The OIG and Research Funding – What to Expect

By Ken Lish

Role of Inspectors General

The Inspector General Act of 1978 established the Offices of Inspectors General (OIG) and outlined their roles, duties, and powers. OIGs provide independent and objective oversight of their agencies and are tasked with three broad purposes:

1) to conduct and supervise audits and investigations relating to the programs and operations of their agency;
2) to provide leadership, coordination, and recommended policies for activities designed to promote economy, efficiency, and effectiveness, and to prevent and detect fraud and abuse; and
3) to communicate to agency heads and Congress regarding problems and deficiencies relating to the administration of agency programs and operations.

To maintain their independence, OIGs do not engage in the management or operations of an agency. Likewise, agency management may not direct or impede activities of an OIG.

NSF OIG in the Research Community

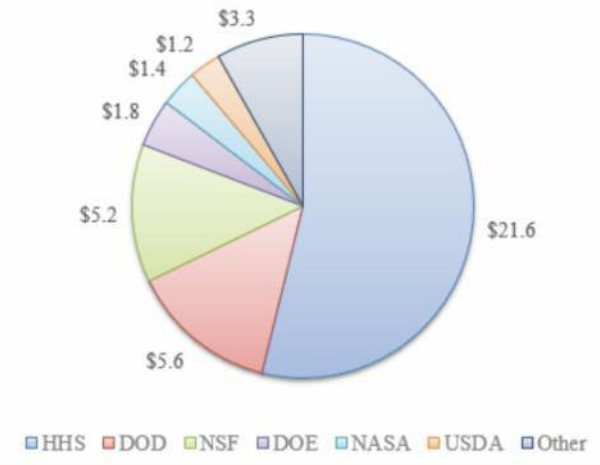
The National Science Foundation's (NSF) core function is to invest in basic research, instrumentation, and facilities to promote the progress of science; it is the third largest provider of federal funding for higher education research and development (see Figure 1). As such, NSF OIG is very active in the research community. Although the Department of Health and Human Services (HHS) and the Department of Defense (DOD) provide more funding than NSF, both have other missions beyond supporting higher education research and development.

To promote efficiency and effectiveness in NSF's programs and operations, NSF OIG assesses internal controls, financial management, information technology, and other systems that affect the operation of NSF programs. NSF OIG is also responsible for providing oversight of the research community that receives funding from NSF in the form of grants, cooperative agreements, and contracts. To put that responsibility into perspective, in fiscal year 2018, NSF received an appropriation of $7.8 billion; funded 1,800 colleges, universities, and other organizations; funded 11,700 competitive awards; and directly supported an estimated 386,000 personnel including researchers, postdoctoral fellows, trainees, teachers, and students. To accomplish its mission, NSF OIG employs auditors, investigators, scientists, and other specialists. It also contracts with independent public accounting firms to provide audit and investigative services. Of the nearly 70 NSF OIG employees, 28 work for the Office of Audits.

NSF OIG's New Approach to Auditing

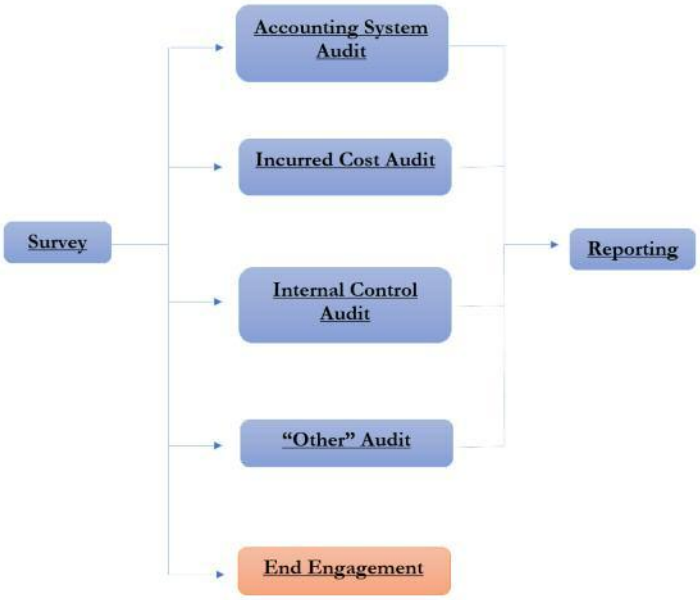
To maximize its limited resources, NSF OIG has established new approaches for conducting audits that are focused internally on agency operations and externally on the research community. First, for internal audits focused on improving NSF operations, NSF OIG has established a new approach that incorporates audit steps at organizations receiving NSF funds. To best assess the efficacy of NSF's guidance, it is necessary to observe how the research community implements the policies that NSF promulgates through its various guides and resources. In situations like this, NSF OIG auditors will conduct fieldwork and audit testing at select NSF-funded institutions to evaluate if those institutions are implementing NSF's guidance as intended. This helps identify if organizations are consistently applying NSF's guidance throughout the research community and if the guidance is achieving NSF's intended results. For example, NSF OIG is currently conducting an audit to identify the federal- and NSF-specific criteria that apply to awardees with government-owned equipment and assess NSF's controls for ensuring that awardees comply with those criteria, including tracking, reporting, and disposition requirements. This approach has improved internal audits by more accurately quantifying the effectiveness of NSF's policies. For further information on NSF OIG's planned audit work, the 2019 Audit Plan can be found at the following location: www.nsf.gov/oig/_pdf/Audit_Plan_FY19.pdf.

