

# Semiannual Report To Congress

March 2007



National  
Science  
Foundation



Office of  
Inspector  
General



## ***About***

### ***The National Science Foundation...***

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

NSF invests approximately \$5 billion per year in a portfolio of approximately 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 receive 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...***

Front: A Coast Guard Icebreaker approaches the Antarctic coastline.

Back: The northern edge of a giant iceberg in the Ross Sea, Antarctica.

Photo by Josh Landis, NSF

# Table of Contents

<b>OIG Management Activities .....</b>	<b>5</b>
Legal Review .....	5
Outreach .....	6
<b>Audits &amp; Reviews .....</b>	<b>11</b>
Significant Reports.....	11
Audit Resolution.....	23
Work in Progress .....	25
A-133 Audit Reports.....	26
<b>Investigations .....</b>	<b>29</b>
Civil and Criminal Investigations.....	29
Administrative Investigations .....	33
<b>OIG Performance Report .....</b>	<b>39</b>
<b>Statistical Data.....</b>	<b>53</b>
<b>Appendices.....</b>	<b>63</b>



## From the Inspector General

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This report highlights the activities of the National Science Foundation (NSF) Office of Inspector General (OIG) for the six months ending March 31, 2007. Our office issued 18 audit reports and reviews that identified \$3,617,631 in questioned costs. We also closed 18 civil/criminal cases and 36 administrative cases, while recovering \$783,989 in government funds. More about OIG's accomplishments can be found in our annual Performance Report on p. 39.

Longstanding issues associated with audit resolution continued to be problems during this reporting period. On page 11 we report that NSF received an unqualified opinion on its FY 2006 financial statement audit but was again cited for two reportable conditions related to agency oversight of its awards and contracts. On pages 14-16 we summarize the most recent audits of NSF's polar support contractor. Previous audits of this contractor resulted in questioned costs of approximately \$55 million, which have not yet been resolved. We are confident that the agency understands the importance of these critical issues, and we continue to work closely with management to expedite their resolution.

Our office has long expressed concerns about the way awardees administer cost sharing, in which the institutions commit to providing resources to supplement NSF awards. While federal guidelines require that cost-shared expenses be accounted for in the same manner as federal expenditures, many awardees do not effectively document or substantiate the value of cost-shared expenditures, raising questions about whether required contributions are actually being made. Since the National Science Board voted in October 2004 to eliminate program-specific cost-sharing requirements, new commitments have declined. However the administrative problems associated with continuing awards that include cost sharing have not abated. As the Board examines the impacts and unintended consequences of the new cost sharing policy over the coming months, I hope these issues will be part of the discussion. We stand ready to assist the Board in addressing this matter.

Finally, in early May, I was honored to be appointed by the OMB Deputy Director as the Vice-Chair of the Executive Council on Integrity and Efficiency, a committee of 33 inspectors general appointed by the heads of their respective agencies. As NSF's IG, I have been an active member of the ECIE for over seven years and have found that many of the challenges our office faces are common to all OIGs and can be best addressed through discussion and coordination with our colleagues. I look forward to serving the federal inspector general community in this new role.

Christine C. Boesz, Dr.P.H.  
Inspector General  
May 11, 2007

# OIG Management Activities

## Legal Review

The Inspector General Act of 1978, as amended, mandates that our office monitor and review legislative and regulatory proposals for their impact on the Office of Inspector General (OIG) and the National Science Foundation's (NSF) programs and operations. We perform these tasks for the purpose of providing leadership in activities that are designed to promote economy, effectiveness, efficiency, and the prevention of fraud, waste, abuse, and mismanagement. We also keep Congress and NSF management informed of problems and monitor legal issues that have a broad effect on the Inspector General community. The following legislation merits discussion in this section.

### Program Fraud Civil Remedies Act of 1986 (PFCRA)

We support a legislative initiative to amend PFCRA to include NSF and the 26 other agencies that are currently excluded from participation under the Act's enforcement provisions. PFCRA enables agencies to fully implement their statutory mission to prevent fraud, waste and abuse by availing themselves of the enforcement capabilities contained within the Act.

PFCRA sets forth administrative procedures that address allegations of program fraud when the claims are less than \$150,000. Currently, the U.S. Postal Service and the executive departments identified in the Inspector General Act of 1978 are the only agencies permitted to use PFCRA. NSF and the other agencies with Inspectors General appointed by agency heads (pursuant to a 1988 amendment to the IG Act) are not included.

We believe that using the enforcement provisions of PFCRA will enhance NSF and other agency recoveries in instances of fraud that fall below PFCRA's jurisdictional threshold of \$150,000. In a March 2006 letter to Congress, the National Science Board formally requested "that Congress amend the PFCRA to include NSF," and provide the agency with its investigative resolution authorities.

### HIGHLIGHTS

*Legal Review* 5

*Outreach* 6

## Outreach

During this semiannual period NSF OIG continued to engage in outreach to NSF, other federal agencies and their OIGs, and the national and international research communities. Our office has long been a proponent for the need to establish compliance programs at research institutions that rely on government funds for support. When invited to speak to the research community at conferences, workshops, and meetings, we use the opportunity to explain components of such programs to our colleagues and to demonstrate their value. Interest in this message has grown, especially at the university level. Responding to the public's expectations of increased institutional accountability that is reflected in the well-reported ramifications of incidents of university misconduct, university leaders and research administrators are actively developing programs to ensure compliance with legal and regulatory requirements as well as ethical expectations.

Our outreach activities are intended to inform and educate the research community about all aspects of our mission of prevention and detection of fraud, waste, and abuse. But when speaking to institutions, our message is more concise: compliance systems and programs can effectively address perceived risk, achieve technical compliance with federal requirements, enhance the research enterprise, and contribute to success.

## *Working with the Federal Community*

***Dr. Boesz appointed Vice-Chair of ECIE.*** In early May, Dr. Christine C. Boesz, the National Science Foundation Inspector General was appointed Vice Chair of the Executive Committee for Integrity and Efficiency (ECIE). The ECIE was established in 1992 by Executive Order 12805 to coordinate and enhance governmental efforts to promote integrity and efficiency and to detect and prevent fraud, waste, and abuse in Federal programs. The Deputy Director for Management of the Office of Management and Budget serves as Chair of the ECIE and its membership includes 33 Inspectors General that were appointed by the head of their respective agencies.

The mission of the ECIE is to 1) address integrity, economy, and effectiveness issues that transcend individual Government agencies, and 2) increase the professionalism and effectiveness of IG personnel throughout the Government. To accomplish their mission, ECIE members conduct interagency and inter-entity audit, inspection, and investigation projects to promote economy and efficiency in Federal programs and operations and address more effectively government-wide issues of fraud, waste, and abuse. The Council members also develop policies, standards, and approaches to aid in the establishment of a well-trained and highly skilled IG workforce. Dr. Boesz succeeds Barry Snyder, the Inspector General of the Federal Reserve Board.

The Inspector General also serves as Chair of the PCIE/ECIE Misconduct in Research Working Group, charged with coordinating efforts within the IG community to improve their capability of identifying, investigating, and preventing research misconduct. NSF OIG continued to participate in the PCIE Inspections and Evaluation Committee, the PCIE/ECIE Computer Forensics Working Group, and the PCIE GPRA Roundtable, as well as provide training at the Inspector General Academy and the Federal Law Enforcement Training Center.

***Investigators contribute expertise.*** Working within the federal Inspector General community offers numerous opportunities for formal and informal training and information sharing. During this semiannual period, NSF OIG investigators interacted with their counterparts in the IG community in a number of capacities. We continue to serve as the facilitators for the ECIE investigative peer review effort, and are planning a meeting in this next period, in addition we

serve on the PCIE/ECIE committee convened to review and revise the Qualitative Assessment Review Guidelines for conducting Investigative peer reviews. For example, we are active in the Grant Fraud Subcommittee of the Department

of Justice National Procurement Fraud Task Force, in which we contributed to: 1) the development of a basic core curriculum for grant fraud investigations; 2) the creation of effective outreach tools for the grant community; and 3) the enhancement of federal certification standards. We also participated in the Regional Procurement Fraud Working Group, hosted by the United States Attorney's Office for the Eastern District of Virginia.

Due to the nature of our work and our experience in grant fraud and research misconduct investigations, we are frequently invited to contribute to training events for others within the IG community or to participate in curriculum reviews or planning meetings. During this semiannual period, we conducted our Fifth Annual Grant Fraud Investigations Training Program. Over 140 investigators, representing 30 federal, state, and local agencies, participated in this event. The response to this training has been overwhelmingly positive and we are now identifying a larger facility in which to hold next year's training.



The Office of Audits hosted a workshop for visiting officials from the NSF of China. Jannifer Jenkins, Arnie Garza (left) and Dr. Boesz (center) pose with workshop participants.



**Auditors serve on financial committees.** OIG auditors continued to actively participate in the Federal Audit Executive Council (FAEC), which is sponsored by the IG community to discuss and coordinate audit policy and operations government-wide. Auditors met monthly with the Financial Statement Audit Network, a working group of one of FAEC's standing committees, volunteered to help develop guidance to IG offices on auditing agency controls over financial reporting, and worked with other OIGs to survey the community about human resource and training needs. In addition, auditors participated in updating the GAO/PCIE Financial Audit Manual, which helps ensure that financial statement audits of federal agencies are consistent, of high quality, and efficiently performed.

## Working with the Research Community

**OIG staff participate in conferences.** The wide range of workshops, conferences, and other events sponsored by institutions and associations of research professionals offered valuable opportunities for OIG staff members to communicate our message. We were invited to attend a broad array of such events and presented to the international, state, and regional chapters of the Society of Research Administrators International (SRAI), to NSF's Small Business Innovation Research grant recipients, and to NSF's Regional Grant Recipients Seminars.

**International activities.** We participated in international forums convened to discuss the issues of how to most effectively address research misconduct and what role the various stakeholders should play in the process. Participants in each of these international events were anxious to share information and discuss how best to foster effective research integrity programs. OIG staff participated in events with colleagues from the Scientific and Technological Research Council of Turkey; the Turkish Academy of Sciences; the Standing Committee for Social Sciences of the European Science Foundation; the Swedish Research Council; and Uppsala University of Sweden.

Dr. Fischer and Dr. Boesz pose with fellow representatives to the Global Science Forum meetings in Tokyo.



The Inspector General participated as the U.S. Representative in the deliberations on research misconduct and research integrity of the Global Science Forum (GSF) held in Tokyo on February 22-23. The GSF is part of the Organization for Economic Cooperation and Development comprising 30 full member nations. The meetings were designated a Workshop on Best Practices for Ensuring Scientific Integrity and Preventing Misconduct, and Dr. Boesz presented on how research misconduct investigations are handled within the U.S. The meetings resulted in a



consensus statement to be voted on for adoption at the next GSF meeting. While in Japan, the IG also met separately with the Director General of the Science and Technology Policy Bureau of Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT) and other accountability officials who wanted to learn more about the U.S. approach.

Meetings with our counterparts from other countries, provide opportunities to address how best to advance our common goal of ensuring integrity in the operation of the research enterprise, and assist individuals and organizations in their efforts to create systems and tools to identify, resolve, and prevent research misconduct or mismanagement. Consequently, these meetings promote an environment of ethical conduct in scientific research and grant administration.

***OIG staff present at universities.*** Members of the NSF OIG provided presentations at 10 universities to inform, and answer questions from university officers and others involved in applying for or administering NSF awards, performing supported research, or conducting university-level inquiries into allegations of research misconduct. Our audiences varied greatly in size and composition. We presented to students, university research administrators, and faculty on a variety of topics including ethical conduct in research, lessons learned from case studies, and techniques for successful research misconduct inquiries and investigations. These presentations are supplemented by fact sheets, brochures, posters, and other outreach material designed to make the most of each opportunity to engage the community and make an impression.

## ***Working with NSF***

Our work within NSF continues to advance the Inspector General's goal of maximizing the frequency and effectiveness of communications between OIG personnel and agency personnel. We took advantage of the opportunity to address each of the bi-monthly NSF Conflict-of-Interests briefings to communicate directly to the majority of NSF employees, and explain the OIG mission and responsibilities, our ongoing liaison program with NSF, and the channels through which employees can bring matters to our attention.

OIG staff participated as resource personnel in the NSF Program Managers' Seminars, which provide new NSF staff with detailed information about the Foundation and its activities. These sessions provided OIG staff an opportunity to develop personal and professional relationships with their NSF colleagues and to learn about new developments within NSF program management, while at the same time educating agency staff about the mission and responsibilities of NSF OIG.

Our liaison program built on our prior success in establishing and maintaining effective communication and professional relationships with the individual directorates and offices within NSF. Liaison staff held 30 meetings this semiannual period, in which they solicited suggestions from the directorates and offices regarding issues they considered appropriate for OIG review, and discussed other issues of mutual interest.

## Significant Reports

### ***Financial Statement Audit Reports and Review of Information Systems***

Establishing and maintaining sound financial management is a top priority for the federal government because agencies need accurate and timely information to make decisions about budget, policy, and operations. Information security is also critically important as unauthorized access to information systems can compromise agencies' abilities to fulfill their missions and protect sensitive information. To evaluate financial management and information security, Congress has enacted the Chief Financial Officer's (CFO) Act and the Federal Information Security Management Act (FISMA) respectively. The CFO Act, as amended, requires agencies to prepare annual financial statements and the agency OIG, or an independent public accounting firm selected by the OIG, to audit these statements. FISMA requires an independent evaluation of agencies' controls over information security.

