

**NATIONAL SCIENCE FOUNDATION**

**OFFICE OF INSPECTOR GENERAL**

**Performance Plan  
2008 - 2009**



## INTRODUCTION

This performance plan is presented in two sections: the Office of Inspector General (OIG) Strategic Plan for 2005-2010, and the OIG Annual Plan for April 1, 2008, through March 31, 2009.

The *OIG Strategic Plan* (p. 2) identifies the OIG's vision, mission, basic values, five-year strategic focus, management challenges for the National Science Foundation (NSF), and core functions. It also includes the *OIG Workforce Plan* (p. 9), which describes the human capital needed to meet the office's strategic goals over the next three years.

The *OIG Annual Plan* (p. 12) describes the goals and strategies we will use to focus our operations over the 12-month period to achieve our strategic objectives, as well as the measures we will use to determine our progress. Our goals include (1) promoting NSF efficiency and effectiveness, (2) safeguarding the integrity of NSF programs and resources, and (3) using OIG resources effectively and efficiently.

The purpose of our performance plan is to identify OIG's broad priorities and direction for the coming years and to guide our specific activities for the current year. We are using the 12-month period from April 1 to March 31 as our performance period in order to tie office-wide performance goals more effectively to individual performance, which NSF requires be rated during that 12-month period. We are committed to integrating this plan into our ongoing management system, assessing its progress on a regular basis, making adjustments as needed, and achieving our goals.

# OIG Strategic Plan

## VISION

We will use our diverse and talented staff to assist NSF in improving its programs and meeting the needs of the communities it supports. We will help prevent problems, address existing issues in a timely and proportionate manner, keep abreast of emerging challenges and opportunities, and facilitate positive change.

## MISSION

Under the authority of the Inspector General Act of 1978, as amended, the OIG conducts independent and objective audits, investigations, and other reviews to provide effective oversight of NSF activities. Our specific aims are to promote the efficiency and effectiveness of NSF programs and operations and to safeguard their integrity. We strive to address the concerns of our stakeholders: the National Science Board, the Congress, NSF, the research communities, the Executive Branch, and the American public.

## BASIC VALUES

***Professionalism.*** We follow accepted technical and ethics standards of our disciplines; do our work fairly and thoroughly; represent our results accurately, objectively, and with a sense of proportion; and complete our work within a reasonable time so that it is available for relevant decisions.

***Accountability.*** We take responsibility for the quality of the work we perform and promote integrity, objectivity, and consistency in all our efforts.

***Flexibility.*** We make every effort to anticipate changing information, environmental conditions, and potential opportunities and obstacles; adjust our priorities and work methods as needed; and employ effective communications to increase the positive impact of change.

***Innovation.*** We think creatively, adopt new ways of addressing issues tailored to unique circumstances, take reasonable risks in resolving problems, and build on successful processes to make them better.

***Teamwork.*** We are respectful of others; seek common ground when differences occur; be honest, trustworthy, and straightforward; and are cooperative without compromising our independence. We engage employees at all levels in developing and continually improving our work methods and products.

## 5-YEAR STRATEGIC FOCUS

The OIG's strategy focuses primarily on providing independent oversight to ensure the efficiency, effectiveness, and integrity of NSF's business activities. We are not responsible for managing any NSF program operations, nor do we attempt to assess the scientific merit of research funded by the agency. Instead, we concentrate our resources on monitoring agency management functions that may pose significant financial or other risks, investigating allegations of criminal behavior or other misconduct, and recommending corrective actions to NSF management. In determining our priorities, we consider the results of prior audits and consult closely with the National Science Board and the Congress, to both of whom the Inspector General directly reports, and with NSF managers and staff, the Office of Management and Budget, and members of the research communities supported by NSF. Over the five-year period covered by this strategic plan, the OIG has identified the following as areas for priority attention:

- Pre-award assessment of awardees' grant management capability
- Post-award monitoring of awardees' financial and program performance
- Post-audit follow-up on audit findings and recommendation
- Oversight and management of centers and large facility awards
- Assessment of research results and return on investment
- Awardee and NSF financial accountability and compliance
- Security and adequacy of NSF infrastructure, including personnel, equipment, and information technology resources
- Quality of Single Audits
- NSF employee and awardee integrity
- Misconduct in research

*Internal Audits of NSF.* Through internal audits of NSF, the OIG will assess six areas that have been identified as management challenges or risks to NSF, or are federal priorities: (1) Pre-award processes, including merit review, contract procurement, and pre-award evaluation of awardees' capabilities to manage NSF funds; (2) Post-award monitoring of active awards and major projects, including centers and large facilities, such as the U.S. Antarctic Program; (3) Post-audit processes, including the resolution of audit findings and recommendations and the implementation of corrective actions plans that adequately address the root causes of the findings; (4) Evaluation of scientific research results, including the results of long-term investments in major research and education projects; (5) Safeguarding physical and intangible assets, including sensitive agency information such as personally identifiable information; and (6) Financial accountability as mandated by federal requirements such as the Chief Financial Officers Act and the Federal Managers Financial Integrity Act.

