



NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230

**OFFICE OF
INSPECTOR GENERAL**

MEMORANDUM

DATE: August 31, 2011

TO: Martha A. Rubenstein
Director and Chief Financial Officer
Office of Budget, Finance, and Award Management (BFA/OAD)

James H. Lightborne
Division Director
Division of Human Resource Development (EHR/HRD)

FROM: Dr. Brett M. Baker /s/
Assistant Inspector General for Audit

SUBJECT: Limited Scope Review: Improvements in Grant Management Needed at the University of Alaska – Anchorage, OIG Report No. 11-1-017

This memorandum report provides the results of our review of the University of Alaska – Anchorage's (UAA) processes for managing NSF grants. The review was part of an on-going series of limited scope evaluations being performed by the Office of Inspector General (OIG) to provide oversight of funds provided by the American Recovery and Reinvestment Act of 2009 (ARRA or Recovery Act). A prior report on the University's processes for quarterly ARRA reporting has been issued. Of 29 grants totaling \$12.8 million awarded by NSF as of March 31, 2010, eight awards totaling \$3.4 million (27 percent) were ARRA-funded. Considering the increased accountability for Recovery Act funds and the significant increase in total NSF funding in the past two years, it is important that UAA has the capabilities and systems in place to provide proper stewardship of federal assistance funds. This report addresses our limited scope evaluation of whether UAA has adequate internal controls in place to provide accountability over NSF grant funds. Detailed description of background, objectives, scope, and methodology can be found in Appendix A.

Our limited scope review found that UAA generally has a well established federal grants management program. Specifically, the University has generally established sound grant management policies and procedures to ensure compliance with federal and NSF award requirements. In addition, the University's Grants and Contract Services staff

is knowledgeable and have a high commitment for ensuring a fully compliant federal grants management program. However, our review identified three areas where improvements are needed to be fully compliant with federal and NSF grant requirements. Specifically, UAA needs to (i) improve management of its \$1.3 million minority alliance award,¹ (ii) revise its labor effort reporting process to ensure reliable confirmation of all salary charges to NSF grants, and (iii) improve its property management system to safeguard equipment purchased with NSF funds.

A draft of this memorandum was provided to UAA management for its review and comment. In addition, a written outline of the review results was presented to the University at the completion of our onsite review work. UAA generally concurred with the audit findings and recommendations and agreed to take appropriate corrective actions. However, continued University vigilance is required to ensure all costs charged to its \$1.3 million minority alliance award are allowable per federal and NSF grant requirements. UAA's written response to the draft report can be found in its entirety in Appendix B.

We consider UAA's internal control procedural weaknesses identified in the audit findings to be significant. Accordingly, we request that your office work with the University and the cognizant audit agency, the Office of Naval Research (ONR), to develop a written Corrective Action Plan detailing specific actions taken and/or planned to address each audit recommendation. Milestone dates should be provided for corrective actions not yet completed.

To help ensure the recommendations are resolved within six months of audit report issuance pursuant to Office of Management and Budget Circular A-50, please coordinate the development of the Corrective Action Plan with our office during the resolution period. Each audit recommendation should not be closed until NSF, in coordination with ONR, determines that UAA has adequately addressed the recommendations and proposed corrective actions have been satisfactorily implemented. Please note that we have sent a copy of the audit report under separate cover to Ms. Debbie Rafi, Director of the Indirect Cost Branch, ONR.

Cc: Mary Santonastasso, Division Director, DIAS
Dale Bell, Deputy Division Director, DIAS
Alex Wynnyk, Branch Chief, CAAR/DIAS
James Hicks, Program Director, LSAMP Program, EHR/HRD
Karen Tiplady, Division Director, DGA

¹ NSF funding for the Louis Stokes Alliance for Minority Participation (LSAMP) award 0602742 totaled \$1,300,963 at the time of our April 2010 onsite review. Funding for the award was increased by \$475,198 per amendment 004 on September 9, 2010, increasing total funding to \$1,776,161.

Findings and Recommendations

Finding 1 – Improvement Needed in Management of \$1.3 Million Award

UAA needs to improve the management of its \$1.3 million Louis Stokes Alliance for Minority Participation (LSAMP) award² to ensure proper stewardship of NSF funds. Our review disclosed that UAA inappropriately (i) expended \$533,144 or 41 percent of total award funds for project activities outside the approved award scope and (ii) charged \$78,093 of unallowable entertainment, food, and other costs. Specifically, when two major subrecipients withdrew from the LSAMP Alliance partnership, UAA did not obtain required NSF approval to expend the \$533,144 of subaward funding for other project purposes. In addition to the charging of unallowable award costs, our review disclosed that the University's frequent use of cost transfers further impacted the integrity of the LSAMP award charges.

As a result of the award management weaknesses identified, there is less assurance that UAA expended funds on LSAMP project activities with the greatest merit and broad impact for achieving NSF's program goal of increasing minority student participation in science, technology, engineering, and mathematics (STEM) disciplines on a nationwide basis. This occurred because (i) responsible University LSAMP program officials lacked sufficient knowledge and expertise in federal and NSF award requirements to ensure proper financial and administrative management of award funds and (ii) the University's Grants and Contract Services office did not adequately monitor award expenditures to ensure compliance with contractual NSF award terms and conditions.

Federal and NSF Award Requirements

OMB regulations establish administrative requirements and cost principles for managing federal assistance awards. Accordingly, the NSF award terms and conditions specifically require grantees “to comply with the applicable Federal requirements for cooperative agreements and to the prudent management of all expenditures Documentation for each expenditure or action affecting this award must reflect appropriate organizational reviews or approvals that should be made in advance of the action” Further, the award agreement requires prior written NSF approval for any significant project change, including a *change in the objectives or scope* of an award.