### ***FY 2006 Independent Auditors Issue Unqualified Opinion; Continue to Cite Need for Improved Post-Award and Contract Oversight***

During this reporting period we completed the required CFO audit for fiscal year (FY) 2006. Under a contract with OIG, Clifton Gunderson LLP conducted an audit of NSF's financial statements for FY 2006. The auditors issued an unqualified opinion but repeated both reportable conditions from prior years' audits related to NSF's post-award oversight for high risk grants and contract monitoring.

In FY 2006, NSF expended approximately \$4.9 billion in grants and cooperative agreements and approximately \$550 million on active contracts and interagency agreements. As such, it is important that NSF oversee these grants and contracts to ensure that federal funds are properly spent on allowable costs benefiting NSF's research activities, and that contractors use federal funds consistent with the objectives

#### **HIGHLIGHTS**

<i>Significant Reports</i>	<i>11</i>
<i>Audit Resolution</i>	<i>23</i>
<i>Work in Progress</i>	<i>25</i>
<i>A-133 Audit Reports</i>	<i>26</i>



of the contracts. In FY 2006, NSF made progress in addressing prior post-award monitoring recommendations by initiating some new procedures, such as hiring a contractor to perform desk reviews of certain high risk awards. However, the auditors reported that additional improvements are still needed, as \$2.7 billion of \$3.2 billion (84%) of high risk awards did not receive a site visit or desk review during FY 2006. Specifically, Clifton Gunderson recommended that NSF: (1) complete the desk review program implemented for high risk awards and evaluate the benefit and effectiveness of such reviews; (2) refine the factors in the risk assessment model used to select high risk awards for desk review or site visits; (3) expand the review coverage to include testing of federal cash transactions for high risk awards that were excluded from other NSF reviews for that fiscal year; and (4) revise standard operating guidance for planning and scheduling reviews for large facilities.

Clifton Gunderson also reported that NSF did not have a comprehensive, risk-based system in place to oversee and monitor its contracts. The auditors recommended that NSF: (1) expand the Contracts Manual to include specific policies and procedures for identifying and managing high risk contracts; (2) continue to perform Quarterly Expenditure Report reviews of its largest contractors and follow up on the findings and recommendations in the OIG cost-incurred reports issued from FY 2000 forward; and (3) maintain an electronic copy of key source documentation used to support the property, plant, and equipment activity and balances in NSF's financial statements.

In January, NSF submitted its proposed action plans to address the recommendation related to these reportable conditions. The proposed corrective actions were reasonable and generally responsive to all but two of the contract monitoring recommendations. The OIG and Clifton Gunderson will continue working with NSF management to ensure that these issues are resolved timely.

### ***Management Letter Also Cites Need for Improved Post Award and Contract Monitoring Practices***

The FY 2006 Management Letter identified eight findings, some of which incorporated elements of prior years' findings related to NSF's operations and financial reporting controls.<sup>1</sup> The Management Letter reported continuing weaknesses in NSF's grants and contracts monitoring programs. For example, the auditors found missing or late grantee annual project reports, late final project reports, and incomplete documentation in NSF's monitoring files to evidence the extent and results of its oversight reviews. The auditors recommended that NSF revise its Site Visit Review Guide to provide specific guidance for reviews and for documenting the review steps, results, and clo-

<sup>1</sup> Auditors issue a management letter to separately communicate findings arising from the financial statement audit that are not reported in the audit report but are still important to ensuring a sound overall internal control structure and require management's attention.

sure of recommendations. Further, the auditors found that NSF did not fully document its contract monitoring activities and needs to provide training to all employees responsible for accepting services and/or goods.

The Management Letter repeated three findings, including two findings originally included in the FY 2004 Management Letter on post-retirement liabilities and environmental clean-up costs. The Letter recommended that NSF seek guidance from the Federal Accounting Standards Advisory Board (FASAB) on how to account for post retirement benefits at Federally Funded Research and Development Centers (FFRDCs) that it wholly supports. In one case, neither NSF nor the FFRDC reported this liability on its financial statements. FASAB's guidance is necessary to ensure that the entity responsible for this liability is correctly recognizing, recording, and reporting it. The Letter also reported that NSF needs to clarify its responsibilities for environmental clean-up costs in the Antarctic. Although the treaty that governs NSF's responsibilities in the Antarctic states that NSF has responsibility for remediation of environmental incidents, it does not appear to provide for concomitant liability. To ensure that NSF prepares accurate financial statements, the auditors recommended that NSF seek guidance from FASAB on how to account for clean-up costs for which NSF has an obligation and responsibility, but no apparent legal liability.

NSF management generally concurred with a number of the recommendations in the Management Letter. In some instances NSF is developing alternative approaches to resolve the findings. The FY 2007 financial statement audit will evaluate NSF's actions in response to the findings and recommendations to determine whether it has resolved these issues.

### ***FY 2006 FISMA Report Affirms NSF Security Program but Identifies Needed Improvements***

FISMA requires agencies to adopt a risk-based approach to improving computer security that includes annual security program reviews and an independent evaluation by the Inspector General. Under a contract with the OIG, Clifton Gunderson conducted this independent evaluation for FY 2006. Clifton Gunderson reported that NSF has an established information security program and has been proactive in reviewing its internal security controls and identifying areas that should be strengthened. NSF also corrected five of the eight findings reported in the prior year's Independent Evaluation Report. However, the auditors reported three new findings relating to a general support system, disaster recovery, and access controls. These weaknesses pose a considerable risk to NSF and should be addressed promptly. NSF management provided a corrective action plan for the recommendations and Clifton Gunderson will review implementation of these corrective actions as part of its FY 2007 independent evaluation.

## **Contract Audits**

### ***Polar Support Contractor Continues to Have Compliance Problems***

Beginning with our September 2004 Semiannual Report,<sup>2</sup> we have reported on a number of audits of NSF's largest contractor, Raytheon Polar Services Company (RPSC). These audits questioned about \$55.5 million of claimed costs and cited RPSC's parent, Raytheon Technical Services Company (Raytheon) for failing to comply with its federally disclosed accounting practices, subsequently removing RPSC from Raytheon's disclosure statement. These audits also identified a number of internal control deficiencies in RPSC's method for identifying indirect vs. direct costs, its New Zealand operations, and its billing, financial, project, and subcontract management systems. This semiannual period we reported that if RPSC is allowed to continue its practice of charging indirect costs as direct costs, contrary to its certified accounting practices in the NSF contract, NSF could incur an additional \$26.6 million of costs for the remaining contract period 2005 through 2010.

We also previously reported that RPSC needs to improve its subaward monitoring and assess the risks that its subcontractors can accurately record and bill its subcontract costs. In this period two audits of an RPSC subcontractor, Agencias Universales S. A. (AGUNSA), were completed. The auditors found significant internal control deficiencies, which enabled AGUNSA employees to embezzle \$157,000, including \$7,200 related to the RPSC contract. If not corrected, these deficiencies could adversely affect AGUNSA's ability to effectively administer its ongoing financial activities under the RPSC subcontract.

### ***RPSC's Proposed Disclosure Statement Revision Drives Estimated Costs Requiring Resolution to \$82.6 Million***

RPSC spends approximately \$110 million annually to provide science, operations and maintenance support to sustain year-round research in NSF's United States Antarctic Program (USAP). Raytheon is required to file a Cost Accounting Standards Board (CASB) disclosure statement with the Department of Defense (DoD) to inform the government how it will bill its direct and indirect costs so that its indirect costs (i.e., overhead management costs) are charged to its government contracts on a consistent and equitable basis. Of the \$55.5 million of previously questioned costs, about \$36.2 million, or 65 percent, were due to the contractor's failure to follow its written disclosure statement, resulting in RPSC exceeding its contractual indirect cost ceilings.

<sup>2</sup> September 2004 Semiannual Report, pp. 15-16.



During this semiannual period, DoD, which is responsible for overseeing Raytheon's compliance with its disclosure statement, made an initial finding of noncompliance with Raytheon's disclosed accounting practices for fiscal years 2003 and 2004. This followed a final determination of noncompliance that DoD made last year citing Raytheon with not adhering to its disclosed accounting practices for fiscal years 2000 to 2002.

In April 2006 Raytheon proposed to correct this noncompliance for the remaining five years of the contract by submitting a unique CASB disclosure statement for its Polar Services business unit retroactive to January 1 2005. Raytheon's proposed change in its disclosed accounting practices was to classify and bill indirect management costs for its Centennial, Colorado office as direct costs. Also, the Defense Contract Audit Agency's (DCAA) audit of the revised CASB disclosure statement identified nine deficiencies and concluded that the disclosure statement was not acceptable because it did not adequately describe RPSC's cost accounting practices used on the NSF contract. The auditors recommended that RPSC submit a revised disclosure statement that corrects each deficiency. RPSC just submitted its revised disclosure statement in February 2007.

Further, RPSC did not submit a cost impact analysis to explain the financial impact of its proposed change in disclosed accounting practices on the remaining five years of the NSF contract. This prompted the OIG to request a cost impact analysis from DCAA, which was completed during this reporting period. The DCAA auditors projected that, if accepted by NSF, the proposed changes in the revised disclosure statement would increase costs charged to NSF by an additional \$26.6 million over the five years 2005 to 2010. This amount would, in turn, raise RPSC's total questioned and estimated increased costs to \$82.6 million.<sup>3</sup>

We recommended that, for the 2000 through 2004 contract period, NSF coordinate with DoD to resolve the disclosed accounting practice deficiencies and the questioned \$36.2 million of indirect costs. We also recommended that NSF resolve the remaining \$19.8 million in questioned costs, including \$12.2 million of costs claimed in excess of contractual indirect cost ceilings and \$7.6 million of improperly claimed other direct costs and fringe benefits. For the 2005 through 2010 contract period, we recommended that NSF also work with DoD to assess the desirability of RPSC's proposed change in disclosed accounting practices in light of the \$26.6 million of increased contract costs.

To address these recommendations and those in the nine prior audit reports on this contract over the past two and one-half years, NSF has drafted a corrective action plan, which we are currently reviewing and discussing with the agency.

<sup>3</sup> The \$82.6 million includes not only the \$26.6 million but also \$560,376 of RPSC fringe benefit costs questioned in DCAA audits this semiannual period.

### ***Funds Embezzled at Polar Subcontractor***

AGUNSA, as an RPSC subcontractor, provides ship chandlery duties and technical support in Punta Arenas, Chile for the US Antarctic Program. From January 1, 2002 through June 30, 2003, two AGUNSA employees embezzled approximately \$157,000 of company funds, including approximately \$7,200 related to AGUNSA's subcontract with RPSC. Although AGUNSA reimbursed its vendors when the embezzlement was discovered, as much as \$616,000 of NSF funds that RPSC paid to AGUNSA may have been delayed during the course of the embezzlement scheme.

At NSF's request, we reviewed the circumstances of the embezzlement and the adequacy of AGUNSA's internal controls to properly accumulate, track, and monitor its costs and billings under the RPSC subcontract in compliance with federal and NSF requirements. The auditors found that AGUNSA lacked adequate management oversight and internal control over the accounting and vendor payment processes, which enabled two individuals in the Punta Arenas Office to divert funds intended to pay vendors. These same individuals also had access to the accounting records in which they falsely recorded payments to vendors that had not been made. The embezzlement was discovered when vendors complained about late payments of their invoices.

The auditors recommended that NSF direct RPSC to ensure that AGUNSA improves its overall internal control and management structure over its invoice and payment process. This includes ensuring that AGUNSA's employees clearly understand their responsibilities to oversee and monitor its vendors and to ensure that vendor invoices are properly prepared, authorized, and documented prior to submission of costs to RPSC for reimbursement.

In general, AGUNSA agreed with the findings and corrective actions in our report. The report has been submitted to NSF's Division of Acquisition and Cooperative Support for audit resolution.

### ***Audits of NSF Support Contractors***

#### ***Question \$634,543 in Costs***

In further support of NSF's request for audits to assist in its contract oversight responsibilities, the OIG contracted with DCAA to perform audits of contracts with Triumph Technologies, Inc., Compuware Corporation, Temple University, and Mathematica Policy Research, Inc., whose total claimed costs amounted to \$41 million. Three of the audits questioned \$634,543 of about \$34 million of claimed costs, and on the fourth audit, over four years we identified minor adjustments to the indirect cost pools and the G&A bases. To prevent future cost overruns we recommended that NSF improve its processes for reviewing contractor invoices and ensure that its contract files are complete and accurate. More information on each audit is presented (next page) :

**Triumph Technologies.** Auditors found that Triumph (NSF's Small Business Innovative Research/Small Technology Transfer Research contractor) failed to comply with the indirect rate ceilings in its NSF contract, claiming costs in excess of contractual indirect ceiling limitations for each of the three years audited, resulting in \$79,548 of questioned costs. Triumph also did not provide documentation to support \$1,192 of its claimed subaward costs. As a result, auditors questioned a total of \$80,740 out of the \$1.7 million of costs that Triumph claimed.

**Compuware Corporation.** Compuware, in two of its contracts to provide information technology support services for NSF over four years, incorrectly included some direct costs in the overhead pool and claimed unallowable costs that were incurred for gifts, contributions, parties and picnics. These errors resulted in \$320,418 of questioned costs out of \$28 million in costs claimed.