*External Audits.* The number, size and complexity of NSF's award portfolio pose a risk that NSF may make improper payments or that awardee institutions may not comply with applicable federal and NSF financial and administrative requirements. Consequently, OIG expects to continue allocating a significant portion of resources to audits of selected high-risk awardees to evaluate their financial accountability and underlying internal controls to ensure compliance with federal requirements and the

terms and conditions of their NSF awards. OIG will continue to use its own audit staff, independent public accounting firms and other Federal agencies under contract with OIG to conduct audits of these higher risk programs and institutions. OIG also expects to continue to conduct audits of NSF awards supporting international projects as NSF expands its involvement in international collaborations and activities.

*Evaluation of OMB Circular A-133 Audits.* NSF's substantial reliance on CPA audits performed under the Single Audit Act requires closer OIG oversight of their quality, including the establishment of an ongoing quality control review program. Audits performed under the Single Audit Act are intended to provide federal agencies with assurance that their awardees are properly accounting for and managing federal grant funds. The OIG participated with other OIGs in the Government-wide *Report on National Single Audit Sampling Project*, issued in June 2007, which found "significant percentages of unacceptable audits and audits of limited reliability." OIG will continue to support government-wide actions to address the audit quality deficiencies identified by the project.

*Investigations.* We will continue to react effectively and in a timely manner to allegations of fraudulent practices, and over the next few years we will focus greater effort on proactive prevention and detection of grant fraud. This will include expanding our outreach to ensure that NSF staff and awardees understand the rules and regulations that apply to them. It also includes efforts to determine if violations identified during individual investigations are widespread, whether they undermine the integrity of the data upon which NSF relies, and evaluating indicators of grant fraud that may be found during audits and other reviews. We will conduct a proactive, interdisciplinary assessment of complex audit findings that may indicate fraud or other potential violations that may go undetected. Investigators could be expected to initiate more cases resulting from grant fraud and compliance review programs, as well as from proactive SBIR fraud reviews. We will continue to identify opportunities to assist awardee institutions, other government agencies, and other IG offices in deterring misconduct, fraud, and other violations. Within the federal IG community, we will continue to play a leadership role in establishing more effective coordination of grant fraud prevention and detection. Further, we will continue to play a leadership role in the area of research misconduct. While continuing to serve as a leader in education, prevention, and detection efforts in this area, we will expand our efforts as the global impact of research misconduct is more fully understood and acknowledged. Finally, we will work among all federal investigative agencies and in developing, testing, and implementing a peer review process for investigations units in ECIE IG offices.

*Administration.* OIG will continue to develop and refine the OIG Knowledge Management System, which is tailored to the specific needs of our investigative, audit, and management staff. We also seek to establish a more integrated performance management system within OIG, with a more effective coupling of our annual OIG performance plan with the individual performance appraisal process. These initiatives will serve to enhance the productivity and effectiveness of OIG staff.

*Management Challenges.* To a significant extent, OIG's priorities are governed by its annual list of the most serious management and performance challenges facing NSF. In many cases, these difficult challenges will extend over at least the next several years, and they largely reflect the results of our past work, the priorities enunciated for the federal government by the Congress and the Administration, and

our staff's knowledge of agency operations. The current management challenges include:

- Award and contract administration, including post award administration, management of large infrastructure projects, contract monitoring, and audit resolution.
- Human Capital, including workforce planning and administrative infrastructure.
- Budget, Cost and Performance Integration, including performance reporting and the provision of information about the costs of NSF operations.
- Information Technology (Enterprise Architecture).
- The United States Antarctic Program, including long-term planning for NSF facilities in the Antarctic, and accounting for property, plant and equipment.
- Merit Review, and in particular, implementation of the criterion for broadening participation.

### **CORE FUNCTIONS**

In keeping with our statutory mission, we perform an oversight role and do not engage in program operating functions. Broadly speaking, our work may be divided into three functional areas: (1) *audits and reviews*, which provide information about how well systems function, determine whether activities comply with financial and compliance standards, and identify ways systems can be improved; (2) *investigations*, which address allegations of serious civil, criminal, or research misconduct; and (3) *education and outreach*, which provides a valuable means of establishing and maintaining effective communications between OIG, NSF, and the research communities, which is essential in facilitating our mission of promoting the efficiency and effectiveness of NSF programs and operations and safeguarding their integrity. In each area, we strive to focus on substantive matters, to demonstrate our commitment to perform our duties fairly and to work cooperatively without compromising our independence.

