## **Civil and Criminal Investigations**

# Former NSF Program Officer Convicted of Submitting False Statements on Financial Disclosure Forms

A former NSF program officer was ordered to pay a \$5,000 fine and \$1,601 in restitution after he pled guilty to making false statements on his annual financial disclosure reports submitted to NSF from 2006 through 2010. He retired while under investigation after 36 years of employment at NSF. The program officer failed to disclose that he received gifts and travel-related reimbursements, such as lodging, transportation, and food, from a restricted source, a professor at a university who received NSF grants. He disguised some of the gifts and reimbursements as false invoices submitted to the university from a company owned by a second professor at a different university. Both of these professors regularly traveled with the program officer to international scientific conferences. The program officer also concealed that he received money for international travel from a university while receiving reimbursements from NSF for that same travel.

# Former School Superintendent Sentenced to Prison and Ordered to Pay More than \$325,000 in Restitution

We previously reported the indictment of a former school superintendent and two former university professors in California for fraud related to NSF and Department of Education grants to support elementary school science and math education. The former superintendent pled guilty to mail fraud charges, and the two former university professors pled guilty to submitting false statements. The former superintendent was ordered to pay \$325,282 in restitution and was sentenced to five months in prison followed by five months in a residential reentry center. Upon release, he will be on supervised release for three years. Both former professors were sentenced to five years of probation.

#### Florida Businessman Sentenced to Prison for Misuse of NSF Logo

We previously reported on a Florida business owner's guilty plea to falsely making, forging, and using the NSF seal. During this reporting period, he was sentenced to a year and a day in prison, followed by two years of supervised release, and ordered to pay a \$25,000 fine.

#### Nonprofit Organization Debarred For Ten Years

We previously reported on a former NSF Senior Executive Service employee who pled guilty to filing a false financial disclosure to NSF and a false tax return,<sup>8</sup> and was sentenced to six months home detention, \$15,393 restitution

<sup>5</sup> March 2011 Semiannual Report, pp.20-21.

<sup>6</sup> March 2012 Semiannual Report, p.25.

<sup>7</sup> March 2012 Semiannual Report, p.27.

<sup>8</sup> March 2012 Semiannual Report, p.20.

and a \$100,000 fine. Based on our recommendation, NSF previously debarred the former employee for ten years, and in this reporting period debarred the Maryland non-profit organization that facilitated his crime for ten years.

### Proposed Debarment of a Former PI at a Georgia College

We previously reported on a PI at a Georgia college who charged an NSF grant for travel costs, personal purchases, and other expenses unrelated to the grant.<sup>11</sup> In this reporting period, we recommended that the PI be debarred for five years; NSF's decision is pending.

### PI and his Company Suspended Government-Wide

A PI for a Maryland company that received a Small Business Technology Transfer (STTR) award from NSF falsely certified to NSF that he was primarily employed by the company when he was employed full-time at a university. The PI also falsely asserted that he had a mandatory outside investment to support a Phase IB application for supplemental funding, and he failed to issue a required subaward to the company's partnering research institution in the Phase IB STTR award. Based on our recommendation, NSF suspended the PI and his company government-wide pending the conclusion of our investigation.

### University Returns \$330,460 After Professor Falsely Certified Effort

An Indiana university put \$160,529 back into two active NSF awards and returned \$169,930 to NSF for a third closed award after the university's internal audit and our investigation confirmed that a tenured professor at the university held an undisclosed paid teaching position at a foreign university while simultaneously serving as PI for the three NSF awards. The PI charged travel and summer salary to the NSF awards, certifying 100% effort on his NSF awards for time during which he was teaching at the foreign institution. Our investigation is ongoing.

# NSF Terminates Remaining \$230,000 of a Small Business Innovation Research (SBIR) Phase II Award

During an ongoing investigation, we determined that a company used award funds on expenses unrelated to NSF work and overcharged indirect costs to the NSF award. Based upon our recommendation, NSF terminated the award, resulting in \$230,144 of funds put to better use.