**Temple University.** An audit of \$4.8 million in claimed costs on a contract with Temple for technical evaluation support for NSF's Division of Research, Evaluation and Communication, identified \$233,385 in questioned costs: \$231,838 for award costs claimed in excess of the authorized contract ceiling, and \$1,547 for unallowable alcoholic beverages. NSF exercised a unilateral modification to increase the award by \$175,000 but failed to sign the award document or provide it to Temple. Accordingly, while an additional \$175,000 of costs may now be allowable, the increase in award funds is insufficient to cover Temple's total claimed costs.

**Mathematica Policy Research (MPR).** Out of \$6.5 million claimed on three contracts awarded to MPR for data and research services in support of NSF's Division of Science Resources Statistics over four years, the auditors found \$83,226 of unallowable and/or misclassified costs in its overhead and G&A expense pools and added \$39,795 to MPR'S G&A base because of misallocated costs.

Overall, we recommended that NSF establish an internal screening process to review contractors' invoices to ensure that ceiling amounts for indirect costs are not exceeded and that all contract modifications are appropriately signed and provided to the contractor. We also recommended that NSF resolve the questioned costs, indirect cost rates, and penalties based on the results of the audits, and require the contractors to strengthen their internal controls to prevent similar problems from recurring in the future. Each of these reports has been provided to NSF's Division of Acquisition and Cooperative Support to ensure that the contractors' corrective actions adequately address the report's recommendations.



## Grant Audits

### ***Voluntary Faculty Effort Pledged to Sponsored Projects Goes Unrecorded***

As previously reported in a prior Semiannual Report,<sup>4</sup> the OIG has undertaken an initiative to assess the adequacy of accounting and reporting processes for labor costs at a representative sample of NSF's top-funded institutions. During this reporting period, we audited the accounting records related to labor effort at the California Institute of Technology (Caltech) in Pasadena, California. We found that Caltech generally supported salary costs to NSF but needs to develop a system to provide accurate reporting of voluntary committed cost sharing by faculty members.

Our review of 32 sampled employees indicated that Caltech's labor effort reporting system provided support for most of the \$1.6 million of FY 2005 salaries charged directly to NSF grants. But three of the five faculty members who had explicitly pledged in their grant proposals that they would voluntarily contribute 1 to 20 percent of their labor time on five federal awards did not report any of this time in their labor effort reports. A January 2001 OMB clarification memorandum<sup>5</sup> required awardees to track and account for faculty research effort voluntarily committed as cost sharing in their labor effort reporting systems. The Memorandum defined voluntary committed labor effort as cost sharing of salary costs that Principal Investigators (PIs) specifically pledge willingly at the university's expense and is in addition to any mandatory cost sharing required by the agency under the award agreement.

Accurate reporting of voluntary committed labor effort is necessary to enable the federal government to assess whether the PIs at Caltech actually devoted the level of effort promised in their grant proposals. In our sample, the unreported faculty effort was valued at approximately \$100,000 or about 20 percent of the annual compensation received by the three PIs. In addition, the salary costs associated with unreported faculty effort do not get properly included in Caltech's organized research base, thereby resulting in greater Caltech indirect costs paid by the federal government. Since Caltech has 286 faculty members who may also have omitted reporting their voluntary labor, the monetary impact is potentially significant.

In addition, Caltech needs to improve the timeliness of its labor effort distribution and certification process. In FY 2005, Caltech circulated 63 labor reports for the 32 sampled employees an average of 12.5 days after the required 120-day timeframe. We also found that PIs certified 25 percent of the reports from 1 to 47 days after the 30-day required turnaround time. Without timely certification NSF has less assurance that the certifications are reliable

<sup>4</sup> September 2005 Semiannual Report, p. 20.

<sup>5</sup> OMB Memorandum M-01-06, Clarification of OMB A-21 Treatment of Voluntary Uncommitted Cost Sharing and Tuition Reimbursement (January 5, 2001).

because PIs must remember as far back as 11 months to confirm employee activity on sponsored projects.

The weaknesses in Caltech's labor effort reporting occurred because the university has not established clear guidance and procedures to ensure that PI effort voluntarily pledged as cost sharing in federal grant proposals is properly identified and tracked in the labor report reporting system. Therefore, we recommended that Caltech develop and implement procedures that will more accurately report voluntarily contributed faculty labor effort on sponsored projects, and ensure timely certification of labor effort reports. In general, Caltech agreed with the audit findings and recommendations but stated that it already had adequate management processes in place to address the issue of timely effort reports. We forwarded the report to NSF's Division of Institution and Award Support to work with Caltech's cognizant agency to ensure that the University takes adequate corrective action to address the report's findings and recommendations.

### ***Non-Profit Lacks Support for \$2.47 Million in Costs***

An audit of The American Institute of Mathematics (AIM), a non-profit organization engaged in expanding mathematical knowledge, found inadequate internal controls over NSF grant funds. For seven NSF grants with cumulative funding of \$6.1 million as of December 31, 2005, AIM did not provide adequate documentation to support \$1.57 million of employee salaries (\$1,184,367 of NSF direct costs and \$389,900 of claimed cost sharing), \$882,054 of NSF funds passed-through to subawardees and independent contractors, and \$23,531 of travel, participant support, and indirect costs. In addition, AIM charged almost all of its indirect costs and cost sharing to one NSF award, had inadequate financial oversight of its subrecipients and independent contractors, and lacked a financial accounting system that could ensure accurate, current, and complete disclosure of the financial results of its NSF awards. The grantee is unique in that NSF is its only federal sponsor and that most of the award personnel are not employees of AIM.

The internal control weaknesses and the significant amount of undocumented costs occurred because AIM was not familiar with federal grant requirements and lacked written policies and procedures to ensure compliance. We recommended that AIM establish written policies and procedures and provide staff training. AIM agreed with most of the recommendations and we have forwarded the audit report to NSF's Division of Institution and Award Support to resolve costs and ensure corrective action.

### ***Community College Failure to Follow Own Internal Control Procedures Results in \$185,213 of Questioned Costs***

In this semiannual period, we completed the last of a series of audits of NSF awards to community colleges. This audit of three awards amounting to \$2.7

million to Nashville State Technical Community College, (NSTCC), found that the college did not always adhere to its established policies and procedures to account for NSF funds.

NSTCC was not always able to provide adequate documentation for costs charged to its NSF awards. Routine accounting documents such as purchase orders, invoices, contracts, and sign-in sheets were not available to support \$37,193 of participant support, consultant costs, travel costs and other direct costs. NSTCC also overcharged one award \$148,020 for indirect costs because it claimed the budgeted amount of indirect costs instead of applying the NSF approved indirect cost rate to actual salaries and wages. The audit also found that for one ongoing award NSTCC could not provide adequate support for \$85,446 or 35% of the \$241,528 it had claimed to NSF as cost sharing. In total the auditors questioned \$185,213 in costs submitted.

In addition, NSTCC did not obtain required certifications and personnel activity reports to support \$556,016 of salaries, wages, and fringe benefits, or approximately 21 percent of \$2.7 million in total costs claimed. The auditors were ultimately able to satisfy themselves of the propriety of the labor costs that NSTCC charged to its NSF awards by performing additional audit procedures. However, NSTCC needs to significantly improve its controls over labor effort reporting to prevent such problems on future awards.

The auditors recommended that NSF direct NSTCC to implement procedures to verify that all employees working on NSF awards are: 1) completing the required personnel activity reports and obtaining proper review and certification of the reports; 2) trained on NSTCC procedures to review, approve, and maintain all documentation to support direct and cost sharing costs charged to future NSF awards; and 3) claiming indirect costs based on the terms of the NSF award agreements.

NSTCC generally agreed with the audit recommendations and indicated that it has initiated corrective action. However, NSTCC disagreed that it lacked appropriate documentation for certain costs charged to its NSF awards and that it did not have adequate documentation to support its cost share. To follow up on our findings and recommendations, we have forwarded the audit report to NSF's Division of Institution and Award Support.

### ***University Needs to Improve Internal Controls Over Sub-award Management***

An audit of two NSF awards to the University of Puerto Rico – Central Administration (UPR) with \$8.8 million of claimed NSF funds found significant deficiencies in the University's subaward-monitoring system. Similar findings were also reported in UPR's Fiscal Year 2003 A-133 Single Audit Report.



UPR did not adequately monitor subaward costs or subawardee cost sharing for one award that included seven subawards amounting to \$3.1 million or 58 percent of the total costs charged to the NSF award. The auditors had to perform additional audit steps at further expense to verify that all but \$8,530 of claimed subaward costs were allowable. UPR needs to strengthen its internal controls over subaward monitoring to ensure that future subaward costs claimed are allowable and allocable to NSF awards.

To address internal control weakness, we recommended that UPR develop and implement written policies and procedures to assess and document each subawardee's risk of claiming unallocable or unallowable costs and cost sharing contributions and perform periodic risk-based monitoring reviews of subawardee costs. UPR generally agreed with the recommendations and we have forwarded the report to NSF's Division of Institution and Award Support to resolve the findings.

### ***Material Weaknesses Found in School District's Internal Controls Over NSF Funds***

As part of our ongoing review of awardees under NSF's Urban Systemic Initiatives/(USI) Urban Systemic Program (USP),<sup>6</sup> we audited \$26.5 million in costs and \$6 million in cost sharing claimed by the Dallas Independent School District (DISD) on two awards. The audit identified seven weaknesses in the District's internal controls over financial reporting including three material weaknesses: DISD did not have adequate systems to retain and retrieve records, track and report the receipt and expenditure of cost sharing, and account for participant support costs.

Furthermore, DISD destroyed records for the first three years of one of the two awards audited in violation of NSF requirements that records should be maintained for three years following the submission of a final project report, and could not locate 22 out of 232 transactions tested for both awards. The auditors performed additional audit procedures at government expense and ultimately questioned only \$91,216 of the costs claimed.

DISD did not adequately identify track, and monitor \$9.9 million of participant support costs, out of the \$26.5 million of total costs claimed on both awards. The auditors again found it necessary to perform alternative tests, and questioned \$33,602 of participant support costs. They also found that, participant support tuition reimbursement checks were returned to the same person who initiated them, thus creating the opportunity for errors or irregularities to occur without being detected. The remaining questioned costs totaling \$57,614 were for unsupported consultant, materials, supplies, travel, and miscellaneous expenses.

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<sup>6</sup> March 2006 Semiannual Report, pp. 16-17.

DISD was also required to provide \$98.9 million of cost sharing on one award, but did not have policies and procedures in place to accumulate and monitor its actual cost sharing contribution and ensure that required levels were met, even though its accounting system was capable of properly accounting for cost share. The auditors did not question any of the \$50 million cost sharing shortfall because, after the completion of fieldwork, at DISD's request, NSF reduced the required amount of cost sharing to \$3 million. The auditors verified that DISD had adequate support for the revised amount of required cost sharing.

The auditors recommended that the NSF direct DISD to develop and implement a financial management system with policies to effectively administer and monitor NSF funds, and ensure that DISD (1) maintains documentation supporting all award costs; (2) implements accounting processes to separately identify, track, and report on participant support costs and cost sharing; and (3) segregates check disbursement duties. DISD generally agreed with the report recommendations, and we forwarded the report to NSF's Division of Institution and Award Support to resolve the questioned costs and ensure that corrective actions are responsive to the audit recommendations. We also suggested that NSF flag DISD in its award system until NSF is able to resolve the findings and recommendations and defer closure of the audit recommendations until an adequate corrective action plan has been implemented.

## ***Performance Audits***

### ***National Science Board's Compliance with Sunshine Act Improves***

During 2006, the National Science Board continued to demonstrate a clear intent to comply with the requirements of the Government in the Sunshine Act. The Board greatly improved its procedural compliance in 2006, having implemented a new process for tracking due dates for publicly announcing meetings. However, the Board could further improve its compliance with the Act by ensuring that it votes on and announces all changes to publicly announced agendas, and by instructing court reporters to fully record all closed meetings.

In addition, the Board generally closed meetings only when warranted, consistent with the Act's exemptions. However, in several closed meetings, the Board, and particularly the Executive Committee, continued to include agenda items that should have been included in open sessions. This occurred because the decision to include agenda items in open or closed sessions is made in advance of the actual meeting. There was insufficient evidence to determine whether the Board properly applied the Sunshine Act's prospective standard of being likely to reveal information covered by one of the Act's

exemptions when deciding upon closed meeting agenda items. Based on these findings, we again recommended that the Board develop, implement, and provide training on a process for documenting the reason for placing each agenda item in a closed rather than an open meeting. The Board generally agreed with our recommendations.

## **Audit Resolution**

### ***NSF Takes Steps to Improve Indirect Cost Procedures and Awardee Accountability Over Grant Funds***

NSF has agreed to adopt recommendations contained in two prior audit reports in which OIG advised the agency to revise its indirect cost recovery policy to conform to federal requirements and continue to improve its policies for reviewing and negotiating indirect cost rates. Since indirect costs comprise about 20 percent of NSF's award costs, it is important that NSF ensure that awardee institutions correctly apply the indirect cost rate and that it has accurate and reliable information when it negotiates indirect cost rates with its awardees. In two additional audit resolutions completed this period, NSF has taken steps to ensure that Howard University and New Mexico Highlands University have improved their internal controls, including their management of subawards and cost sharing, on NSF awards to ensure compliance with federal and NSF requirements.

