

NATIONAL SCIENCE FOUNDATION
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OFFICE OF
INSPECTOR GENERAL

MEMORANDUM

Date: August 4, 2009

To: Mary F. Santonastasso
Division Director, Division of Institution and Award Support
(BFA/DIAS)

Karen Tiplady
Division Director, Division of Grants and Agreements (BFA/DGA)

From: Michael R. Kuklok 
Senior Audit Manager

Subject: NSF OIG Report Number 09-1-012
Audit of Effort Reporting System, Arizona State University

Attached is the final report prepared by WithumSmith+Brown, an independent public accounting firm, on the audit of the payroll distribution and effort reporting system used by Arizona State University (ASU) to support salary and wages charged to NSF grants. The University's comments to the draft report have been summarized after the recommendations for each audit finding and the auditor's response has been provided to these comments. The full text of the University's comments is included as Appendix B to the audit report.

The audit found that the University generally has a well established Federal grants management program. However, because the University did not place sufficient emphasis on effort reporting, ASU needs to improve its internal controls to ensure proper implementation and oversight of its labor effort reporting system. Without appropriate controls for certifying labor effort reports, ASU has less assurance that the certifications are reliable and reasonably support salaries and wages charged to NSF's sponsored projects. In addition, weak internal controls lead to NSF paying \$29,700 in excessive salaries, fringe benefits and overhead due to labor effort charged to NSF grants that did not directly benefit those grants and for allocating employee's annual base salary at a rate higher than supported in the documentation. The University also had not conducted a comprehensive independent internal evaluation of the effort reporting system, as required by OMB Circular A-21. The significant nature of these control weaknesses raises concerns about the reasonableness and reliability of the remaining \$11.7 million of FY 2007 labor charges to NSF grants.

We consider ASU'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 Department of Health and Human Services (DHHS), 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 issuance of the audit report 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 DHHS, determines that ASU has adequately addressed the recommendation and proposed corrective actions have been satisfactorily implemented. Please note that we have sent a copy of the audit report under separate cover to Jon D. Crowder of DHHS-OIG.

OIG Oversight of Audit

To fulfill our responsibilities under Generally Accepted Government Auditing Standards, the Office of Inspector General:

- Provided a detailed audit program for the agreed upon procedures review and ensured WithumSmith+Brown's approach and planning for the audit was appropriate;
- Evaluated the qualifications and independence of the auditors;
- Monitored progress of the audit at key points by accompanying WithumSmith+Brown auditors onsite at the grantee;
- Coordinated periodic meetings with WithumSmith+Brown and OIG management to discuss audit progress, findings, and recommendations;
- Reviewed the audit report, prepared by WithumSmith+Brown, to ensure compliance with Generally Accepted Government Auditing Standards and the NSF Audit Program; and
- Coordinated issuance of the audit report.

WithumSmith+Brown is responsible for the attached audit report on ASU's payroll distribution and effort reporting system and the conclusions expressed in the audit report. The NSF OIG does not express an opinion on the audit report's conclusions.

We appreciate the cooperation that was extended to us during our review. If you have any questions, please feel free to call me at 703-292-4975 or Jerel Silver at 703-292-8461.

Enclosure

cc: Gilbert Tran, Technical Manager, Office of Management and Budget
Thomas Cooley, Director and Chief Financial Officer, BFA/OAD
Alexander Wynnyk, Branch Chief, BFA/DIAS
Charles Zeigler, Special Assistant, BFA/DIA

**Audit of Effort
Reporting System**

**Arizona State University
Tempe, Arizona**

**National Science Foundation
Office of Inspector General**

**August 3, 2009
NSF OIG 09-1-012**



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Ms. Deborah H. Cureton
Associate Inspector General for Audit
Office of Inspector General
National Science Foundation
4201 Wilson Boulevard
Arlington, VA 22230

Dear Ms. Cureton:

WithumSmith+Brown is pleased to submit this performance audit report of the Effort Reporting System at Arizona State University (ASU). This audit is one in a series of Office of Inspector General (OIG) reviews of the labor effort distribution systems being conducted at NSF's top-funded universities. The audit was performed in accordance with Government Auditing Standards (GAS).

Our audit objectives were to: (a) evaluate whether ASU's internal controls are adequate to properly manage, account for, monitor, and report salary and wage costs on NSF grants in accordance with the U.S. Office of Management and Budget (OMB) and NSF grant requirements; and, (b) determine if salaries and wages charged to NSF awards are allowable, allocable, and reasonable in accordance with Federal cost principles and NSF award terms and conditions.

We appreciate the opportunity to assist the Office of Inspector General by providing an audit of the ASU's effort reporting system.

WithumSmith+Brown, PC

August 3, 2009

This page redacted in entirety

Executive Summary

This audit report provides the results of our review of the effort reporting system used by the Arizona State University (ASU) to support salaries and wages charged to the National Science Foundation (NSF) awards. In fiscal year 2007, ASU's direct Federal grant expenditures totaled \$218.5 million, of which \$37.6 million, or 17 percent, were for NSF awards. Of the total NSF expenditures, \$12.3 million was for salaries and wages. This audit is one of a series of Office of Inspector General (OIG) reviews of the labor effort distribution systems being conducted at NSF's top-funded universities to assess the adequacy of internal controls to ensure salary and wage costs claimed on NSF grants are properly managed, accounted for, and monitored.

Our review disclosed that ASU generally has a well established Federal grants management program. However, the audit disclosed several internal control weaknesses that ASU needs to correct to ensure proper implementation and oversight of its effort reporting system. Our review of 30 sampled employees, with total FY 2007 NSF salary charges of \$640,841, found that the effort reporting system did not ensure salaries and wages charged to NSF awards reasonably reflected actual work performed on the sponsored projects. Specifically, the audit disclosed:

- Fifty of 67 employee Activity Distribution Reports (ADR), used to record the allocation of an employee's labor effort to sponsored projects and other activities, were either not certified within the University's established certification period or the certification date could not be determined;
- Six ADRs from five of the sampled employees were improperly certified by four University officials who were not in a position to know whether the work was actually performed as represented on the ADR;
- Four employees charged labor costs directly to NSF grants for work that did not directly benefit any of the NSF grants;
- Three employees did not have appointment letters or employment contracts that document an employee's annual base salary used for allocating salary charges to sponsored projects and other activities; and,
- Two employee's salaries were allocated to NSF using higher annual base salaries than the amount recorded on appointment letters or employment contracts.

In addition, contrary to the U.S. Office of Management and Budget (OMB) Circular A-21, the University had not performed a comprehensive independent internal evaluation of its effort reporting system to ensure the system complied with Federal requirements and was effective.

These weaknesses occurred because ASU did not place sufficient emphasis on effort reporting. Specifically, ASU did not have adequate policies and procedures on

effort reporting; require mandatory training for all personnel involved in effort reporting; and establish proper monitoring and oversight of its labor effort reporting system.

As a result, NSF has less assurance that ASU labor effort reports are reliable in reasonably supporting salaries and wages charged to sponsored projects. The significant nature of these control weaknesses raises concerns about the reasonableness and reliability of the remaining \$11.7 million in FY 2007 labor charges to NSF grants and the \$40.6 million salary portion of ASU's other \$180.9 million of Federal award expenditures. Further, these weaknesses resulted in ASU overcharging NSF \$29,700 for 6 of the 30 sampled employees for labor effort that did not directly benefit NSF grants and for allocating employee's annual base salary at a rate higher than supported in the documentation.

