



National Science Foundation

# SEMIANNUAL REPORT TO THE CONGRESS

March 2006

Office of the  
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...***

Spattering or glowing vents inside Pu`u `O`o, Kilauea's active vent. Kilauea is the youngest and southeastern-most volcano on the big island of Hawaii. (Photo by Tom Pfeiffer / [www.decadevolcano.net/VolcanoDiscovery.com](http://www.decadevolcano.net/VolcanoDiscovery.com); selected by Ken Straka)

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# From the Inspector General

## *Letter from the IG...*

This report highlights the activities of the National Science Foundation (NSF) Office of Inspector General (OIG) for the six months ending March 31, 2006. During this period, our office issued 17 audit reports and reviews that identified \$2,671,061 in questioned costs and \$940,046 of promised cost-shared funds at risk of not being contributed. In addition, we closed 43 civil/criminal cases, 30 administrative cases, and recovered \$2,331,397 as a result of our investigative efforts.

Although the amount of questioned costs is one important measure of an OIG's effectiveness, it is not the sole objective of the audits we conduct of NSF grant funds. Over the past few years we have changed the focus of our audits to look more closely at the financial internal controls of the research institutions funded by NSF and to assess their effectiveness. We have learned that to simply question the allowability of costs claimed for an award is not enough to assure appropriate accountability for federal dollars. Our goal is to prevent fraud, waste and abuse by helping institutions to recognize weak internal controls and to strengthen them so that future funding will be better managed.

I again reaffirm our support for amending the Program Fraud Civil Remedies Act of 1986 (PFCRA) to include NSF. PFCRA enables designated agencies to handle allegations of program fraud, when the claims are less than \$150,000, without the assistance of the Department of Justice. In March, the National Science Board sent a letter to Congress formally requesting that PFCRA be amended to include the National Science Foundation. I urge Congress to consider that request.

On page 18 of this report, we discuss some of our recent audit work involving the reporting and dissemination of NSF research results. Effective communication of the outcomes of scientific research serves many purposes, including maximizing the impact of NSF's investments in research, affording the agency appropriate recognition as a sponsor of cutting-edge science and technology, and facilitating access to scientific results by researchers in related fields. In February, we issued a report that examined NSF's dissemination practices and found that NSF relies heavily on the individual researchers to publicize their own results. We believe that the agency could, and should, do more. For example, other federal grant-making agencies make citations in journals resulting from their research available to the public, and often go further by providing free and convenient access to the final reports or published articles. In an era in which technology allows the instantaneous and widespread communication of scientific results, NSF is not taking a good opportunity to provide a useful service to the science community. A follow-up audit report exploring other issues related to dissemination will be issued within the next few months.

Finally, in May 2006, the terms of eight key members of the National Science Board will expire. Dr. Warren Washington, Dr. Diana Natalicio, Dr. Mark Wrighton, Dr. Nina Federoff, Dr. Michael Rossman, Dr. Jane Lubchenco, Dr. Daniel Simberloff, and Dr. John White will be leaving the Board. The six-year terms of these members coincide with my tenure as Inspector General and I am very pleased to have worked with them and to have observed first-hand their contributions to NSF and to the scientific and engineering research, and education enterprises. In particular, I want to express my deep appreciation to Dr. Washington, Chairman of the National Science Board, and Dr. Wrighton, Chairman of the Audit & Oversight Committee, for their interest and support of the OIG over the past four years.

A handwritten signature in cursive script, reading "Christine C. Boesz".

Christine C. Boesz, Dr.P.H.  
Inspector General  
May 8, 2006



# Executive Summary

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- The audit of NSF's FY 2005 financial statements resulted in an unqualified opinion. However, in its Report on Internal Controls Over Financial Reporting, the auditors identified two reportable conditions relating to NSF's post-award administration and contract monitoring. In February, NSF submitted its proposed action plans to address six recommendations related to these reportable conditions. The proposed corrective actions were reasonable and generally responsive to all but two recommendations. The OIG and the independent auditor will continue working with NSF management to ensure these issues are resolved in a timely manner. **(Page 13)**
- The OIG contracted with the Defense Contract Audit Agency (DCAA), to complete a series of audits of the financial reports and practices of Raytheon Polar Services Company (RPSC) which provides operations and maintenance support to NSF's United States Antarctic Program (USAP). Most recently, the OIG and DCAA completed three more reviews that assessed RPSC's compliance with its federally disclosed cost accounting practices and the adequacy of its financial business systems and controls. The auditors found that RPSC improperly claimed \$ 21.1 million of indirect costs as direct costs for the contract period 2000 to 2002 contrary to its disclosure statement. As a result, the Department of Defense (DOD), which is responsible for overseeing RTSC's compliance with its CASB disclosure statement on all federal contracts, issued an initial determination of non-compliance to RTSC for RPSC, its subsidiary. **(Page 14)**
- In February 2006, OIG issued an audit report on NSF's policies and practices for publicly disseminating the results of NSF-funded research, including the information that it receives in the final project reports. Although NSF provides the public with information about proposed research selected for funding, the auditors found that it does little to publicize information about the results of that research. While NSF collects citations of journal articles resulting from its funded research, it is the only federal agency that does not provide this information to the public. The audit report recommends that NSF make the publication citations more widely available by including them in the award abstracts database already publicly available through its website. **(Page 18)**

- A scientist who owned a small business, was sentenced to 12 months home confinement, five years probation, and fined \$20,000 for Mail Fraud and Tax Evasion charges related to grants and contracts received from SBIR awards made by NSF and other agencies. The scientist previously pled guilty to sending SBIR Phase II progress reports to NSF that included research previously conducted by the company under an Air Force SBIR Phase II contract, and failing to pay income tax on grant funds he converted to his personal use. He paid \$288,414 for penalties and interest related to tax evasion, and the court prohibited him from participating in federal grants, contracts, or employment for five years. In addition, the scientist paid \$1,111,586 to the government to settle a False Claims Act case based on investigative findings that the scientist submitted false reports to various agencies related to SBIR awards. **(Page 27)**
- A university paid \$2.5 million and entered into a settlement agreement with the federal government to resolve civil allegations that it submitted false claims on approximately 500 federal grants awarded from 1997 through 2004. The National Science Foundation's share of the settlement was \$345,808. The grants were made by numerous federal agencies for work to be performed at two of the university's specialized service facilities (SSFs). A multi-agency investigation concluded that the university submitted grant applications containing incorrect or overstated information about anticipated expenses in the SSFs, because the university did not use a proper basis for setting and regularly updating its billing rate structure, as required by OMB Circular A-21. As part of the settlement, the university also signed a compliance agreement with the federal government that will require it to make significant changes in its grant administration program. **(Page 27)**
- An OIG investigation concluded that a PI plagiarized text and figures from multiple source documents into two SBIR Phase I proposals he submitted to NSF. We recommended NSF send the PI a letter of reprimand informing him that NSF has made a finding of research misconduct against him, and require that when proposals are submitted by the PI, or on his behalf, to NSF, he be required to submit a certification to OIG for 3 years that, to the best of his knowledge, they contain nothing that violates NSF's research misconduct regulation. **(Page 32)**
- The 2005 OIG Performance Report describes progress in the achievement of our three goals: 1) to promote NSF efficiency and effectiveness; 2) safeguard the integrity of NSF programs and resources; and 3) utilize OIG resources effectively and efficiently. **(Page 37)**