

# Performance Audit of Incurred Costs – University of New Mexico

REPORT PREPARED BY WITHUMSMITH+BROWN, PC

NATIONAL SCIENCE FOUNDATION  
OFFICE OF INSPECTOR GENERAL

August 22, 2018  
OIG 18-1-004





## AT A GLANCE

### Performance Audit of Incurred Costs – University of New Mexico

Report No. OIG 18-1-004

August 22, 2018

#### AUDIT OBJECTIVE

The National Science Foundation Office of Inspector General engaged WithumSmith+Brown, PC (WSB) to conduct a performance audit of incurred costs at the University of New Mexico (UNM) on NSF awards for the period July 1, 2013, to June 30, 2016. The auditors tested \$1.7 million of the \$79 million of costs claimed to NSF. The objective of the audit was to determine if costs claimed by UNM on NSF awards during this period were allocable, allowable, reasonable, and in conformity with NSF and Federal financial assistance requirements. WSB is responsible for the attached auditors' report and the conclusions expressed in this report. NSF OIG does not express any opinion on the conclusions presented in WSB's audit report.

#### AUDIT RESULTS

UNM did not always comply with all Federal, NSF, and UNM regulations and policies when allocating expenses to NSF awards. The auditors questioned \$48,842 of costs claimed by UNM during the audit period. Specifically, the auditors found \$28,733 in unreasonable equipment purchases, \$16,775 in various unreasonable transactions, and \$3,334 in unreasonable travel.

#### RECOMMENDATIONS

The auditors included three findings in the report with associated recommendations for NSF to resolve the questioned costs and to ensure UNM strengthens administrative and management controls.

#### AUDITEE RESPONSE

UNM did not agree with all of the findings in the report. UNM's response is attached in its entirety to the report as Appendix A.

**FOR FURTHER INFORMATION, CONTACT US AT (703) 292-7100 OR [OIG@NSF.GOV](mailto:OIG@NSF.GOV).**



# NATIONAL SCIENCE FOUNDATION OFFICE OF INSPECTOR GENERAL

## MEMORANDUM

**DATE:** August 22, 2018

**TO:** Dale Bell  
Director  
Division of Institution and Award Support

Jamie French  
Director  
Division of Grants and Agreements

**FROM:** Mark Bell [REDACTED]  
Assistant Inspector General  
Office of Audits

**SUBJECT:** Audit Report No. 18-1-004, University of New Mexico

This memo transmits WithumSmith+Brown's (WSB) report for the audit of costs charged by University of New Mexico (UNM) on NSF awards during the period July 1, 2013, to June 30, 2016. The audit encompassed more than \$1.7 million of the \$79 million claimed to NSF during the period. The objective of the audit was to determine if costs claimed by UNM on NSF awards during this period were allocable, allowable, reasonable, and in conformity with NSF award terms and conditions and applicable Federal financial assistance requirements.

Please coordinate with our office during the 6-month resolution period, as specified by Office of Management and Budget Circular A-50, to develop a mutually agreeable resolution of the audit findings. The findings should not be closed until NSF determines that all recommendations have been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

### OIG Oversight of Audit

WSB is responsible for the attached auditors' report and the conclusions expressed in this report. We do not express any opinion on the conclusions presented in WSB's audit report. To fulfill our monitoring responsibilities, the Office of Inspector General:

- reviewed WSB's approach and planning of the audit;
- evaluated the qualifications and independence of the auditors;
- monitored the progress of the audit at key points;
- coordinated periodic meetings with WSB, as necessary, to discuss audit progress, findings, and recommendations;
- reviewed the audit report prepared by WSB; and
- coordinated issuance of the audit report.



# NATIONAL SCIENCE FOUNDATION OFFICE OF INSPECTOR GENERAL

We thank your staff for the assistance that was extended to the auditors during this audit. If you have any questions regarding this report, please contact Jeremy Hall at 703-292-7100.

## Attachment

cc:

Anneila Sargent  
John Veysey  
Ann Bushmiller  
Christina Sarris  
Fleming Crim

Fae Korsmo  
Teresa Grancorvitz  
Pamela Hawkins  
Alex Wynnyk  
Rochelle Ray

Carrie Davison  
Allison Lerner  
Lisa Vonder Haar  
Ken Chason  
Dan Buchtel

Ken Lish  
Billy McCain  
Jeremy Hall  
Jennifer Kendrick  
Louise Nelson

# **University of New Mexico**

## **Audit of Incurred Costs**

### **National Science Foundation Office of Inspector General**

**August 20, 2018**

**OIG 18-1-004**

---

## Table of Contents

---

Background .....	1
Results of Audit .....	2
Finding 1: Unreasonable Equipment.....	2
Recommendations.....	4
Awardee Response.....	4
Auditors' Additional Comments.....	5
Finding 2: Unreasonable Transactions.....	5
Recommendations.....	7
Awardee Response.....	7
Auditors' Additional Comments.....	8
Finding 3: Unreasonable Travel.....	8
Recommendations.....	9
Awardee Response.....	10
Auditors' Additional Comments.....	10
Appendix A: Awardee Response .....	11
Appendix B: Objective, Scope, Methodology, and Criteria .....	15
Objective .....	15
Scope.....	15
Methodology .....	15
Criteria .....	16
Appendix C: Questioned Costs Summary by Award.....	17