#### Awardee Violates Grant Terms and Returns \$98,500 to NSF

As a result of our investigation, a New York university returned \$98,500 to NSF after making scholarship payments to ineligible students under an NSF award. The university also instituted new processes to confirm student eligibility and to track scholarship payments.

<sup>9</sup> September 2011 Semiannual Report, p.10.

<sup>10</sup> March 2012 Semiannual Report, p.26.

<sup>11</sup> September 2011 Semiannual Report, p. 8.

# Attorney General Grants Statutory Law Enforcement Authority to Office of Investigations Special Agents

On 11 September 2012, the Attorney General approved statutory law enforcement authority for the NSF OIG Office of Investigations. This authority relieves OIG from the administrative burden of repeated requests for special deputation from the U.S. Marshals Service and broadens the law enforcement powers of our Special Agents. For example, it allows them to work with other law enforcement agencies without establishing concurrent jurisdiction in an investigation, and permits them to independently apply for and execute search and arrest warrants. It also enhances agent safety by providing authority to carry weapons on a 24/7 basis throughout the United States. We welcome approval of statutory law enforcement authority and are confident this authority will enhance our ability to investigate wrongdoing that puts federal funds at risk.

### **Research Misconduct Investigations**

Research misconduct damages the scientific enterprise, is a misuse of public funds, and undermines the trust of citizens in government-funded research. It is imperative to the integrity of research funded with taxpayer dollars that NSF-funded researchers carry out their projects with the highest ethical standards. For these reasons, pursuing allegations of research misconduct by NSF-funded researchers continues to be a focus of our investigative work. In recent years, we have seen a significant rise in the number of substantive allegations of research misconduct associated with NSF proposals and awards. The NSF definition of research misconduct encompasses fabrication, falsification, and plagiarism.

NSF takes research misconduct seriously, as do NSF's awardee institutions. During this reporting period, institutions took actions against individuals found to have committed research misconduct, ranging from letters of reprimand to termination of employment. During this period, NSF's actions in research misconduct cases ranged from letters of reprimand to one year of debarment.

We referred nine cases of research misconduct to NSF, which are summarized below. In every case, we recommended that NSF make a finding of research misconduct, send the subject a letter of reprimand, require the subject to complete a Responsible Conduct of Research training program, and other actions as described below. NSF's decisions are pending in eight of the nine cases.

# NSF-Supported Graduate Student Plagiarizes from Lab Partner's Dissertation

A former doctoral student at a Texas university copied over 1,200 lines of text as well as numerous embedded objects and supporting data into his dissertation from the dissertation of a lab partner who graduated a few years earlier. The university conducted an investigation during which the student attempted to explain the common materials as a natural consequence of working closely with the graduating lab partner in order to keep the long-

term project going. The university investigation committee rejected this explanation and found that the student committed intentional plagiarism. The committee noted in its report that the student "faced difficult circumstances when completing his dissertation" given that his original advisor departed the university and the department failed to provide a new formal advisor until one year later. However, the committee concluded these conditions were "conducive to plagiarism, but did not excuse" the student's actions and the university rescinded the student's doctoral degree.

We concurred with the university's findings and recommended that NSF debar the former student for three years. After the debarment period, we recommended that for five years NSF bar the student from serving NSF as a reviewer, advisor, or consultant; and require certifications and assurances for all proposals or reports submitted to NSF.

### Faculty Member Claims Copied Text was Public Knowledge

A faculty member at an Ohio university plagiarized approximately 500 lines of text into four proposals submitted to NSF. He admitted that he copied most of the material, which he said he did because English was not his native language. He also asserted that citations and quotation marks were unnecessary because the text was copied from a public source, or was public knowledge. The university investigation concluded that the faculty member's actions were reckless and he should have known of the need for citation.

