

NATIONAL SCIENCE FOUNDATION
4201 Wilson Boulevard
ARLINGTON, VIRGINIA 22230



**OFFICE OF
INSPECTOR GENERAL**

MEMORANDUM

Date: March 31, 2011

To: Mary F. Santonastasso, Director
Division of Institution and Award Support

Karen Tiplady, Director
Division of Grants and Agreements

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

Subject: Audit Report No. OIG-11-01-009
Ohio State University

Attached is the final audit report, prepared by McBride, Lock & Associates, an independent public accounting firm, on the audit of NSF Award numbers EEC-0425626, HRD-0331560, and CHE-0532250 awarded to The Ohio State University (the University or OSU). The audit covers costs claimed for the three awards from November 1, 2003 to September 30, 2009, totaling approximately \$17.5 million in NSF costs claimed and \$5 million in claimed cost share.

The three awards selected for audit were chosen by the NSF-OIG because the awards mandate extensive collaboration between OSU and several subawardees, involve large salary and indirect cost expenditures, and require substantial cost sharing by the University and subawardees. Also, prior OSU audits have identified material noncompliance and internal control weaknesses in its financial grant administration..

Except for \$1,736,068 of questioned NSF funded costs; \$263,937 of cost share; \$223,131 of at-risk participant support costs; and \$9,796,159 of at-risk cost share, the costs claimed by the University and its subawardees for the NSF awards audited appear fairly stated and are allowable, allocable and reasonable. The auditors identified five significant compliance and internal control deficiencies in OSU's financial management that contributed to the questioned costs and could impact current and future NSF awards. Specifically, OSU lacks an effective system for monitoring costs claimed by subawardees; cost share commitments are not adequately monitored; participant support costs are not identified, segregated and monitored to ensure the fulfillment of the related commitments; employee effort has not consistently been certified on a

timely basis and by someone with sufficient knowledge to ensure the reliability of the certification; and training is not adequate to ensure that responsible OSU personnel are aware of compliance requirements in the NSF award terms and conditions.

To address these compliance and internal control deficiencies, the auditors recommend that the Director of NSF's Division of Institution and Award Support (DIAS) address and resolve the recommendations made to OSU to: (1) expand OSU subawardee risk assessment and monitoring processes; (2) improve award accounting, analysis and monitoring procedures targeted at cost share; (3) establish adequate policies and procedures for identifying, accounting for, and monitoring participant support costs; (4) ensure that employees are properly and timely certifying effort reports; and (5) expand policies, procedures and training programs that address the noncompliance identified during this audit in the areas of cost share, participant support costs, and subaward costs. The University has previously implemented systems and procedures to correct most significant effort reporting deficiencies.

The University, in its response to the draft report dated February 28, 2011, generally concurred with the recommendations and agreed to some of the questioned costs. The University's response is described after each finding and included in its entirety in Appendix A.

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

We are providing copies of this memorandum to the Division Director of Human Resources Development (HRD), the Division Director of Mathematical & Physical Sciences (MPS/CHE) and the Division Director of Engineering, Education, and Centers (EEC). The responsibility for audit resolution rests with the Division of Institution and Award Support, Cost Analysis and Audit Resolution Branch (CAAR). Accordingly, we ask that no action be taken concerning the report's findings without first consulting CAAR at 703-292-8244.

OIG Oversight of Audit

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

- Reviewed McBride, Lock & Associates' approach and planning of the audit;
- Evaluated the qualifications and independence of the auditors;
- Monitored the progress of the audit at key points;
- Coordinated periodic meetings with McBride, Lock & Associates and NSF officials, as necessary, to discuss audit progress, findings, and recommendations;
- Reviewed the audit report, prepared by McBride, Lock & Associates to ensure compliance with Government Auditing Standards; and
- Coordinated issuance of the audit report.

McBride, Lock & Associates is responsible for the attached auditor's report on the University and the conclusions expressed in the report. We do not express any opinion on the Schedules of Award Costs, internal control, or conclusions on compliance with laws and regulations.

We thank your staff for the assistance that was extended to our auditors during this audit. If you have any questions regarding this report, please contact Jannifer Jenkins at 703-292-4996.

Attachment

cc: Theresa Maldonado, Division Director, ENG/EEC
James H. Lightbourne, Division Director, EHR/HRD
Matthew Platz, Division Director, MPS/CHE

**The Ohio State University-
Columbus**

Board of Trustees
154 W. 12th Avenue
Columbus, OH 43210

Independent Auditors' Reports on
National Science Foundation

Award Numbers
EEC-0425626, HRD-0331560,
CHE-0532250

For the Period from November 1, 2003 to September 30, 2009

McBride, Lock & Associates
1111 Main Street
Suite 900
Kansas City, MO 64105

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

The National Science Foundation (NSF) Office of Inspector General (OIG), engaged McBride, Lock & Associates to perform an audit on \$17.5 million in costs claimed and \$5 million in cost sharing claimed as reported on the September 30, 2009 Federal Financial Report (FFR) and cost sharing reports submitted to NSF by The Ohio State University, (the University or OSU) on NSF award numbers EEC-0425626, HRD-0331560, and CHE-0532250.

The University is a public research university and a federal land-grant institution that, in 2009, had 382 active NSF awards totaling over \$160 million and NSF award expenditures of \$41,230,373. The three awards selected for audit were chosen by the NSF-OIG because the awards mandate extensive collaboration between OSU and several subawardees, involve large salary and indirect cost expenditures, and require substantial cost sharing by the University and subawardees. Additionally, prior OSU audits have identified material noncompliance and internal control weaknesses in its financial grant administration.

The purpose of this engagement was to determine whether the costs and cost share claimed by OSU and its subawardees for these NSF awards appear fairly stated in the Schedules of Award Costs; OSU's financial compliance and internal controls provided OSU the ability to properly administer, account for and manage its NSF awards; OSU adequately monitors its subawards; and OSU addressed the issues/findings indicated in its 2009 OMB Circular A-133 single audit report.

For the period from award inception to September 30, 2009, we audited \$17,453,835 in costs claimed and \$5,374,421 in cost sharing claimed to NSF. We determined that, except for \$1,736,068 in questioned salaries and wages, fringe benefit, equipment, participant support, subcontract, indirect, and other costs and \$10,060,096 in questioned and "at risk" cost sharing, described below, the costs claimed by OSU and its subawardees for the NSF funded award expenditures under NSF award numbers EEC-0425626, HRD-0331560, and CHE-0532250 appear fairly stated and are allowable, allocable and reasonable for the NSF awards. In addition, the issues/findings identified in prior audits have been substantially corrected or are not of significance to the NSF awards audited.

Specifically, \$1,736,068 million (10 percent) of the \$17.5 million in total claimed NSF-funded costs, were questioned primarily due to unsupported subawardee costs of \$52,394; unsupported participant support costs and failure to incur budgeted participant support costs of \$1,142,684; an inadequate effort reporting system prior to 2006 resulting in \$437,735 of unsupported payroll, fringe benefit and indirect costs; unallowable lab animal and unapproved capital purchases totaling \$44,355; and questioned cost share short fall of \$58,900. Because OSU failed to provide its portion of the total project costs in cost share, \$58,900 of the direct NSF funding was questioned. See Schedule B.1.6 for the computation of questioned award costs resulting from OSU's cost sharing shortfall. We also questioned cost share claimed for disallowed or unsupported costs and cost shared payroll, fringe benefits and related indirect costs not supported by effort reports totaling \$263,937. We identified \$9,796,159 of cost sharing as "at risk" primarily because committed cost share was not incurred proportionately to the time elapsed on the award. We also identified \$223,131 of "at-risk" participant support costs. "At-risk" cost sharing and participant support costs are the amounts of required cost sharing and participant support costs, respectively, that have not been met at the time of the audit, but which the awardee still has time to meet before the end of the award period.

In addition, we noted five significant compliance and internal control deficiencies in OSU's financial management that contributed to the questioned costs and could impact current and future NSF awards. Specifically, OSU lacks an effective system for monitoring costs claimed by subawardees; cost share commitments are not adequately monitored; participant support costs are not identified, segregated and monitored to ensure the fulfillment of the related commitments; employee effort has not consistently been certified on a timely basis and by someone with sufficient knowledge to ensure the reliability of the certification; and training is not adequate to ensure that responsible OSU personnel are aware of compliance requirements in the NSF award terms and conditions.

Of the five instances of non-compliance identified, all were significant internal control deficiencies. Findings 1, 2 and 3 are considered to be material weaknesses. Specifically:

Finding 1 - Inadequate Subaward Monitoring. The University does not perform risk assessments prior to selecting subawardee institutions and does not adequately monitor the subawardees' post-award compliance with NSF award terms and conditions. This deficiency is caused by the lack of appropriate policies and procedures over subawardee selection and monitoring and the belief that audits of federal programs in accordance with Office of Management and Budget Circular A-133 provides sufficient assurance that subawardees will comply with significant award terms and conditions. At 1 of 2 subawardee sites visited, our audit identified subawardee noncompliance resulting in \$142,617 of questioned costs and cost sharing, representing 51 percent of that university's costs and cost share claimed. The absence of procedures to review and monitor subawardee costs may allow additional unallowable costs claimed on NSF awards to go undetected.

Finding 2 – Inadequate Controls for Meeting Cost Share Commitments. The University does not monitor progress towards fulfilling cost sharing when such commitments are made during the award process. Cost sharing identified and quantified in proposal narratives is not consistently accounted for and identified on the proposal budget. As a result, the Center Award, which was originally scheduled to end August 31, 2009, was found to have a cost share commitment of \$12,364,522 with only \$2,937,363 of accepted cost share. In addition to the \$9 million of "at-risk" cost share, we identified \$263,937 of cost share that was unallowable. These included \$26,345 of costs for picnics, parties, meals, and expedited VISA processing fees associated with bringing foreign nationals to the United States, \$27,549 of postage, telephone and related costs normally included in the University's indirect cost rate, and transfers from other accounts of \$210,043 for which support has not been provided to establish their allowability. The REEL Award, which was originally scheduled to end August 31, 2009, was found to have no cost share accounting or certifications, even though cost share was committed in the proposal in amounts estimated at from \$369,000 to \$494,000. The completed LSAMP award, with a cost share commitment of \$3,491,292, was found to have accounted for only \$2,173,121 of cost share. Because the University has not accounted for and reported cost share related to these additional commitments, we are unable to determine whether the commitments have been fulfilled. Failure to provide the level and types of services represented by approved and required cost share may negatively impact the successful completion of the funded project. Further, inadequate accounting for cost share may result in the refund of monies to the grantor agency as required to honor the agreed-upon award terms. NSF funding amounting to \$58,900 has been questioned as a result of OSU not meeting its cost share requirement and nearly \$10 million of the cost share has been identified as "at-risk" cost share.

Finding 3 – Inadequate Controls for Meeting Participant Support Cost Commitments. The University does not monitor progress towards fulfilling participant support commitments, including commitments from its subawardees, when such commitments are required by OSU or under the terms of the NSF award. Further, participant support costs are not segregated and accounted for separately. As a result, for one concluded award, participant support costs recorded in the OSU general ledger amounted to \$136,416 even though the NSF-approved budget required participant support costs of \$1,279,100. For another ongoing award, the general ledger reports that, during the first 5 years of the award, no award funds have been spent for participant stipends, which represents the majority of the committed participant support costs of \$272,238 over the 7 year award. During the audit it was noted that \$49,107 of participant support costs had been recorded in the general ledger under travel costs but \$7,480 has been identified as unsupported. Failure to provide the level and type of services represented by approved and agreed-upon participant support costs may negatively impact the successful completion of the funded project. Further, inadequate accounting for participant support costs detracts from the ability of management to monitor adherence to award commitments, by both OSU and its subawardees, and may also result in the refund of monies to the grantor agency as required to honor the agreed-upon award terms. Therefore, over \$1.1 million was questioned due to unmet participant support costs.

Finding 4 – Inadequate Effort Reporting System to Support Payroll Costs Prior to 2006; Effort Reporting System Improved in 2006 and Subsequent Years. Prior to 2006, the University did not have an adequate system to ensure that labor charges to federal awards were supported by timely and adequate certifications and that the associated effort was expended on sponsored award activity. This reduced the reliability of payroll costs charged to federal awards. Specifically, prior to 2006, the University's policies and procedures did not require that the certifier have first-hand knowledge of activities or percent of effort expended on federal awards and that effort reports be consistently certified by someone with suitable means of verification on a timely basis. In addition, all effort reports requested could not be located. As a result, a total of \$437,735 of salary, fringe and associated indirect costs charged to all three awards prior to 2006 were questioned.

In 2006, the University implemented enhanced controls over the payroll and effort reporting processes, however, the process for approving effort expended by staff on more than one project needs to be further improved. Our audit procedures identified one PI who was unaware that effort reports reflecting charges to the awards of more than one PI should only be certified pursuant to input and approval from the respective PIs or others who possessed first-hand knowledge of the effort reported. However, our audit procedures did not identify any payroll costs charged to NSF awards subsequent to the charges prior to 2006 that lacked proper certification by the appropriate PI or knowledgeable person.

Finding 5 – Inadequate Policies, Procedures and Training of Personnel Responsible for Compliance with Awardee Requirements. Noncompliance with federal regulations suggests that personnel are not aware of pertinent requirements, which is evidenced in unallowable lab animal and unapproved capital purchases totaling \$44,355. Documented policies and procedures with respect to subawardee monitoring and accounting for and monitoring cost share and participant support commitments are limited and omit key subject matter that relate to the deficiencies identified during the audit. Formal training in the areas of research award administration and federal requirements is minimal, consisting principally of one-on-one training as the need is identified. The absence of policies, procedures and training programs

addressing compliance requirements for the administration of federal awards constitutes a significant deficiency in the system of internal controls over award administration that can lead to unallowable costs charged to NSF and other federal awards.

These five instances of noncompliance and internal control weaknesses could have a significant impact on the OSU's ability to record, process, summarize and report financial data, and effectively and efficiently administer the funds in a manner that is consistent with Federal and NSF requirements. If OSU fails to address these compliance and internal control weaknesses, similar problems may occur when expending the remaining balance on the \$141 million of existing NSF awards.

To address these issues, we recommend that NSF's Director of Institution and Award Support address and resolve the recommendations made to OSU to: (1) expand OSU subawardee risk assessment and monitoring processes; (2) improve award accounting, analysis and monitoring procedures targeted at cost share; (3) establish adequate policies and procedures for identifying, accounting for, and monitoring participant support costs; (4) ensure that employees are properly and timely certifying effort reports; and (5) expand policies, procedures and training programs that address the noncompliance identified during this audit in the areas of cost share, participant support costs, and subaward costs. The University has previously implemented systems and procedures to correct the most significant effort reporting deficiencies noted in Finding No. 4.

OHIO STATE UNIVERSITY RESPONSE

OSU generally concurred with the recommendations and agreed to some of the questioned costs. OSU's response to the findings identified in our audit is described after each finding and within the Schedule Bs, and is included in its entirety in Appendix A. Our comments on OSU's responses follow each of their responses. Attachments 1 through 8, included in OSU's response, contained proposed supporting documentation and schedules from OSU's Office of Sponsored Programs and its subawardee, the University of Akron. Because Attachments 1 through 8 are voluminous, they are contained in a separate volume of this report and are available upon request from the NSF OIG.

The findings in this report should not be closed until NSF has determined that all the recommendations have been adequately addressed and the proposed corrective actions have been implemented.

For a complete discussion of these findings, refer to the Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Schedules Performed in Accordance with Government Auditing Standards.

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Acronyms

NSF	National Science Foundation
OIG	Office of Inspector General
OMB	Office of Management and Budget
OSP	Office of Sponsored Programs
OSU	Ohio State University
PI	Principal Investigator

INTRODUCTION

BACKGROUND

We audited funds awarded by the National Science Foundation (NSF) to The Ohio State University (OSU or University) under award numbers EEC-0425626, HRD-0331560, and CHE-0532250, for the period November 1, 2003 to September 30, 2009. The University, as a Federal awardee, is required to follow the cost principles specified in 2 CFR Part 220 (OMB Circular A-21), *Cost Principles for Educational Institutions*; Federal administrative requirements contained in 2 CFR Part 215 (OMB Circular A-110), *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations*; and Federal audit requirements in OMB Circular-A-133, *Audits of States, Local Governments, and Non-Profit Organizations*.

The University is a public research university and land-grant institution with administrative offices located in Columbus, Ohio and four campuses in Lima, Mansfield, Marion and Newark. Under the governance of a Board of Trustees, OSU has provided teaching, research and service to Ohio and the nation since 1870. There are more than 63,000 students on the University's campuses and hundreds of thousands are served statewide through the OSU Extension and OSU Health Systems. The University is a major grant recipient, with research expenditures ranking it among the top 10 public research universities. In 2009, OSU had 382 active NSF awards totaling over \$160 million and NSF award expenditures of \$41,230,373.

The three awards selected for audit were chosen by the NSF-OIG because the awards mandate extensive collaboration between OSU and several subawardees, involve large salary and indirect cost expenditures, and require substantial cost sharing by the University and subawardees. The University's NSF award portfolio collaborations include groups of universities working together on a common initiative with OSU functioning as the coordinator of all financial administration. Collaborative awards often have high inherent audit risks because of the challenges the awardees face to adequately monitor and account for NSF award funds.

In addition, the University has had prior A-133 audit findings identifying deficiencies in payroll controls, asset management and compilation of schedules of federal expenditures. Also, internal control deficiencies have been identified in the areas of grants and financial management, with specific reference to journal entry approvals, grant oversight, and a decentralized environment.

A description of the three NSF awards audited follows:

1. NSF awarded Cooperative Agreement No. EEC-0425626 to the OSU initially for the period September 1, 2004 through August 31, 2009 in the amount of \$13,183,960, with a cost share requirement of \$12,364,522; however, the award has been extended through August 31, 2011. The Center for Affordable Nanoengineering of Polymer Biomedical Devices (CANPBD), award number EEC-0425626, is a partnership between The Ohio State University, the University of Akron, Boston University, University of California, Berkeley, Johns Hopkins University, Florida A&M University and Purdue University. The purpose of the award is to develop technology to be used to produce nanofluidic devices and nanostructures for next generational medical diagnostic and therapeutic applications. The project includes curriculum development, teacher workshops for high school teachers, and web-based science modules for K-12 students nationwide.

We conducted our audit of this award for the period September 1, 2004 to September 30, 2009. Cumulative disbursements for award number EEC-0425626 reported to NSF for the audit period were \$11,854,024. Cost share claimed totaled \$3,201,300.

2. NSF awarded Cooperative Agreement No. HRD-0331560 to the OSU for the period November 1, 2003 through September 30, 2009 in the amount of \$3,499,123, with a cost share requirement of \$3,499,123. The LSAMP: The Ohio Science and Engineering Alliance, #HRD-0331560 is for the purpose of providing incentives to increase minority participation in science, technology, engineering and mathematics (STEM). The goal of the award was to double the number of minority students receiving bachelor's degrees from 438 in 2001 to 876 in 2008 (the original award expiration date). Initiatives include outreach, mentoring, developing research activities for juniors and seniors and providing staff and faculty professional development. The initial period of the award was from November 1, 2003 through September 30, 2008; however, the award was extended through September 30, 2009.

We conducted our audit of this award for the period November 1, 2003 to September 30, 2009. Cumulative disbursements for award number HRD-0331560 reported to NSF for the audit period were \$3,491,292. Cost share claimed totaled \$2,173,121.

3. NSF awarded Grant No. CHE-0532250 to the OSU for the period September 1, 2005 through August 31, 2010 in the amount of \$2,935,952, with a cost share requirement of \$369,000. The Ohio Consortium for Undergraduate Research: Research Experiences to Enhance Learning (REEL), award number CHE-0532250, is shared with 15 Ohio Colleges and Universities in order to develop research modules for use in undergraduate chemistry courses, implementing the use of the modules and evaluating the effect which is defined, in part, as increasing student participation in undergraduate research by 20%. The period of the award is from September 1, 2005 through August 31, 2010.

We conducted our audit of this award for the period September 1, 2005 to September 30, 2009. Cumulative disbursements for award number CHE-0532250 reported to NSF for the audit period were \$2,108,519. No cost share was claimed through September 30, 2009.

AUDIT OBJECTIVES, SCOPE, AND METHODOLOGY

At the request of the NSF Office of Inspector General (OIG), McBride, Lock & Associates conducted an audit of NSF Award Numbers EEC-0425626, HRD-0331560, and CHE-0532250 which were granted to Ohio State University.

The objectives of our audit were to:

1. Determine whether The Ohio State University's system of internal control over administering its NSF awards is adequate to account for and ensure compliance with applicable OMB Circular and NSF award requirements.

2. Identify and report instances of noncompliance with laws, regulations, and the provisions of the award agreements and weaknesses in The Ohio State University's internal controls over compliance and financial reporting that could have a direct and material effect on the Schedules of Award Costs (Schedules A-1 to A-3) and the University's ability to properly administer, account for, and manage its NSF awards.
3. Determine whether the University adequately monitors its sub-awards;
4. Determine whether the University's Schedules of Award Costs presents fairly, in all material respects, the costs claimed on the Federal Financial Reports (FFR) and cost sharing in conformity with NSF-OIG's *Audit Guide* and Federal and NSF award terms and conditions.
5. Follow-up on recommendations identified in the University's OMB Circular A-133 reports to determine if they were satisfactorily addressed and implemented.

We conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in the *Government Auditing Standards* (July 2007) issued by the Comptroller General of the United States, and the guidance provided in the *National Science Foundation OIG Audit Guide* (August 2008), as applicable. Those standards and the *National Science Foundation OIG Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether the amounts claimed to the National Science Foundation as presented in the Schedules of Award Costs (Schedules A-1 to A-3), are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the Schedules of Award Costs (Schedules A-1 to A-3). An audit also includes assessing the accounting principles used and significant estimates made by The Ohio State University, as well as evaluating the overall financial schedule presentation. We believe that our audit provides a reasonable basis for our opinion, which is stated in the independent auditors' report on financial schedules.

**AUDITORS' REPORTS, FINDINGS
AND RECOMMENDATIONS**

McBRIDE, LOCK & ASSOCIATES

INDEPENDENT AUDITORS' REPORT ON FINANCIAL SCHEDULES

National Science Foundation Office of
Inspector General 4201 Wilson Boulevard
Arlington, Virginia 22230

We have audited the costs claimed by The Ohio State University to the National Science Foundation (NSF) on the Federal Financial Reports for the NSF awards listed below. In addition, we audited the amount of cost sharing claimed on the awards. The Federal Financial Reports, as presented in the Schedules of Award Costs (Schedule A-1 to A-3), are the responsibility of The Ohio State University's management. Our responsibility is to express an opinion on the Schedules of Award Costs (Schedules A-1 to A-3) based on our audit.

<u>Award Number</u>	<u>Award Period</u>	<u>Audit Period</u>
EEC-0425626	September 1, 2004 – August 31, 2011	September 1, 2004 – September 30, 2009
HRD-0331560	November 1, 2003 – September 30, 2009	November 1, 2003 – September 30, 2009
CHE-0532250	September 1, 2005 – August 31, 2010	September 1, 2005 – September 30, 2009

We conducted our audit in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards* (2007 Revision) issued by the Comptroller General of the United States, and the guidance provided in the *National Science Foundation OIG Audit Guide* (August 2007), as applicable. Those standards and the *National Science Foundation OIG Audit Guide* require that we plan and perform the audit to obtain reasonable assurance about whether the amounts claimed to the National Science Foundation as presented in the Schedules of Award Costs (Schedule A-1 to A-3), are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the Schedules of Award Costs (Schedule A-1 to A-3). An audit also includes assessing the accounting principles used and significant estimates made by The Ohio State University's management, as well as evaluating the overall financial schedule presentation. We believe that our audit provides a reasonable basis for our opinion.

The Schedules of Questioned Costs (Schedules B-1 through B-3) explain the questioned \$1,736,068 of claimed NSF-funded costs; questioned \$263,937 of cost share; \$223,131 of at-risk participant support costs; and \$9,796,159 of "at-risk" cost share, as to their allowability under the NSF award agreements. These costs include inadequately supported and untimely certified labor charges; unmet participant support costs; unauthorized equipment purchases; and unsupported, unmet and at-risk participant support and cost share. Questioned costs are (1) costs for which there is documentation that the recorded costs were expended in violation of the laws, regulations or specific award conditions, (2) costs that require additional support by the awardee, or (3) costs that require interpretation of allowability by NSF's Division of Institution and Award Support. "At-risk" participant support costs and cost sharing are the amounts of required participant support costs and cost sharing that has not been met at the time of the audit, but which the awardee still has time to meet before the end of the award period. The final determination as to whether such costs are allowable will be made by NSF. The ultimate outcome of this determination cannot presently be determined. Accordingly, no adjustment has been made to costs claimed for any potential disallowance by NSF.

In our opinion, except for the \$1,736,068 of questioned NSF-funded costs; \$263,937 of cost share; \$223,131 of at-risk participant support costs; and \$9,796,159 of at-risk cost share, the Schedules of Award Costs (Schedule A-1 to A-3) referred to above present fairly, in all material respects, the costs claimed on the Federal Financial Reports and cost sharing claimed, for the period of November 1, 2003 through September 30, 2009, in conformity with the provisions of the *National Science Foundation OIG Audit Guide*, *NSF Grant Policy Manual*, terms and conditions of the NSF awards and on the basis of accounting described in the Notes to the Financial Schedules, which is a comprehensive basis of accounting other than generally accepted accounting principles. These schedules are not intended to be a complete presentation of financial position of Ohio State University in conformity with accounting principles generally accepted in the United States of America.

In accordance with *Government Auditing Standards* and the guidance provided in the *National Science Foundation OIG Audit Guide*, we have also issued a report dated December 23, 2010, on our consideration of The Ohio State University's internal control over financial reporting and our tests of the University's compliance with certain provisions of laws, regulations, and NSF award terms and conditions and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* and should be considered in assessing the results of our audit.

Our audit was conducted for the purpose of forming an opinion on the Schedules of Award Costs (Schedules A-1 to A-3). The accompanying Schedules B-1 to B-3 and C are presented for purposes of additional analysis as required by the *National Science Foundation OIG Audit Guide*. Such information has been subjected to the auditing procedures applied in the audit of the Schedules of Award Costs and, in our opinion, is fairly stated, in all material respects, in relation to the Schedules of Award Costs.

This report is intended solely for the information and use of The Ohio State University's management, the National Science Foundation, The Ohio State University's cognizant federal audit agency, the Office of Management and Budget, and the Congress of the United States and is not intended to be and should not be used by anyone other than these specified parties.

McBride, Lock & Associates

McBride, Lock & Associates
December 23, 2010

McBRIDE, LOCK & ASSOCIATES

**REPORT ON
INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND
OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL SCHEDULES
PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS**

National Science Foundation Office of Inspector General
4201 Wilson Boulevard
Arlington, Virginia 22230

We have audited the costs claimed as presented in the Schedules of Award Costs (Schedules A-1 to A-3), which summarize the financial reports submitted by The Ohio State University to the National Science Foundation (NSF), and claimed cost sharing, as applicable, for the awards and periods listed below and have issued our report thereon dated December 23, 2010.

<u>Award Number</u>	<u>Award Period</u>	<u>Audit Period</u>
EEC-0425626	September 1, 2004 – August 31, 2011	September 1, 2004 – September 30, 2009
HRD-0331560	November 1, 2003 – September 30, 2009	November 1, 2003 – September 30, 2009
CHE-0532250	September 1, 2005 – August 31, 2010	September 1, 2005 – September 30, 2009

We conducted our audit of the Schedules of Award Costs as presented in Schedules A-1 to A-3 in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards* (2007 revision), issued by the Comptroller General of the United States; and the guidance provided in the *National Science Foundation OIG Audit Guide* (August 2008), as applicable.

INTERNAL CONTROL OVER FINANCIAL REPORTING

In planning and performing our audit of the Schedules of Award Costs (Schedules A-1 to A-3) for the period November 1, 2003 to September 30, 2009, we considered Ohio State University's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing our opinion on the financial schedules, but not for the purpose of expressing an opinion on the effectiveness of The Ohio State University's internal control over financial reporting. Accordingly, we do not express an opinion on the effectiveness of The Ohio State University's internal control over financial reporting.

Our consideration of internal control over financial reporting was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control over financial reporting that might be significant deficiencies or material weaknesses and therefore, there can be no assurance that all deficiencies, significant deficiencies, or material weaknesses have been identified. However, as described in the accompanying Schedule of Findings and Responses, we identified certain deficiencies in internal control over financial reporting that we consider to be material weaknesses and other deficiencies that we consider to be significant deficiencies.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the OSU's financial schedules will not be prevented, or detected and corrected on a timely basis. We consider the deficiencies described in the accompanying Schedule of Findings and Responses below as Finding Nos. 1, 2 and 3 to be material weaknesses.

A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies described in the accompanying Schedule of Findings and Responses below as Finding Nos. 4 and 5 to be significant deficiencies.

COMPLIANCE AND OTHER MATTERS

As part of obtaining reasonable assurance about whether The Ohio State University's financial schedules are free of material misstatement, we performed tests of the University's compliance with certain provisions of applicable laws, regulations, and NSF award terms and conditions, noncompliance with which could have a direct and material effect on the determination of financial schedule amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests of compliance disclosed four instances of noncompliance that are required to be reported under *Government Auditing Standards* and the *National Science Foundation OIG Audit Guide* and are described in the accompanying Schedule of Findings and Responses below as finding nos. 1 through 5.

The Ohio State University responses to the findings identified in our audit are described after each recommendation in the accompanying Schedule of Findings and Responses presented below and within the Schedule Bs, and are included in their entirety in Appendix A. We did not audit The Ohio State University's response and, accordingly, we express no opinion on it.

This report is intended solely for the information and use of The Ohio State University's management, NSF, the University's cognizant Federal audit agency, the Office of Management and Budget, and the Congress of the United States, and is not intended to be and should not be used by anyone other than these specified parties.



McBride, Lock & Associates
December 23, 2010

SCHEDULE OF FINDINGS AND RESPONSES

Finding No. 1: Inadequate Subaward Monitoring

The University does not perform risk assessments prior to selecting subawardee institutions and does not adequately monitor the subawardees' post award compliance with NSF award terms and conditions. Specifically, the University does not adequately monitor subaward costs charged to the three NSF awards audited, which included 31 subawards amounting to \$4,628,671 or 27% of the total costs of \$17,453,835 charged to NSF. This deficiency is caused by the lack of appropriate policies and procedures over subawardee selection and monitoring and the University's belief that audits of federal programs in accordance with Office of Management and Budget Circular A-133 provides sufficient assurance that subawardees will comply with significant award terms and conditions. Our audit included site visits to 2 subawardees resulting in the identification, at 1 of the subawardees visited, of subawardee noncompliance resulting in questioning \$142,617 of costs and cost share claimed, representing 51% of that subawardee's total costs and cost share claimed. Further, we noted that \$25,922 of unexpended award funds, consisting primarily of refunds from subawardees, were not identified and returned to NSF until approximately 18 months after the award ended. The absence of procedures to review and monitor subawardee costs may allow additional unallowable subaward costs claimed on NSF awards to go undetected.

Criteria

OMB Circular A-133, Subpart D, Section 400 (d.3), states that a pass-through entity shall perform the following for the Federal awards it makes... (3) "Monitor the activities of subrecipients as necessary to ensure that Federal awards are used for authorized purposes in compliance with laws, regulations, and the provisions of contracts or grant agreements and that performance goals are achieved."

In addition, OMB Circular A-110, Subpart C, Section .51(a), requires awardees to manage and monitor subawards. The claimed cost sharing must be allocable to the awards, provided by the subrecipients own funds and not other Federal funds, and be claimed only once.

To ensure compliance with these sections of OMB Circular A-133 and A-110, the University's policies and procedures should be strengthened and enforced with a goal of more thoroughly evaluating and monitoring subawardees.

Condition

The University did not perform risk assessments prior to selecting its subawardee institutions and did not perform adequate post award monitoring procedures throughout the subaward periods to ensure that subaward funds were expended by the subawardees in accordance with federal regulations and NSF award and university requirements. Two of the awards audited involved subawards to 16 universities in the State of Ohio. For the LSAMP (HRD-0331560) and REEL (CHE-0532250) awards, OSU distributed 51 percent and 39 percent, respectively, of the total \$5,599,811 in award costs to these 16 universities. Of the \$11,854,024 of Center (EEC-0425626) award costs, more than \$2 million, or 17 percent, were passed through to 15 research universities throughout the United States.

Specifically, the University does not have policies or procedures in place that provide for the completion of subawardee risk assessments prior to award and formal, documented monitoring throughout the award period. Ongoing monitoring of subawardee compliance with federal and OSU requirements, whether in the form of site visits, monitoring questionnaires, or review of the subawardees' OMB Circular A-133 audit reports, was not regularly performed. In addition, OSU subawardees provide minimal detail when reporting costs or cost share claims to OSU. Without detailed descriptions of reimbursable costs and cost share, such as name, position of employee whose time is charged, etc., monitoring of subaward costs and cost share for reasonableness and consistency with the approved subaward agreement is difficult and likely ineffective.

To determine whether the lack of subaward monitoring by OSU may have allowed improper costs to be charged to the award, we conducted site visits at 2 subawardees, the University of Akron and Miami University of Ohio. At the University of Akron, a subrecipient for the LSAMP award, we became aware of missing credit card receipts and invoices (\$1,544), missing scholarship vouchers (\$31,550), and inadequately monitored "zip cards" (\$19,300), resulting in total questioned costs of \$52,394. We also learned that cost share in the form of payroll, fringe benefits and related indirect costs amounting to \$90,223 was not supported by effort reports or the payroll distribution system (see Finding 2).

These errors were partly due to Research Administration personnel at the University of Akron who did not require receipts for VISA credit card charges; were not familiar with the documentation requirements associated with direct costs or cost share; and did not require effort reports to support payroll charges claimed as cost share on federal awards. The inability of the University of Akron to provide scholarship vouchers documenting the application, eligibility and amount of scholarships was caused in large part by the departure of the PI and a key Research Administration employee who was involved with the award. We expanded our audit procedures to identify other documentation supporting the validity, eligibility and amounts of the scholarships charged to the award.

The decision not to appropriately monitor the zip cards was the responsibility of the PI. The [REDACTED] award provides for a \$500 amount to be available for each student for use in purchasing software, chemicals, books, and equipment for their research. At the University of Akron these funds were provided in the form of a Zip Card which is similar to a credit card and issued to each student and certain faculty. The zip cards can be used at campus facilities including a game room as well as several restaurants such as Burger King, Pizza Hut and Denny's. While the proposal stated that these funds were to be considered a "room and board allowance" for the students, the PI communicated through an email that these funds could also be used to "have lunch with their scholars" and the zip card protocol allowed for entertainment charges.

The [REDACTED] award was charged \$19,300 of costs for "Zip Card Hospitality", which relates to zip cards in denominations of \$500 or more that were issued to students, graduate student mentors and faculty. The detail of these charges was not provided to the PI or issuing department except by request, with the result that monitoring of the usage of these charges did not occur. Inspection of the detailed Zip Card charges during this audit revealed that many or most of these NSF-funded costs represent frequent visits by faculty mentors to Starbucks or Subway for what appear to be single-customer purchases. Thousands of minutes were also purchased for Games by the recipients of these cards. Because of the absence of monitoring controls and the lack of documentation to support the reasonableness of these charges in relation to the award objectives, we have questioned the zip card hospitality costs amounting to \$19,300.

The above findings illustrate that an assumption of strong controls over any particular subaward, even at a university subject to A-133 audits of federal awards, may be without merit. These findings also highlight the importance of performing a risk assessment prior to making an award to a subawardee, and, throughout the duration of the award, monitoring the subawardee's activities, financial and progress reports, and audit results.

The absence of specific information to support claimed costs and cost share precludes an effective review to determine that the claimed costs and cost sharing is allocable to the NSF awards, provided by the subawardee's own funds and not other Federal funds, and is claimed by the subawardee only once. Subsequent to the audit fieldwork, and nearly 18 months after the September 30, 2009 end of the LSAMP award, OSU identified \$18,091 of refunds from 3 different subawardees occurring in May and June of 2010 and January of 2011. These excess funds residing at OSU were identified in conjunction with the investigation of \$7,831 of costs claimed by OSU on its Federal Financial Report but not actually expended. As a result of this research, \$25,922 of unexpended award funds were belatedly identified and returned to NSF March 22, 2011.

The OSU does not have adequate procedures to facilitate the ongoing post award monitoring of fiscal compliance with subaward terms and also lacks policies addressing the criteria to be used when evaluating a potential subawardee.

Cause

The absence of risk assessment and monitoring procedures are due to staff's opinion that an institution's size, reputation and receipt of an A-133 audit provided sufficient information for risk assessment and monitoring. This position is contrary to the results of this audit which identified internal control weaknesses and instances of noncompliance at large, prestigious subawardee institutions who were recipients of single audits conducted in accordance with OMB Circular A-133, and reflects a lack of adequate review and oversight by the University.

Office of Sponsored Programs personnel stated that universities in the State of Ohio are considered to be well known and thus do not require risk assessment procedures. Research universities such as those receiving more than \$2 million of the Center award were deemed to be sufficiently established and reputable as to also not require risk assessment procedures. We were also informed that OSU relies on the audits of federal awards performed in accordance with OMB Circular A-133, in lieu of OSU performing additional risk assessment or monitoring processes. The PIs on these awards also interact with their counterparts at subawardee institutions and evaluate the progress of the funded project.

The rationales cited above are valid to an extent. However, an A-133 audit report must be obtained and read in order to determine whether internal control deficiencies or instances of noncompliance could impact the administration of an OSU award. Also, an A-133 audit applies primarily to the selected major programs of large federal agencies and therefore may not include procedures to consider controls or compliance over an OSU NSF award. The size and reputation of a potential subawardee, while perhaps impressive, do not preclude the possibility of weak internal controls. As evidence of the need for risk assessment and monitoring procedures, we identified significant instances of noncompliance and questioned costs at one of the OSU subawardees, and these deficiencies, as well as the inadequate award administration systems that allowed them to occur, were not detected by OSU's risk assessment or monitoring procedures. The absence of procedures to review and monitor subawardee systems may allow additional questioned costs to be undetected and result in additional unallowable costs claimed to NSF awards.

Specifically, effective risk-based subawardee monitoring policies and procedures should include mandating that subawardees complete an informative questionnaire disclosing compliance practices and deficiencies, identify and provide copies of any relevant audits performed by other regulatory Federal audit agencies, such as federal Offices of Inspector General, and internal auditors with respect to sponsored awards, and provide complete and detailed reports of award funds expended. Copies of audit reports should be examined by the University in order to ensure that subawardee's internal controls are adequate to record and report accurate cost information to the University. The University also should request details of corrective actions taken with respect to findings that may impact the subaward. Periodic reports of award fund expenditures and cost share should be analyzed for consistency and reasonableness in relation to the subaward goals and project approach. Site visits to evaluate fiscal procedures should also be considered for particularly high dollar subawards.

Effect

The deficiencies noted in OSU's risk assessment, monitoring, request for and review of other audit reports reduce the effectiveness of the University's internal controls over its subaward costs to identify significant internal control weaknesses or instances of noncompliance at subawardee institutions. As a result, the University's internal controls over subaward costs do not provide assurance that the expenditures reported and claimed by the subawardee are accurate, valid, and allowable.

As further evidence of the need for expanded risk assessment and monitoring procedures, our site visit at the University of Akron, as discussed above, revealed deficiencies in award administration and accounting and resulted in questioned costs of \$52,394 and questioned cost share of \$90,223.

Recommendation No. 1:

We recommend that NSF's Director of the Division of Institution and Award Support address and resolve the following recommendations that OSU:

- a. Develop and implement risk assessment and monitoring procedures, such as Subawardee Questionnaires and formal Risk Assessment Criteria, and utilize these tools as part of the initial risk assessment and post award monitoring processes of each subawardee;

Awardee's Comments

We concur with this recommendation. OSU revised its subaward procedures in 2005, after the LSAMP agreements were put in place, to establish consistency across subawards. The procedures are currently being revised again, to include a formal subawardee risk assessment and clearer directions on specific agreement requirements particularly cost-share documentation and reporting. The outcome of the risk assessment will determine the appropriate level of oversight and monitoring of post-award activities.

- b. Reject subawardee invoices if detail information such as the name and position title of personnel whose effort is charged to the award is not provided to support reimbursable costs and claimed cost share. When such detail is provided, analyze invoices in relation to the activities and personnel associated with the subaward to ensure allowability and applicability of the costs claimed;

Awardee's Comments

We agree that it is important to add more stringent reporting and monitoring procedures for subawardees identified through risk assessment as having inadequate internal controls to ensure allowability and allocability of costs. However, if our risk assessment identifies subawardees as low risk, which would include their being in compliance with the requirements of 2 CFR Part 215 (aka A-133), we believe that our current procedure (which is also the standard practice across the majority of academic institutions) of relying on the A-133 audit process as a primary indicator of adequate compliance procedures is acceptable. As noted below, we will follow up with additional monitoring if the A-133 reports reveal deficiencies.

- c. Request and thoroughly review A-133 audit reports (in addition to or in lieu of Harvester summary reports) and reports from other regulatory agencies and internal auditors for all subawardees as part of the risk assessment review;

Awardee's Comments

We agree. We currently request and review A-133 reports after issuing a subaward. Annually, we follow up with subawardees that have A-133 findings to determine if the findings affect our subawards. This is an essential part of our current risk assessment that takes place during the life of a subaward. To improve our subaward risk assessment, we will review published A-133 audit reports before issuing a subaward. Any concerns surfaced by that review will be addressed before issuing the subaward.

- d. Document the conclusions on Risk Assessment and Subawardee Monitoring Forms;

Awardee's Comments

We concur with this recommendation and will implement it as part of our formal risk assessment process.

