
National Science Foundation
NSF
Office of Inspector General
Semiannual Report to Congress
September 2009

About The National Science Foundation...

The National Science Foundation (NSF) is charged with supporting and strengthening all research discplines, 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 the 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 recieve NSF funding; and identifies and helps to resolve cases of misconduct in science. 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.

About the Cover...

Cover Photo by Kenneth L. Busch.

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From the Inspector General

This *Semiannual Report to Congress* highlights the activities of the National Science Foundation Office of Inspector General for the six months ending September 30, 2009. During this period, our office issued seven reports, five of which contained more than $4.1 million of questioned costs. Our investigative staff closed 30 civil/criminal investigations, 52 administrative investigations, and recovered $662,162 for the government.

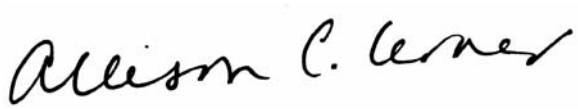
During the past six months, we have directed significant attention to challenges facing NSF as it attempts to spend its Recovery Act funds expeditiously while ensuring accountability and the achievement of the Act's twin goals of reinvestment and recovery. At the agency's invitation, the OIG is participating in several teams created to tackle Recovery Act implementation, allowing us to raise issues for NSF's consideration early in the process. We have proactively provided the agency with our assessment of several key issues, including high-risk programs and awardees that might receive Recovery Act funds, and with quick reports to help inform NSF award decisions, including one which detailed stakeholders' expectations that Recovery Act awards will contribute to both of the Act's goals. This type of real-time collaboration is a new experience for both the OIG and NSF and has resulted in a better-informed and more cooperative relationship that benefits both organizations. NSF has been receptive to the suggestions we have made, and we plan to continue using this approach. At the same time, we will ensure that our independent oversight role is not compromised.

Among the significant audit findings detailed in this report are serious internal control weaknesses at an institution that is currently managing approximately $31million in 47 NSF grants. Four audits of labor-effort reporting systems, part of a series of audits addressing this critical grants management issue at large universities, found that those systems lacked adequate controls to ensure that time claimed on the NSF awards was actually incurred and reported accurately. As a result, the universities and NSF had little assurance that the $92 million of labor charged to those awards represented actual work performed on NSF research, and those funds remain at risk for improper and unallowable charges. In addition, our review of 199 Single Audits covering NSF expenditures of more than $4 billion during a three-year period documented numerous internal control weaknesses in NSF awardees which could put federal funds at risk.

Our investigative work has also yielded significant results. Because it is essential to the integrity of research funded with taxpayer dollars that such projects be carried out according to the highest ethical standards, we continue to aggressively pursue research misconduct by NSF-funded researchers. During this period, we recommended that NSF debar a doctoral student who falsified data in a project involving NSF funding and a research professor who fabricated and falsified data. I am pleased to report that NSF has taken significant steps to address previously reported cases, and among other actions, debarred an associate professor who committed plagiarism in seven NSF proposals that resulted in awards of $420,000.

The agency has also taken major steps to address recommendations arising from employee misconduct cases we reported in March 2009. Among other things, the NSF Director issued a memorandum to all staff detailing the safeguards, training, and policies NSF has implemented pertaining to inappropriate use of government computers. The memorandum made clear that NSF has a zero tolerance policy for such misconduct and that it will strictly enforce this policy. Resolving these cases required sustained interaction between my office and NSF. I look forward to continued cooperation with the agency toward our mutual goal of eliminating such misconduct from NSF's workplace.

Finally, in August, the Director issued a memorandum reinforcing my office's vital mission to prevent and detect fraud, waste, and abuse and strongly stating his expectation that all NSF personnel would fully cooperate with the OIG. The OIG strives to give the public and Congress confidence that each dollar provided to NSF will be spent in the most effective and efficient way possible. My staff could not perform this mission without the cooperation, information, and support provided by their agency colleagues. We look forward to continuing this productive partnership.



Report Highlights

- The OIG continued its proactive oversight of NSF's Recovery Act spending and issued three Alert Memoranda to NSF identifying potentially risky institutions that may receive ARRA funds; providing information about the goals Congress and OMB intended NSF to meet with its ARRA funds; and analyzing whether NSF adequately justified funding proposals approved prior to enactment of the Recovery Act with money intended to address specific new recovery and reinvestment goals.

- An audit at the Carnegie Institution of Washington found that as a result of continuing internal control weaknesses, the approximately $31 million awarded in NSF grants that the Institution is currently managing could be at risk of being misused.

- Audits evaluating whether universities' internal controls are adequate to properly manage, account for, and monitor the more than $1.2 billion in salaries and wages provided by NSF annually found significant deficiencies in those controls. One university, which billed $16 million in labor charges to NSF and $49 million to other federal agencies in FY 2007 alone, had extensive unsupported labor cost transfers.

- A doctoral student demonstrated a pattern of purposeful data falsification. She purposefully falsified data and conclusions in 5 manuscripts citing NSF support, and persuaded an individual to manipulate data to cover up an earlier falsification.

- In response to OIG recommendations NSF debarred an associate professor for 18 months and took actions against several other PIs. The associate professor had plagiarized into seven NSF proposals resulting in awards of $420,000.

- In response to OIG management recommendations relating to employee misuse of government computers, NSF took several actions including installing internet filtering software; issuing a memorandum to all NSF making it clear that NSF has a zero tolerance policy for inappropriate use of government computers; removing two employees, and taking administrative action against several other employees.

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Audits & Reviews

During this period we issued seven reports, of which five contained more than $4.1 million of questioned costs. Further, our audit work resulted in significant recommendations to improve NSF's grant and contract management; to strengthen controls over labor effort reporting, and to help ensure that federal funds are spent properly. We also continued to provide proactive oversight and timely feedback to NSF regarding use of its American Recovery and Reinvestment (ARRA) funds. To this end, we issued three Alert Memoranda focusing on specific ARRA issues.[1]

Specifically, we performed a review of a grant awardee with a history of expenditure control weaknesses, completed four audits in a series of audits of universities' labor effort reporting systems, and audited four large awards at another university. We continued monitoring NSF's competitive selection process for a contractor to manage the United States Antarctic Program for the next 13.5 years and audited costs claimed under a polar program drilling services contract.

Further, we reviewed 199 annual single audits of NSF awardees and noted a substantial improvement in audit quality. Also, together with NSF, we resolved all but six of the 25 recommendations in the Management Letter that accompanied the FY 2008 financial statement audit. Finally, we also worked with NSF management to resolve all of the findings and recommendations in five of our previously issued audits of NSF awardees.

Ensuring Proper Stewardship of ARRA Funds

The American Recovery and Reinvestment Act of 2009 provided $3 billion to NSF, an approximate 50 percent increase over the agency's $6 billion FY 2009 annual appropriation. NSF has quickly developed programs to make awards, established a methodology for awarding stimulus funds, and produced policies and procedures that include new award terms and conditions to specific ARRA awards. Spending ARRA funds expeditiously while ensuring proper stewardship of these funds is a government-wide challenge and a challenge for NSF.

Therefore, we are directing significant attention to proactive and preventive activities to give NSF timely feedback on its ARRA

[1] An alert memorandum is a concise, real-time review of a specific NSF activity or operation as it is being developed and/or implemented, to provide input on issues as they arise. An alert memorandum may also be issued during the course of an audit to notify NSF of matters requiring more immediate attention.

HIGHLIGHTS

endeavors. For example, we monitored NSF's creation of, and provided immediate feedback, on its implementation of key ARRA requirements, including developing agency spending plans and new terms and conditions for awards made under the Act.

In the past six months, we issued three Alert Memoranda on ARRA issues to NSF. The first memorandum identified institutions that may present additional financial and programmatic risks if awarded ARRA funds. This memo included information we had provided to the Recovery Accountability and Transparency Board identifying high risk programs that could potentially receive ARRA funds. We provided this assessment to help NSF ensure the appropriate use of ARRA funds.

The purpose of the second memorandum was to provide NSF with information about stakeholders' expectations with regard to its use of Recovery Act funds to meet the Act's goals. To determine those expectations, we interviewed staff at OMB, OSTP, and in Congress. Based on those interviews, it was clear that although stakeholders expected that NSF's primary contribution would be in the area of reinvestment, it was also clear that they expected that NSF would contribute to the goal of recovery by making awards that created jobs.

The third memorandum analyzed NSF's spending of ARRA funds for "in-house" proposals. These are highly-rated proposals NSF had on hand at the time ARRA was enacted and account for approximately two-thirds of NSF's total ARRA spending. We advised NSF that it needs to document the rationale for its decision to use ARRA funds on an award-by-award basis. Further, we noted that NSF needs to provide guidance for its program officers and grants officials to ensure that they understand how they should monitor the rate at which awardees are spending ARRA funds, as well as how they should respond to awardees' questions relating to their ARRA reporting requirements. Finally, as a follow up to our assessment of potentially risky programs and awardees, we requested that NSF provide us with information on its current and planned actions to mitigate the potential increased risks of particular programs and institutions receiving ARRA funds.

During this period, we also worked with the Inspector General community on two government-wide ARRA reviews. The first was a self-assessment that agencies completed regarding whether they have sufficient qualified grant and contracting staff to adequately handle ARRA work. We provided the results of NSF's assessment to the Recovery Accountability and Transparency Board and are preparing a report to advise NSF of our assessment of the survey responses. In the second Board review, which is ongoing, we are evaluating whether NSF has developed processes and controls to assess data quality of the quarterly recipient reports. The IG community also has new requirements for reporting our activities and how we are spending our ARRA appropriation. We are working with the IG community to fulfill these reporting responsibilities and provide the greatest amount of transparency possible to the American people.

In the next reporting period, we plan to audit selected ARRA awards and evaluate NSF's post-award oversight activities related to the Act. Among other things, we plan to conduct financial capability reviews of selected ARRA recipi-

ents to ensure they have the ability to manage these funds. In addition, we are ready to address any concerns raised by the public under the Act's provision for Inspector General reviews, as well as any complaints we might receive owing to the Act's expanded whistleblower protections.

Significant Grant Audits

Inadequate Internal Controls Remain Despite Institution's History of Grant Management Problems

We conducted an internal control review to determine if Carnegie Institution of Washington (CIW) had strengthened its internal controls after four employees were convicted of embezzling over $532,222, including approximately $200,000 from NSF awards between 1994 and 2006. We found that a number of serious internal control weaknesses remained, although in 2004 CIW's independent auditors had recommended that CIW strengthen its financial management process. As a result of continuing internal control weaknesses, the approximately $31 million in 47 NSF grants that CIW is currently managing could be at risk of being embezzled or misused.

CIW developed a corrective action plan in response to its auditor's 2004 internal control report, but the plan did not fully address all of that report's recommendations. Further, CIW developed institution-wide financial and administrative policies and procedures for federal awards, but they did not provide adequate or sufficient guidance in areas such as grant monitoring practices, segregation of duties, controls over disbursements, journal entries, and proper handling of cash receipts. Moreover, none of the seven CIW departments adequately implemented these new policies and procedures.

For example, four Directors of CIW departments did not effectively monitor their business office activity which should include routinely meeting with the business managers to discuss grant project budgets and expenditures, review monthly credit card statements, and assess overall federal grant activity. In addition, one CIW department did not have a business manager to monitor Principal Investigator grant activity. Continuous monitoring by a business or department manager can help prevent and timely detect embezzlement schemes, such as falsifying time and effort reports, converting property purchased with NSF award funds to personal use, and fabricating invoices and receipts for purchases to make them appear award-related.

CIW departments also either did not have or did not follow adequate written journal entry procedures to ensure that cost transfers to NSF awards for purchases, labor, materials and supplies were appropriate and had adequate supporting documentation, explanation of purpose and evidence of supervisory review and approval. As a result, the review found unapproved, undocumented and inappropriate cost transfers, using journal entries that inappropriately shifted costs from other grants and sources to NSF grants. Moreover, CIW continued to have poor segregation of duties and controls over its disbursement process. A single individual could enter and post invoices, print checks and access the blank-check stock.

Due to the significant nature of the internal control deficiencies identified and to prevent future embezzlements, we recommended that CIW develop and implement the systems, policies, procedures, and plans needed to address all of its internal control weaknesses. In its response, CIW indicated that since our fieldwork was completed, it has made significant improvements to its policies, procedures, and financial practices, including installing a new accounting and administrative system. The actions CIW described, if implemented, should address our concerns.

