Our review identified a variety of such

¹⁸ The order included “breakfast pastries,” bagels, and fruit salad, 8 bottles of juice, 45 cups of regular coffee, 15 cups of decaffeinated coffee, and 10 cups of tea.

¹⁹ Several vendors charged delivery fees. Our review of select invoices determined that [REDACTED] charged a \$35 fee for each NSF refreshment order it delivered—a panel with two sessions in one day incurred two delivery fees. A [REDACTED] agent we contacted stated that delivery fees could be discounted if multiple orders for a single panel are placed by a division; however, multiple orders to different divisions delivered at the same time might not receive a discounted fee: apparently the discount depends upon the catering agent contacted.

²⁰ See snipurl.com/1dc1g1.

issues, which raised concerns with oversight and the adequacy of individual program internal controls. Of the 110 purchases reviewed, 24% had one or more issues related to appropriate documentation for purchase card transactions, or documentation that on its face reflected extraordinary costs. These issues included:

- Missing or late pre-approvals: In IIS, a miscellaneous receipt from Cosi on Fairfax Drive without annotation, pre-approval form, or invoice. In the Division of Ocean Sciences, an unsigned pre-approval form for a purchase from Boeymonger in the amount of \$63.95 with invoices attached for \$81.45 and \$63.95. In the Division of Physics, a purchase of \$11.87 from Tivoli Pastry with a pre-approval form submitted 4 days after the date of the purchase. In the Division of Behavioral and Cognitive Sciences (BCS), pre-approval forms and vendor invoices submitted 1-2 weeks after panels had ended. The objective of purchase pre-approval is to ensure, through an independent assessment, that the planned purchase is appropriate and reasonable—before the purchase is made. Multiple examples of unsigned or post-dated pre-approval authorizations indicate purchases are being made without supervisory review, which could enable fraudulent or unnecessary purchases.
- Disparities in documentation: In CHE, a purchase of 78 beverages for 8 panelists, and a purchase of 99 beverages for 9 panelists. In BCS, vendor invoices with different quantities of snacks and beverages for consecutive sessions of a 10-member panel. In IIS, purchase card charges from one vendor totaling \$101.08 more than the amount on the invoice and vendor receipt. In the Division of Ocean Sciences, a Panera Bread invoice and receipt for different purchase amounts. Such disparities can be indicative of personal or ghost purchases, or fraudulent overpayments.

The instances cited above illustrate disregard for established purchase card procedures, exposing NSF to the risk of fraud and abuse, and they impair NSF's ability to detect erroneous or fraudulent purchases.

Although we ultimately did not find fraud in these instances, each highlights a classic fraud indicator, and strongly suggests that a centralized process would enable NSF to easily review its purchases to ensure that fraud or waste is not occurring. The examples discussed above also illustrate the discretionary nature of refreshment purchasing among NSF organizations as well as examples of poor oversight and record-keeping. In our review of numerous small and otherwise anomalous food purchases, we found none that appeared to be for the purchaser's personal gain. We did not, however, attempt to reconcile the number of panel members with the quantity of food purchased or determine whether individual staff also partook in the provided refreshments. We did identify an NSF staff member who caused her father's company to receive the refreshment orders for three review panel meetings, totaling \$2,085. We determined that her actions represented a conflict of interests, and referred the matter separately to NSF for appropriate action.

Similar to our observations, a potential for systemic vulnerabilities was recognized in a February 2009 memorandum from the Division of Financial Management to DACS.²¹ The memo raised concern that funds being used to purchase refreshments were not being monitored and that some costs appeared excessive.

The vulnerabilities, possibly excessive expenditures, and administrative issues that we identified in this review could be reduced or eliminated if NSF provided centralized coordination of light refreshment purchases for panels and other meetings.²²

IV. Conclusion and Recommendations

We make two recommendations based on the review detailed above.

- 1) NSF pays meeting attendees an amount it has determined to be sufficient to provide for breakfast, lunch, and dinner. In light of that fact, and in consideration of the challenging fiscal environment we are experiencing, we recommend that NSF assess whether it is a prudent use of scarce federal funds to spend nearly a half-million dollars a year to provide extensive free mid-morning and mid-afternoon “refreshments” to panelists, supplementing the flat rate or per diem paid to these individuals.
- 2) If NSF chooses to continue providing refreshments, we recommend that it centralize the provision of such refreshments to improve control over the process and ensure it is carried out reasonably, consistently, and responsibly. Without centralized oversight, NSF places almost \$500,000 of its program funds at risk. Conversely, centralizing refreshment purchasing for panel refreshments would:
 - make it easier to establish and enforce agency-wide, standardized internal control procedures;
 - improve record-keeping and documentation for refreshment purchases;
 - improve the equitable distribution of vendors chosen;
 - provide a standard menu of light refreshment choices for morning and afternoon panels at a reasonable cost;
 - simplify panel purchasing responsibilities for administrative staff; and
 - enable NSF to use its purchasing power to negotiate competitive prices or a blanket purchase agreement, in support of its panel business model.

If you have any questions or wish to discuss these recommendations further, please feel free to contact Monte Fisher at 292-4987 or mfisher@nsf.gov. Please advise me of your responses to these recommendations by December 30, 2010.

²¹ Tab 8.

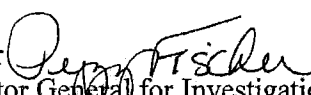
²² For comparison, we note that NIH study section meetings are organized through NIH’s Center for Scientific Review. <http://cms.csr.nih.gov/>. Panelists are paid a flat rate reimbursement that includes an honorarium. Typically, meetings are convened at hotels and the support contract contains standard language for refreshments, meeting set up, and video support. Such standardized handling of panelist refreshments may provide guidance to NSF in evaluating our recommendations.



National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

SEP 30 2011

To: Cora B. Marrett
Deputy Director

From: Peggy L. Fischer 
Assistant Inspector General for Investigations

Subject: OIG Review of NSF's Contractor Employee Background Investigation Process
(OIG Tracking No. PR10010001)

The Office of Inspector General (OIG) conducted a proactive review of NSF's process for ensuring that contractor employees have background investigations conducted. The issues we identified during our review raise significant security concerns with respect to compliance with requirements of the contractor employee entrance process. We make recommendations for NSF to implement a policy to ensure background investigations are conducted in a timely manner.

If you have any questions or wish to discuss these recommendations further, please feel free to contact Dr. Monte Fisher by telephone at 703-292-4987 or email at mfisher@nsf.gov. Please advise me of your actions by October 31, 2011.

Copies: Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG
Amy Northcutt, Acting Assistant Director, OIRM

National Science Foundation Office of Inspector General



Management Implication Report
OIG Tracking No. PR10010001

September 30, 2011

Executive Summary

This brief Management Implication Report describes security risks related to the contractor entrance process and access to NSF facilities and systems, and makes recommendations to address those risks. Each NSF contractor employee who requires routine physical access to NSF or to NSF computer systems for more than six months is required to have a background investigation. This requirement covers contractor employees working 6 months or more either on-site or offsite at NSF who require access to NSF systems.

We initiated a review of NSF's current policies and practices regarding the entrance process for contractor employees to determine if contractor employees are complying with these policies and practices. To ensure the integrity of contractor employees who have access to NSF facilities, systems, and staff, NSF needs to be able to confirm that these contractor employees undergo the required background investigation.

In attempting to obtain information on contractor employees in order to assess their compliance with the background investigation requirement, we found that it was not possible to obtain meaningful information. No central office or database exists that maintains information regarding these employees. As a result, there currently is no mechanism in place by which NSF can determine which contractor employees are at NSF, or whether those who should undergo a background investigation have done so.

The issues we identified during our review raise significant security concerns with respect to compliance with requirements of the contractor employee entrance process. Accordingly, we recommend that NSF:

- 1) Take appropriate action to ensure that: all contractor employees who require a background investigation are identified; that the background investigations are conducted as soon as is practicable (preferably before they begin work at NSF); and that appropriate action is taken in a timely manner when the background investigation raises issues; and
- 2) Confirm that its processes for ensuring that NSF employees obtain background investigations in a timely manner, and ensuring that employees and contractor employees who require security clearances obtain them in a timely manner and maintain them, are functioning well.

Background

In April 2011, OIG identified potential security risks associated with NSF's system for screening and admitting individuals in NSF buildings. In connection with that risk, OIG reviewed information in its files and identified a security risk related to the contractor employee entrance process and access to NSF facilities and systems. This brief Management Implication Report describes those concerns and makes recommendations to address those risks. This MIR will be the first of several MIRs that will focus on issues related to security; including those identified in our April 2011 memo, "Review of Visitor Credentialing and Enforcement Process and Request for Records" (Tab 1), and our August 2011 email, "NSF Security" (Tab 2)."

According to NSF's *Contractor Entrance and Exit Guide* (*The Guide*, attached at Tab 3), each NSF contractor employee "who requires routine physical access to NSF or to NSF computer systems for more than six months" is required to have a background investigation.¹ This includes contractor employees working 6 months or more either on-site or off-site at NSF who require access to NSF systems.

During an investigation which began in 2009, we found that a contractor employee had circumvented the entrance process and failed to report to the Division of Human Resource Management (HRM) for over eight months, to fill out the necessary security background investigation paperwork². In our investigation we found that she had been employed at NSF previously in a competitive position but in 2003 she resigned in lieu of termination. At that time she left owing NSF money for hours not worked and for government property she illegally retained. We also determined that she had a criminal record, and was being investigated by local law enforcement in December 2008 for embezzlement. When she returned to NSF in 2009 as a contractor employee she failed to obtain a security background investigation, which likely would have revealed many of these matters. She issued herself visitor passes through the visitor log system from April 2009 to November 2009 (the entire duration of her employment as an NSF contractor employee).

As a result of the concerns expressed in our April 2011 memorandum, we initiated a review of NSF's current policies and practices regarding the entrance process for contractors to determine if contractors are complying with these policies and practices. That is, we sought to determine whether contractor employees who are hired for 6 months or more report to HRM in a timely manner to fill out the necessary security background check paperwork.³ Other OIGs have also reviewed and found issues with their agencies' processes for carrying out background checks for contractor employees.⁴

¹ *Contractor Entrance and Exit Guide*, p.6, infoshare.nsf.gov/viewDocumentDetails.do?docKey=2918.

² Electronic Questionnaire for Investigations Processing (e-QIP) and National Agency Check with Inquiries (NACI).

³ Hereinafter "contract employees."

⁴ See, e.g., DOD OIG, Rep. No. D-2009-005, Controls over the Contractor Common Access Card Life Cycle (2008), dodig.mil/Audit/reports/fy09/09-005.pdf; DOJ OIG, Report No. I-2005-010, Review of the Security and Emergency Planning Staff's management of Background Investigations (2005), justice.gov/oig/reports/OBD/e0510/final.pdf; DOJ OIG, Report No. I-2005-005, Review of the Bureau of Alcohol, Tobacco, Firearms and Explosives' Implementation of the Safe Explosives Act (2005), justice.gov/oig/reports/ATF/e0505/final.pdf; DOJ OIG, Report No. I-2005-002, Background Investigations Conducted by the United States Marshals Service (2005), justice.gov/oig/reports/USMS/e0502/final.pdf; DOJ OIG, A Review of ICITAP's Screening Procedures for

Current Policies and Practices

According to *The Guide*, the procedures set out therein for contractor employees working on NSF related business for more than 6 months were established for four primary reasons:⁵

- 1) To ensure compliance with Office of Budget Finance and Award Management, Division of Acquisition and Cooperative Support (BFA/DACS) contract requirements for security and privacy and related procedures.
- 2) To ensure the safety and security of NSF staff, visitors, and contractors;
- 3) To manage the distribution, handling, tracking, and return of NSF and Federal assets, including information technology, identification cards, and other property; and
- 4) To comply with relevant established Federal guidelines and regulations, including:
 - Federal Information Security Management Act
 - Office of Management and Budget (OMB) Circular A-130, Appendix III, "Security of Federal Automated Information Systems"
 - Homeland Security Presidential Directive 12, "Policy for a Common Identification Standard for Federal Employees and Contractors", as well as relevant guidance issued by the National Institute of Standards and Technology.

According to *The Guide*, when a contractor employee starts working at NSF:

The NSF COTR or Administrative Officer (AO) must inform the contractor to report to HRM Security . . . within two days of the contractor's enter on duty date to start the ID card process. The HRM Security Specialist⁶ will determine if a new investigation is required and will fingerprint and initiate the contractor in the Electronic Questionnaires for Investigations Processing (e-QIP) system, if necessary. Contractors requiring a new investigation must complete the online security form via e-QIP and submit all required documents to HRM Security within 5 days.⁷

The contractor employee entrance process involves four steps:

- (1) Network account creation;

Contractors Sent to Iraq as Correctional Advisors (2005), justice.gov/oig/special/0502/final.pdf; DOE OIG, DOE/IG-0693, Review of Security at the Strategic Petroleum Reserve (2005), ig.energy.gov/documents/CalendarYear2005/ig-0693.pdf; DHS OIG, OIG-04-08, A Review of Background Checks for Federal Passenger and Baggage Screeners at Airports (2004), dhs.gov/xoig/assets/OIG-04-08_ReviewofScreenersBackgroundChecks.pdf.

⁵ *The Guide*, p.3.

⁶ The HRM Security Specialist is not affiliated with the NSF physical security operation run by the Division of Administrative Services Facilities and Operations Branch.

⁷ *The Guide*, p.6.