- e. Designate supervisory personnel to review risk assessments performed; and

Awardee's Comments

We concur with this recommendation and will implement it as part of our formal risk assessment process.

- f. Follow-up to determine if weaknesses discussed in this report that were identified during subawardee site visits have been adequately resolved and, if not, determine whether greater subaward monitoring is needed.

Awardee's Comments

The University of Akron has provided documentation concerning changes they have implemented in award management to minimize a number of the weaknesses identified in this report. Nonetheless, we will review charges from University of Akron on currently active awards and we will ask for additional information for any charges that appear questionable.

Auditors' Comments

Each of the University's comments is responsive to the finding and recommendation. However, with respect to comment 1.b., an effective subawardee risk assessment should include mandating that subawardees complete an informative questionnaire disclosing compliance practices and deficiencies, identify and provide copies of any relevant audits performed by other regulatory Federal audit agencies, such as federal Offices of Inspector General, and internal auditors with respect to sponsored awards, and provide complete and detailed reports of award funds expended. A review of these items may provide important insights relevant to the ability of an existing or potential subawardee to administer federal awards in compliance with federal regulations and OSU terms and conditions.

This finding should not be closed until NSF determines that the recommendation has been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

Finding No. 2: Inadequate Controls for Meeting Cost Share Commitments

OSU lacked adequate procedures to identify, account for, monitor and report the cost sharing it contributed to its NSF awards, raising questions as to the reliability and integrity of the \$5 million in cost sharing reported for the three NSF awards under audit. Failure to provide the level and type of services represented by OSU's approved cost share budget may negatively impact the successful completion of the intended program objectives and may result in the reduction of the NSF-funded portion of the NSF awards.

Because of the deficiencies in the University's cost sharing procedures, we could not verify all the cost sharing claimed for the three NSF awards audited. Specifically, we noted that, for the LSAMP award, \$90,223 of subawardee cost share was determined to be unsupported and an additional \$41,913 of OSU cost share was unsupported due to effort reports that were untimely or certified by persons without knowledge of the effort represented. Further, OSU did not provide the required level of cost share. OSU was committed to provide cost share equal to the NSF-funded costs. However, while NSF-funded costs claimed were \$3,491,292, OSU only provided \$2,173,121 of cost share, which was insufficient by \$1,318,171. Because we also questioned \$1,332,508 in direct LSAMP award costs, the total accepted NSF-funded costs is reduced to \$2,158,784.

The cost share claimed of \$2,173,121, when reduced by unsupported cost share of \$132,136, results in \$2,040,985 of allowable cost share. Therefore, the total allowed project costs are \$4,199,769 (\$2,158,784 plus \$2,040,985). The University's 50% share of these costs is \$2,099,885 or \$58,900 more than the \$2,040,985 of accepted cost share. Therefore, we questioned \$58,900 of unmet cost share for the LSAMP award since its award period ended on September 30, 2009. The \$58,900 constitutes questioned NSF funded costs (see Schedule B-2.6).

We also identified \$9,427,159 and \$369,000 as "at-risk" unmet cost share on the Center and REEL awards, respectively, since those award periods had not ended at the time of our audit. "At-risk" cost sharing is the amount of required cost sharing that has not been met at the time of the audit, but which the awardee still has time to meet before the end of the award period.

Criteria

NSF Grant General Conditions, Article 22, Section C, and GPM Section 333.6, *Cost Sharing Records and Reports* require an awardee to maintain records of all claimed project costs, including both cost sharing and NSF direct-funded costs. 2 CFR 215, formerly Office of Management and Budget (OMB) Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations*, Subpart C, Section .23(a), prescribes the criteria and procedures for the allowability of cost sharing expenditures and requires, among other things, that cost sharing amounts must be verifiable from the recipient's records, not be included as contributions to any other federal award, or funded by any other federal award. OMB Circular A-110, Section 23, also states that, to be accepted as part of the recipient's cost sharing, expenditures must be necessary and reasonable for proper and efficient accomplishment of project or program objectives and allowable under applicable cost principles.

The OSU Office of Sponsored Programs recognizes the requirement to fulfill committed cost share and addresses this issue in its Proposal Development instructions which state: "If cost sharing is included in a proposal to a federal sponsor and the proposal is funded, the promised cost share becomes a requirement of the award whether or not that requirement is specified in the award document. All cost sharing must be documented as having been provided."

The OMB Circular A-21 Clarifying Memorandum: Clarification of OMB A-21 Treatment of Voluntary Uncommitted Cost Sharing and Tuition Remission Costs, dated January 5, 2001, discusses certain aspects of recipient cost sharing on grant-funded projects, particularly with respect to accounting for and reporting PI effort. The OMB Memorandum provides additional Federal guidance for determining if faculty effort (including senior researchers) voluntarily devoted to grants should be reported as "committed cost sharing" versus "uncommitted cost sharing" and the proper treatment of such PI effort based on the resulting determination. Any PI effort that is specifically pledged in a grant proposal (including the narrative portion) or award is considered to be "voluntary committed cost sharing" and must be separately accounted for and reported in the labor effort distribution system and included in the organized research base for computing the indirect cost rate.

Condition

The University's procedures do not ensure that cost share is adequately identified, accounted for, monitored, and reported as necessary to promote fulfillment of cost share commitments and adherence to program requirements.

Award Number HRD-0331560 (LSAMP)

The University neglected to monitor and did not fulfill its cost share commitment on the LSAMP award. The NSF-approved proposal for this award, as revised, included a cost share commitment of \$3,491,292¹, or 100% of NSF-funded costs, to be provided by the end of the award on September 30, 2009. However, cost share reported to NSF on certified reports for the entire award period totaled only \$2,793,146, while cost share recorded in the University's general ledger at September 30, 2009 was even less, at \$2,173,121, a difference of \$698,146. The difference between the certified cost share and that recorded in the general ledger was due to recording an inaccurate and understated budget for cost share in the accounting system and applying an incorrect F&A rate to cost share

¹ The maximum amount of cost share commitment is \$3,499,123, which is the total amount awarded by NSF, however, as of 9/30/09, the OSU had only claimed \$3,491,292; therefore the cost share requirement was also \$3,491,292.

charges. When this difference became apparent through the audit process, the University amended its certified cost share from \$2,793,146 to \$2,173,121.

While NSF-funded costs were \$3,491,292, OSU only provided, through its amended certification, \$2,173,121 of cost share, which was insufficient by \$1,318,171. Also, the OSU cost share claimed of \$2,173,121 included unallowable costs of \$132,136. Specifically, documentation was not provided to support labor costs amounting to \$41,913 which were claimed as cost share by OSU. In addition, our audit procedures at one subawardee, the University of Akron, revealed that cost share consisting of payroll costs, fringe benefits and related indirect costs were not supported by effort reports, resulting in the questioning of \$90,223 of cost share.

As stated in GPM 333.3, a failure to provide the level of cost sharing reflected in the approved award may result in disallowance of award costs. We previously explained that we questioned \$58,900 of the NSF funded costs due to the OSU’s cost sharing short fall. See Schedule B-2.6 for computation of the \$58,900 of questioned NSF funded award costs resulting from OSU’s cost sharing shortfall.

The program impact of reduced cost share on the achievement of LSAMP objectives is unknown. However, the University’s 2008 Performance Report described the goal of the LSAMP award as follows:

The primary goal is to double the number of underrepresented minority students who earn bachelor’s degrees in STEM fields and to significantly increase the number who pursue graduate study in these fields.

The data subsequently provided to measure the results of the award reveal that, with respect to this primary goal, the result of increasing, even doubling, the number of underrepresented minority students who earn bachelor’s degrees in STEM fields was not met.

Table 2. Total Underrepresented Minority Undergraduate STEM Enrollments and Bachelor’s Degrees Earned by Year for Alliance Institutions

	Baseline				
	<u>2001-02</u>	<u>2003-04</u>	<u>2004-05</u>	<u>2005-06</u>	<u>2006-07</u>
Enrollments	3,743	4,303	3,634	3,548	3,728
Degrees	438	474	463	447	433

Note: 2007-08 data was not available at the time of the writing of this report.

Award Number EEC-0425626 (Center)

We identified \$9,427,159 as “at-risk” unmet cost share on the Center award, reflecting shortfall in the amount of cost share certified to date, while recognizing that the award period has not ended at the time of our audit so that the final cost share may be greater in amount.

The University certified cost share for this award, through September 30, 2009, of \$3,201,300. The general ledger reported cost share of \$419,004. We were informed that this was caused by the omission of waived tuition from the general ledger. The lack of adequate accounting records and controls over cost sharing precluded us from determining whether cost share claimed by the University of \$3,201,300 for the Center award was allowable. We therefore requested that the University compile detailed records of the claimed cost share which we tested. The listing, when provided 9 months after the commencement of the audit, totaled \$3,134,009 which was \$67,291 less than cost share certified.

Based on our tests of the detail cost share listing, we identified \$263,937 of costs that were unallowable. These included \$26,345 of costs for picnics, parties, meals, and expedited VISA processing fees associated with bringing foreign nationals to the United States, \$27,549 of postage, telephone and related costs normally included in the University's indirect cost rate, and transfers from other accounts of \$210,043 for which support has not been provided to establish their allowability.

The NSF-approved proposal for this award included a cost share commitment of \$4,182,522, to be provided by the end of the award on August 31, 2011. Additionally, the University committed to provide \$8,182,000 of in-kind cost share consisting of fellowship support, student support, lab support, computer time at the OSU Supercenter, and new faculty positions. The University did not track this commitment as cost share and did not certify the actual amounts provided. Accordingly, we could not determine whether this cost share was provided and to what extent.

As a result, we have identified \$9,398,230 of cost share as "at-risk" of not being met. This amount includes the \$8,182,000 that was not accounted for as cost share and the originally budgeted cost share of \$4,182,522, for a total commitment of \$12,364,522. Claimed cost share of \$3,201,300, reduced by \$263,937 of questioned cost share, yields accepted cost share of \$2,937,363. The difference of \$9,427,159 (\$12,364,522 less \$2,937,363) represents cost share "at-risk" of being met (see Schedule B-1).

Award Number CHE-0532250 (REEL)

The REEL award proposal requested no NSF funding for PI or senior researcher time. However, review of the proposal budget justification revealed that the University committed to fund senior researcher time and certain other costs associated with the award. The University committed to "supporting the position of Director and will provide 2 quarters of teaching relief, 2 months of summer salary, and a 10% administrative enhancement for a total of \$50,000-\$75,000 per year". In addition, OSU committed to provide funds for "an educational consultant of \$20,000 per year". Also, the University agreed to pay for "Web/Technological Development of \$15,000". The proposal also included committed cost share from a subawardee of \$4,000. These committed and quantified costs described in the proposal budget justification amounted to between \$369,000 and \$494,000.

This committed cost share was not, however, set forth on Line M of the proposal and also was not accounted for in the Award accounting records as cost share. The OSU Cost Share policy does not specifically address the OMB Technical Bulletin requirement that an estimated amount of PI or senior researcher time must be computed by the university and included in the organized research base for each award. The OSU policy does, however, address the concept of committed cost share based on efforts set forth in the proposal narrative, stating the following:

“If cost sharing is included in a proposal to a federal sponsor and the proposal is funded, the promised cost share becomes a requirement of the award whether or not that requirement is specified in the award document. All cost sharing must be documented as having been provided.”

Because OSU did not identify, account for, report and document as having provided the committed cost share cited above, the extent to which the University met this commitment is unknown. Accordingly, promised resources may not have been applied to award activities or NSF may have funded more than their agreed-upon share of program costs. This lapse in accountability for cost sharing commitments precludes a conclusion as to whether OSU shared in the award costs by contributing from \$369,000 to \$494,000 of in-kind services, as pledged in the NSF-approved award proposal. To the extent that these costs have not been incurred, they represent cost share “at-risk” of being met (see Schedule B-3, which identifies \$369,000, which is the minimum amount of cost share required, as cost share “at-risk.”).

Subaward Cost Share

Similar to the subaward costs charged to NSF for the LSAMP award, the University did not consistently require or maintain adequate documentation to support cost sharing expenditures claimed by its subawardees or require such documentation from them, contrary to Federal regulations and NSF award terms and conditions. The University assigns responsibility for review of subawardee cost share to the Principal Investigator and the Office of Sponsored Programs Post-Award Division. Subawardees report and certify cost share to the University at least annually. However, we noted that, while the cost share certification form requests the detail of names to support salary charges, this information is not always included. These subawardee certifications are the only source documentation maintained by the University to support the subawardees’ amounts claimed as cost sharing. No other detail listing or source documentation is submitted by the subawardees with their certifications to support the cost sharing claimed. In addition, the University has no process in place to verify the accuracy and validity of the expenses claimed on the subawardee certifications.

As discussed in Finding 1, in order to evaluate the subawardee costs claimed and cost share certified, we performed a site visit and audit work pertaining to LSAMP funds at two of OSU’s subawardees. At Miami University we noted that, while Miami University certified cost share of \$165,258 on the LSAMP award, the Ohio University reports recorded only \$22,072 as cost share from Miami. Our audit procedures resulted in no exceptions to the cost share recorded and certified by the University of Miami.

At the University of Akron, as discussed above, our audit procedures revealed that cost share consisting of payroll costs, fringe benefits and related indirect costs were not supported by effort reports, resulting in the questioning of \$90,223 of cost share. Emails revealed that these charges were based on the PI’s statement that “each faculty probably spends about 3 hours per week with each student” and on an arbitrary allocation of 3% to 5% of the PI’s time and that of a second employee. None of this time is accounted for as cost share in the payroll distribution system at the University of Akron, and labor effort reports provide no indication that the faculty members or the PI were putting forth effort on activities associated with the LSAMP award.

Cause

Although the University's accounting system accommodates the recording of committed and actual cost share, departmental personnel administering federal awards and those reviewing award terms, conditions, activity and reporting in the Office of Sponsored Programs (OSP) have not fully utilized the system to facilitate monitoring of these aspects of sponsored awards. The accounting system is designed to accommodate the recording of OSU and subawardee cost share, and we noted that budgeted and actual amounts were entered for some awards, although these were not updated throughout the award period. The alternative of maintaining a system separate from the central accounting system has not been effectively accomplished to allow the University to provide documentation supporting its certified cost share. We were also informed that the contents and ramifications of the OMB Clarification Memo were not known and thus not considered by the PI or the involved staff at OSP. Further, University OSP personnel stated their opinion that the proximity of universities in Ohio and the existence of an A-133 audit precluded the need for further risk assessment or monitoring procedures.

Effect

Failure to provide the level and type of services represented by approved cost share may negatively impact the successful completion of the funded project. In addition, inadequate accounting for and monitoring of cost share may result in the refund of monies to the grantor agency as required to honor the agreed-upon award terms. In fact, LSAMP cost share which is questioned and therefore subject to return to NSF amounted to \$58,900, resulting in a \$117,800 reduction of the final funded project costs. Cost share at risk of not being met amounted to nearly \$10 million for the Center and REEL awards. The extent to which these cost share commitments will be met prior to the award end dates and will reduce the amount subject to question and return to NSF is unknown.

Because OSU lacked sufficient policies and procedures to ensure the monitoring of cost share commitments and the accuracy of cost share certified, the University was unable to meet its LSAMP cost share commitment prior to the award end date. As discussed in Finding No. 1, while the award agreement specified that NSF and OSU would share equally in project costs, OSU's cost share of \$2,173,121 was significantly short of \$3,491,292 funded by NSF. When, as a result of this audit, the LSAMP cost share shortage of approximately \$1.3 million was presented to the University, OSU management requested of NSF a reduction in its cost share commitment by this amount. That request was recently approved by the NSF program manager and the required level of cost share was revised down to \$2,173,121. This action changed the level of NSF support for the LSAMP project from 50% to 62% (actual costs shared by OSU of \$2,173,121 divided by NSF-funded costs of \$3,491,292), and also acknowledges a shortfall in costs expended towards the fulfillment of this project's goals of \$1,318,171 (\$3,491,292 less \$2,173,121). Whether this shortfall in expended funds impacted the ability of OSU and its subawardees to achieve the goals of the LSAMP award was not determined. Whether NSF will uphold the recent reduction of cost share required that was requested by the OSU because of this audit is unknown.

The lack of controls ensuring the accuracy and validity of cost sharing claimed by its subawardees may cause the University to certify cost sharing expenditures for an award that either do not exist or are not allowable per federal and NSF regulations. This result can have serious economic consequences, as demonstrated by the Akron University findings cited above. The deficiencies identified during this audit have resulted in the questioning of \$90,223 of cost share claimed by Akron University, a subawardee of OSU.

The absence of verifiable PI time and effort expended on the award's goals and objectives precludes a determination that project results met or will meet the technical award requirements as funded by NSF.

Recommendation No. 2:

We recommend that NSF's Director of the Division of Institution and Award Support address and resolve the following recommendations that Ohio State University:

- a. Develop a system for identifying and recording cost share as required to comply with federal requirements. To ensure the integrity of claimed cost-sharing and avoid duplicate claiming of costs as both cost-shared and federally-funded, we suggest cost-sharing expenditures be tracked in a separate project account for each NSF award.

Awardee's Comments

We concur with this recommendation. Our PeopleSoft accounting system does identify and record cost share. However, we did not always use the PeopleSoft cost share functionality as designed. To remedy this problem, we have developed new cost-share documentation, which we have used in three training sessions for OSP staff. In addition, we have provided quarterly workshops to the campus community since November 2009.

- b. Develop and implement written policies and procedures to assess and document each subawardee's risk of claiming nonallocable or non-allowable cost sharing expenditures. These policies and procedures should include a process for reviewing cost sharing expenditures claimed by subawardees for allowability and allocability. Expenditures should be reviewed to determine that they are allocable to the awards, provided by the subawardee's own funds and not other Federal funds, and are claimed only once. These reviews should be of sufficient scope and quality to allow the University to provide reasonable assurance that all costs claimed are accurate, allowable, and properly documented per NSF regulations and OMB Circulars.

Awardee's Comments

We agree with the recommendation that we assess and document a subawardees risk of being able to substantiate their claimed costs and cost-share. In addition, we will ask that all subcontract invoices include a certification stating that, to the best of their knowledge all costs claimed and cost share provided meet all sponsor and award specific terms and conditions.

We are also including in our revised subaward procedures additional monitoring for awards with a higher degree of complexity than a typical research grant (e.g., those that include unusual cost-sharing arrangements, participant support costs, sponsor or cost-share costs in non-typical categories). OSP staff will meet face to face with PIs and project staff as these projects are being established to ensure that everyone is clear on responsibilities, expectations and procedures. Review sessions with PIs and project staff will take place at appropriate intervals over the life of the award.

- c. Provide training, as discussed in Finding No. 5, regarding the correct process for properly tracking, allocating and reporting all cost share costs that are incurred to benefit a project or function, including uncompensated PI effort. Guidance should clearly state that costs associated with a sponsored project, such as principal investigator costs, should be quantified and properly either charged to the project or added to the indirect cost (F&A) base.

Awardee's Comments

We concur with this recommendation and as noted in response to recommendation 2a. we have begun providing such training to the university community. Guidance documentation has also been posted on our website.

- d. Ensure that all “at-risk” cost share identified in this report is adequately met prior to the end of the award.

Awardee's Comments

We concur with this recommendation. However, we question the calculation of at-risk cost share with respect to the REEL award because our proposal committed \$50,000 - \$75,000 for the center director one time only, not per year (the intent was to provide additional support to get the center established and running as quickly as possible help get the center). The relevant section of the proposal, from FastLane follows:

“Institutional Support from The Ohio State University: As elaborated in the Management Plan, a Director for REEL will be appointed by the Governing Board. It is expected that this person will be a Professor of Chemistry with an independent active research program and interest in the scholarship of teaching and learning. OSU has committed to supporting the position of Director and will provide 2 quarters of teaching relief, 2 months of summer salary, and a 10% administrative enhancement for a total of [REDACTED]. In addition, OSU realizes the importance of dissemination and will provide funds for Web/Technological Development of [REDACTED]-this effort will be led by [REDACTED], OSU. In addition, OSU will budget for an educational consultant [REDACTED] per year. [REDACTED], The Ohio State University who served as the Coordinator for the present OCCUR-REEL project will serve as the initial Consultant and provide overall guidance in translating best practices from programs throughout the nation into the program.”

Thus our interpretation and intent is that the committed cost share is between [REDACTED] and [REDACTED]

Auditors' Response

The University’s comments are responsive to the finding and recommendation. With respect to No. 2.d. the intent of the University and the understanding of NSF should be considered in resolving this finding. This finding should not be closed until NSF determines that the recommendation has been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

Finding No. 3: Inadequate Controls for Meeting Participant Support Cost Commitments

Proper monitoring of participant support costs is not performed, as necessary, to ensure program goals are met and budgeted amounts for participant support are spent only for approved activities. The University's procedures are inadequate for recording and monitoring participant support costs. These costs are not segregated and identified as participant support costs in the accounting system. Further, participant support costs that are to be incurred by subawardees are not monitored to ensure the committed amount is expended. Both the LSAMP Award No. HRD-0331560, which ended on September 30, 2009, and the Center Award No. EEC-0425626, which ends August 30, 2011, reported participant support costs that are far less than the award commitment. These conditions resulted in questioned LSAMP award costs of \$1,142,684. We also identified \$7,480 of questioned participant support costs and \$223,131 of "at-risk participant support costs for the Center award. "At-risk" participant support costs is the amount of required participant support costs that has not been met at the time of the audit, but which the awardee still has time to meet before the end of the award period. The University cannot effectively adhere to the NSF-approved budget for participant support or ensure that it has met its required program goals if it does not consistently identify, account for, and monitor participant support costs.

