# Semiannual Report to Congress

April 1, 2022 - September 30, 2022



# **In Memoriam**



This Semiannual Report is dedicated to the memory of our valued colleague and friend, Darrell Drake, who passed away on August 30, 2022.

Darrell served as a senior auditor in our office for nearly 30 years. He was a 1988 graduate of the Virginia School for the Deaf and the Blind in Staunton and a 1993 graduate of Gallaudet University in Washington, D.C.

Darrell worked on internal and external audits improving internal controls at both NSF and award recipients.

Darrell's audits resulted in NSF recapturing millions in questioned costs, developing a database to track

equipment at recipients, increasing the transparency of National Science Board meetings, and strengthening controls over NSF purchase cards. Darrell also served as the Office of Audit's key independent referencer, ensuring audit reports were supported and understandable.

In 2020 and 2011, Darrell received one of the OIG community's highest honors — the Award for Excellence from the Council of Inspectors General on Integrity and Efficiency.

Darrell was an advocate for those with disabilities, serving on NSF's Disability Employee Resource Group.

Darrell was a beloved colleague, a devoted father to his son, and the Washington Nationals' number one fan. He is greatly missed.



# **Table of Contents**

rom the Inspector Generalnvestigations	
Program Integrity Investigations	
Actions Resulting from Previously Reported Program Integrity Investigations	. 2
Research Misconduct Investigations	.4
Research Misconduct Investigations with University-wide Actions	.6
NSF Management Actions on Previously Reported Research Misconduct Investigations	8
Administrative Investigations	.9
Audits and Reviews Audits and Reviews of NSF Programs and Operations	
Audits of NSF Award Recipients	13
Reviews of Single Audits	14
Audit Resolution	16
Peer Review	
Investigations Data	
Audit Data	21

# From the Inspector General

I am pleased to present our semiannual report, which summarizes our work and accomplishments during the second half of fiscal year 2022. Our partnership with NSF, the National Science Board, and Congress is a critical component to fulfilling our mission, and we appreciate the support of NSF management and staff from across the Foundation.

In this reporting period, our work led to more than \$884,000 in potential savings to taxpayers, including nearly \$216,895 in investigative recoveries and \$667,127 in questioned costs. We continued to address internal and external threats to the integrity of NSF-funded research by investigating wrongdoing involving organizations and individuals that receive awards from NSF. Notably, during this semiannual period, a jury convicted a former university professor of hiding ties to a foreign government while working on U.S. government funded research, and the CEO of a company founded under a Small Business Innovation Research grant was indicted for wire fraud and false statements. We also added a new section to this report to highlight cases that resulted in university-wide actions to help prevent research misconduct. These universities' willingness to expand their responses beyond the individuals who committed research misconduct reflects the seriousness of this problem, and the additional actions they took may benefit the entire research community.

Our audits of NSF programs and operations continue to promote effectiveness, efficiency, and integrity. For example, this semiannual period, we published a capstone report that offers suggestions to improve oversight of the Established Program to Stimulate Competitive Research (EPSCoR). We also reported on ways NSF could improve its major facility divestment process, reduce risks presented by international connections to its network, and improve controls over purchase cards.

Finally, I would also like to acknowledge the tremendous loss our office has suffered with the passing in August of our colleague Darrell Drake. Darrell served in our office for nearly 30 years, ending his career as a senior auditor in our Office of Audits. He was a valued colleague and friend, and his contributions to our office and devotion to his family, friends, and the deaf community will always be remembered and greatly appreciated.





# **Investigations**

The Office of Investigations is dedicated to promoting effectiveness and efficiency in NSF programs and operations. We investigate wrongdoing involving organizations or individuals that receive awards from, conduct business with, or work for NSF. We assess the seriousness of misconduct and recommend proportionate action.

# **Program Integrity Investigations**

We investigate allegations concerning misappropriation and misuse of NSF funds, false statements in documents submitted to NSF, and NSF employee misconduct. When we identify a violation of a criminal or civil statute, we refer our investigation to the U.S. Department of Justice (DOJ) for criminal prosecution or civil action; if the case is accepted, we work with DOJ attorneys to support any resulting litigation. When appropriate, we also refer matters to NSF for administrative action, such as award termination and government-wide suspension or debarment. The following are brief descriptions of case outcomes during this semiannual period:

#### **University Returned Nearly \$215,000 for Salary and Foreign Travel Mischarges**

A university professor failed to disclose his appointment at a foreign university. The professor used NSF funds for unauthorized expenditures, including travel with his family to the foreign university. As a result of our investigation, the university returned nearly \$215,000 to NSF.

# Actions Resulting from Previously Reported Program Integrity Investigations

#### **Professor Convicted of Wire Fraud and False Statements**

We previously reported that NSF suspended three awards involving a professor who was indicted on charges of wire fraud and program fraud for allegedly receiving federal grant money, including salary, while employed by an overseas research university. Additional charges were filed against the professor for making false statements. The jury found the professor guilty of three counts of wire fraud and one count of making false statements. The professor appealed and the judge upheld the false statements conviction and ruled

<sup>&</sup>lt;sup>1</sup> September 2019 Semiannual Report, p. 3



that prosecutors did not provide sufficient evidence to support the wire fraud convictions. DOJ issued a <u>press release</u> about this case; sentencing is scheduled for January 2023.

#### **Professor Convicted on Tax-Related Charges**

We previously reported that a professor was indicted on two counts of wire fraud and one count of making a false statement for failure to disclose to NSF all his organizational affiliations and current and pending support. A superseding indictment was filed, and the professor was convicted of three counts of making a false or fraudulent statement to the Internal Revenue Service and one count of failure to file a report of a foreign bank account. At the end of trial, the judge dismissed the wire fraud charges before a jury could rule on the matter. The jury found the professor not guilty of submitting a false statement to NSF regarding his failure to disclose all organizational affiliations and current and pending support. The judge sentenced the professor to one year probation. DOJ issued a press release about this case.

#### SBIR Company Founder and CEO Indicted for Wire Fraud and False Statements

We previously reported that a company's founder and CEO was charged with wire fraud and making and transmitting false documents to NSF; NSF suspended the CEO, company, and a second, related company governmentwide pending the completion of our investigation.<sup>3</sup> During this reporting period, the CEO was indicted on one count of wire fraud and five counts of making false statements related to an NSF Small Business Innovation Research (SBIR) Phase I grant and a Department of Energy Small Business Technology Transfer Phase I award. According to the indictment, the CEO falsely certified to some program requirements, such as the Pl's primary employment and eligibility to work in the United States, and falsely represented a required subaward payment in response to an IG subpoena. A trial date is pending.

#### Former Associate Professor and Company Debarred for 3 Years

We previously reported that a university returned more than \$650,000 to NSF for expenses that could not be attributed to four NSF awards under the direction of an associate professor. The associate professor used university resources for his company, commingled federal funds with the business activities, and failed to fully disclose his relationship with his company in NSF proposals.<sup>4</sup> During this reporting period, NSF

<sup>&</sup>lt;sup>4</sup> September 2021 Semiannual Report, p. 2



<sup>&</sup>lt;sup>2</sup> September 2021 Semiannual Report, p. 3

<sup>&</sup>lt;sup>3</sup> September 2018 Semiannual Report, p.10; March 2021 Semiannual Report, p. 10

debarred the associate professor and his company for 3 years based on our recommendation.