---

## Abbreviations

---

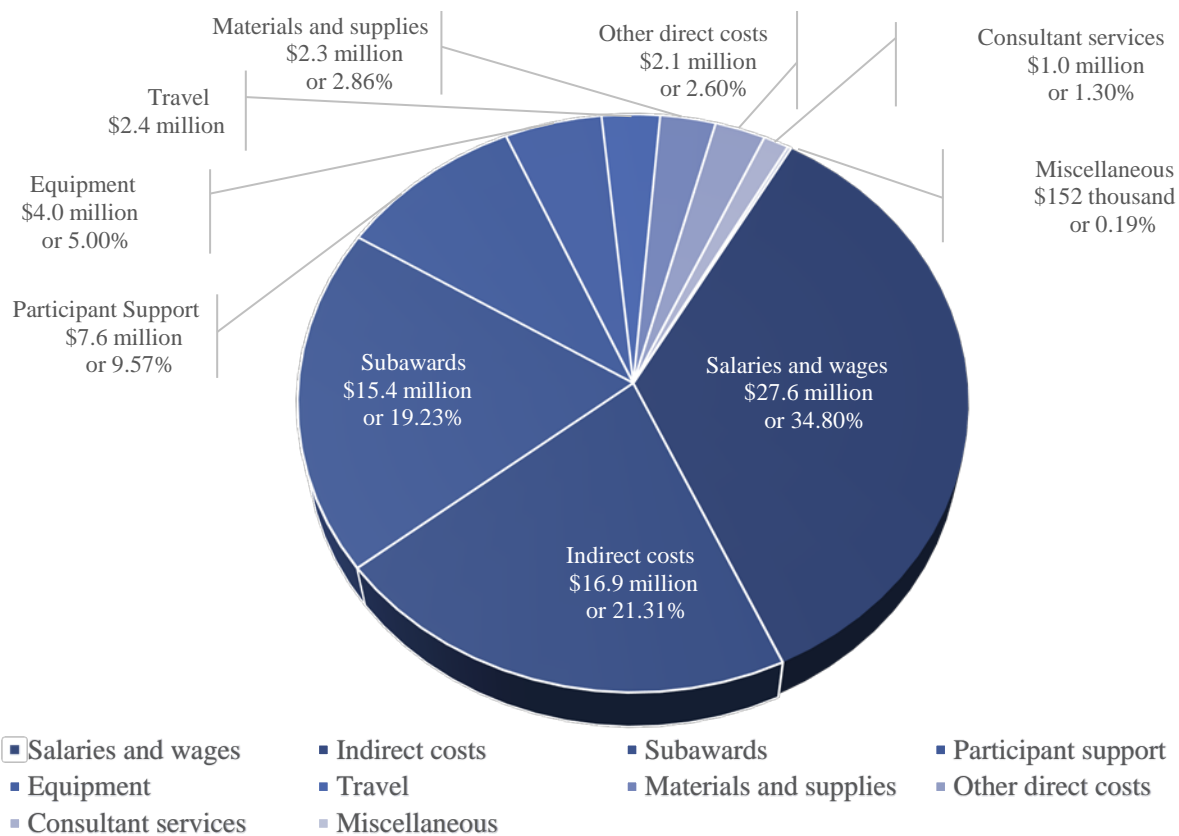
CFR	Code of Federal Regulations
DIAS	Division of Institution and Award Support
F&A	Facilities and Administrative Costs
OIG	Office of Inspector General
UNM	University of New Mexico

## Background

The National Science Foundation (NSF) is an independent Federal agency created “to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense.” NSF is also committed to ensuring an adequate supply of the Nation’s scientists, engineers, and science educators. NSF funds research and education in science and engineering by awarding grants and contracts to educational and research institutions in all parts of the United States.

NSF grantees must follow Federal and NSF grant regulations and guidance in administering NSF awards. The University of New Mexico (UNM) is part of the primary government of the state of New Mexico with a mission to engage individuals in its comprehensive educational, research, and service programs. During fiscal year 2016, the university was awarded approximately \$358.8 million in contract and grant awards. The majority (69 percent) of contracts and grants were awarded by Federal agencies. During our audit period, July 1, 2013, through June 30, 2016, UNM claimed approximately \$79 million of costs across 281 NSF awards. An analysis of these costs claimed by budget category, based on the accounting data provided by UNM, is portrayed in Figure 1.

**Figure 1. Costs Claimed by NSF Budget Category, July 1, 2013, to June 30, 2016**



Source: Auditor summary of accounting data provided by UNM.

## Results of Audit

WithumSmith+Brown, under contract with NSF OIG, audited the costs claimed by UNM on NSF awards for the period beginning July 1, 2013, and ending June 30, 2016. In our testing of 250 judgmentally selected transactions, we identified 12 transactions with a total \$48,842 of questioned costs charged to 9 NSF awards. Three areas where improved oversight is needed to ensure costs claimed are reasonable and necessary in accordance with Federal and NSF award requirements include: 1) \$28,733 in unreasonable equipment purchases; 2) \$16,775 in various unreasonable transactions; and 3) \$3,334 in unreasonable travel. A schedule of questioned costs by award is included in Appendix C.

