

SEMIANNUAL REPORT TO CONGRESS







March 2014

About the National Science Foundation...

The National Science Foundation (NSF) is charged with supporting and strengthening all research disciplines, and providing leadership across the broad and expanding frontiers of science and engineering knowledge. It is governed by the National Science Board which sets agency policies and provides oversight of its activities.

NSF invests approximately \$7 billion per year in a portfolio of more than 35,000 research and education projects in science and engineering, and is responsible for the establishment of an information base for science and engineering appropriate for development of national and international policy. Over time other responsibilities have been added including fostering and supporting the development and use of computers and other scientific methods and technologies; providing Antarctic research, facilities and logistic support; and addressing issues of equal opportunity in science and engineering.

And the Office of Inspector General...

NSF's Office of the Inspector General promotes economy, efficiency, and effectiveness in administering the Foundation's programs; detects and prevents fraud, waste, and abuse within the NSF or by individuals that receive NSF funding; and identifies and helps to resolve cases of research misconduct. The OIG was established in 1989, in compliance with the Inspector General Act of 1978, as amended. Because the Inspector General reports directly to the National Science Board and Congress, the Office is organizationally independent from the agency.

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From the Inspector General

The Semiannual Report to Congress highlights the activities of the Office of Inspector General (OIG) for the six months ending March 31, 2014. During this period our investigative staff closed 48 investigations, had 11 research misconduct cases result in findings by NSF, and recovered over \$1.2 million for the government. In addition, six audits and reviews were issued, including the audit of the agency's financial statements.

The OIG is firmly committed to its mission to detect and prevent fraud, waste, and abuse in the National Science Foundation's (NSF) programs and operations and by those who receive NSF funding. We target our work and direct our resources to areas that pose the highest risk of misuse of taxpayer dollars and can lead to funds used inappropriately being returned to the government.

To that end, our audit of NSF's controls to prevent and detect unauthorized purchases on government purchase cards found a heightened risk that inappropriate or fraudulent transactions could occur without detection because, among other things, some purchases were not pre-approved and card managers did not always review bank activity reports for improper purchases.

Based on information from that audit, which disclosed an NSF employee's suspicious purchases using his government card, we conducted an investigation which revealed that the employee had purchased nearly \$95,000 in items and services for personal use on his government card. He admitted buying cell phones, computers, and other electronic devices for himself and his family and friends for several years. During this semiannual report period, the employee pled guilty in federal court to one count of theft of government property; was sentenced to ten months in prison; and ordered to pay restitution of \$77,803. He no longer works at NSF.

We continue to pursue fraud in the Small Business Innovation Research/ Small Business Technology Transfer programs. During this semiannual period, an investigation originated by our office culminated in a trial that resulted in a Principal Investigator (PI) being convicted on seven felony counts including wire fraud, mail fraud, falsification of records, and theft. The PI, a full-time professor at a Maryland university, created a company and applied to NSF's STTR program. He falsely certified on his STTR proposals and reports that he was primarily employed by the small business during the award, while he continued as a full-time university professor. The PI also created fraudulent company time sheets, which he backdated and falsely represented as timekeeping records, and a fraudulent expenditure ledger in which he recorded fictitious expenses to conceal that he spent the STTR funds on his home mortgage and personal credit cards.

Our work reflects the office's sustained commitment to helping NSF be an effective steward of taxpayer dollars, and benefits from the support of NSF management across the Foundation. We look forward to our continued partnership with NSF and the Congress to fulfill our mission.

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Report Highlights

- Our audit of NSF's purchase card program found that some purchases were not pre-approved and that cardholders did not consistently maintain receipts for transactions as required. NSF agreed with our recommendation to strengthen oversight of its purchase card program and has committed more resources to perform targeted reviews of purchase card activity.
- The annual Federal Information Security Management Act report included eight new findings. In addition, the report repeated or reissued 11 findings from prior years, some from as early as FY 2006. NSF stated that it will develop an action plan to address recommendations to strengthen information technology controls.
- A PI, who was also a full-time professor, fraudulently obtained \$200,000 in grant funds from NSF's Small Business Technology Transfer program and converted the funds to personal use to make payments on his mortgage and personal credit cards and to authorize approximately \$11,000 in salary payments to his wife, who did not perform NSF-related work. A federal jury convicted him of seven counts including wire fraud, falsification of records, and theft of government property.
- We referred 13 cases of research misconduct to NSF including a graduate student who admitted fabricating data, a professor who plagiarized in eight NSF proposals, and a PI who plagiarized in a CAREER proposal.

Audits & Reviews

NSF Needs to Strengthen Oversight of its Purchase Card Program

NSF participates in the General Services Administration's government-wide purchase card program, which provides Federal agencies with the means to purchase general supplies and services. From April 1, 2010 through March 31, 2013, the period covered by our audit, 233 NSF employees used purchase cards for approximately 34,300 transactions totaling almost \$17 million.

We found that: 1) Some purchases were not pre-approved; 2) Cardholders did not consistently maintain receipts for transactions as required; 3) Some purchase card bank statements had not been reviewed by approving officials; and 4) Card managers did not always review bank activity reports and merchant category codes for improper purchases.

As a result, there was a heightened risk that inappropriate or fraudulent transactions could occur and not be detected. We identified several minor inappropriate purchases including 17 transactions that were split purchases. We also referred three cardholders' activity to our Office of Investigations, and one of those individuals pled guilty to stealing more than \$94,000 by using his purchase card to buy electronics, music, and movies for himself and his family.

We recommended that NSF strengthen oversight of its purchase card program including NSF periodically reviewing merchant codes to determine if additional codes should be blocked to prevent improper purchases, and ensuring that approving officials review cardholders' transactions. NSF agreed with our recommendations and has committed more resources to perform targeted reviews of purchase card activity.

NSF Should Assess its Administrative Cost Recovery Rate to Ensure it Accurately Reflects the Level of Effort Involved in Interagency Agreements

In response to a Congressional request, the OIG examined how NSF calculates its administrative cost recovery (ACR) rate and applies it to interagency agreements with other federal agencies. Federal agencies can enter into interagency agreements with other agencies for goods and services and recoup their administrative costs by charging an ACR fee.

We identified two types of incoming interagency agreements that appeared to involve very different levels of effort by NSF. For one type of interagency agreement, NSF may issue a grant on another agency's behalf which involves conducting merit review, overseeing the research performed, and financially monitoring the costs, just as NSF does for awards it issues. For the other type, NSF's effort consists primarily of transferring funds from the requesting agency to another entity. However, regardless of the level of effort required by NSF, the agency charges the same ACR rate based on the dollar value of the interagency agreement.

NSF's use of the same ACR rate calculation of all interagency agreements suggests that NSF could be overcharging on some agreements and undercharging on others. We recommended that NSF assess its administrative cost recovery process to ensure that the fees charged reflect the level of effort involved. NSF stated that it will consider any additional capabilities of its new financial accounting system to refine its ACR rate.

Financial Statement Audit Reports

Establishing and maintaining sound financial management is a top priority for the federal government because agencies need accurate and timely information to make decisions about budget, policy, and operations. The Chief Financial Officer's Act requires agencies to prepare annual financial statements, which must be audited by an independent entity.

