

# OIG FY 2004 Performance Report

This section describes OIG's accomplishments towards the three goals set forth in the OIG Performance Plan for 2004:

1. Increase OIG impact on NSF's effectiveness and efficiency.
2. Safeguard the integrity of NSF programs and resources.
3. Utilize OIG resources effectively and efficiently.

Under each of these goals, we identified several strategies for achieving the goal. For each strategy, we listed specific actions that we planned to complete during the performance period, which ran from April 1, 2004, to March 31, 2005.

## Goal 1: Increase OIG Impact on NSF's Effectiveness and Efficiency

1. Identify and implement approaches to improve audit product quality and timeliness.
  - Develop and implement a tool to assess effectiveness of the story-conferencing process as a means to improve audit product quality and timeliness.
  - Obtain a consultant with Government Auditing Standards expertise to review and comment on the draft audit guide for contract auditors; revise guide as necessary and issue.
  - Assess on-the-job training needs of current audit staff and identify job enrichment training opportunities to broaden auditor experience with various types of NSF audit work.

## HIGHLIGHTS

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- Update and streamline current contract audit monitoring manuals.
- Develop table of contents and milestones to finalize Office of Audit audit quality control standards and procedures manual.
- Assess results of employee survey and develop appropriate steps to address concerns from auditors.

The OIG made progress towards achieving our goal of improving audit timeliness and quality. We used a team-based auditing approach that relies on formal story-conferences between auditors and managers at key points in an audit, thereby facilitating improved communication that results in timelier, higher quality audit reports. Since FY 2003, the Office of Audit (OA) has used the team-based auditing approach on high-risk audits conducted by internal audit staff as well as independent public accounting (IPA) staff that conduct audits under contract with OIG. To assess the effectiveness and efficiency of this process, we developed a questionnaire in FY 2005, which will be incorporated into our Knowledge Management System (KMS) database. At the end of each audit, every audit team member will receive a prompt to complete the questionnaire and the results will be sent to audit management for appropriate action.

The OA retained a consultant with expertise in Government Auditing Standards to review and comment on our draft audit guide for audits performed by IPA firms under contract with OIG. This guide will present the team-based auditing concepts and provide detailed guidance for contractors on their implementation. We also made significant progress in developing policy documents focused on audit quality assurance procedures and standards. OA updated and streamlined procedures manuals for OIG audit staff with responsibility for monitoring contract audits to ensure audit quality and timeliness.

In addition, we added four new sections to our audit quality control policy pertaining to OA standards and expectations regarding independence, independent report referencing, internal quality control, and job rotation. In particular, the job rotation policy provides audit staff with job enrichment training opportunities within OA aimed at broadening their experience by performing different types of NSF audit work. In response to last year's employee survey, we began documenting and distributing the minutes of weekly senior audit manager meetings to ensure that issues of common concern and importance are regularly communicated to all audit staff. Together, these policies and procedures should ensure a more consistent approach to the conduct of audits.

In 2004, we developed measures to compare our actual accomplishments to specific performance objectives. In 2005, we compiled baseline data to

assist us in setting future performance and productivity targets. The baseline data is maintained in our KMS system and includes information such as milestones and scheduling, budgeted and actual hours, monetary and non-monetary recommendations, and the status of the resolution of those audit recommendations.

2. Enhance communication and collaboration between audit and investigation, ensuring that multi-disciplinary approaches are used, where appropriate, to address NSF issues.

- Share information about audit and investigative activities at OIG all-staff meetings.
- Finalize OIG policy on audit/investigative referrals; ensure its implementation.
- Continue to provide audit support for the contractual provision of audit services in support of investigative activities.
- Continue to meet regularly with investigators to discuss cross-cutting issues and means of identifying mutually beneficial issues of importance.

In 2005, the OA shared information on audit activities at all-staff meetings and continued to provide audit support for contractual audit services in support of investigative activities. In addition, OA contributed to the development of an OIG policy on audit and investigative referrals and continued to meet with investigators formally and informally to discuss issues of mutual interest and the status of work resulting from both investigative and audit referrals.

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

- Implement the Office of Audit planning policy for audits.
- Create permanent files of information gathered during audit planning efforts.
- Finalize automated audit report trend analysis process; upload historic audit report data into KMS; develop standard trend analysis reports.
- Develop a process for conducting future automated trend analysis.
- Continue to refine our Agency funding analysis by standardizing

techniques and data reports obtained annually for use in assessing risk of NSF's award portfolio.

OA finalized an audit planning guide to establish a formal methodology for analyzing and assessing risk, and developing and ranking audit proposals based on those assessments. We then select audits to perform based on their priority, their technical requirements, and the availability of requisite staff. This new process was used for the first time in the development of the FY 2005 Annual Audit Plan. The Plan was completed on schedule and presented to the National Science Board at its October 2004 meeting.