### Finding 1: Unreasonable Equipment

We found UNM made purchases near the end of award periods for items that did not appear reasonable or necessary to the awards charged.

#### *Equipment and Materials Purchased and Received at the End of the Award*

We identified four transactions, charged to two awards, totaling \$28,733 where the purchase of instruments near the end of the award did not appear to benefit the NSF award charged, as described in Table 1.

**Table 1. Description of Questioned Transactions Near the Award Expiration**

Description	Invoice Amount	F&A	Total Questioned	Days Remaining in Award
Microscope	19,038	--	19,038	8
Optical beam	3,693	--	3,693	1
Translation stage	3,042	--	3,042	10
Translation stage	2,960	--	2,960	8
<b>Total</b>	<b>\$ 28,733</b>	<b>\$ --</b>	<b>\$ 28,733</b>	

*Source:* Auditor analysis of questioned transactions

We questioned \$28,733 on two multi-year awards for various types of instruments purchased and received near the award expiration. These purchases were not reasonable or necessary considering the limited time remaining on the awards. Additionally, in all but the microscope purchase, the instruments were charged 100 percent to the NSF award, when the award received little, if any benefit. The timing of the purchase and subsequent receipt of the items leads us to



conclude that the purchases were not necessary, reasonable, or prudent for the administration of the award.<sup>1</sup>

The questioned items include:

1. Microscope

\$19,038 for 50.5 percent for a microscope, purchased on [REDACTED], 2015 and received [REDACTED] 2015, on an award that expired [REDACTED], 2015. UNM stated that the microscope was necessary because the program required a research grade microscope for use in identification and preparation of specimens. Although there was minimal time remaining on the project, UNM stated that the NSF Established Program to Stimulate Competitive Research (EPSCoR) program benefitted from the subsequent use of the microscope and this fact was used to allocate the 50.5 percent of the cost to this NSF award. Per UNM, the purchase of the microscope enhanced future research, but a portion of the future need and benefit was associated with this project, and the charge was allocated according to the relative benefit received. However, it is not reasonable to charge 50.5 percent of this purchase to the award given the time remaining on the project. This particular microscope, purchased at the end of the award, was not completely available until [REDACTED], 2015 and represents less than 1 percent of the award period (8 out of 1,442 days).

2. Optical Beam and Translation Stages

\$9,695 for the purchase of an optical beam and two translation stages charged to one award. For this award, all the fabrication costs were budgeted for the first year. The last 1.5 years were to be devoted to acquiring [REDACTED]. Additionally, there was no mention of the need for equipment when the no-cost extension was filed on [REDACTED], 2014. Therefore, we question the following:

- \$3,693 for an optical beam, purchased on [REDACTED], 2014, and received by UNM on [REDACTED], 2014, on an award that expired [REDACTED], 2014. The optical beam controller and adapter were available for less than 1 percent of the award period (1 out of 1,455 days).
- \$3,042 for a translation stage, purchased on [REDACTED], 2014, and received by UNM on [REDACTED], 2014, on an award that expired [REDACTED], 2014. The translation stage was available for less than 1 percent of the award period (10 out of 1,455 days).

---

<sup>1</sup> 2 CFR 220, Appendix A, C.2. and C.3 states that costs “must be reasonable; they must be allocable to sponsored agreements.... A cost may be considered reasonable if the nature of the goods or services acquired or applied, and the amount involved therefore, reflect the action that a prudent person would have taken under the circumstances prevailing at the time the decision to incur the cost was made. Major considerations involved in the determination of the reasonableness of a cost are: whether or not the cost is of a type generally recognized as necessary for the operation of the institution or the performance of the sponsored agreement....”

- \$2,960 for a translation stage, purchased on [REDACTED], 2014, and received by UNM on [REDACTED], 2014, on an award that expired [REDACTED], 2014. The translation stage was available for less than 1 percent of the award period (8 out of 1,455 days).

UNM personnel did not adequately review the above questioned equipment, material, and supply expenditures, which resulted in unreasonable costs. Enhanced oversight procedures and controls should be adopted to review expenditures charged near the end of the award period. Having improved oversight processes in place ensures costs are reasonable and allowable, thus reducing the risk that funds may not be used as required to accomplish the necessary project objectives in accordance with Federal and NSF requirements.

### ***Recommendations***

We recommend that the NSF's Director of the DIAS direct UNM to:

1. Work with NSF to resolve the \$28,773 of questioned costs.
2. Strengthen the administrative and management controls and processes over expenditures near the end of an award and allocation of equipment.

### ***Awardee Response***

UNM does not agree with the questioned costs of \$19,038 for 50.5 percent of the purchase of a microscope near the award expiration date. Per UNM, this award was an infrastructure award designed specifically to build research capacity for the future. Purchasing a more sophisticated digital imaging system, by leveraging additional funds provided through the NSF EPSCoR program, enabled UNM to obtain a more comprehensive, efficient, and higher quality scope and imaging system, which significantly improved the research and training capability. Accordingly, several NSF projects benefited from the use of this equipment after the infrastructure grant ended on [REDACTED], 2015.