Criteria:

Participant support costs are discussed in NSF's Award and Administration Guide, Chapter 5, Section B – Direct Costs, Paragraph 8. Such costs are defined in the Guide as follow:

(i) Participant support costs are direct costs for items such as stipends or subsistence allowances, travel allowances and registration fees paid to or on behalf of participants or trainees (but not employees) in connection with meetings, conferences, symposia or training projects. For some educational projects conducted at local school districts, however, the participants being trained are employees. In such cases, the costs must be classified as participant support if payment is made through a stipend or training allowance method.

The Guide addresses the importance of properly accounting for and monitoring participant support costs, stating:

(ii) Funds provided for participant support may not be used by grantees for other categories of expense without the specific prior written approval of the cognizant NSF Program Officer. Therefore, awardee organizations must account for participant support costs separately.

Participant support costs are also discussed in NSF's Grant Proposal Guide, which states the following:

This budget category refers to costs of transportation, per diem, stipends and other related costs for participants or trainees (but not employees) in connection with NSF-sponsored conferences, meetings, symposia, training activities and workshops. Generally, indirect costs (F&A) are not allowed on participant support costs. The number of participants to be supported must be entered in the parentheses on the proposal budget. These costs also must be justified in the budget justification section of the proposal.

Condition:

Participant support costs are not identified as such in the OSU accounting system. Participant support costs, as defined in the NSF award terms and agreements audited, consist of direct costs for stipends; subsistence allowances; travel allowances, including foreign travel; and registration fees paid to or on behalf of participants in connection with meetings, conferences and training projects associated with the specific NSF awards. The OSU accounting records include these costs in expense accounts such as travel, conferences and training, however, the records do not distinguish between the expenses which are participant support costs associated with the NSF awards and those which are not. Therefore, it is not possible for OSU research personnel to monitor fulfillment of the participant support cost commitments made in the NSF-approved award budget. This deficiency in accounting for participant support costs also prevented the auditors from being able to affirm that the University was in compliance with the NSF requirements for participant support costs.

The inability to effectively monitor participant support costs allowed shortfalls to occur in the LSAMP and Center awards. The LSAMP Award No. HRD-0331560, which ended on September 30, 2009, only reported participant support costs of \$136,416 even though the NSF-approved budget required participant support expenditures of \$1,279,100. This resulted in \$1,142,684 of questioned costs because there are no accounting records to evidence that the participant support requirements were met. The majority of this deficiency is due to the stipend component of participant support costs. The OSU general ledger recorded only \$36,300 as participant stipends, while the NSF-approved proposal budget stipulated \$954,100 for participant support stipends benefiting 1,150 participants for the LSAMP award. It is apparent that the support pledged for more than 1,000 program participants was not fulfilled through the expenditure of only \$36,300 for participant stipends. Increases in certain subawardee budgets suggest that responsibility for providing participant stipends was transferred from OSU to these subawardees. However, the accounting system does not provide the information necessary to determine whether the original participant stipend commitment of \$954,100 was met.

The Center Award No. EEC-0425626 required \$272,238 of participant support costs which were budgeted in the areas of foreign travel, stipends, subsistence and other costs. At September 30, 2009, the OSU had identified no costs as participant support costs. However, foreign travel was incurred in the amount of \$49,107 (18% of the participant support cost commitment) and has been reclassified to the participant support cost category on Schedule A-1. The amount of other costs recorded in the stipend, subsistence and other cost category which could be viewed as participant support costs at September 30, 2009, is unknown. Because the award is ongoing, it is possible that the remaining 82% of pledged participant support costs may be incurred by the award end date of August 30, 2011, and therefore we have not cited questioned costs but rather we have identified \$223,131 as participant support costs that are "at-risk" of not being incurred.

The University also charged as participant support costs \$7,480 representing foreign travel for which a cash advance was paid. No receipts were available to support the allowability of the charges to the Center award. Therefore, we questioned the \$7,480 in participant support costs.

Cause

The University's procedures are inadequate for recording and monitoring participant support costs. Although the University's accounting system accommodates the recording of participant support costs, departmental personnel administering federal awards and those reviewing award terms, conditions, activity and reporting in the Office of Sponsored Programs (OSP) have not fully utilized the system to facilitate monitoring participant support costs on sponsored awards. The alternative of maintaining a system separate from the central accounting system has not been effectively accomplished to allow the University to provide documentation supporting fulfillment of its participant support cost obligations.

The University's policies and procedures also do not recognize the importance of ensuring that subawardee participant support costs be properly identified, accounted for, reported and monitored for fulfillment of the participant support commitment. Accordingly, the shifting of participant support costs from OSU, as the primary awardee, to subawardees was not accompanied by appropriate accountability to ensure that the level of participant support agreed to in the award proposal was achieved.

Effect

The failure to account for and monitor participant support costs increases the possibility that a commitment may not be met before the award expiration date, that award objectives may not be fulfilled and that questioned costs may be required to be returned to the funding agency. Further, enhanced monitoring of participant support costs may have detected the undocumented travel expenses resulting in \$7,480 of questioned costs.

The lack of procedures to identify, segregate and monitor participant support costs may have resulted in a failure to provide all participant support pledged. The inability to make this determination resulted in questioned unmet participant support costs of \$1,142,684 associated with the LSAMP award and questioned and at-risk participant support costs of \$7,480 and \$223,131, respectively, for the Center award.

Recommendation No. 3:

We recommend the NSF's Director of the Division of Institution and Award Support address and resolve the following recommendations that OSU:

- a. Develop and implement written policies and procedures to establish a system for identifying, recording, and monitoring participant support costs as required to comply with federal requirements.

Awardee's Comments

We concur with this recommendation. As noted in the report, the University's accounting system accommodates the recording of participant support costs by using separate projects to segregate non-participant and participant support costs. However, this functionality has not been used consistently. We are reviewing our training materials for both OSP and departmental personnel and will conduct training sessions for staff involved in managing projects that include participant costs. As noted in 2.b above, we will also meet individually with PIs and project staff of awards with non-routine requirements.

However, there are times when establishing multiple project numbers is not practical. For example, for the LSAMP award, OSU's participant support costs were tracked in project 745642. In this award, though, we had participant costs incurred by the other Universities with which we subcontracted. Subcontracts are also often segregated within our accounting system by creating distinct projects – as we did with the LSAMP award to track cost sharing. Establishing unique projects for subaward, non-participant and subaward, participant costs would be extremely unwieldy, so we are required to manually reclass the participant costs from the subawards when reporting.

To mitigate this problem somewhat, we will add to our subaward agreement a requirement to report participant costs as a separate line item on each invoice and we will add an award reporting requirement that participant support costs be calculated and summarized at least annually.

- b. Develop and implement written policies and procedures to assess and document each subawardee's risk of improperly administering, accounting for and claiming participant support costs. These policies and procedures should include a process for reviewing participant support costs claimed by subawardees for allowability and allocability.

Awardee's Comments

We concur with this recommendation and will include participant support costs as one of the parameters that define a complex project. In those cases we will require documentation of participant support costs on subawardee invoices.

- c. Provide training, as further discussed in Finding No. 5, regarding the correct process for properly tracking, allocating and reporting all participant support costs that are incurred to benefit a project or function.

Awardee's Comments

We concur with this recommendation as noted in the response to recommendation 3.a. above.

Auditors' Response

The University's comments are responsive to the finding and recommendation. This finding should not be closed until NSF determines that the recommendation has been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

Finding 4 – Inadequate Effort Reporting System to Support Payroll Costs Prior to 2006; Effort Reporting System Improved in 2006 and Subsequent Years.

Prior to 2006, the University did not have an adequate system to ensure that labor charges to federal awards were supported by timely and adequate certifications and that the associated effort was expended on sponsored award activity. Specifically, prior to 2006, the University's policies and procedures did not require that the certifier have first-hand knowledge of activities or percent of effort expended on federal awards and that effort reports be consistently certified by someone with suitable means of verification on a timely basis. In addition, all effort reports requested could not be located. This reduced the reliability of payroll costs charged to federal awards.

In 2006, the University implemented enhanced controls over the payroll and effort reporting processes, however, the process for approving effort expended by staff on more than one project needs to be further improved. Our audit procedures identified one PI who was unaware that effort reports reflecting charges to the awards of more than one PI should only be certified pursuant to input and approval from the respective PIs or others who possessed first-hand knowledge of the effort reported. However, our audit procedures did not identify any payroll costs charged to NSF awards subsequent to the charges made prior to 2006 that lacked proper certification by the appropriate PI or knowledgeable person.

Criteria

2 CFR 220 (formerly Office of Management and Budget (OMB) Circular A-21), *Cost Principles for Educational Institutions*, requires certification of labor effort/activity contributed by employees on Federal awards. Specifically, paragraph J10.b.(2) states that a payroll distribution system is required that will "...reasonably reflect the activity for which the employee is compensated by the institution; and encompass both sponsored and all other activities on an integrated basis." Such a system must provide for after-the-fact confirmation of employee activity by a responsible person with "suitable means of verification that the work was performed." The employee, project PI, or a responsible person with "firsthand knowledge of the work performed" is required to review and approve the reported labor efforts on the effort reports.

Paragraph J.10.c.(2) states that after-the-fact activity reports for professional staff should be "...prepared each academic term, but no less frequently than every six months. For other employees...the reports [should] be prepared no less frequently than monthly..." The frequency of required certification recognizes that the effectiveness of this internal control is directly impacted by the ability of the certifier to recall the activities performed and related time charged to the award. Accordingly, a timely certification is necessary to provide reliable support for sponsored award labor charges.

Ohio State University policy requires that an effort report be certified within 45 days of receipt. After 45 days the effort report certification status is included in a report that is sent to chairs, deans and the Provost monthly. This communication identifies faculty, staff and students who have not certified their effort reports despite having received at least two monthly notifications (initial and follow-up). The University maintains that, by allowing 45 days for submission, individuals who have not certified their effort reports by the due date warrant additional attention and targeted action in order to ensure certification.

Condition

Deficiencies in the effort reporting process impact the reliability of payroll costs charged to federal awards prior to 2006. The University's independent auditor and its Internal Audit Department have reported weaknesses in effort reporting policies and procedures. An effort reporting audit conducted in 2005 identified the following deficiencies in this area:

1. Inappropriate delegation of time and effort authorizations
2. Lack of suitable means of verification for those certifying effort reports
3. Delinquent certifications
4. Inaccurate certifications (certifying effort totaling more than 100%)
5. Failure to prepare journal entries to account for effort adjustments
6. Inadequate training in the area of effort reporting.

These findings led to the implementation of improved procedures during 2006, and our audit tests identified no exceptions to approved compliance procedure during 2006 and subsequent years. However, we identified exceptions occurring prior to the implementation of the more effective, compliant procedures. Specifically, of the 70 effort reports tested, representing \$519,025 of payroll and fringe benefit costs, 17 reports, or 24% of the effort reports tested, were certified by departmental Human Resource personnel who were not in a position to have first-hand knowledge of activities or percent of effort expended on federal awards. All of these reports were for periods prior to 2006. Total questioned costs as a result of this condition are \$226,401 in direct and indirect charges and \$4,217 in cost sharing charges.

The sample selection of 70 effort reports also revealed 32 reports, or 46%, that were found to have been certified after the 45-day requirement set forth by the University. Late effort reports ranged from 16 days to 812 days. These exceptions were also subsequent to 2006. One effort report for the period including July 2004 was selected for testing and could not be located by the University. The lack of proper approvals, the untimely submission of the effort reports, and missing effort reports do not provide reliable support for the distribution of salaries and wages by the institution or ensure that labor costs claimed are allowable. Total unsupported or questioned costs as a result of the untimely effort reporting are \$315,574 in direct and indirect charges and \$41,912 in cost sharing charges. Questioned costs relating to the lost effort report are \$11,952. Direct costs impacted and questioned as a result of more than one deficiency (lack of proper verification, delinquent verification or lost effort report) totaled \$116,192, and are questioned only once in arriving at the total questioned costs of \$437,735 (\$226,401 plus \$315,574 plus \$11,952 less \$116,192).

The large percentage of effort reports improperly certified indicates that a material amount of salary, fringe benefit and related facilities and administrative costs are not supported by properly approved effort reports certified by an appropriate party on a timely basis. However, audit tests also suggest that the improper effort report certifications were remedied in 2006, and that certifications in subsequent years have been in compliance with federal requirements.

With respect to existing conditions, during audit interviews, the PI on one award stated that, if effort reports present research for awards other than his own, he certifies the entire report without further action. This position is not consistent with "first-hand knowledge" of employee efforts, and suggests that further training of PIs and the personnel who assist them in their award administrative duties would be beneficial.

Effect

Effort reports certified prior to implementation of the revised policy may not have been certified by someone with suitable means of verification and thus may not provide assurance that the effort charged to sponsored awards was in fact effort expended. Failure to have effort reports certified by someone with firsthand knowledge of the effort expended defeats the purpose of the effort reporting process and does not meet either the stated requirement or the intent of OMB Circular A-21. Because these charges are not supported, payroll and related fringe benefits and indirect costs of \$226,401 were questioned, as were \$4,217 of cost share claims.

With respect to timeliness of certification, effort reports certified prior to implementation of the revised policy may not provide assurance that the effort charged to sponsored awards was in fact effort expended. Failure to have effort reports certified on a timely basis increased the likelihood that the certifier would not possess a thorough recall of the actual effort expended and thus lessened the assurance provided by the effort report certification. Because these charges are therefore not supported by a reliable certification, payroll and related fringe benefits and indirect costs of \$315,574 were questioned, as were \$41,912 of cost share claims.

These internal control weaknesses also increase the likelihood that effort that is not properly charged in the payroll system will not be detected and corrected as part of the effort reporting process. Untimely and improperly certified effort reports do not provide reliable support for the distribution of salaries and wages by the University.

Cause

These deficiencies in the effort reporting system resulted from improper policies during years 2006 and prior. The University did not require that the certifier of an effort report have suitable means of verification. The University's position was that, because departmental Human Resource personnel generally have knowledge of personnel assigned to the projects and also access to the payroll system reports, they are in a position to certify that the effort report represents the charges in the payroll system. This position is not consistent with "first-hand knowledge" of employee efforts, and was revised by the University during 2006. This interpretation also negates the point of effort reporting as a supplement to the payroll distribution system.

The untimely submission of effort reports was caused by lack of emphasis on timely certifications. The E-Cert electronic certification system now in place requires the PI to acknowledge their responsibility to certify effort reports in a timely manner. Our audit identified no delinquent certifications for the period after implementation of the E-Cert system.

The University believes that the lost effort report was an isolated instance resulting from the transition to the new PeopleSoft E-Cert online effort reporting system that occurred during 2004. University staff surmised that an error may have occurred during the transition to cause the report to not be recoverable from the E-Cert system.

Recommendation No. 4:

We recommend that NSF's Director of the Division of Institution and Award Support address and resolve the following recommendations that OSU:

- a. Implement procedures to provide that individuals whose effort reports include multiple research projects for more than one PI have the effort report circulated to each of the PI on each federally-funded project reported, and

Awardee's Comments

In such cases we direct the report to the PI overseeing the preponderance of the effort. We will provide additional guidance to all certifiers that in such cases there should be communication to ensure that they collectively agree with the report. Of the more than 6200 effort reports generated in the most recent quarter, less than 5% involved more than one PI.

- b. Implement procedures which will periodically and formally notify all campus staff involved in the E-Cert certification process of the importance of timely and accurate PI review and certification of effort reports.

Awardee's Comments

We concur with this recommendation and have already established a process. For the last two years we have required an annual agreement whereby certifiers are required to read and acknowledge their responsibilities with regard to timely and accurate effort reporting before accessing effort reports to be certified. This is done each year at the beginning of the effort reporting cycle (currently January for Fall Quarter effort reports). First time certifiers are also required to read and acknowledge the responsibility statement.

In addition, college and department administrators have real-time access to a list of yet to be certified reports within their areas of responsibility and monthly lists are sent to certifiers, department chairs, deans and the provost. They work with college fiscal officers to resolve problems.

It should be noted that the University's Internal Audit department provided invaluable support in effecting the culture change within the University community that was requisite to the improvements we have been able to make.

Auditors' Response

The University's comments are responsive to the finding and recommendation. This finding should not be closed until NSF determines that the recommendation has been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

Finding 5 – Inadequate Policies, Procedures and Training of Personnel Responsible for Compliance with Awardee Requirements.

As discussed in findings 1 through 3, the University’s policies, procedures and training programs do not adequately address key aspects of award administration as appropriate to promote compliance with award terms and federal regulations. Exceptions to OSU and NSF policies were also identified in other areas, including equipment purchases without grantor authorization and unallowable costs charged to an NSF award. Also, documented policies and procedures for subawardee monitoring and accounting for and monitoring cost share and participant support commitments are limited and omit key compliance matters. Formal training in the areas of research award administration and federal requirements is provided, however, such training has been insufficient to ensure that personnel responsible for the administration of federal awards are aware of applicable compliance requirements and the means to achieve adherence to them. The absence of policies, procedures and training programs addressing compliance requirements for the administration of federal awards constitutes a significant deficiency in the system of internal controls over award administration.

Criteria

OMB Circular A-110, Subpart C, Section .21(b), paragraph (6) requires awardees to maintain “Written procedures for determining the reasonableness, allocability and allowability of costs in accordance with the provisions of the applicable Federal cost principles and the terms and conditions of the award.”

Written policies and procedures regarding the administration of federal awards provide the structure within which the OSP, PIs and departmental administrators function when making decisions and performing administrative and fiscal actions associated with federal awards. They also can serve as the basis for a curriculum of training courses to ensure appropriate dissemination of compliance requirements and the University’s approved methods of achieving compliance.

The NSF’s Award and Administration Guide states that “Grantees should ensure that costs claimed under NSF grants are necessary, reasonable, allocable, and allowable under the applicable cost principles, NSF policy, and/or the program solicitation.”

An awareness and understanding of the specifics of these requirements is essential to ensure that a control environment which promotes compliance is established.

The NSF’s Grant Policy Manual, Section 301, Grantee Responsibilities, (a) requires the following:

A grantee has full responsibility for the conduct of the project or activity supported under an NSF grant and for the results achieved. The grantee should monitor the performance of the project to assure adherence to performance goals, time schedules or other requirements as appropriate to the project or the terms of the grant. In order to carry out these responsibilities, each grantee organization shall agree to comply with the applicable Federal requirements for grants and to the prudent management of all expenditures and actions affecting the grant. Documentation for each expenditure or action affecting the grant shall reflect appropriate organizational reviews or approvals, which should be made in advance of the action. Organizational reviews are intended to help assure that expenditures are allowable, necessary and reasonable for the conduct of the project, and that the proposed action:

1. is consistent with grant terms and conditions;
2. is consistent with NSF and grantee policies;
3. represents effective utilization of resources; and
4. does not constitute a change in objective or scope.

Acceptance of this responsibility implies knowledge and understanding of grant terms and conditions, NSF and grantee policies and the applicable federal requirements for grants.

Condition

The extent and nature of the compliance deficiencies noted during this audit coupled with a review of existing documented policies and procedures illustrates that policies, procedures and training at OSU are not sufficient to ensure that personnel responsible for the administration and oversight of federal awards are fully aware of and comprehend the implications of award terms and conditions, NSF policies and the applicable federal requirements for grants. Areas for which new or expanded policies, procedures and training should be provided include subawardee monitoring, cost sharing, participant support, equipment procurement and allowable costs

Cost Sharing

Policies in the areas of cost sharing should address the initial commitment to cost sharing in a proposal and the subsequent reporting of cost share. The policy addressing cost sharing commitments consists primarily of the following statement set forth on the Office of Sponsored Program's web site:

If cost sharing is included in a proposal to a federal sponsor and the proposal is funded, the promised cost share becomes a requirement of the award whether or not that requirement is specified in the award document. All cost sharing must be documented as having been provided.

The policy addressing the reporting of cost share consists primarily of the following:

To report cost sharing expenditures not captured on Office of Sponsored Programs purchase orders, investigators submit a copy of the Ohio State monthly Financial Statement (or other equivalent documentation), annotated with those items to be reflected as cost sharing on the appropriate Office of Sponsored Programs project along with a statement of certification. The Office of Sponsored Programs will record these expenditures on the project and report them to the sponsor as part of the regular fiscal reporting.

If cost sharing is to be provided by a third-party agency (other than through a subcontract), documentation equivalent to that cited earlier is required from that agency. The principal investigator is required to obtain this documentation. The Office of Sponsored Programs will report third-party cost sharing to sponsors but will not post these expenditures to the project financial statements.