Our recommendations were primarily directed toward enhancing the University's labor effort reporting system by (i) updating and revising policies to fully comply with Federal regulations, (ii) providing employee training to ensure cognizant department and academic staff fully understand their effort reporting responsibilities so that established procedures are accurately and consistently implemented, and (iii) providing adequate oversight of the effort reporting process. Finally, we recommended that ASU resolve the \$29,700 in questioned costs.

A draft audit report requesting comments on the findings and recommendations was issued to ASU. The University concurred with the findings and recommendations and stated that they revised or plan to revise various policies and procedures, strengthened employee classroom and on-line training, improved the effort reporting oversight functions, and implemented an electronic Effort Reporting System with the capability to track faculty effort committed to projects. The University also said they will remove the questioned costs identified in the report from the NSF grants.

ASU's responses, once implemented, should address our audit recommendations. NSF should work with the cognizant audit agency and/or ASU to ensure the University develops an acceptable corrective action plan to resolve each audit recommendation. We have summarized ASU's responses and provided our comments after each recommendation in the report. We also included ASU's response to our draft report in its entirety as Appendix B.

Arizona State University

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ACRONYMS

ADR	Activity Distribution Report
ASU	Arizona State University
DEA	Department Effort Administrators
NSF	National Science Foundation
OIG	NSF Office of Inspector General
OHR	Office of Human Resources
OMB	U.S. Office of Management and Budget
ORSPA	Office of Research & Sponsored Projects Administration
OVPREA	Office of the Vice President for Research and Economic Affairs
PI	Principal Investigator

INTRODUCTION

BACKGROUND

Approximately one-third of the National Science Foundation (NSF) award funds are provided for salaries and wages, amounting to about \$1.3 billion annually at universities. Also, in recent years, there have been several civil settlements involving overcharges of labor costs to Federal grants, amounting to millions of dollars at several major universities, including some funded by NSF. Because of these legal actions and the material amounts of labor costs paid from NSF awards, the Office of Inspector General (OIG) is undertaking a series of reviews of the labor effort distribution systems at NSF's top-funded universities in order to assess the adequacy of internal controls to ensure salary and wage costs claimed on NSF grants are properly managed, accounted for, and monitored. This audit, involving Arizona State University (ASU), is one of several planned reviews of such labor effort distribution systems.

ASU, established in 1885, is a public institution devoted to superior instruction, excellent student performance, original research and outstanding public service and economic development activities. The University is located in Tempe, Arizona and is a federation of colleges, schools, departments and research institutes. In fiscal year 2007, ASU had approximately 2,970 faculty members, 9,466 administrative and support staff, 51,311 undergraduates, and 13,083 graduate and professional students. Generally, ASU faculty members are awarded nine-month academic year appointments, and thus dedicate a majority of their effort to Federal sponsored research projects in the summer.

In fiscal year 2007, ASU's direct Federal grant expenditures totaled \$218.5 million, of which \$37.6 million, or 17 percent, was for NSF awards. Of the total NSF expenditures, \$12.3 million or 33 percent was for salaries and wages.

The University's Office of Research and Sponsored Projects Administration (ORSPA) is responsible for the management and oversight of Federal grant programs. Primarily, ORSPA is tasked with both pre-award and post-award grant activities, including ensuring ASU's compliance with Federal grant regulations and sponsoring agency requirements. As such, ORSPA develops ASU policies and procedures for Federal grants management and is charged with implementing appropriate training programs and is responsible for financial administration and monitoring of active Federal awards. Additionally, ORSPA is responsible for compiling and distributing ADRs to all academic departments to provide for the certification of actual work effort devoted to federally-sponsored projects. ORSPA also maintains the official file of ADRs.

Within each academic department, senior grants administrative officials are tasked with the management and oversight of sponsored projects to ensure compliance with Federal and university policies and procedures. Such officials typically assist and advise faculty members with the management of Federal grants. They are responsible for ensuring that: awards and their budgets are created accurately in the University's

financial system; award expenditures are monitored on a monthly basis; charges to Federal awards are appropriate; and responsible individuals confirm the reasonableness of employee labor effort on the ADRs. Principal Investigators (PI) have the primary responsibility for all aspects of the Federally-sponsored projects including approval of all charges and for ensuring that the research is conducted in accordance with the award terms and conditions.

OBJECTIVES, SCOPE AND METHODOLOGY

Audit Objectives. Our audit objectives were to: (a) evaluate whether ASU's internal controls are adequate to properly manage, account for, administer, monitor, and report salary and wage costs on NSF grants in accordance with the OMB and NSF grant requirements and (b) determine if salaries and wages charged to NSF awards are allowable, allocable, and reasonable in accordance with Federal cost principles and NSF award terms and conditions.

Scope and Methodology. The audit focused on ASU's payroll distribution and effort reporting system and, accordingly, we reviewed internal controls for ensuring that labor costs charged to NSF were (i) actually incurred; (ii) benefited NSF awards; (iii) were accurately and timely recorded; and (iv) were for allowable and allocable-type activities, as required by Federal and NSF grant requirements. In addition, we evaluated whether the level of PI effort pledged in grant proposal and award documents was actually contributed by the faculty member to accomplish award objectives.

To address each of these control objectives, NSF-OIG engaged a statistician to provide assistance in selecting a statistical sample of employee salary records for testing. The use of statistical tools and methodology is to enable the NSF-OIG to project the audit results to the entire population of universities included in its planned reviews of payroll distribution and effort reporting systems nationwide. However, due to the small statistical sample size of 30 employees tested, we are not able to make any projections to the total ASU population of labor costs charged to NSF grants. Specifically, the FY 2007 salaries and wages costs for the 30 sample employees tested amounted to \$640,841 and were supported by 67 effort reports. The statistical sample was derived from a total population of 1,027 employees, who charged \$11,732,764 of salaries and wages to NSF grants during FY 2007. This population excluded (a) any employee with total salary costs of \$100 or less, and (b) all salary charges for undergraduate students. These amounts were excluded because of their small dollar value and the difficulty in locating undergraduate students for personal interviews.

We interviewed key University officials and reviewed the organization structure and written policies and procedures to assess the "attitude" or "tone at the top" toward grants management and compliance in general as it affects effort reporting.

We compared ASU's policies and procedures to Federal and NSF requirements for allocating labor costs to Federal awards and interviewed ASU personnel to gain an understanding of the controls in place to ensure salaries and wages charged to NSF awards were reasonable and allowable. For the 30 statistically selected employees, we

obtained the following documentation to determine whether labor costs ASU charged NSF awards met the control objectives:

- ADRs documenting 100 percent of each employee's work activities allocated to sponsored and non-sponsored projects for each reporting period.
- Appointment letters or other documents supporting the approved annual base salary for employees.
- Human Resource Management System reports detailing the actual salaries and wages charged to sponsored projects and other activities for each employee during each reporting period.
- Award documents to determine whether the grant had any terms and conditions that would affect allowable labor charges to the award.

To ensure that salary and wage costs charged to NSF awards were incurred and benefited NSF awards, we corroborated the information on the ADR reports by interviewing the 30 sampled employees. We inquired whether (a) the labor charges documented were actually incurred on projects and activities, (b) the approximate percentage of effort actually worked on each sponsored project and/or activity was reasonably consistent with NSF labor charges, and (c) the type of work performed on NSF projects was generally consistent with the scope of the awards. We also interviewed selected administrative grants managers in academic departments to determine procedures for processing and monitoring employee salary charges to Federal grants. Additionally, we interviewed selected PIs to determine the number of projects and personnel they were responsible for and their processes for verifying work performance prior to approving and signing ADR effort reports.