Over the past 12 months, we continued to upgrade an automated process for conducting trend analysis of historic audit data. Currently, all audit findings are coded according to type of finding, cost category (e.g., payroll, travel, equipment), and finding condition when entered in KMS. Categorizing past findings helps inform our audit planning process and facilitates the measuring and reporting of audit issues. We continued to use KMS to track audit milestones and the time staff devote to each audit so that future audits are based on realistic estimates of the staffing resources that will be needed to complete them. In last year's audit planning cycle, we created permanent files of past and present audit proposals and added an appendix to our planning guide that provides links to on-line sources of audit planning information. Together, these efforts should ensure a more robust and efficient audit planning process.

#### 4. Perform outreach regarding effectiveness and efficiency issues.

- Document execution of outreach policy in KMS outreach and time-tracking modules.
- Create a library of information gathered from our outreach efforts (e.g., testimony, minutes of meetings with NSF officials or advisory committee meetings) and make use of this information during the audit planning process.

The outreach plan developed by OA includes three strategies: 1) gaining a better understanding of NSF activities and operations; 2) monitoring audit-related changes in the professional audit and OIG communities; and 3) educating NSF, its stakeholders, and the external community on our audit issues and activities. In 2005, OA staff members were invited to speak at an NSF-sponsored regional grants conference and a conference of university research administrators. Staff also participated in several NSF-sponsored program manager seminars to learn more about NSF's many programs, explain the OIG's role and responsibilities to the new program officers, and to

act as resource advisors, providing a ready contact within OIG. OA staff were involved in a number of federal community initiatives aimed at solving problems related to improper payments, Single Audit quality, federal financial statements and IT security, and grant oversight. OA participates in the OIG Liaison Program, which communicates information about OIG activities and reports to senior agency managers, allows a constructive discussion of NSF and OIG concerns, and provides a point of contact should they wish to communicate further with OIG. We documented these and other outreach efforts in the KMS outreach module and while we did not create a library of information gathered from our outreach efforts, the information gathered during these activities was formally communicated to staff at our monthly “all-hands” meeting.

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

### 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 a quality check for each investigation.

The Office of Investigations (OI) successfully employed the strategies described above to meet the goal of improving case quality and timeliness. We continued our co-leadership role in preparing the Executive Council on Integrity and Efficiency (ECIE) community for investigative peer review. NSF OIG was the first ECIE investigations office to undergo peer review based on the new PCIE/ECIE quality standards for investigations. The review concluded that OI was in full compliance with the applicable investigative standards. We implemented improvements in our training system and file security suggested by the review team. In our continuing effort to refine and improve our processes, we modified several sections of our Investigations Manual.

Each investigative case was subjected to both quality control and quality assurance reviews to ensure that 1) they were performed in accordance with our Investigations Manual, and 2) each Report of Investigation or Management Implication Report addressed the relevant elements. These reviews also verified that cases with underlying audit issues were referred to the OA for audit consideration. Several referrals were subsequently included in the audit plan. We successfully completed site visits related to both research misconduct and criminal/civil cases and increased the number of cases referred to the Department of Justice for prosecution or to NSF management for adjudication. Included among these cases, was the first resolution of an investigation by means of a Settlement Agreement and Compliance Plan cosigned by the agency, OIG, and the subject institution. We worked closely with our contract forensic auditors to make certain that accurate and complete financial information was identified, analyzed, and incorporated into the investigative product. These efforts have significantly increased our abilities to detect fraud and to successfully present cases for prosecution to the Department of Justice.

Each case was monitored for timely completion through the milestones in OIG's KMS. Several new milestones were added to the system this year, and others were modified to improve our tracking capability and assist in the development of new procedures for tracking case processing statistics by individual investigator. These statistics will form the basis for producing meaningful results-based performance measures.

At the beginning of this performance year, we ensured that all members of OI completed an Individual Development Plan and we worked throughout the year to meet both individual and group training objectives to increase both individual and office-wide skill levels. We have implemented an electronic mechanism for tracking planned and completed training to make our efforts more efficient. We continue to survey staff participating in training and other OI offices to ensure our training is of the highest quality available.

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

- Ensure information is accessible to public and NSF.
- Ensure materials are accurate and up-to-date.
- Develop elements of a Compliance program.
- Emphasize OIG liaison activity.
- Convene one Grant Fraud Working Group meeting.



- 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.

The Inspector General Act identifies the detection and prevention of fraud and abuse as primary responsibilities of an Office of Inspector General. In response to this charge, we conduct proactive investigative reviews as time permits and have an active outreach program to NSF and the communities it serves. Through the use of OIG's web site, we made current and relevant information available to our various audiences, including NSF staff, the National Science Board, the Congress, and the research community at large. We also provide information to the public in response to Freedom of Information Act requests. This year we again responded to each request within the time requirements identified in the statute, and we ensured timely responses by modifying our electronic tracking system.

