

# Performance Audit of Incurred Costs – University of Montana

REPORT PREPARED BY COTTON & COMPANY LLP

NATIONAL SCIENCE FOUNDATION  
OFFICE OF INSPECTOR GENERAL

September 27, 2018  
OIG 18-1-007





## AT A GLANCE

Performance Audit of Incurred Costs – University of Montana

Report No. OIG 18-1-007

September 27, 2018

### AUDIT OBJECTIVE

The National Science Foundation Office of Inspector General engaged Cotton & Company LLP (C&C) to conduct a performance audit of incurred costs at the University of Montana (UM) for the period September 1, 2013, to August 31, 2016. The auditors tested more than \$3.5 million of the \$22 million of costs claimed to NSF. The objective of the audit was to determine if costs claimed by UM during this period were allocable, allowable, reasonable, and in conformity with NSF award terms and conditions and applicable Federal financial assistance requirements. C&C 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 C&C's audit report.

### AUDIT RESULTS

UM did not always comply with all Federal, NSF, and UM regulations and policies when allocating expenses to NSF awards. The auditors questioned \$367,779 of costs claimed by UM during the audit period. Specifically, the auditors found \$342,020 of unallowable expenses related to the use of research-based salaries, \$18,932 of inappropriately allocated expenses, and \$6,827 of other unallowable expenses.

### RECOMMENDATIONS

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

### AUDITEE RESPONSE

Except for questioned salaries, UM agreed with the findings and recommendations. UM's response is attached in its entirety to the report as Appendix B.

### CONTACT US

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:** September 27, 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. 18-1-007, University of Montana

This memo transmits the Cotton & Company LLP (C&C) report for the audit of costs charged by the University of Montana (UM) to its sponsored agreements with the National Science Foundation during the period September 1, 2013, to August 31, 2016. The audit encompassed more than \$3.5 million of the \$22 million claimed to NSF during the period. The objective of the audit was to determine if costs claimed by UM 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

C&C 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 C&C's audit report. To fulfill our responsibilities, we:

- reviewed C&C'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 C&C, as necessary, to discuss audit progress, findings, and recommendations;
- reviewed the audit report prepared by C&C; 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 Darrell Drake at 703.292.7100 or [oig@nsf.gov](mailto:oig@nsf.gov).

## Attachment

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**UNIVERSITY OF MONTANA**

**PERFORMANCE AUDIT OF INCURRED COSTS FOR  
NATIONAL SCIENCE FOUNDATION AWARDS  
FOR THE PERIOD SEPTEMBER 1, 2013, TO AUGUST 31, 2016**

**NATIONAL SCIENCE FOUNDATION  
OFFICE OF INSPECTOR GENERAL**

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**NATIONAL SCIENCE FOUNDATION  
PERFORMANCE AUDIT OF INCURRED COSTS  
UNIVERSITY OF MONTANA**

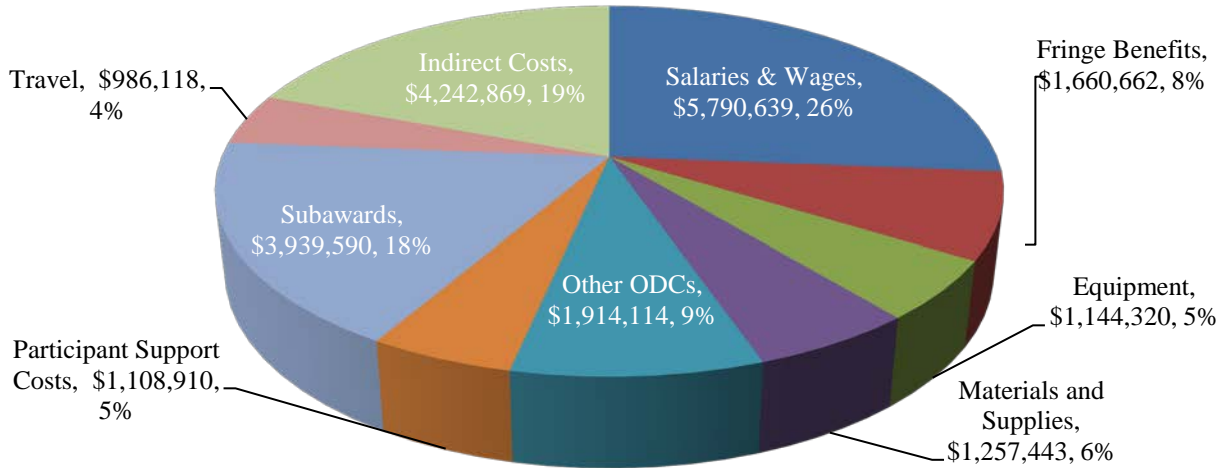
**I. BACKGROUND**

The National Science Foundation (NSF) is an independent Federal agency whose mission is to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense. Through grant awards, cooperative agreements, and contracts, NSF enters into relationships with non-Federal organizations to fund research and education initiatives and to assist NSF in supporting its internal financial, administrative, and programmatic operations.