To confirm that faculty effort pledged in grant proposals was actually contributed to accomplish grant objectives, we reviewed processes for reporting and tracking PI effort and [REDACTED]

[REDACTED]. We reviewed award documents for all Federal grants that a faculty member worked on during FY 2007 to determine the effort pledged on each project and compared this proposed effort to the approximate percentage of actual effort worked on the project. In addition, we determined whether and how ASU tracked and documented PI effort on sponsored projects when no faculty salary support was requested or reimbursed by the Federal Government.

To determine whether labor costs were accurately recorded and charged to NSF, we compared the amounts in appointment letters or other documentation supporting salaries and wages paid to the amounts recorded in the Human Resource Management System for each individual in our selected sample. We recalculated salary and wage costs charged to NSF projects by using the salary shown on supporting documentation and apportioning it by the period of time and percent of effort represented on the ADRs.

We also reviewed labor transactions to determine whether ASU followed Federal, NSF, and University requirements on charging labor costs to NSF projects.

We determined whether ASU officials certified effort reports in a timely manner, by comparing the date the ADR was distributed to the academic departments to the date the reports were certified. Timeliness was based on ASU's internal policy requiring ADRs to be certified and returned to ORSPA within 15 working days of receipt from ORSPA. As required by ASU's policy, we determined whether the effort reports were properly certified by the employee, the project PI, or a responsible official with "suitable means of verification" that labor effort shown on ADRs was a reasonable representation of the work performed.

Finally, we reviewed prior audit reports on ASU's Federal grants management program performed by the University's internal auditors and the OMB Circular A-133 auditors to determine whether there were any audit findings and recommendations on labor effort reporting. Specifically, we interviewed cognizant Internal Audit staff and reviewed the working papers, as needed, to gain an understanding of the scope and procedures used in any audits of ASU's payroll distribution reporting system and/or University management of labor costs charged to Federal projects. We also met with ASU's independent auditors who performed the OMB Circular A-133 audit¹ to discuss their overall audit scope and procedures used for reviewing salaries and wages charged to Federal awards and their review of the labor effort reporting system. We reviewed the most current A-133 audit working papers available during our site visit to ascertain the actual audit scope and procedures used in order to (i) preclude any duplicative audit work and (ii) determine the specific audit procedures performed on the labor effort reporting system.

Onsite review work at ASU was performed for 2-week periods during February and April 2008. The remainder of the audit work was completed through phone interviews, emails, and documentation requests through May 2009. We were engaged to perform the above audit objectives by the NSF-OIG. 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.

¹ OMB Circular A-133 is entitled *Audits of States, Local Governments, and Non-Profit Organizations*.

FINDINGS AND RECOMMENDATIONS

1. Internal Controls Over the Effort Reporting System Need Improvement

Federal Requirements for Labor Effort Reporting

OMB Circular A-21, *Cost Principles for Educational Institutions*, requires certification of labor effort contributed by employees on Federal awards to reasonably reflect the actual labor effort contributed by the employee to meet the objectives of the award. The effort reporting system must provide for an after-the-fact confirmation of employee activity by the employee conducting the work being reported or by an official that is in a position to know whether the work was performed. Although Federal requirements do not specify when a labor effort report should be completed, university officials should provide the after-the-fact confirmation as close to the end of the reporting period as possible to help ensure its reliability. ASU required ADRs to be certified and returned within 15 working days of receipt from ORSPA. The Circular also requires universities to provide for independent internal evaluations to ensure the effort reporting system effectively complies with Federal standards. As such, “the recipient institution is responsible for ensuring that costs charged to a sponsored agreement are allowable, allocable, and reasonable under these cost principles” and “must provide for adequate documentation to support costs charged to sponsored agreements.”²

Consistent with the OMB Circular A-21 requirement for “sound business management practices,” OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organization*, requires entities receiving Federal awards to establish and maintain internal controls that are designed to reasonably ensure compliance with Federal laws, regulations, and program compliance.

However, ASU did not establish adequate internal controls over the effort reporting system. Specifically, ADRs were not certified within the established turnaround period, by individuals with either a first hand knowledge of the work performed or using a suitable means to verify the work performed. In addition, ASU did not ensure that salaries and wages charged to the NSF directly benefited its grants and were correctly charged to NSF grants. Although our review of 67 ADRs for the 30 sampled employees determined that the reports generally supported the FY 2007 salaries of \$640,841 charged to NSF grants, we found:

- Fifty ADRs were either certified after the University’s established 15 working day turnaround period or the certification date could not be determined. Specifically, 48 ADRs were certified after the turnaround period, one was not dated and one was missing. Thus \$437,155 or 68

² Paragraphs C.4.d.(1) and A.2.e., respectively, of OMB Circular A-21, *Cost Principles for Educational Institutions*.

percent of the total salaries and wages tested were either certified late or the certification date could not be determined.

- Four ASU officials, who did not have first hand knowledge of the work performed, certified six ADRs for five employees without obtaining documentation demonstrating the reasonableness of the reported work performed. The ADRs represented \$41,229 of the total salaries and wages tested.
- Four employees charged \$16,883 in salaries tested and \$8,189 in the related fringe benefits and overhead (overhead) costs to NSF, even though there was no direct benefit to the NSF grants. Specifically, two employees prepared grant proposals and charged their time for this administrative activity to the grants, one employee charged his time for work not performed on the grant, and one employee charged her entire two-week vacation time to a grant even though the employee only worked four percent of her time on that grant.
- Three employees did not have appointment letters or employment contracts that document an employee's annual base salary used for allocating salary charges to sponsored projects and other activities. Thus, ASU could not adequately support \$32,791 in salaries and wages charged to NSF.
- Two employee's salaries and wages were allocated to NSF using higher annual base salaries than authorized on appointment letters or employment contracts. This resulted, in an overcharge to NSF of \$3,130 in salaries and \$1,497 in overhead.

In addition, contrary to OMB Circular A-21, the University had not performed a comprehensive independent internal evaluation of its payroll distribution and effort reporting system to ensure the system complied with Federal requirements and was effective.

ASU's Effort Reporting System

Pursuant to the OMB requirements, ASU has implemented an ADR system to document the after-the-fact certification of the reasonableness of employee's salaries and wages charged directly to sponsored projects and other activities. The number of ADR reporting periods in a year is primarily based on the type of employee.³ The University had a policy requiring academic departments to certify and return ADRs within 15

³ For academic staff there are 4 ADR reporting periods: July 1 thru August 15; August 16 thru December 31; January 1 thru May 15; and May 16 thru June 30. For fiscal employees there are 2 ADR reporting periods: July 1 thru December 31 and January 1 thru June 30. For non-exempt employees there are 12 monthly ADR reporting periods.

working days of receipt from ORSPA.⁴ However, the University's policy did not define the number of days from the end of the effort reporting period that ADRs must be distributed to the academic departments. When the academic departments receive the ADRs from ORSPA, cognizant departmental officials (ADR Coordinators) distribute the reports to employees to review for accuracy and to make any necessary corrections. The ADRs are certified, dated and returned to the ADR Coordinator who makes a copy of each report and forwards the original certified reports to ORSPA.

Many ADRs Did Not Meet the University's 15-Working Day Turnaround Period

The audit disclosed that 50 of 67 ADRs, representing \$437,155 (68 percent) of the total NSF labor charges reviewed, were either certified after the University's mandated 15 day turnaround period or the certification date could not be determined. Specifically, 48 ADRs were certified late and for 2 certification dates could not be determined. The number of days late ranged from 1 to 553 days beyond the Universities mandated 15 day turnaround period. The following table summarizes the number of days beyond the ASU certification period that officials took to review and approve their ADRs.