Figure 1. FY 2017 Higher Ed R&D Expenditures (Billions)



Source: NSF, National Center for Science and Engineering Statistics, Higher Education Research and Development Survey, FY 2017.http://ncsesdata.nsf.gov/herd

Figure 2. External Audit Process



Second, for work that is externally focused on the research community, NSF OIG has implemented a new audit approach to better assess and address the unique risks identified at each institution (see Figure 2). As outlined in the August 2018 issue of this magazine in an article titled, "We're In This Together! – Volume II," every audit under this new process will start with a survey phase so the auditors can become familiar with the auditee's overall grant management environment. Once the auditors conclude the survey phase, they will assess the strengths and weaknesses of the auditee's grant management environment and determine the next steps. Paths forward include initiating an accounting system audit, incurred cost audit, internal control audit, or customized audit based on identified risks — or, if it is determined that the auditee has an exceptional grant management system, terminating the audit. This approach will help ensure that both NSF OIG and auditee resources are used in the most effective and impactful manner possible.

Although NSF OIG has already implemented this new methodology and is utilizing it in current audits, there are still a few ongoing audits structured under the prior audit methodology. The prior audit methodology used a very structured approach and focused entirely on evaluating the allowability of costs (see Figure 3). Every audit included data-analytics to identify a sample of at least 250 transactions associated with all drawdowns from NSF awards over a three-year audit period. While the new methodology will provide increased flexibility, a greater focus on the root-causes of audit findings, and a better approach to addressing the unique risks at each auditee, the auditors will still be cognizant of the most common areas of noncompliance that have been consistently identified throughout the past several years.

Common NSF OIG Audit Findings

The two most common areas where NSF OIG has consistently identified instances of noncompliance include travel and spending funds near award expiration.

Travel Findings

When reviewing travel expenditures, it is important for organizations to not only judge the expenditure against the government's travel regulations and the organization's travel policies, but to also apply broader allocability and allowability criteria as well. The need to review and apply so many rules to common expenditures provides many opportunities for errors, oversights, misunderstandings, and misinterpretations. The bullet points below highlight a few important considerations to take into account when reviewing and approving travel expenditures funded by NSF grants:

- Auditors have often identified Principal Investigators who charged travel costs to awards that have extra funds available and are nearing expiration rather than charging the costs to the award(s) that truly benefited from the travel. For this reason, it is important to ensure supporting documentation clearly illustrates that the travel was necessary, reasonable, and benefited the award charged, especially if the travel takes place near the end of an award.
- It is important to ensure travel costs are supported by source documentation. Travel costs that either are not supported by documentation (e.g. receipts) or are supported by illegible documentation will result in questioned costs.
- Business and first-class airfare will always receive extra scrutiny from auditors. The Uniform Guidance provides specific exceptions where business and first-class airfare is allowable, but the organization must clearly document the existence of one of those exceptions within the applicable supporting documentation. In many circumstances, awardee organizations either do not question travelers on the need for business or first-class airfare or neglect to document which specific exception under the Uniform Guidance makes the excess airfare costs allowable.