The university placed a formal letter of reprimand in the faculty member's permanent record, with an admonition that further plagiarism may result in termination of his employment. It further required, for two years, the faculty member and the Sponsored Research Office to certify that any proposals submitted contain no plagiarism, and required that the faculty member enroll in a course on research ethics. We recommended that NSF require certifications and assurances for three years and bar the faculty member from participating as a peer reviewer, advisor, or consultant for NSF for three years.

### Two Professors Resign Due to Plagiarism

A PI and co-PI at a university in Georgia who plagiarized in three NSF proposals, acknowledged they copied, but asserted that they gave full credit to the authors from whom they copied. The university investigation concluded the PI's and co-PI's plagiarism constituted research misconduct and recommended their dismissal. The co-PI resigned, but the PI appealed the decision. After a faculty hearing, the university allowed the PI to resign in lieu of removal.

We concurred with the university that the PI and co-PI committed research misconduct and recommended NSF require certifications and assurances for three years, and bar both from serving NSF as a reviewer, advisor, or consultant for three years.

# Assistant Professor at New Jersey University Exhibits a Pattern of Plagiarism

A New Jersey university investigation concluded that an assistant professor knowingly committed plagiarism in eleven unfunded NSF proposals. It took no further action because the assistant professor was no longer a university employee.

The assistant professor admitted to us that he copied material into his proposals, but asserted that the university had made procedural mistakes. We concluded that the university followed reasonable procedures during its investigation, and that four of the eleven proposals contained significant plagiarism. He plagiarized the majority of the copied text in one proposal from other proposals previously submitted to the same NSF program by other PIs, who had posted them online.

We recommended that NSF require certifications and assurances from him for three years and bar him from serving NSF as a reviewer for three years.

#### PI Plagiarized in Papers and Proposals

A PI at a university in Florida plagiarized in two funded NSF proposals, one unfunded NSF proposal, and a manuscript submitted for publication. During our inquiry, the PI was hired by a North Carolina university. The Florida university investigated and concluded that the PI's copying in the manuscript was plagiarism and made a finding of research misconduct. However, its investigation addressed only two of the PI's four NSF proposals.

Following our own investigation, we concluded the PI's copying in two of the NSF proposals was plagiarism, and his plagiarism in a third, declined NSF proposal and the manuscript was evidence of a pattern of plagiarism. NSF concurred, required the PI to provide certifications and assurances for two years, and barred the PI from serving NSF as a reviewer, advisor, or consultant for two years.

### New Assistant Professor Plagiarizes in NSF Proposal

A faculty member at a Maryland university plagiarized large amounts of text into an NSF proposal. He claimed that he did not realize that citations alone were not sufficient. While his education occurred outside the U.S., he has held various research and teaching positions in the U.S. over a fourteen-year period. We agreed with the university's finding that he knowingly plagiarized the text and recommended that NSF require certifications and assurances for two years.

#### Small Business Official Plagiarizes in Numerous NSF Proposals

A PI plagiarized in numerous SBIR proposals and final project reports between June 2004 and June 2010. The PI said she "did not intentionally use any other person's words without giving appropriate credit," and argued the sources were either properly cited, contributions from collaborators, or common or technical

language. She added that "all the innovations, ideas, research, processes and results are mine and of people I worked with for the proposals submitted to NSF."

Our investigation focused on three awarded proposals and on one declined proposal that contained significant plagiarism. We found that the copied material either was not cited at all or was cited inadequately. We concluded that the PI knowingly committed plagiarism, and recommended that NSF require certifications from her for two years.

### Plagiarism Uncovered in Two NSF SBIR Proposals

Our office concluded that a PI from a company in Virginia plagiarized a modest amount of text in an NSF SBIR proposal, which was later funded. The PI subsequently submitted a second proposal that also contained a modest amount of plagiarized text. The PI acknowledged he did not properly cite references and took responsibility for his actions. We concluded that the PI knowingly committed plagiarism, and we recommended that NSF: make a finding of research misconduct; send a letter of reprimand; require certifications and assurances for two years and bar the PI from serving NSF as a reviewer, advisor or consultant for two years.