#### **Professor Debarred for 3 Years**

We previously reported that a university professor charged his summer salary for 5 years to an NSF award while concurrently maintaining dual employment with a foreign university. As a result of our investigation, the university returned more than \$230,000 to NSF.<sup>5</sup> During this reporting period, NSF debarred the professor for 3 years based on our recommendation.

# Research Misconduct Investigations

Research misconduct damages the scientific enterprise, is a potential misuse of taxpayer dollars, and undermines the trust of citizens in government-funded research. It is imperative to the integrity of research that NSF-funded researchers carry out their projects with the highest ethical standards. Pursuing allegations of research misconduct — plagiarism, fabrication, and falsification — continues to be a focus of our investigative work. NSF takes research misconduct seriously, as do NSF's awardee institutions.

For each case described in this section, we recommended that NSF make a finding of research misconduct, issue a letter of reprimand, and require interactive responsible conduct of research (RCR) training, except where noted. Unless otherwise specified, NSF's decisions are pending.

#### PI Plagiarized and Manipulated Records During the Investigation

We sent inquiry letters to a PI and co-PI about a plagiarism allegation in a proposal submitted to NSF. Their joint response did not dispel the allegation, so we referred the investigation to their university. Based on the evidence, the university found that the PI was responsible for the plagiarism, and it identified a pattern of plagiarism. During the investigation, the PI altered a draft of the proposal and provided it to the university as if it was original. The PI suggested that graduate research assistants might be responsible for the plagiarism.

The university made a finding of research misconduct and required the PI to complete RCR training, recertify all internal training requirements before resuming research activities, and consent to unannounced spontaneous classroom observations. The

<sup>&</sup>lt;sup>5</sup> September 2021 Semiannual Report, p. 2



university also imposed the following sanctions: the PI cannot submit internal or external funding proposals for 2 years, receive merit salary increases for 5 years, mentor students for 5 years, teach extra-contractually for 5 years, or receive emeritus status upon retirement.

We also found that the PI's manipulation of records was a serious aggravating factor, which we referred to DOJ. DOJ declined prosecution in lieu of administrative action. We recommended that NSF require compliance with the requirements imposed by the university and debar the PI for 2 years. We also recommended that for 3 years (concurrent with the debarment, and for 1 year thereafter), NSF require the PI to submit contemporaneous certifications that any proposals or reports he submits to NSF do not contain plagiarized, falsified, or fabricated material (certifications); submit contemporaneous assurances by a responsible official of his employer that any proposals or reports he submits to NSF do not contain plagiarized, falsified, or fabricated material (assurances); and prohibit the PI from participation as an NSF peer reviewer, advisor, or consultant.

#### **Recommendation for Reviewer Suspension Pending Completion of Investigation**

We received an allegation that a proposal submitted to a foreign funding agency contained text and ideas plagiarized from a declined NSF proposal. The foreign funding agency provided the names of the PI and other scientific personnel associated with the foreign proposal, and we confirmed that the PI reviewed the declined NSF proposal. We recommended that NSF suspend the PI from participating as a peer reviewer, advisor, or consultant for NSF, pending the outcome of our investigation.

#### PI Plagiarized in Two Proposals

We received an allegation of plagiarism in a declined proposal submitted to NSF by a small business. We identified plagiarism from many sources and sent an inquiry letter to the PI. The PI denied the plagiarism and speculated that others might have copied from him. He provided a list of his published work, most of which was published after the alleged source documents; he provided no documents supporting his contention that others had copied from his published work. We also reviewed another proposal submitted by the small business with the same PI and found plagiarism. There was no overlap in the sources that were copied into the two proposals. We concluded the PI knowingly committed research misconduct. We recommended that, for 2 years, NSF require certifications and bar the PI from participation as an NSF peer reviewer, advisor, or consultant.



#### PI Plagiarized in Two SBIR Proposals

We investigated an allegation of plagiarism in a declined SBIR proposal and found material copied from four sources. The copied material included many embedded references that were renumbered and reformatted to fit the proposal's reference style. Although the proposal cited and referenced some verbatim text sources, none of the copied verbatim text included any indication the language was not original to the proposal. The PI claimed the sources were properly cited and that background or literature review sections did not need to be quoted since they were well known in that field of study. The PI's response did not dispel the allegation because the plagiarized material's location is irrelevant and verbatim quotations from secondary or tertiary literature are not exempted from accepted scholarly practices.

We conducted our own investigation due to the small size of the business. Our analysis of additional proposals identified similar verbatim plagiarism in a withdrawn SBIR proposal. The PI served as Associate Editor for a journal with guidelines specifying that verbatim quotations should be clearly demarcated, demonstrating his actions were a significant departure from accepted practices of his research community. We concluded the PI knowingly plagiarized material in two SBIR proposals and committed research misconduct. We recommended that, for 2 years, NSF require certifications and bar the PI from participation as an NSF peer reviewer, advisor, or consultant.

# Research Misconduct Investigations with University-wide Actions

This section highlights cases that resulted in university-wide actions to help prevent research misconduct, in addition to actions taken against the PIs. The universities' willingness to expand their responses beyond the individuals who committed research misconduct reflects a commitment to preventing future acts of research misconduct that we felt warranted highlighting in this report. We encourage universities that must address an instance of research misconduct to consider whether a similar approach is warranted.

For each case in this section, we recommended that NSF make a finding of research misconduct, issue a letter of reprimand, and require interactive RCR training, except where noted. Unless otherwise specified, NSF's decisions are pending.



#### PI Knowingly Plagiarized in a Proposal

A PI acknowledged and took full responsibility for copying material we identified in a declined NSF proposal. We referred the matter to the PI's university for investigation. The university concluded the PI committed research misconduct and required the PI to retake RCR training; create a professional writing and grant writing system under an approved plan; receive counseling on writing processes and work with a mentor for 1 year to improve scholarly and grant writing; submit all grant proposals and scholarly writing for 3 years to the department chair; and use plagiarism-checking software before submitting proposals to funding organizations, journals, or professional organizations.

Also, the university committed to the following university-wide actions to help prevent research misconduct:

- review current plagiarism-related training curricula;
- create a policy to ensure grant proposals and scholarly papers are run through plagiarism software before submission;
- require RCR training every 3 years for full-time faculty;
- send, at least semiannually, a newsletter with RCR-related material to all researchers; and
- implement plagiarism certifications for grant applications in its pre-award management system.

We concluded the PI knowingly committed plagiarism in the NSF proposal and recommended that NSF require the PI provide certifications and assurances and prohibit the PI from participation as an NSF peer reviewer, advisor, or consultant for 1 year.