Each Federal agency has an Office of Inspector General (OIG) that provides independent oversight of the agency's programs and operations. Part of the NSF OIG's mission is to conduct audits and investigations to prevent and detect fraud, waste, and abuse. In support of this mission, the NSF OIG conducts independent and objective audits, investigations, and other reviews to promote the economy, efficiency, and effectiveness of NSF programs and operations, as well as to safeguard their integrity. The NSF OIG may also hire a contractor to provide these audit services.

The NSF OIG engaged Cotton & Company LLP (referred to as "we") to conduct a performance audit of costs incurred by the University of Montana (UM). UM is a public research university in Missoula, Montana that claimed more than \$22 million in expenditures through NSF's Award Cash Management Service (ACM\$) across 122 NSF awards during our audit period, or September 1, 2013, through August 31, 2016. Figure 1 shows actual costs incurred by budget category based on the accounting data that UM provided to support costs claimed in ACM\$.

**Figure 1: Costs Claimed by NSF Budget Category, September 1, 2013, through August 31, 2016**



Source: Auditor analysis of accounting data provided

This performance audit, conducted under Order No. D15PB00569, was designed to meet the objectives identified in the Objectives, Scope, and Methodology (OSM) section of this report (Appendix C) and was conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS), issued by the Government Accountability Office (GAO). We communicated the results of our audit and the related findings and recommendations to UM and the NSF OIG.

## II. AUDIT RESULTS

As described in the OSM section of this report, this performance audit included obtaining transaction-level data for all costs that UM claimed on NSF awards during the audit period. We judgmentally selected a sample of 250 transactions for testing, totaling \$3,570,678; performed a cluster test which involved reviewing the timing of \$20,787,836 of ACM\$ draws; and performed an additional cluster test which involved examining the allowability of \$961,469 of research base salaries and fringe benefits.

Based on the results of our testing, we determined that UM did not always comply with all Federal, NSF, and UM regulations and policies when allocating expenses to NSF awards. It needs improved oversight of the allocation of expenses to NSF awards to ensure costs claimed are reasonable, allocable, and allowable in accordance with those regulations and policies. As a result, we questioned \$367,779 in direct and indirect costs that UM claimed during the audit period, as follows:

- \$342,020 of unallowable expenses related to the use of research-based salaries.
- \$18,932 of inappropriately allocated expenses.
- \$6,827 of other unallowable expenses.

We provide a breakdown of the questioned costs by finding in Appendix A of this report.



## Finding 1: Unallowable Use of Research Base Salaries

UM was not consistent in calculating faculty salary expenses and established a second salary rate for externally funded research to enable faculty to charge sponsored projects at a rate higher than their regular salary rate. Specifically, UM's Research Base Salaries Policy, dated March 5, 2014, allows UM to establish two different salaries for tenure-track employees: a regular state-based salary established by the institution (i.e. an Institutional Base Salary or IBS) for employees working on internally funded (i.e., non-sponsored) projects and a Research Base Salary (RBS) for employees working on externally funded (i.e., sponsored) projects.<sup>1</sup> Under this policy, UM tenure-track faculty working on sponsored projects may apply for and receive an RBS that is higher than their IBS, as an "incentive to increase research productivity". Once UM approves an employee for an RBS, it allocates the employee's pay between the two salaries based on the percentage of time the employee spends on sponsored projects; for example, if an eligible employee devotes 50 percent of their time to sponsored projects, UM would calculate the employee's salary as 50 percent of the RBS and 50 percent of the IBS. UM then charges the RBS portion of the salary to the sponsor. As a result, the salary rate that UM is charging NSF and other external sponsors is higher than the rate that UM is paying for the same employee to perform research on non-sponsored projects. This is a highly unusual practice and is unallowable under Federal guidance, as described below.