NSF Receives Unqualified Opinion on Financial Statements for the Sixteenth Consecutive Year, but Needs to Strengthen Monitoring of Cooperative Agreements for Large Construction Projects

Auditors issued an unqualified opinion on NSF's FY 2013 financial statements; however, they reported a significant deficiency in the monitoring of cooperative agreements for large construction projects. This significant deficiency was also reported in the FY 2010 – FY 2012 audits. The auditors stated that the causes of these prior year conditions remain largely uncorrected at September 30, 2013, either due to NSF's continued disagreement with the severity of the conditions, its late implementation of new procedures to rectify the conditions, or the fact that management has not identified specific corrective actions that would apply to existing cooperative agreements.

While the auditors noted that in FY 2013 some progress was made by NSF in designing procedures to rectify certain of the weaknesses noted in prior years as they pertain to future awards of cooperative agreements, little progress has been made by NSF in addressing the issues concerning active cooperative agreements that received contingency funding prior to September 30, 2013. In addition to the conditions noted in the FY 2012 audit, the FY 2013 audit noted:

The audit of a large NSF cooperative agreement at a major university showed that the university's contingency costs were not accumulated and tracked in a manner consistent with how such costs were originally estimated and the university did not separately track and account for these funds in its formal accounting, memoranda, or subsidiary records.

NSF's accounting system shows the cooperative agreement award amount in total, without separate identification of the contingency funding portion of such award. Also, NSF does not track the expenditure of contingency funds to ensure that they are in line with the amount of contingency funds budgeted in the award; and

Awardees continued to be able to draw down contingency funds without prior approval by NSF.

NSF stated that it continues to work to strengthen its controls for awarding and managing construction type cooperative agreements. And, while it continues to disagree with the significant deficiency, NSF stated that it is committed to continuing the progress made in FY 2013 into the future. A copy of NSF's full response is published in its FY 2013 Agency Financial Report.

The auditors also issued a Management Letter in conjunction with the financial statement audit report. The purpose of this document is to communicate findings that are not included in the audit report but are important to ensuring a sound overall internal control structure and require management's attention.

The FY 2013 Management Letter identified seven internal control findings, some of which incorporated elements of prior years' findings related to NSF's operations and financial reporting controls. The Management Letter reported continued improvements were needed in NSF's policies for awarding and administering grants and cost reimbursement contracts.

The auditors made several recommendations, including that NSF fully implement its cost surveillance oversight procedures, continue improving its control over cost reimbursement contracts, and continue to evaluate the effectiveness of its internal control procedures over processing grant transactions.

NSF generally concurred with the recommendations in the Management Letter and is working to resolve the findings. The FY 2014 financial statement audit will evaluate NSF's actions in response to the recommendations.

NSF Needs to Strengthen Information Technology Controls

It is essential for NSF to ensure that its information systems are secure since these systems contain vital sensitive information that is central to the Foundation's mission. NSF has become increasingly dependent on computerized information systems to execute its scientific research and operations and to process, maintain, and report essential information. As a result, the reliability and security of these systems is a major priority.

NSF's 2013 Federal Information Security Management Act (FISMA) report included eight new findings, six for the U.S. Antarctic Program (USAP) and two for NSF. The USAP findings included the need to improve account management, and assessment and authorization controls. NSF findings included the need to identify all assessed risks consistently in Security Assessment Reports. In addition, the report repeated or reissued 11 findings from prior years. The prior year findings, from as early as FY 2006, included the need for USAP to develop and implement a disaster recovery plan, and to enforce NSF's password and account management policies consistently. A reissued FY 10 finding relating to NSF pertained to the need to remove timely the IT accounts of separated employees and contractors. The status of all 19 findings in the FY 13 FISMA report will be assessed during the performance on the FY 14 FISMA evaluation, which is on-going.

Recommendations included development of a disaster recovery plan for Antarctic operations, ensuring that system accounts for terminated users are deactivated in a timely manner, and addressing weaknesses in IT security awareness and training. NSF stated that it will develop an action plan to address the recommendations.

NSF's High-Speed Network

NSF operates and maintains a High-Speed Network (HSN) at its headquarters in Arlington, Virginia. The HSN provides access to a collaborative environment for researchers and educators focused on the development of innovative technology solutions.

We conducted an inspection to determine if NSF's assessed level of risk for the HSN was appropriate and to determine whether NSF had implemented adequate security controls for its high-speed network. We found that NSF has not determined the appropriate level of security controls for the HSN. We recommended that NSF evaluate its existing

controls to ensure that it is providing adequate network and information security for the HSN. NSF agreed with our recommendation and intends to develop a plan to address the issues we identified.

NSF Complies with Sustainability Requirements

In response to a request from the Bicameral Task Force on Climate Change, we examined NSF's compliance with sustainability requirements at its Arlington, Virginia headquarters buildings. We found that NSF generally appeared to be complying with the requirements in our sample. For example, NSF has submitted annual Strategic Sustainability Plans and has indicated that it has expanded the purchase of environmentally sound goods and services. As part of its effort to increase employees' awareness of the importance of environmental goals and sustainability, NSF is providing information in its weekly online news publication. Finally, NSF intends to comply with a number of other requirements when it moves to its new headquarters building.

A-133 Audits

Single Audits Identify Repeat Findings at One-Half of Awardees with Findings

OMB Circular A-133 provides audit requirements for state and local governments, colleges and universities, and non-profit organizations receiving Federal awards. Under this Circular, covered entities that expend \$500,000 or more a year in Federal awards must obtain an annual organization-wide audit that includes the entity's financial statements and compliance with Federal award requirements. Non-Federal auditors, such as public accounting firms and state auditors, conduct these single audits. The OIG reviews the resulting audit reports for findings and questioned costs related to NSF awards, and to ensure that the reports comply with the requirements of OMB Circular A-133.

The 21 audit reports reviewed and referred¹ to NSF's Cost Analysis and Audit Resolution (CAAR) Branch this period covered NSF expenditures of \$261 million as reported in the annual Single Audits during audit year 2012, and resulted in 15 findings at eight NSF awardees.

One awardee received a qualified opinion on its compliance with Federal grant requirements. Six of the 15 findings (40 percent), at four of the eight awardees with findings (50 percent), were repeated from previous audits, calling into question the awardees' ability to adequately manage their NSF awards. One awardee had a finding which had been repeated for six consecutive years.

¹ The number of audits reviewed is much lower than in previous periods due to technical difficulties at the Federal Audit Clearinghouse, which prevented us from obtaining reports pertaining to awardees' 2013 audit years.

Awardees' lack of internal controls and noncompliance with Federal requirements included: untimely and/or incorrect reporting of time and effort; failure to verify that vendors had not been suspended or debarred; inadequate monitoring of subrecipients; and late submission of financial and/or progress reports.

Desk Reviews Continue to Find Audit Quality and Timeliness Issues in Nearly Half of Single Audits

The audit findings in A-133 reports are useful to NSF in planning site visits and other post-award monitoring efforts. Because of the importance of A-133 reports to this oversight process, the OIG conducts desk reviews on all reports for which NSF is the cognizant or oversight agency for audit, and provides guidance to awardees and auditors for the improvement of audit quality in future reports. In addition, OIG returns to the awardees reports that are deemed inadequate so that the awardees can work with the audit firms to take corrective action.

During the period, we conducted desk reviews of 11 audit reports² for which NSF was identified as the cognizant or oversight agency for audit, and found that six fully met Federal reporting requirements. Five reports contained audit quality and timeliness issues. One report inadequately presented the elements of the audit findings as well as the elements of the auditee management's plan to correct the deficiencies reported. In addition, two reports did not use reporting language required by AICPA³ standards. For one of these reports, the auditor also did not accurately prepare the Summary of Audit Results and the Data Collection Form (Form SF-SAC). Finally, two reports were filed after the deadline established in OMB Circular A-133.