UNM does not agree with the questioned costs of \$9,695 for the purchase of an optical beam and two translation stages. Per UNM, this award was to design and build instruments that would allow [REDACTED]

[REDACTED] These purchases were essential and aided research efforts in that they provided output calibration required for the instrumentation to work. Furthermore, the research driving the original proposal has not stopped. There will be no end to this research topic until an acceptable calibration solution is in common usage in the [REDACTED]. Therefore, UNM feels that these costs are not only reasonable, but necessary.

See Appendix A for the complete UNM response.

### ***Auditors' Additional Comments***

We concur with UNM related to the \$23,824 for the purchase of hydrological instrumentation near the award expiration. The report finding and recommendation has been removed.

Our conclusion remains unchanged related to the \$19,038 for 50.5 percent of the microscope purchase near the award expiration. The additional information provided by UNM did not change our view that this purchase near the award expiration date should be questioned. The instrumentation was available for less than 1 percent of the award period (8 out of 1,422 days). Therefore, the report finding and recommendation remain as stated.

Our conclusion remains unchanged related to the \$9,695 for the purchase of the optical beam and translation stages purchased near the award expiration. Per 2 CFR 220, C.4.a, "a cost is allocable to a sponsored agreement if it is incurred solely to advance the work under the sponsored agreement." The additional information provided by UNM did not change our view that this purchase near the award expiration date was not solely beneficial to this sponsored agreement. The instrumentation was available for less than 1 percent of the award period (fewer than 11 days out of 1,455 days). Therefore, the report finding and recommendation remain as stated.

## **Finding 2: Unreasonable Transactions**

We identified five transactions, charged to five awards, totaling \$16,775, that were unreasonable or unallowable on the NSF awards charged as described in Table 2.

**Table 2. Summary of Unreasonable Transactions**

Description	Total Questioned*
Reallocated participant support costs	\$ 12,092
Advertising costs at the end of the award period	2,645
Excessive meal costs	1,217
Unsupported cost transfer	740
Bar set-up fee	81
<b>Total</b>	<b>\$ 16,775</b>

Source: Auditor analysis of questioned transactions.

\*Total questioned includes the applicable F&A.

### **1. Reallocated Participant Support Costs**

We questioned \$12,092 reallocated from participant support for travel costs for UNM employees to attend the NSF [REDACTED] Workshop. In the NSF approved budget, participant support funds were requested to support the participation by 13

individuals in various workshops, not travel for UNM employees. Under NSF's Grant Proposal Guide, costs for employees to participate in NSF-sponsored conferences are not "participant support costs" and "[f]unds provided for participant support may not be used for other categories of expense without specific prior NSF written approval. Such requests must be submitted electronically via use of NSF's electronic systems."<sup>2</sup> Per UNM, verbal confirmation was received, however, NSF did not provide specific prior written approval for the rebudgeting of participant support funds as required per NSF's Grant Proposal Guide.

## 2. Advertising Costs at the End of the Award Period

We questioned \$2,645 on one multi-year award for advertising costs near the award expiration. The late purchase date leads us to believe that the purchases were not necessary, reasonable, or prudent for the administration of the award.<sup>3</sup> The invoice was dated [REDACTED], 2015, the same date as the award expiration. The benefit of the advertising was not realized until after the award expired. UNM concurred and took steps to remove the costs from the award.

## 3. Excessive Meal Costs

UNM charged \$1,829 for dinner for 17 guests at the [REDACTED] Advisory Board Meeting held in Washington, DC, in [REDACTED] 2014. We find \$1,217 of the meal to be an excessive meal expenditure. Specifically, the \$1,829 (\$107.59 average cost per attendee) was spent to provide dinner for 17 attendees in Washington, DC, in [REDACTED] 2014. The GSA per diem rate for meals and incidental expenses (M&IE), in Washington, DC, in [REDACTED] 2014 was \$71. Per the GSA "FY 10-15 Meals and Incidental Expense (M&IE) Breakdown," of that \$71, the meal allowance for dinner was \$36.00. As a result, we find a total of \$1,217 (\$71.59 for each of the 17 attendees) to be excessive and unreasonable.<sup>4</sup> UNM agrees that the meal was excessive and took steps to remove the excessive costs from the award in question.

## 4. Unsupported Cost Transfer

We identified \$740 for a cost transfer charged to one award that was not adequately supported and, therefore, not in compliance with Federal regulations.<sup>5</sup> We were unable to obtain appropriate evidence to support a journal entry posted by UNM. The cost transfer moved the charges for a student onto the NSF award; however, we were unable to

<sup>2</sup> NSF Grants Proposal Guide 15-1 (effective Dec. 26, 2014) Chapter II.C.2.g(v) Participant Support

<sup>3</sup> 2 CFR 220, Appendix A, Section C.3., "A cost may be considered reasonable if the nature of the goods or services...reflect the action that a prudent person would have taken.... Major considerations involved in the determination of the reasonableness of a cost are: whether or not the cost is of a type generally recognized as necessary for the...performance of the sponsored agreement"

<sup>4</sup> Per the UNM Regents' Policy Manual, Section 7.7: Travel Reimbursement and Per Diem, "Employees who are reimbursed solely from federal funds will be reimbursed for meals and incidental expenses at the federal reimbursement rates, as provided in §10-8-4(C)(2) of the Act, for travel to destinations outside of New Mexico."