Federal guidance applicable to these NSF awards<sup>2</sup> states that charges for work performed on sponsored agreements should be based on the individual faculty member's base salary rate, and that salary charges to sponsored agreements should not exceed the proportionate share of a faculty member's base salary for that period. Specifically, 2 CFR Part 220, Appendix A, Section J.10.d., which is applicable to grants awarded prior to December 26, 2014, states:

*(1) Salary rates for academic year. Charges for work performed on sponsored agreements during all or any portion of such period<sup>3</sup> are allowable at the base salary rate. In no event will charges to sponsored agreements, irrespective of the basis of computation, exceed the proportionate share of the base salary for that period. This principle applies to all members of the faculty at an institution...*

*(2) Periods outside the academic year.*

*(a) Except as otherwise specified for teaching activity in subsection J.10.d.(2)(b) of this Appendix<sup>4</sup>, charges for work performed by faculty members on sponsored agreements during the summer months or other period not included in the base salary period will be determined for each faculty member at a rate not in excess of the base salary divided by the period to which the base salary relates, and will be limited to charges made in accordance with other parts of this section. The base salary period used in computing charges for work performed during the*

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<sup>1</sup> UM's use of an RBS was codified in 1999 in section 13.100 of the Collective Bargaining Agreement between the University of Montana Faculty Association and the Montana University System.

<sup>2</sup> OMB 2 CFR Part 220 and OMB's Uniform Guidance, 2 CFR 200.

<sup>3</sup> The "such period" referenced in this guidance refers to the academic year.

<sup>4</sup> The exception identified in subsection J.10.d.(2)(b) applies to charges for teaching activities versus other work performed by faculty members on sponsored agreements during periods not included in the base salary and therefore does not apply.

*summer months will be the number of months covered by the faculty member’s official academic year appointment.*

*(b) Charges for teaching activities performed by faculty members on sponsored agreements during the summer months or other periods not included in the base salary period will be based on the normal policy of the institution governing compensation to faculty members for teaching assignments during such periods.*

And 2 CFR §200.430, paragraph (h)(2), which is applicable to grants awarded on or after December 26, 2014, states:

*Charges for work performed on Federal awards by faculty members during the academic year are allowable at the IBS rate. Except as noted in paragraph (h)(1)(ii) of this section,<sup>5</sup> in no event will charges to Federal awards, irrespective of the basis of computation, exceed the proportionate share of the IBS for that period.*

While IBS is defined in 2 CFR §200.430, paragraph (h)(2) as “the annual compensation paid by an IHE [Institution of Higher Education] for an individual’s appointment, whether that individual’s time is spent on research, instruction, administration, or other activities,” UM’s current Research Base Salaries procedure defines IBS as “the annual compensation the University pays for teaching, scholarship, and service **via state-appropriated funds**” [Emphasis added]. Using this definition of IBS, UM allows tenure-track faculty to set up dual appointments, one at an IBS rate and one at an RBS rate, if a portion of their salary is supported via non-state appropriated funds.

UM believes establishing dual appointments with separate IBS and RBS rates complies with Federal requirements because all faculty member RBS rates are specifically approved and used for all organized sponsored activity, regardless of the funding source. However, because a faculty member’s RBS is always higher than IBS, the use of dual appointments results in UM charging NSF at rates that exceed the proportionate share of an employee’s allowable base salary, or IBS. Therefore, UM’s practice does not comply with the Federal guidance outlined above. Accordingly, we questioned all costs associated with salary expenses that UM charged to NSF awards in excess of the allowable IBS rates, as follows:

**Table 1: Unallowable Research Base Salary Expenses**

NSF Award No.	Fiscal Years	Questioned Costs
	2014-2015	\$3,441
	2014	2,873
	2014	8,150
	2014	909
	2014-2015	2,129
	2014	1,964
	2014	1,826

<sup>5</sup> 2 CFR §200.430 (h)(1)(ii) relates to supplemental compensation for incidental activities; the rate of which is not to exceed the IBS.

	2016	753
	2015	2,809
	2014	8,591
	2014	9,582
	2014-2016	1,322
	2015	2,182
	2014-2016	17,933
	2014-2016	24,036
	2015-2016	1,206
	2016	2,081
	2015	3,566
	2015	2,443
	2016	2,603
	2015	4,114
	2015-2016	7,898
	2014-2016	211,886
	2016	2,791
	2015-2016	10,975
	2015	2,815
	2015	1,142
<b>Total Questioned Costs</b>		<b><u>\$342,020</u></b>

Source: Auditor analysis of UM's payroll subledger and UM salary assignments.

### ***Recommendations***

We recommend that NSF's Director of the Division of Institution and Award Support direct UM to:

1. Repay NSF the \$342,020 of questioned costs.
2. Update its salary policies to ensure that it uses employees' IBS rates when allocating salary expenses to Federally-sponsored projects.