Certain issues require interdisciplinary coordination across these functional areas. An example is information technology security: we aim to develop a coherent approach to computer security so that we can investigate possible security breaches, audit the capacity of NSF computer systems to withstand attempted intrusions, and develop preventive measures to meet the security needs of both NSF and OIG. Such an approach is likely to involve teams composed of auditors, investigators, attorneys, and/or outside experts in information technology and related fields. This is one of several areas in which we believe interdisciplinary collaboration holds great promise for advancing our mission. Others include involving auditors at early stages of investigations into alleged financial improprieties, creating teams of auditors and investigators to work on compliance issues, and bringing together scientists and auditors for performance reviews.

#### **Audits and Reviews**

Most audits and reviews focus on the efficiency and effectiveness of NSF's programs and operations, as well as those of award recipients. We conduct financial and compliance audits, which primarily determine whether costs claimed by awardees are allowable, reasonable, and properly allocated and whether the awardees' internal

control systems are adequate for monitoring their NSF awards. We are also responsible for performing an annual audit of NSF's financial statements, including an evaluation of agency internal controls and data processing systems. We expect to continue to devote increased attention to performance issues that go beyond financial compliance.

We focus our audits and reviews on issues of substantial concern and prospective importance to NSF and its goals. We select and design projects based on assessments of the risk involved in the activity to be reviewed and the likelihood that an audit or review would lead to improvements.

#### Focusing on Substantive Matters

- We consider program, management, and financial risks.
- We conduct our reviews in accordance with government standards and in ways that assist NSF in pursuing its mission.
- We develop and explain our recommendations in terms of how they will improve NSF effectiveness and efficiency.
- We establish priorities for our work by selecting reviews that promise the greatest substantive benefit for NSF.

#### Conducting Reviews Fairly

- After we collect and analyze our data, we solicit feedback from the affected parties and give full consideration to their views.
- To ensure that our reports are thorough, fair, and accurate, we follow accepted quality control practices in the IG community and comply with all relevant federal and professional standards.

#### Working Cooperatively without Compromising our Independence

- We keep affected parties informed, invite them to identify issues of special concern, and endeavor to address the issues they identify.
- We seek to develop analyses and recommendations that enable NSF management and awardees to make improvements.
- We work with NSF managers and awardees to familiarize them with federal requirements and explore ways they can comply without undue burden.

#### Investigations

We are responsible for investigating possible wrongdoing involving organizations or individuals who submit proposals to, receive awards from, conduct business with, or work for NSF. We seek to perform focused, well-documented investigations addressing evidence of serious wrongdoing. When appropriate, the results of these investigations are referred to the Department of Justice or other prosecutorial authorities for criminal prosecution or civil litigation, or to NSF for administrative resolution.

Investigating allegations of research misconduct, specifically falsification of data, fabrication of data, and plagiarism, is among our most important responsibilities. Misconduct in research and education strikes at the core integrity of NSF's mission and compromises the research enterprise on an increasingly global scale. It is therefore a special concern for our office.

### Focusing on Substantive Matters

- We concentrate our investigative resources on the most serious cases, as measured by such factors as the amount of money involved, the seriousness of the alleged ethical violations, and the strength of the evidence.
- We give highest priority to cases that will directly affect future NSF activities, including cases that involve protecting the integrity of federal funds and decision processes, allegations of wrongdoing by NSF staff, and allegations that concern ongoing awards.
- We give priority to cases that will create significant issues for NSF management if they remain unresolved.
- Our research misconduct cases focus on serious violations of the ethical standards that are important to the scientific community.

### Handling Cases Fairly

- Our investigative process includes internal review by staff who have not yet formed an opinion in the case and who bring different disciplinary perspectives to bear on it. Our reviews ensure that matters are kept in proportion and that similar matters are treated consistently.
- We make every effort to collect relevant information in a manner that minimizes the burden on the providers while also allowing a thorough analysis of the facts.
- We protect the privacy of investigative subjects by seeking information directly from them. We conduct our investigations discreetly to avoid inadvertent damage to reputations.
- We value timeliness and recognize that delay can undermine fairness. We give priority to resolving cases in which we have already contacted the subject of the investigation.
- We review past cases in determining how to handle new cases, allowing us to discipline our use of discretion and foster consistency without sacrificing flexibility.

### Working cooperatively without compromising our independence

- When handling allegations of research misconduct, we seek to accommodate variations in the investigative procedures at awardee institutions. We require that awardees follow fair and reasonable procedures consistent with NSF regulations.
- We work with awardee institutions to ensure that their investigations meet NSF's needs by articulating our concerns at the outset and offering assistance throughout an investigation. We provide advice to help the institutions meet their needs as well as ours.
- We explain our practices and procedures to all affected parties, and when we cannot share substantive information, we explain why.
- We coordinate our work closely with Department of Justice attorneys, law enforcement officers, research university administrators, and officials at other agencies and institutions.



- Based on our experience with research misconduct, we play a leadership role among federal agencies.

### **Education and Outreach**

An effective education and outreach program is essential to the successful performance of our mission of preventing and detecting problems. Our outreach program also plays a key role in reinforcing NSF's support for the integrity of and compliance with its rules, policies and procedures.