- (2) IT security and privacy awareness training;
- (3) Security investigation ; and
- (4) Identification card issuance.⁸

According to *The Guide*, the roles and responsibilities within NSF are as follows:

- The Office of Budget, Finance and Award Management, Division of Acquisition and Cooperative Support (BFA/DACS) is responsible for the “solicitation, negotiation, award and administration of NSF contracts” and the determination of “consequences of non-compliance with security and privacy contract language requirements.”⁹
- Contracting Officers Technical Representatives (COTRs) are responsible for “providing oversight to and ensuring that contractor program managers are aware of their responsibility to follow NSF policies and procedures for entrance and exit procedures.” Further, they are required to “[e]nsure all requirements are met for background checks, building access, and any other required clearances.”¹⁰
- The Office of Information and Resource Management (OIRM) is responsible for: “operational support and procedures for contractor entrance and exit at NSF.” There are three divisions which have a role in managing the contractor employee entrance process.
 - HRM conducts the background investigations.
 - The Division of Administrative Services (DAS) manages physical security and issues and manages identification cards.
 - The Division of Information Systems (DIS) controls access to the NSF information systems, oversees user accounts, and provides the mandatory security and privacy awareness training.¹¹

The purpose of the background investigation is to ensure that contractor employees who will be working at NSF for more than 6 months are “reliable, trustworthy, of good conduct and character, and of complete and unswerving loyalty to the United States.”¹² To ensure the integrity of contractor employees who have access to NSF facilities, systems, and staff, NSF needs to be able to confirm that these contractor employees undergo the required background investigation.

⁸ *The Guide*, p.5.

⁹ *The Guide*, p.3.

¹⁰ *The Guide*, pp.3-4.

¹¹ *The Guide*, p.4.

¹² OPM website, “General Questions and Answers About OPM Background Investigations,” opm.gov/Products_and_Services/Investigations/FAQs.asp.

Results of Review

In attempting to obtain information on contractor employees in order to assess their compliance with the background investigation requirement, we found that it was not possible to obtain meaningful information. NSF has no central office or database that maintains information regarding these employees. Instead, information regarding contractor employees is maintained differently throughout the agency by either the AOs and COTRs within each directorate or office. As a result, there currently is no mechanism in place by which HRM Security—or anyone else at NSF—can:

- a. ensure that a determination is made as to whether a security background check is needed for each new contractor employee, and that a check is initiated when required;
- b. monitor a contractor employee's status (short term, long term, or intermittent) to determine whether a background check is required or not; or
- c. determine whether a contractor employee has left NSF, or whether a contractor employee who was expected to work at NSF for less than 6 months has in fact stayed longer and therefore will require a background investigation.

This problem results in part from flaws in the process for identifying contractor employees requiring a background investigation. Contrary to what is stated in *The Guide*, in practice it is not HRM Security that determines whether a background check is required for each contractor employee. Instead, the HRM Security Specialist informed us that the AOs or COTRs are the ones that tell the contractor employees to report to HRM to initiate a background investigation. HRM has no way of knowing when contractor employees arrive at NSF. HRM relies on the contractor employees showing up to HRM and letting them know they require a background check. Because of the way this information is communicated, there is no way for NSF to ensure that an appropriate determination is made for each contractor employee, and to identify how many contractor employees who should have background checks do not get them because they never tell HRM, either because of AO/COTR non-compliance or their own. This problem could be mitigated if the AOs or COTRs would directly notify HRM, or if HRM made the determination for all new contractor employees.

Fraud, Waste, and Abuse

As noted above, our files show that one contractor employee's criminal record was not detected because she failed to initiate a background investigation. Because of the decentralized way in which NSF is managing this process, we could not ascertain, and NSF has no reasonable means to know, if contractor employees with criminal records or other problems (such as false statements in their employment applications) are working at NSF.

In the aggregate, NSF contractor employees have access to NSF facilities, and to confidential employee, grantee, and/or agency information, and they may be responsible for safeguarding NSF records, security, IT and physical infrastructure. NSF's current practice

creates a high risk for exposure to fraud, waste, and abuse from contractor employees with criminal records or other indications of untrustworthiness.

OIG Conclusion and Recommendation

The limited review we were able to carry out revealed that NSF policies and practices for obtaining background investigations on contractor employees are neither well designed nor well followed—and it is impossible to determine the full extent of non-compliance because there is no mechanism for tracking these activities by such employees.

The issues we identified during our review raise significant security concerns with respect to compliance with requirements of the contractor employee entrance process. While we did not review compliance with the requirements for background investigations of NSF employees, we believe NSF should ensure the integrity of that process—including how NSF responds to the results of the investigations.

Accordingly, we recommend that NSF take appropriate action to ensure that: all contractor employees who require a background investigation are identified; the background investigations are conducted as soon as is practicable (preferably before they begin work at NSF); and appropriate action is taken in a timely manner when the background investigation raises issues. Such action could include developing a centralized process to track contractor employees, so NSF knows which contractor employees are assigned to NSF, either on-site or off-site, whether their status has changed such that background investigations that previously were not required are now required, and whether they are no longer working at NSF (such that IDs, network and email accounts and/or telephone numbers can be cancelled).

This review did not evaluate the process by which NSF ensures that NSF employees obtain background investigations in a timely manner, nor the process by which NSF ensures that employees and contractor employees who require security clearances obtain them in a timely manner and maintain them. While NSF is addressing the issues raised in this review, we recommend that it ensure that these other processes are functioning as they must.


Please notify us of what actions NSF plans to take in response to these recommendations by October 31, 2011. I would be happy to talk with you to discuss these issues. If you have any questions, please direct them to Monte Fisher, at 703-292-4987 or mfisher@nsf.gov.



National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

September 7, 2011

To: Cora B. Marrett
Deputy Director

From: Peggy L. Fischer 
Assistant Inspector General for Investigations

Subject: Review of SBIR Facilities and PI Relationships
(OIG Tracking Number PR-10020004)

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations.¹ Consistent with that responsibility, we are providing this Management Implication Report, which is based on recent investigations into companies that received NSF funding through the Small Business Innovation Research (SBIR) program.

This Report outlines NSF's current rules pertaining to the SBIR program, the background and results of our review, and four recommendations. If you have any questions or wish to discuss these recommendations further, please feel free to contact Monte Fisher at 703-292-4987 or mfisher@nsf.gov. Please advise me of your actions by October 7, 2011.

Attachment

cc: Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG
Donald Senich, Acting Director, Division of Industrial Innovation & Partnerships (IIP)
Joseph E. Hennessey, Senior Advisor, IIP

¹ The Inspector General Act of 1978, as amended, 5 U.S.C. App. § 2(2).

**National Science Foundation
Office of Inspector General**



**Management Implication Report
OIG Tracking No. PR10020004**

September 7, 2011

Executive Summary

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations. Consistent with that responsibility, OIG is providing this Management Implication Report.

Our office has investigated several SBIR/STTR firms that obtained NSF awards but do not either own or rent space to perform the funded work. Some investigations identified individuals taking advantage of students or family relationships to circumvent the PI primary employment rule of the program as well. In many cases, issues with company facilities and PI relationships are interrelated. These cases highlight fraud factors that could be addressed by implementing certain policies and procedures.

Some companies are:

- Submitting vague or inaccurate claims regarding their facilities and equipment;
- Not conducting or not paying for work at the facilities described in their proposals;
- Using university laboratories to carry out research, by taking advantage of personal relationships with university personnel;
- Failing to disclose to universities claims that university space is being used or leased; and
- Using students and/or family members as nominal PIs to circumvent the primary employment rule.

To address these vulnerabilities, we recommend that NSF take the following actions:

1. Require proposals to contain contracts, agreements, or letters of support from research institution partners that are submitted or signed by someone other than an individual named as working on the project or receiving funds;
2. Require awardees using outside facilities to provide proof of an existing rental or facility use agreement upon the start of an award and in the interim and final reports;
3. Require awardees to list all company officers and disclose their primary employers prior to each award; and,
4. Require awardees to disclose any family or student/postdoc/professor relationships or potential conflict of interests between company personnel and subcontractor personnel prior to each award.

In addition, we previously apprised the SBIR program that a certification required by the SBIR Policy Directive is absent from the FastLane SBIR cover page, and we were told that the certification will be implemented. NSF may find it convenient to add this certification when implementing the other recommendations in the memo.

I. Introduction

NSF's Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs provide funding for small businesses to conduct research and development, and requires that much of the work performed actually be conducted by the small business obtaining the award funds. Many of the businesses that apply for SBIR/STTR funding are newly created, and do not yet have the capital necessary to purchase or rent a facility of their own capable of conducting the work they propose. In these cases, businesses often take advantage of existing laboratory facilities by renting or subcontracting the use of facilities owned by other companies or research institutions. The SBIR/STTR programs require PIs to be "primarily employed" by the business that receives funding during the award period. In addition, for SBIRs, a company must certify that at least two-thirds of the funded work will be done by the company, and not contracted out, in a Phase I; and at least half of the funded work must be done by the company in a Phase II.

Our office has investigated several cases in which SBIR/STTR firms obtain awards from NSF, but do not either own or rent space to perform the work that has been funded. Some of these investigations have identified individuals taking advantage of students or family relationships to circumvent the primary employment rule as well. In many cases, issues with company facilities and PI relationships are interrelated. As discussed below, through these cases we have identified associated fraud factors that could be eliminated by the creation and implementation of certain policies and procedures to prevent such abuses.

II. Current NSF Policies and Procedures

Facilities: The solicitation for SBIR/STTR proposals requires companies to provide descriptions of their facilities, and documentation to support the planned rental or subcontracting of outside facilities. The Phase I solicitation states specifically:

A.9.8. Equipment, Instrumentation, Computers, and Facilities. (Must be uploaded into the system.) Provide a description that specifies the availability and location of significant equipment, instrumentation, computers, and physical facilities necessary to complete the portion of the research that is to be carried out by the proposing firm in Phase I. . . .

If the equipment, instrumentation, computers, and facilities for this research are not the property (owned or leased) of the proposing firm, include a statement signed by the owner or lessor which affirms the availability of these facilities for use in the proposed research, reasonable lease or rental costs for their use, and any other associated costs. Upload images of the scanned statements into this section.

Program Directors in the SBIR office frequently follow-up with companies during the proposal process to request additional information or documentation. This sometimes includes requests for information or documentation regarding facilities as required by the solicitation, but documentation demonstrating the existence of an actual contract or agreement for facility usage is not required during the proposal or award process.

PI Employment: The solicitation for SBIR/STTR proposals states, "The primary employment of the Principal Investigator (PI) must be with the small business concern at the time of the award, which means the PI must be 51% employed by the small business." PIs are also required to spend at least one calendar month on 6-month Phase I awards, and at least two calendar months per year on 2-year Phase II awards, working on the award project.

SBIR companies certify on the proposal cover sheet that the "primary employment of the PI will be with this firm at the time of the award and during the conduct of the research." Program Directors in the SBIR office regularly ask PIs to confirm by email that they are at least 51% employees prior to awards being made. In addition, companies must certify that the PI is primarily employed by the company on the initial request for payment, and again with the submission of each interim and final report.

III. Summary of OIG's Review

During the course of several investigations, we reviewed information and documents submitted to NSF by companies regarding their facilities. We compared these documents to information obtained throughout the investigations and determined there were preventable issues associated with PI relationships and representations about facilities in the proposals. Below is a brief description of these issues associated with six investigations. This list does not include all investigations that have identified problems related to company facilities and PI relationships, but provides a summary of the significant issues found to date that could be addressed by an NSF requirement for the submission of additional information:

Cases related to Facilities

1. **A company that received an initial payment from one SBIR Phase I award from NSF totaling \$100,000.** The company address provided on a Phase I STTR proposal was the Authorized Organizational Representative's (AOR) sister's home address, located in a distant state. The facilities and equipment described in the proposal were listed as available to both the company and the university partner. However, the company itself did not own any of the facilities or equipment needed to perform the proposed work, and no arrangement existed for the company to rent university facilities. The company PI worked for the university partner and was to be hired by the company upon receipt of the award. The award was withdrawn after the NSF Program Director discovered the AOR never hired the PI. The AOR spent over \$80,000 of the \$100,000 he received on personal purchases. Requiring proof of the ownership or rental of a facility capable of performing the proposed work could have alerted NSF of a potential problem.
2. **Two companies at the same location, one of which received three SBIR Phase I awards totaling \$299,997.** The company address provided on three Phase I SBIR proposals was the PI's home address. The company's facilities in these proposals were described as:

located in [a town in] FL with 2500 square feet of laboratory space. The company employs 4 full-time research personnel. The company meets all Federal and Florida environmental laws and regulations.

The second company also described the same facility and equipment in DOD SBIR Phase I proposals concurrently submitted by the PI's husband under the second company's name. Both companies claimed to own the same facility and similar equipment, and both submitted for federal funding during the same time periods without disclosing the existence of the other company at the same address.¹ In fact, while the second company had such a facility at a different location in the past, at the time two of the NSF awards were made, neither company had any research facility. Requiring proof of the ownership or rental of a facility capable of performing the proposed work could have alerted NSF of a potential problem.

Cases containing Issues related to Facilities and PI Relationships

3. **A company that received one SBIR Phase I award from NSF totaling [REDACTED].** The company address provided on the proposal was the PI's home address. The company described its laboratories in the proposal:

Currently, the company consists of 4 laboratories/centers. They are [REDACTED] lab, [REDACTED] lab, [REDACTED], and [REDACTED].