Significant Compliance and Internal Control Deficiencies at University of Michigan Lead to $1.6 Million of Questioned Costs

An audit of four awards to the University of Michigan with $57.7 million in direct costs and $16.6 million in cost sharing found significant compliance and internal control deficiencies in the University's financial management of its NSF grant funds that resulted in $1.6 million of questioned direct costs and more than $136,000 of at-risk cost sharing.[2] The University of Michigan has 565 active NSF awards totaling more than $290 million. Our audit encompassed four large center awards[3] at Michigan which totaled nearly $60 million and represented 20 percent of Michigan's funding from NSF.

We found that the University could not provide source documentation to support $1.4 million in salary, internal charges from University service centers, and other NSF award costs. This occurred because the University's policies did not clearly identify the types of documentation that should be maintained to meet federal requirements and its coding and filing system made locating the documentation difficult.

The audit also found that award costs charged to NSF were not reviewed until the end of the award period which was usually years after costs were incurred and charged to NSF. Due to this significant time lag and the University's ineffective record retention system, the University was often unable to locate the necessary documents to conduct an appropriate review of costs charged to the NSF awards. Our audit questioned more than $61,000 of improper costs for alcohol, salary for a terminated employee, and unrelated scholarship/fellowship aid and stipends claimed under the NSF awards. In addition, the University lacked procedures for overseeing and enforcing labor certification and effort reporting policies and had certified 37 effort reports totaling more than $130,000 prior to the time the staff performed the research effort.

To address these compliance and internal control deficiencies, we recommended that the University develop policies and procedures to specify source documentation that should be maintained for each major category of federal grant costs; amend its record retention system to ensure that documentation to support charges to NSF grants can be readily obtained; and ensure that a comprehensive review of NSF award charges is performed at least annually.

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[2] "At risk" cost sharing is the amount of required cost sharing that, at the time of the audit, the awardee had not provided but had time to meet before the award's expiration date.

[3] NSF Center awards are generally large, interdisciplinary research awards of a scope, scale and complexity beyond the resources of any individual investigator or small group and involve collaborations among research groups at one or more locations.

Further, we recommended that the University monitor and enforce its labor certification and effort reporting policies.

The University of Michigan disagreed with the audit findings and recommendations and asserted that its policies and procedures were adequate.

Labor Effort Reviews Continuing at Universities

The OIG has been conducting a series of audits to evaluate whether universities' internal controls are adequate to properly manage, account for, and monitor salary and wage costs; and to determine whether these costs are allowable in accordance with federal costs principles. It is critical for these systems to be sound because NSF annually provides more than $1.2 billion, approximately one-third of all NSF funds to universities for salaries and wages. Further, this figure is expected to grow as the ARRA increases NSF's funding of grants.

We completed four audits of universities with significant NSF and federal funding during this reporting period. These audits identified key weaknesses with time and effort documentation, transfers of labor costs between awards without explanation or approval, and certification and accuracy of labor effort reports supporting approximately $81 million of research salaries charged to NSF awards.

Georgia Tech Needs to Improve its Labor Effort Reporting

An audit at the Georgia Institute of Technology (Georgia Tech) determined that it had a labor effort reporting system that could track and account for claimed labor-effort costs, but we found material weaknesses in controls for justifying and approving after the fact transfers of labor costs between federal awards. The extensive number and amount of unsupported labor cost transfers raises serious questions about the reliability of the University's entire effort reporting system. Consequently, any improper charges to NSF and other federal awards may not be detected. Since Georgia Tech billed $16 million in labor charges to NSF and $49 million to other federal agencies in FY 2007 alone, it is critical for its labor-effort reports to be reliable.

The audit also revealed that Georgia Tech lacked policies and procedures to comply with a federal grant requirement to track and account for labor effort voluntarily provided to the research project as cost sharing. Accounting for voluntarily committed cost sharing is important to ensure the University's indirect cost rate calculation is accurate and does not result in overcharging the NSF award. Further, Georgia Tech's policy did not incorporate NSF's requirement that limits PI summer salary to two months. Without this limitation in its policy, Georgia Tech could charge excess salaries to NSF.

We made several recommendations to address the control weaknesses we identified including that Georgia Tech require written justification and approval of changes to monthly workload allocation reports and labor cost transfers, require follow-up on inadequately justified labor cost transfers between awards and ensuring proper training and oversight of these activities, and develop policies

to limit charges to NSF sponsored projects to two months of faculty members' base pay in any calendar year. The University agreed with the recommendations.

Cornell Not Using a Suitable Means of Validating Labor Charged to NSF Grants

Our audit of Cornell University's labor effort reporting system found that employees did not comply with federal regulations when they certified effort reports without having first-hand knowledge or a suitable means of verifying that the work was performed and the work benefited the NSF awards. Specifically, officials who were not in a position to know whether work was performed, certified eight of the 30 employees' effort reports we sampled, representing $208,000 (19 percent) of the salaries reviewed This same weakness had been identified by Cornell's internal audit group two years earlier.

The significant nature of this control weakness, coupled with the University's delay in acting on its internal auditors' recommendations, raises concerns about the reasonableness and allowability of the remaining $38 million of Cornell's FY 2007 labor charges to NSF grants, as well as the reliability of the labor costs claimed on its other $262 million of federal awards.

These weaknesses occurred because prior to FY 2008, Cornell did not define in its policies what constituted a suitable means of verifying labor effort or establish adequate internal controls to provide effective management and oversight of its labor effort reporting system.

We recommended that Cornell revise its policies to address the weakness we identified including defining what constitutes *suitable means of verification,* requiring certification by employees with first hand knowledge or certifiers with documented suitable means of verification, periodically training all employees involved in the effort reporting process, and holding certifying officials accountable for following certification policies and procedures.

The University generally concurred with our recommendations and agreed to implement the necessary changes to its policies and procedures by December 31, 2009.

Arizona State Needs to Ensure Reasonableness of NSF Labor Charges

An audit of Arizona State University's (ASU) labor effort reporting system found that ASU did not ensure that salaries and wages charged to NSF awards reasonably reflected actual work performed on the sponsored projects. Specifically, four of the 30 sampled employees charged labor costs to NSF grants for work that did not directly benefit any of the NSF grants, and two other sampled employees' salaries were allocated to NSF awards using annual base salaries that exceeded the amount recorded on appointment letters or employment contracts. As a result, ASU overcharged NSF $29,700 for six employees.

Further, the audit disclosed late, missing or undated certifications on 50 of 67 (75 percent) effort reports, and certifications without first-hand knowledge or suitable means of verification in six instances. In addition, ASU had not performed a

mandatory comprehensive independent internal evaluation of its effort reporting system to ensure the system complied with federal requirements. Because of these weaknesses, NSF has less assurance that ASU labor costs, which for FY 2007 totaled $11.7 and $40.6 million for NSF and other federal agencies respectively, are supportable.

Recommendations to address these weaknesses included developing improved policies and procedures, mandatory training for all responsible research and administrative personnel and independent evaluations of the labor effort reporting system. ASU concurred with the recommendations and agreed to make the necessary changes to policies and procedures. ASU also implemented an electronic effort reporting system, which should further facilitate its ability to monitor effort reporting.

Purdue University Needs to Strengthen Controls over Charging Labor on NSF Grants

Our audit of Purdue University's labor effort reporting found that overall the University had adequate systems to ensure that the time charged to an NSF award represented the actual time spent on that award. However, our sample of 30 employees who charged $850,711 in labor costs to NSF grants identified over $12,000 in charges that were not allowable or did not benefit the NSF grant. While the amount of these overcharges was not materially significant relative to the total amount of sampled labor costs, these excess costs indicate that Purdue has an internal control weakness that could result in improper charges on NSF or other federal awards.

Specifically, three Principal Investigators and two graduate students violated both federal and Purdue University policies when they charged proposal writing and teaching activities as direct costs to NSF grants. The internal control weakness occurred because Purdue University did not have a system in place to ensure adequate monitoring and periodic independent internal evaluation of the effort reporting system. Also, Purdue did not ensure that all cognizant personnel received adequate training on their effort reporting requirements and responsibilities. Purdue University limited its formal effort reporting training to its business office staff and did not include the Principal Investigators.

We made several recommendations, including that Purdue improve training for all personnel involved in the effort reporting process and that the university establish an independent internal evaluation process. Purdue generally agreed with the recommendations. While Purdue University plans to continue its established practice of formally training only its business office staff, it will include additional steps to emphasize effort reporting issues related to proposal writing and graduate student teaching.

Significant Contracts

OIG Continues Monitoring NSF's Antarctic Support Contract Competition

NSF is in the process of selecting a contractor to manage the United States Antarctic Program for the next 13.5 years. The current contract is NSF's largest and is valued at approximately $1.6 billion over ten years. As part of the selection process, NSF requested that the Defense Contract Audit Agency provide cost proposals to conduct audits for each offeror but plans to conduct audits at only the offerors determined to be within the competitive range.
We issued an Alert Memorandum to NSF expressing concerns about what the request covered. There are specific areas of the proposals that the audits should cover, including indirect cost and overhead rates, business and financial systems, and cost accounting practices. Audits of these areas are important to develop a reasonably adequate cost analysis methodology and provide confidence that all major costs are known, disclosed, and considered as part of the award decision, including those that may not be readily apparent at the time of the proposal submission. This is particularly true for proposals from new business entities that do not have existing Cost Accounting Standards disclosure statements that have been determined to be adequate by a government agency. It is also very important that NSF audit the adequacy of offerors' business and financial systems to determine if they are capable of ensuring that government funds under the resulting contract are properly allocated and billed to the benefiting agency contract.

In addition to the Alert Memorandum, given the magnitude and complexity of this procurement, we have monitored NSF's competitive acquisition process, providing periodic comments and suggestions to advise NSF on the process used to select a contractor that can properly account for costs and bill in accordance with federal requirements. We will also continue to provide an independent perspective on NSF's acquisition process and assist NSF in identifying and avoiding possible contract administration challenges and problems.

Polar Program Drilling Services Contract Overrun by $788,000 and Auditors Question $2 Million in Costs

In response to an NSF request, our audit of $19 million in costs claimed by the University of Wisconsin under NSF's Ice Coring and Drilling Services (ICDS) contract found that that the university did not follow contractual requirements to notify NSF of potential cost overruns and claimed $788,255 over the contract ceiling amount through 2007. Specifically, ICDS did not follow contract requirements when it failed to notify NSF of increased costs it began experiencing in 2006 and had reached 75 percent of its contract ceiling. As a result, NSF had less opportunity to manage the increase in costs of the drill or to mitigate the impact of the cost overruns of the drill development and testing.

The audit also noted several internal control weaknesses in UW's contract administration and identified other instances where UW did not fully comply with all terms and conditions of the NSF contract. Specifically, UW requested, but did not obtain NSF approval, for its subcontracts and for equipment purchases

exceeding 5 percent of the total contract value, as required by the contract and *Federal Acquisition Regulation*. As a result, the audit questioned $2.4 million (13 percent) of the costs claimed for unapproved subcontract, equipment, and associated indirect costs. In addition, the audit noted that equipment inventory reports sent to NSF were not complete and travel records were destroyed prematurely, contrary to UW's record retention policy.

We recommended that NSF consider these findings in its review of UW's request for equitable adjustment for the increased costs. We also recommended that NSF require UW to implement a system to monitor and manage costs under the NSF award; timely notify NSF, as required, when it is reaching its contract ceiling; and obtain NSF Contracting Officer approval and consent to enter into subcontracts. Further, we recommended that NSF require UW to submit complete and accurate inventory reports, to verify the existence and accuracy of inventory, and improve controls over record retention.

The university generally agreed with the recommendations, but submitted documentation to show requests for approval from NSF for at least 26 subcontracts to provide services and equipment. NSF responded just once to UW's requests, approving only four subcontracts. UW stated that it subsequently relied on its quarterly progress and financial reports to meet NSF's subcontract approval requirement since NSF had not responded to its requests. Therefore, we issued an Alert Memorandum to NSF recommending that the agency follow its current policies and procedures for monitoring subcontracting activities that require Contracting Officer approval. Further, the memorandum recommended that NSF monitor contract costs, by comparing budgeted costs in the annual program plans to actual costs in invoices, to better manage potential cost overruns

A-133 Audits

Single Audits Continue to Identify Lack of Controls over Federal Funds and Noncompliance with Federal Requirements

For the 199 audit reports reviewed and referred to NSF's Cost Analysis and Audit Resolution (CAAR) Branch this period,[4] covering NSF expenditures of more than $4 billion during audit years 2005 through 2008, the auditors identified 120 findings at 72 NSF awardees. Five awardees received qualified opinions on their financial statements and eight had adverse or qualified opinions on their compliance with federal grant requirements.