In addition, the LSAMP program has additional NSF programmatic award terms and conditions to ensure Alliance partnership institutions achieve their shared goal to significantly increase the number and quality of underrepresented minority students who graduate with a degree in STEM disciplines. Specifically, section 1 of the LSAMP terms and conditions state that "requests to make any changes to personnel, organizations, and/or partnerships specifically named in the proposal that have been approved as part of this award, shall be submitted in writing to the cognizant NSF Program Official for

² NSF funding for the Louis Stokes Alliance for Minority Participation (LSAMP) award 0602742 totaled \$1,300,963 at the time of our April 2010 onsite review. Funding for the award was increased by \$475,198 per amendment 004 on September 9, 2010, increasing total funding to \$1,776,161.

approval prior to any changes taking effect." Thus, it is clear that the NSF award agreement for the LSAMP award required prior NSF approval if there was a change in the Alliance partnership organizations.

Lack of Adequate Management of LSAMP Subawards

Our review of the LSAMP award disclosed that UAA did not properly manage two of three subawards for Alliance partners to ensure compliance with federal and NSF award requirements. Contrary to the NSF award agreement, LSAMP program officials did not initiate required actions to obtain NSF approval when two Alliance institutions, with \$533,144 or 41 percent of total award funds, withdrew from the project. Specifically, the University of Hawaii- Manoa and the University of Washington became ineligible to fully participate in the UAA award because both organizations joined other LSAMP alliances in their local regions. Details of the subaward management weaknesses we identified follow:

- The University of Hawaii - Manoa's (UH) proposed subaward totaled \$286,659 or 22 percent of the \$1.3 million and was to be awarded for the first three years of the LSAMP award. According to the NSF Program Officer, UH separated from the Alliance soon after the November 2006 effective award date. Accordingly, NSF requested the UAA principal investigator (PI) to find other institutions to join the Alliance partnership to replace UH, but this was never accomplished.
- The University of Washington's (UW) proposed subaward totaled \$325,627 or 25 percent of the \$1.3 million and was to be awarded for the first three years of the LSAMP award. Our review disclosed that UAA did not establish the UW subaward agreement until January 9, 2008, 14 months after the effective date of the award. The subaward agreement was established for the performance period of November 1, 2006 to October 31, 2007 and authorized funding of \$66,373. As such, UW performed work under the LSAMP award without a legal binding contract authorizing the project activities. In addition, the PI incorrectly authorized a second \$81,994 payment for UW work primarily performed after its July 2009 withdrawal from the Alliance partnership. As a result, \$69,225 was required to be credited to the LSAMP award because these funds were for work performed after UW withdrew from the Alliance. In total, only \$79,142 or 24 percent of the proposed UW subaward funds of \$325,627 was expended for the subaward activities included in the original award proposal. The remaining \$246,485 was spent by UAA on award costs other than for the UW subaward.

Given that \$533,144 of the total \$612,286 for these two major partners was never expended for proposed Alliance activities, the ability of the NSF LSAMP program to most efficiently achieve its nationwide goals has possibly been compromised. A key requirement for the LSAMP program is the establishment of an Alliance partnership of several institutions to promote minority student participation in STEM disciplines. However, the Alliance partnership was impacted when the Universities of Hawaii and Washington withdrew, leaving only two campuses of the University of Alaska as participating institutions. Thus, the LSAMP goal to increase the number and quality of underrepresented minority STEM students in the Pacific region could not be effectively

achieved when award-funded activities were occurring primarily only in the State of Alaska.

Our review disclosed that a significant portion of the \$533,144 of subaward funds was utilized to pay for UAA student scholarships. While NSF LSAMP program officials stated that student-aid is an allowable program cost, they noted that scholarship funding is not the major purpose or intent of the Program. As such, UAA utilization of a significant portion of the \$533,144 award funds for other purposes, without required NSF approval, raises the question as to whether limited NSF funding was expended on LSAMP project activities with the greatest merit and broad impact to achieve nationwide program objectives. Furthermore, our review of the UAA award proposal disclosed that "industrial partners to [the] program [were to] provide approximately \$400,000 annually in scholarships. . . ." Thus, indicating that the NSF award funds were used for costs that were already planned to be funded by other UAA partners.

Lack of Adequate Award Management Results in Unallowable Costs and Excessive Cost Transfers

Federal cost principles establish standards for specific types of expenses allowed to be charged to federal assistance awards. Such standards explicitly preclude entertainment costs and limits food costs allowed to be charged to federal awards. In addition, NSF program officials stated that it had been made clear to LSAMP awardees at annual NSF meetings that food costs were not to be charged. However, contrary to these requirements, UAA charged \$54,343 of unallowable food and entertainment costs to the LSAMP award. In addition, graduate student financial-aid totaling \$23,750 was improperly allocated to the LSAMP award.³ A description of some of the key components of the total unallowable costs of \$78,093 follows:

- The UAA Grants and Contract Services office performed a pre-review of LSAMP award costs and identified \$18,494 of improper food and entertainment charges by the Anchorage campus. A large part of the expenses were for lunches during weekly student meetings and other food and entertainment costs associated with student activities. A more comprehensive review of such unallowable costs was completed after the onsite OIG review and identified additional charges in the subject cost categories.
- OIG transactions testing of LSAMP award costs identified that the Fairbanks campus had also charged unallowable food expenditures and financial-aid for graduate students. As a result, the LSAMP program office identified an additional \$22,899 of unallowable food charges and \$23,750 of student-aid costs.⁴

³ The LSAMP award was limited to providing support only to pre-college and undergraduate students, not graduate students.