<sup>5</sup> According to 2 CFR 215.53(b), "Financial records, supporting documents, statistical records, and all other records pertinent to an award shall be retained."

substantiate the student's participation on the project. UNM agreed that there was inadequate documentation to support the transfer and will return the funds to NSF.

#### 5. Bar Set-Up Fee

We question \$81 for a bar set-up fee. Although the alcohol was paid for by participants at the cash bar, and not charged to the NSF award, the bartender set-up fee would not have been necessary if alcohol had not been made available at the event. Costs of alcoholic beverages are unallowable; therefore, it is not reasonable to charge the fee related to serving the alcohol.<sup>6</sup> UNM agreed that this charge was unallowable and will return the funds to NSF.

UNM did not adequately review the expenditures, which resulted in unallowable costs. Enhanced oversight procedures should be adopted to strengthen existing processes and controls to review expenditures to minimize unreasonable and unallowable costs. Having improved oversight processes in place ensures the reallocation of expenses in accordance with Federal and NSF requirements to help guarantee that costs are reasonable and allowable and documentation is available and accessible in accordance with UNM and Federal requirements. Revised procedures will reduce the risk that funds may not be used as required to accomplish the necessary project objectives in accordance with Federal and NSF requirements.

#### ***Recommendations***

We recommend that the NSF's Director of the DIAS direct UNM to:

1. Work with NSF to resolve the \$16,775 of questioned costs.
2. Strengthen the administrative and management controls and processes related to the review of expenditures charged to Federal awards.

#### ***Awardee Response***

Of the \$16,775 in questioned costs, UNM does not agree with these questioned costs of \$12,092 as follows:

UNM does not agree with the questioned costs of \$12,092 reallocated from participant support. Per UNM, the Principal Investigator on this project received verbal confirmation at the time from the NSF program officer to use the participant support costs to cover the costs associated with an NSF-supported workshop. UNM does recognize and agree that prior written approval for the rebudgeting of participant support funds is required by NSF's Grant Proposal Guide, and was not received. However, UNM does believe that the costs reallocated from participant support were still used in support of the NSF project, were necessary and reasonable, and ultimately benefitted this award.

---

<sup>6</sup> According to 2 CFR 220, Appendix A, Section J.3, the costs of alcoholic beverages are unallowable.

UNM concurs with the \$1,217 noted in the auditor's findings and recommendations related to excessive meal costs for 17 guests at the [REDACTED] Advisory Board Meeting held in Washington, DC, in [REDACTED] 2014.

UNM concurs with the auditors' findings and recommendations related to the \$2,645 advertising costs. These questioned costs will be moved off of the award and returned to NSF.

UNM concurs with the auditors' findings and recommendations related to an unsupported cost transfer of \$740. These questioned costs will be moved off of the award and returned to NSF.

UNM concurs with the auditor's findings and recommendations related to an \$81 bar set-up fee. Although the alcohol was paid for by participants, and not charged to the NSF award. UNM agrees that it is unreasonable to charge the fee related to serving alcohol at the event. The questioned cost of \$81 will be moved off of the award and returned to NSF.

See Appendix A for the complete UNM response.

### ***Auditors' Additional Comments***

Our conclusion remains unchanged related to the \$12,092 on unexpended participant support costs. The additional information provided does not change our view that specific prior written approval is required for the rebudget of participant support funds as required per NSF's Grant Proposal Guide. Therefore, the report finding and recommendation remains as stated.

We concur with UNM related to the \$1,217 excessive meal charge. Originally, the entire meal was questioned, however, the finding was rewritten to reflect the change in position. Once NSF determines that the \$1,217 of the questioned excessive meal costs has been returned, this issue should be closed.

UNM concurs with the \$2,645 for advertising costs noted in this finding. Once NSF determines that the \$2,645 has been returned, this issue should be closed.

UNM concurs with the \$740 related to the unsupported cost transfer noted in this finding. Once NSF determines that the \$740 has been returned, this issue should be closed.

UNM concurs with the \$81 related to the bar set-up fee noted in this finding. Once NSF determines that the \$81 has been returned, this issue should be closed.

### **Finding 3: Unreasonable Travel**

We questioned three transactions, totaling \$3,334, charged to two NSF awards for travel expenses to [REDACTED]; [REDACTED]; and [REDACTED]

We question \$1,547 for travel to the University of [REDACTED] prior to attending the [REDACTED] Conference in [REDACTED]. Per review of the documentation, the benefit of

the trip to the University of [REDACTED] was not allocable to this award. According to 2 CFR 200, to be allowable for a Federal grant, a cost must be allocable to the Federal award and be necessary and reasonable for the administration and performance of the award.<sup>7</sup> The traveler went to [REDACTED] to participate in a seminar and meet with the faculty and students at the request of University of [REDACTED]. This seminar was unrelated to this award. Therefore, we question \$1,547 for [REDACTED] per diem and 50 percent of the airfare (for travel from [REDACTED] to [REDACTED]) for activities that provided no benefit to this award. UNM agrees that the travel costs should be removed from this award.