For those errors which potentially impacted the reliability of the audit reports, we contacted the auditors and awardees, as appropriate, for explanations of each of the potential errors. After completion of all 11 reviews, we issued a letter to each auditor and awardee informing them of the results of our review and the specific issues on which to work during future audits to improve the quality and reliability of the report.

OIG Follow-up Actions on Quality Control Review

Our follow-up review of the audit of Berkeley Geochronology Center⁴ found that the auditors' additional work performed in response to our quality control review, generally met applicable Federal requirements.

² The audits were conducted by 11 different independent accounting firms.

³ American Institute of Certified Public Accountants

⁴ September 2013 Semiannual Report, p. 11

Audit Resolution

NSF Takes Steps to Improve Workforce Management and the Work Environment for Employees

In response to our recommendation, NSF has made progress in several areas including developing a systematic approach to address human capital management issues. NSF stated that as of September 2013, it had implemented 85 of 102 recommendations for workplace management change.

NSF Sustains \$11 Million of Questioned Costs on Raytheon Contract for U.S. Antarctic Program

In response to our recommendations, NSF sustained \$11 million of questioned costs including direct charges, fringe benefits, overhead, and general and administrative costs claimed from FY 2000-FY 2004 by Raytheon, the logistical support contractor for NSF's Antarctic Program.

Investigations

CIVIL AND CRIMINAL INVESTIGATIONS

Federal Jury Finds PI Guilty on Seven Counts in Scheme to Defraud Small Business Program

We previously reported that a PI was indicted for wire fraud, mail fraud, falsification of records, and theft.⁵ A two week trial was initiated during this semiannual period, and the PI was convicted on all seven felony counts.

The PI, a full-time professor at a Maryland university, created a company and applied to NSF's Small Business Technology Transfer (STTR) program. The PI falsely certified on his STTR proposals and reports that he was primarily employed by the small business during the award, while he continued as a full time university professor, and included misrepresentations in his proposals and budgets about the number of company employees. He also misrepresented the existence of a \$100,000 investment from a third party in order to qualify for matching supplemental funds from NSF's STTR Phase IB program.

This case arose from our proactive review of STTR and SBIR companies. In response to our request for financial documents, the PI created fraudulent company time sheets, which he backdated and falsely represented as contemporaneous timekeeping records. In addition, he created an expenditure ledger which was fraudulent in which he recorded fictitious expenses to conceal that he spent the STTR funds on his home mortgage and personal credit cards. The PI had also paid his wife over \$10,000 for work she did not do.

During the investigation, we found that the PI had also engaged in a fraudulent scheme involving funds under two subcontracts funded by the Department of Defense. He submitted requests for stipend payments for his students under the subcontracts, and when the students received their payments, the PI instructed them to pay him a portion of their stipends. The PI received approximately \$36,000 through this scheme.

His sentencing is scheduled for July 2014.

⁵ September 2013 Semiannual Report, p.16.

NSF Employee Sentenced to Ten Months in Prison for Purchase Card Theft

Based on information from the Office of Audit about an NSF employee's suspicious purchases using his government purchase card, we reviewed the purchases, interviewed the employee's supervisor, and obtained and executed search warrants at the employee's residence and NSF office space. The employee admitted that he had used the purchase card to make personal purchases, including cell phones, cell phone voice and data service, iTunes purchases, and various electronic devices and computing equipment, for himself and his family and friends.

Our investigation determined that over the course of several years he purchased \$94,493 in items and services for personal use. The employee resigned from NSF, and pled guilty in federal district court to one count of theft of government property. He was sentenced to ten months in prison followed by three years of supervised release, and ordered to pay restitution of \$77,803. NSF recovered \$10,263 of the restitution immediately through offset from a separation payment for his accumulated annual leave, and he will pay the rest over time.

University Professor / Company Owner Convicted of False Statements, Returns Funds to NSF

A university professor in Iowa owned an outside company that received four SBIR Phase I awards from NSF. In the course of our investigation, the professor admitted that he used SBIR award funds to pay for a personal rental property, his daughter's education expenses, and his own living expenses. Our investigation also determined that the professor mischarged funds under NSF and other agencies' awards for which he was PI at his university.

The professor pled guilty to two counts of false statements and repaid \$134,084. Sentencing is scheduled for April 2014.

NSF Program Officer Resigns Following Investigation into Conflicts of Interests and Bribery

We investigated a complaint alleging that an NSF program officer violated conflict of interests rules and was making award decisions based on personal and professional relationships, rather than on the merits of the proposals. Our investigation revealed that the program officer, who was the principal and founder of an outside business, created conflicts of interests by misusing his NSF position to benefit himself, his family, and his friends financially. Further, he did not seek the required supervisory approval for his outside activities and did not

disclose them on his annual financial disclosure forms, which prevented NSF from identifying and taking action to address his misconduct. The misconduct included:

- approving an NSF award supplement to employ his stepson;
- facilitating the employment of his girlfriend by one of his awardees;
- soliciting work from NSF awardees to benefit his private company;
- receiving a "finder's fee" as a result of setting up a business venture for an NSF awardee;
- entering into an outside contract between his private company and a Texas university, facilitated by the president of one of his awardee companies;
- making introductions to and/or intervening with his NSF colleagues for the purpose of aiding his private business and its clients, and in one instance getting paid for it; and
- receiving a personal benefit for reviewing patents for an individual whose company had an active NSF award on which he served as program officer.

When NSF learned about this last item, it deprived him of all of his responsibilities for representing NSF and handling proposals and awards, having him perform other duties.

We referred this matter for criminal prosecution, which was declined. We then referred our findings to NSF management, after which the program officer resigned—after nearly nine months without performing program officer responsibilities. We recommended that NSF debar him governmentwide, and NSF's decision is pending.

NSF Employee Indicted for Embezzlement

Our investigation determined that an NSF employee misused government funds. The employee was in charge of a program that provides tuition assistance for NSF employees to take classes toward an undergraduate degree, and she used her position of authority to pay for graduate level classes for herself, which is prohibited under the program.

The case was accepted for prosecution by the Virginia Commonwealth's Attorney for Arlington County, which resulted in the employee being indicted for three counts of embezzlement. When she failed to appear at her initial court hearing, a bench warrant was issued. She turned herself in after a month, was arrested, and spent five days in jail.

NSF Employee Admits to Using Government Purchase Card to Buy Electronics for Personal Use

Our investigation determined that an NSF employee, who maintained an inventory of government-owned electronic equipment for her office, used her government purchase card to buy government mp3 players, headphones, and other items for her personal use. She was also unable to account for multiple pieces of other equipment including smartphones, tablets, and computers. The case has been referred for prosecution by the Virginia Commonwealth's Attorney for Arlington County.

University Repays \$338,910 for Duplicate and Improper Charges

Our investigation of allegations of mischarging and mismanagement related to two awards to an Alabama university determined that most of the financial issues were attributable to a change of accounting systems. However, we also determined that two legitimate \$164,455 expenditures to one of the awards had been erroneously double-charged, and that student stipends were improperly paid to two students; as a result the university returned \$338,910 to NSF.