⁴ The Fairbanks campus was included as one of the three subrecipients in the LSAMP award proposal. However, UAA subsequently decided not to issue a formal subaward agreement and opted to have the Fairbanks campus directly charge expenditures to the LSAMP award.

The total \$78,093 of improper charges identified was or will be removed from the LSAMP award by cost transfers. According to the UAA Cost Transfer Policy, frequent and late cost transfers raise serious questions about the reliability of the University's accounting system and internal controls. Therefore, the Policy states that cost transfers must be monitored carefully in order to ensure compliance with federal regulations. However, our analysis of LSAMP award transactions and discussions with University officials disclosed that cost transfers were frequently used on the subject award. Details of our limited analysis of cost transfer activity follow:

- Thirty-seven percent of the total 7,057 LSAMP transactions were for cost transfers associated with the award expenditures totaling \$1,206,332.
- Fifty-nine percent or \$332,650 of the \$565,389 originally charged to Other Student Aid costs were removed by cost transfers. The PI acknowledged that many of these student scholarship costs should not have been charged to the LSAMP award. Some of these costs were required to be removed from the award to provide adequate funding to pay the UW subaward invoice of \$81,994 discussed below.
- Eighty-four percent or \$69,225 of the last UW subaward payment of \$81,994 had to be removed by cost transfer because work was performed after UW had withdrawn as an Alliance partner from the subject award.

As of result of the unallowable charges and extensive use of cost transfers, there is less assurance that the LSAMP award is being properly managed to meet UAA's fiduciary responsibilities under the NSF award agreement. Given that NSF recently awarded an additional increment of \$475,198 to the LSAMP award in September 2010, it is essential for UAA to improve its award management processes to ensure proper stewardship of the additional funds.

Factors Contributing to LSAMP Award Management Weaknesses

The identified award weaknesses occurred because of (i) the lack of sufficient knowledge of federal and NSF award requirements by responsible LSAMP program officials and (ii) inadequate oversight of award expenditures by the University's Grants and Contract Services (GCS) staff. Pursuant to UAA's Grants and Contract Services Information Manual, there is a shared responsibility for proper financial and administrative management of federal awards by the GCS office, the department business office, and the principal investigator (PI). The GCS grant coordinator is responsible for monitoring grant expenditures to ensure compliance with contractual award terms and conditions. Furthermore, the UAA Manual specifies that the PI and the department business administrator are responsible to work jointly to manage federal awards. Specifically, the departmental business administrator is responsible for charging project costs to appropriate account codes and ensuring that expenditures agree with the budget as approved by the sponsoring agency. However, the Manual explicitly states that "The PI has full responsibility for the completion of the scope of work and the correct allocation of costs to the project according to the budget."

Such shared UAA responsibilities for each federal sponsored project were established to ensure proper completion of the scope of work and the correct allocation of project costs according to the approved federal budget. However, discussions with the PI and GCS officials disclosed that the department business administrators for the LSAMP award lacked adequate training, experience, and expertise in management of federal awards. As a result, prudent award management practices were not executed as follows:

- Required NSF approval was not obtained for expending \$533,144 of budgeted subaward funds for other project activities.
- UW subaward agreement was not timely established after the LSAMP award was received. In addition, documentation was not maintained in project files when the University of Washington withdrew as an Alliance partner to support the date when subaward costs could no longer be charged, thus resulting in the \$69,225 overpayment.
- Extensive charging of expenditures to cost categories that did not agree with the approved NSF award budget. For example, student aid/participant support costs were originally budgeted at \$64,604 or 5 percent of total funds, but actual charges totaled \$313,239 or 26 percent of total award funds.
- Large amounts of unallowable entertainment, food, and graduate student financial- aid costs of \$78,093 were improperly charged to the award due to the lack of knowledge of federal costs principles.
- Extensive use of cost transfers indicating a lack of adequate accounting and internal controls over LSAMP award expenditures. For example, of the 7,057 LSAMP transactions in the project cost ledger, 37 percent involved cost transfers.

These procedural weaknesses evidence that UAA lacked compliance with established University guidance for proper administrative and financial oversight of federal sponsored projects. Accordingly, the University's GCS office needs to enhance its oversight and monitoring activities to ensure that the LSAMP business administrator and PI are knowledgeable and possess the required award management expertise for ensuring that costs charged to the subject award are reasonable, allowable, and allocable as required by federal and NSF requirements.

This is particularly important given that, in addition to the LSAMP award, the PI has multiple sources of other federal and non-federal funding for UAA's Alaska Native Science and Engineering Program (ANSEP) to increase university recruitment and retention of STEM students. For example, as previously stated, the NSF award proposal delineated that an industrial partner was to provide funding annually for student scholarships. However, these types of costs were charged to the NSF award, even though they were not originally included in the award proposal. Accordingly, UAA award management improvements are essential for ensuring that closely related ANSEP activities, supported by more than one funding source, are allocated to the proper sponsored project in accordance with the sponsor's approved budget and scope of work.

Recommendations

We recommend that the NSF Directors of the Division of Institution and Award Support, the Division of Grants and Agreements, and Division of Human Resource Development:

- 1.1 Resolve the \$78,093 in questioned food, entertainment, and graduate student-aid charges to LSAMP award 0602742.

UAA Response: UAA agrees with the recommendation and has removed all questioned costs from the LSAMP grant.

OIG Comments: UAA's actions are fully responsive to the recommendation. The University should provide NSF cost transfer documentation clearly showing removal of the questioned costs from the LSAMP grant.

- 1.2 Review UAA expenditure of the \$533,144 of LSAMP award funds, originally budgeted for subawards, to determine if such costs are allowable and consistent with the approved project scope and objectives specified in the award proposal.