We questioned \$1,340, representing 87.5 percent of the cost of airfare to [REDACTED] [REDACTED]. The trip, lasting [REDACTED] days, only included [REDACTED] business days and [REDACTED] personal days. The personal days represent 87.5 percent of the travel. Per UNM travel policy, “business travelers may combine business travel with personal travels, as long as doing so does not change the primary purpose of the travel from business to personal. If the primary purpose is determined to be personal, under IRS guidelines, certain costs may not be reimbursable.” Therefore, we conclude that it was not reasonable to charge the entire cost of the flight to [REDACTED] to the NSF award.<sup>8</sup> UNM agrees that the applicable portion of the personal days should be removed from the award.

We also questioned \$447 representing 60 percent of Principal Investigator travel related to a proposal discussion. Per review of supporting documentation, the traveler went to [REDACTED] to discuss proposals for new award collaborations and to discuss electronics needs at UNM for research and development. These travel expenses for discussion on future proposals unrelated to this award are not allocable to the award.<sup>9</sup> Per the Principal Investigator response, the electronics discussions took place about 40 percent of the time, with the remainder on the proposal. Therefore, we question 60 percent of the total trip costs. UNM agrees that 60 percent of the trip costs are not allocable and should be removed from this award.

UNM did not adequately review the travel expenditures, which resulted in questioned costs. Enhanced oversight procedures should be adopted to strengthen existing processes and controls to ensure that the purpose for the travel is in accordance with Federal, NSF, and UNM requirements. Having improved oversight processes in place ensures costs are reasonable and allowable, thus reducing the risk that funds may not be used as required to accomplish the necessary project objectives in accordance with Federal and NSF requirements.

### ***Recommendations***

We recommend that the NSF’s Director of the DIAS direct UNM to:

1. Work with NSF to resolve the \$3,334 of questioned costs.

---

<sup>7</sup> According to 2 CFR Section 200.403, to be allowable under Federal awards, costs must meet general criteria, including the requirement for costs to [b]e “necessary and reasonable for the performance of the Federal award and be allocable thereto under these principles.”

<sup>8</sup> 2 CFR 220, Appendix A, Section C.3., “Major considerations involved in the determination of the reasonableness of a cost are: whether or not the cost is of a type generally recognized as necessary for the...performance of the sponsored agreement....”

<sup>9</sup> 2 CFR 220, C4a, “a cost is allocable to a sponsored agreement if it is incurred solely to advance the work under the sponsored agreement.”



2. Strengthen the administrative and management controls and processes related to travel expenditures.

***Awardee Response***

UNM concurs with the finding and recommendations on the three travel transactions totaling \$3,334. The questioned costs of \$3,334 will be moved off of the applicable awards and returned to NSF. In response, UNM will adopt enhanced oversight procedures to strengthen existing processes and controls to ensure that the purpose for the travel is in accordance with Federal, NSF and UNM requirements, thus reducing the risk that funds may not be used as required to accomplish the necessary project objectives in accordance with Federal and NSF requirements.

See Appendix A for the complete UNM response.

***Auditors' Additional Comments***

UNM concurs with the \$3,334 related to the travel expenditures noted in this finding. Once NSF determines that the \$3,334 has been returned, this issue should be closed.



WithumSmith+Brown  
August 20, 2018



---

## Appendix A: Awardee Response

---



University of New Mexico  
Financial Services, Main Campus  
1 University of New Mexico  
MSC 01 1300  
Albuquerque, NM 87131-0001  
Phone: (505) 277-5111

---

WithumSmith+Brown  
Two Logan Square, Suite 2001  
Eighteenth & Arch Streets  
Philadelphia, PA 19103-2726

May 2, 2018

Dear Ms. [REDACTED],

Please find our responses to the audit findings and recommendations proposed in your formal draft report submitted to us by email on April 20, 2018.

### *Awardee Responses to Finding 1: Unreasonable Equipment*

- A. The University of New Mexico (UNM) does not agree with the questioned costs of \$23,824 for the purchase of hydrological instrumentation. Although these costs were purchased near the award expiration of [REDACTED] UNM believes the purchase was reasonable due to several specific circumstances surrounding the purchase and award type.

[REDACTED]

- B. UNM does not agree with the questioned costs of \$19,038 for 50.5 percent of the purchase of a microscope on an award nearing the award expiration of [REDACTED] 2015. Unlike many research awards, this award, through the [REDACTED] is an infrastructure award designed specifically to build research capacity for the future by [REDACTED] in this case

[REDACTED] Purchasing a more sophisticated digital imaging system by leveraging additional funds provided through the NSF EPSCoR program, UNM was able to obtain a more comprehensive, efficient and higher quality scope and imaging system which significantly improved the research and

training capability associated with [REDACTED]

In accordance with the NSF Program solicitation and description, the improvements to [REDACTED]

Consequently, several NSF projects benefited from the use of this equipment after the infrastructure grant ended on [REDACTED] 2015. These projects include, but are not limited to, NSF Award [REDACTED]

- C. UNM does not agree with the questioned costs of \$9,695 for the purchase of an optical beam and two translation stages. UNM's research proposal on this award was to [REDACTED]

[REDACTED] This ability is required in order to attain measurement accuracy from the new generation of giant telescopes. While there are several very different ways to do this, UNM used the instrumentation proposed to build and test to tie [REDACTED]

These purchases were essential and aided research efforts in that they provided output calibration required for the instrumentation to work. All proposed hardware costs were included as a line item in the first-year budget. As the project progressed, decisions about the actual devices built into the instruments changed, e.g. [REDACTED]

[REDACTED] While trying to anticipate and plan that there would be critical purchases in the last days of the grant for this project, spending was monitored to address the final contingency. The grant funds provided the detector motion elements, including translation stages and associated mounting hardware. All other required parts came from lab stock. In closing, the research driving the original proposal has not stopped. There will be no end to this research topic until an acceptable calibration solution is in common usage in the [REDACTED] Therefore, we feel that these costs are not only reasonable, but necessary.

