

NATIONAL SCIENCE FOUNDATION

OFFICE OF INSPECTOR GENERAL

Performance Plan 2003

INTRODUCTION

This performance plan is presented in two sections: the Office of Inspector General (OIG) Strategic Plan for 2003-2008, and the OIG Annual Plan for 2003.

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.

The *OIG Annual Plan* (p. 9) describes the goals and strategies we will use to focus our operations over the next year 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 on-going 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 think creatively, adopt new ways of addressing issues tailored to unique circumstances, 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 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:

- Financial management in NSF programs
- Information technology security
- Workforce planning and management
- Award administration
- Awardee financial accountability and compliance
- Single Audit Act audit quality
- NSF program and project management
- NSF employee and awardee integrity
- Misconduct in research

Performance Audits. OIG will continue to assess (1) NSF's management of large programs, such as the Polar Program operations, Math and Science Partnerships, and infrastructure projects funded from the Major Research Equipment and Facilities Construction appropriation, (2) the validity and verifiability of performance measures used by NSF to report its accomplishments under the Government Performance and Results Act, (3) the agency's administration of the grant awards process, and (4) NSF's workforce planning and management of its human capital. These efforts are also consistent with the President's Management Agenda, which requires Federal agencies to implement specific reforms that will enhance the performance and accountability of their programs. To address these challenges, NSF has launched a number of significant initiatives that will become sufficiently seasoned during the next few years to warrant our review.

Financial and Compliance Audits. The increasing size and complexity of NSF's awards pose a higher risk for improper and erroneous payments by awardee institutions. Consequently, OIG management expects to allocate more resources to overseeing audits by outside CPA firms under contract to OIG to check the level of compliance of selected high-risk awardees with the terms and conditions of their award.

In addition, NSF's substantial reliance on CPA audits performed under the Single Audit Act require 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. Recent reviews by other OIGs have raised concerns regarding the quality of these audits.

The OIG also plans to commit more resources to perform audits of NSF's financial statements and information security systems, in accordance with the new requirements promulgated by the Government Management Reform Act and the Federal Information Security Management Act. Accelerated financial statement reporting deadlines, increasing focus on reconciling interagency account balances, and heightened attention to information security controls will require us to continue to increase our efforts in these key reviews.

Investigations. We will continue to react effectively to allegations of fraudulent practices, and over the next few years we will focus greater effort on proactive prevention and detection. 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 currently 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. We will also continue to play a leadership role in developing more effective coordination of grant fraud and research misconduct work among federal investigative agencies.

Administration. As the OIG program grows over the next few years, we plan to add staff skilled in contracting and human resource management to reduce the office's reliance on beleaguered agency support staff, as well as to strengthen the independence of our office. We will continue to develop and refine a Knowledge Management System 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.

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 turn, and they largely reflect the results of our past work, the priorities enunciated for the federal government by Congress and the Administration, and our staff's knowledge of agency operations. The current management challenges include:

- Workforce Planning and Training
- Budget for Administration and Management
- Management of Large Infrastructure Projects.
- Award Administration.
- Cost Sharing.
- Data Security.
- GPRA Data Quality.
- Cost Accounting Systems.
- Management of U.S. Antarctic Program.
- Broadening Participation in the Merit Review Process.
- The Math and Science Partnership Program.

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 two functional areas: *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; and *investigations*, which address allegations of serious wrongdoing. In each area, we strive to focus on substantive matters, do our work fairly, and work cooperatively without compromising our independence.

Certain issues require interdisciplinary coordination across these two functional areas. An example is information technology security: we need to develop a coherent approach to computer security so that we can adequately investigate possible security breaches, effectively audit NSF computer systems to assess their capacity 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. 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 and management risks as well as financial ones.
- 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 Inspector General community.

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 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, such as the falsification of data, fabrication of data, and plagiarism of the work of others, is among our most important responsibilities. Misconduct in research and education strikes at the core integrity of NSF's mission, and 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 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. For cases in which we recommend formal action, additional external review helps ensure that matters are kept in proportion and similar matters are treated consistently.
- By analyzing cases rigorously and in writing, we focus our information gathering activities. We make every effort to collect relevant information in a manner that minimizes the burden on the providers.
- We protect the privacy of investigative subjects by seeking information from them at the earliest practicable point in an investigation. 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 misconduct in science, 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 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 the Department of Justice, law enforcement officers, and officials at other agencies and institutions.
- Based on our experience with misconduct in science, we play a leadership role among federal agencies.