UAA Response: UAA states that there is a lack of clarity in the award process because there was no written NSF documentation or a budget sheet indicating that the subaward to University of Hawaii (UH) was not to be included as a Pacific Alliance partner in the LSAMP award. As directed by NSF program officer, PI efforts to identify a suitable Alliance partner to replace UH were not successful, thus UAA believes that the LSAMP grant costs incurred should be considered allowable.

OIG Comments: The original LSAMP grant proposal budget submitted to NSF includes the UH subaward and was never revised. Any oral discussions and/or agreements between NSF program officials and the UAA PI do not supersede the written terms and conditions of the LSAMP cooperative agreement, which includes the grant proposal budget and establishes the legal binding contract for the award between NSF and the University. Therefore, we reaffirm that UAA must demonstrate to NSF that its alternative use of budgeted subaward funds for other grant purposes were consistent with LSAMP award objectives and were for allowable costs.

1.3 Require UAA to:

- a. Provide NSF a description and summary schedule of how the \$533,144 of LSAMP award funds, originally budgeted for subawards, was expended.

UAA Response: UAA provided a summary schedule of LSAMP grant expenditures, by major cost categories, for grant inception through May 2011 and a description of the various types of expenses included in each cost category.

OIG Comments: Review of UAA's description of the various cost categories disclosed that certain costs included in the "travel" and "services" categories need to be re-categorized as "participant support" costs to be fully compliant with federal and NSF requirements. Specifically, expenditures for travel and/or housing for students attending the Summer Bridge Program or participants in other LSAMP meetings, conferences, and workshops should be classified as participant support costs. Such reclassification will reduce the grant's indirect costs because federal regulations exclude participant support costs from UAA's indirect rate assessment of [REDACTED]. UAA needs to carefully review its LSAMP grant expenditures to ensure the correct costs are classified in the participant support category.

- b. Provide enhanced training to LSAMP program officials to ensure appropriate knowledge of federal, NSF, and University award management requirements to ensure proper stewardship of award funds.

UAA Response: UAA agrees with the recommendation and states that the Grants and Contract Services office provides both formal and informal training activities for all UAA staff and faculty on various federal grant management compliance topics. Both the LSAMP PI and Fiscal Manager will travel to participate in NSF training for grant management during the year.

OIG Comments: UAA's actions are fully responsive to the recommendation.

- c. Enhance UAA monitoring of the LSAMP award to ensure compliance with federal, NSF, and University award requirements. Such enhanced monitoring should include at minimum:

- i. Increased PI oversight of award charges to ensure costs are reasonable, allowable, and allocable and are consistent with the approved NSF proposal budget and scope of work.

UAA Response: The PI has restructured the Alaska Native Science and Engineering Program (ANSEP) to improve his oversight and provide better assurance that LSAMP costs are reasonable, allowable, and

allocable and consistent with the approved NSF proposal budget and scope of work. Specifically, the Fiscal Manager for the program was replaced subsequent to the OIG audit and has and will continue to attend training and workshops to develop and maintain knowledge for accounting concerns and compliance with OMB Circulars and NSF regulations.

OIG Comments: UAA's response meets the intent of the recommendation.

- ii. Increased oversight by the Grants and Contract Services office to ensure proper management and stewardship of LSAMP award funds.

UAA Response: UAA agrees with the recommendation. Specifically, the Grants and Contract Services (GCS) office has established processes to better inform LSAMP Program officials when federal grants management training opportunities are available. In addition, GCS has instituted a new program to periodically bring together key departmental individuals and its grant staff during the life of an award to discuss any financial challenges or programmatic risk. As such, GCS is highly encouraging such meetings for the LSAMP award as part of his grant monitoring activities.

OIG Comments: UAA's response meets the intent of the recommendation.

Finding 2 – Improvements Needed in UAA Effort Reporting System

UAA's labor effort reporting system generally supports payroll charges to NSF awards; however, certain internal control improvements are needed to ensure full compliance with all federal and NSF grant requirements. Our limited transactions testing disclosed in some instances that effort reports were signed by persons without suitable means of verification, which lessened the reliability of the effort reports to support labor charged to NSF awards. In addition, our review found that UAA has not established policies to ensure (i) senior researcher salary charges are limited to two months as required by NSF guidance and (ii) OMB-mandated independent internal evaluations of the effort reporting system are periodically performed to ensure the system's integrity.

Federal regulations⁵ require that salaries and wages charged to sponsored projects be based on payroll records documented in accordance with the generally accepted practices of colleges and universities. Specifically, the payroll distribution system must provide for the after-the-fact confirmation of employee activity by a responsible person with “suitable means of verification that the work was performed.” In addition, the system will provide for independent internal evaluations to ensure the system's integrity and compliance with the standards required by the Federal Government to support salaries and wages charged to grants. Additionally, NSF grant guidance limits salary compensation for senior project personnel to no more than two months of their regular salary in any one year from all NSF-funded grants⁶.

UAA relies on its bi-weekly effort reports or time sheets⁷ to support the salaries charged to NSF grants. These reports must be signed by the employee and certified by either the PI or supervisor with first-hand knowledge of employee's work activities. UAA's policies allow the labor effort certification to be delegated from the Department Dean/Director/Supervisor to another individual.

Effort Certification Process Lacks Suitable Means of Verification for All NSF Salary Charges

Review of UAA's effort reporting process revealed that some University officials, who were delegated the authority to certify the reasonableness of NSF salary charges, lacked first-hand knowledge to determine whether the work was actually performed. Our limited transactions testing of \$33,219 of NSF salary charges for six employees disclosed that 19 percent of the wages for three employees were inadequately supported by labor effort reports certified by a department's business manager instead of the project PI or supervisor as follows:

⁵ Paragraph J.10b of 2 CFR Part 220, Cost Principles for Educational Institutions (Formerly OMB Circular A-21), issued August 31, 2005.