The auditors identified material weaknesses and/or significant deficiencies in 43 reports (60 percent of reports with findings), indicating substantial concerns about the awardees' ability to manage NSF funds. Awardees' lack of internal controls and noncompliance with federal requirements included: untimely and/or incorrect reporting of time and effort; inadequate support for salary/wages,

[4] We reviewed four additional reports but rejected them due to audit quality issues. Once we receive the revised reports, we will review them, and if acceptable, refer them to NSF for resolution.

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 are required to 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.

equipment, travel, and indirect costs charged to awards; inadequate monitoring of subrecipients; inability to prepare the financial statements; and late financial and/or progress reports.

The auditors identified 60 instances where awardees failed to comply with federal requirements. Nine of these resulted in more than $587,000 in questioned costs for NSF awards. Auditors also identified 60 instances where inadequate internal controls could lead to future instances of noncompliance.

We also examined 97 management letters accompanying the A-133 audit reports and found 56 deficiencies that affected NSF. Auditors issue these letters to identify internal control deficiencies that are not significant enough to include in the audit report, but which could become more serious over time if not addressed. The deficiencies included inadequate tracking, managing, and accounting for NSF costs, and ineffective segregation of duties. These deficiencies affected control processes that are essential to ensuring stewardship of NSF funds and preventing fraud and abuse.

We provided the results of each audit report to NSF and, where appropriate, highlighted our concerns related to opinions or findings. In certain instances, such as reports which contained significant deficiencies or material weaknesses repeated for three or more consecutive years and/or reports which identified $100,000 or more in questioned costs to NSF awards, we requested that NSF coordinate with us during the audit resolution process. Although A-133 does not specifically require NSF to coordinate management decisions on systemic findings when another agency is the cognizant or oversight agency for audit, it does require NSF to issue management decisions on findings which impact its funding. As such, we believe it prudent to bring these issues to the attention of NSF officials and to monitor the actions taken by NSF to improve controls in place at the awardee level. We expect that part of the actions taken by NSF during resolution of these audits would include discussions with the cognizant/oversight agencies for audit to determine what, if any, additional actions NSF should take regarding its awards.

NSF coordinated with us as requested prior to completing resolution of eight reports, but completed resolution of two reports without coordinating with us. NSF contacted the cognizant agency during resolution for one of the ten audits. In addition, in two reports, NSF considered the findings resolved even though

the subsequent year's audits identif ed repeat f ndings. We plan to work with NSF off cials to formalize an agreement on the process for resolving recommendations for A-133 reports for which we have requested coordination.

Timeliness and Quality of Single Audits Improves, But Deficiencies Remain

The audit f ndings in A-133 reports are useful to NSF in planning site visits and other post-award monitoring. Because of the importance of A-133 reports to this oversight process, the OIG reviews 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 reports that are deemed inadequate to the awardees to work with the audit f rms to take corrective action.
We reviewed 108 audit reports for which NSF was the cognizant or oversight agency for audit,[5] and found that 53 (49 percent) fully met federal reporting requirements. This is a substantial improvement in quality over prior semiannual periods. For example, in March 2007 only 9 reports fully met the requirements.

Key factors which contributed to the improvements include actions taken by the auditor community as a whole in response to the National Single Audit Quality Project issued in June 2007[6] and actions taken by individual auditors and auditees in response to our increased monitoring of audit quality and outreach efforts over the past 3 years.

Although improvements in timeliness and quality were signif cant, 55 reports (51 percent) reviewed had timeliness and quality issues. Audit quality issues identif ed included 37 reports (34 percent), in which the Schedule of Expenditures of Federal Awards did not provide suff cient information to allow for identif cation of awards received from non-federal "pass-through" entities or did not adequately describe the signif cant accounting policies used to prepare the schedule. In addition, there were 24 reviews (22 percent) which contained quality issues that had been previously identif ed for the same awardees and auditors.

We contacted the auditors and awardees, as appropriate, for explanations of each of the potential errors. In most cases, the auditors and awardees either provided adequate explanations and/or additional information to demonstrate compliance with federal reporting requirements, or the error did not materially affect the results of the audit. However, we rejected four reports due to substantial non-compliance with federal reporting requirements. We issued a letter to each auditor and awardee informing them of the results of our review and the specif c issues on which to work during future audits to improve the quality and reliability of the report.

We previously reported on our special review of reports under NSF oversight without any identif ed audit f ndings (the "Oversight Project").[7] The review continued to demonstrate that monitoring of reports without audit f ndings is

[5] The "cognizant or oversight agency for audit" is def ned as the federal agency which provided the largest amount of direct funding to an awardee.
[6] Previously reported in September 2007 Semiannual Report, p. 17.
[7] March 2009 Semiannual Report, pp. 22-23.

as necessary as monitoring of reports with audit findings. Of the 55 reports we reviewed with quality issues, 33 (including 3 of the 4 rejected reports) were identified through the Oversight Project. Starting with the audits of fiscal years ending in 2008, the Federal Audit Clearinghouse will automatically provide us with all reports under NSF cognizance or oversight.

Continued Efforts in Response to National Single Audit Sampling Project and Recovery Act

We previously reported on ongoing efforts to improve the quality and oversight of single audits in response to the recommendations of the National Single Audit Sampling Project and on our participation in OMB workgroups to address some of the findings.[8] We continue to work with OMB to revise the Council of Inspectors General on Integrity and Efficiency standards for conducting quality control reviews and desk reviews. We are also working with OMB to address the impact of ARRA on single audits. This group is developing a pilot program for early reporting of internal control deficiencies identified during single audits at the state level.

Audit Resolution

Some FY 2008 Management Letter Recommendations Remain Unresolved

In the March 2009 Semiannual Report,[9] we reported that the Management Letter resulting from the audit of NSF's FY 2008 financial statements included findings in grants processing and documentation, contract monitoring, and reporting of property, plant, and equipment. Management's initial corrective action plan, dated April 2009, included plans to resolve 17 of the 25 recommendations. Management's revised corrective action plan, dated August 2009, resolves an additional two recommendations. Four of the six remaining unresolved recommendations relate to grants monitoring. They include a recommendation to review supporting source documentation before approving payments to problem institutions placed on special payments, and a repeated recommendation from the prior year for NSF to require staff to document review steps and results of its assessments of institutions with high risk awards. A contract monitoring recommendation that is unresolved is to expand the scope of the quarterly expenditure review (QER) procedures of NSF's high risk contractors to include verifying that the amounts recorded in the contractor's general ledger represent costs that are allowable and benefitted the NSF contract. NSF management stated that it plans to consult with the Defense Contract Audit Agency to determine the exact scope of the current QERs and what additional procedures are needed. Until NSF determines the detailed procedures, this recommendation remains unresolved.

[8] September 2008 Semiannual Report, pp. 21-22; March 2009 Semiannual Report, p. 23.
[9] March 2009 Semiannual Report, p.14.
[10] March 2009 Semiannual Report, p 20.

We are continuing to work with NSF to develop acceptable corrective action plans for the unresolved recommendations. During the ongoing audit of the FY 2009 financial statements, the auditors are also evaluating the effectiveness of NSF's implementation of corrective action plans for previously resolved recommendations.

NSF Will Continue to Monitor Bermuda Institute of Ocean Sciences

In response to our March 2009[10] report on the financial capability of the Bermuda Institute of Ocean Sciences (BIOS), NSF has stated that it will continue to monitor the institute's financial position by reviewing the financial statements that BIOS submits to the agency. We conducted the audit to report on the effect of BIOS' major expansion in its research programs.

University of Arizona Corrects Internal Control Weaknesses

The University of Arizona has corrected all the internal control weaknesses we identified in the audit we reported in the March 2009 Semiannual Report. Arizona took a number of actions including updating its policies and procedures to better document its review and approval of labor cost charges by personnel having a "suitable means of verification," and requiring all officials involved in the effort reporting process to receive periodic training. In addition, the University aligned its supplemental compensation guidelines with NSF's summer salary limitations.

Further, the University hired a Financial Compliance Coordinator to monitor the effort report certification process and requested its internal audit department to conduct periodic independent evaluations. The University plans to update its financial management system so that it can track commitments for direct and cost shared labor time to ensure that proposed labor effort commitments are met. Arizona also updated its Handbook for Principal Investigators to ensure that some faculty effort is committed to all sponsored projects. The audit questioned and NSF subsequently sustained $16,584, which the University removed from the NSF grants before the audit was finalized.

NSF Sustains $346,733 in Questioned Costs at American Institute of Physics

In the March 2009 Semiannual Report,[11] we reported that an audit of the American Institute of Physics (AIP) found significant internal control deficiencies and non-compliance with federal requirements in its subcontract procurement and management practices. The audit also identified $77,658 in questioned costs that include $25,000 related to invoices paid to a subcontractor for products that were not completed.

During audit resolution, AIP provided NSF with additional program income information. As a result, NSF identified an additional $294,075 of program income owed on an NSF-funded project, resulting in a total sustained questioned cost of

[11] March 2009 Semiannual Report, p. 18.

$346,733. NSF conf rmed that AIP received the products that were questioned for $25,000 and required AIP to improve its policies and procedures for sub-award monitoring and proper handling of program income.

Education Development Center Agrees to Improve Subaward Monitoring and Revise Travel Policies

In March 2009,[12] we reported that an audit of $14.2 million of costs claimed by Education Development Center, Inc. (EDC), an international non-prof t educational research organization, identif ed compliance and internal control def ciencies in EDC's f nancial management that resulted in inadequate monitoring of $1.3 million of subaward costs. During audit resolution, EDC agreed to improve its subaward monitoring and revise its travel policies to better ensure that the costs claimed on its NSF awards are allowable and that meal costs are reasonable and well documented.

NSF Sustains Questioned Cost and Exploratorium Agrees to Correct Control Weaknesses

In March 2009,[13] we reported that an audit of awards made to Exploratorium, a non-prof t educational organization and science museum, identif ed limited subaward monitoring, undocumented expenses, and unreported program income resulting in $340,204 in questioned costs. NSF sought recovery of all of the questioned costs in audit resolution. In addition, Exploratorium agreed to adhere to its policy to maintain adequate documentation and revise its policies and procedures to improve its subawardee monitoring process and ensure program income is properly reported.

[12] March 2009 Semiannual Report, p. 17.
[13] March 2009 Semiannual Report, p. 17.

Investigations

Research Misconduct Investigations

Research misconduct damages the scientific enterprise, is a misuse of public funds, and undermines the trust of citizens in science and in government. 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 misconduct associated with NSF proposals and awards. It is imperative to the integrity of research funded with taxpayer dollars that we ensure that NSF PIs carry out their projects with the highest ethical standards.

During this reporting period, we referred five cases to NSF which are summarized below. In the first case, NSF made a finding and took actions consistent with our recommendations. NSF's decisions are pending in the other four cases.

Professor Plagiarizes in CAREER Proposal

Our investigation confirmed that a professor at a South Dakota university extensively plagiarized in the CAREER proposal he submitted to NSF. The professor claimed that he mistakenly uploaded his draft proposal in NSF's electronic proposal system. He pointed to an internal university proposal as an example of the text he meant to submit to NSF; however, the university also discovered plagiarism in that proposal as well as plagiarism in his Ph.D. dissertation from another university. The professor resigned prior to any disciplinary action by the university.

Consistent with our recommendations, NSF made a finding of research misconduct; sent a letter of reprimand to the professor; required certifications and assurances for three years; prohibited him from serving as a reviewer of NSF proposals for three years; and required him to complete ethics training.

Doctoral Student Demonstrated Pattern of Purposeful Data Falsification

A doctoral student at a Pennsylvania university purposefully falsified data and conclusions in 5 manuscripts citing NSF support, 3 of which had been published. She also convinced an individual to manipulate data to cover up her earlier falsification. However, she subsequently cooperated with the university's extensive review of data from all of her projects which revealed additional misconduct involving funding from NSF and another federal agency. At the completion of the university investigation, the student, the

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Research misconduct investigations follow the investigative model outlined in NSF's Research Misconduct regulation,[14] based on the government wide policy promulgated by the Office of Science and Technology Policy.[15] This investigative model is unique in that it generally relies on awardee institutions to conduct their own independent investigations, subject to our review and further investigation, followed by NSF's agency adjudication.