Office-wide Functions

In addition to conducting audits and investigations, we pay special attention to (1) staffing and operations and (2) education and outreach. These practices support our core functions. To perform those functions well, we need a capable staff, sound 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, 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 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 keeping with office-wide priorities. We will also tie our individual performance plans to the OIG annual plans, work with NSF to improve human resource support in recruiting and hiring, and manage our use of training resources more effectively.

Education and Outreach. An effective education and outreach program is an essential for 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 conflict of interest briefings and 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 misconduct in science 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.

OIG Annual Plan 2003

OIG GOALS

We have three goals that provide the framework for our annual plans:

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. Enhancing and strengthening OIG internal communication.

Our success is directly related to how well NSF accomplishes its programmatic responsibilities. Consequently, during 2003, 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 explains how we will strengthen our contributions during the period from April 1, 2003, through March 31, 2004.

Goal 1

Promote NSF Efficiency and Effectiveness

▪ **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.

Goal 1 Performance Measures	
	<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 audit product quality and timeliness.

- *Continue to implement team-based auditing approach on high-risk audits.*
- *Provide team-based audit training to audit staff and contract auditors.*
- *Finalize audit guide for contract auditors; incorporate team-based auditing concepts in our contract audit guidance.*
- *Finalize audit report quality standards.*
- *Continue to enhance automated work-in-process audit tracking system.*
- *Establish on-the-job training plan to ensure that new and existing audit staff quickly gain experience conducting audits of NSF awards and programs.*
- *Develop Contracting Officer's Technical Representative procedures manual.*
- *Develop audit contract monitoring procedures manual.*
- *Develop audit quality control standards document.*
- *Develop measures to assess audit product quality and timeliness.*
- *Develop results-based performance measures for Audit Office in 2004.*

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

- Percentage of audits identified as high-risk in which team-based auditing is used.
- Percentage of managers, staff, and contract auditors who complete team-based audit training.
- Completion of audit guide for contract auditors.
- Completion of audit report quality standards.
- Enhancements made to automated work-in-process tracking system.
- Completion of audit on-the-job training plan.
- Completion of COTR procedures manual.
- Completion of contract monitoring procedures manual.
- Completion of audit quality control standards.
- Identification of audit product quality and timeliness measures.
- Identification of results-based performance measures for Audit Office in 2004.

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

- *Finalize audit planning policy document.*
- *Finalize historical trend analysis of audit findings.*
- *Develop a process for conducting future automated trend analysis.*
- *Strengthen OIG expertise in NSF programs to assist in setting audit priorities.*
- *Complete agency funding analysis by program and grantee institution to assist in setting audit priorities.*

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

- Completion of an audit planning policy document.
- Number of annual assessments of risk for assigned areas.
- Completion of historical trend analysis of audit findings.
- Amount of OIG staff training in NSF program operations.
- Completion of agency funding analysis.

3. Strengthen outreach regarding effectiveness and efficiency issues.

- *Finalize an OIG outreach plan to support NSF's efforts to inform the awardee community about the financial and compliance standards that matter for efficiency and effectiveness.*
- *Conduct outreach sessions on effectiveness and efficiency issues for NSF staff and awardees at NSF, institutions, conferences, and other appropriate sites.*

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

- Completion of an Outreach Plan for efficiency and effectiveness matters.
- Number of outreach sessions conducted on effectiveness and efficiency issues.

Goal 2 Safeguard the Integrity of NSF Programs and Resources

- **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, NSF and the scientific community must show a high level of integrity in the expenditure of public funds and in the conduct of research. Scientific endeavor itself, moreover, cannot function effectively if scientists are not able to 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.

Goal 2 Performance Measures	
	<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. Identify ways to improve case product quality and timeliness.

- *Ensure investigations are consistent with PCIE/ECIE quality standards for investigations.*
- *Ensure consistency of investigative efforts with Investigations Manual.*
- *Make high-quality oral and written presentations to prosecutors or agency decision makers.*
- *Assess timeliness and appropriateness of case milestones.*
- *Ensure high-quality referral of audit issues arising from investigations.*
- *Maintain high-quality training for investigators.*
- *Assess results-based performance measures for applicability to OIG investigations activities in 2004.*
- *Perform quality check for each investigation.*

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

- Favorable assessment by independent Investigations peer review.
- Revision of the Investigative Manual on a semiannual basis.
- Increased use of contract services for financial analysis in investigations.
- Percentage of Investigation Reports and Management Implication Reports in which all elements, criteria, or factors important to allegations or issues are identified, addressed, and supported with evidence.
- Number of on-site visits during investigations.
- Tracking of case and project milestones within KMS and assessment of the need for modification.
- Percentage of referrals to Audit that meet criteria in Investigations Manual.
- Percentage of cases assessed for potential for audit referral, Management Implication Report or Proactive Review before being closed.
- Percentage of planned training that is accomplished.
- Identification of any results-based performance measures to be applied to OIG investigations activities in 2004.
- Percentage of investigations for which quality check is performed.