Outreach activities within NSF, such as our liaison efforts with the directorates, make us more accessible to managers and staff and increase the chance that we will hear about important issues. These activities also help educate NSF employees about their obligations to report alleged research misconduct and other issues of fraud, waste, and abuse. Through external outreach to the communities NSF supports, we help NSF foster the responsible use of government funds and integrity in government-supported research programs. We also communicate that our work focuses on matters of substantial concern to NSF and is done with sensitivity to the perspectives and practices of our funded community.

Outreach activities are also a valuable learning tool for OIG staff, as they help familiarize us with NSF and its people, further our understanding of agency operations and the communities it serves, and keep us abreast of changing conditions. They also build trust in our ability to handle sensitive matters with tact, fairness, thoroughness, and a sense of proportion. Such trust is essential for our office to sustain high quality audits, reviews, and investigations.

### **Office-wide Functions**

In addition to conducting audits and investigations, we pay special attention to staffing and operations. These practices support our core functions. To perform those functions well, we need a capable staff, sound policies and procedures, in-depth knowledge of NSF and the communities it serves, and a coordinated education and outreach effort.

**Staffing and Operations.** We are committed to developing the skills of our staff through formal training, challenging work assignments, and a work environment that encourages teamwork, diversity, open communication, and learning. Through collaboration among staff members in the various disciplines represented in OIG, we help our staff develop a broader appreciation of the different aspects of effective performance in NSF-funded activities.

We will continue to improve our management information systems and technologies to create a more productive and satisfying work environment, in which work is planned better and executed in accordance with office-wide priorities. Our individual performance plans will continue to be tied closely to the OIG annual plans, we will work with NSF to continue to improve human resource support, and we will manage our training resources effectively.

## OIG WORKFORCE PLAN

*Overview.* The NSF Office of Inspector General workforce plan serves as a guide for identifying human capital needs, developing and implementing solutions, and evaluating progress toward achieving OIG's strategic goals over the next three years. The plan represents our best estimate of how our current workforce will be adjusted in response to future challenges. OIG will update this plan each year in conjunction with its annual performance plan.

Our current strategic plan describes 10 program areas on which we expect to focus attention over the next few years, including agency management of large programs and facilities, procurement, and misconduct in research. In the past, OIG has pursued a number of initiatives that have changed the way we work in order to maximize productivity of our staff. Many of these initiatives are listed in our performance plan. For example:

- OIG has invested in a knowledge management system (KMS) that has enabled us to be more efficient in scheduling, performing, and reporting on our work.
- The Office of Audit is planning to convert to electronic workpapers to help standardize the audit process and increase its efficiency.
- We expect to continue to increase our use of contractors to perform external audits and provide technical support in complex investigations.
- Our audit and investigative staffs have made significant strides in improving our targeting of high-risk situations.

OIG currently has 74 staff including temporary employees such as interns: 37 work in the audit division, 26 in investigations, and 11 in administration. We believe that the current staffing balance is appropriate for OIG's foreseeable needs, with adjustments noted below in the event of additional funding, and no significant change in the composition of the workforce is expected. To develop our plan, we determined how many members of our staff are approaching retirement and found that as of May 2007, 19 OIG employees, representing almost 30 percent of the workforce, will be eligible to retire within the next five years. Approximately 20 percent of the staff are already eligible or will become so within the next two years. Many of these positions are concentrated at the senior level, indicating an increased need in coming years to engage in succession planning. During the past four years, the turnover rate within OIG has averaged approximately 10 percent per year. If this rate continues, it will allow us some flexibility in adjusting our workforce to meet changing needs and priorities, but any significant changes in workforce emphasis or skill-sets would be possible only with additional funding.

*Audits.* Our audits will focus primarily on six areas that we believe pose the greatest challenge to the agency: (1) award oversight and monitoring, including the management of large infrastructure projects and centers and NSF's execution and refinement of a risk-based program for monitoring its 35,000 active awards; (2) NSF processes for following up on audit findings and recommendations and ensuring corrective action plans that adequately address the basic causes of the findings are implemented; (3) safeguarding information assets, particularly personally identifiable information, as directed by OMB; (4) meeting the new government-wide requirements to identify, test, and report on financial reporting controls under the Federal Managers Financial Integrity Act; (5) NSF oversight of the scientific

performance of its research and assessment of the results of its long-term investments in major research programs; and (6) specific program issues, such as the management of the U.S. Antarctic Program and the recompetition of the contract for this Program, and the transparency of NSF's merit review process.

OIG is allocating more resources to conduct audits of NSF's financial statements and information security systems, in accordance with the requirements promulgated by the Government Management Reform Act and the Federal Information Security Management Act. Accelerated financial statement reporting deadlines, ever-increasing audit requirements, and heightened attention to information-security controls will compel us to expand our efforts in these critical areas. The financial statement and information systems audits, which OIG oversees, but which are performed by an independent CPA firm, currently cost about half of the OIG's funds available for contracted audit work. If future budgets permit, we plan to increase the audits of NSF's information technology program, requiring OIG to add an auditor with systems-auditing experience.