When our office receives a research misconduct allegation, we first conduct a confidential inquiry to establish whether the allegation is substantive. This inquiry often involves confidential communication between our office and the accused subject and does not involve the subject's institution. If the subject is able to provide an adequate explanation to dispel the allegation, our inquiry closes and only the subject is aware that the matter was brought to our attention. This protects the subject's reputation from being unjustly tarnished by frivolous or minor allegations.

In cases where the allegation appears to have substance, we move into the investigation phase, which in most cases involves referring the case to the subject's institution. The institution conducts an investigation and provides us with its investigation report, which we review for fairness, accuracy, and completeness. If the institution's report is thorough and adequate for our purposes, we use the report as the basis for our independent investigation; if the university did not fully address all of the issues, we conduct additional investigation ourselves.

Based on the university's report and any additional investigation on our part, if we conclude that the subject committed research misconduct under NSF's definition (see sidebar), we write an investigation report, and provide the subject an opportunity to comment on our assessment of the evidence and recommended actions. After reviewing the subject's comments, we finalize the report and send it to NSF's Deputy Director for adjudication. If the Deputy Director concludes that the subject committed research misconduct and imposes actions, the subject can appeal the decision to NSF's Director, whose decision is final.

university, and the other federal agency entered into a three-party voluntary settlement agreement in which the university rescinded her graduate degrees, and she agreed not to apply for funding from the agency for 3 years. However, based on the actions of the university and the other federal agency, we did not believe that the government's interests were adequately protected because the other agency's voluntary exclusion did not have the full government-wide effect of a debarment.

Our further investigation also determined that the student's current employer is a federal contractor that produces reports and data analyses which it sells to both public and private sector clients. We identified two reports on which

[14] 45 C.F.R. part 689.
[15] 65 Fed. Reg. 76260 (12/6/00), available at *http://www.ostp.gov/cs/federal_policy_on_research_misconduct.*

the student was a coauthor, and the student admitted to us that she performed some of the data analysis in these reports and indicated that her current employer is unaware of the research misconduct finding at the university.

We concluded that the student committed purposeful falsification as part of a larger pattern of misconduct. We have recommended that NSF: make a finding of research misconduct; send the student a letter of reprimand; debar her for 5 years; require her to complete ethics training; require her to seek either retraction or correction of the published work; require her to provide certifications and assurances for 3 years following the debarment period; and bar her from serving NSF as a reviewer, advisor, or consultant for 3 years following the debarment period.

Research Professor Fabricates and Falsifies Data in NSF Proposal

A research professor at a Nevada university fabricated images in his NSF proposal by assembling several smaller images into a larger image, and falsified the image description. The professor asserted that the fabrication and falsification were without consequence because experiments he conducted after submitting the proposal confirmed the images he had fabricated.

The university investigation recommended a finding of research misconduct, but the professor resigned before the university took action. We have recommended that NSF make a finding of research misconduct; send the professor a letter of reprimand; debar him for 2 years; require certifications and assurances for 3 years after the debarment ends; prohibit him from serving as a reviewer of NSF proposals for 3 years after the debarment ends; and require him to complete a course in ethics training.

Student Plagiarizes in Proposal Requesting Doctoral Funding

A doctoral student at a Nevada university acknowledged that he submitted a Doctoral Dissertation Improvement Grant proposal to NSF that contained material copied from two other sources. The student, who was the co-PI, asserted that this happened because he accidentally submitted an early draft of the proposal as a result of problems he was having with his computer when he was conducting fieldwork abroad.

We referred this matter to his university which concluded that although the student had plagiarized, his actions were careless and therefore did not constitute research misconduct. The university took several actions against the student including requiring him to write letters of apology to the university, NSF, and the authors of the source documents and denying him any additional departmental funding.

Although we agreed with the university's overall assessment, we concluded that the evidence demonstrated that the student acted recklessly, not carelessly, and therefore his actions constituted research misconduct. We recommended that NSF make a finding of research misconduct and that it take other actions including sending a letter of reprimand; requiring certifications for 1 year; and requiring completion of a course in research ethics.

PI and Co-PI Plagiarize in Joint and in Separate Proposals

We substantiated an allegation that a PI and a co-PI from a Wyoming university plagiarized in one joint NSF proposal, two other proposals by the PI, and a fourth proposal by the co-PI.

The university determined that the PI recklessly or knowingly committed plagiarism in three NSF proposals and that the co-PI recklessly plagiarized material in two NSF proposals and 3 published articles. The university required both individuals to complete ethics training, conduct a presentation on research ethics, and certify for two years that their proposals to federal entities do not contain plagiarism. We concluded that the co-PI's actions did not rise to the level of research misconduct. We agreed with the university that the PI's action constituted research misconduct and have recommended that NSF make a finding of research misconduct, send a letter of reprimand, and require certifications from the PI for one year.

OIG Reviews University Findings regarding Human Subject Regulation and Plagiarism

In the first case, we reviewed a university's actions related to alleged violations of NSF's human subjects regulation on an NSF-funded project. In the second, we reviewed findings related to plagiarism on an NSF award.

PI and co-PI Violated Human Subjects Regulation

The Federal Policy for the Protection of Human Subjects (Policy) imposes strict requirements on all federally funded research that involves people as the subjects of the research. At NSF, this includes all awards to develop and implement innovative ways to advance science, mathematics, and engineering education for students. Awards involving human subjects are overseen by panels at the awardee institutions called Institutional Review Boards (IRBs). On several occasions, we have found problems with awardees' compliance with the Policy.

We received information that a New Mexico university's IRB terminated work on an NSF-funded project and ordered a portion of the data destroyed because it found numerous violations of the Policy by the PI and co-PI. The violations included unapproved medical and cognitive testing and inappropriate data sharing. Our investigation concluded that although the PI and Co-PI should have been more cognizant of their responsibilities under the policy, they were in frequent contact with the IRB and believed they were complying with IRB policies. Therefore, we determined that no further action by NSF was necessary, and we sent letters to the PI, Co-PI, and the university IRB apprising them of the need to ensure compliance with federal, university, and grant Human Subject Regulations.

NSF's Definition of Research Misconduct[16]:

a. Research misconduct means fabrication, falsification, or plagiarism in proposing or performing research funded by NSF, reviewing research proposals submitted to NSF, or in reporting research results funded by NSF.

   1. Fabrication means making up data or results and recording or reporting them.
   2. Falsification means manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.
   3. Plagiarism means the appropriation of another person's ideas, processes, results or words without giving appropriate credit.
   4. Research, for purposes of paragraph (a) of this section, includes proposals submitted to NSF in all fields of science, engineering, mathematics, and education and results from such proposals.

b. Research misconduct does not include honest error or differences of opinion.

Graduate Student Misinterprets Advisor's Advice and Plagiarizes

An Ohio university informed us it had reviewed an allegation of plagiarism under an NSF award and concluded an investigation was warranted. The PI, who was also the department chair, was the thesis advisor for several students who worked on related research within his group over several years.

During the university investigation, one of the students who the PI advised stated that he had looked at copy of one of the PI's former student's thesis to check his work, but denied that he had copied text from the thesis of that student, who was also advised by the same PI. During the course of the university's investigation, the PI acknowledged that he encouraged students to use wording from former students' work, had not carefully explained the importance of citation, and that he accepted responsibility for not checking to see if text had been copied and for failing to explain the importance of citation.

Although the university acknowledged shortcomings in the PI's guidance, it concluded that the student was responsible for the plagiarism. As a result of these shortcomings, the university recommended the institution of a university-wide program to promote the responsible conduct of research for faculty, staff, and students. We sent the student a warning letter with guidance about proper citation practices, and the PI a letter of admonishment. We concluded that the PI's poor mentoring mitigated the student's conduct and that the university's actions were sufficient to protect NSF's interests.

[16] 45 C.F.R. § 689.1.

Actions by NSF Management on Previously Reported Research Misconduct Investigations

NSF has taken administrative action to address our recommendations on six research misconduct cases reported in our March 2009 report. In each case, NSF made a finding of research misconduct and issued a letter of reprimand. NSF also took additional significant actions in response to our recommendations which are summarized below.

- **Associate Professor at a Texas University Plagiarized Into Seven NSF Proposals, Resulting in Awards Totaling $420,000.**[17] NSF debarred him for 18 months; required certifications and assurances for 2 years; and barred him from serving as an NSF reviewer for 2 years.

- **PI from a Northeastern University Plagiarized Text into Two NSF Proposals.**[18] NSF proposed to debar the PI for 5 years; prohibited her from serving as an NSF reviewer, advisor, or consultant for 5 years; and directed her to submit certifications and assurances for three years following the expiration of the debarment. NSF's final decision on the proposed debarment is pending.

- **PI From a California Institution Submitted a Proposal In Which a Third of the Text Was Inadequately Cited.**[19] NSF required certifications and assurances for 1 year; and barred him from serving NSF as a reviewer, advisor, or consultant for 1 year.

- **PI From an Indiana University Submitted a Proposal Containing Plagiarized Text.**[20] NSF required certifications and assurances for 2 years

- **Professor at Pennsylvania Institution Plagiarized Text into Two NSF Proposals.**[21] The Deputy Director required certifications and assurances required for 3 years; the professor filed an appeal to the Director, which is pending.

- **PI at a Maryland University Submitted Three NSF Proposals Containing Plagiarized Text.**[22] NSF required certifications and assurances required for 1 year; barred him from serving NSF as a reviewer, advisor, or consultant for 1 year.

[17] September 2008 Semiannual Report, p.40; March 2009 Semiannual Report, p.44.
[18] March 2009 Semiannual pp.45-46.
[19] March 2009 Semiannual Report, p.46.
[20] March 2009 Semiannual Report, p.46.
[21] March 2009 Semiannual Report, p.47.
[22] March 2009 Semiannual Report, p.47.

Administrative Investigations

During the past six months, we conducted an administrative investigation of an NSF employee who abused the time and attendance system to receive pay for hours she did not work. We also found that a program manager violated NSF policies when he posted a conf dential proposal on his university website.

NSF Employee Fails to Account Properly for Hours Worked

We received an allegation that an NSF employee was taking leave and failing to report it. We analyzed her time and attendance records, telephone records, and email folders. Based on this analysis, we concluded that she failed to account properly for her time worked and leave taken in order to receive pay and credit for hours she did not work. Specif cally, we identif ed 10 days for which the employee was paid for time she did not work, 4 days she did not sign out, and 6 days she failed to account for her time accurately. As a result of this abuse, she earned $974 for 49 hours she did not work. We referred the results of our investigation to NSF management, and their decision in this matter is pending.

NSF Program Manager Posts Confidential Proposal on His Personal Webpage

We substantiated an allegation that an NSF program manager, who was in a temporary position through the Intergovernmental Personnel Act, posted a recent NSF proposal on his university website where it was publicly available for a year. He had posted the proposal to make it available to two additional reviewers he had solicited, who were not in NSF's electronic proposal system. Publicly posting a conf dential proposal violated NSF policy. NSF's *Policy and Award Manual* def nes the proposal as one of the pieces of sensitive information program directors handle in the course of their duties, and NSF policy makes clear that pending proposals must be safeguarded and protected from unauthorized disclosure. In addition, this proposal would not have been, and is not, available through a Freedom of Information Act request.[23]

The program manager's failure to include the reviewers in NSF's system precluded them from being screened for conf icts of interests. It also resulted in NSF not having an accurate system of records regarding its review process, which is important so decisions can be fully documented and in cases where review panelists are involved, NSF can comply with the Federal Advisory Committee Act.

Finally, it is important for NSF to know who has access to a proposal in the event of an unauthorized release or an allegation of plagiarism. A further problem resulting from the inappropriate use of reviewers outside of NSF's system is the fact that those reviewers did not receive an express promise of conf dentiality, which NSF's procedures require. As a result, if the PI were to submit a Privacy Act request, NSF may not be able to withhold the identity

[23] 45 C.F.R. § 612.7(a)(4)(i).

of those individuals, as it does for all other reviewers. NSF has advised the program manager, who is no longer at the agency, that he must follow appropriate procedures if he returns to NSF.