#### **University Modifies Research Misconduct Practices Based on OIG Feedback**

We sent a Questionable Administrative Practices letter to a university because it did not investigate all allegations of plagiarism we referred, nor assess all three elements required for a research misconduct finding. As a result, the university notified us they are modifying their practices by:

- having research integrity staff participate in continuing education opportunities and review OIG's specific feedback;
- proactively assigning and training a cohort of faculty and staff to respond to allegations of research misconduct; and
- integrating materials such as those provided on our website into the university's training curriculum.



We did not make a recommendation to NSF because the university's response to the Questionable Administrative Practices letter resolved the issues in this case.

#### PI Admitted to Additional Plagiarism in Proposals

We investigated an allegation of plagiarism by a PI in a declined NSF proposal. The PI acknowledged and took full responsibility for copying the material we identified. He also voluntarily admitted to plagiarizing in a second declined proposal. We referred the matter to the PI's university for investigation. The university concluded the PI committed plagiarism and required the PI to retake RCR training. The university also required the PI to discuss the impact of his misconduct with university staff and informed him that he may be removed from his position if misconduct recurred.

Additionally, the university will require RCR training for all investigators before submitting proposals for external funding.

We concluded the PI knowingly committed plagiarism in the NSF proposals and recommended that NSF require the PI provide certifications and assurances and prohibit the PI from participation as an NSF peer reviewer, advisor, or consultant for 2 years.

# NSF Management Actions on Previously Reported Research Misconduct Investigations

NSF adjudicated five research misconduct investigations reported in previous semiannual reports and made a final decision on an appeal. Except where noted, each case resulted in NSF making a finding of research misconduct, issuing a letter of reprimand, and requiring interactive RCR training. NSF also took additional significant actions in response to our recommendations, as summarized below:

 In the case of the PI who claimed verbatim text need not be demarcated in SBIR or other business proposals,<sup>6</sup> NSF prohibited the PI from participating as an NSF reviewer, advisor, or consultant for 2 years, and required certifications and assurances for 2 years. The PI appealed NSF's decision. NSF reaffirmed its findings and the imposition of all actions.

<sup>&</sup>lt;sup>6</sup> September 2021 Semiannual Report, p. 6; March 2022 Semiannual Report, p. 14



- In the case of the NSF-funded graduate student who self-reported data fabrication and falsification in his dissertation and in eight publications,<sup>7</sup> NSF, for 3 years, required certifications and assurances; prohibited the former student from participation as a peer reviewer, advisor, or consultant for NSF; and required a data management plan with each submitted NSF proposal.
- In the case of the professor who plagiarized from confidential documents, 8 NSF returned a pending proposal without review. NSF also proposed a 2-year, government-wide debarment, and other administrative actions. The professor's appeal of NSF's decision is pending.
- In the case of the NSF-funded graduate student working on NSF- and National Institutes of Health-supported research who falsified and fabricated data in laboratory progress reports for more than 3 years, 9 NSF proposed debarring the student for 3 years. Additionally, for 4 years (the debarment and 1 year afterward), NSF proposed certifications and assurances; barred the student from participation as peer reviewer, advisor, or consultant for NSF; and required a data management plan with each submitted NSF proposal.
- In the case of the professor who allowed his graduate student to falsify data and include it in a paper and database, <sup>10</sup> NSF required compliance with his university-imposed actions and, for 1 year, required certifications and assurances; submission of and adherence to a data management plan; and prohibition from serving as a reviewer, advisor, or consultant. The professor notified NSF of his intent to appeal the actions imposed by the agency's decision.
- In the case of a postdoctoral researcher who plagiarized images and falsified data,<sup>11</sup>
  NSF proposed a 1-year government-wide debarment; prohibition from participating as
  a reviewer, advisor, or consultant for NSF for 4 years; and certifications and assurances
  for 4 years.

# Administrative Investigations

Our office investigates a variety of allegations that are not pursued as criminal or civil matters or do not meet the definition of research misconduct. These cases, which are

<sup>&</sup>lt;sup>11</sup> March 2022 Semiannual Report, pp. 13-14



<sup>&</sup>lt;sup>7</sup> March 2022 Semiannual Report, p. 13

<sup>&</sup>lt;sup>8</sup> September 2021 Semiannual Report, p. 6; March 2022 Semiannual Report, pp. 11-12

<sup>&</sup>lt;sup>9</sup> September 2021 Semiannual Report, p. 6

<sup>&</sup>lt;sup>10</sup> September 2021 Semiannual Report, p. 7

resolved administratively, include allegations such as retaliation against whistleblowers, violations of human and animal subject regulations, violations of peer review confidentiality, conflicts of interest, and employee misconduct.

#### Scientist Alleged Retaliation by his Employer and a Collaborating University

A scientist alleged that his employer and a collaborating university retaliated against him for reporting a gross waste of federal funds on an NSF-funded research cruise operated by the university. We investigated this matter under the whistleblower protection provisions of 41 U.S.C. § 4712 and submitted a report of our findings to NSF management. NSF concluded the scientist was not subjected to a prohibited reprisal for three reasons. First, the record did not establish that the scientist reasonably believed there was a gross waste of federal funds. Second, there did not appear to be a nexus between the alleged protected disclosures and the actions taken by the scientist's employer. Third, even if NSF assumed the scientist made disclosures and those disclosures were a contributing factor to the adverse actions taken by the employer, there was clear and convincing evidence that both the employer and collaborating university would have taken the same actions regardless of the disclosures.

#### **Reviewer Violated Confidentiality of NSF's Merit Review**

An NSF reviewer violated confidentiality by sharing material from a proposal with colleagues. Our investigation confirmed the reviewer agreed to NSF's confidentiality agreement and shared material from the proposal the day it was received. The reviewer admitted violating reviewer confidentiality by sharing the material without permission. NSF barred the reviewer from serving as a reviewer, advisor, or consultant for 1 year.

#### **Proposal Reviewer Shared Proposals Without Permission**

A reviewer breached NSF proposal confidentiality by providing NSF proposals to researchers in her lab without first obtaining permission from the cognizant NSF program officer. The reviewer acknowledged sharing and discussing the proposals with the researchers and incorporating their written comments into the reviews she submitted to NSF. We recommended NSF take appropriate action and inform us of the outcome.

# **Audits and Reviews**

The Office of Audits reviews NSF programs and operations to ensure that administrative, programmatic, and financial aspects of NSF operations are conducted effectively,



efficiently, and economically. We also audit grants, contracts, and cooperative agreements funded by NSF. By providing independent and objective assessments of NSF's program and financial performance, we help NSF improve its business policies and practices to better support its mission.

