



National Science Foundation
Office of the Director

November 9, 2018

Diane L. Souvaine, Ph.D.
Chair, National Science Board
Tufts University
Halligan Hall 102
161 College Avenue
Medford, MA 02155

Dear Dr. Souvaine:

The accompanying document is the response by the National Science Foundation to the Office of Inspector General's (OIG) Semiannual Report, which covers the period from April 1, 2018 through September 30, 2018. I have also included the management report on final actions on audits for the same period.

In this response, we highlight actions during this Semiannual Reporting period that reflect NSF's responsible and ethical stewardship of Federal funds. These actions include NSF's new sexual harassment policy and support of the OIG's investigations of fraud and research misconduct. We detail our partnership with the OIG Office of Audits in a Stewardship Collaborative. Finally, we report our positive actions related to an OIG audit of NSF oversight of grantees' subrecipient monitoring and an OIG Alert Memorandum arising from an ongoing audit of a NSF awardee.

We look forward to continuing our engagement with the OIG to achieve the mission of the Foundation and to address issues of fraud and research misconduct in NSF awards, resolution of OIG audits of NSF awardees, and improvements to our oversight activities.

Sincerely,

A handwritten signature in blue ink that reads 'F. Fleming Crim'.

F. Fleming Crim, Ph.D.
Chief Operating Officer

Enclosures

cc: Dr. France Córdova

NSF's Response to the Office of Inspector General's Semiannual Report to Congress



National Science Foundation
Fall 2018



NSF Management appreciates the opportunity to respond to the NSF Office of Inspector General (OIG) Semiannual Report covering the period from April 1, 2018 through September 30, 2018. We highlight NSF's actions during this Semiannual Reporting period that reflect the responsible and ethical stewardship of Federal funds. These actions include NSF's new sexual harassment policy, support of OIG investigations, and partnership with the OIG Office of Audits in a Stewardship Collaborative. We share NSF's positive actions related to an OIG audit of NSF's oversight of grantees' subrecipient monitoring and an OIG Alert Memorandum arising from an ongoing audit of a NSF awardee. Also appended to this response is the Management Report on Final Actions Taken on Audits, as required by statute.

NSF is committed to responsible and ethical stewardship of Federal funds. Accordingly, NSF does not tolerate sexual harassment and, in September 2018, announced new measures to protect members of the research community. NSF's policy requires awardee institutions to report sexual harassment findings and administrative actions, as implemented through a new term and condition for awards.

NSF also appreciates the OIG's role in proper stewardship of Federal funds. NSF does not tolerate waste, fraud or abuse in NSF awards. To that end, NSF recognizes the importance of the OIG's investigative activities, including those arising from Small Business Innovation Research and Small Business Technology Transfer (SBIR/STTR) awards. We are proud to have supported the OIG's investigative recovery of nearly \$4 million during this reporting period. Based on a recommendation by the OIG, NSF also issued six suspensions during this time, arising from a criminal indictment related to SBIR/STTR awards, in order to mitigate the loss of Federal funds.

Similarly, we recognize the importance of the OIG's investigations of misconduct under 45 C.F.R. Part 689. In FY 2018, the OIG issued about twelve new reports with allegations of research misconduct, defined as plagiarism, falsification, and/or fabrication of research funded by or proposed to NSF.* While NSF is still reviewing these reports, a subset arose from allegations of plagiarism in unfunded proposals by faculty. NSF encourages the training of faculty in the responsible and ethical conduct of research. We further note that the number of new research misconduct referrals in FY 2018 was about the same as FY 2017, when the OIG issued thirteen such reports. Nonetheless, NSF takes every allegation of research misconduct very seriously.

Correspondingly, NSF acknowledges the importance of constructive engagement with the OIG Office of Audits. By way of background, in 2010, the NSF Office of Budget, Finance, and Award Management (BFA) and the OIG Office of Audits established the Stewardship Collaborative, which the NSF Chief Financial Officer and the Assistant Inspector General for Audits co-chair. While initially focused on the resolution of OIG audits of NSF awardees, the Stewardship Collaborative has expanded (a) its membership, by including the NSF Office of Information and Resource Management (OIRM); and (b) its charge, by broadening discussion to encompass issues arising from major research facilities, contracts, financial, and internal performance audits.