Company Returns Funds to NSF for Underspent SBIR Phase I Awards

Our multi-agency investigation of the accuracy of proposals, reports, and timekeeping records associated with multiple SBIR awards to a company determined that the company received the full award amounts but underspent two SBIR Phase I awards by significant amounts. The company failed to notify NSF of the unused funds or return excess funds to NSF associated with the SBIR Phase I awards. We recommended that NSF take action to recover those funds, and the company returned \$152.811 to NSF.

Federal Employee Misrepresented His Employment Status in NSF Proposals

An individual received NSF funds for two proposals in which he had not disclosed that he was an employee of the U.S. Forest Service. Such information is important because NSF provides grants to federal employees only under certain circumstances and when this individual failed to disclose his federal employment, he circumvented procedures designed to ensure that awards to federal employees meet NSF's criteria. Our investigation and review by the Forest Service resulted in his termination from federal employment for several reasons, including his work on the NSF projects during his federal duty hours. Based on our recommendation, NSF terminated his ongoing NSF award, which resulted in \$57,880 put to better use.

Violations Result in NSF Withholding Nearly \$50,000 from SBIR Award

As a part of an ongoing investigation, we recommended that NSF withhold the final payment associated with an expired Phase I SBIR award after our investigation determined that: (1) the company issued a \$30,000 subcontract without NSF approval; (2) the company overstated

the amount of hours reported in its final report; and (3) the PI spent significantly less time on the project than required by the award terms. NSF financially closed the award and withheld the final payment, resulting in \$49,991 put to better use.

University Returns \$26,905 to NSF for Summer Salary Overpayments

We previously reported that a Georgia university entered into a five-year compliance agreement as part of a civil settlement.⁶ During our review of the university's annual compliance report, we identified an issue with summer salary charged to an NSF award and recommended the university conduct a review of all NSF-funded summer salary payments. As a result, the university identified \$26,905 in overpayments and returned those funds to NSF.

Former Professor Debarred for Theft of Grant Funds

We previously reported that a former professor of an Indiana university used NSF grant funds to purchase items for personal use, and as a result he was: suspended government-wide by NSF; indicted and pled guilty to criminal conversion; sentenced to probation and home confinement; and ordered to pay restitution to NSF.⁷ We recommended that NSF debar the former professor and his company for ten years. Since the company and the former professor had already been suspended for three years, NSF debarred them for seven years. NSF also prohibited the former professor from serving as an NSF reviewer, advisor, or consultant to NSF during the debarment period.

NSF Debars PI for Making Fraudulent Purchases with NSF Award Funds

As previously reported, a former PI at a New Jersey university pled guilty after making fraudulent purchases with NSF grant funds.⁸ Subsequently, the court granted the motion by the Department of Justice (DOJ) for default judgment against the PI for violations of the civil False Claims Act.⁹ NSF followed our recommendation and debarred the PI for three years.

NSF Debars Oklahoma Man for Three Years

Previously we reported the case of an Oklahoma businessman who spent more than half of his company's SBIR award funds on non-award related expenditures.¹⁰ Based on our recommendation, NSF debarred the businessman for three years.

⁶ March 2010 Semiannual Report, p.25.

⁷ March 2011 Semiannual Report, p.22; September 2011 Semiannual Report, p.9; March 2013 Semiannual Report, p.24; and September 2013 Semiannual Report, p.19.

⁸ September 2011 Semiannual Report, p.9.

⁹ March 2013 Semiannual Report, p.21.

¹⁰ September 2013 Semiannual Report, pp.15-16.

University Repays Excess Summer Salary to NSF

We determined that a Vermont university overcharged for PI summer salary under an NSF award in violation of the award conditions. The university returned \$14,930 to NSF.

Small Business Repays Excess Student Salary

A Minnesota small business failed to correctly account for student hours worked under a supplement to an NSF SBIR Phase II award. Our investigation found that one student was ineligible under the terms of the supplement and the business had charged the time for two students to unrelated projects. The small business returned \$10,633 to NSF.

Small Business Fails to Track Time under SBIR Phase II Award

Our investigation determined that a Massachusetts small business failed to maintain timekeeping records for the last six months of an SBIR Phase II award. Pending the outcome of our ongoing investigation, NSF followed our recommendation to suspend the final payment of \$75,000 under the award.

NSF Suspends Six Awards and Suspends PI and Company Government-wide

Based on our recommendation, NSF suspended four awards to a research institution and two awards to a company, and suspended the PI and the company government-wide. The issues involve possible fraud in obtaining and reporting on NSF and other federal awards, as well as mischarging of federal funds. The matter has been accepted by DOJ for possible criminal prosecution.

NSF Suspends PI and Company Government-wide

We previously reported¹¹ that a PI had been indicted for false claims, false statements, and theft as a result of significantly inflating the amount of effort he and other company employees expended on an NSF SBIR project. Based on our recommendation, NSF suspended the PI and his new company government-wide.

¹¹ September 2013 Semiannual Report, p.15.

RESEARCH MISCONDUCT INVESTIGATIONS

Research misconduct damages the scientific enterprise, is a potential 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 (plagiarism, data fabrication and data falsification) 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.

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 reporting period, NSF's actions in research misconduct cases ranged from letters of reprimand to a proposed five-year of debarment. In every case, we recommended that NSF make a finding of research misconduct, issue a letter of reprimand, and require the subject to complete a Responsible Conduct of Research training program. We also recommended additional significant actions as summarized below.

Postdoc and Mentor Perpetuate Data Falsification and Fabrication In a Series of Published Articles

A former postdoctoral researcher and his mentor at a Colorado university perpetuated the apparent validity of research data after the postdoc had intentionally falsified and fabricated the original study. After coauthors on the original study were unable to replicate the postdoc's research results, the mentor's college—without informing university-level administration—conducted an informal inquiry and recommended that the issue be worked out in the literature rather than through a formal investigation. Although the mentor's lab members had been able to repeat the results when the postdoc was there, after he left they could not do so.

As a result of the inadequacy of the college's informal inquiry, we conducted our own on-site inquiry. We recommended that the university conduct an investigation, which it agreed to do. The university investigation focused on the postdoc's reported isolation of four compounds and the mentor's continued use of the resulting data over several years, despite mounting evidence of research misconduct presented by lab members and other faculty members.

The mentor's failure to require lab notebooks or to maintain instrumental data in his own lab complicated the investigation; however, his coauthors, students, and other university collaborators maintained

sufficient records to enable the investigation to proceed. The university ultimately concluded that the postdoc had intentionally fabricated data with respect to the four compounds he claimed to have isolated as natural products. Because the postdoc was no longer an employee, the university could take no direct actions against him.

The university also concluded that the mentor was "reckless in his use of highly suspect data" in the face of the "loud chorus of voices challenging the original" work. The investigation committee recommended the retraction of eight publications and required that the mentor receive instruction "in proper scientific laboratory protocols to document techniques and procedures."

We agreed with the university's findings and recommended that NSF: debar the postdoc for five years and the mentor for three years; terminate the former postdoc's active NSF awards; and require retraction of the papers identified by the university and completion of training.

Additionally, until five years after the end of their respective debarment periods, we recommended NSF require certifications and assurances; require submission of detailed data management and mentoring plans with annual certifications of adherence to those plans for new NSF awards; and bar both from serving NSF as a peer reviewer, advisor, or consultant.

Certifications and Assurances

In many of our research misconduct cases, we recommend that NSF require the subjects to submit certifications and/or assurances with every proposal and report they submit to the agency. Certifications are letters from the subject stating that they certify that the document they submit does not violate NSF's research misconduct regulation. Assurances are letters from a responsible official of the subject's employer assuring NSF that they have reviewed the document and that its contents do not violate NSF's research misconduct regulation.