Figure 3. Audit Model Comparison

Old Audit Model	New Audit Model
Audit Work Oriented Toward Transaction Testing	Audit Work Oriented Toward Individual Institutional Risks
Structured Audit Approach	Flexible Audit Approach
Focus on Unallowable Costs	Focus on Root Causes of Noncompliance

- The NSF Proposal & Award Policies & Procedures Guide (PAPPG) states travelers must comply with the Fly America Act. The Fly America Act requires travelers to use United States carriers if they are traveling on funds provided by the federal government. This is an often-overlooked requirement when Principal Investigators and other grant personnel travel internationally.

Spending Near Award Expiration

Costs that are incurred near the end of an award are often allowable and necessary. However, these costs will always receive extra scrutiny from auditors to ensure organizations are not using surplus funds on items that either are not necessary or do not benefit the award. The bullet points below highlight steps auditors will conduct when reviewing these expenditures, as well as best practices that have been observed throughout the research community:

- When conducting their evaluation, the auditors will first ensure the costs are allocable to the award. For example, if the organization purchased equipment, the auditors will confirm the equipment benefited the award the organization charged.
- Second, the auditors will verify the costs were necessary and reasonable for the administration and performance of the award. For example, if the organization purchased a new computer in the final week of an award, the auditors will review all available information to determine whether it was reasonable and necessary to make that purchase. This is why it is of the utmost importance for organizations to retain strong supporting documentation and to review all such expenditures with a skeptical eye.
- The Uniform Guidance defines a reasonable cost as one that a "prudent person" would have made under similar circumstances. Because of the subjectivity of this criteria, this is an area where there is often disagreement between auditees, auditors, and NSF staff responsible for resolving audit findings. Taking an approach of professional skepticism when reviewing these types of purchases will help avoid questioned costs.
- Over the course of several years and dozens of audits, NSF OIG has observed best practices in this area include providing extra scrutiny over costs incurred in the final months of an award and ensuring supporting documentation not only illustrates that a cost was incurred, but also clearly demonstrates the cost was allocable, reasonable, necessary, and benefited the award.

Audit Resolution

Although the audit ends once the final audit report is issued, the audit findings still need to be resolved. NSF's Resolution and Advanced Monitoring (RAM) Branch is authorized by the Chief Financial Officer to resolve most of NSF OIG's external audit reports. Upon receipt of the final report, RAM formally issues the report to the auditee, along with a letter that provides information on what to expect next in the audit resolution process.

RAM reviews all findings and recommendations in the report, including the auditee's response and auditor work papers provided by NSF OIG. Using the information gathered, RAM develops initial determinations and issues them in writing to the auditee, allowing at least 30 days for a response, and shares them with NSF OIG to ensure both offices have the same information.

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To determine correct management decisions, RAM researches NSF systems thoroughly to obtain a complete understanding of terms and conditions, policies, regulations, and specific circumstances for awards where costs have been questioned. RAM also collaborates with the auditee, NSF OIG, program officials, grants officers, and cognizant federal agencies as needed. NSF's Chief Financial Officer reviews all drafted management decisions before sharing them with NSF OIG for consensus. If NSF OIG disagrees with or requests clarification of the draft management decisions, NSF and NSF OIG discuss the issues. If the organizations agree on the decisions, RAM formally issues the management decisions in writing to the auditee. If the organizations continue to disagree, NSF OIG may escalate disagreement(s) to the NSF Audit Follow-Up Official, who will make the final decision. RAM then issues the management decision in writing, based on the Audit Follow-Up Official's determination. The coordination and cooperation of the auditee, NSF, and NSF OIG is vital to the overall stewardship of taxpayer funds.

The Importance of Shared Stewardship

Every organization that receives federal funding plays an important and vital role in ensuring proper stewardship of taxpayer dollars. Organizations that receive federal funding through grants, contracts, or cooperative agreements must ensure they are complying with all applicable federal regulations and are making responsible decisions with the use of taxpayer funds. With NSF funding 1,800 organizations annually, it is important each organization take its responsibilities for proper stewardship of taxpayer funds seriously. In times of tight budgets and fast news cycles, it only takes a few bad actors and negative stories to have a meaningful and negative impact on the entire research funding landscape. The public's confidence in federally-funded scientific research is undermined when funds made available for such research are misused. Consistent with NSF OIG's dual mission to prevent and detect fraud, waste and abuse, and to promote economy and efficiency in NSF's programs and operations, NSF OIG auditors and investigators work diligently to identify situations where federal funds have been used inappropriately and to recover such funds when necessary. By operating as an independent and objective organization focused on providing oversight of NSF and its awardees, Congress and taxpayers have greater confidence that public funds are being used efficiently and effectively. N

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