We did not identify any written procedures concerning cost share beyond those described above and posted on the OSU web site.

The guidelines above, while useful, focus on committing and reporting cost share rather than administering, tracking and monitoring the cost share commitments. It is in these areas where inadequate performance resulted in failure to meet cost share commitments and the resulting questioning of award costs.

The Office of Research, Training, Education, and Communication is the office responsible for providing training. The Office describes its function on the OSU web site, noting that the Office “works with all Office of Research administrative units to develop and coordinate comprehensive training, education, and communication for The Ohio State University research community.” A review of upcoming training opportunities and additional training in the form of video recordings of past training sessions reveals that several areas of research compliance and sponsored award administration are addressed.

We noted that training in the area of cost sharing, in the form of a panel discussion, has been provided and continues to be available through a video recording of the discussion. However, the significant inaccuracies in the accounting records for cost share which were undetected for at least five years, coupled with the failure to meet a material cost share commitment, suggests that the training program is not sufficient or effective, or has not been attended by all personnel whose responsibilities include cost share identification, recording and monitoring.

Participant Support

We were unable to identify any policies or procedures or any training programs addressing the proposing, incurring, tracking, accounting or reporting for participant support costs. The extent of deficiencies pertaining to accounting for and reporting participant support costs, as discussed in Finding 3, illustrate the importance of expanding policy and procedural guidance supplemented by additional training in these areas.

Subawardee Monitoring

Policies and procedures in the area of subawardee monitoring are set forth on the OSP area of the OSU web site. These guidelines are divided into pre-award and posts-award, and focus primarily on the mechanics of selecting the subawardee with consideration given to open competition, obtaining a budget from the subawardee, and agreement on a statement of work.

Under the heading “Additional Information Sources Relating to Subcontracts” there is a brief discussion of the responsibility assigned to the PI. This section reads, in its entirety:

The principal investigator is responsible for closely monitoring the work of the subcontract to be certain that it is being performed in accordance with the subcontract's requirements. These requirements include but are not limited to the time period of performance, method of delivery or performance, quality assurance standards, property, and property reporting requirements.

The principal investigator is also responsible for making certain that the work is completed within the period specified in the contract and for authorizing payment of the subcontractor's invoices based on satisfactory performance of the effort. The principal investigator should not authorize payment if the work is not satisfactory.

The investigator should notify the sponsored program officer if there is any potential delay or breach in the terms and conditions of the subcontract.

The University's policies and procedures do not address the selection of subawardees in relation to a risk assessment process, nor do they discuss subawardee monitoring for fiscal compliance, detailed reporting of costs incurred and cost share by subawardees, or the ramifications of unfulfilled subawardee cost share and participant support cost commitments.

We noted that training in the area of subawardee risk assessment has been offered in the past and continues to be available through a video recording of the discussion. However, the absence of effective subawardee risk assessment procedures prior to and as of the date of this audit, coupled with the serious internal control deficiencies and compliance violations noted at one of the two subawardees selected for site visit, suggests that the training program was not sufficient, or has not been attended by all personnel whose responsibilities include subawardee selection and monitoring.

Equipment Procurement and Allowable Costs

The OSP provides guidance with respect to equipment procurement and other costs on the OSU web site. The pertinent section, entitled "Allowable Costs" states the following:

The costs of permanent equipment or other facilities are allowable when such purchases are approved by the sponsoring agency or provided for by the terms of the sponsored agreement.

This guidance, while consistent with federal requirements, is not sufficiently understood as evidenced by the capital purchases charged to the Center Award in the amount of \$43,868 which were not approved by NSF or included in the award agreement with NSF.

We also noted charges to the Center award in the amount of \$487 for "laboratory animals". The Center award doesn't involve laboratory animals and, accordingly, this charge does not represent an allowable charge to the award.

Training with respect to the procurement of capital items should be provided to both departmental personnel and OSP personnel. Further, OSP personnel should be trained in data analysis techniques in order to identify costs that do not relate to sponsored award objectives.

Effect

The OSP pre-award and post-award personnel, PIs and department administrative officials are the key OSU officials responsible for federal award administration. The University does not have sufficiently comprehensive policies, procedures and training programs to ensure that these individuals were aware of, understood and had the systems to effectively address relevant compliance issues pertaining to the audited awards.

The University has demonstrated an ability to develop and implement effective policies, procedures and training programs, as evidenced by the effort reporting system implemented in 2006. This system, coupled with the guidance and training provided to OSU personnel, effectively resolved the serious deficiencies in the effort reporting process noted prior to 2006. The lack of a similarly broad-based effort in the areas of policies, procedures and training concerning cost sharing, participant support costs and subaward monitoring likely contributed to the deficiencies noted during this audit and the questioned costs reported.

Cause

The University has focused increased attention on avenues to ensure compliance with federal and sponsoring agency requirements. This emphasis is demonstrated by a re-organization within OSU of the Office of Sponsored Programs, changes of personnel assigned to key positions within OSP, the addition of OSP personnel and location of OSP administrators at the departmental level, and the investment in new systems, such as the automated effort reporting system, to facilitate compliance with key requirements.

These efforts to encourage and facilitate compliance are commendable. However, additional major areas, such as the management of cost share and participant support commitments and subawardee contract monitoring, require further attention.

In our prior recommendation nos. 1 through 3, we recommended that the NSF's Director of the Division of Institution and Award Support address and resolve the following that the University:

- a. Develop and implement written policies and procedures to address the proper administration of cost share, participant support costs and subawards. Existing policies and procedures should be reviewed in relation to federal and grantor requirements, as necessary, to ensure that other compliance areas are not lacking in guidance. While policy statements may be brief, procedural guidance should be sufficient to allow the University to meet the NSF requirement that "Grantees should ensure that costs claimed under NSF grants are necessary, reasonable, allocable, and allowable under the applicable cost principles, NSF policy, and/or the program solicitation."

Awardee's Comments

We concur with this recommendation and have addressed some of our approaches in our responses to recommendations 1 and 3. We are reviewing much of our procedural guidance to ensure that it is sufficiently clear, and robust enough to assure an appropriate level of oversight.

- b. Provide training regarding the existence, implications and implementation of the newly-developed policies and procedures. Training should be provided to all personnel involved with award administration. Participation in training sessions should be encouraged as necessary to ensure that the material is understood and implemented by PIs as well as personnel in OSP and departments administrators.

Awardee's Comments

We concur with this recommendation and, as noted above have already revised our cost-sharing procedures and offered campus wide face-to-face training sessions. We are revising our subaward procedures and will offer training sessions on that topic as soon as it is available. In addition, the Vice President for Research will send periodic communications to all investigators reinforcing the importance of timely and responsive project management.

Auditor's Response

The University's comments are responsive to the finding and recommendation. This finding should not be closed until NSF determines that the recommendation has been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

FINANCIAL SCHEDULES

Ohio State University
National Science Foundation Award No. EEC-0425626 (Center)
Schedule of Award Costs
Award Period: September 1, 2004 – August 31, 2011
Audit Period: September 1, 2004 – September 30, 2009
Interim

Cost Category	Approved Budget	Claimed Costs (A)	Reclassi- fications	Claimed Costs After Reclassification	Amount Questioned	At Risk	Schedule Reference
Direct Costs:							
Salaries and wages	\$ 5,580,412	\$ 4,972,327	\$ -	\$ 4,972,327	\$ 131,654	\$ -	B-1.1
Fringe benefits	915,013	545,556	-	545,556	26,148	-	B-1.2
Equipment	-	45,011	-	45,011	43,868	-	B-1.3
Travel	204,650	216,093	(49,107)	166,986	-	-	B-1.4
Participant support	272,238	-	49,107	49,107	-	223,131	
Other direct costs:							
Materials and supplies	450,947	538,407	-	538,407	-	-	
Consultant services	-	24,025	-	24,025	-	-	
Computer services	96,735	751	-	751	-	-	
Subcontracts	1,761,250	2,028,398	-	2,028,398	-	-	
Other	229,712	214,427	-	214,427	487	-	B-1.6
Total Direct Costs	9,510,957	8,584,995	-	8,584,995	202,157	223,131	
Indirect Costs (10)						-	B-1.7
Total						\$ 223,131	
Cost sharing	\$ 12,364,522	\$ 3,201,300	\$ -	\$ 3,201,300	\$ 263,937	\$ 9,427,159	B-1.8

(A) The total claimed costs agree with the total expenditures reported by OSU on the Federal Financial Report – Federal Share of Net Disbursements as of the quarter ended September 30, 2009. Claimed costs reported above are taken directly from OSU's books of accounts.

See accompanying notes to Financial Schedules.

Ohio State University
National Science Foundation Award No. HRD-0331560 (LSAMP)
Schedule of Award Costs
Award Period: November 1, 2003 – September 30, 2009
Audit Period: November 1, 2003 – September 30, 2009
Final

Cost Category	Approved Budget	Claimed Costs (A)	Reclassifications	Claimed Costs After Reclassification	Amount Questioned	Schedule Reference
Direct Costs:						
Salaries and wages	\$ 559,250	\$ 731,310	-	731,310	84,804	B-2.1
Fringe benefits	178,590	176,039	-	176,039	20,105	B-2.2
Travel	5,875	16,905	-	16,905	-	
Participant support	1,279,100	136,416	-	136,416	1,142,684	B-2.3
Other Direct Costs:						
Materials and supplies	99,700	30,572	-	30,572	-	
Publication costs	11,000	-	-	-	-	
Computer services	-	15,281	-	15,281	-	
Subcontracts	938,706	1,782,929	-	1,782,929	52,394	B-2.4
Other	133,600	277,446	-	277,446	-	
Total Direct Costs	3,205,821	3,166,898	-	3,166,898	1,299,987	
						B-2.5
Questioned NSF Shortfall					<u>58,900</u>	
Total Questioned Costs					<u>\$ 1,391,408</u>	
Cost Sharing (B)	<u>\$ 3,499,123</u>	<u>\$2,173,121</u>	<u>\$ -</u>	<u>\$ 2,173,121</u>	<u>\$132,136</u>	B-2.6

(A) The total claimed costs of \$3,491,292 differs from the total expenditures of \$3,499,123 reported by The Ohio State University on the Federal Financial Report – Federal Share of Net Disbursements as of the quarter ended September 30, 2009. Total expenditures reported on the referenced Federal Financial Report also does not reflect a return of funds for \$25,922 that was made on March 22, 2011 by check no. 536991. Claimed costs reported above are taken directly from OSU's books of accounts.

(B) Cost sharing was approved at 100% of NSF-funded project costs. The Questioned NSF Shortfall represents the difference between committed cost share and claimed cost share, net of disallowed costs.

See accompanying notes to Financial Schedules.

Ohio State University
National Science Foundation Award No. CHE-0532250 (REEL)
Schedule of Award Costs
Award Period: September 1, 2005 – August 31, 2010
Audit Period: September 1, 2005 – September 30, 2009
Interim

Cost Category	Approved Budget	Claimed Costs (A)	Reclassifications	Claimed Costs After Reclassification	Amount Questioned	At Risk	Schedule Reference
Direct Costs:							
Salaries and wages	\$ 617,460	\$ 386,246	\$ -	\$ 386,246	\$ 32,734	\$ -	B-3.1
Fringe benefits	176,004	119,508	-	119,508	10,337	-	B-3.2
Equipment	200,000	219,219	-	219,219	-	-	
Travel	20,000	10,927	-	10,927	-	-	
Participant support	-	-	-	-	-	-	
Other Direct Costs:							
Materials and supplies	60,000	68,314	-	68,314	-	-	
Publication costs	-	5,000	-	5,000	-	-	
Consultant services	-	-	-	-	-	-	
Computer services	-	242	-	242	-	-	
Subcontracts	1,026,450	817,344	-	817,344	-	-	
Other direct costs	252,364	3,000	-	3,000	-	-	
Total Direct Costs	2,352,278	1,629,800	-	1,629,800	43,071	-	
Cost Sharing	\$369,000	\$ -	\$ -	\$ -	\$ -	\$369,000	B-3.4

(A) The total claimed costs agree with the total expenditures reported by The Ohio State University on the Federal Financial Report as of the quarter ended September 30, 2009. Claimed costs reported above are taken directly from OSU's books of accounts.

(B) Cost sharing pledged in proposal narrative valued from \$369,000 to \$490,000.

See accompanying notes to Financial Schedules.

Ohio State University
National Science Foundation Award No. EEC-0425626 (Center)
Schedule of Questioned Costs
From September 1, 2004 to September 30, 2009

1. Salaries and Wages – Questioned Costs of \$131,654

We are questioning \$131,654 of salaries and wages as follows:

- 11 effort reports were certified by an employee who did not have first-hand knowledge of activities or percent of effort expended on the NSF award as a suitable means of verification as required by Federal regulation, totaling \$79,022.
- 13 effort reports were not certified on a timely basis as required by Federal regulation, totaling \$93,916.

The amount of questioned costs of \$131,654 is net of the \$41,284 of costs which are questioned due to more than one deficiency. (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

As noted on page 36, we made significant changes to our effort reporting system in 2006. Prior to that time, effort reports were to be certified by department chairs, who could delegate that responsibility. Thus, reports were generally completed by the department Human Resource Professionals (“HRPs”).

From 2004 through 2006 effort certification standards changed as audit findings at other universities (e.g. Northwestern) clarified the grey areas in the effort reporting guidance. At other research institutions, federal auditors determined that “suitable means of verification” roughly equated to “first-hand knowledge”.

As the standards evolved, we began a three year project to upgrade our systems to incorporate the changes prescribed by audit findings. First, the Office of Sponsored Programs worked with the University’s Internal Audit department to highlight the effort reporting process within the University’s risk assessment matrix, with the goal of engaging the University in the enhanced effort reporting process. After extensive discussions with University faculty, the consensus within the University community was that the Principal Investigators (“PI”)/Faculty better met the “first-hand knowledge” audit standard.

Starting in 2006 the University designated PI/Faculty as primary effort certifiers. Under the paradigm still in place, PIs certify their own effort and that of students, postdocs and classified staff working on their projects. Non-PI faculty and professional staff certify their own effort.

Following are the important changes to the effort reporting system that resulted from the involvement of Internal Audit and the University community.

Schedule B-1

- Developed an effort report tracking process that notifies Chairs, Deans, and the Provost on a monthly basis of uncertified effort reports over 45 days old. Data can be accessed and downloaded real-time.
- Developed formal effort training that is offered to all University departments. The training is available at the customer's place of business or on-site in the Research Administration building
- Re-engineered the personnel expenditure transfer process to electronically recalculate the effort report for recertification
- Redesigned the effort reports to be more intuitive and user-friendly, including drill-down effort detail
- Changed the certifier from Chair/delegate (usually Human Resource Professional), to Principal Investigators, non-PI faculty and Professional staff —certifiers who have the best knowledge of the effort provided
- Changed from three certifications a year to four, and so that reports are generated and made available for certification closer to the period being certified. In July 2010 we began generating reports immediately after the end of the certification period (rather than waiting for two months as had been our practice).

As noted in the report, the improvements to the effort reporting process have been significant. Since we significantly improved our effort system as clarification of certification requirements became available, we are requesting that the questioned charges of \$131,654 be allowed.

Auditors' Response

While the University's comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. NSF will resolve this issue during audit resolution.

2. Fringe Benefits – Questioned Costs of \$26,148

OSU claimed fringe benefit costs to NSF pursuant to negotiated rate agreements at rates averaging ████████ of claimed salaries and wages (excluding fellowships and stipends). As a result of questioning the above salaries and wages, we are questioning \$26,148 of fringe benefits ████████████████████. (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

We are requesting that questioned fringe benefit costs of \$26,148 be allowed, based on the rationale in item 1 above.

Auditors' Response

While the University's comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. NSF will resolve this issue during audit resolution.

3. Equipment – Questioned Costs of \$43,868

We are questioning \$43,868 of equipment claimed because the equipment purchases exceeding \$5,000 in cost were not included in the NSF budget and were not approved prior to purchase, in violation of OMB Circular A-21.18(b). (See Finding and Recommendation No. 5 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

The award references cooperative agreement terms and conditions:
<http://www.nsf.gov/pubs/cafadc/cafadc0704.pdf>

1. Significant Project Changes

- (a) Transfer of the project effort (see Article 8);
- (b) Change in objectives or scope (see Article 8);
- (c) Absence or change of PI (see Article 8);
- (d) Change in the amount of cost sharing reflected on Line M of the award Budget (see Article 22); or

2. Rearrangements/Alterations aggregating \$25,000 or over (Construction) (see Article 11).

b. Written prior approval from the NSF Program Officer is required for reallocation of funds provided for participant or trainee support (see Article 7).

c. The prior approval requirements identified above (as well as other types of award related notifications stipulated in GPM Exhibit III-1) must be submitted electronically to NSF

We interpret these terms as indicating that there is no prior approval requirement for purchase of unbudgeted equipment. We are requesting that questioned equipment charge of \$43,868 be allowed.

Auditors' Response

The Cooperative Agreement Financial and Administrative Terms and Conditions dated July 2004 do not require prior approval of capital expenditures at any level. Neither the Cooperative Agreement nor the Grant Letter reference or otherwise incorporate Section 18.b(s) of OMB Circular A-21 which states that "Capital expenditures for special purpose equipment are allowable as direct costs, provided that items with a unit cost of \$5000 or more have the prior approval of the awarding agency." NSF, during audit resolution, will determine whether NSF intended for the provisions of OMB Circular A-21 to apply.

4. **Participant Support (Travel) – Questioned Costs of \$7,480 and Reclassification of \$49,107**

We questioned \$7,480 of travel expenses claimed because the cost claimed was not supported by adequate documentation. These costs represented an advance to the award's principal investigator for foreign travel and subsistence while studying at another university during the summer of 2008. We also reclassified \$49,107 of foreign travel that represented a budgeted component of participant support. (See Finding and Recommendation No. 3 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

To save money during an extended trip to Australia, [REDACTED] sublet a room for 88 nights at \$60 per night (total \$5,280) and claimed only \$25 a day for meals (total \$2,200). Our travel department requested and received a receipt for the sublet room in the amount of \$5,280. The receipt provided as proper documentation for the expense was signed by the room owner, [REDACTED], and by the PI, [REDACTED] (a copy is included as Attachment 2). We feel this documentation is adequate to support the expense, especially since the federal per diems for Sydney Australia for the time period of the trip were \$191 a day for lodging and \$155 for meals (\$346 per day or \$30,448 for the entire period). We believe that the questioned travel costs of \$7,480 are allowed.

We concur with the reclassification of the \$49,107 of foreign travel costs to participant support costs. The participant support travel costs in the original budget (\$85,000) were established in their own project but were coded as international travel rather than participant costs so that we could ensure compliance with travel requirements.

Auditors' Response

The receipt for lodging in the amount of \$5,280 was not provided to us during the audit. We agree that the receipt supports the lodging cost and the related per diem, and therefore we have reinstated the \$7,480 of questioned costs.

5. **Participant Support – At-Risk Costs of \$223,131**

We have identified \$223,131 of "at-risk" participant support costs that could become questioned costs at the end of the award. "At-risk" participant support costs represent the amount of required participant support costs that has not been met at the time of the audit, but which the awardee still has time to meet before the end of the award period. Participant support costs were budgeted for foreign travel, stipends, subsistence and other costs in the amount of \$272,238 for the period from September 1, 2004 through August 31, 2011. The "at-risk" amount represents budgeted participant support costs of \$272,238 reduced by reclassified and accepted travel costs of \$49,107 net of \$7,480 of questioned travel expenses that were questioned because the cost claimed was not supported by adequate documentation. These costs represented an advance to the award's principal investigator for foreign travel and subsistence while studying at another university during the summer of 2008. Accordingly, as of September 30, 2009, only \$41,627 of accepted participant support costs have been incurred (\$49,107 claimed less \$7,480 questioned). After considering the \$7,480 in questioned costs, the balance of

\$223,131 is considered “at risk” because it is unlikely that these costs will be incurred by the end of the award as required by the NSF award agreement. (See Finding and Recommendation No. 3 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

The majority of the participant support costs were provided as supplements (primarily REU supplements), though there were some participant support costs in the revised original award (\$85,000 for participant travel). As noted on above, the \$85,000 was established in a separate project and budgeted as foreign travel to ensure compliance with federal requirements. Our system does not allow us to designate a budget as both participant costs and foreign travel.

As shown on the attached spreadsheet (Attachment 3) we believe that we have identified all participant support costs for the award. We have not met the budgeted level of participant support costs, because there is still a balance in the foreign travel/participant support project. If these funds are not used before the end of the project, the balance will be returned to NSF. Given that budgets are estimates of costs to be incurred, some variation between costs proposed and actually incurred in a budget category (especially in a multi-year award) is not unexpected. We believe that participant support cost in question will be resolved before the end of the award and the funds will not be at risk.