NSF Takes Steps on Cases of Employee Misconduct

In recent years, we have referred a number of employee misconduct cases to NSF and made many management recommendations for improving NSF's workplace environment. NSF has taken several significant steps to address recommendations arising from employee misconduct investigations we reported in our March 2009 semiannual report. This misconduct involved improper use of NSF information technology resources, as well as phone, time and attendance misuse, and abuse of transit subsidies.

In response to our recommendation regarding improper internet use by eight employees, NSF installed internet filtering software that prevents access by NSF computers to inappropriate web sites such as gambling and sexually explicit adult sites. NSF is also exploring additional software that would filter incoming and outgoing emails and attachments to prevent inappropriate material from being received and sent from NSF information technology resources.

In addition, in September 2009 the NSF director issued a memorandum to all NSF staff detailing the safeguards, training, and policies that the agency has implemented pertaining to inappropriate use of government computers. This memorandum makes it clear that NSF has a zero tolerance policy for this type of misconduct and that NSF will strictly enforce this policy. We fully support these initiatives and look forward to their implementation.

In response to our recommendations regarding inappropriate computer use by eight employees, NSF removed two employees, suspended one for 60 days and reduced his grade, suspended one for 15 days and suspended two others for one day. Two had previously left NSF. The six remaining employees retain the right to appeal the action against them. In another case, NSF terminated an employee who inappropriately used his government computer to email sexually explicit material. After he filed a grievance, the action against him was changed to resignation.

NSF proposed to terminate two employees for time and attendance abuse; however, both resigned in lieu of being removed. NSF issued an Official Reprimand to an employee for excessive use of the phone during work hours. Finally, NSF implemented all of our recommendations regarding programmatic improvements to its transit subsidy program and took personnel actions against the four current employees who abused their government-provided transit benefits. Two were required to repay the excess subsidies they received, and two received oral counseling.

NSF recently issued a draft of the Director's "Employee Action Agenda" with a goal of creating a model workplace at NSF. We commend the agency for this agenda which includes goals of mandatory training for all managers and supervisors in harassment prevention, timely responses to misconduct, and the development of a formal performance management framework for individuals

under the Intergovernmental Personnel Act, among other things. We look forward to continuing to work with NSF to help ensure the integrity of the agency's operations and to prevent abuse of government resources.

Civil and Criminal Investigations

We investigate violations of federal civil and criminal statutes by applicants for and recipients of NSF funds, as well as NSF employees and contractors. When we find substantial evidence of wrongdoing, we refer cases to the Department of Justice for prosecution, and recommend administrative action by NSF in appropriate circumstances.

University Returns $31,521 to NSF and Conducts Training on Federal Requirements

We received allegations that a PI at a Massachusetts university purchased equipment for his children's use, double-billed NSF and other funding sources for his travel expenses, and traveled with his office administrator and charged her expenses to NSF grants. The PI's university had reviewed the PI's past and present federal and non-federal research activity and found no evidence of wrongdoing by the PI; however, it identified $31,521 of questioned costs, as well as areas for improvement for the PI and the grant administrators in his department. As a result, the university returned $31,521 to NSF, and the PI and his department's grant administrators received training on federal requirements and university policies.

NSF Receives $10,758 in Settlement of Allegations of Excessive Faculty Salary Charges by University

A multi-agency investigation led by the Department of Defense (DOD) OIG determined that a Massachusetts university overcharged salary for several faculty members to numerous awards from the Department of Energy, DOD, and NSF. Without admitting that its faculty salary charges were excessive, the university changed its policy to prevent this type of mischarging in the future and paid $636,500 to settle the matter. NSF's share of this settlement, based on its proportionate share of the mischarges, was $10,758.

Criminal Convictions Result in Debarments by NSF

NSF has taken action in response to our recommendations on several criminal convictions we reported in our March 2009 report.

- NSF debarred a former research center employee for 5 years after she pled guilty to 17 counts of mail fraud and 5 counts of theft from an organization receiving federal funds following her use of state-issued purchase cards to buy items for personal use. She was also sentenced to 32 months in prison and ordered to pay restitution of over $300,000.

- NSF debarred for 5 years an individual who pled guilty to impersonating an NSF official to lure women to participate in a fake NSF project. He was also

ordered to pay more than $80,000 in fines and penalties and sentenced to 5 years probation with real-time monitoring of his computer use, and to 6 months home detention.

In four other cases in which we recommended that NSF impose 3-year debarments, NSF issued Notices of Proposed Debarment that are pending. The cases include:

- A research center employee who received kickbacks for contracts—this individual was sentenced to 12 months home detention and ordered to pay more than $80,000 in restitution;
- A university employee who used a government purchase card for personal use and charged more than $11,000 to an NSF award—the university terminated her and paid NSF back; she pled guilty to embezzlement, was sentenced to 5 years probation, and was ordered to pay full restitution;
- A PI who improperly charged over $280,000 to an NSF award—the university returned the improperly charged money to NSF and terminated the PI; and
- A PI who improperly managed an NSF award and failed to disclose conflicts of interests.

NSF Imposes Oversight Requirements on University that Misspent Award Funds

After an OIG investigation disclosed problems with use and management of NSF award funds at a Georgia university, pursuant to our recommendations NSF placed the university on advance monitoring and imposed special payment conditions on all of its NSF awards. Although we ultimately determined that this case did not warrant civil or criminal prosecution or debarment, we recommended that NSF take administrative action to protect its award funds.

We are pleased to report that NSF OIG has again received 5 U.S.C. §2302(c) certification from the Office of Special Counsel (OSC). We have maintained this certification for over six years.

5 U.S.C. §2302, Prohibited Personnel Practices, at §2302(c), requires that all federal employees be informed of the rights and remedies available to them under the prohibited personnel practice and whistleblower retaliation protection provisions of Title 5. OSC established its 2302(c) Certification Program to facilitate efforts to meet these statutory obligations.

To gain this certification, we ensured that informational posters were displayed throughout our work areas; ensured information about prohibited personnel practices and the whistleblower protections was provided to current employees and to new employees as part of an orientation process; ensured supervisors were trained on these subjects; and established a link to OSC on the OIG webpage. Both OIG and the National Science Board are 2302(c)-certified.

OIG Management Activities

Congressional Testimony

In August 2009, the Inspector General testif ed before the Senate Commerce, Science, and Transportation Committee at a hearing titled “Waste, Fraud, and Abuse in the Small Business Innovation (SBIR) Program. The SBIR program at NSF is a valuable tool in providing funds to small, high-tech businesses conducting innovative research to advance the agency’s mission. The Inspector General stated that the vast majority of companies receiving SBIR awards from NSF spend these funds to carry out the research they proposed to do; over time, however, the OIG has received allegations and conducted investigations of companies that have allegedly committed fraud involving SBIR awards.

The primary type of fraudulent activity found in NSF’s SBIR program is duplicative funding, in which companies obtain awards from more than one federal agency for the same or duplicative work. The Inspector General emphasized that in response to our recommendations, NSF requires companies to disclose when they submit proposals to more than one agency and to certify the accuracy of that disclosure. Additionally, NSF’s guidance makes it clear to potential recipients that they are prohibited from receiving duplicate funding for the same or overlapping research.

NSF also requires all companies that receive a Phase I SBIR award to attend a workshop to help them comply with NSF requirements. For over 10 years, this workshop has included a brief ng by the OIG that makes it clear that violations of SBIR program requirements constitute wrongdoing that can result in signif cant criminal, civil, and administrative consequences. The Inspector General stressed that NSF has supported the OIG’s efforts to prevent and detect fraud in the SBIR program and has instituted processes that enhance the OIG’s ability to prosecute such fraud. The OIG will continue to work with NSF to prevent unscrupulous companies from the defrauding the SBIR program.

Outreach

As part of our mission to prevent fraud, waste, and abuse, we conduct outreach programs at conferences and for grantees. We tailor these programs to specif c needs, and present information regarding research misconduct and f nancial fraud, as well as general information about what our off ce does to prevent fraud, waste, and abuse.

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Our office is recognized nationally and internationally as a leader in the area of research misconduct. NSF was one of the first government agencies to issue a research misconduct regulation and was instrumental in the development of the Office of Science and Technology Policy's government-wide research misconduct policy. Our office receives numerous requests from universities and others in the research community to provide training on preventing, detecting, and investigating research misconduct, and we have made a number of presentations in the past six months. In addition, our office played a significant role in drafting the "Practical Guide to Investigating Research Misconduct Allegations in International Collaborative Research Projects"[24] which was finalized by the Organization for Economic Cooperation and Development (OECD) during this period.

Outreach to NSF, the National Science Board, universities, the research community, and others is an essential tool in our efforts to prevent and deter fraud and abuse related to NSF- funded grants. Examples of our outreach activity during this reporting period include providing grant fraud training for OIG investigators and auditors and providing best practices and practical suggestions to NSF grant recipients on reducing fraud and mismanagement. In addition, our office made a presentation to the Society of Research Administrators International and to the National Grants Management Association.

We also conduct briefings for recipients of grants under the Small Business Innovation Research (SBIR) program to make it clear to awardees that violations of SBIR program requirements constitute wrongdoing, and we outline the specific criminal, civil, and administrative consequences of such wrongdoing. U.S. Attorneys who have prosecuted cases of fraud against SBIR have cited these briefings as an asset in prosecutive decisions. We also participated in NSF's new employee orientation sessions to inform employees about our office's role and about their responsibility to report potential waste, fraud, and abuse to us.

In keeping with our efforts to focus on the prevention of fraud, waste, and abuse in Recovery Act programs and funding, we are working with NSF to provide timely fraud prevention and detection guidance. The agency has been receptive to our input and we continue to work to help ensure that Recovery Act funding is reaching the intended recipients.

In June, 2009, the Associate Inspector General for Audit co-chaired an international workshop in Portugal on challenges associated with managing research accountability. Dr. Christine Boesz, former NSF Inspector General, served as the workshop facilitator. Hosted by the Portuguese Foundation for Science and Technology and the National Science Foundation, this workshop was the seventh in a series of international accountability workshops, which have focused on topics such as implementing grant oversight strategies, evaluating research results, and strategies to prevent fraud and abuse of research funds. This year's workshop, entitled Restoring Trust, featured case studies and best practices for addressing accountability challenges. Workshop participants came from the United States, nine European countries, the European

[24] Available at *http://tinyurl.com/y88gpac*.

Commission, and Japan. In addition to NSF, United States participants included the director of sponsored programs at the University of Washington and the director of internal audit at the Nature Conservancy. The Associate Inspector General for Audit's presentation, American Recovery and Reinvestment Act, discussed the unique challenges recipients of stimulus funds faced in complying with the explicit goals and detailed requirements of the Act.

The Office of Audit also participated in numerous domestic outreach events related to the Recovery and Reinvestment Act during this reporting period. For example, Audit participated in a panel discussion at a Federal Demonstration Partnership[25] meeting in May 2009 on how to administer stimulus funds. Also, throughout this semiannual period Auditors networked with other OIGs to discuss strategies for complying with the Act's unprecedented accountability, transparency, and oversight requirements. In addition, Auditors actively participated in developing guidance to assist auditors who perform Single Annual Audits, test Recovery and Reinvestment Act expenditures. Further, Auditors and Investigators participated in five NSF workgroups that focused on Recovery and Reinvestment Act topics, such as award processing, budget issues, post award monitoring, and reporting requirements, to help ensure that the agency and the awardees it funded under the Act, complied with its new, complex requirements.

Our Office of Investigations Summer Internship Program is noteworthy in the IG community. During this semiannual period, the program reached a new high, with 13 interns joining our office. Through this program, interns from colleges and law schools throughout the nation, work with civil/criminal investigators, investigative scientists, and investigative attorneys, conducting high quality research, reviewing documents, and interviewing witnesses. Most significantly, our interns draft review plans to proactively identify wrongdoing and systemic weaknesses which contributes to our mission of preventing and detecting fraud. We are proud that the knowledge and experience gained by our interns have contributed to their success in obtaining challenging and rewarding employment after graduation.

Providing Information to the OIG in a Timely and Effective Manner

It is important to note that in August 2009, the Director issued a memorandum to all NSF employees emphasizing our office's vital role in preventing and detecting fraud, waste, and mismanagement and strongly stated his expectation that all NSF employees and offices will cooperate fully with our office. This memorandum specifically directed NSF personnel to refrain from any activity that might inhibit communication or cooperation with the OIG. We commend the agency for this initiative and its recognition of the critical importance of providing information to our office in a timely manner.

[25] The Federal Demonstration Partnership includes federal agencies, academic research institutions and research policy organizations.

