National Science Foundation



Semiannual Report to Congress

September 2009

#### About The National Science Foundation...

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

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

### And The Office of the Inspector General...

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

#### About the Cover...

Cover Photo by Kenneth L. Busch.

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### From the Inspector General



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

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

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

Our investigative work has also yielded significant results. Because it is essential to the integrity of research funded with taxpayer dollars that such projects be carried out according to the highest ethical standards, we continue to aggressively pursue research misconduct by NSF-funded researchers. During this period, we recommended that NSF debar a doctoral student who falsified data in a project involving NSF funding and a research professor who fabricated and falsified data. I am pleased to report that NSF has taken significant steps to address previously reported cases, and among other actions, debarred an associate professor who committed plagiarism in seven NSF proposals that resulted in awards of \$420,000. The agency has also taken major steps to address recommendations arising from employee misconduct cases we reported in March 2009. Among other things, the NSF Director issued a memorandum to all staff detailing the safeguards, training, and policies NSF has implemented pertaining to inappropriate use of government computers. The memorandum made clear that NSF has a zero tolerance policy for such misconduct and that it will strictly enforce this policy. Resolving these cases required sustained interaction between my office and NSF. I look forward to continued cooperation with the agency toward our mutual goal of eliminating such misconduct from NSF's workplace.

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

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# **Report Highlights**

- The OIG continued its proactive oversight of NSF's Recovery Act spending and issued three Alert Memoranda to NSF identifying potentially risky institutions that may receive ARRA funds; providing information about the goals Congress and OMB intended NSF to meet with its ARRA funds; and analyzing whether NSF adequately justified funding proposals approved prior to enactment of the Recovery Act with money intended to address specific new recovery and reinvestment goals.
- An audit at the Carnegie Institution of Washington found that as a result of continuing internal control weaknesses, the approximately \$31 million awarded in NSF grants that the Institution is currently managing could be at risk of being misused.
- Audits evaluating whether universities' internal controls are adequate to properly manage, account for, and monitor the more than \$1.2 billion in salaries and wages provided by NSF annually found significant deficiencies in those controls. One university, which billed \$16 million in labor charges to NSF and \$49 million to other federal agencies in FY 2007 alone, had extensive unsupported labor cost transfers.
- A doctoral student demonstrated a pattern of purposeful data falsification. She purposefully falsified data and conclusions in 5 manuscripts citing NSF support, and persuaded an individual to manipulate data to cover up an earlier falsification.
- In response to OIG recommendations NSF debarred an associate professor for 18 months and took actions against several other PIs. The associate professor had plagiarized into seven NSF proposals resulting in awards of \$420,000.
- In response to OIG management recommendations relating to employee misuse of government computers, NSF took several actions including installing internet filtering software; issuing a memorandum to all NSF making it clear that NSF has a zero tolerance policy for inappropriate use of government computers; removing two employees, and taking administrative action against several other employees.

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