Auditors’ Response

The University’s comments are not entirely responsive to the finding and recommendation. Budgeted participant support costs represent a commitment by the University to expend award funds in a prescribed manner, and approval from NSF is required to reduce this commitment. The return of unspent participant support costs to NSF would not remedy the related failure to provide all participant support pledged. The University should ensure that future commitments to expend effort and funds to encourage participant support on federal awards are honored, accounted for and properly reported to facilitate evaluation of adherence to the award terms and conditions. The information provided as Attachment 3 has not been subject to audit tests and therefore is insufficient to support a reinstatement of the questioned costs. NSF will resolve this issue during audit resolution.

6. Other – Questioned Costs of \$487

We are questioning \$487 of other costs because 1 of the sampled transactions was for laboratory animals, which was not related to the project and was inadvertently charged to the award. (See Finding and Recommendation No. 5 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

We concur with questioning this cost. The project did not use animals. The charges were posted in error and have been removed.

7. Indirect Costs – Questioned Costs of \$78,112

OSU claimed indirect costs to NSF based on applying a [REDACTED] rate against claimed Modified Total Direct Costs (MTDC). As a result, based upon questioning of salaries and wages, fringe benefits, we are questioning \$78,112 of indirect costs [REDACTED] (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

We have requested above that the questioned salary and fringe benefit costs of [REDACTED] be allowed. The associated indirect costs would also be allowable.

Auditors’ Response

While the University’s comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. NSF will resolve this issue during audit resolution.

8. Cost Share – At-Risk Costs of \$9,427,159

The \$9,427,159 of cost sharing “at risk” represents the additional cost sharing necessary to comply with the award budget. “At-risk” cost sharing is the amount of required cost sharing that has not been met at the time of the audit, but which the awardee still has time to meet before the end of the award period. The amount is calculated as follows:

Cost sharing required	<u>\$12,364,522</u>
Cost sharing claimed	3,201,300
Less: Unallowable and Unsupported cost share	<u>263,937</u>
Cost sharing allowed	<u>2,937,363</u>
Difference between cost sharing required and allowed	<u>\$9,427,159</u>

The unsupported cost sharing amounts are based on the following:

- \$26,345 of costs for picnics, parties, meals, and expedited VISA processing fees associated with bringing foreign nationals to the United States,
- \$27,549 of postage, telephone and related costs normally included in the University’s indirect cost rate, and
- \$210,043 of transfers from other accounts for which support has not been provided to establish their allowability.
-

Awardee Comments

We are working with NSF on the cost-share requirements for this award. We believe that the at-risk concerns will be resolved before the project ends.

Schedule B-1

As noted in the report, not all of the cost-share for this award was recorded using the PeopleSoft cost share functionality within the University's general ledger. This precluded some of our normal reviews for allowability. We concur with the disallowance of the \$26,329 for meals and expedited visa approvals.

We believe that the \$27,549 of costs that are normally considered indirect cost (postage, phone, mail) are allowable on this award in accordance the "Major project" definition in 2 CFR Part 220 (aka A-21). This award required substantial administrative activity to make travel arrangements, meeting arrangements, and track a large numbers of program participants.

Within the \$210,043 of unsupported costs transfers is \$45,000 of Accounts Payable invoices. The \$45,000 was disallowed as unsubstantiated AP accruals. However, it actually consisted of five vouchers for \$9,000 each that were located and provided for review. They are included again as Attachment 4. On subsequent review, the \$45,000 should not have been included in our cost-share.

We request that the unsupported cost share amount be reduced to \$236,372.

Auditors' Response

We do not view the functions of this award as requiring an unusual amount of indirect costs beyond the 49.5% indirect cost rate allowed, which has resulted in \$3.3 million of indirect cost reimbursements through September 30, 2009. Further, indirect costs incurred by subawardees participating in the consortium are recovered through their own indirect cost rate and reimbursed accordingly by NSF. Thus the \$27,549 of indirect costs charged as direct costs and claimed as cost share remain questioned.

Ohio State University
National Science Foundation Award No. HRD-0331560 (LSAMP)
Schedule of Questioned Costs
From November 1, 2003 to September 30, 2009

1. Salaries and Wages – Questioned Costs of [REDACTED]

We are questioning [REDACTED] of salaries and wages as follows:

- 5 effort reports were certified by an employee who did not have first-hand knowledge of activities or percent of effort expended on the NSF award as a suitable means of verification as required by Federal regulation, totaling \$53,658.
- 4 effort reports were not certified on a timely basis as required by Federal regulation, totaling \$48,796.
- 1 payroll transaction for which supporting effort reports or timesheets were not available, totaling \$7,850.

The amount of questioned costs of \$84,804 is net of \$25,500 of costs which are questioned due to more than one deficiency. (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

See comments on Schedule B-1.

As noted in the report, the improvements to the effort reporting process have been significant. Since we significantly improved our effort system as clarification of certification requirements became available, we are requesting that of the questioned charges \$76,954 be allowed. We concur that the [REDACTED] in salary charges for which we could not provide an effort report should remain in question.

Auditors' Response

While the University's comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. NSF will resolve this issue during audit resolution.

2. Fringe Benefits – Questioned Costs of \$20,105

OSU claimed fringe benefit costs to NSF pursuant to negotiated rate agreements at rates averaging 23.7% of claimed salaries and wages. As a result of questioning the above salaries and wages, we are questioning [REDACTED] of fringe benefits [REDACTED] x 23.7%). (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

We are requesting that [REDACTED] of the questioned fringe benefit costs of be allowed, and that [REDACTED] (the fringe benefits associated with the in question [REDACTED] salary charge) remain in question based on the rationale in item 1 of Schedule B-1 above.

Auditors' Response

While the University's comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. The entire \$20,105 will remain questioned. NSF will resolve this issue during audit resolution.

3. Participant Support – Questioned Costs of \$1,142,684

We are questioning \$1,142,684 of participant support costs claimed because we are unable to determine whether the costs were incurred as committed in the NSF award. (See Finding and Recommendation No. 3 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

We did not initially require invoices with the level of detail included in NSF's budget forms. We requested from our subawardees a final report with participant support costs broken out as a separate category. Based on these reports, we incurred participant costs of \$1,472,541 (Attachment 5). Given this information, we believe that we have incurred more participant costs than committed in the budget and that the \$1,142,684 is not in question.

Auditors' Response

As discussed in the finding, the University's procedures are inadequate for recording and monitoring participant support costs, in part because these costs are not segregated and identified as participant support costs. The detail of participant support costs provided with the University's response to this audit includes substantial costs from subawardees. These subawardee costs were budgeted separately from OSU's budget for participant support costs. Subawardees had their own budgets for participant support costs. The deficiencies noted in the monitoring of subawardee costs exacerbate the problem of accounting for and monitoring participant support costs. While the schedule of participant support costs includes items that generally correlate with the nature of costs expected to be incurred, the University should demonstrate that participant support costs committed by the subawardees **and** by OSU have been fulfilled. Further, because the detail of participant support costs have not been subject to audit tests, the validity of the claimed costs will need to be considered by NSF in resolving the finding.

4. Subcontracts – Questioned Costs of \$52,394

The following costs are questioned due to lack of supporting documentation at the subawardee, Akron University.

Hospitality Zip Cards improperly documented	\$19,300
Scholarships without supporting documentation	31,550
Credit card payments without receipts	1,044
Missing invoice for travel	<u>500</u>
Total	<u>\$52,394</u>

(See Finding and Recommendation No. 1 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

The University of Akron provided the following explanation for their lack of documentation:

This is in response to the NSF audit report for The University of Akron's LSAMP award under the direction of Principal Investigator [REDACTED]. When this audit was conducted, much of the documentation requested by NSF was to be kept by the department, specifically the PI himself. Unfortunately, [REDACTED] is deceased and it was found that his office was cleared out. No documentation had been kept by the department regarding this grant.

During the time period of this award, documentation for the original scholarship applications, documentation as to why each candidate was selected for the scholarship, visa card receipts and zip card receipts were not available because it was the department's responsibility to be accountable for them. In the place of the itemized receipts and original documentation, the Controller's Office did provide zip card statements, general ledgers, minority statuses, GPAs for each student and student account detail which showed where the funds had been applied and how they were spent.

As the report states, we agree that some funds placed on the zip cards were spent on hospitality transactions. Without the itemized receipts, we cannot assure that they were not for single-customer purchases. In regards to the game time minutes, we can assure that those minutes were not purchased with NSF funds from this award. The zip card statement for Shirza Khan shows game time minutes being added to his zip card, however these minutes were not related to the \$500 deposited for NSF award purposes. Furthermore, these minutes purchased are clearly tracked separately from the \$500 deposit made on 6/13/06. The statement shows what transactions reduced the \$500 deposit and game minutes were not part of that.

Currently the Controller's Office reviews A-21 expenditures, Fly America allowability and visa card expenditures related to travel and hospitality, all on a monthly basis. Going forward we are working on changing the University's current Visa card policy to mandate that all receipts will be centralized within central administration offices. By doing this the Controller's Office will be able to review each itemized receipt for allowability on the sponsored project. Talks have already begun with the University of Akron's Internal Audit Office to make the steps forward to change this policy along with the Purchasing Office.

Overall, The Controller's Office at The University of Akron has many policies and business practices in place today that did not exist during the time of the LSAMP award. Training is also being provided to Principal Investigators as well as Research Administrators to increase their awareness of the need for documentation and to strengthen internal controls. Due to the increase in monitoring of activities, training and current policies in place, the lack of deficiencies and compliance practices have been greatly minimized.

The University of Akron believes they have provided all of the documentation typically necessary to justify the \$31,500 in scholarship expenses. We are requesting that the scholarship costs of \$31,500 be allowed and that the other costs be reassessed for potential allowability.

Auditors' Response

Documentation to support scholarships in the form of the scholarship application or award letter denoting name of applicant, ability to meet award criteria, enrollment status, etc., was available for only \$8,000 of the \$40,000 of scholarship awards. As noted in the finding, we were able to substantiate that individuals to whom scholarship monies were paid were enrolled at the University and that their GPA met the level required. However, documentation does not apparently exist to ensure that these individuals received an LSAMP scholarship, other records support the claimed costs to some extent. NSF will resolve this issue during audit resolution.

5. Indirect Costs – Questioned Costs of \$32,521

OSU claimed indirect costs to NSF based on applying a [REDACTED] rate against claimed Modified Total Direct Costs (MTDC). As a result, based upon questioning of [REDACTED] of salaries and wages and fringe benefits, we are questioning [REDACTED] of indirect costs [REDACTED] (See Finding and Recommendation No. 4 in the *Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

We have requested above that the questioned salary and fringe benefit costs of [REDACTED] be allowed. The associated indirect costs [REDACTED] would also be allowable, with only [REDACTED] remaining in question.

Auditors' Response

While the University's comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. NSF will resolve this issue during audit resolution.

6. Cost Share – \$1.3 Million in Unmet Cost Share and Unallowable Costs Claimed as Cost Share of \$132,136, Results in Questioning \$58,900 of NSF-Funded Costs

Included in the \$2,173,121 of cost share expenses claimed by OSU were disallowed costs of [REDACTED] that were not supported by effort reports. Of these disallowed costs, [REDACTED] were claimed by an OSU subawardee, the University of Akron (see finding no. 1) and consisted of salaries [REDACTED] and fringe benefits [REDACTED]. The remaining \$41,913 of disallowed costs were claimed by OSU and consisted of salaries [REDACTED] fringe benefits [REDACTED] and the related indirect costs [REDACTED].

As detailed in Schedule A-2, OSU claimed cost-share expenses of \$2,173,121. The cost share requirement was 100% of NSF-funded costs. In accordance with GPM 333.3, and OSU's policies, grantees must cost share at the level of cost sharing included in the award. Because of the cost share short-fall, the University did not cost share allowable costs at the level required (or \$3.49 million) in the award. We calculated excess funding NSF provided as a result of inadequate cost sharing as follows:

Maximum Percentage of NSF Funding to Total Project Costs

NSF Share Budgeted	\$3,499,123
OSU Cost-sharing Required	<u>3,499,123</u>
Total Project Costs	<u>\$6,998,246</u>
Maximum NSF Share of Award Costs (NSF share-\$3,499,123/Total project costs-\$6,998,246)	<u>50%</u>

Audit Results

Claimed NSF Costs – Questioned NSF Costs (\$3,491,292 - \$1,332,508)	\$2,158,784
Claimed Cost-sharing – Unacceptable cost sharing (\$2,173,121- \$132,136)	<u>2,040,985</u>
Adjusted Project Costs	<u>\$4,199,769</u>

Questioned Costs

Adjusted Project Costs	\$4,199,769
Less: Maximum NSF Share (50% of \$4,199,769)	<u>2,099,885</u>
Adjusted OSU Required Cost Share	2,099,885
Accepted OSU Supported Cost Share	<u>2,040,985</u>
Cost Share Shortfall – Results in Questioned NSF costs	<u>\$ 58,900</u>

Note: The amount of questioned cost sharing shortfall will ultimately depend on the amount of questioned direct NSF funds and cost share sustained which will be determined by NSF.

Awardee Comments

As noted in the response to Items 1-3 above, OSU has significantly improved its effort system as clarification of certification requirements became available. Therefore, we are requesting that the disallowed salary, fringe benefit and F&A cost-share charges of \$41,913 be allowed.

The University of Akron has significantly improved its effort reporting system and provided the following information.

During the time of this award all effort reporting was done manually, by paper. Effort reports were required for all sponsored activities from each department. After a further analysis it was found that for the cost shared salaries that were reported we do have effort reports for \$23,311 of the total. We could not find effort reports for [REDACTED] of cost shared salaries. There was [REDACTED] of cost shared salaries that did not require effort reports because they are hourly employees and had to fill out a time card, which is how their effort was recorded. Of the other cost share reported we have effort reports that do not correctly identify this project as where effort was placed totaling [REDACTED] – unfortunately during this time effort reports were signed by department heads and were not always 100% accurate due to the fact that each individual did not certify the report themselves.

However, in Fall 2009, The University of Akron rolled out an electronic certification system, ecr, that now requires each individual charged to sponsored research to certify their effort by the deadline. Effort cards are generated three times a year, Fall, Spring and Summer. There are now official University Policies and Controller's Office Procedures regarding effort reporting. We believe this new ecr system greatly improves our tracking and certification of effort on all current and future awards.

Currently, any award that The University of Akron has that includes a cost share commitment is monitored very closely in great detail. Each item is recorded within the financial system to support that commitment. Grant accountants now perform a quarterly review of the cost share expenditures for each sponsored project and are required to keep extensive documentation. These requirements for monitoring did not exist during the timeframe of the award.

Overall, The Controller's Office at The University of Akron has many policies and business practices in place today that did not exist during the time of the LSAMP award. Training is also being provided to Principal Investigators as well as Research Administrators to increase their awareness of the need for documentation and to strengthen internal controls. Due to the increase in monitoring of activities, training and current policies in place, the lack of deficiencies and compliance practices have been greatly minimized.

The University of Akron did not include F&A costs on the cost share it reported (Attachment 6), so the 'related indirect costs ██████' noted above should not be included in the unallowable costs total. Attachment 7 is a spreadsheet showing the \$30,311 of cost-shared effort for which supporting documentation (effort reports or time cards) is available. Attachment 8 shows a revised calculation of the unallowable costs, and indicates that the unallowable amount for the University of Akron should be ██████ (removing F&A costs plus the salary and benefits charges for which effort reports or time cards are available).

The audit noted that ██████ of unexpended award funds were belatedly identified and returned to NSF March 22, 2011. The refunds were received and recorded over a period of months. However, to minimize potential confusion, we elected to wait until all of the subawardees had closed out their subawards before sending a single check to NSF.

Auditors' Response

While the OSU's comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. NSF will resolve this issue during audit resolution.

With respect to the located Akron University effort reports, the acceptability of these documents to support the cost share claimed will require additional analysis and explanation from the University. The effort reports by themselves are not sufficient evidence to reinstate the questioned cost share.

Ohio State University
National Science Foundation Award No. CHE-0532250 (REEL)
Schedule of Questioned Costs
From November 1, 2003 to September 30, 2009

1. Salaries and Wages – Questioned Costs of [REDACTED]

We are questioning [REDACTED] of salaries and wages representing 6 effort reports which were not certified on a timely basis as required by Federal regulation. (See Finding and Recommendation No. 4 in the *Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters*.)
See comments on Schedule B-1.

Awardee Comments

As noted in the report, the improvements to the effort reporting process have been significant. Since we significantly improved our effort system as clarification of certification requirements became available, we are requesting that the questioned charges of [REDACTED] be allowed.

Auditors' Response

While the OSU's comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. NSF will resolve this issue during audit resolution.

2. Fringe Benefits – Questioned Costs of \$10,337

OSU claimed fringe benefit costs to NSF pursuant to negotiated rate agreements at rates averaging 31.6% of claimed salaries and wages. As a result of questioning the above salaries and wages, we are questioning [REDACTED] of fringe benefits [REDACTED] (See Finding and Recommendation No. 4 in the *Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters*.)

Awardee Comments

We are requesting that questioned fringe benefit costs of [REDACTED] be allowed, based on the rationale in item 1 above.

Auditors' Response

While the OSU's comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. NSF will resolve this issue during audit resolution.

3. Indirect Costs - Questioned Costs of [REDACTED]

OSU claimed indirect costs to NSF based on applying a rate of [REDACTED] against claimed Modified Total Direct Costs (MTDC). As a result, based upon questioning of [REDACTED] of salaries and wages and fringe benefits, we are questioning [REDACTED] of indirect costs. (See Finding and Recommendation No. 4 in the *Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

We have requested above that the questioned salary and fringe benefit costs of \$157,802 be allowed. The associated indirect costs would also be allowable.

Auditors' Response

While the OSU's comments should alleviate this deficiency in the future, they do not negate the finding during the audit period. NSF will resolve this issue during audit resolution.

4. Cost Share – At-Risk Costs of \$369,000

The \$369,000 of cost sharing "at risk" represents the cost sharing necessary to comply with the award budget. "At risk" cost sharing is the amount of required cost sharing that has not been met at the time of the audit, but which the awardee could still meet before the end of award period. The amount is calculated as follows:

Cost sharing required	\$369,000
Cost sharing claimed	-
Less: Unsupported cost share	-
Cost sharing allowed	<u>-</u>
Difference between cost sharing required and allowed	<u>\$369,000</u>

Cost sharing of \$369,000 is "at risk" because these costs, committed to in the NSF-approved award budget, have not been identified, accounted for or claimed as cost share, and therefore may not have been incurred. Cost share of \$369,000 includes \$4,000 to be provided by a subrecipient with the remainder to be provided by OSU. (See Finding and Recommendation No. 2 in the *Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Comments

As noted on page 26, we believe the cost share committed was \$175,000 to \$190,000. We are working with NSF to reallocate cost-share contributions to different categories. We believe that any potential issues will be resolved before the project ends and that the required cost share will be met.

Auditors' Response

The intent of the University and the understanding of NSF should be determined and considered in resolving this finding.

Ohio State University
National Science Foundation Award Number
EEC-0425626, HRD-0331560, and CHE-0532250
Summary Schedules of Awards Audited and Audit Results
Period from November 1, 2003 through September 30, 2009

Summary of Awards Audited

Award Number	Award Period	Audit Period
EEC-0425626	9/01/2004 – 8/31/2011	9/01/2004 – 9/30/2009
HRD-0331560	11/01/2003 – 9/30/2009	11/01/2003 – 9/30/2009
CHE-0532250	9/01/2005 – 8/31/2010	9/01/2005 – 9/30/2009

Type of Award	Award Description
EEC-0425626	To develop technology to produce nanofluidic devices and nanostructures for next generational medical diagnostic and therapeutic applications.
HRD-0331560	To provide incentives to increase minority participation in science, technology, engineering and mathematics.
CHE-0532250	To develop and implement research modules for use in undergraduate chemistry courses, and evaluate the effect which is defined, in part, as increasing student. participation in undergraduate research by 20%

Summary of Questioned, Unresolved, and Unsupported Costs by Award

Alternative Procedures Performed by Auditors (Y/N)	Finding	Finding of Non-compliance	Internal Control Finding	Material, Significant or Other?	Amount of	Amount of	Amount of
					Questioned Costs Affected	Claimed Costs Affected	Unsupported Costs Questioned
Y	1	Yes	Yes	Material	\$ 52,394	\$ 1,782,929	\$ 52,394
Y	2	Yes	Yes	Material	336,956	5,374,421	0
Y	3	Yes	Yes	Material	1,365,814	1,365,814	0
Y	4	Yes	Yes	Significant	437,735	10,912,128	437,735
N	5	Yes	Yes	Significant	\$ 44,355	NA	NA

Summary of Questioned Costs and Questioned Cost Share by Finding

Finding	Questioned NSF-Funded Costs	Questioned Cost Share	At-Risk Costs
1. Subawardee Monitoring	\$ 52,394	Note A	NA
2. Meeting Cost Share Commitments	\$ 58,900	\$ 263,937	\$9,796,159
3. Meeting Participant Support Cost Commitments	\$1,142,684	NA	\$223,131
4. Effort Reporting and Payroll Systems	\$ 437,735	Note B	NA
5. Policies, Procedures and Training	\$ <u>44,355</u>	<u>NA</u>	<u>NA</u>
Totals	\$ <u>1,736,068</u>	\$ <u>263,937</u>	\$ <u>10,019,290</u>

Note A. \$90,223 of questioned cost share claimed by subawardees is included in the \$263,937 amount reported under Finding 2 – Meeting Cost Share Commitments.