### ***NSF Revises its Indirect Cost Recovery Procedures for Universities***

NSF is revising its Grant Policy Manual provisions for indirect cost recovery to conform with federal requirements. A prior audit disclosed that contrary to the federal requirements, NSF had allowed universities and colleges to recover indirect costs utilizing rates negotiated after initial awards were granted.<sup>7</sup> As a result, the audit found that 3 of the 23 universities reviewed had used newly negotiated indirect cost rates that resulted in \$1.9 million of NSF grant funding being inappropriately shifted from direct research to administrative and facility support over a nine-year period. NSF's revised policy will require universities and colleges to use the indirect cost rates in effect at the time awards are made throughout the life of the awards in order to preserve the level of NSF funding awarded for research. It has incorporated the change into the draft version of its new Award Administration Guide, which is currently being reviewed by various NSF offices and is expected to be issued in May 2007. The OIG and NSF are working together to reach agreement on whether the \$1.9 million is properly reported as funds that could be more efficiently used for accomplishing NSF's mission.

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<sup>7</sup> September 2006, Semiannual Report, pp. 16-17.

## ***Guidance for Reviewing Indirect Cost Rate Proposals Under Development***

A recent audit found that NSF could improve its processes for reviewing indirect cost proposals from awardees for which it negotiates indirect cost rates. In response, NSF agreed to revise its standard operating guidance for indirect cost proposal review. It stated that its new guidance will include policies and procedures for a risk-based program that requires the updated assessments of awardees' financial management systems, maintenance of historical files on awardees' prior rate negotiations, guidance for staff to facilitate the review of submitted proposals, and more effective tracking of the receipt of proposal and follow up for untimely proposals. NSF has incorporated this change in agency policy into the Proposal & Award Policies & Procedures Guide issued on April 12, 2007 effective June 1, 2007. OIG is reviewing the new guidance to ensure that it adequately addresses the findings and recommendations in the audit report.

## ***NSF to Validate University's Corrective Actions***

As a result of an OIG audit report, NSF has scheduled an onsite visit to Howard University in late April 2007, to verify that the proposed corrective actions are being implemented by the awardee organization. NSF has also required Howard to provide the results of the two independent verifications that it promised to validate timely and appropriate corrective actions were taken to implement the OIG audit report recommendations.

The OIG audit found that Howard had significant internal control weaknesses over cost sharing, funds passed-through to subawardees, faculty salaries, and student stipends. The auditors were not able to determine whether the University actually provided \$12.3 million of claimed cost sharing due to insufficient documentation and the commingling of funds. Also, Howard lacked comprehensive subaward agreements legally obligating its subrecipients to provide \$5.4 million of cost sharing and to restrict \$2.3 million of funding to participant support and/or trainee costs.

In response to the audit recommendations, the University has implemented corrective actions to improve its federal grants management. It issued a new manual establishing policies and procedures for managing and monitoring federal grants and has undertaken a major reorganization of the University's research enterprise. Howard appointed a new cabinet-level Vice-President for Research and Compliance and engaged a consultant to assist in establishing an appropriate structure for managing the research enterprise, including the establishment of effective and efficient internal controls.

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<sup>8</sup> September 2006, Semiannual Report, pp. 16-17.



## ***Inadequate Internal Controls Result in Repayment of \$131,554 of Grant Funds***

An audit of \$3 million awarded to New Mexico Highlands University (NMHU) completed in September 2006 found that NMHU had inadequate internal controls over cost sharing, subawardee monitoring, expenditure reporting, and conflicts of interest statements.<sup>8</sup> The auditors questioned \$165,472 of NMHU's claimed costs. In response to the audit, NMHU stated it will implement an accounting system grant module to track cost sharing and indicated its grant accounting office is now verifying cost sharing and in-kind contributions claimed on federal awards. Further, NMHU stated that it has taken steps to improve its subawardee monitoring. During audit resolution, NSF reviewed documentation submitted by the University in support of its proposed corrective actions and sustained \$131,554 of the questioned costs.

## **Work in Progress**

### ***Audit of NSF's Oversight of Center Programs***

We recently began an assessment of NSF's management and oversight practices related to its eight Center programs. Each center focuses on a different scientific challenge: from engineering research to the "science of learning" to nanoscale science and engineering. Though diverse in subject matter, all are designed to exploit research opportunities that are sufficiently complex and potentially rewarding to justify bringing together facilities, equipment, researchers, and students to a single academic setting. In FY 2006, NSF provided over \$250 million, representing approximately 5 percent of NSF's budget, to 92 individual research Centers. Given NSF's significant investment in using the Centers to advance the frontiers of research and education in science and engineering, we will be examining how NSF oversees and manages these Centers to identify best practices and opportunities for improvement.

### ***Sufficiency of NSF's Cooperative Agreements for Large Facility Projects***

OIG has initiated an audit to determine whether the terms and conditions included in NSF's cooperative agreements for the management and operation of its large facilities projects are sufficient for NSF to provide stewardship over its programs and assets. We will be reviewing a sample of cooperative agreements and analyzing their specific terms and conditions in light of each facility's unique characteristics and risks.



"Brain Camp" is a summer program in which children learn about the brain through fun activities. It is sponsored by the Atlanta Center for Behavioral Neuroscience (CBN), an NSF Science and Technology Center.

Credit: CBN

## A-133 Audit Reports

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 audits. The OIG reviews these 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.

During this reporting period, the A-133 audits of NSF grantees found compliance deficiencies and internal control weaknesses resulting in \$2.3 million of questioned costs related to NSF awards. The findings contained in A-133 reports help to identify potential risks to NSF awards and are useful to both the Foundation and OIG in planning site visits, post-award monitoring, and future audits. Because of the importance of A-133 reports in monitoring awardees, the OIG returns reports that are deemed inadequate to the awardees to work with the audit firms to take corrective action.

### *Findings Related to NSF Awards*

Category of Finding	Type of Finding			
	Compliance	Internal Controls	Monetary	Total
Financial and Award Management	49	46		95
Salary/Wages	16	9	7	32
Procurement System	17	4	1	22
Subawards	14	5	2	21
Equipment	8	3		11
Indirect Costs	7	1	1	9
Property Management System	5	1		6
Travel	7	1		8
Other	5	2		7
Cost-Sharing	2	3	1	6
General Areas	3			3
Other Direct Costs	5			5
Consultant Services	3			3
Interest Earned	2			2
Participant Support Costs			1	1
<b>TOTAL</b>	<b>143</b>	<b>75</b>	<b>13</b>	<b>231</b>

In this reporting period, we reviewed 138 audit reports, covering NSF expenditures of more than \$5.6 billion from fiscal year 2003 through 2006. Among these reports, the auditors issued three qualified, adverse or disclaimer of opinions on the financial statements and 24 qualified, adverse or disclaimer of opinions on the entity's compliance with federal award requirements. The reports revealed 143 instances where awardees failed to comply with federal requirements and 75 instances where weaknesses in awardees' internal controls could lead to future violations. The auditors also identified 13 instances of non-compliance with federal requirements that caused them to question a total of \$2.3 million of the costs claimed by recipients of NSF awards. As detailed in the table on page 26, the most common violations were related to financial and award management deficiencies and documentation supporting claimed salary/wages costs.

We also examined 80 management letters accompanying the A-133 audit reports. Auditors use these letters to report 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 letters we examined disclosed a total of 79 deficiencies that could affect NSF awards in areas such as segregation of duties to prevent potential fraud and policies and procedures related to financial and award management.

### ***Findings Related to Timeliness and Quality***

For 38 of the 138 audit reports we reviewed in which NSF was the cognizant or oversight agency, we found that 15 reports (39 percent) were submitted late or the audit reporting package was incomplete. OMB Circular A-133 requires audits to be completed and reports submitted within the earlier of 30 days after receipt of the auditors' report(s), or nine months after the end of the audit period, unless a longer period is agreed to in advance by the cognizant or oversight agency for audit. In each case, we informed the auditee that the late submission of a complete reporting package could affect the organization's risk profile and suggested that all future A-133 audits be performed and submitted in a timely matter.

The A-133 reports we reviewed also revealed problems with audit quality. Auditors are required to follow OMB Circular A-133 guidelines regarding the presentation of the audit findings. However, we found that 12 reports (32 percent) did not present the findings in sufficient detail. OMB Circular A-133 also provides guidance to the auditee on the preparation of a Corrective Action Plan. We found that 13 reports (34 percent) either did not include a Corrective Action Plan or the plan was incomplete. The OIG identified each of the potential errors and contacted the auditors and awardees, as appropriate, for explanations. In each case, the auditors and awardees either provided adequate explanations or additional information to demonstrate compliance with the Circular, or the error did not affect the results of the audit. While some of the errors were clearly immaterial, the auditors and awardees

generally acknowledged that the errors reduced the reliability of the reports. In each case, we issued a letter to the awardee to inform them of the results of our review and to identify issues on which they should work with the auditors during future audits to improve the quality and reliability of the report.

## Civil and Criminal Investigations

### ***Research Firm Returns \$1.55 Million and Enters into a Compliance Plan***

A Maryland-based social science research firm entered into a settlement agreement to resolve allegations that it shifted labor costs from private contracts to government contracts, and charged government contracts for unallowable costs such as the preparation of bids and proposals, administrative labor, and overhead. This investigation was initiated pursuant to a qui tam lawsuit filed in 2002. A “qui tam” is an action brought by a private party, the relator, under the False Claims Act, alleging the submission of false claims to the federal government by a contractor or grantee. In this instance, the relator was a former employee of the firm. The four-year investigation confirmed the allegations and revealed that the firm submitted a total of \$958,756 in false claims to NSF and the Departments of Commerce, Justice, and Health and Human Services. Damages attributed to NSF grants and contracts totaled \$395,379. The firm entered into a settlement agreement which required it to pay \$1.55 million to the federal government. As part of the settlement agreement, the firm also entered into a four-year Compliance Plan with our office, requiring implementation and yearly evaluation of a compliance program and an annual financial audit.

### ***Institution Settles with Department of Justice***

A review of an institution’s handling of participant support money revealed the institution wrongfully drew down and spent over \$27,000 in award funds after the expiration date of the award. The award was for a one-year period and the institution obtained a one-year, no-cost extension. Two days before the award expiration date, the institution requested and was denied a second no-cost extension.

The program officer that denied the request, reiterated the denial in an email to the PI, and also spoke to the PI on the telephone, emphasizing again that the award had expired, and that “no new costs incurred after the expiration of the

#### HIGHLIGHTS

<i>Civil &amp; Criminal Investigations</i>	29
<i>Administrative Investigations</i>	33



grant would be honored by NSF.” Despite the program officer’s explicit and repeated instructions, the PI directed the institution’s finance director to draw down all the remaining NSF award funds, approximately \$32,000. The institution later characterized this post-expiration drawdown as a “reimbursement,” which our investigation revealed to be false.

After the award expired, the institution filed a false Federal Cash Transaction Report indicating that all NSF funds had been spent as of the end of the reporting period. The PI also filed a Final Project Report, representing that work on the project was complete. The PI and the institution’s general counsel denied all knowledge of the program officer’s denial of the request for a second no-cost extension.

The Department of Justice (DOJ) accepted our case for prosecution under the civil False Claims Act, and ultimately the institution settled this matter with the DOJ for \$52,150 and agreed to implement a compliance plan. Following the civil settlement, we recommended that NSF debar the PI for a period of three years. NSF is considering this recommendation.

### ***University Foundation Returns Award Funds to NSF***

An Ohio university returned \$16,050 in award funds to NSF as a result of an OIG investigation. The investigation revealed that the PI had apparently reallocated both travel funds and participant support funds to pay personal salary, without obtaining proper approvals from the agency. When expenditures appeared in the university’s records that were unusual for the type of award, we reviewed university policies and the financial records of other awards managed by the same PI. While no other irregularities were found, we concluded that the university allowed funds to be reallocated without proper approvals from an NSF program official, and the university agreed to repay those funds.

### ***Former Research Center Employee Pleads Guilty to Mail Fraud***

On March 26, 2007, the U. S. Attorney’s Office (USAO) for the District of Colorado announced that a former employee of an NSF funded-research center pleaded guilty to one count of mail fraud for misuse of her employer’s credit card. The indictment alleged that the employee used the center’s credit card to purchase items such as books and iPods from retail outlets, and then advertised and resold many of the items on eBay, using the center’s FedEx account to ship them. The employee hid the fact that she was purchasing the items by misrepresenting the items that had been purchased by spreading the charges among several research center accounts. This resulted in many of the purchases being charged directly to federally-funded projects supported by NSF and DOE. Following her plea, the former employee awaits sentencing by the court. The research center returned \$8,677.37 to its NSF-funded projects and \$6,451.59 to its DOE-funded projects.

## ***News Article Leads to Return of \$69,199 to NSF***

An investigation initiated as a result of information that appeared in a news article resulted in \$69,199 being returned to NSF. The news article revealed that another federal agency was withholding substantial funds from a university center that NSF also funded. After discussing the matter with the other agency and the civil fraud division of the Department of Justice, we contacted the university and requested financial and other documents pertaining to NSF awards to the center.