The growing size and complexity of NSF's awards have increased NSF's exposure to fraud, waste and mismanagement and require the OIG's active oversight. Consequently, we plan to audit selected high-risk awardees and programs using our own audit staff, as well as CPA firms under contract with OIG, and we need experienced auditors to oversee contractors' work and ensure it meets our standards. However, the market for experienced auditors has become substantially more competitive in recent years, requiring us to explore new approaches to recruiting and retaining qualified staff.

*Investigations.* Our investigative cases continue to become more complex, requiring increased interaction with NSF, institutional administrators, international organizations, and the Department of Justice in order to bring about effective resolutions. In addition, NSF OIG serves as the focal point for investigating allegations of research misconduct and has experienced a 300 percent increase in both allegations and substantive investigations over the past decade. We will need to recruit at least one additional investigator in order to handle the workload created by the more-intricate civil/criminal cases and the growing number of research misconduct cases.

In recent years, an important component of the resolution of a growing number of our institutional cases has been a compliance agreement. This is a compact between the institution, NSF management, and OIG that requires the institution to implement a set of specific management controls to ensure that federal regulations on the handling of grant funds are fully observed. Such agreements require follow-up by OIG to ensure that the actions to which an institution has committed have in fact been performed. Investigations will need to continue to recruit staff with exceptional legal, administrative, and communications skills to conduct this monitoring. The increase in both reporting and report-monitoring responsibilities for the investigations unit over the next two years will also require the creation of an executive officer position to manage these activities.

Over the next few years we will continue to focus greater effort on proactive reviews that result in the detection of grant fraud and the deterrence of fraudulent behavior. Based on our recent investigative experience, we have initiated proactive reviews that have been remarkably successful in detecting fraud and mismanagement through better targeting of high-risk institutions and activities. These efforts require increasing use of forensic financial and computer skills to develop investigative leads

and evidence. Prevention activities also include expanding our outreach to ensure that NSF staff and awardees understand the rules and regulations that apply to them. As NSF programs have increased in funding, complexity, and number, OIG has seen a commensurate increase in requests for information from universities and research institutions. No immediate new positions are anticipated, but over the longer term, additional staffing may become necessary to ensure that institutional staff and researchers are fully informed of applicable regulations and policies.

*Administration.* The office's administrative staff has undertaken several large projects over the past five years that have fundamentally changed the way our employees work. OIG's development of a KMS system and a performance planning process have informed the efforts of OIG staff, increased management and operational efficiency, and given staff more explicit direction. OIG will continue to expand and refine the KMS, which has been customized to meet the requirements of our investigative, audit, and management staff. We are also working to establish an integrated performance management system within OIG, with a more effective coupling of our annual OIG performance plan with the individual performance appraisal process. No increases in our administrative staff are contemplated at this time.

*Summary.* If the OIG budget remains flat over the next few years, we will be able to implement only those actions that have a minimal effect on personnel costs, such as succession planning, and we will modify our recruiting practices to reflect the need for entry-level program performance auditors and more-experienced auditors to monitor contractors. If the budgets for FY 2009 and beyond provide adequate funding, we plan to add three additional auditors to perform IT, contracts, and performance audits; one or two investigative staff with legal, administrative, and communications skills to oversee compliance agreements with institutions; and an executive officer for the investigations division.

# OIG Annual Plan

## April 2008 – March 2009

### OIG GOALS

We have three goals that provide the framework for our performance plan:

1. ***Promote NSF efficiency and effectiveness.***
  - a. Increasing OIG impact on NSF's effectiveness and efficiency.
2. ***Safeguard the integrity of NSF programs and resources.***
  - a. Enhancing our ability to detect and address improper, inappropriate, or illegal activities.
  - b. Balancing reactive approaches (investigations) and proactive approaches (outreach, audits, and reviews) to achieve maximum preventive effect.
3. ***Utilize OIG resources effectively and efficiently.***
  - a. Continuing to strengthen our management and planning tools and techniques.
  - b. Fully developing, planning for, and utilizing OIG personnel.
  - c. Ensuring that managers and staff have the tools and resources necessary to accomplish their duties and responsibilities.
  - d. Initiating and participating in collaborative efforts with other organizations that have shared interests.
  - e. Promoting effective internal and external communications.

Our success is directly related to how well NSF accomplishes its programmatic responsibilities. Consequently, we will ensure that our work focuses on priority agency issues and that we provide useful, timely feedback to agency managers, the National Science Board (NSB), and the Congress. This plan covers the period from April 1, 2008, through March 31, 2009.

## Goal 1

### Promote NSF Efficiency and Effectiveness

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- Increase OIG Impact on NSF’s Effectiveness and Efficiency

In recent years, we have identified a wide range of issues concerning NSF management and operations, analyzed their causes, and made recommendations for improvements to the cognizant agency managers. In some cases, despite our efforts, issues previously identified have continued to pose problems for NSF. Recognizing that we play an advisory role and have limited control over how issues are ultimately resolved, we believe we can make our work achieve better results for NSF. The following performance measures and strategies describe the steps we will take to increase our impact on NSF effectiveness and efficiency.