# Audits and Reviews of NSF Programs and Operations

#### **Capstone Report Offers Suggestions to Improve EPSCOR Oversight**

Over the past 3 years, we conducted audit work at 10 Established Program to Stimulate Competitive Research (EPSCoR) award recipients, resulting in seven reports and more than \$2.7 million in questioned costs at five award recipients. We also reviewed audits that included EPSCoR findings from the past 22 years to identify systemic issues. In this report, we summarized three key issues identified at multiple EPSCoR recipients and included suggestions to help the EPSCoR recipient community address them. Specifically, EPSCoR recipients need to strengthen internal controls and oversight related to assessing and monitoring subrecipient risk, charging costs to support summer research programs, and implementing new accounting systems. As a result of our audit work, NSF is strengthening its procedures and guidance to help ensure EPSCoR award recipients better comply with NSF and federal requirements.

#### NSF Could Improve its Major Facility Divestment Process

We reported that NSF could improve its processes for planning and managing divestments to better comply with requirements and best practices. NSF has some processes for planning divestment of its major facilities, such as identifying major facilities for divestment based on input from the scientific community and starting to plan and estimate the costs for a major facility's divestment during its design stage. However, we found NSF had not planned for the divestment of the older facilities we reviewed, did not ensure divestment cost estimates were reasonable for some of the major facilities in our sample, or provide Congress full life-cycle cost information as required. Although NSF has successfully transferred the operation and maintenance of some major facilities to other organizations, its experience with divestment is limited.

We recommended that NSF develop a process to enable an agency-level view of all major facilities; develop a process to ensure full life-cycle costs of major facilities, including costs associated with divestment, are deemed reasonable and provided to Congress; and improve policies, procedures, and guidance to clearly define the last major facility life cycle stage. NSF agreed with our findings and is taking steps to strengthen its oversight of the complete life cycle.



#### **International Telework Requirements Not Met**

We found that 22 NSF employees, guests, and contractors intentionally connected to the NSF network from international locations without authorization between June and September 2021. Additionally, NSF's required telework training did not address NSF's prohibition on international telework or reference the Department of State's requirements for federal employees teleworking overseas. Further, NSF did not periodically communicate its international telework prohibition to staff or have a process to monitor international connections to the NSF network.

In response to our work and in advance of the final report issuance, NSF issued guidance that reiterates its prohibition of international telework and clarifies the permitted use of devices or access to the NSF network when staff travel oversees for official business. It also states that individuals must leave their NSF-issued devices at home and should disable NSF email on their personal devices before departing the United States for reasons other than official business.

NSF agreed with our six recommendations to improve communication to employees, guests, and contractors; assess the risks of international connections to the network; and establish monitoring and data retention programs.

#### FY 2021 Audit of NSF's Compliance with the Payment Integrity Information Act

The *Payment Integrity Information Act of 2019*<sup>12</sup> (PIIA) requires agencies to periodically review and identify programs and activities that may be susceptible to significant improper payments. PIIA also requires OIGs to annually review improper payment reporting in the Agency Financial Report or Performance and Accountability Report and assess six requirements of the Act.

Kearney & Company (Kearney), under a contract with us, conducted a performance audit of NSF's compliance with PIIA for FY 2021. 13 Kearney found that NSF complied with PIIA reporting requirements for FY 2021 based on its review of NSF's Agency Financial Report and risk assessments. Additionally, NSF met all applicable requirements established by the Office of Management and Budget (OMB) Memorandum M-21-19 for compliance with PIIA. 14

<sup>&</sup>lt;sup>14</sup> OMB Memorandum M-21-19, Appendix C to Circular No. A-123, *Requirements for Payment Integrity Improvement*, March 5, 2021, requires federal agencies to institute a systematic method of reviewing all



<sup>&</sup>lt;sup>12</sup> P.L. 116 - 117 - Payment Integrity Information Act of 2019

<sup>&</sup>lt;sup>13</sup> OIG Report 22-2-004, May 17, 2022

#### NSF Could Improve Purchase Card Internal Controls

Although NSF has rules, procedures, and practices to promote accountability and discourage purchase card misuse, it could improve its purchase card guidance and strengthen internal controls in some areas. Specifically, NSF did not ensure its program guidance was up to date or comprehensive in all areas. For transactions that we tested, cardholders did not always maintain documentation for exceptions to potentially prohibited purchases, get written approval from the approving official before making a purchase, and/or retain a purchase receipt.

We made five recommendations to improve NSF's purchase card internal controls, including revising its purchase card manual and training program participants in the areas where we found noncompliance. NSF agreed with all five recommendations and is taking steps to strengthen its purchase card program.

# **Audits of NSF Award Recipients**

#### The Massachusetts Institute of Technology Did Not Comply with GRFP Award Terms

During our audit of NSF's Graduate Research Fellowship Program (GRFP), we found that the Massachusetts Institute of Technology (MIT) did not comply with all GRFP award terms and conditions, ensure the accuracy of reported payments to fellows, or properly account for GRFP drawdowns on one award. Specifically, MIT did not submit annual completion reports detailing the status of GRFP fellows or prorate payments to fellows in whole month increments. In addition, although we found that MIT paid fellows as reported to NSF for 90 percent of the fellows, we also found variances that were sometimes the result of MIT under- or over-paying the stipend amount specified in the fellowship's terms and conditions, or MIT certifying inaccurate amounts while paying the fellows correctly.

MIT is implementing updated policies and procedures and adding resources to manage its program to support GRFP compliance under the direction of MIT's Coordinating Official. MIT has also revised its processes for recording and managing GRFP awards and will work with NSF to resolve the financial variances identified in the report.

#### **Audits of Award Recipients Resulted in More Than \$667,000 in Questioned Costs**

OIG contractors and staff completed audits of 11 NSF award recipients that expended

programs and activities, identify programs susceptible to significant improper payments, and assess risk against factors that are likely to contribute to improper payments.



more than \$256.8 million of NSF funds. The audits assessed the allowability, allocability, and reasonableness of costs charged to NSF and resulted in more than \$667,000 of questioned costs. The findings included unallowable costs, inadequately supported costs, and inappropriately allocated costs. The auditors recommended that the award recipients strengthen controls over the areas that led to the questioned costs and that NSF recover the questioned costs.

**Reports of Award Recipients this Semiannual Period** 

Report No.	· Award Recipient	
22-1-003	University of California, Merced	\$226,652
22-1-004	University of Idaho	\$35,316
22-1-005	University of Maine	\$0
22-1-006	Cal Poly Corporation	\$30,177
22-1-007	San Francisco State University	\$260
22-1-008	Education Development Center	\$88,089
22-1-009	BSCS Science Learning	\$158,050
22-1-010	West Virginia University Research Corporation	\$43,156
22-1-011	Arctic Research Consortium of the United States	\$14,847
22-1-012	North Carolina Central University	\$60,320
22-1-013	Colorado School of Mines	\$10,260
Total		\$667,127

Source: NSF OIG

# **Reviews of Single Audits**

*Uniform Guidance*<sup>15</sup> requires colleges, universities, and non-profit organizations that expend \$750,000 or more a year in federal awards to obtain an annual independent financial audit, referred to as a "single audit." NSF relies on the results of single audit reports to plan its oversight efforts, including site visits and other post-award monitoring. We conduct desk reviews on all single audit reporting packages for which NSF is the cognizant or oversight agency. <sup>16</sup> During a desk review, we examine the audit reporting package, which includes financial statements, federal award expenditures, and auditors' reports, but not the underlying auditors' audit documentation, to determine whether it meets *Uniform Guidance*, *Generally Accepted Government Auditing Standards* (GAGAS), and American Institute of Certified Public Accountants (AICPA) audit standards.