Our investigation revealed that: 1) there were no documents or timesheets to support 12 employees whose salaries were charged to the awards; 2) an additional 13 administrative and non-technical personnel had been charged to the awards though only one part-time administrative position was approved; and 3) there were no timesheets to support the posting of a large number of salaries to the award. The university reviewed its records, returned \$69,199 to NSF, and updated its policies and procedures at the center so that such discrepancies should not recur.

## ***University Agrees to Return Funds for Misuse of Program Income***

As reported in previous Semiannual Reports,<sup>9</sup> we conducted a proactive review of conference awards for compliance with rules associated with program income, and as a result several grantees have voluntarily returned funds that were improperly used. In the course of a follow-up to that earlier review, we noted that a Texas university did not report program income to NSF, despite the fact that the university appeared to have charged and collected registration fees.

During the investigation, we learned that the University earned \$280,865 in program income for the award from registration fees. The PI improperly used \$103,208 of these funds to pay for meals that took place before the conference began and to financially reward the students involved in helping to coordinate the conference. As a result of the investigation, the university reimbursed NSF for the funds the PI misused.

## ***Recipient of Fellowship Returns NSF Funds***

A graduate student repaid three weeks of expenses and stipend totaling \$1,387 to an NSF program after he admitted that he left the program early without authorization. We initiated an investigation after receiving allegations that a graduate student may have defrauded an NSF foreign exchange fellowship program by leaving the program several weeks prior to the program's ending and providing false information about his return date. The fellowship

<sup>9</sup> September 2004 Semiannual Report, pp.31-32; September 2003 Semiannual Report, p.41.

provided more than \$6000 for travel, expenses, and summer stipend. The NSF program office asked the student about information it received that he did not attend the end of the program, and the student responded with unclear information about his return date and the reasons for the early departure.

After the NSF program office referred the matter to OIG, we interviewed the graduate student. He admitted that he left the program three weeks early without receiving appropriate approvals, and later provided inaccurate information about his return date to the NSF program office. The student wrote a check to NSF for \$1,387, the portion of expenses and stipend that the student received for the three weeks he did not participate in the program, and apologized to the NSF program staff for his actions.

### ***OIG and NSF Continue to Jointly Monitor Compliance Agreements***

In this reporting period, OIG and NSF have been responsible for the continued monitoring of two compliance agreements, one with a large city school district and one with a Florida university. As reported in previous Semiannual Reports,<sup>10</sup> compliance agreements are included in settlements reached with grantee institutions whose financial control systems deficiencies have failed to prevent financial improprieties. The two compliance agreements required each entity to create and implement a compliance program. The entities are also required to submit annual compliance reports, to include annual independent audit reports of all NSF award funds at each respective entity, for each year that the compliance agreements are in effect.

During this reporting period, the school district conducted its independent audit and submitted its annual compliance report, within the required timeframe. However, the Florida university failed to complete its independent audit and to submit its annual compliance report in a timely manner. As a result, we notified NSF management that the university was in breach of the compliance agreement. Subsequently, the university submitted a corrective action plan as permitted by the compliance agreement, which required the independent audit and annual report to be completed within 120 days. OIG and NSF management worked together with the university to help bring it into compliance, by ensuring that its independent audit and its annual report were both completed within 120 days of the initial breach, as envisioned by the corrective action plan. We are currently reviewing the annual audit and the annual compliance report to determine whether the university has effectively corrected the breach.

<sup>10</sup> March 2006 Semiannual Report, p.28; September 2005 Semiannual Report, pp.23-24; March 2005 Semiannual Report, pp.27-28.

## Administrative Investigations

### *Actions by the Deputy Director*

#### ***NSF Finds PIs Committed Research Misconduct in Six Separate Cases***

The September 2006 Semiannual Report presented the results of six separate investigations of plagiarism that were forwarded to NSF for appropriate action. The following summaries describe the outcome of each case:

- NSF agreed with our recommendations to make a finding against a PI who plagiarized text in three proposals. It required the PI to certify in writing for a period of three years that any documents submitted to NSF are free of any plagiarism.<sup>11</sup>
- NSF concurred with our recommendations, finding that a PI at a New Jersey institution committed research misconduct by plagiarizing text into two NSF proposals. In addition, the PI's university did not renew his contract of employment.<sup>12</sup>
- NSF's Deputy Director made a finding of research misconduct in the case of a New York university professor who plagiarized text into three proposals submitted to NSF, but who claimed that the NSF electronic submission process removed quotation marks and citations from his proposals. The DD also proposed a three-year debarment from receiving federal funds and required that, for three years following the period of debarment, the professor certify and a responsible official of his employer provide an assurance, that any NSF proposals or reports submitted do not contain plagiarized, falsified, or fabricated material. The professor objected to the proposed debarment, but the Deputy Director affirmed her decision. The time period for the professor to appeal the finding of research misconduct to the NSF Director is pending.<sup>13</sup>
- NSF concurred with our recommendations concerning a case in which a professor resigned from his tenure-track position after the university investigation concluded that he had plagiarized text into proposals submitted to NSF and other federal agencies. The Deputy Director made a finding that the professor committed research misconduct, sent him a letter of reprimand, and required him to certify for two years that any documents submitted to NSF are free of any plagiarism.<sup>14</sup>

<sup>11</sup> September 2006 Semiannual Report, p.39.

<sup>12</sup> September 2006 Semiannual Report, p.39.

<sup>13</sup> September 2006 Semiannual Report, p.36.

<sup>14</sup> September 2006 Semiannual Report, pp.39-40.

- A very senior university professor plagiarized text in two NSF proposals despite prior warnings from colleagues that one of the proposals contained plagiarized text. NSF made a finding of research misconduct and concurred with our recommendations. The agency took the following actions: debarred the professor for two years; required the PI to certify, and a responsible official of his employer to assure, that proposals he submits to NSF do not contain plagiarized, falsified, or fabricated material for three years after the debarment period; prohibited the PI from reviewing NSF proposals for a period of two years, concurrent with the debarment period; and required the PI to complete a course in research ethics.<sup>15</sup>
- NSF made a finding of research misconduct for a PI who plagiarized text into an NSF proposal from several source documents. Based on our investigation NSF also concurred with our recommended actions, including requiring him to certify to OIG that proposals he submits to NSF for one year from the date of NSF's letter of reprimand do not contain plagiarized, falsified, or fabricated material. As a result of the institution's investigation, the institution's adjudicator had previously recommended that the PI's employment with the institution be terminated. However, after negotiations, the PI was placed on half-pay for one year with additional restrictions.<sup>16</sup>

### ***NSF Concludes Postdoctoral Fellow Falsified Research Data***

In our last Semiannual Report,<sup>17</sup> we discussed our investigation of an NSF-funded postdoctoral fellow at a New England institution who falsified data in a published article. Based on our investigation and recommendations, NSF found that the postdoctoral fellow committed research misconduct, sent him a letter of reprimand, and debarred him for two years. NSF also implemented our other recommendations which: require him to certify to NSF that the publication containing the falsified data has been retracted; require him to certify completion of an ethics course covering research misconduct before applying for NSF funding; require that, each time he submits a proposal or report to NSF for three years after the debarment period, the PI certify and provide assurances from his employer that the submissions do not contain plagiarized, fabricated, or falsified material; and bar the PI from participating as a reviewer of NSF proposals for three years.

### ***PI's Appeal of Research Misconduct Finding Rejected***

NSF's finding of research misconduct against a PI who copied text from numerous sources into several of his NSF proposals, including proposals he submitted during the course of the investigation was upheld on appeal.<sup>18</sup>

<sup>15</sup> September 2006 Semiannual Report, pp.37-38.

<sup>16</sup> September 2006 Semiannual Report, p.38

<sup>17</sup> September 2006 Semiannual Report, p.37.

<sup>18</sup> September 2006 Semiannual Report, pp.35-36.



The PI asked NSF's Director to reconsider whether the PI's actions were "a significant departure from accepted practices of the relevant research community," which is the standard for a finding under NSF's Research Misconduct regulation. The Director affirmed the finding of research misconduct based on the PI's own admissions that he copied the text and the university's finding that his actions constituted a "violation of the institutional standard of scholarly integrity."

## ***Reports Forwarded to the Deputy Director***

### ***Co-PI Misleads Colleagues with Copied Text***

Our office received a substantive allegation that a proposal submitted to NSF by a PI and two co-PIs contained a limited amount of text plagiarized from two sources. We referred the allegation to their university, which investigated and concluded that one of the co-PIs knowingly plagiarized and misled her colleagues into thinking the copied material was her original text. The co-PI tendered her resignation, effective June 2007, and in the meantime is prohibited by the university from submitting proposals for external funding. We recommended that NSF send a letter of reprimand to the co-PI informing her that NSF has made a finding of research misconduct. We also recommended that NSF require, a certification from the co-PI for one year beginning June 2007, that all her submissions to NSF contain nothing that violates NSF's research misconduct regulation.

### ***Faculty Member Commits Plagiarism in Four NSF Proposals***

A member of the faculty of a university was found by the institution to have committed plagiarism in multiple NSF proposals. We received an allegation that the subject submitted proposals to NSF containing text and figures plagiarized from several sources, including web sites and published papers. In response to our inquiry, the subject admitted he had copied the text and figures without offset or attribution. He also disclosed that two additional sections of text that had been similarly copied without offset or attribution. In total, over a span of three years, the subject submitted four proposals to NSF that contained copied text, figures and references from 18 different original sources. We referred the investigation into this matter to his university.

Following a careful review of the evidence, the university's investigation committee found that a preponderance of the evidence indicated that the subject committed intentional plagiarism. The subject argued that his practices were accepted within his field, but the committee concluded that, even if there were more "permissive standards" in computer science, the subject's behavior "falls out of the scope." The committee concluded the subject's actions were a significant departure from the standards in his research community,

and that his actions were knowing and willful, and that his plagiarism constituted a pattern. The university sent the subject a letter of reprimand and required that he provide certifications to university officials that none of his proposals or written research materials contain plagiarism, that he take a course in research ethics and that he forego eligibility for any salary increase not mandated by the state during the 2006-2007 academic year.

We concurred with the university's conclusions, and found its discussion on the seriousness of the subject's actions particularly persuasive. According to the committee, the subject's actions were unequivocally wrong because of the extent of plagiarism, his position as a faculty member, and his responsibility to uphold his community standards. We recommended that NSF: send the subject a letter of reprimand concluding that his plagiarism is research misconduct; require for two years after the issuance of the reprimand that the subject certify and obtain assurances from institution officials that any proposals, reports, and other documents submitted to NSF do not contain plagiarized, falsified, or fabricated material; and require him to complete a course in research ethics.

### ***Co-PI Copied Text into NSF Proposal***

A proposal submitted to NSF by a PI and two co-PIs at a Wisconsin university contained a limited amount of text copied from six sources. Previously OIG had received an allegation about the proposal and contacted the subjects. They then reported the allegation to their university, which initiated an investigation. The university concluded that one of the co-PIs recklessly plagiarized, and that the PI and other co-PI were negligent in their review of the proposal. The university applied the same sanction against all three subjects by requiring that a certified committee of researchers review all submissions for external funding from each of them for a period of one year.

We concurred with the university that the co-PI plagiarized, but concluded he did so knowingly, not recklessly. We concluded the PI and other co-PI acted negligently and that neither acted with a culpable level of intent necessary for a finding of research misconduct. We recommended that NSF: make a finding of research misconduct against the co-PI; require the PI to submit copies of the university's assurances for one year; require the PI to submit personal certifications for one year; and require certification the PI complete an ethics class.

### ***Pattern of Plagiarism Committed by a University Professor***

A New York university professor plagiarized a substantial amount of text from multiple sources into a proposal submitted to NSF, and into two research publications acknowledging NSF support. The professor claimed that his students and post-doctoral research associate provided the plagiarized texts to him in their research progress reports. A university investigation con-

cluded that these individuals did not provide the text, and determined that the professor had also plagiarized text into a previously submitted NSF proposal, and into three internal university proposals.

We recommended that NSF make a finding of research misconduct; debar the subject from receiving federal funds for a period of two years; prohibit the subject from serving as a reviewer of NSF proposals for the same two-year period; and require, for a period of two years after the debarment period, that the subject submit assurances by a responsible official of his employer that any proposals or reports submitted by the subject to NSF do not contain plagiarized material. We also recommended that NSF require the professor to complete an ethics training course.

## **Significant Administrative Cases**

### ***Program Income Identified at NSF-Supported Center***

During an OIG investigation into allegations of fraud, we discovered that an NSF-sponsored center had not reported program income to the agency as required. The center was generating revenue from the sale of two research-oriented items. We determined that all of the revenue from the sale of the first item and part of the revenue from the second item constituted program income that should have been reported to the agency. The institution agreed that program income in the amount of \$26,000 generated by the first item should be used to offset costs associated with the grant but disagreed with our assessment of the second item. We informed the program officer and the grants officer of our differing opinions and asked them to determine whether the income generated by the second item is in fact program income and should be used to offset NSF grant funds. A decision is pending.

### ***University Refunds Overpaid Indirect Costs***

During the course of our investigation of a co-PI's time and effort under an NSF-funded award, a Texas university self-identified and refunded to NSF an overpayment of indirect costs to a subawardee under that same award. While the issue of the co-PI's time and effort was ultimately determined to be an internal personnel issue for the university, in the course of the investigation another issue arose concerning indirect costs. Under OMB Circular A-21 G.2., the "modified total direct costs" (MTDC) is used to determine the amount of the awardee's indirect costs that may be claimed under the award. Awardees may include in their MTDC up to \$25,000 of expenses paid to a subawardee. The university self-identified that it had included more than \$25,000 in its MTDC in determining its indirect costs under the award, and refunded the overpayment of \$6,424.20 to NSF.