However, the company's address was the PI and her husband's apartment, and no other company address existed. The proposal included a letter of support from the PI's husband who worked in a university lab. The husband held a more advanced degree and was more of the subject matter expert than the PI. The proposal stated that some of the work would be completed in a laboratory at the husband's university—without disclosing the marital relationship. The company did not have an active contract for use of the university's laboratory facilities during the time period of the NSF award. Requiring proof of the ownership or rental of a facility capable of performing the proposed work, the disclosure of the familial relationship between the company PI and subcontractor, and a letter of support from a university official rather than the director of the subcontractor, could have alerted NSF of potential problems.

4. **A company that received one SBIR Phase I award totaling [REDACTED].** The company address provided on a Phase I SBIR proposal was the PI's home address. The PI's husband worked at a university and provided a letter of support in the proposal that offered the use of his university laboratory and equipment—without disclosing the marital relationship. The university was unaware of the arrangement the professor had made with his wife's company until after the award was made. When the university discovered the arrangement, it refused to approve it, and reported the issue to OIG during

¹ While companies can share research facilities, NSF cannot accurately assess "the availability of these facilities for use in the proposed research" if the company fails to disclose other users of the same facility.

the award period. The company then purchased equipment and rented a facility using award funds in order to accomplish the proposed work. The facility portion of the proposal contained only a letter from the professor describing his university laboratory. Requiring proof of the ownership or rental of a facility capable of performing the proposed work, the disclosure of the familial relationship between the company PI and subcontractor, and a letter of support from a university official rather than the director of the subcontractor could have alerted NSF of potential problems.

5. **A company that received one SBIR Phase I award, one SBIR Phase II award, and one SBIR Phase IIB award totaling \$1,090,000 from NSF.** The registered company address is a 909 square foot office space. The company founder is a professor who runs a university laboratory. The PI on the Phase I award to the company was a student under the university professor / company founder. The company budgets on the NSF awards included subcontracts to the professor/founder at his university laboratory. The professor/founder's biosketch in his NSF basic research proposals through the university did not disclose his employment at the company, and his current and pending support did not disclose DOD awards made to his company that subcontracted to his lab at the university. The proposal stated that the subcontract would provide access to the university laboratory. No other facility was described. A list of all company officers and their primary employers and the disclosure of the student/professor relationship between the company PI and subcontractor would have disclosed a potential conflict of interests to NSF.

A company that received one SBIR Phase I award and one SBIR Phase II award totaling [REDACTED]. The company address provided on Phase I and Phase II SBIR proposals was a post office box. The company was incorporated at the owner's home address. The NSF Program Director questioned the PI's use of a university email address on the Phase II proposal, and the PI responded that she had special arrangements to use university facilities to perform her research. The PI offered to provide documentation to support those arrangements, but never did. In fact, the PI was a 50% employee of the university, and therefore not primarily employed by the company. In the Phase II proposal to NSF, the company budgeted \$119,000 for a subaward to the university for work to be done in the university's laboratory by the PI's university supervisor. According to the proposal, the university would provide the company with use of its facility as a part of the subaward. According to the university, no arrangements existed for use of their facilities, and they did not receive a subaward from the Phase II award. In response to a recommendation by OIG, NSF suspended the Phase II award, pending further investigation, thereby protecting the remaining \$74,999. Requiring proof of the ownership or rental of a facility capable of performing the proposed work could have alerted NSF of a potential problem.

IV. Conclusions and Recommendations

Our analysis of recent SBIR investigations has identified several issues of concern related to company facilities. Some companies are:

- Submitting vague or inaccurate claims regarding their facilities and equipment;
- Not conducting or not paying for work at the facilities described in their proposals;
- Using university laboratories to actually carry out research, by taking advantage of personal relationships with university personnel;
- Failing to disclose to universities claims that university space is being used or leased; and
- Using students and/or family members as nominal PIs to circumvent the primary employment rule.

We recommend that NSF take the following actions to ensure that it funds responsible companies through the SBIR program:

1. Require proposals with institutional partners providing facilities to contain contracts, agreements, or letters of support from those partners. Those documents should be signed by someone other than an individual named as working on the project or receiving funds;
2. Require awardees using outside facilities to provide proof of an existing rental or facility use agreement upon the start of an award and in the interim and final reports;
3. Require awardees to list all company officers and disclose their primary employers prior to each award; and,
4. Require awardees to disclose any family or student/postdoc/professor relationships or potential conflict of interests between company personnel and subcontractor personnel prior to each award.

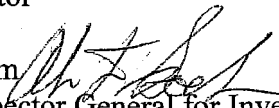
In addition, we previously apprised the SBIR program that a certification required by the SBIR Policy Directive is absent from the FastLane SBIR cover page, and we were told that the certification will be implemented. NSF may find it convenient to add this certification when implementing the other recommendations in the memo.



National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

April 24, 2012

To: Cora B. Marrett
Deputy Director

From: Alan F. Boehm 
Assistant Inspector General for Investigations

Subject: Review of SBIR Program
(OIG Tracking Number PR10020004)

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of NSF programs and operations, and to prevent and detect fraud and abuse in these programs and operations.¹ In addition, the Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) program reauthorization provisions of the National Defense Authorization Act for Fiscal Year 2012 state that:

The Inspector General of each Federal agency that participates in the SBIR program or STTR program shall cooperate to prevent fraud, waste, and abuse in the SBIR program and the STTR program by... reviewing regulations and operating procedures of the Federal agency...²

Consistent with these responsibilities, we are providing this Management Implication Report, which is based on recent investigations into companies that received NSF funding through the SBIR / STTR program.

This Report outlines NSF's current rules pertaining to the SBIR / STTR program, the background and results of our review, and seven recommendations. If you have any questions or wish to discuss these recommendations further, please feel free to contact Monte Fisher at 703-292-4987 or mfisher@nsf.gov. Please advise me of your actions by May 24, 2012.

Attachment

cc: Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG
Grace J. Wang, Director, Division of Industrial Innovation & Partnerships (IIP)
Joseph E. Hennessey, Senior Advisor, IIP

¹ The Inspector General Act of 1978, as amended, 5 U.S.C. App. § 2(2).

² 112th Congress, H.R. 1540, § 5143(a)(5)(B), available at www.gpo.gov/fdsys/pkg/BILLS-112hr1540enr/pdf/BILLS-112hr1540enr.pdf & goo.gl/A21io.

National Science Foundation
Office of Inspector General



Management Implication Report
OIG Tracking No. PR10020004

April 24, 2012

I. Introduction

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of NSF programs and operations, and to prevent and detect fraud and abuse in these programs and operations.¹ In addition, the Small Business Innovation Research (SBIR) / Small Business Technology Transfer (STTR) program reauthorization provisions of the National Defense Authorization Act for Fiscal Year 2012 state that:

The Inspector General of each Federal agency that participates in the SBIR program or STTR program shall cooperate to prevent fraud, waste, and abuse in the SBIR program and the STTR program by... reviewing regulations and operating procedures of the Federal agency....²

Consistent with these responsibilities, we are providing this Management Implication Report, which is based on recent investigations into companies that received NSF funding through the SBIR/STTR programs.

NSF's SBIR and STTR programs provide funding for small businesses to conduct research and development. Over the past few years, our office has conducted many proactive and reactive investigations of SBIR/STTR awardees, and we have identified several areas where the programs are vulnerable to fraud, waste, or abuse. As discussed below, through the implementation or modification of certain policies and procedures, NSF could address many of the program's vulnerabilities and decrease the risk of fraud, waste, or abuse in the future.

II. SBIR/STTR Solicitation and Grant Conditions

- A. Primary Employment:** Currently, the NSF SBIR/STTR solicitation addresses the primary employment requirement of the programs by stating that the PI must "be at least 51% employed by the small business at the time of the award." During the course of several investigations, this language has led to the argument that a university professor with a 50% appointment or an individual with a full time position elsewhere can qualify as a PI on an SBIR award as long as that individual works more hours at the awardee company. It also leads to arguments about whether a 1% difference in employment commitment would be material to NSF's funding decision.

Recommendation: Revise the solicitation to include language such as the emphatic admonishment in NASA's 2011 SBIR/STTR solicitation: "Note: NASA considers a fulltime workweek to be nominally 40 hours and we consider 19.9-hour workweek elsewhere to be in conflict with this rule."³

¹ The Inspector General Act of 1978, as amended, 5 U.S.C. App. § 2(2).

² 112th Congress, H.R. 1540, § 5143(a)(5)(B), available at www.gpo.gov/fdsys/pkg/BILLS-112hr1540enr/pdf/BILLS-112hr1540enr.pdf & goo.gl/A21io.

³ goo.gl/gY2QV.

B. Significant Rebudgeting: Currently, the NSF SBIR/STTR solicitation and grant conditions do not directly address rebudgeting of award funds. The grant conditions require awardees to notify NSF of changes in objectives or scope, change of PI, and post-award transfers of project effort. Some program directors within ENG/IIP include a statement in their standard pre-award correspondence with awardees that NSF must be notified of and approve significant deviations from the award budget. Recent investigations have found some companies have moved considerable amounts of funds to different budget categories, generally to the benefit of the PI's salary. These changes to the budget could be significant and have an impact on the project, but due to the fixed price nature of SBIR/STTR awards, NSF is not always notified and OIG is left with little recourse.

Recommendation: Revise the solicitation and grant conditions to require awardees to notify NSF when any significant changes to the budget are planned, and define "significant rebudgeting" as a set dollar figure or percentage. Alternatively, require all program directors within ENG/IIP to include a statement in their pre-award correspondence requiring awardees to notify NSF when any significant changes to the budget are planned, and define "significant rebudgeting" as a standard dollar figure or percentage.

III. Certifications

A. Supplemental Awards: NSF requires companies to certify to the rules of the SBIR/STTR program at the time of Phase I and II proposals and reports. Certifications are not included when companies submit proposals for Phase IB or IIB funding.

Recommendation: Require the submission of the standard SBIR/STTR cover page with supplemental proposals.

B. Cost Analysis and Audit Resolution (CAAR) Branch Phase II Financial Capability Reviews: Prior to NSF issuing Phase II awards, each prospective awardee is subject to a financial capability review performed by CAAR. Prospective awardees provide CAAR with standard financial documentation to support the Phase II budget, and complete a Financial Management Systems Questionnaire. The individual responsible for completing the questionnaire signs and dates it, but there is currently no certification language. Recent investigations have found companies that provide false responses in the questionnaire, or provide inaccurate financial documents.

Recommendation: Add a certification to the Financial Management Systems Questionnaire that the responses provided in the questionnaire *and* the supporting financial documentation are true and complete to the best of their awardee's knowledge.⁴

⁴ The Financial Management Systems Questionnaire is Appendix 4 in the Prospective New Awardee Guide—Appendix 5 in the Guide is the Certificate of Indirect Costs, which includes a suitable certification (goo.gl/zOtg8).

IV. Financial Reporting

- A. Phase II Milestone Charts:** NSF requires the submission of milestone charts with each SBIR/STTR Phase II interim project report. These milestone charts detail the time and costs spent on the Phase II project during the reporting period. The Phase II grant general conditions state that the milestone chart should include “a total estimate of expenditures” during the reporting period. The milestone chart itself states that the expenditures listed should be a “good faith estimate.” Some program officers inform grantees in writing that the milestone charts must contain actual expenditures, but this is not a consistent practice among all program officers. Prior to receiving Phase II funding, awardees’ financial and timekeeping systems are reviewed to ensure companies can accurately track time and expenses on a Phase II award. Recent investigations have found companies including inaccurate numbers in their milestone charts that are not supported by any documentation. In one case, a PI argued that while the numbers in his company’s reports were not supported by documentation, NSF only required a “good faith estimate” so that is what he provided.

Recommendation: Since companies are required to maintain accurate accounting of award expenditures, remove the “estimated” language from the grant general conditions and milestone charts. Require companies to submit actual expenditures as recorded in their financial systems as of a stated date.

- B. Phase I Milestone Charts:** Currently, NSF does not require the submission of any Phase I financial information. Recent investigations have found many companies have used Phase I award funds for purchases that are personal in nature, or otherwise unrelated to the Phase I work.

Recommendation: In Phase I final reports, require awardees to submit a milestone chart similar to what is required in Phase II reports, or some type of summary of expenses that can be compared to the proposed budget. Including such information in the final report would make it easier to hold companies accountable when they have used funds inappropriately, and should have a deterrent effect on companies or individuals misusing award funds.

- C. 7% Fee:** SBIR/STTR awardees are allowed to collect a 7% fee or profit from the award which can be used for expenses otherwise unallowable under the grant conditions. The Phase I and II grant conditions state that, if total expenditures are significantly less than the award amount, NSF reserves the right to renegotiate the amount and/or duration of the award.⁵ No definition of “significantly less” is provided. Recent investigations have found some companies spending less than budgeted on award activities, but since there is no definition of “significantly less,” we are unable to determine whether these companies are in violation of program rules.

Recommendation: Define “significantly less” as a set dollar figure or percentage, and require companies to report any unspent funds over the threshold to NSF prior to

⁵ E.g. Phase I (02/12) § 1, goo.gl/13Woi; Phase II (02/12) § 1, goo.gl/6Pucq.

approval of the final report and release of the final payment, reduced by the unspent amount.

V. Summary

Recent investigations have identified several areas where the SBIR/STTR programs are vulnerable and could be improved. The recommendations set forth above should serve to strengthen the programs against future fraud, waste, or abuse, as well as facilitating investigation and prosecution when fraud is committed.