⁶ Chapter V.B.1.a.(ii)(a) of the NSF Award & Administration Guidelines.

⁷ UAA uses the terms “effort reports” for exempt employees and “time sheets” for non-exempt employees.

Summary of Sampled Labor Effort Reports Reviewed

Employee Type	Total Effort Reports Reviewed		Certified by PI or Supervisor			Certified by Business Manager		
	No.	Salary Dollars	No.	Salary Dollars	% to Total	No.	Salary Dollars	% to Total
Postdoctoral & PI	6	\$ [REDACTED]	3	\$ [REDACTED]	56%	3	\$ [REDACTED]	44%
Faculty & PI	3	[REDACTED]	3	[REDACTED]	100%	0	[REDACTED]	0%
Student	9	[REDACTED]	9	[REDACTED]	100%	0	[REDACTED]	0%
Student	6	[REDACTED]	3	[REDACTED]	54%	3	[REDACTED]	46%
Student	8	[REDACTED]	4	[REDACTED]	50%	4	[REDACTED]	50%
Student	5	[REDACTED]	5	[REDACTED]	100%	0	[REDACTED]	0%
Totals – 6 employees	37	\$33,219	27	\$26,895	81%	10	\$6,324	19%

Even though departmental business managers did not have first-hand knowledge of employee work activities, such individuals did not obtain "suitable means of verification" to support their certifications by contacting the employees directly or PIs to validate the reasonableness of the employee's labor distribution. For example, the business manager signed the effort reports for one of the PIs reviewed, who worked on five different projects, without validating with the researcher if the reported effort on each project was reasonable.

This weakness occurred because UAA's labor effort policies and procedures did not define what constituted a "suitable means of verification" and the documentation required to be maintained in award files. Our discussions with officials of one UAA department revealed that it was not unusual for business administrators to certify bi-weekly effort reports for employees working on sponsored projects. Officials stated they were unaware that such a practice was not in compliance with federal requirements.

Other Effort Reporting Policies Need Improvement

Furthermore, UAA grant policies did not establish (i) clear limitations on senior researcher salaries to ensure compliance with NSF's two-month wage limitation or (ii) periodic and systematic evaluation of the effort reporting system as required by OMB Circular A-21 requirements. Discussion of these two issues follows:

- a. NSF's Two-Month Rule: The University's policies included no references to NSF's two-month rule that limits salary compensation for senior project personnel to no more than two months of an individual's regular salary in any one year. This limit includes salary received from all NSF-funded grants. Our review of salary charges for one faculty member did not disclose that the individual budgeted and/or charged more than two months salary to NSF grants. However, given that 11 percent of the \$12.8 million awarded by NSF included \$1.4 million budgeted for faculty or senior

personnel salaries, it is important for the University to establish formal policy to ensure such salaries are compliant with the subject NSF grant requirement. Both UAA PIs and department business offices campus-wide need to be clearly aware of the NSF salary limitation.

- b. Independent Internal Evaluation: The University's effort reporting policy and procedures did not provide for "independent internal evaluations to ensure the system's integrity" as required by federal cost principles. Discussions with UAA officials disclosed that an internal evaluation of the University's effort reporting system has never been performed. However, a comprehensive evaluation of the system would have likely disclosed the internal control weaknesses noted during our review and provided UAA the opportunity to implement improvements to ensure a fully compliant effort reporting system.

UAA lacked comprehensive effort reporting policies and procedures that are in full compliance with all federal and NSF requirements because the University had not placed sufficient emphasis on labor effort reporting. The control weaknesses identified raise concerns about the reliability of UAA effort reports for the \$4 million or 31 percent of total NSF funding budgeted for salaries and wages on its active 29 NSF grants. This is particularly important given that \$1.3 million or 33 percent of the budgeted salaries are funded by eight Recovery Act grants. With the unprecedented Recovery Act accountability and transparency goals, improvements in the University's effort reporting system is essential.

Recommendations

We recommend that the NSF Director of the Division of Institution and Award Support, coordinate with cognizant audit agency, as needed, to require UAA to enhance its effort reporting policies and procedures as follows:

- 2.1 Define what is considered to be a "suitable means of verification" for certifying effort reports, as required by federal cost principles,⁸ and the documentation required to be maintained in project files.

UAA Response: UAA agrees with the recommendation and is developing and testing a new electronic worksheet/effort reporting system to better document employee effort. In conjunction with the new system, procedures are being written and trainings will be provided to all UAA employees.

OIG Comments: UAA's response meets the intent of the recommendation.

⁸ Paragraph J.10b.(2)(b), *Criteria for Acceptable Methods for Compensation for Personal Services*, of 2 CFR Part 220, Cost Principles for Educational Institutions (OMB Circular A-21), states that "The method must recognize the principle of after the fact confirmation or determination so that costs distributed represent actual costs, unless a mutually satisfactory alternative agreement is reached. Direct cost activities and F&A cost activities may be confirmed by responsible persons with *suitable means of verification* that the work was performed. Confirmation by the employee is not a requirement for either direct or F&A cost activities if other responsible persons make appropriate confirmations."

- 2.2 Include NSF's two-month rule to ensure senior researchers limit salaries received from all NSF-funded grants to two months of the individual's regular salary.

UAA Response: UAA agrees with the recommendation and notes that the Grants and Contract Services' website includes a section for compliance with the NSF two-month limitation on a researcher's regular salary.

OIG Comments: UAA's actions are fully responsive to the recommendation.

- 2.3 Establish a requirement for a periodic independent internal evaluation of the payroll distribution and effort reporting system, as required by federal cost principles, to ensure its integrity and compliance with federal standards.