**University of Montana Response:** UM partially concurred with this finding. UM concurred that it needs to clarify its salary policy in relation to how it allocates salary expenses for research. Effective July 2018, UM modified its RBS procedures and removed all references to the practice being specific to "externally funded" sponsored activities. Now, if a faculty member has an RBS established under UM policy, it must be used for all organized research activity (e.g., separately budgeted and accounted for) regardless of funding source.

However, UM did not agree to repay the \$342,020 of questioned costs, as it did not concur that its use of RBS was unallowable. UM noted that under its institutional policy, faculty may hold dual appointments, and each position may have its own base rate. One position is instructional and pays for teaching, scholarship, and service, while the second position reflects organized

research and is paid at the RBS. UM asserted that this dual appointment practice does not contradict Federal guidance, as neither OMB Circular A-21 nor the Uniform Guidance formally defines IBS, and neither states that an IHE can only have one IBS. Moreover, OMB Circular A-21, Section J.10.d.(1), states that charges for work performed on sponsored agreements by faculty members during the academic year will be based on the faculty member's compensation "under the policy of the institution concerned."

UM stated that it has consistently followed its institutional policies. In addition, UM noted that its proposals to NSF have clearly and consistently identified the salary to be paid, and NSF has approved those salaries/proposals. UM therefore believes such expenditures to be allowable.

**Auditors' Additional Comments:** Our position regarding this finding does not change. Specifically, UM's response notes that its use of dual appointments, one for teaching activities and one for research activities, does not contradict Federal guidance as IBS is not formally defined; however, as noted above, IBS is formally defined in the Uniform Guidance<sup>6</sup> as "the annual compensation paid by an IHE for an individual's appointment, **whether that individual's time is spent on research, instruction, administration, or other activities** [Emphasis added]." Accordingly, we believe that the UM's use of different salary rates for research and instructional activities directly contradicts the Uniform Guidance.

Further, we do not agree with UM's assessment that these salaries should be allowable because they were "clearly and consistently identified" within proposals that NSF approved as budget estimates alone do not qualify as support for charges on Federal awards<sup>7</sup>. Additionally, we noted that RBS salaries charged to awards were not always consistent with the rates included in the original grant proposals, nor did those proposals mention that the budgeted salary amounts were not based on the employee's standard IBS salary.

## **Finding 2: Inappropriately Allocated Expenses**

UM did not appropriately allocate expenses to NSF based on the relative benefits received by the awards charged, as required by 2 CFR 220 and 2 CFR 200.<sup>8</sup> Specifically, UM inappropriately allocated \$18,932 to three NSF awards, as follows:

- **Unallocable Global Positioning System (GPS) Collars:** On Sep [REDACTED] 2013, the final day of the 8-year period of performance (POP) for NSF Award No. [REDACTED], [REDACTED], UM ordered ten GPS collars [REDACTED] for a total of \$15,252. UM charged the full \$15,252 to the [REDACTED] award. UM stated that the scope of the [REDACTED] award included educating and training PhD students, and that a PhD student used the GPS collars to continue their studies after the award POP ended; UM therefore believed that the cost of

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<sup>6</sup> See 2 CFR 200.430(h)(2)

<sup>7</sup> 2 CFR 200.430(i)(1)(viii) states that budget estimates alone do not qualify as support for charges to Federal awards.

<sup>8</sup> According to 2 CFR 220, Appendix A, Section C.4, and 2 CFR §200.405, a cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to the cost objective in accordance with relative benefits received.

the collars should be allocable to the award. However, because UM purchased the collars on the final day of the award and did not receive them until after the award POP expired, it should not have allocated the cost to this award.

In addition to the costs not being allocable to this award, the program solicitation related to the [REDACTED] award, NSF [REDACTED], states that UM may only request special-purpose research materials as part of the first-year special allocation;<sup>9</sup> purchasing these materials on the final day of the award’s POP, [REDACTED], therefore appears to be unallowable.

- **Unallocable Camera Expense:** On [REDACTED] 2016 UM ordered a digital camera and printer that were expected to arrive at UM on [REDACTED] 2016, or one day after the expiration date of NSF Award [REDACTED]. UM charged 96 percent of the expense, or \$1,487, to this award. UM stated that the Principal Investigator (PI) lost most of the images collected for this award as a result of a computer crash, and because the camera the PI had been using no longer worked, the PI needed a new camera to recapture the [REDACTED] images. Although the PI does appear to have needed a camera to photograph [REDACTED] during the award period, the camera and printer purchased were general-purpose supplies and were not available until after the award’s POP expired. UM therefore should not have allocated the costs for the camera to this award.
- **Unallocable Tuition Expense:** In January 2015, UM charged \$2,193 to NSF Award No. [REDACTED] for a graduate student’s Spring 2015 tuition. The student previously allocated effort to this project; however, UM terminated the student’s role on this award before the Spring 2015 semester began. Because this student did not allocate effort to this award during the Spring 2015 semester, UM should not have allocated their tuition to this award. UM noted that it had inappropriately charged this expense to the award due to a lack of communication within the department and has agreed to reimburse NSF for this expense.