<sup>&</sup>lt;sup>15</sup> 2 CFR Pt. 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

<sup>&</sup>lt;sup>16</sup> Generally defined as an awardee's predominant federal funding agency.

During this period, we conducted desk reviews of 40 single audit reporting packages. The audits were conducted by 28 different independent public accounting firms and covered nearly \$1.2 billion in total federal expenditures, including more than \$570 million in NSF direct expenditures. As shown in Figure 1, 30 audit reporting packages (75 percent) fully met federal reporting requirements.

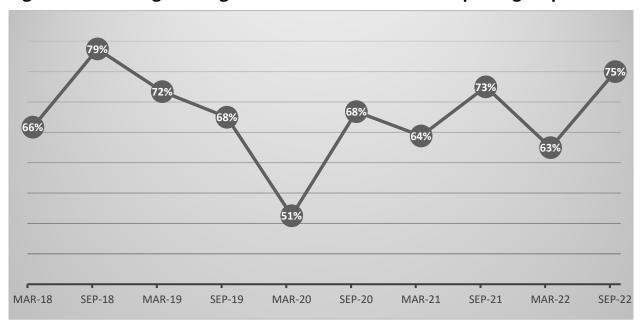


Figure 1. Percentage of Single Audits That Met Federal Reporting Requirements

Source: NSF OIG Semiannual Reports

We identified deficiencies in 10 audit reporting packages, including reporting packages submitted after required deadlines; incomplete identification of awards within the major programs; incomplete Schedules of Expenditures of Federal Awards; audit report findings with missing elements and insufficient information to support audit resolution; auditors' failure to report unallowable costs as questioned costs; inaccurate reporting on the Data Collection Form (Form SF-SAC); failure to report information regarding prior year audit findings; and incorrect determination of auditee risk.

For errors that potentially impacted the reliability of the audit reporting packages, we contacted the auditors and awardees for explanations of each of the potential errors. In most cases, the auditors and awardees provided adequate explanations or additional information to demonstrate compliance with federal reporting requirements. However, in one instance, we rejected the audit reporting package because the deficiencies were significant. For all reviews, we issued a memorandum to the auditor and awardee informing them of the results of our review and the actions needed to improve the quality and reliability of future audits. We also provided a copy of the memorandum to the awardee's other federal funding agencies for their use in monitoring and oversight. In the

instance where we rejected the audit, we separately referred the auditor to the AICPA Professional Ethics Division and Peer Review Program for additional review.

#### **Quality Control Review of Cherry Bekaert, LLP**

Quality Control Reviews (QCR) consist of in-depth reviews of auditor documentation in support of single audits. QCRs are an important tool for determining whether single audits meet government auditing and reporting requirements, and for helping to improve future audit quality. Firms can receive a QCR rating of Pass, Pass with Deficiencies, or Fail. During this period, we issued one report on our QCR of Cherry Bekaert, LLP's Single Audit of the Computing Research Association for the year ended June 30, 2020. We issued a rating of Pass with Deficiencies. Although we determined the audit report was reliable for agencies' use in oversight of awards to the Computing Research Association, we identified two quality issues that did not affect the reliability of the audit report. Cherry Bekaert agreed with our recommendation to improve the quality of its future single audits.

#### **Audit Resolution**

We work closely with NSF to resolve recommendations resulting from our findings to improve operations and internal controls, recover questioned costs, and put funds to better use. We have different processes for resolving recommendations pertaining to NSF programs and operations and those pertaining to external organizations, such as universities.

To resolve recommendations pertaining to NSF programs and operations, NSF submits a corrective action plan to our office with proposed actions and milestone dates. We review the plan and work with NSF to ensure the proposed corrective actions are timely and responsive to the report's recommendations. When we accept the corrective action plan, the recommendations are resolved. Once NSF provides us evidence that it has implemented the corrective action and we confirm the work is done, we close the recommendation.

Our audit reports pertaining to external organizations generally contain recommendations to improve internal controls and/or recover questioned costs claimed by the award recipients. In such cases, NSF formally issues our report to the auditee and reviews the auditee's response to the report's recommendations. The auditee also has the opportunity to discuss concerns with NSF, and in some circumstances, NSF may discuss those concerns with us. NSF then provides us with a draft management decision record, which details its reasons for sustaining or not sustaining recommendations and questioned costs. If necessary, we may ask for clarification or additional information and



discussion on NSF's management decision. Once we agree with NSF's management decision, the recommendations are resolved. NSF notifies our office when it confirms that the auditee has completed recommended internal control corrective actions and repaid questioned costs. The recommendations are closed once we receive this notification.

#### **MIT No Longer Requiring Fellows to Cover Tuition Shortfalls**

We closed the only recommendation from our 2022 memo <u>The Massachusetts Institute of Technology's Noncompliance with Certain Graduate Research Fellowship Program Terms and Conditions</u>. NSF's Graduate Research Fellowship Program (GRFP) provides institutions a cost of education allowance for each fellow actively completing full-time research or coursework. In return, institutions must exempt these fellows from paying tuition and fees normally charged to graduate students of similar academic standing. As a result of our audit, the Massachusetts Institute of Technology (MIT) is no longer requiring its GRFP fellows to cover tuition shortfalls. Additionally, although our recommendation addressed policies and practices at MIT, NSF updated its GRFP policy for all institutions and reminded them of their obligations under GRFP awards.

#### NSF Awarded a FAR-based Contract for EPSCoR Data Collection Services

We closed the only recommendation from our 2021 report <u>NSF Directed Funding to Vendor Without Following Competition Rules</u>. The report noted NSF directed funding for EPSCoR data collection services to a vendor since at least 2016 without following procurement guidelines. In 2022, NSF solicited, and awarded, a Federal Acquisition Regulation-based contract for EPSCoR data collection services.

#### NSF Completes Actions to Strengthen Controls Over Access to Sensitive Information

We closed all recommendations from our 2020 review, <u>Management Notification Regarding Access to Social Security Numbers in the NSF Report Database</u>. NSF conducted a review of individuals with access to social security numbers to ensure they had a continued business need for such information. Additionally, NSF developed and updated procedures to provide additional controls to ensure requests for access require a business need and established an annual recertification process. NSF updated its <u>Information Technology Security and Awareness Training</u> to include a statement requesting users to request access removal when they determine access to systems or data is no longer needed.



#### **NSF Strengthens Process for Evaluating Major Facilities Operations Proposals**

We closed the final recommendation from our 2020 <u>Audit of NSF's Processes for Evaluating the Operations and Maintenance Cost Proposal for the Ocean Observatories Initiative</u>. NSF developed standard solicitation language and added pertinent sections to the *Research Infrastructure Guide* to ensure future major facility operations proposals include inflation factors. Also, NSF issued new internal standard operating guidance, titled *Major Facility Oversight Reviews*, which includes annual assessments of key operational risks, their potential costs and scientific impacts, and mitigation strategies to inform NSF's cost analysis or the annual award increment.