### Assistant Professor at Texas University Accepts Responsibility for Plagiarism

An assistant professor at a Texas university plagiarized in two NSF proposals. He admitted copying the text and said that he was "professionally embarrassed and grateful that NSF identified the mistakes so that [he] could immediately withdraw" a similar proposal submitted to another agency.

The university's investigation concluded that the assistant professor recklessly committed plagiarism, but took no action against him because he was no longer an employee of the university. We determined that the university did not address whether the subject's actions were a significant departure from accepted practices and the university never interviewed the subject regarding the allegation.

Our investigation concluded that the assistant professor knowingly plagiarized material into two NSF proposals as well as a non-NSF proposal. We recommended that NSF require that he provide certifications and assurances for one year.

# Actions by NSF Management on Previously Reported Research Misconduct Investigations

NSF has taken administrative action to address our recommendations on eight research misconduct cases reported in previous semiannual reports. In each case, NSF made a finding of research misconduct, issued a letter of reprimand, and required the subject to complete a Responsible Conduct of Research training program. NSF also took additional significant actions in response to our recommendations as summarized below.

- In the case of a pattern of plagiarism by a California PI,<sup>12</sup> NSF debarred the PI for one year, required the PI to provide certifications for three years after the debarment, and barred the PI from serving NSF as a reviewer, advisor, or consultant for three years.
- In the case of a New Jersey associate professor who knowingly committed plagiarism by copying from a previously awarded NSF proposal, NSF debarred the PI for one year, required that he provide certifications and assurances for three years following the debarment period, and barred him from participating as an NSF reviewer for four years.
- In the case of an Illinois faculty member who plagiarized text into six NSF proposals submitted over a three-year period,<sup>14</sup> NSF required the PI to provide certifications and assurances for four years, and barred service as an NSF reviewer for four years. The faculty member appealed all of these actions to the NSF Director, who denied the appeal.
- In the case of an Indiana assistant professor who plagiarized in three proposals to NSF, one of which was awarded, 15 NSF required the PI provide certifications and assurances for three years, and terminated the professor's NSF award, resulting in \$13,832 available for NSF to put to better use.
- In the case of an assistant professor at a Mississippi university who knowingly plagiarized text and a figure into two NSF proposals, 16 NSF required certifications and assurances for three years, and barred him from serving NSF as a reviewer, advisor, or consultant for three years.
- In the case of a co-PI at a Puerto Rico university who plagiarized from multiple documents,<sup>17</sup> NSF required certifications and assurances for two years, and barred the co-PI from serving NSF as a reviewer, advisor, or consultant for two years.
- In the case of an assistant professor PI at an Illinois institution who plagiarized material within a collaborative NSF proposal, NSF required that he provide certifications and assurances for two years, and barred him from participating as an NSF reviewer, advisor, or consultant for two years. The PI appealed the finding to NSF's Director, and his decision is pending.
- In the case of a PI at an Ohio university who plagiarized text and figures into multiple NSF proposals, 19 NSF required the PI to provide certifications and assurances for two years, and barred the PI from serving NSF as a reviewer, advisor, or consultant for two years.

<sup>12</sup> March 2012 Semiannual Report, pp.17-18.

<sup>13</sup> March 2012 Semiannual Report, pp.7-18.

<sup>14</sup> March 2012 Semiannual Report, p.18.

<sup>15</sup> September 2011 Semiannual Report, p.12 and March 2012 Semiannual Report, p.21.

<sup>16</sup> March 2012 Semiannual Report, pp.18-19.

<sup>17</sup> March 2012 Semiannual Report, p.19.

<sup>18</sup> March 2012 Semiannual Report, pp.20-21.

<sup>19</sup> March 2012 Semiannual Report, p.20.

• In the case of a faculty member at a New York university who plagiarized from an awarded proposal he received from a PI at another university, 20 NSF required certifications and assurances for two years, and barred him from serving NSF as a reviewer, advisor, or consultant for two years.