National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

SEP 30 2010

To: Cora B. Marrett
Acting Deputy Director

From: Peggy L. Fischer *Peggy Fischer*
Assistant Inspector General for Investigations, Office of Inspector General

Subject: OIG Review of BREAD Proposals and Recommended Awards
(OIG Tracking No. PR10060012)

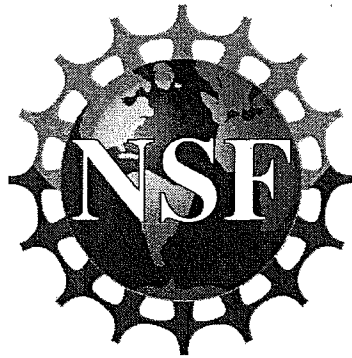
The National Science Board (NSB) encouraged NSF, through the Office of International Science and Engineering (OISE) and the Office of Inspector General (OIG), to collaborate on a white paper that highlights NSF's approaches and recent activities related to accountability and research integrity of international projects, as well as provide information about future efforts. Using the NSB language as guidance and consistent with OIG's mission, we are providing this Management Implication Report based on our review of the proposals and pending awards as of March 2010 under the Basic Research to Enable Agricultural Development (BREAD) program, with emphasis on accountability, research integrity, and minimal bureaucratic overhead.

This report describes our review of the BREAD proposals and recommended award Oversight Plans and contains recommendations to improve future solicitations and the current awardee Oversight Plans.

We look forward to your comments and feedback. If you have any questions or wish to discuss these recommendations further, please feel free to contact Dr. Monte Fisher by telephone at (703) 292-4987 or email at mfisher@nsf.gov. Please advise me of your actions within October 29, 2010.

cc: Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG
Larry H. Weber, Director, Office of International Science and Engineering
Jane Silverthorne, Acting Director, Division of Integrative Organismal Systems
Joann P. Roskoski, Acting Director, Directorate for Biological Sciences

National Science Foundation
Office of Inspector General



Management Implication Report
OIG Tracking No. PR10060012
30 September 2010

I. BACKGROUND

In 2008, the National Science Board (NSB) issued *International Science and Engineering Partnerships: A Priority for U.S. Foreign Policy and Our Nation's Innovation Enterprise*.¹ In its introduction, the then Chairman of the NSB, Dr. Steven Beering, stated that the NSB

established the Task Force on International Science . . . to examine the role of the U.S. Government in international science and engineering (S&E) partnerships. The Task Force . . . focus[ed] on: facilitating partnerships between U.S. and non-U.S. scientists and engineers, both in the U.S. and abroad, and in developed and developing countries; and utilizing S&E partnerships in improving relations between countries and to raise the quality of life and environmental protection in developing countries.²

Among the NSB's observations were that "[a]ccountability must be an integral part of planning successful collaborations to assure supporters that research integrity is a priority and that funds are used appropriately."³

The NSB identified accountability as integral to achieving the strategic priorities, including a goal to "Encourage partnerships with the accountability community so that common ground rules can be established in international S&E partnerships in order to minimize both misconduct and bureaucratic overhead." It expanded on this goal stating:

For the U.S. to support international S&E partnerships, there must be accountability, research integrity, and minimal bureaucratic overhead from many sources. Common standards for research integrity among participants in international S&E partnerships must be created, because scientific misconduct and excessive bureaucratic overhead have become issues of global concern. Currently, efforts are underway to foster common research integrity values and to establish definitions of misconduct – generally considered to include plagiarism, fabrication, and falsification of data. A well-designed strategy to promote integrity, deter misconduct, and minimize bureaucracy within international partnerships should be an integral part of all collaborative agreements. While there is no established methodology for setting common research integrity standards, the Organisation for Economic Co-operation and Development (OECD) Global Science Forum is working to develop models that may facilitate accountability in international S&E partnerships. These efforts are supported by OSTP, NSF, and the NSF Office of Inspector General.⁴

Subsequently, NSF's Office of International Science and Engineering (OISE) issued a draft white paper⁵ describing and making recommendations related to NSF's approaches and recent activities in international project accountability and research integrity. In its white paper, OISE cited the paragraph above in its introduction and recognized OIG's "role in stimulating and

¹ Tab 1, NSB-08-4.

² Id. page V.

³ Id. page 4.

⁴ Id. page 19.

⁵ Tab 2, International Research Integrity (Draft 10) 11 January 2010.

advancing dialog on the responsible conduct of research within the international community.”⁶ Indeed, through audits and investigations, and its outreach efforts, including those with the Global Science Forum⁷ and the World Conferences on Research Integrity,⁸ OIG has been an active participant and observer of international research accountability and integrity. The white paper identified the Basic Research to Enable Agricultural Development (BREAD) solicitation and its requirement for an Oversight Plan in its list of “Completed or Ongoing Activities.” The requirement for an international project Oversight Plan, coupled with OIG’s experience with the complexities of international oversight, piqued OIG’s interest and led to this review.

Consistent with OIG’s mission to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations,⁹ we developed this Management Implication Report based on our review of the Oversight Plans in the submitted proposals and awards in the BREAD program.

II. International Collaboration at NSF

The vast majority of NSF grants are awarded solely to U.S. researchers for the purpose of continuing NSF’s mission to promote the progress of science and engineering. Although the *Grant Proposal Guide* (GPG) states, “NSF rarely provides support to foreign organizations. NSF will consider proposals for cooperative projects involving U.S. and foreign organizations, provided support is requested only for the U.S. portion of the collaborative effort.”¹⁰ NSF has a long history of encouraging international collaboration. Of interest here, NSF’s Plant Genome Research Program (PGRP) encourages international participation in research projects. The *Developing Country Collaborations in Plant Genome Research* program¹¹ sought to increase collaboration between U.S. scientists and those in developing countries in the areas of agriculture, energy, the environment, and, specifically, biotechnology research. The solicitation asked for a description of “the roles for the developing country scientists” and “the history of collaborative efforts between the proposed partners,”¹² but no formal Oversight Plan was required.

BREAD is designed as a new component of the PGRP and is jointly supported by NSF and the Bill & Melinda Gates Foundation. The program solicitation¹³ states, “The objective of the BREAD Program is to support innovative scientific research designed to address key constraints to smallholder agriculture in the developing world.”¹⁴ International collaborators can receive funding as subawardees from the U.S. awardee, and Oversight Plans were required to be included at the time of the submission of the proposals that identified international subawards. The Plan, to be included in the Special Information and Supplementary Documentation section, was described in the solicitation as:

⁶ Id. page 1.

⁷ See snipurl.com/12aep6 and snipurl.com/12af0t.

⁸ See snipurl.com/12afbg and wcri2010.org.

⁹ 5 U.S.C. App. § 2(2).

¹⁰ Chapter I.E.6. Most recently updated and effective January 4, 2010.

¹¹ Tab 3, DCC-PGR Solicitation 04-563.

¹² Id. page 2.

¹³ Tab 4, BREAD Solicitation 09-566.

¹⁴ Id. page 1.

- **(A-3) Oversight Plan (maximum 3 pages):** Projects with subawards must provide a description of the lead institution's Oversight Plan for those subawards, including: Ensuring financial accountability, including the monitoring of expenditures and reporting on outcomes, for all subawardees. In this regard, the submitting institution should also provide a description of any past experiences in dealing with subawards to foreign institutions, particularly in the country (ies) where subawards would be made in this proposal.
- Ensuring compliance with regulations for the use of recombinant DNA, microbes, transgenic plants or animals, including any work involving vertebrate animals.¹⁵
- Ensuring compliance with regulations relating to the US Agricultural Bioterrorism Act of 2002.¹⁶
- Adherence to common principles for the responsible conduct of research and the investigation of research misconduct allegations.¹⁷
- BREAD does not anticipate the use of any human subjects in proposed research, and if any is anticipated, the PI must contact the Program Officer of BREAD for advice.

III. Review of BREAD Proposal Oversight Plans^{18, 19}

Two hundred nine proposals were submitted under the BREAD solicitation and 168 were “pending” at the start of our review (January 2010). We randomly selected 84 of these proposals²⁰ for a 50% sampling²¹ and examined each proposal's Oversight Plan for responsiveness to the elements of (1) financial accountability, (2) biological oversight (recombinant DNA, microbes, etc.), (3) Bioterrorism Act compliance, and (4) responsible conduct of research (RCR). In reviewing the four Oversight Plan elements, we assessed whether elements were “substantively responsive,” *i.e.*, the PI not only addressed each element, but provided an explanation of how compliance would be met.

We assessed each proposal's Plan against criteria we considered reasonable for an Oversight Plan. These included:

- a) **Financial Accountability:** A description of the process of subawardee financial management and how the awardee would evaluate and oversee that process, as well as a description of past experiences with foreign subawardees;
- b) **Biological Oversight:** A statement of whether or not recombinant DNA, microbes, etc. would be used in the project. If such materials were to be used in the project, we then

¹⁵ GPG Chapter II.D.6.

¹⁶ snipurl.com/12akym.

¹⁷ As reference, see OECD Global Science Forum materials at snipurl.com/12ai6z and NIH Fogarty International Center materials at snipurl.com/12aids.

¹⁸ Tab 5, Summary of BREAD Proposal Results.

¹⁹ Tab 6, BREAD Proposal Graphs.

²⁰ Tab 7, Table of BREAD Proposals Examined in Review.

²¹ This sampling size leads to a 95% confidence level with a 7.6% confidence interval.

looked for descriptions on what regulations were applicable and how compliance with these requirements would be met;

- c) **Bioterrorism Act:** A statement of whether or not select agents would be used, and if so, an explanation of controls for their use; and
- d) **RCR:** An explanation of the research ethics training at each institution and a discussion of how a research misconduct policy would be enforced, including how allegations would be addressed.

Further, we felt any successful Oversight Plan should:

- a) Provide evidence that the subawardee was aware of and collaborated in the development of the Plan, and that it agreed to and could effectively implement the proper controls described in the Plan;
- b) Be compatible with national regulations and guidelines already in place at both the awardee and subawardee location; and
- c) Not simply be a recitation of the awardee's rules and regulations.

These three principles are fundamental to effective institutional compliance plans²² and aid in building strong institutional capacities for rigorous internal controls in potentially weak environments.

IV. Results

Of the 84 proposals, 14 did not have subawards and were not required to have Oversight Plans. We excluded them from consideration. The remaining 70 proposals with subawards identified 40 different countries as the location of their subawardees.²³ Of these 70, we reviewed all of their Oversight Plans to determine whether they were substantively responsive to each Oversight Plan element.²⁴ We found that every Plan that substantively addressed an element employed a significant amount of text to do so, while the Plans that addressed elements cursorily devoted correspondingly less text. Accordingly, the results of our review can be well quantified by simply counting the number of lines of text devoted to each topic.

We found that the vast majority of Plans devoted significant explanation to financial accountability, but consistently neglected the other elements. The average number of sentences per Plan element are as follows:

²² See snipurl.com/12a19b.

²³ Tab 8, BREAD Proposal Subawardee Countries.

²⁴ We limited our review to whether the Oversight Plans substantively addressed each element—we did not assess the merits of the Oversight Plans.

Financial Accountability - 21 lines
Biological Oversight - 5 lines
Bioterrorism Act Compliance - 2 lines
RCR - 3 lines

The majority of the proposals (50 proposals or 71%) devoted five or fewer lines of text to the RCR element. Frequently, we read material such as this:

The research team is aware and will adhere to common principles for the responsible conduct of research. Additionally, given any unanticipated research misconduct investigation, we will follow fundamental principles and suggested procedures.²⁵

Responses such as this are unsatisfactory because they contain no substantive information about this critical element and simply reiterate the solicitation requirement language. It provides no indication of what “common principles”²⁶ would be adhered to, whether there is agreement between the parties, and what “fundamental principles and suggested procedures” would be applied.

In the course of our review, we also identified several PIs who submitted proposals to BREAD from the same institutions and provided essentially identical or substantially similar Oversight Plans even though the individual subawardees were located in different nations and therefore subject to different laws and regulations.²⁷ These plans ranged from poor to substantively responsive, but they tended to stress compliance with university policies and procedures without regard for compliance with any policies or procedures at the different foreign institutions. This observation reinforces the overall appearance that some of the Oversight Plans were developed without collaboration with or an understanding of the legal and regulatory restrictions in other nations.

Overall, of the 70 proposals with subawards, 14 (20%) were substantively responsive to each Oversight Plan element. We found numerous Plans that recited U.S. rules or promised compliance with U.S. regulations without discussion of how the rules and regulations of other countries were accounted for despite the fact that much of the research would be conducted overseas.²⁸ In the absence of such collaboration, the effectiveness of any Oversight Plan is questionable.

²⁵ IOS-0965223.

²⁶ We note as recently as the discussions at the Second World Conference on Research Integrity there do not appear to be any “common principles” for research integrity, although there is a general desire for such principles.

²⁷ Tab 9, Universities with Identical or Substantially Similar Oversight Plans. For example, we looked at two proposals from the University of Georgia with subawardee countries including Niger and India in one proposal and India and South Africa in another. Although both Oversight Plans outlined the same awardee institution policies, they do not account for the potential policy differences between the different subawardee countries. We found similar instances in proposals submitted from Iowa State University, North Carolina State University, the University of California-Riverside, and the University of Massachusetts.

²⁸ It is possible that the rules and regulations in other countries are similar to, more stringent or more relaxed than those applying to US awardees. Such variations are important to acknowledge so that NSF is cognizant of the control environment in which the research will be conducted.

V. Review of Recommended BREAD Awards^{29,30}

We also assessed the attributes and responsiveness of the Oversight Plans for the 15 proposals recommended for awards.³¹ Two of these proposals did not have subawards, and consequently did not need Oversight Plans. In the remaining 13 recommended awards, 11 foreign countries were named as subawardees.³² Of these 13, only one (8%) had a Plan that we considered substantively responsive to all four of the Oversight Plan elements.