2. Strengthen proactive activities (outreach, reviews) in integrity matters.

- *Ensure information is accessible to public and NSF.*
- *Develop a Compliance brochure.*
- *Emphasize OIG liaison activity.*
- *Continue developing Grant Fraud Working Group.*
- *Monitor and assess the effect of outreach on targeted communities.*
- *Analyze closed cases to assess areas for proactive reviews.*
- *Monitor and assess the effect of proactive activities on case processing time, priorities, and allegation assessment.*
- *Ensure all FOIA/PA requests are responded to in a timely manner.*

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

- Update of OIG website with outreach materials semiannually.
- Participation in Program Managers and Regional Grants Seminars and Conflict of Interest briefings.
- Publication of Compliance brochure.
- Convening of OIG Liaison Meetings semiannually.
- Convening of two Grant Fraud Working Group meetings.
- Review of evaluations of outreach presentations and completion of all appropriate changes in presentations.
- Number of Proactive Reviews initiated.
- Assessment of the impact of proactive efforts on investigative efforts.
- Percentage of FOIA and PA requests responded to within timeframes stipulated by regulation.

Goal 3 Utilize OIG Resources Effectively and Efficiently

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- **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**
 - **Enhance and strengthen OIG internal communication**

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.

Goal 3 Performance Measures	
	Data Source(s)
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. Utilize 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, and*
 - *OIG impact on NSF.*
- *Analyze survey results and develop corrective actions for the problems identified.*
- *Continue the use of the team approach in brainstorming and resolving OIG internal management issues and in developing OIG activities.*
- *Complete development of an integrated Knowledge Management System within the OIG.*

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

- Completion of survey of OIG staff.
- Development of corrective actions based on survey results.
- Assessment of the use of the team approach in OIG internal management issues and activities.
- Full implementation of an integrated MIS.

2. Strengthen staff recruitment, development, and training.

- *Use OIG survey results and other information to analyze OIG skill mix to determine whether it will meet future priority needs of the office.*
- *Assume greater responsibility within OIG for handling personnel recruitment and hiring.*
- *Develop an office-wide process for individual development plans.*
- *Provide OIG training in NSF programs and procedures, professional skills, and other subjects that have wide application within the office.*
- *Ensure that all OIG staff meet OIG training requirements.*
- *Add at least one critical element to all staff performance appraisals to tie individual performance to the OIG Performance Plan.*

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

- Analysis of OIG skill mix and future needs.
- Hiring of a management analyst to handle OIG personnel responsibilities.
- Implementation of individual development plans for all OIG staff.
- Percentage of staff in compliance with OIG training policy.
- Revision of all individual performance appraisal forms to include at least one critical element tied to the OIG Performance Plan.

3. Improve communication and collaboration within OIG.

- *Develop an intra-office referral policy.*
- *Provide timely information exchange and referrals between the audit and investigation units.*
- *Provide Audit Office support for contract financial analysis services in support of investigative activities.*
- *Develop indicators for deciding when it makes sense to use multi-disciplinary professional resources on OIG assignments.*
- *Provide opportunities for joint training and discussions of cross-cutting issues for auditors, investigators, and other OIG staff.*
- *Assess Grant Fraud Indicators pilot program.*
- *Share information about audit and investigative activities at all-staff meetings.*

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

- Implementation of an intra-office referral policy.
- Assessment of information exchanges and referrals between the audit and investigation units.
- Provision of contract financial analysis services to support investigations.
- Completion of indicators for multi-disciplinary activities.
- Conduct of joint training and discussions of cross-cutting issues in OIG.
- Assessment of the Grant Fraud Indicators pilot program.

- Percentage of all-staff meetings at which auditors and/or investigators gave presentations about their activities.

4. Ensure effective external communications and consultation.

- *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.*
- *Update NSF leadership regularly on OIG activities and concerns.*
- *Play an active role in the IG community.*

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

- Percentage of semiannual reports to the Congress, management letter to NSF, annual OIG performance report, budget submission, and other regular reports completed by prescribed target dates.
- Provision of testimony, responses to questions, and other information requested by congressional committees.
- Number of briefings provided to NSB members/committees, congressional staff or members, OMB staff, NSF staff, and others.
- Number of committees and task forces on which OIG staff participated with NSF staff.
- Number of regular update meetings with the NSF Director and Deputy Director.
- Participation on Executive Council on Integrity and Efficiency (ECIE) committees and assistance provided to ECIE-related activities.