NUMBER OF DAYS LATE BEYOND CERTIFICATION PERIOD BASED ON SIGNATURE DATE				
Days Late	# ADRs	% of Late ADRs	Total Salaries	% Late Salaries
1 to 50	41	62 %	\$ 353,870	55 %
51 to 100	4	6 %	23,979	4 %
101 to 180	2	3 %	40,947	6 %
553	1	1 %	12,917	2 %
Not Certified Timely	48	72 %	431,713	67 %
Timeliness not determinable	2	3 %	6,914	1 %
Subtotal	50	75 %	438,627	68 %
ADRs Certified On-Time	17	25 %	202,214	32 %
Total	67	100%	\$ 640,841	100%

Typically, PIs do not establish and keep records of employee's labor effort on grants and other activities because Federal cost principles do not require this record keeping. Therefore, the longer it takes to certify ADRs, the less reliable ADRs may become because PIs generally rely on their memory when approving ADRs for themselves and the individuals that work for them. Further PI's may have multiple awards and many employees working for them, which increases the risk that the PI's memory of the amount and type of activities each employee performed will be less accurate over time. For example, one PI had seven ongoing research projects and was responsible for overseeing 1 post doctoral candidate and 7 graduate students. Thus, providing an after-the-fact confirmation as close to the end of the effort reporting period

⁴ ASU also had a contradictory policy on its certification period requiring ADRs to be certified and returned to ORSPA within 15 working days from the end of the effort reporting period. We did not to use this policy because in most instances, ADRs would be late by the time the departments received them from ORSPA.

as possible helps to ensure the reliability of the effort reporting system. With the current reporting system, PIs may have to remember more than 8 months⁵ of activity to confirm ADRs. Since the University does not specify the number of days from the end of the effort reporting period that ADRs must be distributed to the academic departments the recall period could be even longer.

Administrative Officials Did Not Have a Suitable Means to Certify ADRs

In addition, administrative personnel certified ADRs even though they did not have a suitable means for validating the work performed. For example, four ASU officials certified six ADRs for five employees even though they did not have first hand knowledge of the work performed and they did not obtain documentation demonstrating the reasonableness of the salary charged to NSF. The ADRs represented \$41,229 of the total NSF salaries tested. Specifically, three department administrative officials incorrectly certified five ADRs for four employees while an unidentified individual who was not the employee conducting the work being reported or the PI, improperly certified one ADR for an employee. ASU had no documentation in their grant files to demonstrate that a suitable means of verification was obtained for any of the six ADRs that were certified.

Salary Charges Must Directly Benefit NSF Grants

Administrative Time Charged Directly to Sponsored Projects. OMB Circular A-21 and University policy clearly established that only employee activities directly benefiting Federally-sponsored projects are allowed to be charged to such sponsored projects. However, two of nine PIs charged NSF \$7,159 in salaries and \$3,264 in the related overhead costs for their administrative time that did not directly benefit any NSF grant. Specifically, one PI stated that he spent 37.5 percent of his summer effort in preparing grant proposals while the other PI stated that he spent 10 percent of his summer effort in preparing grant proposals. See Appendix A for further details on questioned costs.

NSF Charged For Work Not Performed on Grant. A PI stated that he did not work on any NSF grants during the summer 2007 period. However, the May 16 through June 30, 2007 ADR indicated he charged 40 percent of his time to an NSF grant, representing \$3,926 in salaries and \$1,789 in the related overhead costs. The PI did not recall why he certified the ADR, but believed a mistake was made on this grant. See Appendix A for further details on questioned costs.

Vacation Time Improperly Allocated to a Sponsored Project. Although an employee worked only four percent of her time on an NSF award, ASU incorrectly allocated the employee's entire two-week vacation pay to the NSF award. University policy provides for an allocation of salary for vacation time to Federally sponsored

⁵ For fiscal year employees, the amount of time PIs have to recall work activity can be more than 8 months since the effort reporting period covers six months, distribution of the ADR can take up to 2 months and the certification turnaround period is 15 working days (21 calendar days).

projects based on the level of effort recorded on the employee's ADR. Therefore, ASU overcharged NSF \$5,798 in salary for vacation time taken in August 2006 and \$3,137 for the associated overhead costs. See Appendix A for further details on questioned costs.

ASU Did Not Always Maintain Documents to Support Employee's Annual Base Salary

Although OMB Circular A-21 mandated that universities "must provide for adequate documentation to support costs charged to sponsored agreements,"⁶ 3 of the 30 employees tested did not have adequate documentation to support their annual base salary used in allocating labor charges to NSF and other Federally sponsored projects and activities. For the three employees without appointment letters or similar documentation, ASU charged NSF \$32,791 of the total FY 2007 salaries tested. While the annual salary amounts used to compute the NSF salary charges did not appear to be excessive when compared to others in similar positions, the documentation of each employee's salary rate is essential because ASU does not have standard pay scales. They have several rates for employees pay based on academic title, number of years in the position, and the individual's pay rate negotiated at the time of hire.

The following table provides additional information on the three employees without an appointment letter or similar documentation to support their annual base salaries.

ANNUAL BASE SALARY WITH NO SUPPORTING DOCUMENTATION	
Position	Salary Charged to NSF
Faculty Member	\$ 15,951
Post Doctorate	14,292
Other Non-Professional	2,548
Total	\$ 32,791

Salary Charged to NSF in Excess of Employee's Annual Base Salary

Further, the audit disclosed that for 2 of the 30 employees tested, ASU overcharged NSF \$3,130 in salaries and \$1,497 in the related overhead costs because ASU used employee annual base salaries that were higher than supported in the official records when allocating salaries to Federal awards. See Appendix A for further details on questioned costs.

Comprehensive Independent Evaluation of the Effort Reporting System Not Conducted

Finally, ASU did not meet the OMB Circular A-21 requirement for universities to conduct a periodic independent internal evaluation of its payroll distribution and effort reporting system to ensure the system meets Federal requirements and is effective. We reviewed two recent audits that covered the University's payroll distribution and effort

⁶ Paragraph A.2.e of OMB Circular A-21, *Cost Principles for Educational Institutions*.

reporting system, however, neither audit was a comprehensive systemic review of its effort reporting system. Although ASU has an audit conducted in accordance with OMB Circular A-133 (“A-133”) annually,⁷ the A-133 audits were not designed nor intended to be a comprehensive evaluation of the payroll distribution and effort reporting system. For example, the A-133 audit we reviewed had procedures to test selected ADRs to ensure they were certified and the auditors recalculated the percent of pay per the ADR to the total recorded in the payroll system. However, the A-133 auditors did not interview employees to corroborate the information on the ADR. The A-133 auditors likely would have identified employees incorrectly charging their administrative time spent on preparing grant proposals directly to sponsored projects, if they conducted employee interviews. In addition, the A-133 auditors did not ensure that at least some faculty effort (paid or unpaid by the Federal Government) was committed to a sponsored project or that an estimated amount of faculty effort was computed by the University and included in the organized research base. Also, we concluded that although the University’s Audit and Advisory Services (Internal Audit) is independent from the ORSPA, the audit they conducted of the ASU payroll system did not meet the OMB requirement because the audit was not a comprehensive review of the effort reporting system. Rather, the audit focused on “extra” compensation paid to employees during fiscal year 2006. Therefore, neither the A-133 audit or the University’s internal audits were a systemic evaluation of the payroll distribution and effort reporting system.