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		$3,053,497
B.	Recommendations that were issued during the reporting period		$0
C.	Adjustments related to prior recommendations		$0
Subtotal of A+B+C			$3,053,497
D.	For which a management decision was made 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		$3,053,497
For which no management decision was made within 6 months of issuance			$3,053,497

Audit Reports Issued with Questioned Costs

		Number of Reports	Questioned Costs	Unsupported Costs
A.	For which no management decision has been made by the commencement of the reporting period	27	$59,033,545	$1,091,038
B.	That were issued during the reporting period[25]	13	$4,735,465	$1,617,013
C.	Adjustment related to prior recommendations			
Subtotal of A+B+C		40	$63,769,010	$2,708,051
D.	For which a management decision was made during the reporting period	18	$1,384,297	$426,906
	i) dollar value of disallowed costs ii) dollar value of costs not disallowed	N/A N/A	$1,072,246 $312,051	N/A N/A
E.	For which no management decision had been made by the end of the reporting period	22	$62,384,713	$2,281,145
For which no management decision was made within 6 months of issuance		9	$57,649,248	$664,132

[26] Of the 13 audit reports with questioned costs issued during this period, eight were Single Audit (A-133) audit reports, with a total of $587,396 questioned costs. Of those eight, four A-133 reports found a total of $145,098 unsupported costs.

Audit Reports Involving Cost-Sharing Shortfalls

		Number of Reports	Cost-Sharing Promised	At Risk of Cost Sharing Shortfall (Ongoing Project)	Actual Cost Sharing Shortfalls (Completed Project)
A.	Reports with monetary findings for which no management decision has been made by the beginning of the reporting period:	3	$1,353,360	$0	$834,556
B.	Reports with monetary findings that were issued during the reporting period:	1	$10,576,949	$136,263	$0
C.	Adjustments related to prior recommendations	0	$0	$0	$0
Total of reports with cost sharing findings (A+B+C)		4	$11,930,309	$136,263	$834,556
D.	For which a management decision was made during the reporting period:	2	$437,258	$0	$323,838
	1. Dollar value of cost-sharing shortfall that grantee agreed to provide	2	$437,258	$0	$323,838
	2. Dollar value of cost-sharing shortfall that management waived	0	$0	$0	$0
E.	Reports with monetary findings for which no management decision has been made by the end of the reporting period	2	$11,493,051	$136,263	$510,718

Status of Recommendations that Involve Internal NSF Management Operations

Open Recommendations (as of 09/30/2009)	
Recommendations Open at the Beginning of the Reporting Period	52
New Recommendations Made During Reporting Period	0
Total Recommendations to be Addressed	52
Management Resolution of Recommendations[26]	
Awaiting Resolution	9
Resolved Consistent With OIG Recommendations	43
Management Decision That No Action is Required	0
Final Action on OIG Recommendations[27]	
Final Action Completed	3
Recommendations Open at End of Period	**49**

Aging of Open Recommendations

Awaiting Management Resolution:	
0 through 6 months	0
7 through 12 months	6
More than 12 months	3
Awaiting Final Action After Resolution	
0 through 6 months	0
7 through 12 months	20
More than 12 months	20

[27] "Management Resolution" occurs when the OIG and NSF management agree on the corrective action plan that will be implemented in response to the audit recommendations.
[28] "Final Action" occurs when management has completed all actions it agreed to in the corrective action plan.

List of Reports

NSF and CPA Performed Reviews					
Report Number	**Subject**	**Questioned Costs**	**Unsupported Costs**	**Better Use of Funds**	**Cost Sharing At-Risk**
09-1-008	Cornell University Effort Reporting System	$0	$0	$0	$0
09-1-009	Georgia Tech Effort Reporting System	$0	$0	$0	$0
09-1-010	Carnegie Institution of Washington	$25,718	$25,718	$0	$0
09-1-011	Wisconsin Ice Core Drilling Services	$2,475,308	$27,308	$0	$0
09-1-012	Arizona State Effort Reporting system	$29,700	$0	$0	$0
09-1-013	Purdue Labor Effort Reporting	$12,630	$0	$0	$0
09-1-014	University of Michigan	$1,604,713	$1,418,889	$0	$136,263
09-6-001	Alert Memo - ARRA – Potential High Risk Awardees	$0	$0	$0	$0
09-6-002	Alert Memo – OIG Understanding of ARRA Stakeholder Expectations	$0	$0	$0	$0
09-6-003	Alert Memo – Source Selection Process for the Award of ASC	$0	$0	$0	$0
09-6-004	Alert Memo ARRA – Review of Funding of In-House Proposals	$0	$0	$0	$0
09-6-005	Alert Memo – Contract Administration Issue (Wisconsin)	$0	$0	$0	$0
	Total:	**$4,148,069**	**$1,471,915**	**$0**	**$136,263**

NSF-Cognizant Reports

Report Number	Subject	Questioned Costs	Unsupported Costs	Cost Sharing At-Risk
09-4-083	12-07 Association for Institutional Research, Inc. - FL	$0	$0	$0
09-4-106	12-07 REJECTED DOSECC Drilling Observation and Sampling of the Earth's Continental Crust - UT	$0	$0	$0
09-4-111	9-07 Fort Worth Museum of Science and History – TX	$0	$0	$0
09-4-112	9-07 Kentucky Science and Technology Corporation	$0	$0	$0
09-4-113	9-07 LSST, Inc. – AZ	$0	$0	$0
09-4-114	12-07 Monterey Bay Aquarium Research Institute – CA	$0	$0	$0
09-4-115	8-07 MISE Merck Institute for Science and Education – NJ	$0	$0	$0
09-4-116	7-07 MSRI Mathematical Sciences Research Institute – CA	$0	$0	$0
09-4-117	6-07 Los Angeles County Museum of Natural History Foundation – CA	$0	$0	$0
09-4-118	6-07 Maine Mathematics and Science Alliance	$0	$0	$0
09-4-119	6-07 MPC Corporation – PA	$0	$0	$0
09-4-120	9-07 Montshire Museum of Science - VT	$0	$0	$0
09-4-121	6-07 NISS National Institute of Statistical Sciences - NC	$0	$0	$0
09-4-122	6-07 New York Hall of Science	$0	$0	$0
09-4-123	5-07 Oregon Museum of Science and Industry	$0	$0	$0
09-4-124	6-07 Oregon Public Broadcasting	$0	$0	$0
09-4-125	12-07 Puget Sound Center Foundation for Teaching Learning & Technology – WA	$0	$0	$0
09-4-126	6-07 QEMN Quality Education for Minorities Network – DC	$0	$0	$0
09-4-127	6-07 San Diego Society of Natural History – CA	$0	$0	$0
09-4-128	12-07 Santa Fe Institute – NM	$0	$0	$0
09-4-129	6-07 SoundVision Productions - CA	$0	$0	$0
09-4-130	12-07 The Franklin Institute – PA	$0	$0	$0
09-4-131	12-07 Space Science Institute – CO	$0	$0	$0
09-4-132	6-07 The Institute for Global Environmental Strategies, Inc. - VA	$0	$0	$0
09-4-133	12-07 Sciencenter Discovery Museum – NY	$0	$0	$0
09-4-134	9-07 The Algebra Project, Inc. – MA	$0	$0	$0

09-4-135	12-07 TERC Technical Education Research Centers, Inc. – MA	$0	$0	$0
09-4-136	6-07 The Brookings Institution – DC	$0	$0	$0
09-4-137	12-07 The Mathematical Association of America – DC	$0	$0	$0
09-4-138	12-07 The Samuel Roberts Noble Foundation, Inc. - OK	$0	$0	$0
09-4-139	8-07 Twin Cities Public Television, Inc. – MN	$0	$0	$0
09-4-140	9-07 The Concord Consortium Incorporated – MA	$0	$0	$0
09-4-141	6-07 The Science Museum of Minnesota - MN	$0	$0	$0
09-4-142	9-07 URA Universities Research Association, Inc. - DC	$0	$0	$0
09-4-143	9-07 Teachers Development Group - OR	$0	$0	$0
09-4-144	607 REJECTED Town of Hudson – MA	$0	$0	$0
09-4-145	6-07 The Queens Borough Public Library - NY	$0	$0	$0
09-4-146	9-07 NEON REVISED National Ecological Observatory Network, Inc. – CO	$0	$0	$0
09-4-147	12-07 Biological Sciences Curriculum Study, Inc. – CO	$0	$0	$0
09-4-148	6-07 Center for Occupational Research & Development/CORD, Inc. - TX	$0	$0	$0
09-4-149	12-07 Gulf of Maine Research Institute – ME	$0	$0	$0
09-4-150	9-07 Hazardous Material Training & Research Institute – IA	$0	$0	$0
09-4-151	6-07 Illinois State Museum Society	$0	$0	$0
09-4-152	6-07 IRIS Incorporated Research Institutions for Seismology – DC	$0	$0	$0
09-4-153	12-07 ICSI International Computer Science Institute – CA	$0	$0	$0
09-4-154	12-07 Institute for Global Environment and Society, Inc. – MD	$0	$0	$0
09-4-155	6-07 Institute for Advanced Study – NJ	$0	$0	$0
09-4-156	12-07 Institute for Broadening Participation – ME	$0	$0	$0
09-4-157	12-07 Boyce Thompson Institute for Plant Research – NY	$0	$0	$0
09-4-158	6-07 Garfield Park Conservatory Alliance – IL	$0	$0	$0
09-4-159	6-08 IUP Research Institute – PA	$0	$0	$0
09-4-160	6-08 The Institute for Global Environmental Strategies – VA	$0	$0	$0
09-4-161	5-08 Oregon Museum of Science and Industry	$0	$0	$0

09-4-162	6-08 Exploratorium – CA	$0	$0	$0
09-4-163	6-08 Harrisburg University of Science and Technology - PA	$0	$0	$0
09-4-164	6-05 REVISED School District of Riverview Gardens – MO	$0	$0	$0
09-4-165	6-08 Keck Graduate Institute of Applied Life Sciences – CA	$0	$0	$0
09-4-166	6-08 Garfield Park Conservatory Alliance – IL	$0	$0	$0
09-4-167	6-08 California Science Center Foundation – CA	$0	$0	$0
09-4-168	6-08 Viewpoints Research Institute, Inc. – CA	$0	$0	$0
09-4-169	6-08 Cary Institute of Ecosystem Studies, Inc. – NY	$0	$0	$0
09-4-170	7-08 MSRI Mathematical Sciences Research Institute – CA	$0	$0	$0
09-4-171	6-08 Oregon Public Broadcasting	$0	$0	$0
09-4-172	12-07 Association of Science-Technology Centers – DC	$0	$0	$0
09-4-173	12-07 Astrophysical Research Consortium – WA	$0	$0	$0
09-4-174	2-07 REJECTED Astronomical Society of the Pacific – CA	$0	$0	$0
09-4-175	3-07 Berkeley Geochronology Center – CA	$0	$0	$0
09-4-176	12-07 BBSR/BIOS Bermuda Institute for Ocean Sciences – NY	$0	$0	$0
09-4-177	6-08 Illinois State Museum Society	$0	$0	$0
09-4-178	6-08 School District of Riverview Gardens – MO	$0	$0	$0
09-4-179	6-08 Allegheny Intermediate Unit - PA	$0	$0	$0
09-4-180	6-08 William Marsh Rice University – TX	$0	$0	$0
09-4-181	6-07 Bigelow Laboratory for Ocean Science - ME	$0	$0	$0
09-4-182	6-08 Council for Adult and Experiental Learning – IL	$0	$0	$0
09-4-183	6-08 CSU Fullerton Auxiliary Services Corp. – CA	$0	$0	$0
09-4-184	6-08 Maine Mathematics and Science Alliance	$0	$0	$0
09-4-185	12-07 REJECTED OIDA Optoelectronics Industry Development Association, Inc. – DC	$0	$0	$0
09-4-186	3-08 Girls Incorporated – NY	$0	$0	$0
09-4-187	8-08 Twin Cities Public Television, Inc. – MN	$0	$0	$0
09-4-188	6-08 Southwest Center for Educational Excellence – MO	$0	$0	$0