## PIs Are Responsible for Contents of Their Proposals

In a number of recent cases of apparent plagiarism, PIs have sometimes claimed that graduate students or post-doctoral research associates who are not named or otherwise credited in the proposal are responsible for the plagiarized text. The NSF Grant Proposal Guide (GPG) states: “Authors other than the PI (or any co-PI) should be named and acknowledged.”<sup>19</sup> Grant writers, students, and post-doctoral research associates who prepare sections of the proposal should therefore be named in the proposal.

When investigating an allegation of plagiarism, in the absence of other identified authors, we contact the PI and all co-PIs. If the explanation provided indicates that an unnamed individual (such as a graduate student or post-doc) was responsible for the copied text, we contact that individual to confirm the explanation. Unfortunately, many times these individuals have left the university, and in some cases, the country, making it nearly impossible to validate the explanation.

We believe that final responsibility for the contents of the proposal ultimately resides with the named authors of the proposal—the PI and the co-PIs. Recent university investigation committees share this view. Therefore, PIs should carefully review any written materials that their students and post-docs provide as a part of a submitted proposal to ensure they meet the high scholarship standards required of an NSF proposal.<sup>20</sup>

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<sup>19</sup> Chapter 1, Section D3, page 13.

<sup>20</sup> Grant Proposal Guide, NSF 04-23, available at [http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=gpg](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg)

# OIG Performance Report 2006-2007

## Goal 1

### *Promote NSF Efficiency and Effectiveness*

#### **1. Identify and implement approaches to improve product quality and timeliness.**

- *Analyze the costs and benefits of moving to electronic workpapers; if feasible, conduct pilot testing with the internal audit team.*
- *Develop a statement of work for performance audits conducted by contract auditors at grantee institutions.*
- *Complete most OIG audits within one year of conducting the planning conference.*
- *Complete 75% of all audits carried over from prior year.*
- *Assess results of the annual employee survey and develop appropriate steps to address the highest priority concerns of the audit staff.*
- *Finalize and issue an audit follow-up and resolution policy.*
- *Develop and issue a policy for performing annual and final contract close-out audits.*
- *Link the AIGA and AIGI performance plans to their respective staff performance plans.*
- *Identify workload targets for each audit team.*
- *Review ECIE methods for ensuring the quality and timeliness of investigative products.*
- *Ensure the investigative sufficiency of all cases.*
- *Update Investigations Manual and forms.*

OIG continued to make progress in improving audit timeliness and quality. During this semiannual period, we began a project to assess the benefits of implementing electronic workpapers within the Office of Audit and analyze the cost and functionality of several alternatives. Conversion from



paper to electronic workpapers should increase audit timeliness and quality by facilitating teamwork, reinforcing professional auditing standards and procedures, and attracting staff with strong technical skills. A volunteer team of auditors and IT professionals is currently evaluating and comparing several “off-the-shelf” software packages, as well as other alternatives. We expect to make our recommendation within the next month.

For audits contracted to certified public accounting (CPA) firms we also developed a new statement of work, which emphasizes the evaluation of awardees’ internal controls. This new model should benefit awardee institutions and NSF management by providing proactive assessments of awardees’ capabilities for managing federal funds to prevent problems caused by internal control deficiencies. We plan to use this model for future audits of NSF awardees performed by contractors.

In the past year OIG completed 55 percent of the audits contracted to CPA firms and 56 percent of audits performed by OIG staff within one year and 68 percent of the audits carried over from the prior year. Although the completion rate for carryover audits was less than the target rate of 75 percent, we implemented two initiatives to help the office reach the goal for next year: 1) we reduced the levels of review for low and medium-risk audits, which have minimal or non-material findings, respectively, thus reducing the time to completion; and 2) we developed a tracking process for quarterly workload targets for each audit team in order to more closely link individual and team production to office performance goals.

To address issues raised in the 2006 OIG employee survey, we established an Employee Survey Advisory Group to advise senior audit management. This group recommended ways to improve communications, utilize contractors more effectively, and issue audit reports more efficiently. The Advisory Group will continue to meet at least annually to monitor progress on the implementation of these recommendations.

OIG developed policies to guide staff on their roles and responsibilities for audit resolution and contract closeout audits. The audit resolution policy describes the office’s role in resolving and closing audit findings and helps ensure that both audit resolution and the implementation of audit recommendations are effective and performed in a timely manner. The contract closeout policy clarifies the office’s responsibilities and priorities in responding to a request for assistance from NSF in closing out its contracts.

OIG also made significant strides in improving investigative product quality. This year we:

- Adopted staff suggestions to make significant changes in internal Office of Investigations processes.
- Completed an internal peer review with a team composed of members from each investigative unit.
- Updated our Investigations Manual and forms in response to changes in law, regulation, or practice within the community.
- Continued active supervisory review of milestones to ensure timely case and project completion.
- Implemented an electronic flagging system to alert staff of approaching case-specific milestones.
- Provided advice and assistance to other OIGs in individual peer reviews, as well as suggestions for improving investigative processes, in our role as a coordinator of the ECIE investigative review process.
- Ensured effective quality control and quality assurance on all Investigative Reports and Management Implication Reports.
- Continued to employ a forensic auditing firm to support investigations, enabling us to realize significant improvements in our information analysis, increase recoveries, raise the frequency of agreement by NSF management on recommended actions, and resolve more cases without an increase in the number of investigators.
- Achieved the direct alignment of all individual staff performance plans with the OIG Performance Plan.

## ***2. Strengthen our focus by refining approaches for selecting work and setting priorities.***

- *Conduct audit plan brainstorming meeting, document results, and develop appropriate steps to address ideas of audit staff as summarized by the audit planning team.*
- *Develop and execute the annual audit plan.*
- *Develop a catalog of publications for an audit planning library.*

- *Initiate a listing of NSF programs by dollar amount/cost by program.*
- *Perform and document annual risk assessment of NSF's award portfolio.*
- *Document methodology for final selection of audits to be included in the annual audit plan.*
- *Develop a list of investigation risk areas through consultation between the offices of Audit and Investigations.*
- *Identify audit and investigation issues arising from NSF priorities, high-risk programs, and management challenges.*

The Audit office held brainstorming sessions in June 2006 to begin preparation of the FY 2007 Audit Plan. We incorporated ideas from those sessions with risk assessments of NSF awards and awardee institutions, OIG's annual Management Challenges Letter, referrals from Investigations, and NSF's audit requests into the FY 2007 Audit Plan, which we presented to the National Science Board in September 2006. For reference in future audit planning, we also documented the methodologies used in developing the risk assessments and prioritizing audits in the Plan. In addition, this year we developed a hyperlinked audit library of resources and obtained a list of NSF programs by dollar amount. All of these actions strengthen the OIG's capabilities for selecting work and setting priorities.

Staff from the offices of Investigations and Audit met regularly to exchange information, identify common concerns, proactively address possible conflicts and redundancies, and monitor referrals that had been made. These meetings have helped to improve each unit's understanding of the other's work, enhance office-wide sharing and cooperation, and discover ways to use this knowledge in assessing risks and establishing priorities pertaining to their work.

An Investigations team reviewed NSF's last two strategic plans, its budget request, high-risk list, and the Management Challenges letter to identify matters, programs, or awardees warranting investigative scrutiny. This information proved valuable in the development of the Investigative Proactive Review Plan.

## Goal 2

### ***Safeguard the Integrity of NSF Programs and Resources***

#### ***1. Detect and address improper, inappropriate, or illegal activities.***

- *Ensure that NSF and grantees adequately respond to OIG investigative findings*
- *Explore the feasibility of implementing a plagiarism software program.*
- *Improve our ability to detect falsified figures in NSF proposals.*
- *Accelerate the research misconduct investigation process.*
- *Develop a mechanism for assessing questionable research practices, questionable financial measures, and questionable management/administrative practices.*

OIG continues to improve its ability to detect and address improper, inappropriate, and illegal activities. We tracked the responsiveness of both NSF and its awardees to OIG recommendations and found that in almost every instance, agency management accepted our factual findings and recommendations. Similarly, we saw affirmative responses to our recommendations throughout the NSF awardee community. Numerous compliance agreements and ethics programs have been initiated or refined as a result of our work.

This year we assessed and updated our investigative tools to take advantage of recent advancements in technology and ensure that the process of conducting research misconduct and civil/criminal investigations is as efficient as possible. We examined various plagiarism software programs and selected one for procurement. We are also assessing programs for detecting falsified figures in proposals. Additionally, our criminal investigators evaluated some newly developed search tools for collecting information about subjects and/or witnesses and compared them to our current system. After considering the results, cost, and ease of operation of each product, we selected a new system.

Our research misconduct investigations rely heavily on the efforts of inquiry and investigation committees at the research universities. In each case, we examine the relevant university report to determine if it meets the requirements laid out in NSF's policies. In cases where the committees' efforts fall short, OIG staff may perform the additional work required to submit the findings to the NSF Deputy Director for adjudication. To reduce the instances of

insufficient university reports, we drafted a plan this year for improving the performance of their committees and for identifying those institutions that fail to correct their conduct in this important area.

In addition, we have developed procedures for assessing and addressing questionable research, financial, and management or administrative practices. When staff professionals encounter these situations, we immediately assess whether the matter warrants a full investigation or is more appropriate for letters of warning.

## **2. Strengthen OIG proactive activities.**

- *Increase the use of financial information data mining and analysis techniques to detect fraud indicators.*
- *Develop a Proactive Review Action Plan to identify systemic weaknesses.*
- *Assess investigative priorities and case trends.*
- *Expand the use of plagiarism software for proactive identification of plagiarism in NSF proposals.*

OIG continues to emphasize the prevention and detection of fraud, waste, and abuse in the course of its proactive review program. During this period, the use of financial information data mining and analysis techniques to detect instances of fraud has become a part of our routine investigative process. We also expanded the process of crafting our Proactive Review Action Plan. Investigators conducted brainstorming sessions with auditors, solicited suggestions regarding vulnerable programs and high-risk institutions from NSF, and polled organizations composed of members of the research community. In addition, we surveyed the IG community to determine if they had practices that might be adopted to improve our proactive reviews of NSF programs and operations. The data obtained will be used to implement the office's proactive review plan for this next performance year. We are assessing investigative priorities and case trends as part of our development of the proactive review plan.

Our proactive review of selected 2005 proposals, using plagiarism software, has been delayed until new software is procured early in the next performance year.



## Goal 3

### **Utilize OIG Resources Effectively and Efficiently**

#### **1. Strengthen and utilize the professional expertise and talents of all OIG staff.**

- *Conduct annual survey of OIG staff to obtain its views on the effectiveness of*
  - *OIG use of its resources in personnel, equipment, technology and contracting,*
  - *Management planning, policies, and procedures,*
  - *Internal communications and coordination.*
  - *OIG impact on NSF, and*
  - *KMS and other management tools.*
- *Analyze survey results and develop and implement corrective actions for any problems identified.*
- *Make system enhancements to KMS, including development of an administrative support module.*
- *Conduct KMS and other IT training, as necessary.*
- *Update KMS user manuals.*
- *Provide prompt, effective responses to requests for IT support.*
- *Establish a new-employee orientation program.*
- *Update and finalize auditor and management analyst position descriptions.*
- *Develop audit and investigation core competencies.*
- *Develop audit and investigation core training programs.*
- *Complete training identified in Individual Development Plans.*
- *Ensure all investigative staff complete appropriate skill level classes.*
- *Develop an Audit Training Plan.*
- *Develop workload targets in audit staff performance plans.*

The employee survey committee issued its report in April 2006, identifying the primary concerns of OIG staff based on their survey responses. The committee recommended improving trust between supervisors and staff, better accounting by senior managers for all issues that received less than adequate ratings in the survey, and clarification of OIG's telecommuting policy. In response, we made an effort to improve communications between supervisors and staff to help define more clearly and alleviate the issues involving trust. The offices of Audits and Investigations formed advisory committees to help them implement specific actions. Audits established a group to recommend ways to improve internal communications, utilize contractors more effectively, and process audit reports more efficiently. Investigations established a working group to address various concerns raised in the survey and ensure continued positive change. After a review of the telecommuting policy, the OIG leadership decided that the policy was sufficiently clear but that it was not being implemented properly. Supervisors have been encouraged to allow wider use of telecommuting by their staffs and the next survey will test whether employees feel they are given adequate opportunity to telecommute. The 2006 survey showed that problems identified in previous years' surveys, including insufficient cooperation and information sharing among OIG units, have been largely resolved.

Because the most pressing issues identified in the annual employee surveys over the past five years appear to have been addressed, senior management determined that it would be more useful to administer the employee survey every two years so that actions taken in response to the previous surveys would have time to take effect and be more meaningfully assessed.

We continued to make enhancements to the OIG Knowledge Management System (KMS), including the development of modules for administrative support and new employee processing. These modules facilitate 1) management and tracking of personnel actions and inventory, 2) intra-office communications, and 3) human capital planning. In addition, new performance reports allow management and staff to more readily associate individual/group achievements with office-wide goals and plans. We also hired an information technology specialist to provide more prompt and effective responses to requests for IT support. All training planned for the KMS system was successfully completed and user manuals were updated.