UM does not have sufficient procedures in place to ensure that it allocates all costs to sponsored projects based on the relative benefits received. We are therefore questioning \$18,932 of expenses that UM inappropriately allocated to three NSF awards, as follows:

**Table 2: Expenses Not Appropriately Allocated to NSF Awards**

Description	NSF Award No.	Fiscal Year	Questioned Costs
Unallocable GPS Collar Expense	[REDACTED]	2014	\$15,252
Unallocable Camera Expense	[REDACTED]	2016	1,487
Unallocable Tuition Expense	[REDACTED]	2015	2,193
<b>Total Questioned Costs</b>			<b><u>\$18,932</u></b>

Source: Auditor summary of questioned transactions.

<sup>9</sup> [REDACTED] grants awarded under this solicitation provided a budget of up to \$600,000 per year to support stipends and education allowances for [REDACTED] trainees. However, the solicitation allows first-year budgets to include a “special allocation” of up to \$200,000 for funding related to the purchase of shared research equipment, special-purpose research materials, software, and databases that cost \$5,000 or more per item.

## ***Recommendations***

We recommend that NSF's Director of the Division of Institution and Award Support direct UM to:

1. Repay NSF the additional \$18,932 of questioned costs.
2. Strengthen the administrative and management controls and processes over allocating expenses incurred within the final 90 days of an award's POP. Processes could include requiring UM to review all purchases made during the final 90 days of an award's POP for compliance with applicable policies and procedures before charging the expenses to a sponsored project.
3. Strengthen the administrative and management controls over allocating tuition expenses to sponsored projects.

**University of Montana Response:** UM agreed to repay any costs not already refunded to NSF. UM also noted that it has modified its controls and procedures for allocating (1) expenses incurred in the final 90 days and (2) tuition expenses to sponsored awards in order to strengthen those controls and management oversight.

**Auditors' Additional Comments:** Our position regarding this finding does not change.

### **Finding 3: Unallowable Expenses**

UM charged \$6,827 of unallowable costs to four NSF awards, as follows:

- ***Unallowable Fundraising Costs:*** In June 2014, UM charged NSF Award No. [REDACTED] for \$867 in costs incurred to produce an auction booklet used for fundraising purposes. Costs related to organized fundraising are expressly unallowable under 2 CFR 220;<sup>10</sup> as such, UM should not have charged these costs to this award.

UM agreed to remove these expenses from the NSF award.

- ***Unallowable Dental Work:*** In May 2015, UM charged NSF Award No. [REDACTED] for \$1,477 in costs associated with dental work that a student required in order to be eligible to perform fieldwork in Antarctica. NSF's United States Antarctic Program (USAP) Participant Guide specifically states that the cost of treatment to resolve dental conditions in order to meet USAP screening criteria are not reimbursable; as such, UM should not have charged these costs to this award.

UM agreed to remove these expenses from the NSF award.

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<sup>10</sup> According to 2 CFR 220, Appendix A, Section J.20.a., costs of organized fund raising, including financial campaigns, endowment drives, solicitation of gifts and bequests, and similar expenses incurred solely to raise capital or obtain contributions, are unallowable.

- **Unallowable Lodging Expenses:** In April 2015, UM charged NSF Award No. [REDACTED] for \$2,328 in lodging costs for a PI to attend a grant-related conference in [REDACTED]. The PI incurred the lodging expenses at a rate of \$239 per night; however, the General Services Administration (GSA) per diem rate for [REDACTED] at the time of this expense was only \$163 per night. UM’s *Travel Guidelines & Procedures* state that lodging costs paid using Federal grant funds cannot exceed the per diem room rate established by GSA without obtaining prior approval; as such, UM should not have charged NSF for the \$740 of lodging expenses that exceeded the allowable Federal rate.

UM agreed that the traveler did not obtain prior approval to incur costs in excess of the GSA rate and therefore agreed to remove these expenses from the NSF award.