#### How We Will Measure Progress

Performance will be measured through a series of performance indicators intended to ensure that we have more impact.

<b>Goal 1 Performance Measures</b>	
	<i>Data Source(s)</i>
1.1 OIG activities and products address substantive agency and federal issues.	Survey and Analysis
1.2 Outreach successfully supports NSF efforts to inform its awardee community about the financial/compliance standards that matter for effectiveness and efficiency.	Survey and Analysis
1.3 Information is available to NSF management in time to address issues	Survey and Analysis
1.4 Products are clear, concise and factual and convey realistic recommendations that will correct the problems identified	Survey and Analysis

## STRATEGIES AND ASSOCIATED ACTIONS

In order to achieve this goal, we plan to accomplish the following specific strategies and actions:

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

- *Initiate a process and develop a time-phased plan to convert to electronic audit workpapers.*
- *Develop a policy for risk-based audit supervisory review and report signature and transmittal, and associated audit report content and presentation templates for: 1) internal performance reports performed by OIG staff and 2) performance grant audit reports performed by OIG or contractors.*
- *Identify new policies or revisions to existing policies necessary to comply with the 2007 edition of Government Auditing Standards and develop a timetable for issuing/revising these policies.*
- *Develop supplemental procedures for the policy on audit report issuance and distribution.*
- *Conduct a training session for contractors to provide guidance and examples of quality audit reports.*
- *Identify key procurement milestone dates for all contract audits and initiate a process to track procurement milestones for all contract audits.*
- *Complete most OIG audits within one year of conducting the planning conference.*
- *If budget constraints allow, start all jobs designated “must-do” within audit planning year.*
- *Identify all jobs over one-year old as of April 1 and reduce backlog by 100%.*
- *Identify and monitor quarterly workload targets for each audit team.*
- *Discuss performance-based contracting with the Contracting Officer; present options on how to include performance-based language in our contracts.*
- *Complete evaluations of contractor-performed audits issued for March 31 and September 30 semiannual reporting periods.*
- *Review Office of Investigations (OI) operations for compliance with ECIE standards of performance.*
- *Review Investigations Manual and forms.*
- *Prepare a draft administrative manual for OI administrative functions.*

We will use the following measures to assess progress in implementing this strategy:

- A completed conversion plan to migrate to electronic workpapers.
- Completed audit report content and presentation formats for: 1) internal performance audit reports prepared by OIG staff; and 2) performance grants audit reports prepared by OIG staff or contractors.
- Identification of new policies or revisions to existing policies necessary to comply with the 2007 Government Auditing Standards and development of a timetable for formulating these policies.
- Development of procedures to supplement the policy on report issuance and distribution.

- Completion of training for contract auditors on writing quality audit reports.
- Tracking of procurement milestones for contract audits.
- Percentage of audits completed by OIG or its contractors within one year of conducting the planning conference.
- Percentage of must-do jobs started within an audit planning year (October 1-September 30).
- Reduction in backlog of jobs over one-year-old as of April 1 by 100%.
- Identification and tracking of quarterly workload targets.
- Development of options for including performance-based language in our contracts.
- Completed contractor evaluations for all contract audits issued for 3/31/08 and 9/30/08 semiannual reporting periods.
- Completion of OI internal peer review.
- Completion of revision of Investigations Manual and forms update.
- Completion of draft OI administrative manual.

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

- *Develop and execute the annual audit plan.*
- *Document decision for final selection of audits included in the audit plan.*
- *Based on funding by Directorate and Division, develop a risk analysis of key NSF programs and operations for use in audit planning.*
- *Review KMS report directory to identify improvements to the types of investigative reports available.*
- *Review preliminary (P-file) initiation process and ensure that administrative (A) and investigative (I) cases are opened as appropriate.*

We will use the following measures to assess progress in implementing this strategy:

- Development and execution of the annual audit plan.
- Documentation of decision for the final selection of audits included in the plan.
- Completion of funding risk analysis.
- Number of staff identified risk factors in NSF programs and operations.
- Completion of review and number of reports improved/modified.
- Completion of review of Debarment Report to ensure accuracy.
- Complete revision of intake process to ensure appropriate classification of P, I, and A cases.



## Goal 2 Safeguard the Integrity of NSF Programs and Resources

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- Enhance ability to detect and address improper, inappropriate, or illegal activities
- Balance reactive and proactive approaches in order to achieve maximum preventive effect

To maintain public confidence in government-funded research and education efforts, NSF and the education and research communities must show a high level of integrity in the expenditure of public funds and in the conduct of their efforts. These endeavors, moreover, cannot function effectively if researchers and educators cannot rely on their colleagues to produce and represent their results with integrity. When problems of integrity occur, they must be dealt with in a fair and responsible manner. OIG conducts activities to promote sensitivity to ethics in research and to help NSF reduce such abuses as falsification of data, plagiarism, fabrication of data, and misuse of government funds. The following performance measures and strategies describe the steps we will take to safeguard the integrity of NSF programs and resources.