Note B. \$41,913 of questioned cost share due to inadequate effort reporting is included in the \$263,937 amount reported under Finding 2 – Meeting Cost Share Commitments.

The Ohio State University
Notes to the Financial Schedules
From November 1, 2003 to September 30, 2009

Note 1: Summary of Significant Accounting Policies

Accounting Basis

The accompanying financial schedules have been prepared in conformity with National Science Foundation (NSF) instructions, which are based on a comprehensive basis of accounting other than generally accepted accounting principles. Schedules A-1 to A-3 have been prepared by The Ohio State University (OSU) from the Federal Financial Reports submitted to NSF and OSU's accounting records. The total claimed costs of \$3,491,292 reported on Schedule A-2 differs from the total expenditures of \$3,499,123 reported by The Ohio State University on the Federal Financial Report – Federal Share of Net Disbursements as of the quarter ended September 30, 2009. Total expenditures reported on the referenced Federal Financial Report also does not reflect a return of funds from OSU to NSF for \$25,922 that was made on March 22, 2011, and which represented unexpended award funds of \$7,831 and returned subawardee funds of \$18,091. The basis of accounting utilized in preparation of these reports differs from generally accepted accounting principles. The following information summarizes these differences:

A. Equity

Under the terms of the award, all funds not expended according to the award agreement and budget at the end of the award period are to be returned to NSF. Therefore, the awardee does not maintain any equity in the award and any excess cash received from NSF over final expenditures is due back to NSF.

B. Equipment

Equipment is charged to expense in the period during which it is purchased instead of being recognized as an asset and depreciated over its useful life. As a result, the expenses reflected in the Schedule of Award Costs include the cost of equipment purchased during the period rather than a provision for depreciation.

Except for awards with nonstandard terms and conditions, title to equipment under NSF awards vests in the recipient, for use in the project or program for which it was acquired, as long as it is needed. The recipient may not encumber the property without approval of the federal awarding agency, but may use the equipment for its other federally sponsored activities, when it is no longer needed for the original project.

C. Inventory

Minor materials and supplies are charged to expense during the period of purchase. As a result, no inventory is recognized for these items in the financial schedules.

D. Income Taxes

The Ohio State University is a component unit of the State of Ohio and is exempt from income taxes under Section 115 of the Internal Revenue Code. It is also exempt from State of Ohio income taxes.

Note 2: NSF Cost Sharing and Matching

Below are the cost share requirements and actual cost share as of September 30, 2009.

NSF Award No.	Cost Sharing Required	(A) Actual Cost Sharing Claimed	(B) Questioned Cost Sharing	Net Cost Sharing (A)-(B)	Over/ (Under)
EEC-0425626 (Center)	\$12,364,522(1)	\$3,201,300	\$263,937	\$2,937,363	\$ 427,159
CHE-0532250 (REEL)	369,000(1)	--	--	--	369,000
HRD-0331560 (LSAMP)	<u>2,099,885</u>	<u>2,173,121</u>	<u>132,136(2)</u>	<u>2,040,985</u>	<u>58,900</u>
Total	<u>\$14,833,407</u>	<u>\$5,374,421</u>	<u>\$396,073</u>	<u>\$4,978,348</u>	<u>\$9,855,059</u>

(1) These amounts are for the entire award period of September 1, 2004 to August 31, 2011 for the Center award and September 1, 2005 to August 31, 2010 for the REEL award.

(2) Questioned cost sharing of \$132,136 coupled with the effect of \$1.3 million in NSF funded questioned costs resulted in a cost share shortfall (i.e. additional NSF funded questioned costs of \$58,900. See Schedules A-2 and B-2.6.

Note 3: Indirect Cost Rates

The University's indirect cost rate is negotiated with the Department of Health and Human Services. The rate is a final rate which is applied to the base of modified total direct costs.

Award Number	Indirect Cost Rate	Base
EEC-0425626 (Center)		
CHE-0532250 (REEL)		
HRD-0331560 (LSAMP)		

Awardee's Comments to Report



Response to Independent Auditors'
Report

National Science Foundation
Awards

EEC-0425626

HRD-0331560

CHE-0532250

March 30, 2011

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Finding No. 1: Inadequate Subaward Monitoring

Recommendation No. 1:

We recommend that NSF's Director of the Division of Institution and Award Support address and resolve the following recommendations that OSU:

- a. Develop and implement risk assessment and monitoring procedures, such as Subawardee Questionnaires and formal Risk Assessment Criteria, and utilize these tools as part of the initial risk assessment and post award monitoring processes of each subawardee;

We concur with this recommendation. OSU revised its subaward procedures in 2005, after the [REDACTED] agreements were put in place, to establish consistency across subawards. The procedures are currently being revised again, to include a formal subawardee risk assessment and clearer directions on specific agreement requirements particularly cost-share documentation and reporting. The outcome of the risk assessment will determine the appropriate level of oversight and monitoring of post-award activities.

- b. Reject subawardee invoices if detail information such as the name and position title of personnel whose effort is charged to the award is not provided to support reimbursable costs and claimed cost share. When such detail is provided, analyze invoices in relation to the activities and personnel associated with the subaward to ensure allowability and applicability of the costs claimed;

We agree that it is important to add more stringent reporting and monitoring procedures for subawardees identified through risk assessment as having inadequate internal controls to ensure allowability and allocability of costs. However, if our risk assessment identifies subawardees as low risk, which would include their being in compliance with the requirements of 2 CFR Part 215 (aka A-133), we believe that our current procedure (which is also the standard practice across the majority of academic institutions) of relying on the A-133 audit process as a primary indicator of adequate compliance procedures is acceptable. As noted below, we will follow up with additional monitoring if the A-133 reports reveal deficiencies.

- c. Request and thoroughly review A-133 audit reports (in addition to or in lieu of Harvester summary reports) and reports from other regulatory agencies and internal auditors for all subawardees as part of the risk assessment review;

We agree. We currently request and review A-133 reports after issuing a subaward. Annually, we follow up with subawardees that have A-133 findings to determine if the findings affect our subawards. This is an essential part of our current risk assessment that takes place during the life of a subaward. To improve our subaward risk assessment, we will review published A-133 audit reports before issuing a subaward. Any concerns surfaced by that review will be addressed before issuing the subaward.

- d. Document the conclusions on Risk Assessment and Subawardee Monitoring Forms;

We concur with this recommendation and will implement it as part of our formal risk assessment process.

- e. Designate supervisory personnel to review risk assessments performed; and

We concur with this recommendation and will implement it as part of our formal risk assessment process.

- f. Follow-up to determine if weaknesses discussed in this report that were identified during subawardee site visits have been adequately resolved and, if not, determine whether greater subaward monitoring is needed.

The University of Akron has provided documentation concerning changes they have implemented in award management to minimize a number of the weaknesses identified in this report. Nonetheless, we will review charges from University of Akron on currently active awards and we will ask for additional information for any charges that appear questionable.

Finding No. 2: Inadequate Controls for Meeting Cost Share Commitments

Recommendation No. 2:

We recommend that NSF's Director of the Division of Institution and Award Support address and resolve the following recommendations that Ohio State University:

- a. Develop a system for identifying and recording cost share as required to comply with federal requirements. To ensure the integrity of claimed cost-sharing and avoid duplicate claiming of costs as both cost-shared and federally-funded, we suggest cost-sharing expenditures be tracked in a separate project account for each NSF award.

We concur with this recommendation. Our PeopleSoft accounting system does identify and record cost share. However, we did not always use the PeopleSoft cost share functionality as designed. To remedy this problem, we have developed new cost-share documentation, which we have used in three training sessions for OSP staff. In addition, we have provided quarterly workshops to the campus community since November 2009.

- b. Develop and implement written policies and procedures to assess and document each subawardee's risk of claiming nonallocable or non-allowable cost sharing expenditures. These policies and procedures should include a process for reviewing cost sharing expenditures claimed by subawardees for allowability and allocability. Expenditures should be reviewed to determine that they are allocable to the awards, provided by the

subawardee's own funds and not other Federal funds, and are claimed only once. These reviews should be of sufficient scope and quality to allow the University to provide reasonable assurance that all costs claimed are accurate, allowable, and properly documented per NSF regulations and OMB Circulars.

We agree with the recommendation that we assess and document a subawardees risk of being able to substantiate their claimed costs and cost-share. In addition, we will ask that all subcontract invoices include a certification stating that, to the best of their knowledge all costs claimed and cost share provided meet all sponsor and award specific terms and conditions.

We are also including in our revised subaward procedures additional monitoring for awards with a higher degree of complexity than a typical research grant (e.g., those that include unusual cost-sharing arrangements, participant support costs, sponsor or cost-share costs in non-typical categories). OSP staff will meet face to face with PIs and project staff as these projects are being established to ensure that everyone is clear on responsibilities, expectations and procedures. Review sessions with PIs and project staff will take place at appropriate intervals over the life of the award.

- c. Provide training, as discussed in Finding No. 5, regarding the correct process for properly tracking, allocating and reporting all cost share costs that are incurred to benefit a project or function, including uncompensated PI effort. Guidance should clearly state that costs associated with a sponsored project, such as principal investigator costs, should be quantified and properly either charged to the project or added to the indirect cost (F&A) base.

We concur with this recommendation and as noted in response to recommendation 2a. we have begun providing such training to the university community. Guidance documentation has also been posted on our website.

- d. Ensure that all "at-risk" cost share identified in this report is adequately met prior to the end of the award.

We concur with this recommendation.

Finding No. 3: Inadequate Controls for Meeting Participant Support Cost Commitments

Recommendation No. 3:

We recommend the NSF's Director of the Division of Institution and Award Support address and resolve the following recommendations that OSU:

- a. Develop and implement written policies and procedures to establish a system for identifying, recording, and monitoring participant support costs as required to comply with federal requirements.

We concur with this recommendation. As noted in the report, the University's accounting system accommodates the recording of participant support costs by using separate projects to segregate non-participant and participant support costs. However, this functionality has not been used consistently. We are reviewing our training materials for both OSP and departmental personnel and will conduct training sessions for staff involved in managing projects that include participant costs. As noted in 2.b above, we will also meet individually with PIs and project staff of awards with non-routine requirements.

However, there are times when establishing multiple project numbers is not practical. For example, for the LSAMP award, OSU's participant support costs were tracked in project 745642. In this award, though, we had participant costs incurred by the other Universities with which we subcontracted. Subcontracts are also often segregated within our accounting system by creating distinct projects – as we did with the LSAMP award to track cost sharing. Establishing unique projects for subaward, non-participant and subaward, participant costs would be extremely unwieldy, so we are required to manually reclass the participant costs from the subawards when reporting.

To mitigate this problem somewhat, we will add to our subaward agreement a requirement to report participant costs as a separate line item on each invoice and we will add an award reporting requirement that participant support costs be calculated and summarized at least annually.

- b. Develop and implement written policies and procedures to assess and document each subawardee's risk of improperly administering, accounting for and claiming participant support costs. These policies and procedures should include a process for reviewing participant support costs claimed by subawardees for allowability and allocability.

We concur with this recommendation and will include participant support costs as one of the parameters that define a complex project. In those cases we will require documentation of participant support costs on subawardee invoices.

- c. Provide training, as further discussed in Finding No. 5, regarding the correct process for properly tracking, allocating and reporting all participant support costs that are incurred to benefit a project or function.

We concur with this recommendation as noted in the response to recommendation 3a. above.

Finding 4 – Inadequate Effort Reporting System to Support Payroll Costs Prior to 2006; Effort Reporting System Improved in 2006 and Subsequent Years.

Recommendation No. 4:

We recommend that NSF's Director of the Division of Institution and Award Support address and resolve the following recommendations that OSU:

- a. Implement procedures to provide that individuals whose effort reports include multiple research projects for more than one PI have the effort report circulated to each of the PI on each federally-funded project reported, and

In such cases we direct the report to the PI overseeing the preponderance of the effort. We will provide additional guidance to all certifiers that in such cases there should be communication to ensure that they collectively agree with the report. Of the more than 6200 effort reports generated in the most recent quarter, less than 5 % involved more than one PI.

- b. Implement procedures which will periodically and formally notify all campus staff involved in the E-Cert certification process of the importance of timely and accurate PI review and certification of effort reports.

We concur with this recommendation and have already established a process. For the last two years we have required an annual agreement whereby certifiers are required to read and acknowledge their responsibilities with regard to timely and accurate effort reporting before accessing effort reports to be certified. This is done each year at the beginning of the effort reporting cycle (currently January for Fall Quarter effort reports). First time certifiers are also required to read and acknowledge the responsibility statement.

In addition, college and department administrators have real-time access to a list of yet to be certified reports within their areas of responsibility and monthly lists are sent to certifiers, department chairs, deans and the provost. They work with college fiscal officers to resolve problems.

It should be noted that the University's Internal Audit department provided invaluable support in effecting the culture change within the University community that was requisite to the improvements we have been able to make.

Finding 5 – Inadequate Policies, Procedures and Training of Personnel Responsible for Compliance with Awardee Requirements.

In our prior recommendation nos. 1 through 3, we recommended that the NSF's Director of the Division of Institution and Award Support address and resolve the following that the University:

- a. Develop and implement written policies and procedures to address the proper administration of cost share, participant support costs and subawards. Existing policies and procedures should be reviewed in relation to federal and grantor requirements, as necessary, to ensure that other compliance areas are not lacking in guidance. While policy statements may be brief, procedural guidance should be sufficient to allow the University to meet the NSF requirement that "Grantees should ensure that costs claimed under NSF grants are necessary, reasonable, allocable, and allowable under the applicable cost principles, NSF policy, and/or the program solicitation."

We concur with this recommendation and have addressed some of our approaches in our responses to recommendations 1 and 3. We are reviewing much of our procedural guidance to ensure that it is sufficiently clear, and robust enough to assure an appropriate level of oversight.

- b. Provide training regarding the existence, implications and implementation of the newly-developed policies and procedures. Training should be provided to all personnel involved with award administration. Participation in training sessions should be encouraged as necessary to ensure that the material is understood and implemented by PIs as well as personnel in OSP and departments administrators.

We concur with this recommendation and, as noted above have already revised our cost-sharing procedures and offered campus wide face-to-face training sessions. We are revising our subaward procedures and will offer training sessions on that topic as soon as it is available. In addition, the Vice President for Research will send periodic communications to all investigators reinforcing the importance of timely and responsive project management.

Schedule of Questioned Costs

National Science Foundation Award No. [REDACTED]
From September 1, 2004 to September 30, 2009

1. Salaries and Wages – Questioned Costs of \$131,654

We are questioning \$131,654 of salaries and wages as follows:

- 11 effort reports were certified by an employee who did not have first-hand knowledge of activities or percent of effort expended on the NSF award as a suitable means of verification as required by Federal regulation, totaling \$79,022.
- 13 effort reports were not certified on a timely basis as required by Federal regulation, totaling \$93,916.

The amount of questioned costs of \$131,654 is net of the \$41,284 of costs which are questioned due to more than one deficiency. (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

Awardee Response

As noted on page 36, we made significant changes to our effort reporting system in 2006. Prior to that time, effort reports were to be certified by department chairs, who could delegate that responsibility. Thus, reports were generally completed by the department Human Resource Professionals (“HRPs”).

From 2004 through 2006 effort certification standards changed as audit findings at other universities (e.g. Northwestern) clarified the grey areas in the effort reporting guidance. At other research institutions, federal auditors determined that “suitable means of verification” roughly equated to “first-hand knowledge”.

As the standards evolved, we began a three year project to upgrade our systems to incorporate the changes prescribed by audit findings. First, the Office of Sponsored Programs worked with the University’s Internal Audit department to highlight the effort reporting process within the University’s risk assessment matrix, with the goal of engaging the University in the enhanced effort reporting process. After extensive discussions with University faculty, the consensus within the University community was that the Principal Investigators (“PI”)/Faculty better met the “first-hand knowledge” audit standard.

Starting in 2006 the University designated PI/Faculty as primary effort certifiers. Under the paradigm still in place, PIs certify their own effort and that of students, postdocs and classified staff working on their projects. Non-PI faculty and professional staff certify their own effort.

Following are the important changes to the effort reporting system that resulted from the involvement of Internal Audit and the University community.

- Developed an effort report tracking process that notifies Chairs, Deans, and the Provost on a monthly basis of uncertified effort reports over 45 days old. Data can be accessed and downloaded real-time.
- Developed formal effort training that is offered to all University departments. The training is available at the customer's place of business or on-site in the Research Administration building
- Re-engineered the personnel expenditure transfer process to electronically recalculate the effort report for recertification
- Redesigned the effort reports to be more intuitive and user-friendly, including drill-down effort detail
- Changed the certifier from Chair/delegate (usually Human Resource Professional), to Principal Investigators, non-PI faculty and Professional staff —certifiers who have the best knowledge of the effort provided
- Changed from three certifications a year to four, and so that reports are generated and made available for certification closer to the period being certified. In July 2010 we began generating reports immediately after the end of the certification period (rather than waiting for two months as had been our practice).

As noted in the report, the improvements to the effort reporting process have been significant. Since we significantly improved our effort system as clarification of certification requirements became available, we are requesting that the questioned charges of \$131,654 be allowed.

2. Fringe Benefits – Questioned Costs of [REDACTED]

OSU claimed fringe benefit costs to NSF pursuant to negotiated rate agreements at rates averaging [REDACTED] of claimed salaries and wages (excluding fellowships and stipends). As a result of questioning the above salaries and wages, we are questioning [REDACTED] of fringe benefits [REDACTED] (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

We are requesting that questioned fringe benefit costs of [REDACTED] be allowed, based on the rationale in item 1 above.

3. Equipment – Questioned Costs of \$43,868

We are questioning \$43,868 of equipment claimed because the equipment purchases exceeding \$5,000 in cost were not included in the NSF budget and were not approved prior to purchase, in violation of OMB Circular A-21.18(b). (See Finding and Recommendation No. 5 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters*.)

The award references cooperative agreement terms and conditions:

<http://www.nsf.gov/pubs/cafatc/cafatc0704.pdf>

1. Significant Project Changes

- (a) Transfer of the project effort (see Article 8);
- (b) Change in objectives or scope (see Article 8);
- (c) Absence or change of PI (see Article 8);
- (d) Change in the amount of cost sharing reflected on Line M of the award budget (see Article 22); or

2. Rearrangements/Alterations aggregating \$25,000 or over (Construction) (see Article 11).

b. Written prior approval from the NSF Program Officer is required for reallocation of funds provided for participant or trainee support (see Article 7).

c. The prior approval requirements identified above (as well as other types of award related notifications stipulated in GPM Exhibit III-1) must be submitted electronically to NSF

We interpret these terms as indicating that there is no prior approval requirement for purchase of unbudgeted equipment. We are requesting that questioned equipment charge of \$43,868 be allowed.

4. Participant Support (Travel) – Questioned Costs of \$7,480 and Reclassification of \$49,107

We are questioning \$7,480 of travel expenses claimed because the cost claimed was not supported by adequate documentation. These costs represented an advance to the award's principal investigator for foreign travel and subsistence while studying at another university during the summer of 2008. We also reclassified \$49,107 of foreign travel that represented a budgeted component of participant support. (See Finding and Recommendation No. 3 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters*.)

To save money during an extended trip to [REDACTED] sublet a room for 88 nights at \$60 per night (total \$5,280) and claimed only \$25 a day for meals (total \$2,200). Our travel department requested and received a receipt for the sublet room in the amount of

\$5,280. The receipt provided as proper documentation for the expense was signed by the [REDACTED], and by the [REDACTED] (a copy is included as Attachment 2). We feel this documentation is adequate to support the expense, especially since the federal per diems for [REDACTED] for the time period of the trip were \$191 a day for lodging and \$155 for meals (\$346 per day or \$30,448 for the entire period). We believe that that the questioned travel costs of \$7,480 are allowed.

We concur with the reclassification of the \$49,107 of foreign travel costs to participant support costs. The participant support travel costs in the original budget (\$85,000) were established in their own project but were coded as international travel rather than participant costs so that we could ensure compliance with travel requirements.

5. Participant Support – At-Risk Costs of \$223,131

We have identified \$223,131 of “at-risk” participant support costs that could become questioned costs at the end of the award. “At-risk” participant support costs represent the amount of required participant support costs that has not been met at the time of the audit, but which the awardee still has time to meet before the end of the award period. Participant support costs were budgeted for foreign travel, stipends, subsistence and other costs in the amount of \$272,238 for the period from September 1, 2004 through August 31, 2011. The “at-risk” amount represents budgeted participant support costs of \$272,238 reduced by reclassified and accepted travel costs of \$49,107 net of \$7,480 of questioned travel expenses that were questioned because the cost claimed was not supported by adequate documentation. These costs represented an advance to the award’s principal investigator for foreign travel and subsistence while studying at another university during the summer of 2008. Accordingly, as of September 30, 2009, only \$41,627 of accepted participant support costs have been incurred (\$49,107 claimed less \$7,480 questioned). After considering the \$7,480 in questioned costs, the balance of \$223,131 is considered “at risk” because it is unlikely that these costs will be incurred by the end of the award as required by the NSF award agreement. (See Finding and Recommendation No. 3 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

The majority of the participant support costs were provided as supplements (primarily REU supplements), though there were some participant support costs in the revised original award (\$85,000 for participant travel). As noted on above, the \$85,000 was established in a separate project and budgeted as foreign travel to ensure compliance with federal requirements. Our system does not allow us to designate a budget as both participant costs and foreign travel.