Consistent with our methodology, we counted the number of lines of text addressing each Oversight Plan element, excluding the two Plans that lacked subawards. As was the case with the larger proposal set, significantly more text was devoted to financial accountability when compared to the other Plan elements. Of the 13 recommended awards with subawards, the averages per Plan element are as follows:

Financial Accountability - 16 lines

Biological Oversight - 6 lines

Bioterrorism Act Compliance - 1 line

RCR - 2 lines

Only the recommended award we deemed substantively responsive to all elements had a substantive response (15 lines) devoted to RCR. The remaining 12 proposals had fewer than five lines of text devoted to RCR, with four having none. The following is a typical example explanation of an RCR plan:

We adhere to the common principles for the responsible conduct of research and the investigation of research misconduct allegations.³³

We found it perplexing that PIs, who should be concerned about research integrity, would submit plans that indicated such a lack of interest in or understanding of how to ensure integrity in the challenging circumstances presented by international research collaborations. As with the proposals we reviewed, this select group of proposals gave little to no evidence that thought, planning, or coordination with the subawardee had occurred.

After the panel, the PIs of recommended awards were contacted by the Program Officers³⁴ with requests for additional information, including requests for expanded information on the Oversight Plans.³⁵ Consistent with our methodology, we again counted the number of lines of text addressing each Oversight Plan element. Of the 13 recommended awards with subawards, the average line additions per Plan element are as follows:

²⁹ Tab 10, Summary of Recommended BREAD Award Results. Three of these proposals are also found in our previous sample [REDACTED], [REDACTED], and [REDACTED].

³⁰ Tab 11, Recommended BREAD Award Graphs.

³¹ Tab 12, Table of Recommended BREAD Awards.

³² Tab 13, BREAD Recommended Award Subawardee Countries.

³³ [REDACTED]. See [REDACTED] and [REDACTED] for similar explanations.

³⁴ We noted that three different Program Officers contacted the recommended awardees but all requested additional information in the same general format.

³⁵ Tab 14, Line Count Comparisons Before and After Post-Panel Additions.

Financial Accountability - 5
Biological Oversight - 3
Bioterrorism Act Compliance - 3
RCR - 2

We then added these lines to the lines in the recommended awards to develop the final results below:

Financial Accountability - 22
Biological Oversight - 8
Bioterrorism Act Compliance - 4
RCR - 4

Based on the Program Officers requests, most of the PIs expanded on the information provided in their submitted proposals' Oversight Plans.^{36,37, 38} In this new sample pool we identified only one instance where the supplementary information changed a non-substantive Plan to a substantive one,³⁹ bringing our substantive total to two out of 13 (15%).⁴⁰ It is possible that only a marginal improvement was observed because PIs may be inexperienced in developing such Plans.⁴¹

VI. Conclusions

The BREAD program solicitation's requirement for international subawardee Oversight Plans allows awardees to ensure that such subawardees understand and can implement the high standards of accountability and conduct required of U.S. awardees. Accountability is essential to an awardee's effective management of an award and carefully formulated Oversight Plans will enable awardees to ensure accountability at the subaward level.

Our review of the BREAD proposals' Oversight Plans found widespread significant weaknesses that were only marginally improved during the recommended awardee exchanges with Program Officers. Few of the Plans appear to have been developed cooperatively with subawardees and there was little indication that the subawardees could comply with such Plans.

³⁶ Tab 15, Recommended BREAD Award Results Following Post-Panel Additions.

³⁷ Tab 16, Recommended BREAD Award Graphs Following Post-Panel Additions.

³⁸ The Program Officers documented their review of the Oversight Plans for projects with subawards in Diary Notes in eJacket. Many of these Notes commented on the awardees' experiences with foreign subawardees. Although we find such experience commendable, it did not alter our conclusions about the substance of the BREAD Oversight Plans

³⁹ This PI substantively expanded the Plan in the areas of biological oversight, Bioterrorism Act compliance, and RCR.

⁴⁰ None of the three proposals that are found in our proposal review, recommended award review, and post-Panel review was considered substantively responsive before or after the PI's response to the Program Officer's request.

⁴¹ In this context, we note that one PI, in response to the PO's request for more information, included a copy of the University's "Code of Conduct for Subaward Admin," which provided "standard language for the financial management and compliance to regulations of all subawardee institutions" (apparently both foreign and domestic), and then stated: "We also attach the original oversight plan as submitted in the original proposal. We are not sure exactly what is required here and would be happy to provide whatever additional information is sought." 1/19 response to Program Officer for [REDACTED].

We found numerous Plans that recited U.S. rules or promised compliance with regulations without discussion of the rules and regulations of other countries, despite the fact that much of the research would be conducted overseas. Some of the Plans contained details about financial accountability. In contrast, details on RCR, which we considered a critical element to the Oversight Plans, were sparse. Some Plans merely recited the text in the program solicitation, while others promised adherence to U.S. standards and institutional policies that likely have little relevance, application, or force in foreign countries. We concluded that:

1. Clearer guidance in the Solicitation about the expectations for the development of the Oversight Plans would likely lead to more substantive responses, engagement of the subawardees, and thus more and effective oversight; and
2. NSF should work with the recipients of the BREAD awards to ensure that the Oversight Plans provide evidence that the subawardee was aware of and collaborated in the development of the Plan, and that it agreed to and could effectively implement the proper controls described in the Plan and that they are not simply a recitation of the awardee's rules and regulations.

VII. Recommendations

We recommend that NSF:

1. Modify any future solicitation with international subawardees to include more details about the expectations for Oversight Plans, such that the Plan:
 - a. Is developed by the awardee in conjunction with the international subawardee and describes how the awardee will provide effective oversight of the international subawardee for each element of the Oversight Plan;
 - b. Includes an explanation of how it accommodates both the awardee's and the international subawardee's rules and regulations,⁴² and includes citations to appropriate NSF regulations and awardee and international subawardee policies; and
 - c. Includes a signed statement of agreement between the awardee and the international subawardee to adhere to the Plan prior to proposal submission.
2. Engage each current BREAD awardee to encourage the development of comprehensive Oversight Plans in collaboration with the international subawardees as described in the conclusions above. In particular, NSF should ensure strong plans for RCR training and research misconduct reporting and enforcement.

⁴² Again, resolving differences in rules and regulations is critically important to NSF's understanding of how the US rules and regulations can be adhered to in environments when relevant local rules and regulations may not exist or provide for less stringent requirements. It also provides a forum for resolving those situations where the US rules and regulations are less stringent than the subawardees.



National Science Foundation • Office of the Inspector General
4201 Wilson Boulevard, Suite II-705, Arlington, Virginia 22230

DEC 27 2011

To: Cora B. Marrett
Deputy Director

From: Peggy L. Fischer *William J. Hallin, HLO, 22 Dec 2011 for Peggy Fischer*
Assistant Inspector General for Investigations

Subject: OIG Review of BREAD Oversight Proposals and Recommended Awards
(OIG Tracking No. PR10060012)

On September 30, 2010, the Office of Inspector General (OIG) provided you with a Management Implication Report based on our review of proposals and pending awards under the Basic Research to Enable Agricultural Development (BREAD) program. Our report described the lack of detailed oversight plans that showed careful coordination with the foreign subawardee for ensuring biological oversight, bioterrorism act compliance, and responsible conduct of research, including research misconduct reporting. We recommended that NSF modify any future solicitation with international subawardees to include more details about the expectations for oversight plans. With regard to current awardees, we recommended that NSF:

Engage each current BREAD awardee to encourage the development of comprehensive Oversight Plans in collaboration with the international subawardees In particular, NSF should *ensure strong plans for RCR training and research misconduct reporting and enforcement.*¹

In response to our recommendations, NSF agreed to modify the future BREAD solicitation to ensure clear expectations for robust oversight plans. NSF also stated that "current awardees will be encouraged to develop a comprehensive oversight plan and to *explain . . . how they are addressing RCR training and research misconduct reporting and enforcement.*"²

¹ Emphasis added.

² Emphasis added.

We reviewed the recent solicitation for the BREAD program and confirmed that it included appropriate language regarding development of collaborative oversight plans.³

Regarding our second recommendation, the BREAD program sent each of the current BREAD awardees an email requesting in relevant part:

At this time, the Program would like to ask for additional information regarding the Oversight Plan for your funded BREAD project Please provide, no later than August 15, 2011, a summary of the current Oversight Plan that *includes a description of how [the awardee institution] will address the responsible conduct of research (RCR) training and research misconduct reporting and enforcement for the project.* It would be helpful if all subawardees could provide information regarding their relevant policies and guidelines and if [the awardee institution] could provide *details on how they will coordinate to ensure compliance and reporting requirements for all parties.*⁴

The results of our review of the responses from current awardees for FY10 are shown in Tabs 1 and 2. Of the twelve awardees that originally provided no specific information about RM or RCR, *only one* substantively addressed RM and RCR in its response to NSF. Three of the twelve awardees provided no additional information whatsoever. Several awardees provided copies of or links to their RCR and RM policies, but no elaboration about how they would coordinate with subawardees to implement those policies in BREAD's unique circumstances. The NSF program took no action regarding the inadequate submissions.

In addition, we reviewed the Oversight Plans for the four FY11 awardees, as shown in Tab 3. With regard to RCR and RM, only one plan was adequate, while three were deficient to varying degrees.

Thus, the NSF BREAD program continues to accept Oversight Plans that are woefully deficient regarding RM and RCR. As the National Science Board noted in *International Science and Engineering Partnerships: A Priority for U.S. Foreign Policy and Our Nation's Innovation Enterprise*, "[c]ommon standards for research integrity among participants in international S&E partnerships must be created, because scientific misconduct and excessive bureaucratic overhead have become issues of global concern."⁵ Moreover, NSF has a statutory mandate to ensure that "each institution that applies for financial assistance from the Foundation . . . describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to [all members] participating in the proposed research project."⁶ According to the BREAD program solicitation, Oversight Plans should demonstrate how the awardee and subawardee will ensure "[a]dherence to common principles for the responsible conduct of research and the investigation of research misconduct allegations[,] includ[ing] an explanation of how the Plan accommodates both the awardee's and the non-US subawardee's rules and

³ 11-579, nsf.gov/publications/pub_summ.jsp?ods_key=nsf11579.

⁴ Emphasis added.

⁵ NSB 08-4.

⁶ 42 U.S.C. § 1862o-1 (2010).

regulations⁷ For this purpose, the solicitation refers applicants to a guide prepared by the Organisation for Economic Cooperation and Development, which observes:

Research is increasingly a multi-national endeavour. International collaborations, peer review by international scientists, or human subject research conducted in another country for example, are now current practices. However, differences within and between national policies create new challenges in such a context: What happens when allegations of misconduct are raised against international collaborations? Which country conducts the investigation, or should all? How far should countries go in assisting other countries' investigations? And, perhaps an even more overarching question: what happens when two relevant national policies are at odds with each other?

An agreement for collaborative research involving parties from more than one country should address the promotion of good practice in research and describe the principles, standards and procedures for the investigation of allegations of research misconduct within the project.⁸

That guide includes boilerplate text for such agreements in international collaborative research projects, which should facilitate the development of adequate Oversight Plans.

Based on the foregoing, it appears that NSF is not ensuring that adequate Oversight Plans are in place to address the requirements for RCR training and research misconduct reporting and enforcement. Accordingly, we recommend that NSF:

- (1) Determine how to bring the current BREAD awardees' Oversight Plans in line with the requirements for RCR training and research misconduct reporting and enforcement.
- (2) Make no future awards for proposals that do not provide comprehensive Oversight Plans that were demonstrably developed in collaboration with the international subawardees, including strong plans for RCR training and research misconduct reporting and enforcement.

⁷ NSF 11-579, nsf.gov/publications/pub_summ.jsp?ods_key=nsf11579.

⁸ OECD Global Science Forum, *Investigating Research Misconduct Allegations in International Collaborative Research Projects: A Practical Guide*, at 1 (April 2009), available at <http://www.oecd.org/dataoecd/42/34/42770261.pdf>.

We look forward to your comments and feedback. If you have any questions or wish to discuss these recommendations further, please feel free to contact Dr. Monte Fisher by telephone at 703-292-4987 or email at mfisher@nsf.gov. Please advise me of your actions by January 23, 2011.

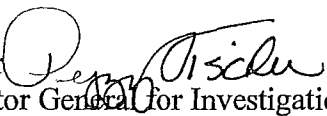
cc: Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG
Machi Dilworth, Director, Office of International Science and Engineering
Jane Silverthorne, Acting Director, Division of Integrative Organismal Systems
John Wingfield, Assistant Director, Directorate for Biological Sciences



National Science Foundation • Office of the Inspector General
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AUG 02 2011

To: Cora B. Marrett
Deputy Director

From: Peggy L. Fischer 
Assistant Inspector General for Investigations

Subject: OIG Review of NSF Wireless Purchases
(OIG Tracking No. PR10070013)

The Office of Inspector General (OIG) conducted a proactive review of wireless device and service purchases made by National Science Foundation (NSF) organizations. NSF directorates and divisions purchase a variety of devices and services, totaling over \$500,000 in fiscal years 2009 and 2010.

This report describes our review of current NSF wireless device and service purchasing and security policies and practices. It also contains recommendations for NSF to implement an agency-wide policy on the purchase and use of wireless devices and services, as well as to centralize such purchasing.

If you have any questions or wish to discuss these recommendations further, please feel free to contact Dr. Monte Fisher by telephone at 703-292-4987 or email at mfisher@nsf.gov. Please advise me of your actions by August 31, 2011.