UAA Response: UAA agrees with the recommendation and the University of Alaska Internal Auditors have scheduled a periodic review of the payroll distribution and effort reporting system. For fiscal year 2012, the audit began on July 15, 2011.

OIG Comments: UAA's response meets the intent of the recommendation.

Finding 3 – Property Management System Needs Improvement

UAA needs to improve management of federally-funded equipment to properly safeguard such assets. Federal regulations⁹ establish property management standards and procedures requiring: maintaining property records with identification numbers; completing a physical inventory every two years; and establishing a control system to ensure adequate safeguards to prevent loss, damage, or theft of the equipment.

To meet the federal standards, UAA complies with the University of Alaska's statewide property manual. The manual requires all equipment purchased with federal funds be affixed with a property tag and a physical inventory to be performed annually. In order to facilitate its annual physical inventory, UAA uses a bar code scanner program. Thus, property tags, with bar code identification, are required to be affixed to each piece of equipment.

Our review disclosed that UAA equipment records included all data elements required by federal property management standards and an annual physical inventory had been conducted. However, the University needs to take timely actions to update inventory records and affix property tags when equipment is received. Review of two sampled equipment purchases of \$502,222, or 86 percent of total equipment expenditures incurred between July 1, 2008 and March 31, 2010, identified the following weaknesses:

- A mass spectrometer costing \$342,310 was delivered in February 2009. At the time of our April 2010 onsite review, 14 months later, the required property tag had not been affixed.
- Six pieces of equipment were purchased with \$159,912 of NSF Recovery Act funds and delivered in January 2010. At the time of our review, three months after receipt, the items had neither been added to the UAA inventory records nor affixed with property tags.

As a result, UAA cannot effectively perform its annual property inventory and provides less assurance to NSF that equipment funded with grant funds are adequately safeguarded to prevent loss, damage, or theft. As such, these internal control weaknesses lessen UAA accountability over the \$982,481, or eight percent of total NSF funds, budgeted for equipment purchases.

These control weaknesses occurred because UAA lacked sufficient management oversight and monitoring of the property management function. Specifically, the University relied upon a sole Property Coordinator for maintenance of property records and had not established alternative plans to ensure key functions were re-assigned to other staff during periods of long-term employee absences. The Property Coordinator stated that she had a backlog of property records after she returned from two recent long-term absences. In addition, the Procurement Services Director stated that he was

⁹ Section .34 of 2 CFR Part 215, Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations (Formerly OMB Circular A-110).

not aware of the backlog issues due to the recent transfer of the property management function to his department during recent campus reorganization.

Recommendation

We recommend that the NSF Director of the Division of Institution and Award Support, coordinate with cognizant audit agency, as needed, to require UAA to:

- 3.1 Establish appropriate Office of Procurement Services management oversight to ensure compliance with established University property standards for timely tagging of equipment and updating of property records.

UAA Response: UAA agrees with the recommendation and is providing intensive training to ensure federal property is properly handled according to OMB Circular requirements and University of Alaska policies and procedures. The UAA Associate Vice Chancellor for Financial Services is monitoring this activity.

OIG Comments: UAA's response meets the intent of the recommendation.

Background, Objectives, Scope, and Methodology

Background:

The University of Alaska - Anchorage (UAA) is the state's largest post-secondary institution and is one of the three regional university centers in the University of Alaska system. UAA operates with the mission to discover and disseminate knowledge through teaching, research, engagement, and creative expression. UAA is an open access university with academic programs leading to occupational endorsements; undergraduate and graduate certificates; and associate, baccalaureate, and graduate degrees. In the fall of 2009, the Anchorage campus had a student body of 15,662 students, 536 regular and 447 adjunct faculty members, and 1,133 other staff members.

Sponsored programs, including research, service, and instruction occur in many departments across the campus and are a function of a number of UAA's centers and institutes. UAA's Office of the Vice Provost for Research and the Graduate School provides coordination with other units within the University of Alaska and Statewide Administration on matters of research, compliance, sponsored programs, and federal initiatives. The Office of Sponsored Programs provides review and signatory authority for all sponsored proposals submitted to funding sources and the Grants and Contract Services office provides post-award administration of sponsored programs in concert with principal investigators and departmental business administrators.

As of March 31, 2010, UAA had 29 active NSF grants totaling almost \$12.8 million with reported cumulative expenditures of approximately \$6.4 million. Of these 29 grants, eight awards or \$3.4 million were funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act or ARRA). One of the primary goals of the Recovery Act is to foster unprecedented levels of accountability and transparency in government spending. The table below summarizes the financial information on NSF grants awarded to UAA.

Break-down of NSF Funding by Major Budget Categories

Category	ARRA		Non-ARRA		Total	
Salaries						
Fringe Benefits						
Equipment						
Travel						
Participant Support						
Subawards						
Other Direct Costs ¹⁰						
Total Direct Costs						
F&A (Indirect) Costs						
Total Grant Costs						

Review Objective:

The objective of our limited scope review was to evaluate whether UAA had established an adequate system of internal control to provide reasonable assurance that NSF grant funds were administered in accordance with federal grant regulations and NSF award terms and conditions.

Scope and Methodology:

This review was part of an on-going series of OIG evaluations being performed to provide oversight of the \$3 billion in NSF ARRA funding. UAA was chosen for review because of the significant increase in total NSF funding in the last two years. From 2008 to 2010, total NSF funding almost doubled from about \$7 million to almost \$13 million, of which \$3.4 million was provided by the Recovery Act.