Factors Contributing to Effort Reporting Weaknesses

These weaknesses occurred because, prior to FY 2008, ASU officials did not place sufficient emphasis on effort reporting. Specifically, the University had not: developed adequate effort reporting policies and procedures; required training for personnel involved in the effort reporting process; and, established proper monitoring and oversight of the effort reporting system. After the University was informed of our audit, the ██████████ informed ██████ Deans and other University officials in a December 12, 2007 email that ██████ had become aware of a number of systemic issues with the payroll distribution and effort reporting system that required immediate attention and went on to name many of the same issues that we identified in this report. The ██████████ stated his intent was to let the Schools and Colleges know that ██████ considered compliance with the University’s policy and procedures on payroll distribution and effort reporting as a priority and wanted everyone’s support on this issue. ██████ felt this was necessary since ██████ believed no one at ██████ level had emphasized the importance of effort reporting in the past.

Lack of Adequate Effort Reporting Policies. ASU’s effort reporting policies and procedures were inadequate or non-existent in the following areas: (1) defining an ADR distribution period, (2) identifying senior management officials that would be held

⁷ Under the Single Audit Act of 1984 (Public Law 98-502) as amended in 1996 (Public Law 104-156), non-Federal entities that expend \$500,000 or more a year in Federal awards are required to have an organization-wide audit that includes the non-Federal entity’s financial statements and compliance with Federal award requirements. The OMB Circular A-133 established uniform requirements among Federal agencies for audits of State, Local Governments, and Non-Profit Organizations.

accountable for the timely certifications of ADRs, (3) defining for administrative officials what types of documents demonstrate that a suitable means of verification was obtained in ensuring work was performed as represented on ADRs, (4) identifying employee's work activities that may be charged directly to Federally sponsored projects from those work activities that should not be charged directly to sponsored projects, and (5) conducting an independent internal evaluation of the payroll distribution and effort reporting system to ensure the system meets all Federal requirements and is effective.

University's Distribution Period. Although the University had a policy requiring academic departments to certify and return ADRs within 15 working days of receipt from ORSPA, they did not specify the number of days from the end of the effort reporting period that ADRs should be distributed to the academic departments. The amount of time from the end of the effort reporting period to certify ADRs may vary significantly between reporting periods because the University did not establish an ADR distribution period. For example, in FY 2007, the distribution of ADRs to academic departments varied from less than a month to almost five months. As we stated earlier in the report, the longer it takes to certify ADRs the less reliable they may be because PIs typically certify ADRs based on their memory. Therefore, to ensure ADRs are certified and returned to ORSPA as close to the end of the reporting period as possible, it is critical to define a distribution period when ADRs should be sent to the academic departments.

Timely Certification of the ADR. ASU's policy did not designate senior management officials, such as Department Chairs, to be held accountable for the timely completion of ADRs. Such senior officials (i.e. Department Chairs), who have the responsibility for securing and retaining staff and faculty members and recommending tenure and promotions, would have more leverage than department grant administrative staff or ORSPA personnel in ensuring PIs review and certify ADRs within the University's certification period.

In July 2008, ASU implemented a new automated payroll distribution system to improve its ADR process. The new system eliminates the need for paper ADRs, uses an automated routing system with electronic signatures and includes automated email notifications. Once the ADRs are certified, they are routed back to ORSPA who is responsible for maintaining them in the system. ASU officials believe the time period to certify the reports should be shortened since the paper ADRs will no longer be required to be physically distributed to the departments and returned to ORSPA. Also, officials noted that the new automated system should assist the University in monitoring ADRs for timely completion because the system will be more transparent for both the academic department and the ORSPA staff. Therefore, timeliness issues should be more readily identified for prompt resolution. ORSPA officials stated that 90 percent of the ADRs issued under the new automated system were certified on time.

While we agree that the automated system should help shorten the certification process and should provide both department personnel and University staff with the capability to monitor ADRs for timely completion, it is essential that ASU officials establish formal monitoring procedures to institutionalize the process.

Suitable Means of Verification. Although the University had a policy requiring certifying officials without first hand knowledge of the work performed to obtain a suitable means of verification, the University did not define or provide examples of what constitutes suitable means. Our statistical sample identified several instances where suitable means were not obtained. For example, three administrative personnel, who certified ADRs without obtaining documentation, were confused over how to satisfy the Federal requirement on obtaining a suitable means of verification.

Billing Policies on Employee Work Activities. ASU policies did not define the specific work activities by employee type that are included in the annual base salaries and whether those activities could be charged directly to Federally sponsored projects. This likely contributed to two PIs incorrectly charging their administrative time on preparing grant proposals directly to NSF sponsored projects.

Independent Internal Evaluations. ASU did not establish policies on implementing a Federally mandated independent internal evaluation of the payroll distribution and effort reporting system to ensure the system met Federal requirements and was effective. ASU did not have a policy because they believed its annual A-133 audit met the OMB Circular A-21 requirement for an independent evaluation of its payroll distribution system.

Training. The [REDACTED] stated in [REDACTED] December 12, 2007 email to the Deans and other University officials that it appears many of our faculty do not understand the purpose of an ADR or how to properly complete the certification. Further, [REDACTED] was concerned about a large number of missing ADRs covering several fiscal years that may never had been certified and returned to ORSPA and a lack of supporting documentation (i.e. appointment letters) for salaries paid to faculty in personnel files. Due to these issues, [REDACTED] supported having mandatory training in the new effort reporting system and said that the University was working on this. We agree with the Vice President and would add that it is essential that mandatory *periodic* training for all personnel involved in effort reporting be established, *as we identified many of the same issues that [REDACTED] spoke of in [REDACTED] email sent to Deans and other University officials.* Periodic training would not only stress its commitment by University management of the importance of its effort reporting process, but serve to ensure that new staff is trained as well as keeping all staff involved with effort reporting apprised of any changes to the process.

Lack of Monitoring and Oversight. Although ORSPA established an Outstanding ADR List for follow-up with the academic departments, ORSPA did not consistently ensure the list was kept current and sent to the departments for follow-up on the outstanding ADRs. Further, department administrative officials did not monitor their departments to ensure ADRs were completed within the University's established certification period. In addition, department administrative officials did not provide adequate oversight to ensure appointment letters or similar documents were maintained in

their files, kept current, and salary data from the appointment letters were accurately recorded into the payroll distribution system.

ADR System May Produce Unreliable ADRs and Excess Labor Charges

As a result, ASU provides limited assurance over the accuracy of ADRs tested. More significantly, those control weaknesses could affect the remaining \$11.7 million of FY 2007 labor charges to NSF grants, as well as the \$40.6 million salary portion of ASU's other \$180.9 million of Federal awards. Further, these weaknesses resulted in \$29,700 of overcharges to NSF for salaries and the associated overhead costs based on our limited sample. Therefore, it is likely additional overcharges exist and will continue without changes to the internal control structure.

Recommendations

We recommend that the NSF Director of the Division of Grants and Agreements and the Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to implement the following recommendations:

- 1.1 Work with the ASU officials to establish an internal control structure that utilizes the capabilities of its new automated effort reporting system to ensure a payroll distribution and effort reporting system that reasonably reflects the actual effort employees devote on sponsored projects. At a minimum, ASU should take the following corrective actions:
 - a. Establish or revise University effort reporting policies and procedures to:
 - i. Define a maximum number of days from the end of the effort reporting period to distribute ADRs to the academic departments.