Copies: Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG
Martha A. Rubenstein, Director and Chief Financial Officer, BFA

National Science Foundation
Office of Inspector General



Management Implication Report
OIG Tracking No. PR10070013

August 2, 2011

Executive Summary

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations. Consistent with that responsibility, OIG is providing this Management Implication Report based on a proactive review of wireless device and service purchases made by NSF offices. Our review determined NSF purchased wireless devices and services totaling \$529,395.09 in fiscal year (FY) 2009 and \$661,825.22 in FY 2010. From an investigative perspective, we were concerned that NSF staff might be procuring wireless devices or services for personal use.

We found that NSF's *ad hoc*, decentralized process for purchasing wireless assets and services has resulted in a hodgepodge of both devices and plans across the Foundation and frequently even within individual offices. The existence of such a wide variety of devices and plans limits NSF's ability to take advantage of economies of scale that could be achieved if the Foundation's wireless needs were consolidated and purchases were made through existing contracts maintained by the General Services Administration. The extreme diversity of devices and plans also makes the process of managing wireless assets and usage extremely and needlessly complex, and thus undermines the Foundation's ability to:

- utilize the most efficient and cost-effective service plan;
- minimize the burden of usage monitoring;
- ensure that users understand the terms of their service plans and identify and address instances in which users exceed their plan limits;
- ensure that devices are replaced for legitimate reasons and not simply because users want newer versions of their current devices;
- identify and address billing errors and possible fraudulent activity;
- identify and inactivate unused or inactive lines or devices;
- ensure appropriate IT security controls are in place for all devices; and
- ensure that costly international calling plans are in place only when needed.

In the current fiscal environment, NSF's practice of purchasing wireless assets and services without either a policy or business case governing such purchases warrants reassessment. As part of that reassessment, NSF should consider ways to take advantage of economies of scale in purchasing, to ensure consistency in the devices and service plans purchased across the Foundation and within offices, and to minimize opportunities for fraud, waste, and abuse.

Accordingly, we recommend that NSF take the following actions:

1. Develop and implement an agency-wide policy on the purchase and use of wireless devices. The policy should include assessment of which staff positions actually need wireless devices, the device functions needed to perform official duties (while complying with encryption standards), guidelines for appropriate use, the service plans needed to perform official duties, and the providers from which those devices and service plans are available. The policy should also focus on inventory control, to identify and manage device replacement cycles.

2. Provide centralized procurement of wireless devices and service plans to ensure the Foundation can monitor and manage costs and receive the benefit of economy of scale purchasing, taking advantage of relevant GSA contracts.
3. Require each user who possesses or receives a wireless device to acknowledge, in writing, his or her understanding of the appropriate use guidelines and recognition that the device is federal government property and the user has no right of privacy. The acknowledgement should be renewed annually. If feasible, NSF should also implement a banner notice for all NSF-provided wireless devices, providing the same information provided when logging into NSF's computer network. NSF should also address the issue of security and use of wireless devices in its annual Information Technology security briefings.
4. Update NSF Bulletin 08-18, *Personal Use Policy for NSF Technology and Communication Resources*, to include wireless devices and services.

I. Introduction

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations. Consistent with that responsibility, OIG is providing this Management Implication Report based on a proactive review of wireless device and service purchases made by NSF offices.

While reviewing NSF purchase card records, we identified annual wireless and other telecommunication purchases of \$357,328.79 in fiscal year (FY) 2009¹ and \$423,307.04 in FY 2010. We initiated this investigative proactive review to determine whether wireless devices or services were being procured for personal use. We expanded our examination to include wireless purchases made by purchase order, resulting in total purchases of \$529,395.09 in FY 2009 and \$661,825.22 in FY 2010.

This report describes NSF's policy and practices for procuring wireless devices and services. The complexity of the process across the offices, divisions, and directorates of the Foundation is characterized by a number of variables, including:

- **People** – Responsibility for purchasing wireless devices and services varies by office, division, or directorate—we will generally refer to the entities that procure wireless devices and services for NSF staff as “offices.” In some offices, administrative staff make the purchases, while in others information technology (IT) specialists are responsible. The decisions as to which staff receive NSF-provided wireless devices also vary across NSF, and include: permanent staff, Intergovernmental Personnel Act assignees (IPAs), administrative staff, and contractors.
- **Devices** – The wireless devices purchased by NSF include multiple versions of BlackBerries, Apple iPhones, iPads, and Palm Smartphones. In some cases, NSF offices have more than one device (BlackBerries and iPhones) as well as multiple versions of the same device (BlackBerries) in their inventories; while other offices purchase a single device for all staff who are provided with devices.² Each of these devices must be entered into NSF's Property Tracking System when obtained, physically verified annually, and removed from the system when replaced.³

¹ NSF purchase card records prior to December 2008 are not available due to changes in the government-wide GSA purchase card program. Prior to December 2008, NSF purchase cards were issued by Bank of America (BoA); on November 30, 2008, NSF's cards transitioned to JPMorganChase. NSF does not have electronic access to BoA records for the first two months of fiscal year 2009 (October-November 2008).

² The recently-revised Manual 17 states the following regarding tablets such as the iPad: “The usage of Tablet computers and associated data services is at the discretion of the applicable NSF Divisions and Directorates. It is appropriate for NSF to pay the cost of connectivity when NSF requires that an employee be available to the agency (e.g., essential Continuity of Operations employees).” It remains silent about other devices that staff may desire.

³ inside.nsf.gov/administrative/office/property_procedures.cfm. Devices that are delivered to the NSF mailroom are entered into the NSF Property Tracking System (PTS) by mailroom staff. Credit card holders who purchase devices

- **Service Plans** – The wireless devices purchased by NSF offices run on the wireless networks of AT&T, Sprint, T-Mobile, Nextel, and Verizon. Each wireless carrier offers a variety of voice, data, and international service plans, as well as options for text messaging, entertainment, and other applications. Some carriers offer additional options, such as “pooling” minutes and month-to-month “rollover” of minutes. Many NSF offices use multiple wireless networks with a variety of service packages. While some NSF offices allocate service packages by position (e.g., an Assistant Director may have a different package of services than a Program Officer), others range from data-only packages (for receipt and transmission of email) to unlimited service packages for all devices.
- **Funding** – According to NSF’s Financial Management Policy Manual (Manual 17), Agency Operations and Award Management (AOAM) funds are used to purchase wireless devices and related data services for NSF staff, and program funds are used to purchase these devices and services for IPA staff.⁴ Each carrier submits its own bill for services, so each month staff must track and pay numerous bills. The use of different funding sources to pay for devices and services within the same office compounds the difficulty of this process.

The variables above make a rigorous analysis of NSF’s system for requests, approvals, purchasing, tracking, and standardization of wireless devices and services virtually impossible to conduct. We therefore focused on the procurement of wireless devices and services. We limited our review of specific purchase-card charges for cellphones, smartphones, tablets, and air cards,⁵ not laptops or book readers—and we included wireless device and service purchases made with purchase orders to better estimate the full cost and complexity of the devices and services across the Foundation.

are responsible for reporting accountable property purchases to DAS for bar coding and recording in the PTS. We did not review the rigor with which purchased devices are entered into or retired devices are removed from the PTS.

⁴ Manual 17 sections 171 & 172.

⁵ An air card is a high speed wireless broadband card that gives users mobile internet access on their laptops, using their cellular data service.

II. Results of Current OIG Review

Our review determined that NSF offices purchased wireless devices and services totaling \$529,395.09 in FY 2009 and \$661,825.22 in FY 2010.⁶ NSF offices purchased the following devices in FYs 2009⁷ and 2010:

Device Type / Provider	2009	2010
BlackBerry – AT&T	2	14
BlackBerry – Nextel	0	1
BlackBerry – Sprint	34	29
BlackBerry – T-Mobile	43	138
BlackBerry – Verizon	124	128
iPhone – AT&T	44	57
iPad – Apple	0	39
Palm Smartphone	3	0
Total	250	406

As of January 2011, NSF's Property Tracking System indicated that NSF was in possession of 729 wireless devices for approximately 1,500 staff. This figure includes previous year's purchases as well as those purchased on the JPMorganChase purchase card and by purchase order.

Our review identified a decentralized process for wireless purchasing that is both complicated and time consuming, and places NSF at risk for uncontrolled and untrackable growth in its wireless expenses, as well as wireless security issues. Below we discuss both the NSF policies that apply to these devices and the practices employed within the agency.

A. NSF Wireless Purchasing and Security Policies

1. Purchasing Policy

There is no NSF policy that specifically addresses the procurement and use of wireless devices and services, nor is there any policy regarding which NSF staff *need* wireless devices or which devices are appropriate for their needs. NSF purchases are made on an item-by-item basis by individual offices within the agency. Because the purchases are small and not made centrally, NSF, to date, has not taken advantage of economies of scale or government-wide purchasing programs available through the General Services Administration (GSA). According to GSA, its programs provide high quality, state-of-the-art, FAR-compliant, budget-priced,

⁶ See Tab 1. Purchases of \$357,328.79 in the last 10 months of FY 2009 (see footnote 1) and \$423,307.04 in FY 2010 were made with JPMorganChase VISA purchase cards; an additional \$172,066.30 in FY 2009 and \$238,518.18 in FY 2010 purchases were made via purchase order by the Division of Acquisition Services (DACs), Office of Budget, Finance and Award Management.

⁷ The table reflects 10 months of purchases for 2009. GSA changes to the purchase card program in early 2009 transitioned NSF cards from Bank of America (BoA) to JPMorganChase. NSF no longer has access to BoA records for the first two months of FY09.

convenient products and services, through its Network,⁸ Information Technology Schedule 70,⁹ and Telecommunications Expense Management Services (TEMS) programs. These government-wide programs allow agencies to purchase wireless devices and services at pre-negotiated prices. In addition, the TEMS program is designed to streamline the ordering and management of wireless devices and services. It enables the federal government to reduce the total cost of wireless services through optimizing rate plans, identifying inventory and billing errors, actively monitoring spending, eliminating unused lines, applying process efficiencies, and improving management and security controls.¹⁰ According to the GSA TEMS website, “[c]ustomer agencies have realized cost savings of about 26 percent on their total wireless spending.” We learned that the Department of Treasury has been able to obtain a price of \$47/month for unlimited Blackberry service. Because NSF is a much smaller customer, it might not be able to receive that low a rate. However, it is possible that NSF could obtain wireless devices and services under another agency’s contract. To do so, NSF needs to define a business requirement and work through GSA to determine the best pricing it could obtain.

2. Security Policy

The security of federal government wireless devices is critical. In 2006 the Office of Management and Budget (OMB) recommended that all departments and agencies “ensure” that certain safeguards are put in place, including “[e]ncrypt[ion of] all data on mobile computers/devices which carry agency data unless the data is determined to be non-sensitive, in writing,” and use of “a ‘time-out’ function for remote access and mobile devices requiring user re-authentication after 30 minutes inactivity.”¹¹ Following a high-profile data breach at the Veterans’ Administration, on May 22, 2007, OMB subsequently reiterated that all agencies “must implement” these safeguards,¹² and that encryption must be done “using only NIST [National Institute of Standards and Technology] certified cryptographic modules . . .” NIST validates and certifies cryptographic modules to Federal Information Processing Standards (FIPS) through the Cryptographic Module Validation Program.¹³

Consistent with the OMB direction, NSF Bulletin 07-10, *NSF Policy on Encryption for Mobile Computing* (June 29, 2007)¹⁴ (Tab 2), states that NSF information and data that has been placed on portable computing devices, including smartphones, must be encrypted. The implementation of encryption on NSF-owned equipment is the responsibility of the Division of Information Systems (DIS). The iPhone and iPad cryptographic modules have not been NIST-certified. However, as of June 1, 2011, NSF allows Blackberry smartphones, iPhones (3GS, 4 or later), and iPads to access NSF email if those devices have been previously configured by the IT

⁸ gsa.gov/portal/content/104870.

⁹ gsa.gov/portal/category/25677. Schedule 70 provides General Purpose Commercial Information Technology, Equipment, Software, and Services.

¹⁰ gsa.gov/portal/content/105139.

¹¹ M-06-16, *Protection of Sensitive Agency Information*, whitehouse.gov/sites/default/files/omb/memoranda/fy2006/m06-16.

¹² M-07-16, *Safeguarding Against and Responding to the Breach of Personally Identifiable Information*, whitehouse.gov/sites/default/files/omb/memoranda/fy2007/m07-16.

¹³ FIPS 140-2, *Security Requirements for Cryptographic Modules*, csrc.nist.gov/publications/fips/fips140-2/fips1402.

¹⁴ infoshare.nsf.gov/showFile/1895/IB0710.

Help Central staff.¹⁵ Wireless devices must meet three conditions in order to be used to access NSF e-mail: (1) the device must be password protected; (2) the individual must allow NSF to install a security profile on the device and (3) NSF must be able to “wipe” the device if it is lost or stolen.¹⁶

B. NSF Wireless Purchasing Practices, Costs, and Security Practices

1. Wireless Purchasing Practices

NSF has not established policy or criteria for determining the best device or service package to meet business needs. In addition, individual offices which purchase wireless devices are not required to develop a business case to support the purchases they make. As a result, it is not possible to assess whether NSF staff receive the most appropriate device or service package for their needs.