This year OIG launched a new initiative to improve the processing and orientation of new employees. Administrative staff interviewed recently-hired employees about their experiences during the first few months of work to identify areas for improvement. To ensure that new hires speedily receive all of the equipment, supplies, information, and resources they need to be effective, checklists of these essential items are now posted on the shared computer drive so that management can track what they have received. Supported by KMS, the new on-line orientation also includes answers to "frequently asked questions" to help new employees more quickly and easily acquire the knowledge and skills they need to perform their jobs.

The Audit office updated all auditor and management analyst position descriptions this year. The new position descriptions incorporate seven core competencies: thinking analytically, applying subject matter knowledge, communicating effectively, evaluating tasks and achieving results, solving problems, working in teams, and making decisions. The position descriptions also include additional competencies, such as managing resources, building consensus, and serving customers, which staff members are expected to develop within one year after entering their positions. Investigations likewise refined the core competencies of its staff.

The Audit office developed core training programs for GS 7-12 positions. The Government Auditing Standards require 80 hours of continuing professional education for auditors every two years. This year OIG has continued to track training hours for each audit staff member and has approved a training plan that will ensure that all audit staff comply with these standards. The development of the new position descriptions and competencies and the monitoring of staff training will strengthen audit staff and ensure that their skills are applied more effectively and efficiently to OIG work.

Investigations also developed a specific core training regimen to ensure that its staff is professionally trained. However, all the training listed in the Individual Development Plans of some staff members could not be completed due to course cancellations, case-related demands, and unanticipated problems with the Inspector General Academy courses. Management, administrative and legal staff also participated in extensive training to maintain their leadership and professional skills through such programs as the Federal Executive Institute, Inspector General Retreats, the Department of Commerce Science and Technology Fellowship Program, the Federally Employed Women's Conference, Senior Executive Service Forums, the Aspen Institute, the NSF Academy, and international workshops. Across all units, OIG remains committed to maintaining a highly motivated and well-trained staff.

In addition, for this performance year the Audit office added "workload targets" as a new critical element in individual performance plans to enable auditors to meet the workload targets of the OIG Annual Performance Plan, including ensuring individual audits are completed within one year of the start date.

## ***2. Improve communication and collaboration within OIG.***

- *Facilitate information exchange and referrals among the Audit, Investigation, and Administrative units.*
- *Share information about audit, investigative, and administrative activities at all-staff meetings.*
- *Strengthen Investigations/Audit/Administrative teams performing OIG/NSF liaison duties.*

- *Conduct periodic meetings between audit and investigation managers to discuss cross-cutting issues, mutual concerns, and cooperative efforts.*
- *Use office-wide committees for completion of various OIG projects and activities.*
- *Conduct periodic informational meetings for administrative staff from each OIG unit.*
- *Ensure staff participation in the development and implementation of the annual OIG Performance Plan.*

Information exchange among the different units that comprise the OIG continues to be open and effective. All units have contributed to improved communication and collaboration within OIG through participation in formal and informal meetings, activities, and training events. Audit and Investigations staff meet regularly to discuss issues of mutual concern and to monitor matters that have been referred between the offices. Many referrals are explored during these meetings, and while some are found to lack substance, action is taken on any deemed to be significant. In addition, a number of brainstorming sessions between Audit and Investigations staff have been convened to generate ideas for proactive reviews, investigative priorities, and audit planning. The Administrative Manager also convened periodic meetings of administrative staff members to share information and ideas, develop solutions to common problems, and keep everyone current on changes in procedures and requirements.

During the performance period, an auditor, investigator, other OIG staff member, or a team of employees, made presentations at virtually all of the office's monthly staff meetings to share information about their work. Surveys indicate that the presentations were well received and considered professionally valuable. There was strong participation in the OIG liaison program, in which staff members from different OIG units are paired to establish an ongoing relationship with their designated NSF directorate, division, or office. Staff members were also active on office-wide committees set up to handle everything from planning the annual office retreat to preparing an analysis of the employee survey. In addition, staff throughout the office contributed to the development of the annual OIG Performance Plan.

### ***3. Ensure effective external communications and consultation with our stakeholders.***

- *Produce timely external reports on OIG results and issues.*
- *Provide testimony and other requested information to congressional committees.*
- *Provide briefings to the NSB, Congress, OMB, NSF, and others regarding OIG plans, priorities, and progress.*

- *Prepare timely OIG budget requests.*
- *Issue two OIG Newsletters by email.*
- *Update NSF leadership regularly on OIG activities and concern.*
- *Participate in NSF committees and task forces, as appropriate.*
- *Collaborate with federal and international agencies to advance common audit, investigative, and management goals.*
- *Provide leadership and active participation in the IG community.*
- *Track and coordinate GAO audits of NSF programs.*
- *Develop guidance for the OIG/NSF liaison program.*
- *Conduct active outreach to NSF and the research community.*
- *Ensure that most liaison teams include representatives from more than one OIG unit.*
- *Improve presentation and content of OIG website.*
- *Track usage of OIG website.*
- *Ensure that FOIA/PA requests are processed in a timely manner.*

During the past year, OIG prepared all reports for which it was responsible, including two Semiannual Reports to Congress, NSF's Financial Statement Audit Report, an OIG Performance Report, and a Management Challenges Letter, all of which were issued within the timelines prescribed either by law or by specified due dates. We also issued our 2008 budget submission according to OMB and Congressional requirements. Further, OIG provided suggestions for new legislation at the request of a Congressional committee. In addition, OIG leadership met with Congressional and OMB staff to discuss OIG operations and priorities.

Our staff and its financial statement audit contractor gave briefings at most meetings of the Audit and Oversight Committee of the National Science Board, including the status of NSF's financial statement audit and the effectiveness of the corrective actions taken by the agency in response to previous financial audits, OIG's proposed budget submission, the annual audit plan, and significant investigations and audit reports. We released two electronic newsletters to inform NSF stakeholders of OIG's significant audits and investigations between the issuances of our Semiannual Reports to Congress. In addition, the IG and Deputy IG conducted briefings for the NSF Director and Deputy Director at regular intervals to apprise them of OIG's activities and discuss opportunities to improve agency operations.

OIG staff actively participated in NSF committees. For example, Audit staff members were active in the Audit Coordinating Committee, which resolves coordination issues associated with the financial statement audit. The Se-



nior Policy and Operations Advisor serves as an executive secretary to the Audit and Oversight Committee of the National Science Board. The Deputy IG participated in quarterly Division Director retreats and served as the OIG liaison for the agency's Office of Equal Opportunity. During the past year we continued to advance our goal of enhancing communications with agency staff by presenting at NSF-organized events. We spoke at the conflict-of-interest briefings conducted by the NSF ethics official approximately twice a month and gave presentations at each of the NSF Program Manager's Seminars, which provide new NSF program managers with detailed information about the Foundation and its activities. OIG also reached out to the larger research community by attending approximately 50 separate events, mostly held by universities across the country, to make presentations or participate in a conference or forum.

Deputy AIG William Harrison congratulates Sherrye McGregor on her award from the Virginia Society of Research Administrators for her keynote address to their fall meeting.



As institutions around the world increasingly collaborate to conduct scientific research, it is important that those who fund and perform research have an understanding of the rules, regulations, best practices, and research ethics that exist in other countries. The NSF OIG has been at the forefront of this effort. The IG was designated as the United States representative to the Global Science Forum Expert Group, which was formed to address the need for better understanding of the differences among countries in approaching research misconduct issues and to develop practical guidance for governments on handling research misconduct and conducting training on ethical issues. The IG also spoke at the International Network of Research Management Societies in Australia, where she called for the development of national and international standards for investigating allegations of research misconduct. These exchanges have helped heighten international awareness of the need for common definitions and rules in the area of research misconduct. NSF OIG continued to co-host the Accountability in Science Research Funding workshop, which this year convened in The Hague with representatives of 11 countries in attendance. Twenty-two representatives of the Chinese Ministry of Supervision visited our offices in September to meet with Dr. Boesz and OIG staff. We also participated in a planning meeting for the 2007 International Conference on Research Integrity in Portugal. Attended by 20 representatives from a number of countries and organizations, this conference is designed to facilitate discussion of coordination on research misconduct and ways to improve the education of researchers in ethical behavior.

Our office continues to organize and actively participate in committees, projects, and events supported by the IG community. The President's Council of Integrity and Efficiency and the Executive Council of Integrity and Efficiency (PCIE/ECIE) each year issue a report to the President on the most significant activities and accomplishments of the federal IG community. This

year's report was prepared jointly by the Department of Agriculture and the National Science Foundation OIGs. Our investigators participated in the Procurement Fraud Working Group established by the U.S. Attorney for the Eastern District of Virginia as well as the newly established National Procurement Fraud Task Force at the Department of Justice. Under the auspices of the task force, we have taken a leadership role in two areas of grant fraud: a review of government-wide certification processes; and various OIG outreach efforts to program officers and grant recipients. We organized and hosted a successful Grant Fraud Workshop, which was attended by dozens of OIG professionals from most grant-making agencies. OIG staff also assisted the IG Academy and the Federal Law Enforcement Training Center by participating in curriculum review/course development committees and serving as advisors for the Basic Non-Criminal Investigator Course. We continued to coordinate the ECIE investigative peer review process and served as the chair for the PCIE/ECIE Peer Review Revision team. The Deputy IG served on the PCIE/ECIE award evaluation committee, and the IG was active in the PCIE/ECIE Executive Committee, the Investigations Committee, and the Inspection and Evaluation Committee.

OIG auditors provided leadership to interagency groups established to advance common audit goals. For example, we chaired the Financial Statement Committee of the Federal Audit Executive Council, helped the PCIE and the Government Accountability Office revise the Financial Audit Manual, and actively participated in the government-wide Financial Statement Audit Roundtable. OIG auditors have met monthly during this reporting period with auditors from other federal OIGs in the Financial Statement Audit Network to discuss proposed accounting standards and requirements for federal financial statement audits. We also commented on proposed changes to the Government Auditing Standards, 2007 Revisions (the "Yellow Book"), and the Federal Accounting Standards Advisory Board's proposed statement of concepts on Definition and Recognition of Elements of Accrual-Basis Financial Statements. Additionally, we contributed to standardizing the government-wide statement of work used to procure the financial statement audit contractors, helped update the Audit Monitoring Guide that assists OIGs in monitoring the quality of the financial audit performed by the external auditors, and tracked GAO's audit work at NSF.

OIG's liaison program continued to achieve its goals of establishing effective working relationships and communications with the individual directorates and offices within NSF. OIG liaison teams, usually composed of one auditor and one investigator, initiated approximately 30 liaison events this year. We published an internal guide for our liaison program to ensure it continues to operate in accord with the IG's original vision. We also made a number of improvements to the OIG website to facilitate communication with our stakeholders, including the uploading of our most recent presentations and publications. Over 23,000 visitors logged onto our website during this reporting period, an indication of the success of our outreach efforts. One-hundred percent of the FOIA requests we received were processed within the specified timeframes.

# Statistical 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	\$1,900,000
B.	Recommendations that were issued during the reporting period	\$0
C.	Adjustments related to prior recommendations	\$0
Subtotal of A+B+C		\$1,900,000
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	\$1,900,000
For which no management decision was made within 6 months of issuance		\$1,900,000

### 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	18	\$60,605,063	\$2,254,038
B.	That were issued during the reporting period	16	\$5,878,712	\$2,650,710
C.	Adjustment related to prior recommendations	0	\$0	\$0
Subtotal of A+B+C		34	\$66,483,775	\$4,904,748
D.	For which a management decision was made during the reporting period	11	\$4,568,637	\$1,824,055
	i) dollar value of disallowed costs	N/A	\$555,964	N/A
	ii) dollar value of costs not disallowed	N/A	\$4,012,673	N/A
E.	For which no management decision had been made by the end of the reporting period	23	\$61,915,138	\$3,080,693
	For which no management decision was made within 6 months of issuance	7	\$56,036,426	\$429,983

**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	\$11,602,658	\$606,563	\$8,101
B.	Reports with monetary findings that were issued during the reporting period:	2	\$2,147,780	\$505,538	\$0
C.	Adjustments related to prior recommendations	1	\$0	\$13,562	\$0
Total of reports with cost sharing findings (A+B+C)		5	\$13,750,438	\$1,125,663	\$8,101
D.	For which a management decision was made during the reporting period:	2	\$6,922,394	\$335,187	\$8,101
	1.Dollar value of cost-sharing shortfall that grantee agreed to provide	2	\$6,922,394	\$0	\$8,101
	2.Dollar value of cost-sharing shortfall that management waived <sup>21</sup>	2	\$6,922,394	\$335,187	\$0
E.	Reports with monetary findings for which no management decision has been made by the end of the reporting period	3	\$6,828,044	\$790,476	\$0

<sup>21</sup> Indicates the dollar value waived by management primarily due to additional documentation provided during audit resolution to support the questioned amounts.