ASU's Response

ASU concurred with the recommendation. ASU will, along with release of the electronic FY 2008 effort reports, define a specific date at each certification period for release of effort reports. ASU will strive to maintain a timeframe of less than four months from the end of the effort reporting period to distribution effort reports to the academic departments, which will result in a maximum of a six month period from effort reporting period end date to certification deadline.

Auditors' Comments

The University met the intent of the recommendation. However, we believe ASU should reconsider their position on taking up to six months from the end of the effort reporting period to distribute and certify ADRs. As pointed out in the report, the longer it takes to

certify an ADR the less reliable they become because the certifier relies on their memory of the work performed. A six month effort reporting period would require the certifier to remember up to one year of time spent on sponsored projects and other activities. In addition, the new automated payroll distribution system, implemented in July 2008, should greatly reduce the time required to distribute and certify ADRs.

- ii. Require ORSPA to ensure the Outstanding ADR list is kept current and provided to the academic departments' senior management official responsible for the timely completion of ADRs.

ASU's Response

ASU concurred and has enacted this change. The ORSPA effort reporting team provides a weekly report of outstanding effort reports to Department Effort Administrators (DEA), college Dean's offices, the Office of the Vice President for Research and Economic Affairs (OVPREA) and on a periodic basis ORSPA will provide the status of outstanding ADRs to the Department Chairs.

Auditors' Comments

ASU's response has met the intent of the recommendation.

- iii. Require the departments to monitor ADRs to ensure they are completed within the University's established certification period.

ASU's Response

ASU concurred and has enacted this change with the Effort Reporting system workflow. As certification periods progress, status reports are generated and updates are provided to DEA's, Department Chairs and Deans by ORSPA. This allows upper management's direct monitoring of percentage completion and certifications outstanding so department managers and faculty leadership can engage certifiers in meeting deadlines.

Auditors' Comments

ASU's response has met the intent of the recommendation.

- iv. Assign and hold ASU senior management officials, such as Department Chairs, accountable for the certification of ADRs within the University's certification period.

ASU's Response

ASU concurred with this recommendation. The OVPREA maintains regular contact with Department Chairs regarding effort reporting cycles and outstanding matters. Specifically, Chairs are notified when each certification period begins and after certification periods close to inform them of any pending certifications. OVPREA enforces department, PI and employee accountability with sanctions for late certification. Award activations and modifications are not processed for any PI or the employee for whom effort report certifications are outstanding on any of their projects.

Auditors' Comments

ASU's response has met the intent of the recommendation.

- v. Define what documentation suffices for a "suitable means of verification."

ASU's Response

ASU concurred and will require each employee to certify their ADRs. In the case of student workers and graduate students, the lead PI will certify their ADRs. Since an employee or PI may not be available to certify their ADRs, the University plans to define suitable means of verification in their policies to include written confirmations from the individual or physically verifiable information (e.g. notebooks, sign in sheets). The policy will also define where additional information obtained to verify the effort should be stored (project file).

Auditors' Comments

ASU's response has met the intent of the recommendation.

- vi. Define the typical instructional, research and administrative work responsibilities included in the annual base salary for various types of ASU employees and which of those activities could be charged directly to Federal awards from those activities that should not be charged directly to Federal awards.

ASU's Response

ASU concurred and will be modifying and expanding their existing guidance on annual base salary to include definitions of typical instruction, research and administrative work responsibilities included in annual base salary for various types of ASU employees.

Additionally, ASU will enhance other policy which references direct charging to include the delineation of activities that can and cannot be charged directly to Federal awards.

Auditors' Comments

ASU's response has met the intent of the recommendation.

- vii. Require an independent evaluation of the payroll distribution and effort reporting system to ensure the system is in compliance with Federal, NSF, and University standards and is effective. The policy should identify the specific office responsible for performing the evaluation and how often such an evaluation should be conducted.

ASU's Response

ASU concurred and this change has been enacted. The University's Audit and Advisory Services conducted a full review of ASU's effort reporting system in FY 2009 and will continue their review in FY 2010. Additionally, the University's Audit and Advisory Services will review the system every three years, or at more frequent intervals as circumstances require.

Auditors' Comments

ASU's response has met the intent of the recommendation.

- b. Ensure departmental and human resource officials establish and maintain current appointment letters or similar documentation establishing an employee's annual base salary that is allocated to employee's Federal awards and other activities and ensure the data from the appointment letters are correctly entered into the payroll system.

ASU's Response

ASU concurred and will be requesting that departments provide the documentation of employee personnel files to the Office of Human Resources (OHR), and also will communicate the importance of centrally housing the personnel files, in compliance with current SPP 1101 – Personnel Records. Additionally, the OHR has an extensive project to put ASU central OHR paper files in order and will work over the remainder of FY 2010 with colleges and department to pull all 'essential' paper documentation together in either a single central file or a pair of files (OHR and College).

Auditors' Comments

ASU's response has met the intent of the recommendation.

- c. Require *periodic training to all* employees involved in the effort reporting process. Such training should include a thorough discussion of ADR certification responsibilities and requirements and the various types of employee work activities that could be charged directly to Federal awards from those work activities that should not be charged directly to Federal awards.

ASU's Response

ASU concurred and has enacted this change. ASU is currently strengthening their training based on end user feedback. The University offers classroom and online training. Both methods of training will discuss the roles and responsibilities of various personnel involved in effort reporting, what types of expenditures must be certified, and what the certification means. ASU will monitor the completion of the training via an online test. Furthermore, ASU is working with college and departmental senior management to define training requirements for faculty and methods to ensure participation.

Auditors' Comments

ASU's response has met the intent of the recommendation.

- d. Resolve the \$29,700 in total questioned salary costs and the associated overhead costs (see Appendix A) resulting from improper charges for employee activity not directly benefiting NSF grants and using employee's annual base salary rates greater than the rates supported by the employee's appointment letters when allocating salary charges to sponsored projects.

ASU's Response

ASU concurred and the \$29,700 in total questioned costs will be removed from the NSF grants to which they were charged.

Auditors' Comments

ASU's response has met the intent of the recommendation.

2. Additional Internal Control Weakness Needing Management Attention

An OMB January 2001 Clarification Memorandum⁸ provide that Federally-funded research programs should have some level of committed faculty effort, paid or unpaid by the Federal Government. Such committed faculty effort should not be excluded from the organized research base by declaring it to be voluntary uncommitted cost sharing. If a research sponsored project shows no faculty effort, paid or unpaid by the Federal Government, an estimated amount must be computed by the university and included in the organized research base. [REDACTED]

However, ASU did not have the capability to track PI committed effort to the actual effort performed on the grant. Although we did not find any PIs from our sample without effort committed to a sponsored project (all sampled PIs had some level of committed faculty effort),⁹ the lack of effective controls could result in overcharging indirect costs to sponsored projects. This occurred because ASU did not have a policy to implement and institutionalize the OMB requirement for the issue described above. Without a university policy it is difficult to enforce compliance and consistency in the application of the OMB requirement. Thus, ASU is operating at a higher risk that indirect costs charged to NSF awards could result in overcharges.

Recommendations

We recommend that the NSF Director of the Division of Grants and Agreements and the Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to implement the following recommendations:

- 2.1. Work with ASU officials to establish an internal control structure that provides for a payroll distribution system that reasonably reflects the actual effort employees devote on sponsored projects. At a minimum, ASU should take the following corrective actions:
 - a. Develop a policy, including a requirement to document the methodology, for computing an estimated amount of faculty effort that would go into the organized research base to ensure at least some faculty effort is committed to a sponsored project.