## **Administrative Investigations**

#### PI and Co-PI Falsify Education and Experience Credentials

While assessing an allegation of extensive plagiarism in multiple proposals submitted to NSF by a Missouri company, we discovered that neither the PI nor the co-PI had any of the claimed academic credentials — including bachelor's, master's, and doctoral degrees — and the PI's claim of relevant employment experience overlapped periods of time when he was incarcerated. We referred the case to a U.S. Attorney's Office, which declined the case for criminal prosecution. Based on the false statements regarding academic and employment experience and the extensive plagiarism, we recommended that NSF debar the PI, the co-PI, and the organization for five years. NSF's decision is pending.

# NSF Panelist Breaches Confidentiality by Revealing Another Panelist's Identity

Our investigation determined that an NSF merit review panelist from Michigan revealed a fellow panelist's identity to the PI of a declined proposal in violation of his written agreement "not to divulge or use any confidential information," including the identity of the other panelists. In an email to the PI, the panelist offered to provide the PI with information about the "inner workings" of the panel. The panelist disclosed the identity of the panelist who had given the proposal the lowest rating. Based on our recommendation, NSF prohibited the panelist who violated the confidentiality agreement from serving NSF as a reviewer, advisor, or consultant for 11 months.

#### NSF Reviewer Posts Confidential Proposals on the Web

An NSF reviewer from Massachusetts—had twenty-two NSF proposals posted on his personal webpage within his company's public website. The Google search engine discovered and cached copies of the proposals, making these confidential proposals accessible to the general public via internet search. NSF staff subsequently worked with Google to remove the confidential material from the cache and search index. The reviewer claimed that he believed that the webpage was private and not discoverable; however, at least one of the PIs became aware that his/her proposal was accessible online when contacted by an unrelated third party to discuss the confidential research. We recommended that NSF bar the reviewer from participating as a peer reviewer, advisor, or consultant for NSF for two years, and NSF's decision is pending.

# Human Subjects Research Concerns Due to Protocol Noncompliance

Based on our recommendation, NSF suspended the award for a PI at a Texas university due to serious and continuing noncompliance with an Institutional Review Board (IRB) protocol, including an unapproved expansion of participants. Following suspension of the award, the PI implemented several corrective actions and the IRB lifted its suspension of the PI's research activities. NSF also rescinded the suspension of the PI's NSF award.

# NSF Rotator Fails to Address the Appearance of a Conflict of Interests

We raised concerns about a new NSF rotator's participation in handling a proposal submitted by a PI with whom she was engaged in ongoing proposal preparations. This participation included the rotator contacting program officers at NSF and NIH to determine whether the proposed work fit within their programs, drafting an abstract for the collaborative work, and expressing a commitment to carry on the collaboration with the PI after a third member of the team withdrew.

Federal employees have an obligation to "avoid any actions creating the appearance that they are violating" applicable ethical standards, and the existence of such an appearance is evaluated from "the perspective of a reasonable person with knowledge of the relevant facts."<sup>21</sup> In our view, even though the collaboration had not yet proceeded to substantive work before the program officer handled the PI's proposal, a reasonable person with knowledge of the relevant facts would perceive the appearance of an ethical violation.

Although the rotator returned to her home institution before NSF received our report, we made several recommendations to NSF to help prevent such issues in the future, including that NSF require new staff to complete a full ethics briefing prior to conducting proposal review activities. NSF responded that it will consider whether to implement merit review basics training within three months of arrival.

### Employee Who Abused NSF's Electronic Systems Resigns

Our investigation found that an employee misused NSF's time and attendance and email systems, and committed other acts of misconduct.<sup>22</sup> NSF conducted its own review and the employee resigned.

# NSF Employee Referred for Administrative Action for Falsifying Application for Federal Health Benefits

An NSF employee falsified information on his federal employee health benefits application to obtain benefits for his ineligible girlfriend and her child. There was no financial loss to the government because the employee paid the same rate to obtain benefits for his son; however, the employee's fraud resulted in

<sup>21 5</sup> C.F.R. § 2635.101(b)(14).