- **Unallowable Shipping Costs:** In January 2014, UM charged NSF Award No. [REDACTED] for \$9,202 in costs associated with shipping grant-related equipment to UM; however, the invoice that UM provided only supported \$5,459 of actual expenses. UM stated that it charged NSF the additional \$3,743 because UM’s Campus Mail service received a 50% discount from FedEx in accordance with its current undocumented mailroom expense distribution procedure<sup>11</sup>. UM did not actually incur any additional costs that could be allocated to the award in accordance with 2 CFR 220;<sup>12</sup> as such, it should not have charged the additional \$3,743 to NSF.

UM agreed to remove these expenses from the NSF award.

UM does not have sufficient procedures in place to ensure that all costs allocated to NSF awards comply with all required Federal, NSF, and UM policies and procedures. As a result, UM charged NSF for costs that are expressly unallowable. We are therefore questioning \$6,827 of costs charged to four NSF awards, as follows:

**Table 3: Unallowable Expenses**

Description	NSF Award No.	Fiscal Year	Questioned Costs
Unallowable Fundraising Costs	[REDACTED]	2014	\$867
Unallowable Dental Work	[REDACTED]	2015	1,477
Unallowable Lodging Expenses	[REDACTED]	2015	740
Unallowable Shipping Costs	[REDACTED]	2014	3,743
<b>Total Questioned Costs</b>			<b>\$6,827</b>

Source: Auditor summary of questioned transactions.

**Recommendations**

<sup>11</sup> Per UM, a campus department utilizing Campus Mail services is charged the retail FedEx rate less half of the volume discount received and the other half of the discount is recouped by Campus Mail to fund its operation.

<sup>12</sup> According to 2 CFR 220, Appendix A, Section C.4., a cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to such cost objective in accordance with relative benefits received.

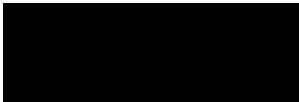
We recommend that NSF's Director of the Division of Institution and Award Support direct UM to:

1. Repay NSF the \$6,827 of questioned costs.
2. Strengthen the administrative and management controls and processes over allocating travel expenses to sponsored projects. Processes could include implementing controls that disallow reimbursement of charges that exceed the allowable GSA per diem rates without first obtaining proper approval.
3. Strengthen the policies and procedures around directly charging non-standard expenses to sponsored research projects. Processes could include placing controls on non-standard account codes to require approval from the Office of Research and Sponsored Programs (ORSP) before UM can charge the costs to a sponsored funding source.
4. Develop a written policy to update its current mailroom expense distribution procedure to appropriately charge mailroom expenses based on actual costs incurred.

**University of Montana Response:** UM agreed to repay any costs not already refunded to NSF. UM also noted that it has strengthened its administrative and management controls over (1) allocating travel expenses and (2) reviewing non-standard expenses related to sponsored projects. In addition, UM noted that it has reviewed and modified its mailroom expense distribution procedures in order to appropriately charge mailroom expenses based on actual cost incurred.

**Auditors' Additional Comments:** Our position regarding this finding does not change.

COTTON & COMPANY LLP



Michael W. Gillespie, CPA, CFE  
Partner



**APPENDIX A: SCHEDULE OF QUESTIONED COSTS BY FINDING**

**NATIONAL SCIENCE FOUNDATION**  
**ORDER # D15PB00569**  
**PERFORMANCE AUDIT OF INCURRED COSTS ON NSF AWARDS**  
**UNIVERSITY OF MONTANA**

**SCHEDULE OF QUESTIONED COSTS BY FINDING**

Finding	Description	Questioned Costs		Total
		Unsupported	Unallowable	
1	Unallowable Use of Research-Based Salaries	\$0	\$342,020	\$342,020
2	Inappropriately Allocated Expenses	0	18,932	18,932
3	Unallowable Expenses	<u>0</u>	<u>6,827</u>	<u>6,827</u>
<b>Total</b>		<b><u>0</u></b>	<b><u>\$367,779</u></b>	<b><u>\$367,779</u></b>

**APPENDIX B: UNIVERSITY OF MONTANA RESPONSE**

# University of Montana

Response to National Science Foundation (NSF)  
Performance Audit of Incurred Costs on NSF Awards  
For the period September 1, 2013, to August 31, 2016

## RECOMMENDATION #1

**WE RECOMMEND THAT NSF'S DIRECTOR OF THE DIVISION OF INSTITUTION AND AWARD SUPPORT DIRECT US TO:**

- 1. REPAY NSF THE \$342,020 OF QUESTIONED COSTS.**
- 2. UPDATE ITS SALARY POLICIES TO ENSURE THAT IT USES EMPLOYEES' IBS RATES WHEN ALLOCATING SALARY EXPENSES TO FEDERALLY SPONSORED PROJECTS.**

The University partially concurs with the recommendation. The University does concur that we need to clarify our salary policy in relation to how we will allocate salary expenses for research. Effective July 2018, the University modified its research base salary procedures and removed all references to the practice of being specific to "externally funded" sponsored activities. Now, if a faculty member has a research base salary (RBS) established under University policy, it must be used for all organized research activity (e.g., separately budgeted and accounted for) regardless of funding source.