Our review included NSF grant charges as of March 31, 2010, with transactions testing selected from FY 2009 and 2010 expenditures. While we reviewed UAA's internal controls for management of federal grant funds, the evaluation was limited in scope because only minimal transactions testing was performed to assess whether UAA was complying with its established institutional policies and procedures. Transactions' testing focused on ARRA grants, but was extended to other NSF grants as required, because Recovery Act expenditures were minimal at the time of our April 2010 onsite review. Specifically, our transactions review was limited to 57 items totaling \$394,440 of the \$3,937,322 incurred between July 1, 2008 and March 31, 2010. Our sample was judgmentally selected based primarily on large dollar items in the following cost categories reviewed: salaries, fringe benefits, procurements, equipment, travel, participant support, and subawards. In addition, our review included the following steps:

- Reviewed criteria applicable to federal grants management, including the Office of Management and Budget (OMB) and NSF guidance.

¹⁰ Other Direct Costs includes Materials & Supplies, Publications, Consultant Services, Computer Services, and Other Costs.

- Assessed whether UAA policies, procedures, and processes for federal grants management were consistent with OMB and NSF requirements in the following areas: time and effort report, cost sharing, subawards and subrecipient monitoring, procurement, property and equipment, participant support, travel, indirect costs, consultants, quarterly financial reports, and annual and final project reports.
- Interviewed cognizant UAA officials, including PIs, department business managers, and Grants and Contract Services office staff, to gain an understanding of their role in the grant management process.
- Conducted analytical procedures and limited non-statistical sampling of NSF grant charges in major cost categories to assess the adequacy of supporting documentation and compliance with established UAA grant management processes and related controls.
- Interviewed NSF program officials about UAA's Louis Stokes Alliance for Minority Participation (LSAMP) grant. Reviewed the applicable NSF solicitation for the UAA LSAMP grant, the UAA grant proposal for the subject award, and applicable NSF award documentation and correspondence.
- Discussed fieldwork results with UAA management officials and NSF program and grant management officials.

The onsite UAA review work was performed from April 26 -30, 2010, with additional information obtained through November 2010. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan the review 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 the findings and conclusions contained in the report.



August 15, 2011

Dr. Brett M. Baker
Assistant Inspector General for Audit
National Science Foundation
4201 Wilson Boulevard
Arlington, Virginia 22230

Dear Dr. Baker:

Please accept this response to the recommendations made by the NSF Office of Inspector General as a result of its review of the University of Alaska Anchorage (UAA) ARRA processes.

Findings and Recommendations

Finding 1 – Improvement Needed in Management of \$1.3 Million Award

Recommendations

We recommend that the NSF Directors of the Division of Institution and Award Support, the Division of Grants and Agreements, and Division of Human Resource Development:

- 1.1 Resolve the \$78,093 in questioned food, entertainment, and graduate student-aid charges to LSAMP award 0602742.

UAA Response: UAA agrees with the recommendation and removed all food and entertainment costs from the grant prior to the NSF OIG visit but after the sample expenses were sent to the NSF OIG offices. The LSAMP Principal Investigator (PI) is committed to ensuring that LSAMP does not have these types of issues again and has taken appropriate action to make this happen. Graduate student aid was discovered to have been added by a partner office of the LSAMP grant and was removed immediately upon discovery. The PI recognizes these to be inappropriate costs for the undergraduate LSAMP program.

In July 2010, the Fiscal Manager for the Alaska Native Science and Engineering Program (ANSEP) was replaced. The extensive cost transfer issue has been eliminated. The new Fiscal Manager has attended multiple National Meetings on grant management in Washington DC and will continue to attend trainings and workshops to maintain knowledge for accounting concerns and compliance with OMB Circulars and NSF regulations. The PI will also be attending training during the current year.

- 1.2 Review UAA expenditure of the \$533,144 of LSAMP award funds, originally budgeted for subawards, to determine if such costs are allowable and consistent with the approved project scope and objectives specified in the award proposal.

UAA Response: UAA has removed many of the participant expenses in the grant. This issue highlights a lack of clarity in the award process. The objectives and scope of the proposal did not align with the objectives and scope of the award. The subaward to University of Hawaii was never included in the award document and this was discussed between the NSF Program Officer and the PI. However, there is neither written documentation nor a budget sheet indicating that the award did not include Hawaii. NSF was aware University of Hawaii was never part of this Alliance. The PI was told to look for a new school as a partner and did so. After researching other schools and universities, the PI was unable to

identify a suitable Alliance partner to replace Hawaii. We believe the costs should be considered allowable.

1.3 Require UAA to:

- a. Provide NSF a description and summary schedule of how the \$533,144 of LSAMP award funds, originally budgeted for subawards, was expended.
 1. We have prepared a detailed analysis of all LSAMP expenditures for your review. – See attached Schedule A.
 2. We understand part of monitoring sub-awards is ensuring the invoiced activity is billed for a time period after the sub-award is fully executed and before the expiration date of the sub-award.
 3. At the time of the original award, the UAA ANSEP Fiscal Manager sent sub-award documents to the University of Washington (UW). Shortly afterwards, the UAA ANSEP Fiscal Manager left for another job. The fact that we did not receive the executed document back from University of Washington in a timely manner was lost in the transition to a new ANSEP Fiscal Manager.
 4. On January 3, 2008, there was a personnel change at the University of Washington and a new UW program director was hired.
 5. The new UW program director discovered that the documents had not been timely processed and returned the executed sub-award packet to UAA.
 6. The \$81,994 invoice in question was received before the sub-award expired in July 2009. However, it was not processed for payment until September 2009. Later we realized that the \$81,994 invoice was not a certified invoice generated by UW's Grants and Contracts Office. Subsequently we found we had been pre-billed in the amount of \$69,225 for activity happening after the sub-award expiration date. This amount was credited back to the LSAMP grant.
- b. Provide enhanced training to LSAMP program officials to ensure appropriate knowledge of federal, NSF, and University award management requirements to ensure proper stewardship of award funds.