Based on the work by NSF and the OIG in the Stewardship Collaborative, BFA and the OIG co-authored an article, entitled "We're In this Together!", published during this reporting period in The National Council of University Research Administrators (NCURA) Magazine, Vol. 50, No. 4 (August 2018), pp. 28-31. The article, which provides an overview of the OIG's process for auditing NSF awardees and BFA's resolution of OIG findings, questioned costs, and recommendations, acknowledges that NSF and the OIG may have "differences

*The OIG research misconduct reports for FY 2017 and FY 2018, as described herein, exclude its program integrity cases, e.g., which typically arise from allegations of fraud in SBIR/STTR awards.

in approach to stewardship.” These differences may be limited to the resolution of a specific finding in a single audit or may involve differing interpretations of a policy that affects many audits. However, as the article concludes, “[t]hrough mutual respect of the imperative roles both play in supporting the NSF mission, NSF and NSF OIG cooperate better, which benefits both organizations’ shared goal of ensuring accountability and stewardship of taxpayer investments.”

NSF appreciates the OIG’s recommendations for improvement of its oversight of grantees’ subrecipient monitoring. Shortly after passage of the America Innovation and Competitiveness Act (AICA), which mandated the OIG’s subrecipient monitoring audit, BFA used a new oversight tool, Targeted Review Assessments, to assess awardees’ policies and procedures for the monitoring and oversight of subrecipients. By August 2017, BFA had conducted targeted review assessments of twenty-nine awardees and shared the results with the OIG to inform its own audit. For the small number of awardees for which BFA identified significant concerns through the Targeted Review Assessments, NSF required a formal response and corrective actions, which have now been closed. The OIG’s recommendations, which include ensuring that NSF guidance includes a specific mechanism to verify that recipients of large and complex awards complete subrecipient risk assessments, will help to improve NSF’s oversight of major research facilities.

NSF recognizes the value in the OIG sharing its concerns through a recent Alert Memorandum regarding a matter related to its ongoing audit of the Woods Hole Oceanographic Institution (WHOI) Major Overhaul and Stabilization Account. We note that the OIG did not issue any recommendations with respect to current or any future awards to WHOI. The OIG could not confirm that observations in the Alert Memorandum would result in any findings in the final audit report because the audit is still underway. Consistent with our approach to this Alert Memorandum, NSF has made a continuing request to the OIG to provide any additional information about its concerns, in view of current and future awards to WHOI.

NSF appends to this response its Management Report on Final Actions Taken on Audits (also known as the Final Action Tables). As required by statute, the Final Action Tables set out NSF’s actions on audits, including disallowed costs and disposition of recommendations for the better use of funds.

We believe that cooperation with the OIG supports NSF’s responsible and ethical stewardship of Federal funds. We look forward to continuing engagement with the OIG to achieve NSF’s mission, to address issues of research misconduct and fraud in NSF awards, and to improve both resolution of OIG audits and NSF oversight of awardees.

F. Fleming Crim



Chief Operating Officer, National Science Foundation

Cover image:

This artist’s rendering shows the universe’s first, massive, blue stars embedded in gaseous filaments, with the cosmic microwave background just visible at the edges. Using radio observations of the distant universe, NSF-funded researchers Judd Bowman of Arizona State University, Alan Rogers of MIT and their colleagues discovered the influence of such early stars on primordial gas. Although they can’t directly see the light from the massive stars, Bowman’s team was able to infer their presence from dimming of the cosmic microwave background (CMB), a result of the gaseous filaments absorbing the stars’ UV light. The CMB is dimmer than expected, indicating that the filaments may have been colder than expected, possibly from interactions with dark matter.

Credit: *Nicolle R. Fuller, National Science Foundation*

**Management Report on Final Actions
Taken on Audits with Disallowed Costs for the Six-Month Period
Ended September 30, 2018**

	Number of Reports	Dollar Value
A. Audit reports with management decision on which final action has not been taken at the beginning of the period	5	\$1,144,989
B. Audit reports on which management decisions were made during the period	10	\$1,400,353
C. Total audit reports pending final action during this period (Total A+B)	15	\$2,545,342
D. Audit reports on which final action was taken during this period		
(1) Recoveries		
a) Collection and Offset	10	\$1,008,940
b) Amount uncollectible	0	
(2) Write-offs	0	
E. Audit reports needing final action at the end of the reporting period (C-D)	5	\$1,536,402
F. Total (D+E)	15	\$2,545,342