# NSF Completes Actions to Improve Its Controls to Prevent Misallocation of Major Facility Expenses

We closed the final recommendation from our 2019 report <u>Audit of NSF's Controls to Prevent Misallocation of Major Facility Expenses</u>. NSF provided the recipient community additional guidance to help ensure recipients consistently allocated construction and operation expenses to the correct award and adequately documented allocation decisions. NSF now requires major facility recipients to create a segregation of funding plan on how it will allocate expenses during the construction and operations phases, particularly when construction and operations activities overlap in time. Additionally, NSF updated internal standard operating procedures and guidance for overseeing recipients and conducting the final major facility construction review.

#### **NSF Strengthened Its IPERA Risk Assessment Process**

By law, our office conducts an audit every 3 years of NSF's risk assessment process to identify its susceptibility to significant improper payments. We closed the four recommendations from our 2019 *Performance Audit over the Improper Payments Elimination and Recovery Act*. NSF developed new procedures to ensure completeness of the risk assessment, a new standard operating guide that provides instructions on the Recapture Table process, and written procedures to periodically synchronize the status of recovery activities. NSF also reviewed Invoice Payment Platform payment credit activity to ensure applicable amounts are included in the payment recapture amounts reported and included this step in the new Recapture Table standard procedures.

#### **NSF Sustains \$3,267,252 of Questioned Costs**

NSF and OIG resolved 11 previous audits of award recipients this semiannual period. In addition to sustaining questioned costs, NSF required the award recipients to implement



recommended actions such as upgrading accounting software; developing or revising policies and procedures; increasing training on the allowability of costs, including those for travel, salaries, participant support, service center expenses, and consultants; and reviewing costs before drawing down NSF funds or charging costs to NSF awards.

**Reports of Award Recipients Resolved This Semiannual Period** 

Report No.	Issue Date	Award Recipient Questioned Quest		Sustained Questioned Costs	
<u>19-1-011</u>	4/30/2019	University of Delaware	\$426,667	\$258,467	
<u>19-1-016</u>	8/8/2019	Ohio State University	\$502,587	\$463,523	
<u>20-1-008</u>	8/31/2000	Duke University	\$708,906	\$663,284	
21-1-001	1/7/2021	University of Kansas Center for Research, Inc.	\$1,550,054	\$1,550,054	
21-1-003	1/13/2021	University of Wyoming	\$256,351	\$256,351	
21-1-009	5/13/2021	University of New Mexico	\$20,965	\$3,681	
<u>21-1-013</u>	5/25/2021	University of Wisconsin	\$48,998	\$29,798	
<u>21-1-015</u>	5/27/2021	University of Central Florida	\$294	\$294	
<u>21-1-018</u>	8/2/2021	University of Michigan	\$11,499	\$11,499	
<u>22-1-004</u>	5/6/2022	University of Idaho	\$35,316	\$30,301	
22-1-005	6/1/2022	University of Maine	\$0	N/A	
Total			\$3,561,637	\$3,267,252	

Source: NSF OIG

# **Peer Review**

Federal audit organizations performing work under Government Auditing Standards must have an external peer review by reviewers independent of the organization every 3 years. The reviews are conducted in accordance with guidelines established by the Council of the Inspectors General on Integrity and Efficiency and focus on the audit organization's quality control system. A quality control system includes the office's organizational structure as well as policies and procedures that facilitate compliance with *Generally Accepted Government Auditing Standards*. On external peer reviews, audit organizations can receive a rating of pass, pass with deficiencies, or fail. The Office of Audits received a rating of pass in March 2021 for the year ending September 30, 2020. A copy of the final peer review report is posted on our website.



The Office of Investigations received a rating of pass in December 2017. The scheduled peer review for the Office of Investigations has been delayed due to the pandemic and is expected to begin in spring 2023.

# **Statistical Tables**

# **Investigations Data**

**Table 1. Investigative Case Activities**<sup>17</sup>

Referrals to DOJ Criminal Prosecutors (individuals and entities counted separately for all referrals)  Referrals to Criminal State/Local Authorities Indictments/Criminal Information  Arrests  Criminal Convictions/Pleas  Referrals to DOJ Civil Prosecutors  Referrals to Civil State/Local Authorities  Civil Settlements/Judgements/Compliance Plans  Investigative Reports Issued to NSF Management for Action  Research Misconduct Findings Issued by NSF  Government-wide Suspensions/Debarments/Voluntary Exclusions  Administrative Actions taken by NSF (Includes actions related to findings of research misconduct, suspension/termination of awards or employee	6 0 1 0 2 10 0
Referrals to Criminal State/Local Authorities Indictments/Criminal Information Arrests Criminal Convictions/Pleas  Referrals to DOJ Civil Prosecutors Referrals to Civil State/Local Authorities Civil Settlements/Judgements/Compliance Plans  Investigative Reports Issued to NSF Management for Action Research Misconduct Findings Issued by NSF Government-wide Suspensions/Debarments/Voluntary Exclusions Administrative Actions taken by NSF (Includes actions related to findings of	1 0 2 10 0
Indictments/Criminal Information Arrests Criminal Convictions/Pleas  Referrals to DOJ Civil Prosecutors Referrals to Civil State/Local Authorities Civil Settlements/Judgements/Compliance Plans  Investigative Reports Issued to NSF Management for Action Research Misconduct Findings Issued by NSF Government-wide Suspensions/Debarments/Voluntary Exclusions Administrative Actions taken by NSF (Includes actions related to findings of	1 0 2 10 0
Arrests Criminal Convictions/Pleas  Referrals to DOJ Civil Prosecutors Referrals to Civil State/Local Authorities Civil Settlements/Judgements/Compliance Plans  Investigative Reports Issued to NSF Management for Action Research Misconduct Findings Issued by NSF Government-wide Suspensions/Debarments/Voluntary Exclusions Administrative Actions taken by NSF (Includes actions related to findings of	10
Criminal Convictions/Pleas  Referrals to DOJ Civil Prosecutors  Referrals to Civil State/Local Authorities  Civil Settlements/Judgements/Compliance Plans  Investigative Reports Issued to NSF Management for Action  Research Misconduct Findings Issued by NSF  Government-wide Suspensions/Debarments/Voluntary Exclusions  Administrative Actions taken by NSF (Includes actions related to findings of	10
Referrals to DOJ Civil Prosecutors Referrals to Civil State/Local Authorities Civil Settlements/Judgements/Compliance Plans Investigative Reports Issued to NSF Management for Action Research Misconduct Findings Issued by NSF Government-wide Suspensions/Debarments/Voluntary Exclusions Administrative Actions taken by NSF (Includes actions related to findings of	10
Referrals to Civil State/Local Authorities  Civil Settlements/Judgements/Compliance Plans  Investigative Reports Issued to NSF Management for Action Research Misconduct Findings Issued by NSF  Government-wide Suspensions/Debarments/Voluntary Exclusions Administrative Actions taken by NSF (Includes actions related to findings of	0
Referrals to Civil State/Local Authorities  Civil Settlements/Judgements/Compliance Plans  Investigative Reports Issued to NSF Management for Action Research Misconduct Findings Issued by NSF  Government-wide Suspensions/Debarments/Voluntary Exclusions Administrative Actions taken by NSF (Includes actions related to findings of	0
Civil Settlements/Judgements/Compliance Plans  Investigative Reports Issued to NSF Management for Action Research Misconduct Findings Issued by NSF Government-wide Suspensions/Debarments/Voluntary Exclusions Administrative Actions taken by NSF (Includes actions related to findings of	
Investigative Reports Issued to NSF Management for Action Research Misconduct Findings Issued by NSF Government-wide Suspensions/Debarments/Voluntary Exclusions Administrative Actions taken by NSF (Includes actions related to findings of	0
Research Misconduct Findings Issued by NSF  Government-wide Suspensions/Debarments/Voluntary Exclusions  Administrative Actions taken by NSF (Includes actions related to findings of	
Research Misconduct Findings Issued by NSF  Government-wide Suspensions/Debarments/Voluntary Exclusions  Administrative Actions taken by NSF (Includes actions related to findings of	
Government-wide Suspensions/Debarments/Voluntary Exclusions  Administrative Actions taken by NSF (Includes actions related to findings of	13
Administrative Actions taken by NSF (Includes actions related to findings of	5
	2
research misconduct, suspension/termination of awards or employee	
·	22
misconduct)	
Total Investigative Recoveries (includes funds returned to NSF, restitution,	
fees, proceeds from civil settlements and funds put to better use)	\$216,895
Substantiated Whistleblower Retaliation	0
Substantiated Agency Interference	