The University does not agree that we should repay NSF the questioned cost as we do not concur with the finding that we have unallowable use of RBS. The University believes that faculty may hold dual appointments and that salary for each position will be dependent upon the employment expectations of the respective position. One position, primarily instructional, pays for teaching, scholarship, and service. The second position reflects their organized research and will be paid at the RBS in accordance with University policy. This dual appointment practice does not contradict federal guidance as neither A-21 Cost Principles nor the Uniform Guidance formally defines IBS and neither states that an Institution of Higher Education (IHE) can only have one IBS. The University maintains that faculty members may have two different positions, each with their own base rate, following our institutional policy. See A-21.J.10.d(2) (bold emphasis added):

"Charges for work performed on sponsored agreements by faculty members during the academic year will be based on the individual faculty member's regular compensation for the continuous period which, under the policy of the institution concerned, constitutes the basis of his salary. Charges for work performed on sponsored agreements during all or any portion of such period are allowable at the base salary rate. In no event will charges to sponsored agreements, irrespective of the basis of computation, exceed the proportionate share of the base salary for that period."

[https://obamawhitehouse.archives.gov/omb/circulars\\_a021\\_2004/#j](https://obamawhitehouse.archives.gov/omb/circulars_a021_2004/#j)

The University's proposals to NSF have clearly and consistently identified the salary to be paid and NSF has approved those salaries/proposals. We have consistently followed our institutional policies and believe such expenditures to be allowable.

**RECOMMENDATION #2**

**WE RECOMMEND THAT NSF'S DIRECTOR OF THE DIVISION OF INSTITUTION AND AWARD SUPPORT DIRECT UM TO:**

- 1. REPAY NSF THE ADDITIONAL \$18,932 OF QUESTIONED COSTS.**
  
- 2. STRENGTHEN THE ADMINISTRATIVE AND MANAGEMENT CONTROLS AND PROCESSES OVER ALLOCATING EXPENSES INCURRED WITH THE FINAL 90 DAYS OF AN AWARD'S POP. PROCESSES COULD INCLUDE REQUIRING UM TO REVIEW ALL PURCHASES MADE DURING THE FINAL 90 DAYS OF AN AWARD'S POP FOR COMPLIANCE WITH APPLICABLE POLICIES AND PROCEDURES BEFORE CHARGING THE EXPENSES TO A SPONSORED PROJECT.**
  
- 3. STRENGTHEN THE ADMINISTRATIVE AND MANAGEMENT CONTROLS OVER ALLOCATING TUITION EXPENSES TO SPONSORED PROJECTS.**

The University concurs with the recommendation. The University will repay any costs not already refunded to NSF. During the course of the audit, the University modified controls and procedures for the allocation of expenses incurred in the final 90 days and tuition to sponsored projects to strengthen those controls and management oversight.

**RECOMMENDATION #3**

**WE RECOMMEND THAT NSF'S DIRECTOR OF THE DIVISION OF INSTITUTION AND AWARD SUPPORT DIRECT UM TO:**

- 1. REPAY NSF THE \$6,827 OF QUESTIONED COSTS.**
  
- 2. STRENGTHEN THE ADMINISTRATIVE AND MANAGEMENT CONTROLS AND PROCESSES OVER ALLOCATING TRAVEL EXPENSES TO SPONSORED PROJECTS. PROCESSES COULD INCLUDE IMPLEMENTING CONTROLS THAT DISALLOW REIMBURSEMENT OF CHARGES THAT EXCEED THE ALLOWABLE GSA PER DIEM RATES WITHOUT FIRST OBTAINING PROPER APPROVAL.**
  
- 3. STRENGTHEN THE POLICIES AND PROCEDURES AROUND DIRECTLY CHARGING NON-STANDARD EXPENSES TO SPONSORED RESEARCH PROJECTS. PROCESSES COULD INCLUDE PLACING CONTROLS ON NON-STANDARD ACCOUNT CODES TO REQUIRE**



**APPROVAL FROM THE OFFICE OF RESEARCH AND SPONSORED PROGRAMS (ORSP) BEFORE UM CAN CHARGE THE COSTS TO A SPONSORED FUNDING SOURCE.**

**4. DEVELOP A WRITTEN POLICY TO UPDATE ITS CURRENT MAILROOM EXPENSE DISTRIBUTION PROCEDURES TO APPROPRIATELY CHARGE MAILROOM EXPENSES BASED ON ACTUAL COSTS INCURRED.**

The University concurs with the recommendation. The University will repay any costs not already refunded to NSF. During the course of the audit, the University strengthened the administrative and management controls over allocating travel expenses and the review of non-standard expenses for sponsored projects. Also, the University mailroom expense distribution procedures have been reviewed and modified to appropriately charge mailroom expenses based on actual cost incurred.