Graduate Student Admits Fabricating Data

A graduate student who conducted NSF-funded research at a Michigan university fabricated the existence of biological sample collections and the performance of experiments, and also fabricated and falsified data. The student admitted to the research misconduct and the university dismissed her from the graduate program.

When we interviewed the student, she accepted responsibility for the research misconduct. We concluded that she intentionally fabricated and falsified data and the research record, and recommended that NSF debar her for three years. After the debarment period, we recommended that for three years NSF: require certifications and assurances; require submission of a detailed data management plan with annual certifications of adherence for any resulting awards; and bar her from participating as a peer reviewer, advisor, or consultant for NSF.

Finding of Research Misconduct and Debarment Recommended for Professor

Our investigation identified copied text in three NSF proposals submitted by a professor from a Tennessee university. A university investigation found that the professor committed plagiarism, but that his actions were careless and did not constitute a significant departure from the standards of his research community. Our investigation concluded that the professor acted recklessly and that his actions did constitute a significant departure from the standards of his research community, and therefore that he did commit research misconduct.

Our investigation also determined that between 2004 and 2011 the professor served as an NSF review panelist six times. On each occasion, NSF provided him a flat rate to cover expenses for lodging and meals; nonetheless, he also requested and received duplicate lodging and meal reimbursements from his university. Based on his plagiarism and deceptive conduct, we recommended that the professor be debarred for two years and that NSF require him to complete an ethics course within one year.

Florida Professor Plagiarizes in Eight NSF Proposals

A Florida university determined that a professor intentionally committed extensive plagiarism in several proposals, including two proposals he submitted to NSF as PI. Despite the professor's claim that no other proposals contained copied text, our investigation found substantial plagiarism in six additional NSF proposals. We recommended that NSF debar the professor for one year, followed by three years barring the professor from serving as a reviewer, advisor, or consultant; and three years of certifications and assurances.

Lab Director Commits Plagiarism

A lab director in Illinois plagiarized text, ideas, and structure from an awarded NSF proposal she had obtained from the proposal's PI. During our inquiry, she told us she thought the PI had given her permission to copy text and ideas from the proposal, which was aimed at the same NSF program as hers. Her institution investigated, found that she violated its code of ethics, and imposed sanctions.

The awarded proposal's PI told us she had voluntarily offered the director a copy of her proposal, but had not given permission for the director to use her text or ideas. We concluded that the lab director knowingly plagiarized and we recommended that NSF debar the lab director for one year, require three years of certifications and assurances, and bar her from serving as a consultant or reviewer for NSF for three years.

PI Plagiarizes in Funded Faculty Early Career Development (CAREER) Proposal

A professor at a Tennessee university plagiarized in a CAREER proposal submitted to NSF. The professor asserted that he was rushed in preparing the proposal and did not have time to properly edit his submission. However, the same copied text appeared in proposals he later submitted to other federal agencies, seeking support for the same research that was already funded by the NSF CAREER award. The university made a finding of research misconduct, required training in the responsible conduct of research, and placed the professor under the mentorship of a senior faculty member. We agreed with the university's conclusions, and recommended that NSF impose a three-year period of certifications and assurances, and a concurrent prohibition from service to NSF as a reviewer, consultant, or advisor.

Professor Asserts that Rushed Deadline Resulted in Extensive Plagiarism

A professor from a Texas university plagiarized about three pages of material in his NSF proposal. Claiming that he was rushed by deadlines, the professor accepted full responsibility for his actions. His university determined that he committed research misconduct in failing to properly attribute the work of others within his proposal. We concurred with the university's assessment and recommended that NSF require certifications and assurances for three years and bar the professor from serving as a reviewer for two years.

Professors and Postdoctoral Researcher Plagiarize in Two NSF Proposals

Two Washington professors and their postdoctoral researcher plagiarized materials from ten separate sources into two NSF proposals. Based on its investigation, the university required that the professors' grant proposals be reviewed for five years, that they develop an ethics workshop within three years, and that their dean and department chair be responsible for monitoring their work. The university concluded there was sufficient evidence to substantiate the postdoc's direct involvement in the plagiarism, but in lieu of a full investigation it entered into a settlement agreement that precludes the postdoc from seeking employment from the university for seven years.

Based on our further investigation, we determined that the postdoc was responsible for a large portion of the plagiarized text. While the actions taken against the professors adequately protected the interests of the federal government, we recommended that NSF require the postdoc to provide certifications and assurances for three years.

Professor Plagiarizes from Graduate Students' Dissertations

A professor at a Pennsylvania university plagiarized material from the dissertations of two former students, and from an article by another author summarizing the professor's own work, into four NSF proposals. The university investigation revealed that the professor copied text from the dissertation of one former student, which itself contained plagiarized text. The university accepted the professor's assertion that no other proposals contained improperly copied text and the university found that no research misconduct occurred.

Our investigation determined that the professor had submitted two more NSF proposals with text copied from a second former student's dissertation, which also contained plagiarized text, as well as from an article by another author summarizing the professor's research. We concluded that the professor knowingly committed plagiarism and recommended that NSF require two years of certifications and assurances, and bar the professor from serving NSF as a reviewer, advisor, or consultant for two years. NSF accepted our recommendations.

Graduate Student Plagiarizes in NSF-Funded Dissertation

A graduate student working under an NSF award at a Pennsylvania university plagiarized a large amount of text into his dissertation. The university concluded it was plausible that the student, who had been educated in another country, was unaware of proper citation or paraphrasing standards for reviewing other research. Further, the student admitted that he was in a hurry and reckless in putting his dissertation together. The university determined he recklessly plagiarized and required him to replace the official version of his dissertation with a revised version.

We concurred with the university's conclusions, and we recommended that NSF require two years of certifications and assurances, and bar the student from serving NSF as a reviewer, advisor, or consultant for two years.

Team Leader Recklessly Plagiarizes in NSF Proposal

A university team leader in Illinois both contributed to and compiled two NSF proposals in which plagiarized text appeared. The university determined that the team leader recklessly plagiarized "since proper checking of citations and appropriate attributions were not provided." We agreed with the university's assessment and recommended that NSF require certifications and bar the professor from serving NSF as a reviewer, advisor, or consultant for one year.

Professor Plagiarizes From Four Sources Into an NSF Proposal

A North Carolina professor plagiarized a modest amount of text from multiple sources into his NSF proposal. Because the professor claimed that he placed the copied text into his draft proposal as a place holder, the university concluded that he had no structured process to prevent the insertion of plagiarized text into his proposals. We concurred with the university that the professor plagiarized recklessly and recommended that NSF require the professor to submit certifications for one year.

Actions by NSF Management on Previously Reported Research Misconduct Investigations

NSF has taken administrative action to address our recommendations on fifteen research misconduct cases reported in this semiannual and 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 former doctoral student at a Minnesota university who intentionally fabricated and falsified data on which his dissertation advisor relied in an NSF proposal, NSF finalized the five-year debarment proposed previously.¹²
- NSF took action against a graduate student in Kentucky who fabricated data ¹³ by proposing a one-year debarment, imposing one year of certifications, and barring the student from serving as a reviewer, advisor, or consultant for NSF for one year.
- In the case of a former postdoctoral fellow at a Washington university who intentionally falsified data,¹⁴ NSF proposed a one-year debarment, barred him from participating as a reviewer, advisor, or consultant for three years, and required three years of certifications and assurances as well as certifications of adherence to a detailed data management plan in each new proposal.