**Management Report on Final Action
on Audits with Recommendations for Better Use of Funds
Agreed to by Management
For the Six-Month Period Ended September 30, 2018**

	Number of Reports	Dollar Value
A. Audit Reports with management decisions on which final action had not been taken at the beginning of the period	0	\$0
B. Audit Reports on which management decisions were made during the period	0	\$0
C. Audit reports on which final action was taken during this period (Total A+B)	0	\$0
D. Recommendations on which final action was taken during this period	0	
(1) the dollar value of recommendations that were actually completed		\$0
(2) the dollar value of recommendations that management subsequently concluded should not or could not be implemented or completed		\$0
E. Audit reports for which no final action has been taken by the end of the reporting period (C-D)	0	\$0

Management Report on Final Actions Taken on Audits with Disallowed Costs for the Six-month Period Ended September 30, 2018			Sustained Costs
A. Audit Reports with management decisions on which final action has not been taken at the beginning of the period:			
1	15-1-020	Stanford University	\$70,040
2	16-4-052	National Ecological Observatory Network (NEON) ¹	\$962,298
3	17-1-002	University of California - Davis	\$86,853
4	17-1-004	Oregon State University (Oceanus)	\$5,082
5	17-1-008	Georgia Institute of Technology ²	\$20,716
Subtotal A			\$1,144,989
			5
B. Audit Reports on which management decisions were made during the period:			
1	16-1-023	University of Michigan	\$218,349
2	17-1-005	University of California - Scripps Inst of Oceanography	\$95,882
3	17-1-006	University of California - San Diego	\$187,089
4	17-1-007	Raytheon BBN Technologies ³	\$80,143
5	17-4-099	National Ecological Observatory Network (NEON)	\$730,177
6	18-1-002	Texas A&M Engineering Experiment Station	\$72,784
7	18-4-051	New York Botanical Garden	\$0
8	18-5-033	Duke University	\$3,000
9	18-5-036	Chicago State University	\$12,929
10	18-5-050	Livingstone College	\$0
Subtotal B			\$1,400,353
			10
C. Total Audit Reports pending final action during this period: (Total A+B: 15)			\$2,545,342
D. Audit Reports on which final action was taken during this period:			
1	15-1-020	Stanford University	\$70,040
2	17-1-002	University of California - Davis	\$86,853
3	17-1-004	Oregon State University (Oceanus)	\$5,082
4	17-1-007	Raytheon BBN Technologies ³	\$80,143
5	17-1-008	Georgia Institute of Technology ²	\$20,716
6	17-4-099	National Ecological Observatory Network (NEON)	\$730,177
7	18-4-051	New York Botanical Garden	\$0
8	18-5-033	Duke University	\$3,000
9	18-5-036	Chicago State University	\$12,929
10	18-5-050	Livingstone College	\$0
Subtotal D			\$1,008,940
			10
E. Audit Reports needing final action at the end of the period:			
1	16-4-052	National Ecological Observatory Network (NEON) ¹	\$962,298
2	16-1-023	University of Michigan	\$218,349
3	17-1-005	University of California - Scripps Inst of Oceanography	\$95,882
4	17-1-006	University of California - San Diego	\$187,089
5	18-1-002	Texas A&M Engineering Experiment Station	\$72,784
Subtotal E			\$1,536,402
			5
F. Reconciliation of Audit Reports: (Total D+E: 15)			\$2,545,342
¹ NSF disallowed a total of \$962,298, of which \$812,941 has been remitted via an offset resulting from finalization of the FY 2015 NSF-negotiated indirect cost rate. The balance of disallowed costs has been turned over to the NSF Grants Officer for consideration as "pre-existing liabilities" in accordance with terms and conditions included in Battelle Memorial Institute's (BMI) current award(s). Upon a decision by the Grants Officer, disposition of the entire amount will be reported accordingly.			
² Difference of \$599 between amount collected and the amount presented in OIG Questioned Cost Tables represents additional unallowable costs identified by awardee and disallowed.			
³ Difference of \$5,387 between amount collected and the amount presented in OIG Questioned Cost Tables represents additional unallowable costs identified by awardee and disallowed.			