### How We Will Measure Progress

Performance for this goal will be measured through a series of performance indicators intended to assess how well we are safeguarding integrity of programs and resources.

<b>Goal 2 Performance Measures</b>	
	<i>Data Source(s)</i>
2.1 Integrity issues are addressed in a timely and appropriate manner.	Survey and Analysis
2.2 Investigative outputs are clear, concise and factual and convey analytical rigor and specific, realistic recommendations	Survey and Analysis
2.3 Proactive activities successfully accomplish goals and enhance investigative efforts.	Survey and Analysis

## STRATEGIES AND ASSOCIATED ACTIONS

In order to achieve this goal, we plan to accomplish the following specific strategies and actions:

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

- *Implement a Civil/Criminal unit-wide approach to proactively detecting areas of high risk for fraud.*
- *Develop a proactive review process to explore issues associated with administrative investigations.*
- *Ensure effective compliance plan oversight.*
- *Utilize technology to facilitate the work of investigators.*

We will use the following measures for assessing progress in implementing this strategy:

- Completion and implementation of the plan.
- Initiate a proactive review regarding plagiarism.
- Number of compliance plan milestones met.
- Number of presentations conducted by video and teleconferences.

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

- *Identify and maintain focus on high-risk awardees.*
- *Conduct brainstorming sessions to generate new proactive ideas and to refine current risk areas.*

We will use the following measures for assessing progress in implementing this strategy:

- Number of proactive reviews initiated.
- Number of proactive efforts initiated.
- Number of brainstorming sessions.
- Number of referrals to OA.

### **3. Refine preliminary financial investigative steps.**

- *Improve initial techniques for financial analysis in potential fraud cases.*
- *Leverage existing audit and investigative information.*

We will use the following measures for assessing progress in implementing this strategy:

- Development of a “boilerplate” proposal for initial financial analysis.
- Number of cases in which past audits and A-133 audits were reviewed.
- Number of cases in which other OIGs are contacted.

## Goal 3 Utilize OIG Resources Effectively and Efficiently

- Continue to strengthen our management and planning tools and techniques
- Fully develop, plan for, and utilize OIG personnel
- Ensure that managers and staff have tools and resources necessary to accomplish their duties and responsibilities
- Promote effective internal and external communications

Our success depends on our ability to pull together as an organizational unit, make effective use of our limited resources, overcome internal divisions, develop an effective infrastructure for management, draw on resources external to our own organization, and focus our efforts on issues important to NSF. We have a diverse and talented workforce whose backgrounds and skills range beyond what one would find in a typical OIG. To effectively capitalize on our internal diversity, we must ensure a common understanding of office priorities, open communications both within our office and with outside organizations, and fully coordinated efforts to accomplish our goals. The following measures and strategies represent the steps we will take to address these issues.

### How We Will Measure Progress

Performance for this goal will be measured through a series of performance indicators intended to assess how well we are safeguarding integrity of programs and resources.

<b>Goal 3 Performance Measures</b>		<i>Data Source(s)</i>
3.1	Assessments to determine if we are effectively and efficiently utilizing OIG resources	Survey and Analysis
3.2	Adequacy of management and planning tools and techniques	Survey and Analysis
3.3	Effectiveness of personnel recruitment, retention, development, planning, and utilization	Survey and Analysis
3.4	Effectiveness of OIG internal communication	Survey and Analysis

## STRATEGIES AND ASSOCIATED ACTIONS

In order to achieve this goal, we plan to accomplish the following specific strategies and actions:

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

- *Analyze the previous year's biennial employee survey results and develop and implement corrective actions for any problems identified.*
- *Make system enhancements to KMS, including development of a fund-control tracking system for contract audits.*
- *Conduct KMS and other IT training, as necessary.*
- *Update KMS user manuals.*
- *Provide prompt, effective responses to requests for IT support.*
- *Identify and replace outdated computer systems.*
- *Test the automated calling system for continuity of operations planning and testing.*
- *Conduct at least one new employee orientation.*
- *Develop and implement annual audit training plan..*
- *Conduct exit surveys with all exiting staff to obtain feedback on any issues and areas for office improvement.*
- *Conduct all-hands Office of Audit meeting once a quarter. Audit staff will be invited to suggest agenda topics to their respective SAM or DAIGA.*
- *Conduct meetings of the Audit Employee Survey Advisory Group and the AIGA on a quarterly or other mutually agreed upon schedule to discuss issues of continuing concern among audit staff.*
- *Complete training identified in Individual Development Plans.*
- *Maintain and verify investigative training records for compliance with investigative core competency requirements.*
- *Provide presentations to OI staff on material learned and effectiveness of courses following any training attended.*
- *Participate in core competency training for investigators to increase staff knowledge.*
- *Revise OI position descriptions to ensure consistency and provide a career ladder for advancement.*