¹² September 2013 Semiannual Report, p.24.

¹³ September 2013 Semiannual Report, p.20.

¹⁴ September 2013 Semiannual Report, p.20.

- In the case of a professor who plagiarized from a proposal that she reviewed for NSF,¹⁵ NSF imposed certifications and assurances for three years, and prohibited the professor from serving as a reviewer, consultant, or advisor to NSF for three years.
- In the case of the assistant professor at an Arizona university who
 plagiarized text in two NSF proposals and blamed it on software,¹⁶
 NSF required certifications and assurances for approximately two
 years, and barred him from participating as a reviewer, advisor, or
 consultant for NSF for approximately two years.
- NSF required a small business owner who knowingly plagiarized text in two NSF proposals to submit certifications for two years.¹⁷
- NSF required a PI employed by an Idaho company, who knowingly plagiarized material in an NSF proposal, to submit certifications and assurances for two years.¹⁸
- In the case of a PI in South Carolina who plagiarized into three NSF proposals,¹⁹ NSF required that for two years the PI: certify compliance with his university-imposed sanctions; provide certifications and assurances; and be barred from serving as a reviewer, advisor, or consultant for NSF.
- NSF required a PI, formerly at an Illinois university,²⁰ who plagiarized text into two grant proposals, to provide certifications for one year.
 We also identified \$42,641 of inappropriate expenditures that were returned by the university during the last semiannual period and the current one.
- In the case of a PI in Georgia who falsified five letters of collaboration, NSF required certifications for one year and prohibited the PI from serving as a reviewer, advisor, or consultant for NSF for one year.
- In the case of an associate professor at an Illinois university who
 plagiarized material into an NSF proposal,²¹ NSF required one year of
 certifications.
- In the case of an assistant professor at a Pennsylvania university who knowingly plagiarized in a proposal, ²² NSF required that he certify compliance with his university's sanctions and required certifications and assurances for one year.
- In the case of a PI at an Ohio institution who submitted a collaborative proposal containing extensive plagiarism, NSF required certifications and assurances for one year.²³ The Ohio institution subsequently terminated the award, resulting in \$50,000 put to better use.

¹⁵ September 2013 Semiannual Report, p.22.

¹⁶ March 2013 Semiannual Report, p.29.

¹⁷ September 2013 Semiannual Report, p.22.

¹⁸ September 2013 Semiannual Report, p.21-22.

¹⁹ September 2013 Semiannual Report, p.22.

²⁰ September 2013 Semiannual Report, pp. 23-24.

²¹ September 2013 Semiannual Report, p.23.

²² September 2013 Semiannual Report, p.24.

²³ September 2013 Semiannual Report, p.23.

NSF required a South Carolina co-PI who plagiarized to provide certifications for one year.

 NSF declined to make a finding of research misconduct against a professor at a Colorado university who plagiarized in his CAREER proposal that NSF awarded with ARRA funds.²⁴ We recommended a finding of reckless plagiarism, but NSF concluded that the professor acted carelessly.

ADMINISTRATIVE INVESTIGATIONS

Panelist Violates NSF's Conflict of Interests Rule in Reviewing Proposal

A panelist submitted a written review for a proposal, with which he had a conflict of interests (COI), even though he was not one of the panelists assigned to provide a written review of that proposal. We verified the panelist was a recent collaborator and co-author with both the PI and co-PI of the proposal. The panelist acknowledged that although he had a conflict of interests with both the PI and co-PI, he rated the proposal "Excellent" and was a strong oral advocate of the proposal during the panel discussion.

He claimed that he did not recognize the PI's and co-PI's names because he had not physically met with them and wrote the manuscript with them via email. NSF requires panelists to disclose potential COIs, so the program officer can make informed decisions about the objectiveness of reviewers' opinions. Therefore, we recommended NSF ban the panelist from participating as a reviewer, advisor, or consultant for NSF for two years. NSF's decision is pending.

NSF Panelist Breaches Confidentiality by Asking His Staff to Review Proposals for Him

A Texas professor knowingly breached reviewer confidentiality by sharing six NSF proposals assigned to him for panel review with subordinates at his institution. Panelists reviewing proposals for NSF sign a non-disclosure form and agree not to disclose material from any proposal they are asked to review. During our investigation, the panelist admitted that he shared the confidential proposals with his postdoctoral researchers, but asserted he had not done this before.

Concurrent with our investigation, the National Institutes of Health (NIH) reviewed a similar allegation involving the panelist's disclosure of proposals during his participation on NIH study sections. NIH's

²⁴ March 2013 Semiannual Report, pp.29-30.

documentation established a pattern of conduct which was contrary to the panelist's assertion that the NSF panel was an exception to his standard practice.

We recommended that NSF ban the panelist from serving NSF in an advisory capacity, including as a panelist or *ad hoc* reviewer, for an appropriate period of time. NSF's response is pending.

We also recommended that NSF emphasize its requirement of confidential treatment of proposals by including a watermark on proposals that are printed or downloaded. NSF agreed to implement this recommendation.

Two Institutions Terminate Awards Resulting in Over \$220,000 of Funds Put to Better Use

As part of our investigation into allegations of research misconduct involving plagiarism in an NSF proposal, a Massachusetts institution terminated the award early, resulting in \$162,288 of funds put to better use. The investigation into research misconduct is ongoing.

In a second case, after completing its investigation into allegations of plagiarism in an NSF proposal, a university in Maine terminated the award. As a result, approximately \$40,000 of unexpended funds was put to better use. The university also refunded approximately \$26,000 to NSF.

Awardee Violates Grant Terms and Returns Nearly \$48,000 to NSF

As a result of our investigation of a Maryland community college identified during a proactive review of NSF scholarship awards, the community college returned \$47,970 in scholarship and tutoring funds to NSF, after making scholarship payments to ineligible students under an NSF award. The community college also implemented new practices to monitor student eligibility and assure compliance with grant terms of future awards.

Government-wide Suspension Recommended for Researcher Who Used NSF-Funded Supercomputers to Mine Bitcoins

We received reports describing a researcher's abuse of NSF-funded supercomputing resources at two universities to conduct bitcoin mining activities. Bitcoin is a virtual currency that is independent of national currencies, but it can be converted into traditional currencies through exchange markets. It is generated or "mined" through a process that is by design computationally intensive.

The researcher misused over \$150,000 in NSF-supported computer usage at two universities to generate bitcoins valued between \$8,000 and \$10,000. Both universities determined that this was an unauthorized use of their IT systems. The researcher asserted that he was conducting tests on the computers, but neither university had authorized him to conduct such tests -- both university reports noted that the researcher accessed the computer systems remotely and may have taken steps to conceal his activities, including accessing one supercomputer through a mirror site in Europe.

The researcher's access to all NSF-funded supercomputer resources was terminated. In response to our recommendation, NSF suspended the researcher government-wide.

NSF Decision in Significant Abuse of Transit Subsidy

We previously reported that, following our review of NSF's Transit Subsidy Benefit Program,²⁵ we opened an investigation of an NSF employee, who we determined had inappropriately used approximately \$4,000 of transit benefit funds. Her misuse involved a combination of personal trips, requesting and accepting an almost \$1,000 cash reimbursement for expenses that she had not incurred, \$974 left on old transit cards, and parking.²⁶ We had recommended that NSF itself recover the funds remaining on the employee's old transit cards, and recover the rest of the money from the employee. NSF management first proposed to suspend her for 20 days, but reduced the suspension to 14 days, in part because her supervisor thought that she had repaid all \$2.881 of the misused funds.