<sup>&</sup>lt;sup>17</sup> For "Investigative Reports Issued to NSF Management for Action" we count only investigative reports issued to NSF that include recommendations for administrative action (*e.g.*, findings of research misconduct, imposition of governmentwide suspension or debarment, or suspension/terminations of awards). We count recommendations for each individual and entity separately.



Table 2. Investigative Case Statistics<sup>18</sup>

	Preliminaries	Investigations
Cases Active at Beginning of Period	1	112
Cases Opened this Period	6	22
Cases Closed this Period	6	31
Cases Active at End of Period	1	103

### **Audit Data**

Table 3. Audit Reports Issued with Recommendations for Better Use of Funds

		Dollar Value
A.	For which no management decision has been made by the beginning of the reporting period	\$0
В.	Recommendations that were issued during the reporting period	\$0
C.	Adjustments related to prior recommendations	\$0
Sub	ototal of A+B+C	\$0
D.	For which a management decision was made during the reporting period	\$0
	i. Dollar value of management decisions that were consistent with OIG recommendations	\$0
	ii. Dollar value of recommendations that were not agreed to by management	\$0
E.	For which no management decision had been made by the end of the	<b>#</b> 0
	reporting period	\$0
F.	For which no management decision was made within 6 months of issuance	\$0

<sup>&</sup>lt;sup>18</sup> Research misconduct statistics are reported on our <u>website</u>.



Table 4. Audit Reports Issued with Questioned Costs<sup>19</sup>

Tab	Table 4. Audit Reports Issued with Questioned Costs "						
		Number of	Questioned	Unsupported			
		Reports	Costs	Costs			
A.	Reports with questioned costs from prior reporting periods for which no management decision has been made by the beginning of this reporting period	27	\$8,096,430	\$1,688,558			
В.	Reports with questioned costs that were issued during this reporting period	10	\$667,127	\$206			
C.	Adjustment related to prior recommendations	0	\$0	\$0			
Sub	ototal of A+B+C	37	\$8,763,557	\$1,688,764			
D.	For which a management decision was made during the reporting period	10	\$3,561,637	\$1,444,743			
	i. Dollar value of costs disallowed (sustained) by NSF management <sup>20</sup>		\$3,267,252	N/A			
	ii. Dollar value of costs not disallowed (sustained) by NSF management.		\$294,385	N/A			
E.	For which no management decision had been made by the end of the reporting period	27	\$5,201,920	\$244,021			
F.	For which no management decision was made within 6 months of issuance	18	\$4,570,109	\$ 243,815			

\_

<sup>&</sup>lt;sup>19</sup> Unsupported costs are a subset of questioned costs and are shown separately as required by the *Inspector General Act*. These costs were not supported by adequate documentation at the time of the audit.

<sup>&</sup>lt;sup>20</sup> Disallowed or sustained costs are charges made to NSF awards that the auditors questioned, and NSF management agreed should not have been charged to the government. In extenuating circumstances, NSF management may decide to recover a different amount than the amount sustained.

 Table 5. Reports Issued (by OIG and Independent Public Accounting Firms)

Report No./ Date Issued	Title	Questioned Costs	Un- supported Costs	Better Use of Funds	No. of Recs
22-1-003 4/15/22	Performance Audit of Incurred Costs - University of California, Merced	\$226,652	\$206	\$0	33
22-1-004 5/6/22	Performance Audit of Incurred Costs - University of Idaho	\$35,316	\$0	\$0	12
22-1-005 6/1/22	Performance Audit of Incurred Costs - University of Maine	\$0	\$0	\$0	1
22-1-006 6/21/22	Performance Audit of Incurred Costs - Cal Poly Corporation	\$30,177	\$0	\$0	13
22-1-007 6/22/22	Performance Audit of Incurred Costs - San Francisco State		\$0	\$0	6
22-1-008 6/28/22	l Costs - Education Development		\$0	\$0	12
22-1-009 6/28/22	Performance Audit of Incurred Costs - BSCS Science Learning	\$158,050	\$0	\$0	16
22-1-010 7/5/22	Performance Audit of Incurred Costs - West Virginia University Research Corporation	\$43,156	\$0	\$0	6
22-1-011 8/9/22	Performance Audit of Incurred Costs - Arctic Research Consortium of the United States	\$14,847	\$0	\$0	10
22-1-012 8/12/22	Performance Audit of Incurred Costs - North Carolina Central University	\$60,320	\$0	\$0	14
22-1-013 9/23/22	Performance Audit of Incurred Costs - Colorado School of Mines	\$10,260	\$0	\$0	10
22-2-004 5/17/22	Compliance with PIIA for FY 21	\$0	\$0	\$0	0
22-2-005 5/25/22	Audit of NSF's Purchase Card Program	\$0	\$0	\$0	5
22-2-006 9/2/22	Audit of NSF's Divestment of Major Facilities	\$0	\$0	\$0	3