We will use the following measures for assessing progress in implementing this strategy:

- Development and implementation of corrective actions based on analysis of survey results.
- Completion of system enhancements to KMS.
- Development of a fund-control tracking system for contract audits.
- Provision of KMS and other IT training to OIG staff.
- Issuance of KMS user manual updates.
- Level of staff satisfaction with KMS and IT support, as reflected in employee survey.
- Replacement of specified computer systems.
- Testing of automated calling system.
- Completion of one new employee orientation session.
- Development and execution of the annual audit training plan.

- Number of exiting staff with whom exit surveys were conducted.
- Number of all-hands audit staff meetings.
- Number of meetings between the Employee Survey Advisory Group and AIGA.
- Number of classes completed in accordance with Individual Development Plans.
- Number of core competency classes completed.
- Number of presentations given to staff during OI meetings.
- Two related training courses completed by each OI staff member.
- Completion of OI position description revision project.

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

- *Ensure information exchange and referrals among the Audit, Investigation, and Administrative units.*
- *Share information about audit, investigative, and administrative activities at all-staff meetings.*
- *Maintain Investigations/Audit/Administrative teams and monitor their performance of 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.*
- *Increase OI staff's utilization of electronic review and mailing for correspondence.*
- *Hold brown bag lunch discussions of topics affecting OIG.*
- *Improve effectiveness of OI meetings.*
- *Address issues for OI highlighted in employee survey.*

We will use the following measures for assessing progress in implementing this strategy:

- Number of “brainstorming sessions” and other information exchanges among the audit, investigation, and administrative units.
- Number of referrals within OIG, as shown in KMS.
- Percentage of all-staff meetings at which auditors, investigators, and/or administrative staff give presentations about their activities.
- Percentage of OIG/NSF liaison teams composed of combined audit, investigative, and/or administrative personnel, and assessment of the effectiveness of such teams.
- Number of meetings between audit and investigation managers to discuss cross-cutting issues, mutual concerns, and cooperative efforts.
- Participation of staff from all OIG units in office-wide committees.
- Number of informational meetings conducted for administrative staff from each OIG unit.
- Extent of staff participation in the development and implementation of the annual OIG Performance Plan.
- Percentage of OI staff utilizing the electronic review process.
- Number of brown bag lunches.

- Implementation of revised schedule and section meetings for OI.
- Develop specific staff suggestions addressing survey issues.

### 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.*
- *Review statistical section of Semiannual Report for usefulness and to ensure it includes all statutory reporting requirements.*
- *Update NSF leadership regularly on OIG activities and concern.*
- *Participate in 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.*
- *Conduct active outreach to NSF and the research community, and particularly to professional associations of higher learning.*
- *Track usage of OIG website.*
- *Increase capability of OIG website to accommodate the use of multimedia informational tools such as videos, podcasts, and links to relevant news stories.*
- *Post audit reports to OIG website within required timeframe after issuance.*
- *Ensure that FOIA/PA requests are processed in a timely manner.*
- *Submit article(s) for publication in appropriate journals.*
- *Provide briefings to NSF staff during initial orientation.*

We will use the following measures for assessing progress in implementing this strategy:

- Percentage of semiannual reports to the Congress, annual OIG performance report, budget submissions, and other regular reports completed by prescribed target dates.
- Number of testimonies, responses to questions, and other information submissions provided at the request of congressional committees.
- Number of briefings provided to NSB members/committees, congressional staff or members, OMB staff, NSF staff, and others.
- Completion of budget requests in compliance with established deadlines.
- Number of OIG Newsletters issued.
- Review of new statistical section in Semiannual Report.
- Number of update meetings with the NSF Director and Deputy Director.
- Number and nature of participation in activities within the IG community, particularly number of committees and task forces on which OIG staff served.
- Extent of participation with other federal and international agencies in joint training, collaborative projects, and the development of policies and

procedures to advance common audit, investigative, and management goals.

- Leadership and participation roles on President's Council on Integrity and Efficiency/Executive Council on Integrity and Efficiency (PCIE/ECIE) committees and related activities.
- Number of GAO audits tracked and coordinated.
- Completion of a guide for the OIG/NSF liaison program.
- Number of outreach activities by OIG staff to NSF and the research community.
- Number of outreach activities directed to professional associations of higher learning.
- Percentage of liaison teams that include staff from more than one OIG unit.
- Number of hits on OIG website to indicate level of usage.
- Completion of modifications to the NSF OIG website to accommodate the use of multimedia and links to relevant news stories.
- Percentage of audit reports posted to OIG website within required timeframe after issuance.
- Percentage of FOIA/PA milestones met.
- Submission of article(s) to appropriate journals.
- Number of briefings at new employee orientations.