We participated in numerous NSF events such as program management seminars, conflict of interest briefings, and regional grants seminars, sending knowledgeable OIG representatives to discuss issues of interest and answer questions. OIG staff members were also assigned as liaisons to NSF offices to ensure good communication between OIG and the agency's directorates. A survey to determine the effectiveness of OIG liaison efforts indicated that the content, format, and frequency of liaison events were appropriate and well received, and that NSF managers were comfortable communicating with OIG liaisons.

We conducted the second annual Grant Fraud Investigation's Training Program for PCIE/ECIE investigators, which was attended by 80 staff from the IG community. Ten representatives from six IG offices gave presentations that focused on case studies of successful grant fraud investigations and prosecutions. Our survey of participants indicated that they found the workshop extremely useful both for the information that was shared and for the strengthening of professional networks. The workshops have become so popular that we are working with the Inspector General Criminal Investigator Academy to accommodate all who want to attend.

This year, we expanded our efforts to develop and disseminate information about effective compliance programs. For example, we introduced new presentations at professional meetings on compliance programs based on the United States Sentencing Commission Federal Sentencing Guidelines, and we developed a new poster that was displayed at a recent National Science

Board Meeting. The poster will also be exhibited at professional meetings to prompt discussion about the use of compliance plans in the resolution of particular cases. We made effective use of our compliance initiative to resolve a significant case with the execution of a Settlement Agreement and Compliance Plan.

Our efforts to conduct proactive reviews this year were curtailed because we experienced a significant increase in both the number and complexity of allegations. We did not have adequate resources to devote to this important task or to complete a planned data-mining project. Nevertheless we are in the final stages of completing three proactive reviews initiated in previous years that are likely to result in recommendations to NSF for management improvements.

### **Goal 3: Utilize OIG Resources Effectively and Efficiently**

#### 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.
- Develop in-house technical expertise for maintaining KMS.
- Complete a KMS users manual for OIG staff.

Approximately 70 percent of OIG staff responded to the annual employee survey this year, the most ever. We view this survey as an effective means for measuring how well we are using the staff's professional expertise and whether we are providing our employees with the guidance and resources needed to



do their jobs. Although there is still room for improvement in some areas, overall ratings increased by about five percentage points from last year. More importantly, some of the areas that earlier surveys had indicated were significant problems received considerably higher ratings. The most improvement occurred in issues related to cooperation among OIG units, the utilization of contractors, and communications between the various units within OIG. We believe that the progress is due at least in part to a concerted effort by the office to address these issues. We used the annual OIG retreat and other all-hands meetings to help define the issues, reach a common understanding, and achieve a consensus on actions to improve our performance. Specific areas in which the staff perceived relatively high OIG effectiveness included technology support within the office, OIG's impact in helping to solve important agency problems, the guidance provided in OIG policies and procedures, the utilization of OIG staff skills and abilities, communications within OIG for keeping staff informed, and the use of contractors by OIG.

OIG continued to make effective use of the team approach in internal management issues and in OIG activities. We used teams to assess the annual survey, organize the annual OIG retreat, advise on the development of internal OIG policies, and serve as OIG liaisons to the directorates and offices in NSF. Most investigations are conducted by teams composed of investigators, attorneys, scientists, and/or other appropriate OIG staff members. Ad hoc staff groups are often formed to produce briefings, congressional testimony, or special reports, and as indicated above, most audits are conducted using a team-based auditing approach.

The integrated KMS made significant strides during the past year, but some problems persisted and we fell short of our goal to finish its development. In many cases, as more staff members became regular users, we identified additional functions or enhancements to build into the system to make it more robust in meeting OIG data management and tracking needs. The additional demands on the system, particularly during the semiannual reporting period, created processing delays and other technological issues that need to be resolved. KMS has advanced our data analysis beyond the disaggregated and obsolete stovepipe systems it replaced and we are continuing to refine it. This year's enhancements included modules for managing FOIA requests, individual development plans, and OIG subpoenas, as well as strengthening the modules for managing and tracking audits, investigations, referrals, training, outreach, and other activities. We hired a second IT specialist for the office, and his primary responsibility is to develop in-house expertise for administering and maintaining KMS. We completed KMS users' manuals for investigators and auditors, who represent the bulk of the system's users.

## 2. Strengthen staff recruitment, development, and training.

- Assess results of pilot test for an office-wide process for individual development plans and establish a permanent IDP process within OIG.
- Ensure that all OIG staff meet OIG training requirements.
- Revise individual performance appraisal forms to link the critical elements to the OIG Performance Plan.
- Update auditor and management analyst position descriptions.
- Develop a core audit training program and core audit competencies.