09-4-189	9-08 UCAR University corporation for Atmospheric Research – CO	$0	$0	$0
09-4-190	6-08 New York Hall of Science – NY	$0	$0	$0
09-4-191	6-08 QEMN Quality Education for Minorities Network – DC	$0	$0	$0
09-4-192	3-08 Berkeley Geochronology Center - CA	$0	$0	$0
09-4-193	6-08 Michigan State University	$0	$0	$0
09-4-194	6-08 Science Museum of Minnesota	$0	$0	$0
09-4-195	6-08 CRA The Computing Research Association – DC	$0	$0	$0
09-4-196	6-08 Chicago Children's Museum – IL	$0	$0	$0
09-4-197	6-08 Los Angeles County Museum of Natural History Foundation – CA	$0	$0	$0
09-4-198	9-08 LSST, Inc. – AZ	$0	$0	$0
09-4-199	6-08 MPC Corporation – PA	$0	$0	$0
09-4-200	6-08 Museum of Science – MA	$0	$0	$0
09-4-201	6-08 Institute for Advanced Study – NJ	$0	$0	$0
09-4-202	6-08 Adler Planetarium – IL	$0	$0	$0
09-4-203	9-08 The Concord Consortium, Inc. – MA	$0	$0	$0
09-4-204	6-08 Stark County Educational Service Center – OH	$0	$0	$0
09-4-205	6-08 Brooklyn Children's Museum Corp. – NY	$34,979	$0	$0
09-4-206	6-08 The Children's Museum (Boston) – MA	$0	$0	$0
09-4-207	6-08 Children's Museum, Inc. (Houston) – TX	$0	$0	$0
09-4-208	6-08 Carnegie Institution of Washington – DC	$0	$0	$0
09-4-209	6-08 Educational Broadcasting Company – NY	$0	$0	$0
09-4-212	6-08 IRIS Incorporated Research Institutions for Seismology and IRIS Ocean Cable – DC	$0	$0	$0
09-4-213	9-08 Museum of Science and Industry, Inc. – FL	$0	$0	$0
09-4-214	6-08 New York Botanical Garden	$0	$0	$0
09-4-215	6-08 WNYC Radio – NY	$0	$0	$0
09-4-216	12-07 REVISED CRDF U.S. Civilian Research and Development Foundation – VA	$0	$0	$0
09-4-217	6-08 American Museum of Natural History – NY	$0	$0	$0
09-4-228	9-08 California Institute of Technology - CA	$0	$0	$0
	Total:	**$34,979**	**$0**	**$0**

Other Federal Audits

Report Number	Subject	Questioned Costs	Unsupported Costs	Cost Sharing At-Risk
09-5-105	6-08 State of Florida	$1,894	$0	$0
09-5-127	6-08 South Orange County Community College District - CA	$122,694	$0	$0
09-5-159	6-08 University of Richmond and Its Affiliates - VA	$35,400	$35,400	$0
09-5-164	6-08 Ohio State University - OH	$100,560	$0	$0
09-5-175	5-08 LaSalle University - PA	$97,085	$97,085	$0
09-5-176	9-07 Fort Berthold Community College - ND	$75	$75	$0
09-5-183	6-08 Wildlife Trust, Inc., Wildlife Preservation Trust International - NY	$194,709	$12,538	$0
	Total:	**$552,417**	**$145,098**	**$0**

Audit Reports With Outstanding Management Decisions

This section identifies audit reports involving questioned costs, funds put to better use, and cost sharing at risk 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 ten reports remaining that met this condition. The status of recommendations that involve internal NSF management is described on page 38.

Report Number	Subject	Questioned Costs	Unsupported Costs	Better Use of Funds	Cost Sharing at Risk
05-1-005	RPSC Costs Claimed FY2000 to 2002	$33,425,115	$0	$0	$0
06-1-023	RPSC 2003/2204 Raytheon Polar Services Company	$22,112,521	$0	$0	$0
06-2-011	University Indirects	$0	$0	$1,900,000	$0
07-1-003	Triumph Tech, Inc.	$80,740	$1,192	$0	$0
07-1-015	Supplemental schedule to #06-1-023 RPSC	$560,376	$0	$0	$0
07-1-019	Abt Associates	$22,716	$0	$0	$0
09-1-007	CRDF U.S. Civilian Research & Development Foundation	$198,926	$0	$1,153,497	$0
09-4-088	12-07 American Association of Community Colleges DC	$12,734	$0	$0	$0
09-5-048	8-07 College of the Mainland TX	$110,629	$0	$0	$0
09-5-052	6-07 Howard University DC	$1,125,491	$662,940	$0	$0
	Total:	**$57,649,248**	**$664,132**	**$3,053,497**	**$0**

INVESTIGATIONS DATA
(April 1, 2009 – September 30, 2009)

Civil/Criminal Investigative Activities

Referrals to Prosecutors	4	
Criminal Convictions/Pleas	0	
Civil Settlements	1	
Indictments/Information	1	
Investigative Recoveries	$	663,194.45

Administrative Investigative Activities

Referrals to NSF Management for Action	13
Research Misconduct Findings	5
Debarments	4
Administrative Actions	65
Certif cations and Assurances Received	10

Investigative Case Statistics

P	reliminary	Civil/Criminal	Administrative
Active at Beginning of Period	53	76	72
Opened	55	41	52
Closed	163	30	52
Active at End of Period	45	87	72

Freedom of Information Act and Privacy Act Requests

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

Requests Received	4	5
Requests Processed	43	
Appeals Received		0

Response time ranged between 1 days and 20 days, with the median around 15 days and the average around 13 days.

Appendix

October 16, 2009

MEMORANDUM

To: Dr. Steven C. Beering
Chair, National Science Board

Dr. Arden Bement
Director, National Science Foundation

From: Allison Lerner
Inspector General, National Science Foundation

Subject: Management Challenges for NSF in FY 2010

In accordance with the Reports Consolidation Act of 2000, I am submitting our annual statement summarizing what the Office of Inspector General (OIG) considers to be the most serious management and performance challenges facing the National Science Foundation (NSF). We have compiled this list based on our audit and investigative work, general knowledge of the agency's operations, and the evaluative reports of others, including the Government Accountability Office and NSF's various advisory committees, contractors, and staff.

This year we have taken a fresh look at the challenges that NSF faces and have focused on six issue areas that reflect fundamental program risk, and are likely to require management's attention for years to come. They include:

- Ensuring Proper Stewardship of Recovery Act Funds
- Improving Grant Administration
- Strengthening Contract Administration
- Becoming a Model Agency for Human Capital Management
- Encouraging Ethical Conduct of Research
- Effectively Managing Large Facilities and Instruments

If you have any questions or need additional information, please call me at 703-292-7100.

CHALLENGE: Ensuring Proper Stewardship of ARRA Funds

Overview: The American Recovery and Reinvestment Act (ARRA), enacted in February 2009 is intended to create and save jobs through investments for long-term economic growth. ARRA provided an additional $3 billion for the National Science Foundation (NSF) in its three core appropriations accounts: Research and Related Activities, Education and Human Resources, and Major Research Equipment and Facilities Construction (MREFC). The Act also instituted reporting requirements intended to ensure transparency and accountability. The OIG received an additional $2 million to conduct oversight of the use of these funds.

Challenge for the Agency: It will be a challenge for NSF to spend its ARRA funds expeditiously while ensuring accountability and that the twin goals of reinvestment and recovery are met. We have identified a number of risk areas that represent challenges to NSF in spending ARRA funds in accordance with the law's objectives while meeting increased reporting requirements and greater transparency. Following are examples of some of these challenges:

- Determining in advance that awards are appropriate for stimulus funding
- Making and monitoring ARRA awards, especially ones made to high-risk institutions
- Meeting the law's requirements for greater transparency by providing all required information on the Recovery.gov website
- Promoting timely, complete, and accurate reporting by awardees

Another major challenge for NSF is the area of job creation and retention. While it is clear how NSF will meet the Act's goal of reinvestment, it is less clear how the agency will promote the goal of economic recovery. The agency has not fully identified how NSF will address this key goal, and in particular the number of jobs created and/or retained in its ARRA-related metrics. While it is difficult to measure the economic benefits produced by basic research, stakeholders expect NSF to be able to provide information on the number of jobs created. Last spring, OIG presented NSF with an assessment of stakeholder expectations for meeting its ARRA goals.

Further, the agency's allocation of $200 million of ARRA funds in support of the Academic Research Infrastructure Program, a program NSF has not been involved with for some time, poses a challenge. We believe that this program presents the same types of risk to NSF as a newly established program. In addition, $400 million of the ARRA funds are for MREFC projects. We have consistently identified these large, complex infrastructure projects as more challenging for NSF.

OIG's Assessment of the Agency's Progress: NSF has taken important steps to address the challenges posed by the increased demands of ARRA. For example, NSF quickly developed programs to make awards, established methodology and put out implementing policies and procedures that include new award terms and conditions specific to ARRA awards. Generally, NSF is dealing well with ARRA's funding and reporting challenges and has stated that it will focus attention on risky programs.

At the agency's invitation, the OIG is participating in a number of teams created to grapple with issues related to ARRA implementation through which we are able to learn about the requirements associated with ARRA funds, and hear first-hand about how NSF is administering the funds. Our participation in these activities enables us to raise issues for NSF's consideration at an early stage in the process. In those meetings and in periodic reports to the agency, we have provided NSF with our assessment of key challenges such as potentially risky programs and awardees, and the agency has been responsive to the concerns we have raised.

CHALLENGE: Improving Grant Administration

Overview: Close monitoring and management attention from the pre-award stage through grant closeout is essential for effective grant management. The American Recovery and Reinvestment Act increases the need for effective grant management, as it will require NSF to manage an unprecedented influx of funds and resulting awards while meeting economic stimulus objectives and responding to increased reporting requirements .

An effective pre-award framework should include an assessment of financial risk to help ensure that potential awardees possess the financial capability to successfully perform under the award. Large dollar and complex awards may be more difficult to administer and may require more oversight. Pre-award financial reviews are also particularly important for new awardee institutions that may lack experience in handling government funds.

An effective post-award framework should integrate oversight of both financial and programmatic issues to ensure that awardees comply with terms, conditions, and regulations; achieve expected progress toward accomplishing project goals; and file accurate financial reports as required.

Awardees that pass through federal funds to subrecipients are required to monitor them by reviewing financial and performance reports, conducting site visits, and ensuring that subrecipients have adequate financial systems to properly manage the funds. Adequate controls over subrecipient monitoring are an important safeguard to ensure funds are spent properly.

NSF also needs to ensure that it takes action on known problems identified by OIG and Single Audits. NSF has a responsibility to follow up to correct internal control weaknesses to ensure that corrective actions are taken. Our recent review found that NSF lacks policies to do this.

Challenge for the Agency: Since 2002, we have recommended that NSF strengthen its post-award administration policies and practices. Over the past several years, NSF has improved its monitoring of financial performance, but refinements are needed to its processes for: documenting site visit reviews, ensuring cost sharing requirements are met, and approving payments for grantees known for having prior problems.

A continuing challenge for the agency is to improve monitoring of program performance. This is particularly important in light of the additional awards made with ARRA funding. To integrate the monitoring of both program and administrative performance, NSF needs to improve communication between staff engaged in program and financial oversight.

Our audit work continues to document deficiencies in subrecipient oversight. Specifically, in four audits completed in March 2009 of non–profit organizations with more than $14 million of subawards, we found a consistent pattern of inadequate subrecipient oversight. One of the four audits that focused on costs claimed by a nonprofit organization that was established to provide cooperative research and development opportunities to scientists and engineers in the independent states of the former Soviet Union found significant internal control weaknesses in the process for overseeing hundreds of foreign subrecipients. As a result, there was an increased risk of fraud and of unallowable costs being charged to the NSF awards. Without appropriate oversight of subrecipient spending, NSF risks paying substantial subaward costs absent adequate assurance that these payments are permissible.

OIG's Assessment of the Agency's Progress: NSF has reported that it has taken a number of steps during the past year to improve grants administration. For example, the agency states that it has assessed the business performance of 30 percent of awardees administering 94 percent of NSF funds through advanced monitoring, including 30 site visits and 159 desk reviews. In addition, NSF has updated its *Proposal and Award Policies and Procedures Guide* and its *Proposal and Award Manual*. The agency states that it is planning to modify: grant conditions to require principal investigators to submit a new type of final report on project outcomes; and the research.gov website to include the capability of principal investigators to report at the end of the project on project outcomes.

CHALLENGE: Strengthening Contract Administration

Overview: NSF's financial statement auditors recommended a number of improvements to NSF's contract monitoring process in the management letter for the FY 2008 financial statement audit. The auditors have warned that if the problems persist, management cannot ensure the reasonableness and accuracy of costs incurred on high risk contracts, which amounted to $205 million for FY 2008.