ASU's Response

ASU concurred and stated they are in the process of developing a methodology and documenting a procedure by which ASU will calculate any required addition to the base, where no PI effort is identified. ASU

⁸ OMB Memorandum M-01-06, January 5, 2001, *Clarification of OMB A-21 Treatment of Voluntary Uncommitted Cost Sharing and Tuition Remission.*

⁹ Our sample of 30 employees contained 9 PIs.

also stated they will utilize a standard for minimum effort required to be committed to a project as the guideline for calculating addition to the base.

Auditors' Comments

ASU's response has met the intent of the recommendation. When the proposed methodology has been properly documented and implemented, such action should fully address the audit recommendation.

- b. Record and track PI effort to ensure that either some faculty effort is committed to a sponsored project or an estimated amount of faculty effort goes into the organized research base.

ASU's Response

ASU concurred and they anticipate the launch of a new research administration system by early calendar year 2011 which will allow ASU to track faculty effort committed to projects. ASU also stated that this action item has been incorporated into the implementation plan which is currently in progress.

Auditors' Comments

ASU's response has met the intent of the recommendation. When the proposed system has been properly implemented, such action should fully address the audit recommendation.

Appendix A

Schedule of FY 2007 Questioned Costs

Award Number	Salary Costs	Fringe Benefits	Indirect Costs	Total Costs
No Direct Benefit to Grants				
Administrative costs:				
0301007	\$ 6,361	\$ 989	\$ 1,911	\$ 9,261
0092530	798	124	240	1,162
Subtotal	\$ 7,159	\$ 1,113	\$ 2,151	\$ 10,423
Improper costs:				
0443087	\$ 3,926	\$ 610	1,179	5,715
Vacation costs:				
0603478	\$ 5,798	\$ 1,293	\$ 1,844	\$ 8,935
Total no direct benefit:	\$ 16,883	\$ 3,016	\$ 5,174	\$ 25,072
Base Salary not Supported				
Salary costs:				
0092530	\$ 2,899	450	\$ 871	\$ 4,220
0615938	231	92	84	407
Subtotal	\$ 3,130	\$ 543	\$ 955	\$ 4,627
Total Questioned Costs	\$ 20,013	\$ 3,558	\$ 6,129	\$ 29,700

Appendix B



OFFICE FOR RESEARCH AND
SPONSORED PROJECTS
ADMINISTRATION

PO BOX 873503
TEMPE, AZ 85287-3503

(480) 965-5479
FAX: (480) 965-2455

July 23, 2009

WithumSmith+Brown, PC
[REDACTED]

8403 Colesville Road, Suite 340
Silver Spring, MD 20910

Subject: Response to the Draft Report on the Audit of Arizona State University Effort Reporting System

[REDACTED]

Arizona State University is pleased to provide our response to the findings and recommendations contained in the draft report on the Audit of Arizona State University Effort Reporting System.

On behalf of the University, thank you for the time invested in this audit as well as the professionalism and cooperative attitude you have exhibited. If you have any questions or if we can provide any further assistance, please contact [REDACTED] or via email at [REDACTED].

Best regards,
[REDACTED]

ASU's Comments to Draft Audit Report

Arizona State University

July 23, 2009

ASU Responses to Draft Report on Audit of Effort Reporting System

Recommendation 1.1

Work with the ASU officials to establish an internal control structure that utilizes the capabilities of its new automated effort reporting system to ensure a payroll distribution and effort reporting system that reasonably reflects the actual effort employees devote on sponsored projects. At a minimum, ASU should take the following corrective actions:

a. Establish or revise University effort reporting policies and procedures to:

- i. Define a maximum number of days from the end of the effort reporting period to distribute ADRs to the academic departments.*

ASU Response: We concur. Effective with the release of the electronic FY2008 effort reports, ASU has defined a specific date at each certification period for release of effort reports to Departmental Effort Administrators (DEA's) to initiate the certification process. ASU will strive to maintain a timeframe of less than four months from the end of the effort reporting period to distribution of effort reports to the academic departments, which will result in a maximum of a six month period from effort reporting period end date to certification deadline.

The release dates and certification windows are incorporated into the Effort Reporting Calendar and can be accessed via the Office for Research and Sponsored Projects Administration Effort Reporting website at http://researchadmin.asu.edu/effort_reporting.

- ii. Require ORSPA to ensure the outstanding ADR list is kept current and provided to the academic departments' senior management official responsible for the timely completion of ADRs.*

ASU Response: We concur and ASU has enacted this change. The ORSPA effort reporting team provides a weekly report of outstanding effort reports to Department Effort Administrators, college Dean's offices, and the Office of the

Vice President for Research and Economic Affairs (OVPREA). On a periodic basis, Department Chairs are contacted by ORSPA to be updated on the status of outstanding reports. We are currently working on an online report which will allow university employees and administrators to query for outstanding reports for themselves and/or their departments. The online information will be updated nightly. A system generated summary report will be disseminated weekly.

- iii. *Require the departments to monitor ADRs to ensure they are completed within the University's established certification period.*

ASU Response: We concur. ASU has enacted this change with the Effort Reporting (ER) system workflow. ASU's new online effort reporting system has a workflow which requires review of the effort report by the Department Effort Administrators both before and after the certification by the person with suitable means of verification. The security of the ER system requires that a person other than the certifier act as Departmental Reviewer. This prohibits an individual from acting as both the Departmental Reviewer and the certifier on an effort report.

Any unresponsive Department Effort Administrators are reported to senior management for resolution- whether to encourage the DEA to act or to reassign another individual to this role immediately. Since inception of the new online system, this process has functioned effectively. Policy and/or procedure, as determined appropriate, will be updated to state the role requirements and timeframe for action in order to clarify this role.

At any point, DEA's can access the system to check the status of individual effort reporting forms and review their effort reporting work queue for forms awaiting processing. Additionally, Department Effort Administrators are prompted to complete their reviews by ORSPA and OVPREA when effort reports are released, during the certification period, and after the deadline, as needed.

As certification periods progress, status reports are generated and updates are provided to DEA's, Department Chairs and Deans by ORSPA. This allows upper management's direct monitoring of percentage completion and certifications outstanding so department managers and faculty leadership can engage certifiers in meeting deadlines.

Once a certification window has closed, a "hold list" is created weekly and distributed to stakeholders, including upper management, to promote completion of certifications and achievement of full compliance. While delinquent certifications are pending, sanctions (as described below) are imposed on faculty.

- iv. *Assign and hold ASU senior management officials, such as Department Chairs, accountable for the certification of ADRs within the University's established certification period.*

ASU Response: We concur. This has been enacted with the launch of our new effort reporting system. When the system was launched, the Office of the Vice President for Research and Economic Affairs (OVPREA) sent three sets of correspondence during the first effort cycle informing faculty and Chairs of the release. For the largest departments at the university, senior management met in person with each department to demonstrate the system and emphasize the importance and purpose of effort reporting.

The OVPREA maintains regular contact with Department Chairs regarding effort reporting cycles and outstanding matters. Specifically, Chairs are notified when each certification period is launched and after certification periods close to inform them of any pending certifications. OVPREA enforces department, PI and employee accountability with sanctions for late certification. Award activations and modifications are not processed for any PI or the employee for whom effort report certifications are outstanding on any of their projects.