Wireless purchasing decisions are made office-by-office, and responsibility within offices for wireless purchasing and plan management varies widely across the Foundation. In some offices, such as the Directorates for Biological Sciences (BIO), Computer & Information Science & Engineering (CISE), and Geosciences (GEO), computer specialists are responsible for purchasing, managing, and providing wireless device support to division staff, in addition to their day-to-day responsibilities for information technology resources (laptop and desktop computers, printers, etc.). In other offices, such as the Directorate for Engineering (ENG) and DAS, administrative staff members are responsible for purchasing devices and making payments to wireless vendors. As a result, there is a wide range of expertise among the NSF employees, both in purchasing and managing wireless devices and in monitoring and managing their associated costs.

Of the six offices we met with in the course of our review,¹⁷ only GEO provided us with a written procedure. The “Portable Electronic Device Assignment” procedure (Tab 3) addresses the assignment and use of portable IT resources within the Directorate, including wireless devices. All GEO staff members who desire portable IT resources must make the request to their supervisors, who forward the request to the proper approving officials in the organizational unit if they agree it is appropriate. If all organizational approvals are obtained, the centralized IT staff purchase the device. CISE has also taken steps to centralize the purchasing and management of its wireless devices and computer resources for the entire directorate in its OAD. CISE/OAD stated that it took this action at the beginning of FY 2011 to control and better manage: multiple accounts for multiple devices across the directorate; activation/deactivation of wireless international services; and the choice of devices available to office staff. This directorate-level centralization is less burdensome on divisional administrative and IT staff, but

¹⁵ See, e.g., inside.nsf.gov/staffnewsitem.do?cntn_id=119651. NSF IT Help Central staff update device security settings.

¹⁶ “Wiping” the device means that all data on the device is deleted, including both NSF and personal information.

¹⁷ We interviewed the top four purchasers of wireless services for 2009 (BIO/OAD, OIRM/DAS, ENG/CMMI and MPS/DMR), as well as an all-iPhone division (GEO/OAD) and a division with extensive international roaming charges (CISE/IIS).

the relatively small number of devices and services purchased limits potential economies of scale.

In the course of our review, we examined billing invoices in four divisions which comprised 31% of the purchases (\$135,377.24) made with NSF purchase cards in 2009: BIO/OAD; the ENG Division of Civil, Mechanical, & Manufacturing Innovation (CMMI); the Directorate for Mathematical & Physical Sciences Division of Materials Research (DMR); and DAS. We determined that, while some offices actively manage the devices and service plans, others do not.¹⁸ At the time of our review:

- A BIO/OAD computer specialist was responsible for managing approximately
 - 54 BlackBerries on T-Mobile
 - 1 BlackBerry on Verizon
 - 1 iPhone on AT&T, and
 - 15 air cards.
- A CMMI program specialist was responsible for managing
 - 5 iPhones on AT&T, and
 - 4 BlackBerries on T-Mobile.
- A DMR program specialist was responsible for managing
 - 18 iPhones and 1 air card on AT&T, and
 - 5 BlackBerries on T-Mobile.
- A DAS division secretary was responsible for handling billing invoices for wireless devices managed by the division's Administrative Officer, including
 - 39 BlackBerries on Verizon
 - 24 BlackBerries on Sprint
 - 3 BlackBerries on T-Mobile, and
 - 1 iPhone on AT&T.

To add to the complexity, in the bullets listed above, devices and services varied by provider, as well as within providers (for example, we found differing levels and combinations of voice, data, and texting services within a division and a provider).

The staff we interviewed pointed out a variety of issues, including:

- The lack of policy, procedures, or guidance for the purchase of wireless devices or services at NSF, which results in purchasing decisions made without clear regard to business need, service requirement, or cost. Office staff responsible for wireless device and service purchasing told us that without a written policy, they have no way to limit the choice of device or level of service requested.

¹⁸ The level of review ranges from careful monthly review of invoices to no review at all with automatic monthly charges to office purchase cards.

- The lack of a standard business device or plan for the conduct of official NSF business, which often results in a single staff person having to support a variety of devices with a variety of service plans on multiple carriers within the same office.¹⁹
- No ability for individual offices to take advantage of economies of scale purchasing for multiple devices/services from one or more providers.
- The fact that NSF Bulletin 08-18, *Personal Use Policy for NSF Technology and Communications Resources*²⁰ discusses internet access, email, telephone systems, and other office equipment, but does not mention wireless devices. As a result, NSF employees are not explicitly prohibited from accessing or downloading inappropriate content or other nongovernment related subscription services to their government-provided BlackBerries, iPhones, or iPads.

2. Wireless Costs

Our review identified wide ranges in the costs paid for the variety of wireless devices, service plans, international charges and roaming expenses across the Foundation.

For example, DAS issued 40 BlackBerries to its staff. Those devices were supported by plans which included varying levels of voice service, domestic long distance, text messaging, and data/downloads, depending on the user's roles and responsibilities. We found that:

- Twenty BlackBerries have a \$65/month service plan
- Twenty BlackBerries have plans that range from \$50 to \$100/month.

In contrast, CMMI had 5 iPhones issued to its IPA assignees. Independent of any analysis of the IPA's needs, each iPhone was supported by a plan that allowed:

- \$100/month for unlimited voice calling,²¹
- \$30/month for data transmission, and
- \$20/month for unlimited text messaging,

for a total cost of \$150/month each. In addition, two of these iPhones incurred international roaming charges²² and other service charges, and another two were not used for one and three months respectively, despite being activated and incurring costs. Cost savings might have been realized by developing a business need analysis and identifying a standard service package.

¹⁹ We found that different people in the same office want different versions of Blackberries, such as newer or touch screen models, and different services, and NSF offices accommodate those desires. Because each vendor carries different Blackberry versions and offers different service plans, many offices end up with a variety of phones, plans, and providers. The burden placed on administrative staff is exacerbated by the fact that some staff members want new Blackberry models as soon as they are available, requiring new equipment purchases and retirement of phones that are still fully functional.

²⁰ infoshare.nsf.gov/showFile/2989/ib0818.pdf.

²¹ One iPhone had an additional \$59.99/month international plan for a total of \$215.97/month.

²² One iPhone incurred \$185.66 in international roaming charges in 2009; the other incurred \$96.27.

We also found that NSF staff members who travel overseas can incur extraordinary international roaming charges. For example, an IPA in the CISE Division of Computer and Network Systems incurred \$4,631.46 in roaming charges for internet access in less than one week in Germany (Tab 4). The same IPA incurred \$998.80 in roaming charges over 2 days for internet access in South Africa a month later.²³ Although one computer specialist told us that he attempted to manage costs by activating and deactivating international roaming for the devices in his division, he stated that it was both time consuming and difficult to manage the activations across multiple devices. Some staff told us that they were not familiar with international roaming options for the variety of devices within their division, while others activated costly international plans for all devices regardless of whether the phones were anticipated to be used internationally.

Apple introduced the iPad in April 2010. While iPads cannot be used for telephone calls or videoconferencing, they can be used for email. As of the date we requested the information, less than a year after they were introduced, NSF had purchased 39 iPads. In addition to the purchase price of the iPad, which currently ranges from \$499 to \$829, monthly data plans range from \$15 to \$80/month.²⁴

3. Wireless Security Practices

Of the devices in NSF's current wireless device inventory, only BlackBerries have received the OMB-required NIST certifications.²⁵ Although neither iPhones nor iPads have been certified by NIST,²⁶ Division of Information Services (DIS) officials stated that, based on an internal risk analysis, they concluded that the three requirements noted above²⁷ provide adequate security for the NSF threat environment; and therefore DIS allows the use of iPhones and iPads at NSF.²⁸ Twenty-five of the 48 NSF offices that purchased wireless devices in 2009 and 2010 purchased at least one iPhone or iPad, and at least two divisions (CMMI and DMR) now appear to use iPhones exclusively. A table listing NSF offices with iPhones and iPads is found at Tab 5.

C. Potential Indicators of Waste, Fraud, and Abuse

We initiated this review to assess purchases for significant instances of waste, fraud, or abuse. Risk factors indicating possibly inappropriate expenditures include: domestic and international roaming charges for personal calls exceeding the personal use threshold described

²³ The travel voucher indicates this was official travel to organize a workshop and attend an IEEE conference in Mannheim, Germany.

²⁴ store.apple.com/us/browse/home/shop_ipad/family/ipad/select?

²⁵ NIST certificates for Research in Motion/BlackBerry cryptographic modules and library, csrc.nist.gov/groups/STM/cmvp/documents/140-1/1401vend.htm.

²⁶ NIST "Cryptographic Module Validation Program FIPS 140-1 and FIPS 140-2 Modules in Process List (3/7/11), see csrc.nist.gov/groups/STM/cmvp/documents/140-1/140InProcess.

²⁷ See page 4.

²⁸ DIS provides the guidance in Tab 6 to IT Specialists and others purchasing equipment on behalf of the agency, including iPhones and iPads.

by NSF policy,²⁹ personal-use third-party downloads, and downloads of for-cost entertainment or other non-business related applications.

Our review of selected billing statements for AT&T, Sprint, T-Mobile, and Verizon determined that each vendor's statement differed in the amount of usage information and detail provided. In some cases, we identified music and radio services on carrier invoices; however, we determined that the devices subscribed to unlimited data plans, and therefore did not incur additional charges for the services. We also found instances of extraordinary roaming charges, as described above.

However, the immense variations among service plans in use across the Foundation, and even within individual offices, made it extremely difficult for us to pinpoint possible fraudulent activity. Even if we found usage that appeared to be fraud, the wide variety in plans would hamper our ability to establish intent because it is not clear that NSF staff with these devices: are aware of the rules governing the usage of such devices and the limitation of their service plans; are informed of them formally when they are provided such a device;³⁰ and are reminded of those matters on a recurring basis. As mentioned previously, NSF Bulletin 08-18, *Personal Use Policy for NSF Technology and Communication Resources*, does not address wireless devices.

We also noted that while NSF desktop or laptop computers display a banner when logging on to the network that informs the user that the device is federal government property and the user has no right of privacy, NSF's wireless devices do not. We are uncertain about whether such a banner could be placed on wireless devices, but in its absence, the need for, and the individual acknowledgement of, appropriate use guidelines for wireless devices become critical.

III. Conclusion and Recommendations

We found that NSF's *ad hoc*, decentralized process for purchasing wireless assets and services has resulted in a hodgepodge of both devices and plans across the Foundation and frequently even within individual offices. The existence of such a wide variety of devices and plans limits NSF's ability to take advantage of economies of scale that could be achieved if the Foundation's wireless needs were consolidated and purchases were made through existing contracts maintained by the General Services Administration. The extreme diversity of devices and plans also makes the process of managing wireless assets and usage extremely and needlessly complex, and thus undermines the Foundation's ability to:

- utilize the most efficient and cost-effective service plan;
- minimize the burden of usage monitoring;
- ensure that users understand the terms of their service plans and identify and address instances in which users exceed their plan limits;

²⁹ NSF Bulletin 08-18, *Personal Use Policy for NSF Technology and Communication Resources*, infoshare.nsf.gov/showFile/2989/ib0818.pdf.

³⁰ Such as requiring the user to sign a certification acknowledging the rules when being issued a device.

- ensure that devices are replaced for legitimate reasons and not simply because users want newer versions of their current devices;
- identify and address billing errors and possible fraudulent activity;
- identify and inactivate unused or inactive lines or devices;
- ensure appropriate IT security controls are in place for all devices; and
- ensure that costly international calling plans are in place only when needed.

In the current fiscal environment, NSF's practice of purchasing wireless assets and services without either a policy or business case governing such purchases warrants reassessment. As part of that reassessment, NSF should consider ways to take advantage of economies of scale in purchasing, to ensure consistency in the devices and service plans purchased across the Foundation and within offices, and to minimize opportunities for fraud, waste and abuse.

We recommend that NSF take the following actions:

1. Develop and implement an agency-wide policy on the purchase and use of wireless devices. The policy should include assessment of which staff positions actually need wireless devices, the device functions needed to perform official duties (while complying with encryption standards), guidelines for appropriate use, the service plans needed to perform official duties, and the providers from which those devices and service plans are available. The policy should also focus on inventory control, to identify and manage device replacement cycles.
2. Provide centralized procurement of wireless devices and service plans to ensure the Foundation can monitor and manage costs and receive the benefit of economy of scale purchasing, taking advantage of relevant GSA contracts.
3. Require each user who possesses or receives a wireless device to acknowledge, in writing, his or her understanding of the appropriate use guidelines and recognition that the device is federal government property and the user has no right of privacy; the acknowledgement should be renewed annually. If feasible, NSF should also implement a banner notice for all NSF-provided wireless devices, providing the same information provided when logging into NSF's computer network. NSF should also address the issue of security and use of wireless devices in its annual Information Technology security briefings.
4. Update NSF Bulletin 08-18, *Personal Use Policy for NSF Technology and Communication Resources*, to include wireless devices and services.

If you have any questions or wish to discuss these recommendations further, please feel free to contact Monte Fisher at 703-292-4987 or mfisher@nsf.gov. Please advise me of your responses to these recommendations by August 31, 2011.



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FEB 14 2012

To: Cora B. Marrett
Deputy Director

From: William J. Kilgallin *William Kilgallin*
Acting Assistant Inspector General for Investigations

Subject: OIG Review of NSF's Public Transportation Subsidy Program
(OIG Tracking No. PR11020001)

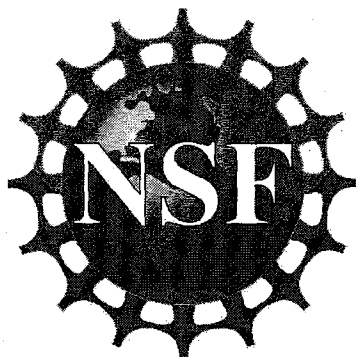
The Office of Inspector General (OIG) conducted a proactive review to determine whether there was any evidence of fraud, waste, or abuse with respect to government funds distributed by NSF for the Public Transportation Subsidy Program, as described in the attached Management Implication Report. The issues we identified during our review raise significant concerns with respect to compliance with certifications made by employees upon application. In the course of this review, we also uncovered issues relevant to the Pre-tax Parking Program. We make recommendations for NSF to implement annual certifications and improve recordkeeping.