Effective contract administration is particularly important since NSF is in the midst of choosing a contractor to provide logistical support for the U.S. Antarctic Program over the next 13.5 years. The current contract, which is NSF's largest valued at $1.2 billion over 10 years, was scheduled to expire in March of 2010 but has been extended for one year.

Challenge for the Agency: The transition to a new USAP contract will severely test NSF's contract administration practices. The immediate challenge is to administer an effective and successful procurement process that results in the selection of a contactor that can meet the USAP's diverse needs while

providing value to the government. The process should assure that: all offerors receive the same information and opportunities, their proposals are carefully analyzed and compared, and critical information is verified. The closeout of the existing USAP contract will also pose a challenge, as NSF must resolve issues involving the contactor's accounting practices and subrecipient oversight that have lingered since 2000-2004, as well as obtain audits of incurred costs for later contract years. Auditors have identified specific areas needing improvement including the closeout of contracts, and reviews of incurred costs and contract expenditures.

The long-term challenge for NSF is to continue to strengthen its contract monitoring efforts once the new USAP contract is executed. In addition, in July OMB issued new guidance to strengthen and improve acquisition practices that calls on NSF and other federal agencies to achieve a number of ambitious goals. The challenges represented by the USAP contract transition, the need to correct NSF's existing contact administration deficiencies, and meeting the heightened expectations of the administration, are formidable and will require management's attention for years to come.

OIG's Assessment of Agency's Progress: During the past year, NSF developed and issued the Antarctic Support Contract solicitation and began evaluating proposals it received. OIG has offered advice to the agency on key areas of the cost proposals that should be verified through audits, including indirect and overhead rates and the adequacy of offerors' business systems and cost accounting practices.

The agency has advised us that due to a delay in evaluating proposals it plans to extend the current contract for one year. But NSF needs to obtain an audit of the contractor's disclosure statement, as well as the cost proposal for the extension, to complete the negotiations. The agency will also need audits of more recent contract costs incurred since 2004 before it can close out the contract. Meanwhile, a hiring freeze imposed by the agency earlier this year has prevented the Contracting Office from replacing departing personnel. Reductions in the number of acquisition staff during this critical period are a cause of concern and may impede NSF's progress in surmounting these challenges.

CHALLENGE: Becoming a Model Agency for Human Capital Management

Overview: Workforce planning and other issues such as the use of visiting scientists or "rotators", the development of management succession plans, and delays in the process of recruiting and hiring, have long been identified by OIG as management challenges. In FY 2008, NSF increased the number of program officers by 15 percent to 520 to help alleviate workload imbalances.[29] But workload pressures increased significantly last February when the agency received $3 billion in ARRA funds, the bulk of which had to be expended before fiscal year-end. The disbursement of the ARRA funds for new grants during the

[29] According to the FY 2008 Merit Review Process Report, rotators comprise 59% of the total number of program officers.

last half of FY 2009 has increased workload by 40 to 50 percent for those staff engaged in processing new awards and will result in a commensurate increase in post-award workload.

In addition to these new and longstanding issues, the agency's response to a number of workplace misconduct incidents in 2008 raised questions from Congress and others about its personnel policies and practices, as well as the effectiveness of its Equal Employment Opportunity Office. After these inquiries, the NSF Director told the National Science Board last August that he was determined to make the agency a model of workforce management within the federal government.

Challenge for the Agency: To become a model agency, NSF must address several deficiencies in its workforce planning process. Primarily, it must develop an effective process for estimating future workload and for determining the appropriate number and skill set of the workforce required to administer it. In the past, both program officers and administrative staff have struggled to keep pace with their grant-making responsibilities and have not had adequate time to focus on post-award monitoring activities. The additional awards funded by the Recovery Act in 2009 are likely to exacerbate the situation as they mature over the next three years and require more oversight by NSF staff.

NSF must also define an appropriate role for its temporary professional staff or "rotators" that will fully utilize their expertise in science, education, and engineering while compensating for potential weaknesses in the areas of supervision, and the lack of institutional knowledge and long-term organizational perspective. The agency should determine what types of positions should be reserved for rotators as opposed to federal employees, and if rotators are appointed as managers it must ensure that they have the skills to be effective in that role.

Finally, NSF must continue to make progress in the areas of succession planning and improving the support it offers to managers engaged in recruiting and hiring new employees. A recent analysis of NSF's workforce indicates that 39 percent will be eligible to retire in 2011. Between the increasing number of agency managers eligible for retirement, and the rotational nature of a large segment of its program officer workforce (59%), ensuring that the appropriate planning and tools for the replenishment of NSFs program officers and managers is critical to the agency's success.

OIG's Assessment of Agency's Progress: The agency has taken a number of steps to improve workforce management, including hiring a permanent SES-level director of its EEO office. NSF has also formed teams of employees to identify areas for improving employee satisfaction and other areas affecting human capital. The announcement of the agency's goal to become a model of human capital management is a positive development, indicating an increased commitment on the part of NSF toward improving its human capital management.

The agency continues to make progress towards improving workforce planning. It states that it has taken a number of steps over the past year to address workforce planning issues, including evaluating and updating the workforce planning

systems, and improving its customer ratings for agency recruiting and hiring services. NSF reports that further efforts in the areas of staffing, management succession and the use of rotators are pending an upcoming comprehensive analysis of these issues early next year by OPM. Finally, in its FY 2010 budget, NSF has requested funds to contract for development of systems requirements for a workload analysis tool.[30]

CHALLENGE: Encouraging the Ethical Conduct of Research

Overview: The opportunities and incentives for scientists to commit research misconduct or engage in questionable research practices have never been greater, due to the increasing amount of information stored on the internet, the development of more powerful search tools, the ubiquity of digital research data and the ease with which such data can be manipulated, and the availability of new stimulus-related research funds. In a recent survey of 2,500 scientists by the Pew Research Center, 11% of those polled indicated that the possibility of making a lot of money leads many in their specialty to violate ethical principles, while 26% reported that it leads their colleagues to cut corners on quality.[31]

Research collaborations between scientists and students from different nations continue to proliferate. Since there are often differences between the various science communities concerning their views on research ethics, and the reporting and compliance regime to which they are subject, it can often be unclear to individual researchers (and sometimes even their oversight officials) which set of rules applies. International organizations such as the OECD's Global Science Forum (GSF) recognize the problem and have taken steps to foster a discussion about these issues and attempt to develop one framework that will apply in the area of research misconduct.

Challenge for the Agency: NSF's challenge is to strengthen understanding and adherence to recognized standards of ethical research conduct by scientists in the U.S. and those who participate in international collaborations. One step to addressing the first part of the challenge was mandated by the America COMPETES Act (ACA), which required NSF to ensure that each institution that applies for NSF funds "describe in its grant proposal a plan to provide appropriate training and oversight in the responsible and ethical conduct of research to undergraduate students, graduate students, and postdoctoral researchers participating in the proposed research project."[32]

The second part of the challenge pertains to NSF's responsibility to help lead international efforts to implement a single framework for the investigation and resolution of research misconduct allegations made against a participant in a multinational collaboration. In 2007 and in April 2009, the Global Science Forum issued reports that provide a basis for research integrity frameworks in projects involving international partners.[33]

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[30] OIG is currently conducting a review of the rotating director model, and is planning to perform an evaluation of workforce planning issues during the coming year.
[31] "Public Praises Science; Scientists Fault Public, Media", Pew Research Center for the People and the Press, July 9, 2009.
[32] 42 U.S.C. § 1862o-1.
[33] See *http://www.oecd.org/dataoecd/37/17/40188303.pdf* and *http://www.oecd.org/dataoecd/29/4/42713295.pdf*

OIG's Assessment of Agency's Progress: During the past year, NSF published in the Federal Register its implementation of the ACA requirement, incorporated the requirement into its proposal certifications and updated its Award & Administration Guide and Grant Proposal Guide. It has made two awards to support beta websites that provide resources on ethics education in science and engineering awards. With regard to international collaborations, NSF states that it will complete a white paper related to the GSF report by the end of the year that will specify the actions that it intends to take.

CHALLENGE: Effectively Managing Large Facilities and Instruments

Overview: In FY 2006, NSF spent more than $1 billion for the operations phase of 16 large facilities including the National Center for Atmospheric Research and the Network for Earthquake Engineering Simulation. The operations phase for large facilities includes the day-to-day work required to support and conduct research and education activities and to ensure that the facility is operating efficiently and in a cost-effective manner. NSF typically awards five-year cooperative agreements to universities or to non-profit organizations to operate and maintain these large facilities. Under the cooperative agreements, the awardee is responsible for day-to-day operations at the facilities, and NSF is responsible for monitoring and overseeing the awardee's programmatic and financial performance. Cooperative agreements should contain clear performance metrics to help ensure fiscal accountability, stewardship of NSF assets, and compliance with laws and regulations.

Challenge for the Agency: Management of its large facilities presents several challenges for NSF. Because it lacks an overarching policy to ensure that large facility agreements contain terms and conditions to address performance evaluation and measurement, it is a challenge for NSF to make difficult funding decisions between competing priorities. Only two of the six large facility agreements reviewed by the OIG in 2008 included terms and conditions addressing the primary components of a robust program evaluation and measurement system. Given NSF's $1 billion annual funding for large facilities, all large facility agreements should contain performance components. Absent these components NSF cannot be assured that the facilities it funds are operating effectively and efficiently and achieving intended goals.

OIG's Assessment of the Agency's Progress: NSF agreed with our recommendations to: strengthen its cooperative agreements by adding authority and resources to NSF's Large Facilities Office, and training NSF staff on the use of performance evaluation and measurement in connection with all large facilities. In its response to last year's management challenges letter, NSF reported that it has issued a requirement for all operational facilities to have performance measures established in the cooperative agreements and reported annually. The agency also reported that it conducted its second Large Facilities Workshop on Best Practices for awardees and NSF staff. Additionally, NSF stated that it revised supplementary materials to the Large Facilities Manual and conducted training on the Manual for NSF program staff. Further, NSF has increased the number of personnel assigned to the Large Facilities Office.

Acronyms

AD	NSF Assistant Director
AIG	Associate Inspector General
ARRA	American Recovery and Reinvestment
CAREER	Faculty Early Career Development Program
CAS	Cost Accounting Standards
CBA	Collective Bargaining Agreement
CIGIE	Council of Inspectors General on Integrity and Efficiency
CISE	Computer and Information Science and Engineering Directorate
COI	Conflict of Interest
COV	Committee of Visitors
DACS	Division of Acquisition and Cost Support
DCAA	Defense Contract Audit Agency
DD	Deputy Director
DGA	Division of Grants and Agreements
DIAS	Division of Institution and Award Support
DoD	Department of Defense
DoE	Department of Energy
DoJ	Department of Justice
ECIE	Executive Council of Integrity and Efficiency
EPSCoR	Experimental Program to Stimulate Competitive Research
FFRDC	Federally Funded Research and Development Centers
FISMA	Federal Information Security Management Act
GAO	Government Accountability Office
GAS	Government Auditing Standards
GPRA	Government Performance and Results Act
HHS	Department of Health and Human Services
IG	Inspector General
MIRWG	Misconduct in Research Working Group
MREFC	Major Research Equipment and Facilities Construction
NIH	National Institute of Health
NSB	National Science Board
NSF	National Science Foundation
OEOP	Office of Equal Opportunity Programs
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPP	Office of Polar Programs
OPM	Office of Personnel Management
PCIE	President's Council on Integrity and Efficiency
PI	Principal Investigator
PFCRA	Program Fraud Civil Remedies Act
SBIR	Small Business Innovation Research
STC	Science and Technology Centers
USAP	United States Antarctic Program

Reporting Requirements

Under the Inspector General Act, we report to the Congress every six months on the following activities:

Reports issued, significant problems identified, the value of questioned costs and recommendations that funds be put to better use, and NSF's decisions in response (or, if none, an explanation of why and a desired timetable for such decisions). (See pp. 5, 7, 35)

Matters referred to prosecutors, and the resulting prosecutions and convictions. (See pp. 21, 46)

Revisions to significant management decisions on previously reported recommendations, and significant recommendations for which NSF has not completed its response. (See pp. 18, 45)

OIG disagreement with any significant decision by NSF management. (None)

Any matter in which the agency unreasonably refused to provide us with information or assistance. (None)

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