## **APPENDIX C: OBJECTIVES, SCOPE, AND METHODOLOGY**

## OBJECTIVES, SCOPE, AND METHODOLOGY

The NSF OIG Office of Audits engaged Cotton & Company LLP (referred to as “we” in this report) to conduct a performance audit of costs that UM incurred on NSF awards for the period from September 1, 2013, through August 31, 2016. The objective of this audit was to determine if costs claimed by UM during the audit period were allocable, allowable, reasonable, and in conformity with NSF award terms and conditions and applicable Federal financial assistance requirements.

Our work required us to rely on computer-processed data obtained from UM and the NSF OIG. The NSF OIG provided data to support the total costs that UM claimed on NSF awards through ACM\$ during our audit period, as well as relevant budget and award header data for each of the awards for which UM claimed costs. UM provided detailed transaction-level data for all costs charged to NSF awards during the period. This resulted in a total audit universe of \$22,044,665 in costs claimed on 122 NSF awards.

We assessed the reliability of the data provided by UM by (1) comparing costs charged to NSF award accounts within UM’s accounting records to reported net expenditures, as reflected in UM’s ACM\$ drawdown requests submitted to NSF for the corresponding periods; and (2) reviewing the parameters that UM used to extract transaction data from its accounting records and systems.

Based on our assessment, we found UM’s computer-processed data to be sufficiently reliable for the purposes of this audit. We did not review or test whether the data contained in, or the controls over, NSF’s databases were accurate or reliable; however, the independent auditor’s report on NSF’s financial statements for fiscal year 2017 found no reportable instances in which NSF’s financial management systems did not substantially comply with applicable requirements.

UM management is responsible for establishing and maintaining effective internal controls to help ensure that it uses Federal award funds in compliance with laws, regulations, and award terms. In planning and performing our audit, we considered UM’s internal control solely for the purpose of understanding the policies and procedures relevant to the financial reporting and administration of NSF awards, to evaluate UM’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 UM’s internal control over award financial reporting and administration. Accordingly, we do not express an opinion on the effectiveness of UM’s internal control over its award financial reporting and administration.

After confirming the accuracy of the data provided, we reviewed all available accounting and administrative policies and procedures, relevant documented management initiatives, previously issued external audit reports, and desk review reports to ensure that we understood the data and that we had identified any possible weaknesses within UM’s system that warranted focus during our testing.

We began our analytics process by reviewing the transaction-level data that UM provided and using IDEA software to combine it with the NSF OIG-provided data. We conducted data mining



and data analytics on the entire universe of data provided and compiled a list of transactions that represented anomalies, outliers, and aberrant transactions. We reviewed the results of each data test and judgmentally selected transactions for testing based on criteria including, but not limited to, large dollar amounts, possible duplications, indications of unusual trends in spending, descriptions indicating potentially unallowable costs, cost transfers, expenditures outside of an award's POP, and unbudgeted expenditures.

We identified 250 transactions for testing and sent the proposed list to the NSF OIG for review and approval. Based on discrepancies identified during our reconciliation, we also proposed conducting a cluster test to examine drawdowns on a sample of 17 NSF awards to evaluate whether UM had appropriately drawn down the funding from ACM\$. After receiving approval from the NSF OIG, we requested that UM provide documentation to support each transaction, as well as the relevant information required to enable us to perform our cluster testing. We reviewed the supporting documentation to determine if we had obtained sufficient, appropriate evidence to support the allowability of the sampled expenditures. When necessary, we requested and reviewed additional supporting documentation and obtained explanations and justifications from PIs and other knowledgeable UM personnel until we had sufficient support to assess the allowability, allocability, and reasonableness of each transaction.

We discussed the results of our initial fieldwork testing and our recommendations for expanded testing with the NSF OIG. Based on the results of this discussion, we performed another cluster test to evaluate the effect of using an RBS rate rather than an IBS rate in calculating the salary expenses allocated to NSF during the audit period.

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 UM personnel, to ensure that they were aware of each of our findings and did not have any additional documentation to support the questioned costs.

We conducted this performance audit 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 our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.



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