Deans and Department Chairs are currently and will continue to be notified weekly when their faculty are delinquent (or approaching delinquency) in the completion of their effort reports and their assistance is sought to ensure on-time completion. Since inception of the new online system, the participation of senior management in the process has been very effective in achieving certification compliance. Policy and/or procedure, as appropriate, will be updated to more clearly state the responsibility of senior management to follow-up and resolve issues with pending certifications.

- v. *Define what documentation suffices for a "suitable means of verification."*

ASU Response: We concur. The control over the determination of suitable means of verification has been enacted via our ER system workflow process. Default settings for each employee type determine who can certify. Each employee self-certifies, except in the case of student workers and graduate students, who are certified by the lead Principal Investigator on the project.

Proxy certifiers can only be assigned by the ORSPA Effort Reporting team. Proxy is only granted for employees who have been terminated, who are on medical leave, who have granted authority to another individual who has a direct project role, or another like circumstance.

These proxy situations are discussed in our training programs, and we are adding the definitions to our policy and proxy protocol. These documents will reflect that suitable means of verification include but are not limited to written confirmation from the individual, physically verifiable information (e.g. notebooks, sign in sheets), or based on first hand observation of the individual. The procedures will also define in writing when the proxy situations are allowable, who is an acceptable proxy, and where additional information obtained to verify the effort should be stored (project file). This information will also be available on our website.

- vi. *Define the typical instructional, research and administrative work responsibilities included in the annual base salary for various types of ASU employees and which of those activities could be charged directly to Federal awards from those activities that should not be charged directly to Federal awards.*

ASU Response: We concur. ASU policies provide guidance as to what is and is not included in Institutional Base Salary. This information is specifically referred to in our Research and Sponsored Projects policy RSP 502-03 Certification of Sponsored Project Effort, as well as supported by the concepts presented in the Academic Affairs policy ACD 510-04 Intra-University Consulting. The term Institutional Base Salary is further defined in the ACD policy glossary.

To further clarify this concept, we will be modifying and expanding our existing guidance on Institutional Base Salary to include definitions of typical instruction, research and administrative work responsibilities included in Institutional Base Salary for various types of ASU employees. We will enhance other ASU policy

which references direct charging to include the delineation of activities that can and cannot be charged directly to Federal awards.

- vii. *Require an independent evaluation of the payroll distribution and effort reporting system to ensure the system is in compliance with Federal, NSF, and University standards and is effective. The policy should identify the specific office responsible for performing the evaluation and how often such an evaluation should be conducted.*

ASU Response: We concur. This change has been enacted, as ASU has engaged the internal audit team from the ASU Office of the General Counsel in evaluation of the system and procedures. This team, called the University Audit and Advisory Services, conducted a full review of ASU's effort reporting system during FY2009, utilizing resources such as federal effort reporting audits. University Audit and Advisory Services has indicated that they will continue their review of the effort reporting system during their next review, to be conducted in FY2010. ASU's University Audit and Advisory Services have incorporated the Effort Reporting System into its scope, and will review the system every three years, or at more frequent intervals as circumstances require.

- b. *Ensure departmental and human resource officials establish and maintain current appointment letters or similar documentation establishing an employee's annual base salary that is allocated to employee's Federal awards and other activities and ensure the data from the appointment letters are correctly entered into the payroll system.*

ASU Response: We concur. ASU will be requesting that departments provide the documentation of employee personnel files to the Office of Human Resources, and also will communicate the importance of centrally housing the personnel files, in compliance with current SPP 1101 – Personnel Records.

Office of Human Resources (OHR) has an extensive project to put ASU central OHR paper files in order and will work over the remainder of FY2010 with colleges and department to pull all 'essential' paper documentation together in either a single central file or a pair of files (OHR and College). The electronic documentation project is dependent on a variety of transactions being fully automated, but should be in place by the end of FY2011.

ASU will be establishing a comprehensive set of policies and procedures for monitoring and verifying payroll expenses. The following guidance and tools have been put in place in fiscal year 2009 to assist departments in monitoring and reviewing their payroll expenses.

- Policy FIN 203 – Org Manager Responsibilities: Describes the accountability for departments to ensure their payroll expenses are accurate in accordance with their respective budgets.
- Policy SPP 405-02 – Overpayment: Addresses the process to follow in the event an overpayment has been determined.
- MyReports – HR Expenditures: Reporting of departmental payroll expenses in relation to their budget.
- Business Process Guide: Assists in reconciling Payroll Expenses.

Additional business processes will be put in place in FY2010 to ensure appropriate management approval is documented for all payroll expenses.

University Audit and Advisory Services will be auditing this function in FY2010 to ensure that planned improvements are implemented and compliance is enhanced.

- c. *Require periodic training to all employees involved in the effort reporting process. Such training should include a thorough discussion of the ADR certification responsibilities and requirements and the various types of employee work activities that could be charged directly to Federal awards from those work activities that should not be charged directly to Federal awards.*

ASU Response: We concur. We have enacted this change and are currently strengthening our training based on end user feedback. We offer classroom training to Department Effort Administrators each effort cycle – including beginner and refresher course- and notify the DEA population of the next training opportunities each cycle via email. We have tracked attendance of the DEA sessions and are confident that the active population of DEAs has received training. Additionally, DEAs are very interactive with the ORSPA effort team and frequently utilize our help resources to obtain guidance and assistance.

We offer online training for the faculty, in addition to providing in-person training upon request. When the new system was launched, senior management attended departmental meetings for the departments with the most research activity to explain

the requirements and policies related to effort reporting as well as to demonstrate the system usage and the importance placed on compliance. We will continue to monitor the completion of the training via an online test and are working with college and departmental senior management to define training requirements for faculty and methods to ensure participation.

We also offer online resources for learning such as FAQs, policy guidance, in addition to a help desk email which is monitored constantly and is devoted exclusively to effort reporting issues. Our online training, as well as in person training, discusses what the roles and responsibilities of effort reporting are for each system role, what types of expenditures must be certified, and what the certification means.

- d. *Resolve the \$29,700 in total questioned salary costs and the associated overhead costs (see Appendix A) resulting from improper charges for employee activity not directly benefiting NSF grants and using employee's annual base salary rates greater than the rates supported by the employee's appointment letters when allocating salary charges to sponsored projects.*

ASU Response: We concur. The \$29,700 in total questioned costs will be removed from the NSF grants to which they were charged.

Recommendation 2.1

Work with the ASU officials to establish an internal control structure that provides for a payroll distribution system that reasonably reflects the actual effort employees devote on sponsored projects. At a minimum, ASU should take the following corrective actions:

- a. Develop a policy, including a requirement to document the methodology, for computing an estimated amount of faculty effort that would go into the organized research base to ensure at least some faculty effort is committed to a sponsored project.

ASU Response: We concur. ASU is in the process of developing a methodology and documenting a procedure by which we will calculate any required addition to the base, where no PI effort is identified. We will utilize a standard for minimum effort required to be committed to a project as the guideline for calculating addition to the base.

- b. Record and track PI effort to ensure that either some faculty effort is committed to a sponsored project or an estimated amount of faculty effort goes into the organized research base.

ASU Response: We concur. We anticipate the launch of a new research administration system late in calendar year 2010 or early in calendar year 2011 which will allow us to track faculty effort committed to projects. From this system we will be able to provide researchers with information on deviations between proposed and actual effort throughout the course of the projects. These action items have been incorporated into the implementation plan which is currently in progress.

Reductions from proposed PI effort of less 25% are allowable per expanded authorities delegated to ASU. Any reductions in excess of this amount will be investigated and accounted for appropriately as direct charge, cost share, or for negotiation with sponsors on reduction of PI effort.