In the course of our review, we determined that numerous NSF employees misused both programs, as described in the attached Report of Investigation (ROI). It is highly likely that many additional employees also misused these programs; in the sample we analyzed, we found that almost half of the participants misused the subsidy. We are referring this matter to you so that appropriate action can be taken by the Foundation. Please note that the ROI contains confidential personal information and it should be disclosed only to individuals who must have knowledge of its contents to facilitate NSF's assessment and resolution of this matter. Unauthorized disclosure may result in personal criminal liability under the Privacy Act, 5 U.S.C. § 552a(i)(1).

If you have any questions or wish to discuss these recommendations further, please feel free to contact William Kilgallin by telephone at 703-292-4993 or email at wkilgall@nsf.gov. Please advise me of your actions by March 14, 2012.

Copies: Allison C. Lerner, Inspector General
Clifford J. Gabriel, Office of the Director's Liaison to OIG
Amy Northcutt, Acting Assistant Director, OIRM
Lawrence Rudolph, General Counsel

National Science Foundation
Office of Inspector General



Management Implication Report
Case Number PR11020001

14 February 2012

I. Introduction

The Inspector General Act requires OIG to recommend policies to promote economy, efficiency, and effectiveness in the administration of agency programs and operations, and to prevent and detect fraud and abuse in these programs and operations. Consistent with that responsibility, OIG is providing this Management Implication Report based on a proactive review of NSF Public Transportation Subsidy Program.

An earlier OIG proactive review of the transit subsidy program recommended programmatic improvements and appropriate action against four employees who abused the program.¹ Because the transit subsidy was not fully electronic,² that review was limited to assessing how well a limited set of individuals' subsidies matched existing address records. In response, NSF implemented our recommended improvements and took action regarding the four individuals. More recently, we investigated an allegation that an NSF employee obtained transit subsidy benefits but did not use them, instead providing the benefits to her daughter.³ OIG subsequently reviewed use of transit subsidy for Metro use by a sample of NSF employee participants. Because the program is now fully electronic, we were able to uncover substantial misuse of the transit subsidy program, as well as misuse of the Pre-Tax Parking Benefit Program.

This report overviews NSF's policies for the NSF Public Transportation Subsidy Program and the NSF Pre-Tax Parking Benefit Program, and describes the results of our investigation into misuse of both. After our discussion, we make some recommendations to NSF management – concomitant with this report we are referring information to NSF management about individual employees for consideration of possible personnel actions and restitution.

II. Results of Current OIG Review

A. Relevant Policies

1. Public Transportation Subsidy Program

Federal employees are eligible to receive a tax-free transit subsidy benefit from their agency.⁴ NSF provides the following guidance:

The Internal Revenue Service allows participants to use only the amount of transit subsidy they need to cover their actual commuting expenses, not including

¹ PR07060015, MIR issued 19 March 2009, discussed in OIG Semiannual Report to the Congress, March 2009 pp.49-50 & September 2009 p.28.

² At that time, participants could obtain the subsidy either by adding to a SmarTrip card or by picking up a paper farecard—there is no means to track use of paper farecards. The subsidy is now provided to Metro users exclusively through SmarTrip cards.

³ The employee misused a total of \$3,220 of transit subsidy funds. The employee admitted responsibility and, because her actions constituted theft of federal funds, we referred the matter to the U.S. Attorney's Office. The employee agreed to a pretrial diversion, requiring her to repay the money and perform 50 hours of community service. We referred the matter to NSF management (case A10090071), which issued her a letter of counseling.

⁴ Executive Order No. 13150, frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=2000_register&docid=fr26ap00-131.pdf.

parking. If a participant will not need their full monthly subsidy for eligible commuting due to telework, travel, leave plans, etc, they must reduce their subsidy by a corresponding amount or return the leftover amount to NSF.⁵

Before applying for benefits, employees certify understanding of the rules of the program, which include in pertinent part:

- I may not receive a subsidy for the days I telework or otherwise do not commute to work.
- I will not use transit benefits to pay for official government travel
- I will not use transit benefits to pay for parking.
- I understand that each month DAS may conduct reviews of randomly-selected participants' fare calculations, hours worked, benefits used, leave requests and travel authorizations/vouchers to verify compliance with the appropriate use of their subsidies.⁶

The final certification informs employees that "making false, fictitious, or fraudulent certification may render me ineligible for participation in the transit subsidy program,"⁷ but it does not warn them that making false statements or converting subsidy funds to personal use is a federal crime.

2. Pre-Tax Parking Benefit Program

NSF provides a Pre-Tax Parking Benefit Program to its employees.⁸ Unlike the Transit Benefit, which provides cash to the employee for commuting, the Pre-Tax Parking Benefit is a modification to earnings. NSF manages the flow of paperwork to the Department of Interior for the modification of the employee's earnings. NSF provides the following guidance:

Employees are able to use up to \$230 per month of their gross income to pay for parking expenses before taxes are computed. Employees save on Federal payroll and income taxes on the amount of the benefit they select since that amount is no longer treated or reported as taxable salary.⁹

Employees do not formally certify that they will use the tax exempt money for parking, nor are they warned that failure to use the benefit as intended constitutes tax evasion.¹⁰ The "Pre-tax Parking Fact Sheet", a link available to interested employees (though participating employees are not required to review the page) advises that "employees are encouraged to retain documentation of parking expenses in the event of an IRS audit of their personal records."¹¹

⁵ Tab 1, inside.nsf.gov/oirm/das/ssb/ps/ptsp.jsp (*emphasis added*; **emphasis in original**).

⁶ Tab 2, Transit Subsidy Application.

⁷ Tab 2, Transit Subsidy Application.

⁸ Pursuant to 26 U.S.C. § 132(f), frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+26USC132.

⁹ Tab 3, Pre-tax Parking Program (*emphasis added*), inside.nsf.gov/oirm/hrm/erb/programs_services/pretax_parking.jsp.

¹⁰ Many employers and agencies do provide such a warning.

¹¹ inside.nsf.gov/oirm/hrm/erb/programs_services/parking_facts.jsp.

B. Analysis of WMATA Records

Our current review was limited to transit subsidy participants who use SmarTrip cards to travel on WMATA trains and buses, as well as other buses that accept SmarTrip cards. WMATA maintains records of all SmarTrip card use. We issued a subpoena to Washington Metropolitan Area Transit Authority (WMATA) for records of SmarTrip card use by the 750 NSF employees participating in the program as of 8 March 2011. WMATA provided 184 partial records covering the 8 month period 1 August 2010 to 6 April 2011. WMATA explained that it is very time consuming to retrieve these records, and especially difficult for records predating August 2010.¹²

C. Levels of Misuse for Public Transportation Subsidy Program.

Our review identified that almost half (49%) of the participants in the sample are misusing the subsidy by using it to pay for parking or personal trips. Misuse totaling \$19,457 was found in 90 cards, with individual amounts ranging from \$16 to \$658. The average amount of misuse for the 90 cards over the period of 8 months was \$216. If the misuse during the 8-month period was representative of these users' activity throughout the year, then the average individual misuse for the year can be estimated to be \$324.¹³ We found that 65% of the misuse was accounted for through paying for parking, which is prohibited, while 35% of misuse was due to travel that appears unrelated to commuting.

For 31 of the accounts in question, the 8-month total misuse was less than \$100 per account. The distribution of larger misuse totals is shown in the table:

SmarTrip Card Transit Subsidy Misuse				
Monetary Range of Misuse	Number of Participants in that Range	Total Misuse for Eight Months	Average Misuse per Account	Estimated Average annualized
\$100-200	19	\$2,712	\$142	\$214
\$200-300	14	\$3,457	\$288	\$432
\$300-400	12	\$4,316	\$360	\$540
\$400-500	6	\$2,686	\$448	\$672
>\$500	8	\$4,721	\$590	\$885
Total	59	17,892		

Assuming that the sample findings were representative of NSF subsidy SmarTrip card users, extrapolating to all 750 records from 2009 forward, we estimate that a review of all records of subsidy SmarTrip card users would reveal approximately 360 non-compliant participants, misusing nearly \$120,000 annually.

¹² We recently received an additional 177 records from WMATA. We do not anticipate reviewing these records or receiving additional records from WMATA.

¹³ Note that this is the average misuse of the program participants who misused their subsidy—it is not the average of all participants.

The amount of possible misuse by each person is limited by the fact that the SmarTrip card cannot hold more than \$300. We noted that few subsidy participants complied with the requirement to reduce each month's subsidy to account for non-commuting days in the previous month. As a result, many participants gradually built up their balances to the point that they routinely reached the limit of \$300 when adding the monthly subsidy.¹⁴

D. Misuse of Pre-Tax Parking Benefit Program

For the 59 cards with more than \$100 of apparent misuse, 16 of those who used the transit subsidy to pay for parking appeared to also receive \$11,848 total in pre-tax parking benefit over 8 months. The 16 people paid for \$3,571 total in parking with their transit subsidy, ranging from \$67 to \$454. However, NSF is unable to determine when these individuals began participating in the pre-tax parking program—if some of them started after August 2010, then their misuse of this program would be less.

We requested start dates and benefit amounts for all participating employees of the Pre-Tax Parking Benefit Program, but the current NSF enrollment procedure for tax-free parking does not keep track of such information. In the current procedure, an employee joins the program by emailing the Pre-Tax Parking Benefit Program contact person. The contact person then enters the transportation benefit into the Federal Personnel Payroll System and sends an informational email with an effective date and tax-free amount to the new participant, thereby completing the process. NSF does not keep a record of who receives the benefit, when they started, and how much they receive—the only record available, via the Department of the Interior (which handles payroll for NSF), is the amount currently being set aside per pay period for each participant. This lack of recordkeeping prevents NSF management from ensuring that applicants are entitled to the amount of the benefit they are receiving while also impairing our ability to find abuse. While the transit subsidy can no longer be inappropriately used for parking, the misuse of the Pre-Tax Parking Benefit Program that we found reveals that there are participants who do not ensure that the amount deducted from their taxable income accurately reflects their out-of-pocket parking costs.

E. Recent Changes in the Transit Subsidy Program

On 1 October 2011 WMATA began automatically loading the subsidy onto participants' SmarTrip cards. The new system provides two accounts per SmarTrip card: one for subsidy funds and one for personal funds.¹⁵ Under the new subsidy distribution system, employees are no longer able to pay for parking with the subsidy, since exit points of WMATA parking lots deduct funds only from the personal account. The Metrorail faregates and bus fareboxes deduct funds exclusively from the subsidy account, until the subsidy account is exhausted. The amount of subsidy unused in a month does not roll over to the following month; instead, the maximum amount of each participant's subsidy resets on the first of each month, regardless of how much remains from the previous month's subsidy.¹⁶

¹⁴ This practice has now been eliminated by the recent changes in the SmarTrip program. See Section II.E.

¹⁵ The funds remaining on the card on 1 October became the personal account; thus, all participants were gifted with any subsidy funds remaining on their cards on that day.

¹⁶ See wmata.com/business/employer_fare_program/faq_autoload.cfm#18.

III. Conclusions and Recommendations

Significant widespread misuse of the transit subsidy benefit has occurred over an indefinite period among NSF employees. Prospectively, the type of misuse of funds we uncovered will be reduced significantly because of the changes to the manner in which transit benefits are now added to SmarTrip cards. The subsidy can no longer be used for parking at WMATA parking lots, which constituted two-thirds of the misuse we found. Also, the cards no longer store more than each participant's monthly subsidy amount, since leftover amounts do not roll over to the following month, which will prevent the monthly maxed-out card balances that were so common among NSF employee participants. However, potential for misuse still exists in the form of participants who do not commute as often as they have claimed to and instead use the benefit to pay for trips unrelated to commuting. Further, in addition to misuse of the transit subsidy to pay for parking and trips apparently unrelated to work commutes, we also discovered misuse of the Pre-Tax Parking Benefit Program over the course of our review. While gathering data about the latter, we found that NSF does not have an adequate system for recording participants in the Pre-Tax Parking Program, their tax-free amounts, start dates, and changes. Accordingly, our recommendations below address the broader programmatic issues implicated in the findings.

We recommend that NSF:

- (1) Require annual certifications of participants in the Public Transportation Subsidy Program that they: will comply with all the requirements of the program¹⁷; understand that providing false information to obtain benefits is a violation of 18 U.S.C. § 1001; and understand that using benefits for personal travel is a violation of 18 U.S.C. § 641.
- (2) Require annual certifications of participants in the Pre-Tax Parking Benefit Program that they: will use the tax-exempt funds for work parking only; will adjust the amount of tax-free income they receive according to actual parking costs incurred; understand that providing false information to obtain benefits is a violation of 18 U.S.C. § 1001; and understand that failing to report as income withheld funds that were not used for parking is a violation of 26 U.S.C. § 7201.
- (3) Improve its recordkeeping of participants in the Pre-Tax Parking Benefit Program, keeping each participant's name, amount, and effective date, as well as dates and amounts of changes.

¹⁷ Although the subsidy program's application already includes the assertion that the applicant "will re-certify my subsidy annually when contacted by DAS," DAS has not been requiring recertifications. See Tab 2.