*Awardee Responses to Finding 2: Unreasonable Transactions*

- A. UNM does not agree with the questioned costs of \$12,092 that were reallocated from participant support for travel costs for UNM employees to attend the NSF [REDACTED] Workshop. The UNM PI on this project received verbal confirmation at the time from his NSF program officer to use the participant support costs to cover the costs associated with an NSF-supported workshop. The [REDACTED] Workshop: [REDACTED] supported by NSF, was designed to discuss a [REDACTED]

[REDACTED]

UNM does recognize and agree with the conclusion that prior written approval for the rebudgeting of participant support funds as required by NSF's Grant Proposal Guide was not received. However, we do believe that costs reallocated from participant support were still used in support of the NSF project, and were necessary, reasonable, and ultimately benefitted this award. This transaction occurred in [REDACTED] 2016, and since then, UNM has strengthened its controls over monitoring participant support costs. Through increased training efforts with outreach to research administrators and PIs and ongoing monitoring of participant support budget to actuals throughout the life of the award and at closeout, we believe that UNM has adequate administrative and management controls and processes in place related to the review of participant support expenditures charged to Federal awards.

- B. UNM concurs with the auditor's findings and recommendations related to advertising costs at the end of the award period. The questioned costs of \$2,645 will be moved off of the award and returned to NSF.
- C. Although UNM concurs with the auditor's findings and recommendations related to excessive meal costs charged for 17 guests at the [REDACTED] Advisory Board Meeting held in Washington, DC in [REDACTED] 2014, we do not agree with the total amount questioned. The questioned costs included in the formal draft report are \$1,829, which represents the entire charge for 17 guests at the [REDACTED] Advisory Board Meeting. We agree that \$1,217 of the questioned cost is an excessive meal expenditure, however, we do not agree with the auditors' conclusion that because this meal was not specifically and clearly identified in the proposed scope of work and the budget that the entire amount is unallowable. Based on a thorough review of the award documents, UNM believes that the meeting in question was specifically mentioned in the Financial/Administrative Terms and Conditions (FATC) of the Cooperative Agreement. Under the Project Governance and Governing Responsibilities section of the FATC, UNM "coordinates and supports Working Groups, directly interfaces with the NSF approved [REDACTED] and [REDACTED] User Group meetings." In addition, the FATC goes on to state, "The [REDACTED] will be established within the first year after award and will convene annually for meetings of 1-2 days." The FATC also makes it very clear that, "When certain meals are an integral and necessary part of a conference or meeting (i.e., working meals where business is transacted), grant funds may be used for such meals." Based on these three excerpts from the FATC, UNM believes that the reasonable portion of the meal costs (\$612) are allowable because these costs are clearly identified in the award documents. The dinner for the members of the [REDACTED] and the [REDACTED] team who presented the update to the board was a business meeting and gave the members of the [REDACTED] time to ask more specific questions of the team and respond to the additional questions provided in their meeting agenda. The [REDACTED] meetings last only a day and a half so there is not always adequate time for all the questions to be asked during the presentations or for the responses from the board.
- D. UNM concurs with the auditor's findings and recommendations related to an unsupported cost transfer of \$740. These questioned costs will be moved off of the award and returned to NSF.
- E. UNM concurs with the auditor's findings and recommendations related to an \$81 bar set-up fee. Although the alcohol was paid for by participants, and not charged to the NSF award, we agree that it is unreasonable to charge the fee related to serving alcohol at the event. The questioned cost of \$81 will be moved off of the award and returned to NSF.

Through continued training initiatives with accounting staff, and increased outreach and training with UNM research administrators and PIs, UNM will adopt enhanced oversight procedures to strengthen existing processes and controls to help ensure that costs are reasonable, allowable, and documentation is available and accessible in accordance with UNM and Federal requirements, thus reducing the risk that funds may

not be used as required to accomplish the necessary project objectives in accordance with Federal and NSF requirements.

*Awardee Response to Finding 3: Unreasonable Travel*

- A. UNM concurs with the auditor's findings and recommendations on the three transactions totaling \$3,334 charged to two NSF awards for the travel expenses to [REDACTED], [REDACTED], and [REDACTED]. The questioned costs of \$3,334 will be moved off of the applicable awards and returned to NSF. Through continued training initiatives with accounting staff, UNM will adopt enhanced oversight procedures to strengthen existing processes and controls to ensure that the purpose for the travel is in accordance with Federal, NSF and UNM requirements, thus reducing the risk that funds may not be used as required to accomplish the necessary project objectives in accordance with Federal and NSF requirements.