We evaluated the results of an office-wide pilot test of individual development plans and decided to implement them on a permanent basis. They are now synchronized with the annual performance appraisal process for OIG employees. All office staff members met or exceeded OIG's annual training requirements, and we revised the employee appraisal forms to link them more closely to the OIG Performance Plan. We also worked with NSF to modify our SES appraisal forms to conform to new OPM requirements. We achieved a provisional certification for this year, and we have further revised the appraisals for resubmission to OPM for permanent certification. Finally a team from OA is reviewing core audit competencies that will serve as a foundation for developing an audit training regimen, and updated position descriptions.

## 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.
- Share information about audit and investigative activities at all-staff meetings.

We formed a committee with representatives from all the units and drafted a policy to improve coordination, informal consultations, and referrals within the office. The policy was approved by senior management and issued in October 2004. We believe that it has been instrumental, along with other actions taken within the office, in improving the working relations among our units and fostering an environment conducive to sharing information and

expertise, referring matters that may be of interest to another unit, and working more collaboratively on issues that concern more than one unit. Feedback from the OIG employee survey indicates that the relationships between investigators and auditors, in particular, have continued to improve. At almost all our monthly all-hands meetings, either investigators, auditors or administrative staff discuss a significant project. These exchanges have been effective in improving mutual understanding of the roles and concerns of each of the various units.

#### 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 consult with the NSB, Congress, OMB, NSF, and others regarding OIG plans, priorities, and progress.
- Issue two OIG newsletters by e-mail.
- Update NSF leadership regularly on OIG activities and concerns.
- Collaborate with federal and international agencies to advance common audit, investigative, and management goals.
- Provide leadership and active participation in the IG community.

The OIG's Semiannual Reports to the Congress, budget submissions to the Office of Management and Budget and to the Congress, Management Letter to NSF, annual Performance Report, and Management Challenges Letter were designed to produce timely information on OIG findings and concerns to key stakeholders. We also issued two electronic OIG Newsletters to a broad audience in the federal government and research communities. The IG testified before the House of Representatives Committee on Science Subcommittee on Research and provided all information requested by committee members and staff. Her testimony focused on investigative and audit activities, as well as significant management challenges facing NSF. Our staff presented regular briefings on OIG activities to the Audit and Oversight Committee of the National Science Board. The subjects included the results of the annual audit of NSF's financial statements, the findings and recommendations of several performance audits, and the OIG budget submission. The Inspector General and Deputy Inspector General regularly briefed the NSF Director and Deputy

Director on recent, ongoing, and planned OIG activities, as well as other matters concerning the management and operations of the agency.

As part of our continuing efforts to prevent and detect fraud, waste, and abuse, we regularly reached out to domestic and international communities to inform them both about our work and about their responsibilities in ensuring the integrity and effectiveness of research activities. Our office played a leadership role in establishing a dialog among international officials engaged in research compliance. The Inspector General co-hosted a workshop, Accountability in Science Research Funding, with the Director General of the Science Foundation Ireland, in Dublin, Ireland, in June 2004. The purpose of the meetings, which were attended by representatives from 14 countries, was to discuss methods for monitoring and auditing science and engineering projects and to share best practices among the participating organizations. Our Associate Inspector General for Investigations was a keynote speaker at a meeting of the Australian Research Management Society in Australia, where she discussed establishing compliance programs as a means to correct problems found during the course of investigations.

OIG staff members were also invited to speak at a wide range of conferences held by institutions and associations and participated on several federal committees and task forces, including the Office of Management and Budget (OMB) directed Federal Workgroup on Erroneous/Improper Payments. As the primary attendee from the IG community, the NSF OIG representative provided a perspective on what actions the IG community is planning to take on evaluating agency actions to comply with this Act. We also worked closely with other OIGs and federal agencies on joint investigations, and our investigators provided briefings to the IG community following our successful resolution of a case involving federal travel card abuse, which has been a widespread problem in the federal government.

We attended the first meeting of the Research Business Models working group on subrecipient monitoring, sponsored by the National Science and Technology Council's Committee on Science. The group is evaluating current federal guidance on subrecipient monitoring contained in OMB Circular A-133 and ways to simplify or eliminate procedures for overseeing grant funds passed through to other organizations. NSF OIG has also played a leading role in an Executive Council on Integrity and Efficiency (ECIE) working group that is developing investigative peer reviews. OIG staff also participated in updating the five-year PCIE/ECIE Strategic Framework. We continued to work with other federal agencies and OIGs as they implemented policies and procedures for investigating allegations of research misconduct. As Chairperson of the PCIE/ECIE Misconduct in Research Working Group, the NSF Inspector General led efforts to educate the community about this issue.