### Status of Recommendations that Involve Internal NSF Management Operations

<b>Open Recommendations (as of 3/31/2007)</b>	
Recommendations Open at the Beginning of the Reporting Period <sup>22</sup>	76
New Recommendations Made During Reporting Period	24
Total Recommendations to be Addressed	100
<b>Management Resolution of Recommendations<sup>23</sup></b>	
Awaiting Resolution	28
Resolved Consistent With OIG Recommendations	72
Management Decision That No Action is Required	0
<b>Final Action on OIG Recommendations<sup>24</sup></b>	
Final Action Completed	34
Recommendations Open at End of Period	66
<b>Aging of Open Recommendations</b>	
Awaiting Management Resolution:	
0 through 6 months	19
7 through 12 months	1
More than 12 months	8
Awaiting Final Action After Resolution	
0 through 6 months	5
7 through 12 months	14
More than 12 months	19

<sup>22</sup>Two recommendations were not previously reported.

<sup>23</sup>“Management Resolution” occurs when the OIG and NSF management agrees on the corrective action plan that will be implemented in response to the audit recommendations.

<sup>24</sup>“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	Unsup-ported-Costs	Better Use of Funds	Cost Sharing At-Risk
07-1-001	Dallas Independent School district	\$91,216	\$85,816	\$0	\$0
07-1-002	Mathematica Policy Research Institute	\$0	\$0	\$0	\$0
07-1-003	Triumph Tech, Inc.	\$80,740	\$1,192	\$0	\$0
07-1-004	RPSC CAS Disclosure Statement	\$0	\$0	\$0	\$0
07-1-005	Temple University – contract close out	\$233,385	\$0	\$0	\$0
07-1-006	Cost Impact Analysis for Raytheon	\$0	\$0	\$0	\$0
07-1-007	Compuware Corporation	\$345,492	\$0	\$0	\$0
07-1-008	AGUNSA Embezzlement	\$0	\$0	\$0	\$0
07-1-009	AGUNSA Internal Controls	\$0	\$0	\$0	\$0
07-1-010	DCMA findings for Raytheon Noncompliance	\$0	\$0	\$0	\$0
07-1-011	American Institute of Mathematics	\$2,089,952	\$2,089,952	\$0	\$389,900
07-1-012	University of Puerto Rico Mayaguez	\$16,030	\$7,546	\$0	\$0
07-1-013	California Institute of Technology Effort Reporting	\$15,227	\$0	\$0	\$0
07-1-014	Nashville State Technical Community College	\$185,213	\$36,901	\$0	\$115,638
07-1-015	Supplemental schedule to #06-1-023 RPSC	\$560,376	\$0	\$0	\$0
07-2-001	NSF FY 2006 Financial Statement Audit	\$0	\$0	\$0	\$0
07-2-002	NSF FY 2006 Special Purpose Financial Audit	\$0	\$0	\$0	\$0
07-2-004	NSF's FY2006 Management Letter Report	\$0	\$0	\$0	\$0
	Total:	\$3,617,631	\$2,221,407	\$0	\$505,538

## NSF-Cognizant Reports

Report Number	Subject	Questioned Costs	Unsupported Costs	Cost Sharing At-Risk
07-4-001	American Institute of Physics	\$0	\$0	\$0
07-4-002	Samuel Roberts Noble Foundation, Inc.	\$0	\$0	\$0
07-4-005	Shodor Education Foundation	\$0	\$0	\$0
07-4-006	Fresno Unified School District	\$0	\$0	\$0
07-4-007	Fresno Unified School District	\$0	\$0	\$0
07-4-009	American Association of Physics Teachers	\$0	\$0	\$0
07-4-010	US Civilian Research & Development Foundation	\$0	\$0	\$0
07-4-011	Stark County Educational Service Center	\$0	\$0	\$0
07-4-012	Austin Independent School District	\$0	\$0	\$0
07-4-013	Brownsville Independent School District	\$0	\$0	\$0
07-4-014	Cleveland Municipal School District	\$0	\$0	\$0
07-4-015	Allegheny Intermediate Unit	\$0	\$0	\$0
07-4-016	Ordway Research Institute, Inc.	\$0	\$0	\$0
07-4-017	Milwaukee Public Schools	\$0	\$0	\$0
07-4-019	Keck Graduate Institute of Applied Life Sciences	\$0	\$0	\$0
07-4-021	Texas A & M Research Foundation	\$0	\$0	\$0
07-4-022	Merck Institute for Science and Education	\$0	\$0	\$0
07-4-023	American Geophysical Union	\$0	\$0	\$0
07-4-024	University Corporation for Atmospheric Research	\$0	\$0	\$0
07-4-028	Associated Universities, Inc.	\$0	\$0	\$0
07-4-029	Associated Universities, Inc.	\$0	\$0	\$0
07-4-030	Shodor Education Foundation	\$0	\$0	\$0
07-4-031	Center for Image Processing in Education, Inc.	\$0	\$0	\$0
07-4-032	Southwest Center for Educational Excellence	\$0	\$0	\$0
07-4-033	American Geophysical Union	\$0	\$0	\$0
07-4-034	Austin Independent School District	\$0	\$0	\$0
07-4-035	Dallas Independent School District	\$0	\$0	\$0
07-4-036	Clark County School District-NV	\$0	\$0	\$0
07-4-037	WGBH Educational Foundation	\$0	\$0	\$0
07-4-038	New England Board of Higher Education	\$0	\$0	\$0
07-4-039	Town of Hudson-MA	\$0	\$0	\$0
07-4-040	United States-Mexico Foundation for Science	\$0	\$0	\$0
07-4-041	Institute for Genomic Research	\$0	\$0	\$0
07-4-042	Henry E. Huntington Library & Art Gallery	\$0	\$0	\$0

### NSF-Cognizant Reports

Report Number	Subject	Questioned Costs	Unsupported Costs	Cost Sharing At-Risk
07-4-043	Harrisburg University of Science & Technology	\$0	\$0	\$0
07-4-044	Keck Graduate Institute of Applied Life Sciences	\$0	\$0	\$0
07-4-045	Merck Institute for Science and Education	\$0	\$0	\$0
07-4-048	American Institute of Physics	\$0	\$0	\$0
	<b>TOTAL:</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

### Other Federal Audits

Report Number	Subject	Questioned Costs	Unsupported Costs	Cost Sharing At-Risk
07-5-020	University of Richmond	\$689,685	\$0	\$0
07-5-021	University of Georgia Research Foundation	\$147,239	\$0	\$0
07-5-068	Illinois Institute of Technology	\$735	\$0	\$0
07-5-069	State of Georgia	\$156,295	\$0	\$0
07-5-092	Nevada System of Higher Education	\$6,837	\$6,837	\$0
07-5-095	Alfred University	\$95,549	\$95,549	\$0
07-5-096	Howard University	\$1,164,741	\$326,917	\$0
	<b>Total:</b>	<b>\$2,261,081</b>	<b>\$429,303</b>	<b>\$0</b>

### ***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 eight reports remaining that met this condition. The status of recommendations that involve internal NSF management is described on page 56.*

**INVESTIGATIONS CASE ACTIVITY**

(October 1, 2006 – March 31, 2006)

**Civil/Criminal Investigative Activities**

Referrals to Prosecutors	7
Criminal Convictions/Pleas	1
Civil Settlements	2
Indictments/Information	1
Investigative Recoveries	\$783,989.91

**Administrative Investigative Activities**

Referrals to NSF Management for Action	4
Research Misconduct Findings	7
Debarments	2
Administrative Actions	37
Certification and Assurance Actions <sup>25</sup>	15

**Investigative Case Statistics**

	<b>Preliminary</b>	<b>Civil/Criminal</b>	<b>Administrative</b>
Active at Beginning of Period <sup>26</sup>	103	58	64
Opened	90	24	36
Closed	108	18	36
Active at End of Period	85	63	64

<sup>25</sup> NSF accompanies some actions with a certification and/or assurance requirement. For example, for a specified period, the subject may be required to confidentially submit to OIG a personal certification and/or institutional assurance that any newly submitted NSF proposal does not contain anything that violates NSF regulations.

<sup>26</sup> Last period we reported 57 C/C cases and 65 Admin. cases. During this period, an Admin case was converted to a C/C case which accounts for the difference in the numbers.



## Freedom of Information Act and Privacy Act Requests

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

- Requests Received 20
- Requests Processed 19
- Appeals Received 0

Response time ranged between 1 day and 20 days, with the median around 14 days and the average around 13 days.

# APPENDICIES

## *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. 11, 53)

Matters referred to prosecutors, and the resulting prosecutions and convictions.  
(See pp. 29, 60)

Revisions to significant management decisions on previously reported recommendations, and significant recommendations for which NSF has not completed its response.  
(See pp. 23, 59)

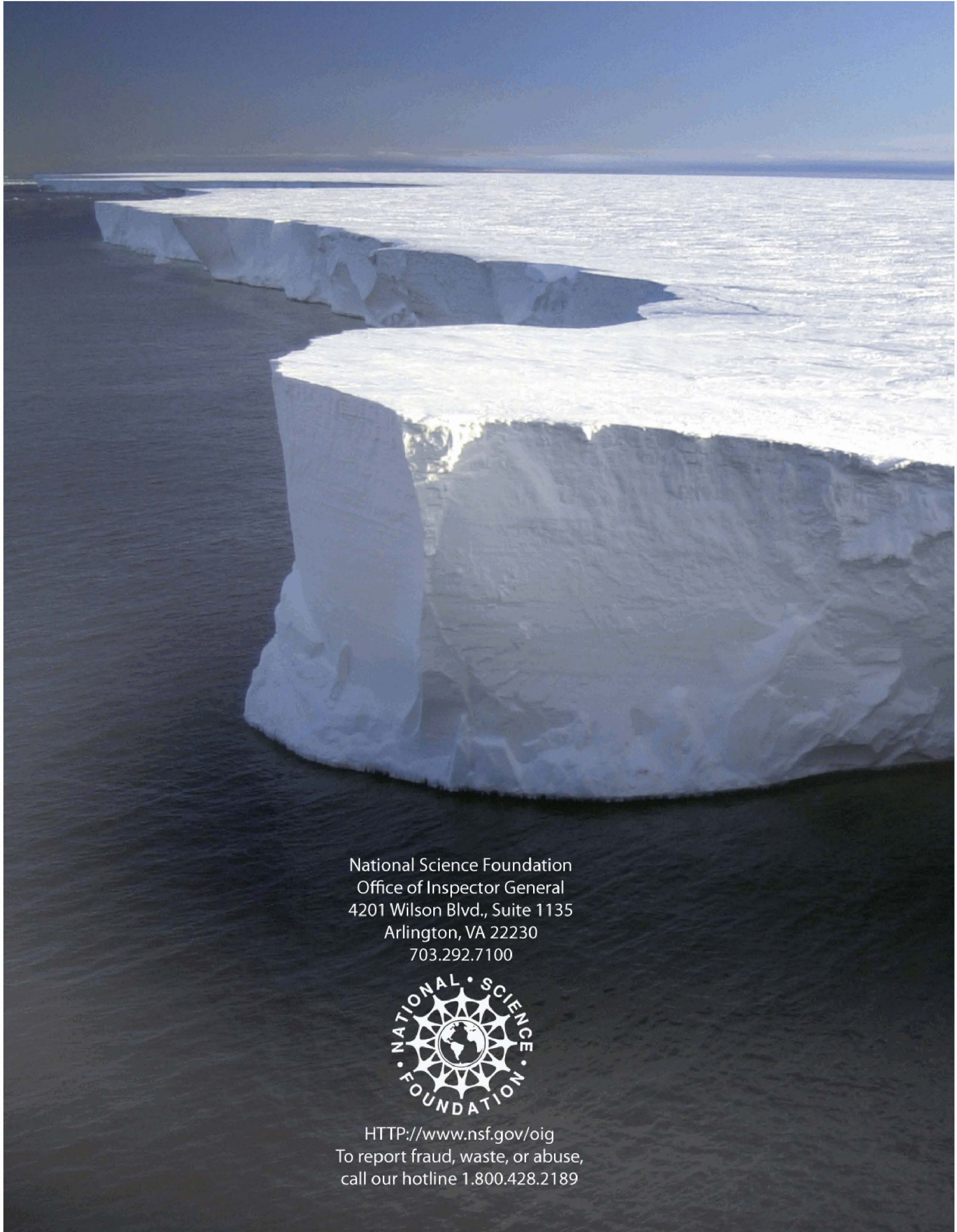
Legislation and regulations that may affect the efficiency or integrity of NSF's programs.  
(See p. 5)

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)

## ACRONYMS

CASB	Cost Accounting Standards Board
CFO	Chief Financial Officer
COI	Conflict of Interest
COV	Committee of Visitors
DACS	Division of Acquisition and Cooperative 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
FASAB	Federal Accounting Standards Advisory Board
FFRDC	Federally Funded Research and Development Centers
FISMA	Federal Information Security Management Act
FOIA	Freedom of Information Act
FY	Fiscal Year
GAO	Government Accountability Office
GPRA	Government Performance and Results Act
GSF	Global Science Forum
GPG	Grant Proposal Guide
IG	Inspector General
KMS	Knowledge Management System
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
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPP	Office of Polar Programs
PCIE	President's Council on Integrity and Efficiency
PI	Principal Investigator
PFCRA	Program Fraud Civil Remedies Act
QCR	Quality Control Review
RPSC	Raytheon Polar Services Corporation
SBIR	Small Business Innovation Research
STC	Science and Technology Centers
USAP	United States Antarctic Program
USI	Urban Systemic Initiative
USP	Urban Systemic Program



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