UNM believes that the report issued by WithumSmith+Brown on April 20, 2018 demonstrates our ability to be effective stewards of Federal and NSF funds. We appreciate the thoroughness and professional manner in which WithumSmith+Brown staff conducted the audit, and for their clear communications and updates throughout the process. The recommendations made provide us with an opportunity to strengthen and improve upon existing processes and controls to ensure UNM continues with the highest level of management and oversight of Federal and NSF sponsored projects.

Sincerely,

[REDACTED]  
Elizabeth Metzger  
University Controller

---

## **Appendix B: Objective, Scope, Methodology, and Criteria**

---

### **Objective**

To determine if costs claimed by UNM on NSF awards are allowable, allocable, reasonable, and in compliance with NSF and Federal financial assistance requirements.

### **Scope**

Our audit included assessing the allowability, allocability, and reasonableness of costs claimed by UNM through the Award Cash Management Service for the 3-year period beginning July 1, 2013, through June 30, 2016. We obtained from UNM all award transactions comprising all costs claimed to NSF during this period. This provided an audit universe of approximately \$79 million, in more than 68,000 transactions, across 281 individual NSF awards. For transaction testing, we judgmentally selected 250 transactions totaling more than \$1.7 million and utilized a data analytics approach to identify potential risk areas.

The audit work was conducted at the auditors' offices; at NSF in Arlington, Virginia; and onsite at UNM in Albuquerque, New Mexico. We conducted onsite fieldwork during March and April 2017. At the conclusion of our fieldwork, we provided a summary of our results to NSF OIG personnel for review. We also provided the summary of results to UNM personnel to ensure that they were aware of each of our findings and did not have any additional documentation to support the questioned costs.

UNM management is responsible for establishing and maintaining effective internal control to help ensure that Federal award funds are used in compliance with laws, regulations, and award terms. In planning and performing our audit, we considered UNM's internal control to understand the policies and procedures relevant to the financial reporting and administration of NSF awards. We also evaluated UNM's compliance with laws, regulations, and award terms applicable to the items selected for testing, but not for the purpose of expressing an opinion on the effectiveness of UNM's internal control over award financial reporting and administration. Accordingly, we do not express an opinion on the effectiveness of UNM's internal control over its award financial reporting and administration.

This performance audit was conducted in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for the conclusions based on the audit objective. The auditors believe that the evidence obtained provides a reasonable basis for the conclusions based on the audit objective.

### **Methodology**

Our work required reliance on computer-processed data obtained from UNM and NSF. At our request, UNM provided detailed transaction data for all costs charged to NSF awards during our audit period. We also extracted award data directly from NSF's various data systems. To select

transactions for further review, we designed and performed automated tests of UNM and NSF data to identify areas of risk and conducted detailed reviews of transactions in those areas.

We assessed the reliability of the data provided by UNM by:

1. Comparing UNM award expenditure totals reported to NSF, through the Award Cash Management System, to UNM award expenditure amounts per their accounting transaction data;
2. Reconciling the accounting transaction ledger data to the accounting sub-ledger data; and
3. Reviewing and testing the parameters UNM used to extract transaction data from its accounting records and systems.

After verifying that the population of data was appropriate, we analyzed the data contained in the UNM general ledger and supporting detailed ledgers to identify anomalies, outliers, and aberrant transactions. We then judgmentally selected a sample of transactions to test.

Based on our testing, we found UNM's computer-processed data sufficiently reliable for the purposes of this audit. We did not review or test whether the data contained in, or controls over, NSF's databases were accurate or reliable; however, the independent auditors' report on NSF's financial statements for fiscal years 2015 and 2016 found no reportable instances in which NSF's financial management systems did not substantially comply with applicable requirements.

## Criteria

We assessed UNM's compliance with its internal policies and procedures, as well as the following:

- 2 CFR Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*;
- 2 CFR Part 220, *Cost Principles for Educational Institutions* (OMB Circular A-21);
- 2 CFR Part 215, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations* (OMB Circular A-110);
- NSF Proposal and Award Policies and Procedures Guide (includes the *Grant Proposal Guide* and *Award and Administration Guide*);
- NSF Award Specific Terms and Conditions; and
- NSF Federal Demonstration Partnership Research Terms and Conditions.

## Appendix C: Questioned Costs Summary by Award

Award Number	Direct Costs	F&A Costs	Total Questioned
Finding 1: Unreasonable Equipment			
	\$ 19,038	\$ --	\$ 19,038
	9,695	--	9,695
<b>Finding 1 Total</b>	<b>28,733</b>	<b>--</b>	<b>28,733</b>
Finding 2: Unreasonable Transactions			
	12,092	--	12,092
	2,099	546	2,645
	1,217	--	1,217
	740	--	740
	81	--	81
<b>Finding 2 Total</b>	<b>16,229</b>	<b>546</b>	<b>16,775</b>
Finding 3: Unreasonable Travel			
	1,418	369	1,787
	1,025	522	1,547
<b>Finding 3 Total</b>	<b>2,443</b>	<b>891</b>	<b>3,334</b>
<b>TOTAL</b>	<b>\$ 47,405</b>	<b>\$ 1,437</b>	<b>\$ 48,842</b>



NATIONAL SCIENCE FOUNDATION  
OFFICE OF INSPECTOR GENERAL