<sup>22</sup> September 2011 Semiannual Report, p.16.

a loss totaling over \$11,000 from the insurance company. We referred this matter to the U.S. Attorney's Office, which declined prosecution in lieu of administrative action. We referred the matter to the employee's supervisor for action, which is pending.

## **Management Implication Reports**

### Recommended Changes to the SBIR / STTR Program

NSF's SBIR and STTR programs provide funding for small businesses to conduct research and development. Our investigative work has identified several areas where the SBIR/STTR programs are vulnerable to fraud, waste, and abuse, and based on this work we provided a Management Implication Report to NSF. To reduce the risk of fraud, we recommend that NSF:

- Provide clarification of the requirement that the "primary employment" of the PI must be with the company at the time of the award, by defining a fulltime workweek.
- Require awardees to notify NSF when any significant changes to the budget or research are planned.
- Require companies to affirm that they will comply with the rules of the SBIR and STTR programs when submitting proposals for supplemental funding.
- Require Phase II awardees to certify to the accuracy of the information provided in their financial management systems questionnaire and supporting financial documentation prior to receiving the Phase II award, and to include actual expenditures in their project reports.
- Require Phase I awardees to provide a summary of actual expenses with their final report, and require companies to report any unspent funds over a set threshold prior to approval of the final report and release of the final payment, reduced by the unspent amount.

NSF has agreed to all but the last of these recommendations, and implementation is pending. Rather than require a summary of expenses for Phase I awards, NSF will require the company to state that all of the funds were fully expended as designated in the grant budget, or provide an explanation if not. The program will review the information that will be provided by grantees going forward on actual expenditures under Phase I and Phase II awards, and if it finds significant disparities it will reevaluate implementing the last recommendation. These are reasonable responses to our recommendations.

### NSF Addresses Employee Misuse of Transit Subsidy Program

We previously reported<sup>23</sup> that our review of NSF's Transit Subsidy Benefit Program disclosed significant misuse by a sample of participants using it to pay for parking or apparent personal trips. We also found that some NSF employees in our sample misused the Pre-Tax Parking Benefit program. We referred the employees who appeared to be misusing the Transit Subsidy Program and/or Pre-Tax Parking Benefit program to NSF and recommended appropriate action (including recovery of the misused funds), and encouraged NSF to evaluate other employee participants' usage as well.

While the subsidy program has been modified in a manner that limits such misuse, we recommended that NSF require annual certifications of participants in both programs that they will use the programs properly and not for personal gain, and NSF agreed.

NSF determined that it was not practical or cost-efficient to evaluate all usage for all employee participants to take action against misuse involving personal trips, and given the number involved and the complexity of the review process, we agree. However, NSF will seek recovery from employees who were found in our review to have repeatedly used transit subsidy funds for parking. If all forty employees repay the transit subsidy funds they misused for parking, NSF will recover approximately \$10,000.

## NSF addresses Contractor Employee Background Investigation Process

We previously reported<sup>24</sup> that our review of NSF's contractor employee background process determined numerous vulnerabilities in physical security policies and procedures.

In response to our recommendations, NSF will take the following steps:

- Update its on-boarding guidance and procedures to ensure that the policies and procedures were current, employee and contractor responsibilities were clearly defined, and background investigations are completed in a timely manner.
- Enhance its training for Contracting Officer Technical Representatives
  (COTRs) regarding the on-boarding and exit clearance of contractors,
  and implement a Contractor Security Clause in all new solicitations and
  contracts to enhance contractors' education and accountability regarding
  the security responsibilities and requirements of their staff.
- Review the processes around designation of positions requiring security clearances, initiation of the clearance, and timely renewal where warranted to be completed by November 2012.

<sup>23</sup> March 2012 Semiannual Report, pp.28-29.

<sup>24</sup> September 2011 Semiannual Report, p.16.