However, when we requested documentation to confirm that the funds had been repaid, NSF discovered the employee had previously repaid only the \$67 of her parking mischarges identified in our review of the Program, but had not repaid any money from the other misuse identified in this investigation. The employee was aware that she had not repaid the \$2,814 she owed for her transit abuse; nevertheless, she did not clarify the facts for her supervisor but instead signed the decision letter and did not attempt to pay back the \$2,814.

Further, we gave the employee our draft report of investigation, which made it clear that, although she had repaid \$67 for her parking mischarges, she still owed \$2,814 for her misuse of the transit benefit. However, NSF is not requiring her to repay more than \$500 of the money she misused.

²⁵ March 2012 Semiannual Report, pp.28-29; September 2012 Semiannual Report, p.29; and March 2013 Semiannual Report, pp. 35-36.

²⁶ September 2013 Semiannual Report, pp 25-26.

MANAGEMENT IMPLICATION REPORTS

NSF Implements Recommendations to Improve Its Award Management System

NSF's web-based application, eJacket, is the agency's system for performing many functions for award and proposal processing, and is a critical tool to enable NSF personnel to manage awards effectively and maintain the official record for awards. We previously discussed our MIR with recommendations for NSF to improve the utility and integrity of eJacket.²⁷

NSF has implemented several of our recommendations to improve eJacket including revising policies and practices to ensure that all relevant proposal and award decisions and documents are stored within eJacket, in consistent locations with informative titles and correct dates.

NSF has also agreed to assess the feasibility of including the following information within eJacket for each award: the ability to see all relevant information about the award in chronological order; the identity of current and all former NSF program and grant officers and awardee PIs and co-PIs; and current and historical full contact information for awardees, PIs, and co-PIs. NSF intends to complete this assessment within the next semiannual period.

Finally, NSF determined that its systems retain information about the Internet Protocol addresses for most submissions by applicants and awardees; this practice has already proven useful in our investigations.

In addition, since we issued our MIR in June 2013, we made two related recommendations to NSF:

- When NSF users log into the NSF computer network, they see a
 banner informing them that the use of NSF computers and networks
 is restricted to official use only, and users have no expectation of
 privacy therein. We recommended that NSF implement similar
 banners on smartphones and tablets and NSF agreed to install
 suitable banners to the extent practical on current and future
 smartphones and tablets.
- 2. NSF recently implemented a web-based "Award Cash Management \$ervice" (ACM\$) to handle institutions' reporting of charges to their NSF awards. ACM\$ provides a greatly enhanced level of detail about awardee charges to each award, which could be very useful to NSF program officers. Accordingly, we recommended that NSF assess the feasibility of providing direct linkage to ACM\$ from within eJacket. NSF's response to this recommendation is pending.

Recommendation to NSF to Implement the Winning Submission of the 2012 Presidential SAVE Award

The winning submission for the 2012 Presidential SAVE Award²⁸ suggested that participants in the Public Transportation Subsidy Program switch from regular fares to half-price senior fares as soon as they become eligible. The U.S. CFO Council issued an Alert stating that all agencies "should be actively working to implement two initiatives that were finalists for the 2012 SAVE Award," including the switch to senior transit subsidy fares.²⁹ We recommended that NSF issue an annual bulletin encouraging eligible participants to switch to Senior SmarTrip cards, pointing out to staff that they will save not only federal funds, but their own as well, since the discount applies to personal as well as commuting use. NSF's response to this recommendation is pending.

²⁸ http://www.whitehouse.gov/blog/2012/12/21/2012-save-award-winner

²⁹ https://cfo.gov/controller-alert-save-award

OIG Management Activities

Total Accountability: Suspension, Debarment, and Beyond

Suspension and debarment are valuable administrative tools that agencies can use to protect scarce funds from fraud, waste, abuse, poor performance, and noncompliance with contract provision or applicable law. The IG community is committed to enhancing suspension and debarment use to protect taxpayer funds by ensuring that the government only does business with responsible parties. The Suspension and Debarment Working Group, under the auspices of the Council of Inspectors General for Integrity and Efficiency, is dedicated to enhancing the IG community's understanding and use of government-wide suspension and debarment.

The working group sponsored its fourth suspension and debarment workshop, "Total Accountability: Suspension, Debarment, and Beyond" on March 28. The event was attended by nearly 250 auditors, investigators, attorneys, procurement personnel, and others representing 40 agencies and sub-agencies and 33 Offices of Inspector General. Topics discussed at this year's workshop included legislative developments, audit and performance-based actions, and coordination of remedies. The workshop facilitated conversations and collaborative relationships across the OIG, suspension and debarment, and Department of Justice communities that will enhance our mutual efforts to protect government resources.

Statistical Data

Audit Data

Audit Reports Issued with Recommendations for Better Use of Funds

			Dollar Value
A.	For which no management decision has been made by the commencement of the reporting period		\$304,895,499
B.		ommendations that were issued during reporting period	\$0
C.		stments related to prior	\$0
Sub	total of	FA+B+C	\$304,895,499
D.		which a management decision was le during the reporting period	\$0
	i)	Dollar value of management decisions that were consistent with OIG recommendations	\$0
	ii)	Dollar value of recommendations that were not agreed to by management	\$0
E. For which no management decision had been made by the end of the reporting period \$304,895,499			
	which in 6 m	\$304,895,499	

Audit Reports Issued with Questioned Costs*

		Number of Reports	Questioned Costs	Unsupported Costs
Α.	For which no management decision has been made by the commencement of the reporting period	21	\$31,641,064	\$2,375,769
B.	That were issued during the reporting period	0	\$0	\$0
C.	Adjustment related to prior recommendations	2 ³⁰	-\$8,001	-\$8,190
Subto	Subtotal of A+B+C		\$31,633,063	\$2,349,579
D.	For which a management decision was made during the reporting period	10	\$17,312,537	\$12,351
	Dollar value of disallowed costs	N/A	\$11,547,247	N/A
	Dollar value of costs not disallowed	N/A	\$5,765,290	N/A
E.	For which no management decision had been made by the end of the reporting period	12	\$14,320,526	\$2,337,228
For which no management decision was made within 6 months of issuance		12	\$14,320,526	\$2,337,228

^{*}On Report No. 14-2-006, there were no questioned costs; however, as a result of a referral from the OIG Office of Audit to the OIG Office of Investigations based on audit work, a former NSF employee was ordered to pay \$77,803 in restitution for theft of government property. See p. 16.

Status of Recommendations that Involve Internal NSF Management Operations

Open Recommendations (as of 09/30/2013)	
Recommendations Open at the Beginning of the Reporting Period	64
New Recommendations Made During Reporting Period	50
Total Recommendations to be Addressed	114
Management Resolution of Recommendations ³¹	
Awaiting Resolution	60
Resolved Consistent With OIG Recommendations	54
Management Decision That No Action is Required	0
Final Action on OIG Recommendations ³²	
Final Action Completed	16
Recommendations Open at End of Period (03/31/2014)	98

³⁰ On prior semiannual reports, \$8,190 of double-counted questioned and unsupported costs were included for Report No. 13-5-094. On Report No. 13-5-100, \$189 of additional questioned (but not unsupported) costs were reported during audit resolution.