UAA Response: Agreed.

1. The UAA Grants and Contracts Office offers formal and informal training activities for all UAA staff and faculty. Various compliance topics (effort reporting, transfer requirements, matching and cost-sharing, A-21, A-133, and subaward monitoring, etc.) are presented each year in various formats.
2. Canned workshops and webinars are offered to the departments as CDs and DVDs. These are primarily offered through Thompson Publishing and Research. Administration purchases them on a regular basis.
3. Departments are encouraged to send their fiscal staff member to training workshops offered through Management Concepts, NCURA and Society for Research Administrators (SRA).
4. In fiscal year 2011 training, workshops and seminars were offered for Certified Research Administrator (CRA) training
5. The Research Administration websites—Research Compliance Office, Grants and Contracts, and Office of Sponsored Research—have all modified and enhanced the content of their

websites to provide additional materials to aid researchers and all UAA grant users. The changes have been highlighted in reminders to two listservs, one of which is distributed to all UAA faculty and another to all academic and research managers and administrative staff members.

6. LSAMP and ANSEP personnel are specifically notified for these events.
 7. The LSAMP PI and the LSAMP Fiscal Manager will travel to appropriate NSF training for grant management during the year.
- c. Enhance UAA monitoring of the LSAMP award to ensure compliance with federal, NSF, and University award requirements. Such enhanced monitoring should include at minimum:
- i. Increased PI oversight of award charges to ensure costs are reasonable, allowable, and allocable and are consistent with the approved NSF proposal budget and scope of work.

UAA Response: The Vice Provost for the Alaska Native Science and Engineering Program has restructured the office to improve oversight and provide better assurance that all costs are reasonable, allowable, and allocable and are consistent with the approved NSF proposal budget and scope of work.

- ii. Increased oversight by the Grants and Contract Services office to ensure proper management and stewardship of LSAMP award funds.

UAA Response: Agreed. The Grants and Contracts Office has processes in place to better inform the UAA LSAMP Program Officials when training opportunities are available. The Director for Grants and Contracts encourages the LSAMP/ANSEP personnel to register for available trainings. The Grants and Contracts Office has instituted a program for “kick-off” meetings to bring together key department individuals and the Grants and Contracts designated staff to increase communication and provide face-to-face interaction. At these initial meetings, everyone is introduced to the complexities of each award document with its terms and conditions. While these meetings are not required for every grant or contract, they are used for those with match, subawards, or other complicating issues at the beginning of the program. Departmental fiscal administrators and PI’s with higher programmatic risk or with particular financial challenges are encouraged to meet with the Director of the Grants and Contracts as well as with the Grant Coordinator during the life of the award to work on solutions to particular problems in a timely manner. The LSAMP program is currently being monitored by the Grants and Contracts Office and meetings are encouraged.

Finding 2 – Improvements Needed in UAA Effort Reporting System

Recommendations

We recommend that the NSF Director of the Division of Institution and Award Support, coordinate with cognizant audit agency, as needed, to require UAA to enhance its effort reporting policies and procedures as follows:

- 2.1 Define what is considered to be a "suitable means of verification" for certifying effort reports, as required by federal cost principles, and the documentation required to be maintained in project files.

UAA Response: We agree. The University of Alaska (UA) is developing and currently testing a new electronic timesheet/effort reporting system to better document employee effort. In conjunction with the

Dr. Brett M. Baker

August 15, 2011

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new system, procedures are being written and trainings will be provided to all UA employees. UAA Grants and Contracts has provided and will continue to provide effort reporting workshops on the importance of compliance to the OMB Circulars for effort reporting as an after-the-fact institution.

The University of Alaska Statewide Office is conducting leadership meetings with representatives of UAA, UAS, and UAF Human Resource offices and Grants and Contracts offices to respond to findings solicited from an externally funded oversight company—Maximus—for effort certification problem solving. Policy revisions are being addressed in conjunction with the new electronic timesheet process. The present method of effort certification is with biweekly timesheets serving dual roles with payroll processing. All UA employees with restricted funding are required to submit timesheets to report their efforts.

2.2 Include NSF's two-month rule to ensure senior researchers limit salaries received from all NSF-funded grants to two months of the individual's regular salary.

UAA Response: Agreed. The Grants and Contracts website does include a section for compliance to the NSF requirement for two months of the individual's regular salary. The leadership meetings addressed in 2.1 are addressing adding the NSF requirement into the revised policy.

2.3 Establish a requirement for a periodic independent internal evaluation of the payroll distribution and effort reporting system, as required by federal cost principles, to ensure its integrity and compliance with federal standards.

UAA Response: Agreed. The University of Alaska Internal Auditors have scheduled a periodic review of the payroll distribution and effort reporting system. For FY12, the audit began July 15, 2011. Additional information can be obtained from UA Statewide Internal Auditor, Nikki Pittman at nikki.pittman@alaska.edu.

Finding 3 – Property Management System Needs Improvement

Recommendation

We recommend that the NSF Director of the Division of Institution and Award Support, coordinate with cognizant audit agency, as needed, to require UAA to:

3.1 Establish appropriate Office of Procurement Services management oversight to ensure compliance with established University property standards for timely tagging of equipment and updating of property records.

UAA Response: Agreed. The Property Coordinator in place during the NSF OIG audit is no longer in the position and intensive training is occurring to ensure federal property is properly handled according to OMB Circular requirements and University of Alaska policies and procedures. The UAA Associate Vice Chancellor for Financial Services is monitoring this activity.

Please let me know if I can provide you with additional information. Thank you.



Attachment: As Noted

Alaska Native Science & Engineering Program (ANSEP)
University of Alaska Anchorage (UAA)