Total	18 Reports	\$667,127	\$206	\$0	152
	Association				
9/28/22	of the Computing Research	N/A	N/A	N/A	N/A
22-8-001	Bekaert, LLP's FY 2020 Single Audit	N1/A	N1/A	N1/A	N1/A
	Quality Control Review of Cherry				
	Funding				
8/23/22	Graduate Research Fellowship	Φ0	Ψ0	φ0 φ0	5
22-6-006	Technology's Administration of	\$0	\$0	\$0	5
	The Massachusetts Institute of				
7713722	and Controls				
7/15/22	Recipients Need Stronger Oversight	\$0	\$0	\$0	0
22-6-005	Capstone Report: EPSCoR				
J/ 14/22	Requirements				
9/14/22	with International Telework	\$0	\$0	\$0	6
22-3-001	Inspection of NSF's Compliance				

Table 6. Reports Issued before April 1, 2022, with Unimplemented Recommendations as of September 30, 2022 (Summary Table)

Year	Number of Reports with Unimplemented Recommendations	Number of Unimplemented Recommendations	Dollar Value of Aggregate Potential Cost Savings <sup>21</sup>
2017	1	1	\$0
2019	4	66	\$1,190,163
2020	6	175	\$1,873,064
2021	15	203	\$3,598,158
2022	5	53	\$876,958
Total	31	498	\$7,538,343

 $<sup>^{21}</sup>$  Aggregate potential savings are "questioned costs" if the recommendations have not been resolved, and "sustained costs" if the recommendations have been resolved (agreed to by NSF and OIG).



Table 7. Reports Issued before April 1, 2022, for which No Management Decision Has Been Made by September 30, 2022, Including the Aggregate Potential Cost Savings of Those Recommendations (Detailed Table)<sup>22</sup>

Report No./ Date Issued	Topic/Type of Audit	No. of Recs	Why Mgmt. Decision Has Not Been Made	Desired Timetable for Mgmt. Decision	Aggregate Potential Cost Savings
19-1-010 5/2/19	University of Maryland College Park Incurred Cost Audit	19	Draft management decisions require additional edit and review before finalizing.	3/30/2023	\$357,108
19-1-017 9/13/19	Oregon State University Incurred Cost Audit	24	Draft management decisions require additional edit and review before finalizing.	3/30/2023	\$369,532
20-1-001 1/10/20	University of Colorado Boulder Incurred Cost Audit	15	Additional information from awardee needed to finalize management decisions.	3/30/2023	\$79,831
20-1-004 7/13/20	University of North Carolina at Chapel Hill Incurred Cost Audit	43	Additional information from awardee needed to finalize management decisions.	3/30/2023	\$744,671
20-1-005 7/23/20	University of Houston Incurred Cost Audit	30	Resolution delayed by diminished capacity and transition of staff.	3/30/2023	\$133,305
20-1-007 8/11/20	Yale University Incurred Cost Audit	36	Draft management decisions require additional edit and review before	3/30/2023	\$251,973

<sup>&</sup>lt;sup>22</sup> This table shows only recommendations that have not yet been resolved. Table 6 includes both unresolved and resolved recommendations that have not yet been implemented.

			finalizing.		
21-1-002 12/17/20	Texas A&M Incurred Cost Audit	24	Draft management decisions require	3/30/2023	\$137,558
21-1-004 1/15/21	University of Florida Incurred Cost Audit	17	Draft management decisions require additional edit and review before finalizing.	12/30/2022	\$640,723
21-1-007 4/30/21	Clemson University Incurred Cost Audit	35	Draft management decisions require additional edit and review before finalizing.	3/30/2023	\$276,440
21-1-008 5/13/21	Emory University Incurred Cost Audit	8	Draft management decisions require additional edit and review before finalizing.	12/30/2022	\$89,884
21-1-011 5/19/21	Florida International University Audit of the Implementation of COVID-19 Flexibilities	9	Draft management decisions require additional edit and review before finalizing.	12/30/2022	\$22,144
21-1-014 5/26/21	California Institute of Technology Audit of the Implementation of COVID-19 Flexibilities	11	Draft management decisions require additional edit and review before finalizing.	12/30/2022	\$50,721
21-1-016 6/29/21	University of South Carolina Columbia Incurred Cost Audit	8	Additional information from awardee needed to finalize management decisions.	12/30/2022	\$140,360
21-1-017 7/20/21	Tennessee State University Incurred	13	Additional information from	3/30/2023	\$155,432



Total	18 reports	369			\$4,570,109
22-1-002 12/9/21	University of Texas at Dallas Incurred Cost Audit	24	Draft management decisions require additional edit and review before finalizing.	12/30/2022	\$249,210
22-1-001 10/15/21	University of Rhode Island Incurred Cost Audit of EPSCoR Awards	21	Additional information from awardee needed to finalize management decisions.	3/30/2023	\$627,748
21-1-020 9/29/21	University of California, San Francisco Incurred Cost Audit	20	Additional information from awardee needed to finalize management decisions.	3/30/2023	\$136,810
21-1-019 8/30/21	University of Pittsburgh Incurred Cost Audit	12	management decisions.  Draft management decisions require additional edit and review before finalizing.	12/30/2022	\$106,659
	Cost Audit		awardee needed to finalize		



#### **About the National Science Foundation**

NSF is an independent federal agency created by Congress in 1950 "[t]o promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes" (Pub. L. No. 81-507). NSF leadership has two major components: a director who provides oversight of NSF staff and management responsible for program creation and administration, merit review, planning, budget, and day-to-day operations; and a 24-member National Science Board to establish the overall policies of the Foundation. With a budget of approximately \$8.8 billion (FY 2022), NSF is the funding source for about 25 percent of all federally supported basic research conducted by America's colleges and universities. Each year, NSF supports an average of about 200,000 scientists, engineers, educators, and students at universities, laboratories, and field sites throughout the United States and the world.

#### **About the NSF Office of Inspector General**

The NSF Office of Inspector General promotes effectiveness, efficiency, and economy in administering the Foundation's programs; detects and prevents fraud, waste, abuse, and whistleblower reprisal within NSF or by individuals who receive NSF funding; and identifies and helps to resolve cases of research misconduct. NSF OIG was established in 1989, in compliance with the *Inspector General Act of 1978*, as amended. Because the Inspector General reports directly to the NSB and Congress, the Office is organizationally independent from the Foundation.

#### **Connect with Us**

For more information or questions, please contact us at <u>oigpublicaffairs@nsf.gov</u>. Follow us on Twitter at <u>@nsfoig</u>. Visit our website at <u>oig.nsf.gov</u>.

#### Report Fraud, Waste, Abuse, or Whistleblower Reprisal

- File an online report: <u>oig.nsf.gov/contact/hotline</u>
- Anonymous Hotline: 1.800.428.2189
- Mail: 2415 Eisenhower Avenue, Alexandria, VA 22314 ATTN: OIG HOTLINE

#### **Photo Credit**

A slice through the 3D map of galaxies from the first few months of the Dark Energy Spectroscopic Instrument (DESI). *Credit: D. Schlegel/Berkeley Lab using data from DESI; acknowledgment: M. Zamani (NSF's NOIRLab) (Available under Creative Commons <u>Attribution 4.0 International</u>).* 