^{31 &}quot;Management Resolution" occurs when the OIG and NSF management agree on the corrective action plan that will be implemented in response to the audit recommendation.

^{32 &}quot;Final Action" occurs when management has completed all actions it agreed to in the corrective action plan.

Aging of Open Recommendations

Aging of Open Recommendations	
Awaiting Management Resolution:	
0 through 6 months	50
7 through 12 months	0
More than 12 months	10
Awaiting Final Action After Resolution	
0 through 6 months	2
7 through 12 months	0
More than 12 months	36

List of Reports

OIG and CPA-Performed Reviews³³

Report Number	Subject	Questioned Costs	Unsupported Costs	Better Use of Funds
14-2-001	NSF's FY 2013 Financial Statement Audit	\$0	\$0	\$0
14-2-002	NSF 2013 Closing Package Audit Report	\$0	\$0	\$0
14-2-003	FISMA 2013 Independent Evaluation	\$0	\$0	\$0
14-2-004	FY 2013 FISMA Cyberscope Report	\$0	\$0	\$0
14-2-005	NSF FY2013 Management Letter	\$0	\$0	\$0
14-2-006	Purchase Card Audit	\$0	\$0	\$0
14-3-001	High Speed Network Inspection	\$0	\$0	\$0
14-2-007	IT Management Letter (Information Technology)	\$0	\$0	\$0
14-6-001	Alert Memo: Administrative Cost Recovery Rate	\$0	\$0	\$0
14-7-001	IQCR of TeamMate 13-F-2-001 High Speed Network Evaluation	\$0	\$0	\$0
	Total: 10	\$0	\$0	\$0

³³ The Office issued 10 reports this semiannual period.

NSF-Cognizant Reports

Report Number	Subject	Questioned Costs	Unsupported Costs
14-4-001	12-12 Center for Severe Weather Research - CO	\$0	\$0
14-4-002	3-12 Decision Science Research Institute - OR	\$0	\$0
14-4-003	12-12 Stroud Water Research Center - PA	\$0	\$0
14-4-004	12-12 Bay Area Video Coalition - CA	\$0	\$0
14-4-005	12-12 National Council for Science and the Environment - DC	\$0	\$0
14-4-006	12-12 The Shodor Education Foundation, Inc NC	\$0	\$0
14-4-007	12-12 Triangle Coalition for Science and Technology Education - VA	\$0	\$0
14-4-008	12-12 Woods Hole Oceanographic Institution - MA	\$0	\$0
14-4-009	12-12 The Historymakers, Inc IL	\$0	\$0
14-1-010	12-12 WTEC World Technology Evaluation Center - PA	\$0	\$0
14-1-011	12-12 openairboston.net - MA	\$0	\$0
	Total: 11	\$0	\$0

Other Federal Reports

Report	Subject	Questioned	Unsupported
Number		Costs	Costs

No reports containing questioned costs were received from other federal agencies having oversight or cognizance.

Audit Reports with Outstanding Management Decisions

This section identifies audit reports involving questioned costs, and funds put to better use where management had not made a final decision on the corrective action necessary for report resolution with six months of the report's issue date. At the end of the reporting period there were 16 reports remaining that met this condition. The status of recommendations that involve internal NSF management is described on pages 36-37.

Report Number	Subject	Questioned Costs	Unsupported Costs	Better Use of Funds
05-1-005	RPSC Cost Claimed FY2000 to 2002	\$1,933,722	\$0	\$0
07-1-003	Triumph Tech, Inc.	\$80,740	\$1,192	\$0
09-1-014	University of Michigan	\$1,604,713	\$1,418,889	\$0
09-5-048	8-07 College of the Mainland - TX34	\$110,629	\$0	\$0
10-1-012	COL OOI Proposed Budget ³⁵	\$0	\$0	\$88,118,848
11-1-001	REVISED ATST Price Proposal ³⁶	\$0	\$0	\$62,338,903
11-1-021	NEON National Ecological Observatory Network ³⁷	\$0	\$0	\$75,780,354
12-1-005	UCAL - Santa Barbara	\$6,325,483	\$0	\$0
12-1-008	NEON Proposal Audit ³⁸	\$0	\$0	\$78,657,394
12-5-143	9-11 Fort Berthold Community College - ND	\$25,343	\$24,659	\$0
13-1-001	REVISED University of Wisconsin - Ice Cube Incurred Cost	\$2,134,379	\$0	\$0
13-1-002	Jackson State University	\$943,475	\$844,241	\$0
13-1-004	ARRA Cornell University	\$794,221	\$19,703	\$0
13-1-005	EarthScope (SAFOD) San Andreas Fault Observatory at Depth Expenditures	\$339,277	\$0	\$0
13-5-094	6-12 FBCC Fort Berthold Community College - ND 9-month audit ³⁹	\$28,154	\$28,154	\$0
13-5-102	6-12 Bunker Hill Community College - MA	\$390	\$390	\$0
	Total:	\$14,320,526	\$2,337,228	\$304,895,499

³⁴ This report was on hold at the request of OIG.

³⁵ This report is on hold due to OIG request for an extension to respond to NSF's proposed resolution. In addition, OIG Report No. 12-3-001 Review of Specific Cost Information Related to Contingencies on Consortium for Ocean Leadership's (COL) Ocean Observatories Initiative Cost Proposal, issued 3/26/12, restated the finding in Audit Report No. 10-1-012, which found \$88,118,848 of "Better Use of Funds" in the Ocean Observatories Initiative proposal. Thus, Report No. 12-3-001 is also on hold.

³⁶ This report is on hold due to OIG request for an extension to respond to NSF's proposed resolution.

³⁷ This report is on hold due to OIG request for an extension to respond to NSF's proposed resolution.

³⁸ This report is on hold due to OIG request for an extension to respond to NSF's proposed resolution.

³⁹ This report was on hold at the request of OIG.

Investigative Activities

Referrals to Prosecutors	7
Criminal Convictions/Pleas	2
Arrests	1
Civil Settlements	0
Indictments/Information	3
Investigative Recoveries	\$1,236,750.78
Referrals to NSF Management for Action	29
Research Misconduct Findings	11
Suspensions/Debarments/Exclusions	13
Administrative Actions	59
Certifications and Assurances Received ⁴⁰	13

Investigative Case Statistics

	Preliminary	Civil/Criminal	Administrative
Active at Beginning of Period	10	142	109
Opened	9	15	29
Closed	13	27	21
Active at End of Period	6	130	117

Freedom of Information Act and Privacy Act Requests

Our office responds to requests for information contained in our files under the freedom of Information Act ("FOIA," 5 U.S.C. § 552) and the Privacy Act (5 U.S.C. § 552a). During this reporting period:

Requests Received	13
Requests Processed	16
Appeals Received	4
Appeals Upheld	2

Response times ranged between 5 days and 51^{41} days, with the median around 22 days and the average around 25 days.

⁴⁰ NSF accompanies some actions with a certification and/or assurance requirement. For example, for a specified period, the subject may be required to confidentially submit to OIG a personal certification and/or institutional assurance that any newly submitted NSF proposal does not contain anything that violates NSF regulations.

⁴¹ Some FOIA response times were affected by the government closure.





National Science Foundation Office of Inspector General 4201 Wilson Blvd., Suite 1135 Arlington, Va 22230 703.292.7100

http://www.nsf.gov/oig To report fraud, waste, of abuse, call our hotline 1.800.428.2189