As shown on the attached spreadsheet (Attachment 3) we believe that we have identified all participant support costs for the award. We have not met the budgeted level of participant support costs, because there is still a balance in the foreign travel/participant support project. If these funds are not used before the end of the project, the balance will

be returned to NSF. Given that budgets are estimates of costs to be incurred, some variation between costs proposed and actually incurred in a budget category (especially in a multi-year award) is not unexpected. We believe that participant support cost in question will be resolved before the end of the award and the funds will not be at risk.

6. Other – Questioned Costs of \$487

We are questioning \$487 of other costs because 1 of the sampled transactions was for laboratory animals, which was not related to the project and was inadvertently charged to the award. (See Finding and Recommendation No. 5 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

We concur with questioning this cost. The project did not use animals. The charges were posted in error and have been removed.

7. Indirect Costs – Questioned Costs of \$ [REDACTED]

OSU claimed indirect costs to NSF based on applying a [REDACTED] rate against claimed Modified Total Direct Costs (MTDC). As a result, based upon questioning of salaries and wages, fringe benefits, we are questioning [REDACTED] of indirect costs [REDACTED] (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

We have requested above that the questioned salary and fringe benefit costs of \$157,802 be allowed. The associated indirect costs would also be allowable.

8. Cost Share – At-Risk Costs of \$9,427,159

The \$9,427,159 of cost sharing “at risk” represents the additional cost sharing necessary to comply with the award budget. “At-risk” cost sharing is the amount of required cost sharing that has not been met at the time of the audit, but which the awardee still has time to meet before the end of the award period. The amount is calculated as follows:

Cost sharing required	<u>\$12,364,522</u>
Cost sharing claimed	3,201,300
Less: Unallowable and	
Unsupported cost share	<u>263,937</u>
Cost sharing allowed	<u>2,937,363</u>
Difference between cost sharing	
required and allowed	<u>\$9,427,159</u>

We are working with NSF on the cost-share requirements for this award. We believe that the at risk concerns will be resolved before the project ends.

The unsupported cost sharing amounts are based on the following:

- \$26,345 of costs for picnics, parties, meals, and expedited VISA processing fees associated with bringing foreign nationals to the United States,
- \$27,549 of postage, telephone and related costs normally included in the University's indirect cost rate, and
- \$210,043 of transfers from other accounts for which support has not been provided to establish their allowability.

As noted in the report, not all of the cost-share for this award was recorded using the PeopleSoft cost share functionality within the university's general ledger. This precluded some of our normal reviews for allowability. We concur with the disallowance of the \$26,329 for meals and expedited visa approvals.

We believe that the \$27,549 of costs that are normally considered indirect cost (postage, phone, mail) are allowable on this award in accordance the "Major project" definition in 2 CFR Part 220 (aka A-21). This award required substantial administrative activity to make travel arrangements, meeting arrangements, and track a large numbers of program participants.

Within the \$210,043 of unsupported costs transfers is \$45,000 of Accounts Payable invoices. The \$45,000 was disallowed as unsubstantiated AP accruals. However, it actually consisted of five vouchers for \$9,000 each that were located and provided for review. They are included again as Attachment 4.

We request that the unsupported cost share amount be reduced to \$191,372.

National Science Foundation Award No. HRD-0331560 (LSAMP)

From November 1, 2003 to September 30, 2009

1. Salaries and Wages – Questioned Costs of \$84,804

We are questioning \$84,804 of salaries and wages as follows:

- 5 effort reports were certified by an employee who did not have first-hand knowledge of activities or percent of effort expended on the NSF award as a suitable means of verification as required by Federal regulation, totaling \$53,658.
- 4 effort reports were not certified on a timely basis as required by Federal regulation, totaling \$48,796.
- 1 payroll transaction for which supporting effort reports or timesheets were not available, totaling \$7,850.

The amount of questioned costs of \$84,804 is net of the \$25,500 of costs which are questioned due to more than one deficiency. (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

As noted on page 36, we made significant changes to our effort reporting system in 2006. Prior to that time, effort reports were to be certified by department chairs, who could delegate that responsibility. Thus, reports were generally completed by the department Human Resource Professionals (“HRPs”).

From 2004 through 2006 effort certification standards changed as audit findings at other universities (e.g. Northwestern) clarified the grey areas in the effort reporting guidance. At other research institutions, federal auditors determined that “suitable means of verification” roughly equated to “first-hand knowledge”.

As the standards evolved, we began a three year project to upgrade our systems to incorporate the changes prescribed by audit findings. First, the Office of Sponsored Programs worked with the University’s Internal Audit department to highlight the effort reporting process within the University’s risk assessment matrix, with the goal of engaging the University in the enhanced effort reporting process. After extensive discussions with University faculty, the consensus within the University community was that the Principal Investigators (“PI”)/Faculty better met the “first-hand knowledge” audit standard.

Starting in 2006 the University designated PI/Faculty as primary effort certifiers. Under the paradigm still in place, PIs certify their own effort and that of students, postdocs and classified staff working on their projects. Non-PI faculty and professional staff certify their own effort.

Following are the important changes to the effort reporting system that resulted from the involvement of Internal Audit and the University community.

- Developed an effort report tracking process that notifies Chairs, Deans, and the Provost on a monthly basis of uncertified effort reports over 45 days old. Data can be accessed and downloaded real-time.
- Developed formal effort training that is offered to all University departments. The training is available at the customer's place of business or on-site in the Research Administration building
- Re-engineered the personnel expenditure transfer process to electronically recalculate the effort report for recertification
- Redesigned the effort reports to be more intuitive and user-friendly, including drill-down effort detail
- Changed the certifier from Chair/delegate (usually Human Resource Professional), to Principal Investigators, non-PI faculty and Professional staff —certifiers who have the best knowledge of the effort provided
- Changed from three certifications a year to four, and so that reports are generated and made available for certification closer to the period being certified. In July 2010 we began generating reports immediately after the end of the certification period (rather than waiting for two months as had been our practice).

As noted in the report, the improvements to the effort reporting process have been significant. Since we significantly improved our effort system as clarification of certification requirements became available, we are requesting that of the questioned charges \$76,954 be allowed. We concur that the \$7,850 in salary charges for which we could not provide an effort report should remain in question.

2. Fringe Benefits – Questioned Costs of [REDACTED]

OSU claimed fringe benefit costs to NSF pursuant to negotiated rate agreements at rates averaging [REDACTED] of claimed salaries and wages. As a result of questioning the above salaries and wages, we are questioning [REDACTED] of fringe benefits [REDACTED]. (See Finding and Recommendation No. 4 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

We are requesting that \$18,205 of the questioned fringe benefit costs of be allowed, and that \$1,860 (the fringe benefits associated with the in question \$7,850 salary charge) remain in question based on the rationale in item 1 above.

3. Participant Support – Questioned Costs of \$1,142,684

We are questioning \$1,142,684 of participant support costs claimed because we are

unable to determine whether the costs were incurred as committed in the NSF award. (See Finding and Recommendation No. 3 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

We did not initially require invoices with the level of detail included in NSF's budget forms. We requested from our subawardees a final report with participant support costs broken out as a separate category. Based on these reports, we incurred participant costs of \$1,472,541 (Attachment 5) Given this information, we believe that we have incurred more participant costs than committed in the budget and that the \$1,142,684 is not in question.

4. Subcontracts – Questioned Costs of \$52,394

The following costs are questioned due to lack of supporting documentation at the subawardee, Akron University.

Hospitality Zip Cards improperly documented	\$19,300
Scholarships without supporting documentation	31,550
Credit card payments without receipts	1,044
Missing invoice for travel	<u>500</u>
Total	<u>\$52,394</u>

(See Finding and Recommendation No. 1 in the *Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

The University of Akron provided the following explanation for their lack of documentation:

This is in response to the NSF audit report for The University of Akron's LSAMP award under the direction of Principal Investigator Paul Lam. When this audit was conducted, much of the documentation requested by NSF was to be kept by the department, specifically the PI himself. Unfortunately, Dr. Lam is deceased and it was found that his office was cleared out. No documentation had been kept by the department regarding this grant.

During the time period of this award, documentation for the original scholarship applications, documentation as to why each candidate was selected for the scholarship, visa card receipts and zip card receipts were not available because it was the department's responsibility to be accountable for them. In the place of the itemized receipts and original documentation, the Controller's Office did provide zip card statements, general ledgers, minority statuses, GPAs for each student and student account detail which showed where the funds had been applied and how they were spent.

As the report states, we agree that some funds placed on the zip cards were spent on hospitality transactions. Without the itemized receipts, we cannot assure that they were not for single-customer purchases. In regards to the game time minutes, we can assure that those minutes were not purchased with NSF funds from this award. The zip card statement for Shirza Khan shows game time minutes being added to his zip card, however these minutes were not related to the \$500 deposited for NSF award purposes. Furthermore,

these minutes purchased are clearly tracked separately from the \$500 deposit made on 6/13/06. The statement shows what transactions reduced the \$500 deposit and game minutes were not part of that.

Currently the Controller's Office reviews A-21 expenditures, Fly America allowability and visa card expenditures related to travel and hospitality, all on a monthly basis. Going forward we are working on changing the University's current Visa card policy to mandate that all receipts will be centralized within central administration offices. By doing this the Controller's Office will be able to review each itemized receipt for allowability on the sponsored project. Talks have already begun with the University of Akron's Internal Audit Office to make the steps forward to change this policy along with the Purchasing Office.

Overall, The Controller's Office at The University of Akron has many policies and business practices in place today that did not exist during the time of the LSAMP award. Training is also being provided to Principal Investigators as well as Research Administrators to increase their awareness of the need for documentation and to strengthen internal controls. Due to the increase in monitoring of activities, training and current policies in place, the lack of deficiencies and compliance practices have been greatly minimized.

The University of Akron believes they have provided all of the documentation typically necessary to justify the \$31,500 in scholarship expenses. We are requesting that the scholarship costs of \$31,500 be allowed and that the other costs be reassessed for potential allowability.

5. **Indirect Costs – Questioned Costs of ██████████**

OSU claimed indirect costs to NSF based on applying a ██████████ rate against claimed Modified Total Direct Costs (MTDC). As a result, based upon questioning of ██████████ of salaries and wages and fringe benefits, we are questioning ██████████ of indirect costs ██████████ (See Finding and Recommendation No. 4 in the *Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

We have requested above that the questioned salary and fringe benefit costs of \$95,199 be allowed. The associated indirect costs \$29,512 would also be allowable, with only \$3,009 remaining in question.

6. **Cost Share – \$1.3 Million in Unmet Cost Share and Unallowable Costs Claimed as Cost Share of \$160,105, Results in Questioning \$73,019 of NSF-Funded Costs**

Included in the \$2,173,121 of cost share expenses claimed by OSU were disallowed costs of \$160,105 that were not supported by effort reports. Of these disallowed costs, \$118,192 were claimed by an OSU subawardee, the University of Akron (see finding no. 1) and consisted of salaries (\$72,251), fringe benefits (\$17,972) and the related indirect costs (\$27,969). The remaining \$41,913 of disallowed costs were claimed by OSU and consisted of salaries (\$25,101), fringe benefits (\$6,893) and the

related indirect costs (\$9,919).

As detailed in Schedule A-2, OSU claimed cost-share expenses of \$2,173,121. The cost share requirement was 100% of NSF-funded costs. In accordance with GPM 333.3, and OSU's policies, grantees must cost share at the level of cost sharing included in the award. Because of the cost share short-fall, the University did not cost share allowable costs at the level required (or \$3.49 million) in the award. We calculated excess funding NSF provided as a result of inadequate cost sharing as follows:

Maximum Percentage of NSF Funding to Total Project Costs

NSF Share Budgeted	\$3,499,123
OSU Cost-sharing Required	<u>3,499,123</u>
Total Project Costs	<u>\$6,998,246</u>
Maximum NSF Share of Award Costs (NSF share-\$3,499,123/Total project costs-\$6,998,246)	<u>50%</u>

Audit Results

Claimed NSF Costs – Questioned NSF Costs (\$3,491,292 - \$1,332,508)	\$2,158,784
Claimed Cost-sharing – Unacceptable cost sharing (\$2,173,121- \$160,105)	<u>2,013,016</u>
Adjusted Project Costs	<u>\$4,171,800</u>

Questioned Costs

Adjusted Project Costs	\$4,171,800
Less: Maximum NSF Share (50% of \$4,171,800)	<u>2,085,900</u>
Adjusted OSU Required Cost Share	2,085,900
Accepted OSU Supported Cost Share	<u>2,013,016</u>
Cost Share Shortfall – Results in Questioned NSF costs	<u>\$ 72,884</u>

Note: The amount of questioned cost sharing shortfall will ultimately depend on the amount of questioned direct NSF funds and cost share sustained which will be determined by NSF.

As noted in the response to Items 1-3 above, OSU has significantly improved its effort system as clarification of certification requirements became available. Therefore, we are requesting that the disallowed salary, fringe benefit and F&A cost-share charges of \$41,913 be allowed.

The University of Akron has significantly improved its effort reporting system and provided the following information.

During the time of this award all effort reporting was done manually, by paper. Effort reports were required for all sponsored activities from each department. After a further

analysis it was found that for the cost shared salaries that were reported we do have effort reports for \$23,311 of the total. We could not find effort reports for \$27,054 of cost shared salaries. There was \$7,000 of cost shared salaries that did not require effort reports because they are hourly employees and had to fill out a time card, which is how their effort was recorded. Of the other cost share reported we have effort reports that do not correctly identify this project as where effort was placed totaling \$16,807 – unfortunately during this time effort reports were signed by department heads and were not always 100% accurate due to the fact that each individual did not certify the report themselves.

However, in Fall 2009, The University of Akron rolled out an electronic certification system, ecrct, that now requires each individual charged to sponsored research to certify their effort by the deadline. Effort cards are generated three times a year, Fall, Spring and Summer. There are now official University Policies and Controller's Office Procedures regarding effort reporting. We believe this new ecrct system greatly improves our tracking and certification of effort on all current and future awards.

Currently, any award that The University of Akron has that includes a cost share commitment is monitored very closely in great detail. Each item is recorded within the financial system to support that commitment. Grant accountants now perform a quarterly review of the cost share expenditures for each sponsored project and are required to keep extensive documentation. These requirements for monitoring did not exist during the timeframe of the award.

Overall, The Controller's Office at The University of Akron has many policies and business practices in place today that did not exist during the time of the LSAMP award. Training is also being provided to Principal Investigators as well as Research Administrators to increase their awareness of the need for documentation and to strengthen internal controls. Due to the increase in monitoring of activities, training and current policies in place, the lack of deficiencies and compliance practices have been greatly minimized.

The University of Akron did not include F&A costs on the cost share it reported (Attachment 6), so the 'related indirect costs (\$27,969)' noted above should not be included in the unallowable costs total. Attachment 7 is a spreadsheet showing the \$30,311 of cost-shared effort for which supporting documentation (effort reports or time cards) is available. Attachment 8 shows a revised calculation of the unallowable costs, and indicates that the unallowable amount for the University of Akron should be \$52,334 (removing F&A costs plus the salary and benefits charges for which effort reports or time cards are available).

The audit noted that ...\$25,922 of unexpended award funds were belatedly identified and returned to NSF March 22, 2011... The refunds were received and recorded over a period of months. However, to minimize potential confusion, we elected to wait until all of the subawardees had closed out their subawards before sending a single check to NSF.

**National Science Foundation Award No. CHE-0532250 (REEL)
From November 1, 2003 to September 30, 2009**

1. Salaries and Wages – Questioned Costs of \$32,734

We are questioning \$32,734 of salaries and wages representing 6 effort reports which were not certified on a timely basis as required by Federal regulation. (See Finding and Recommendation No. 4 in the *Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

As noted on page 36, we made significant changes to our effort reporting system in 2006. Prior to that time, effort reports were to be certified by department chairs, who could delegate that responsibility. Thus, reports were generally completed by the department Human Resource Professionals (“HRPs”).

From 2004 through 2006 effort certification standards changed as audit findings at other universities (e.g. Northwestern) clarified the grey areas in the effort reporting guidance. At other research institutions, federal auditors determined that “suitable means of verification” roughly equated to “first-hand knowledge”.

As the standards evolved, we began a three year project to upgrade our systems to incorporate the changes prescribed by audit findings. First, the Office of Sponsored Programs worked with the University’s Internal Audit department to highlight the effort reporting process within the University’s risk assessment matrix, with the goal of engaging the University in the enhanced effort reporting process. After extensive discussions with University faculty, the consensus within the University community was that the Principal Investigators (“PI”)/Faculty better met the “first-hand knowledge” audit standard.

Starting in 2006 the University designated PI/Faculty as primary effort certifiers. Under the paradigm still in place, PIs certify their own effort and that of students, postdocs and classified staff working on their projects. Non-PI faculty and professional staff certify their own effort.

Following are the important changes to the effort reporting system that resulted from the involvement of Internal Audit and the University community.

- Developed an effort report tracking process that notifies Chairs, Deans, and the Provost on a monthly basis of uncertified effort reports over 45 days old. Data can be accessed and downloaded real-time.
- Developed formal effort training that is offered to all University departments. The training is available at the customer’s place of business or on-site in the Research Administration building

- Re-engineered the personnel expenditure transfer process to electronically recalculate the effort report for recertification
- Redesigned the effort reports to be more intuitive and user-friendly, including drill-down effort detail
- Changed the certifier from Chair/delegate (usually Human Resource Professional), to Principal Investigators, non-PI faculty and Professional staff —certifiers who have the best knowledge of the effort provided
- Changed from three certifications a year to four, and so that reports are generated and made available for certification closer to the period being certified. In July 2010 we began generating reports immediately after the end of the certification period (rather than waiting for two months as had been our practice).

As noted in the report, the improvements to the effort reporting process have been significant. Since we significantly improved our effort system as clarification of certification requirements became available, we are requesting that the questioned charges of \$32,734 be allowed.

2. **Fringe Benefits – Questioned Costs of [REDACTED]**

OSU claimed fringe benefit costs to NSF pursuant to negotiated rate agreements at rates averaging [REDACTED] of claimed salaries and wages. As a result of questioning the above salaries and wages, we are questioning [REDACTED] of fringe benefits [REDACTED] (See Finding and Recommendation No. 4 in the *Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

We are requesting that questioned fringe benefit costs of [REDACTED] be allowed, based on the rationale in item 1 above.

3. **Indirect Costs - Questioned Costs of [REDACTED]**

OSU claimed indirect costs to NSF based on applying a rate of [REDACTED] against claimed Modified Total Direct Costs (MTDC). As a result, based upon questioning of [REDACTED] of salaries and wages and fringe benefits, we are questioning [REDACTED] of indirect costs. (See Finding and Recommendation No. 4 in the *Independent Auditors' Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

We have requested above that the questioned salary and fringe benefit costs of \$157,802 be allowed. The associated indirect costs would also be allowable.

4. **Cost Share – At-Risk Costs of \$369,000**

The \$369,000 of cost sharing “at risk” represents the cost sharing necessary to comply with the award budget. “At risk” cost sharing is the amount of required cost sharing that has not been met at the time of the audit, but which the awardee could still meet before the end of award period. The amount is calculated as follows:

Cost sharing required	\$369,000
Cost sharing claimed	-
Less: Unsupported cost share	-
Cost sharing allowed	_____ -
Difference between cost sharing required and allowed	<u>\$369,000</u>

Cost sharing of \$369,000 is “at risk” because these costs, committed to in the NSF-approved award budget, have not been identified, accounted for or claimed as cost share, and therefore may not have been incurred. Cost share of \$369,000 includes \$4,000 to be provided by a subrecipient with the remainder to be provided by OSU. (See Finding and Recommendation No. 2 in the *Independent Auditors’ Report on Internal Control Over Financial Reporting and on Compliance and Other Matters.*)

We question the above calculation because our proposal committed \$50,000 - \$75,000 for the center director one time only, not per year (the intent was to provide additional support to get the center established and running as quickly as possible help get the center). The relevant section of the proposal, from FastLane is included as Attachment 1. Thus our interpretation and intent is that the committed cost share is between \$175,000 and \$190,000.

As noted on page 26, we believe the cost share committed was \$175,000 to \$190,000. We are working with NSF to reallocate cost-share contributions to different categories. We believe that any potential issues will be resolved before the project ends and that the required cost share will be met.

Status of Prior Audit Findings

Status of Prior Audit Findings

The University has had prior A-133 audit findings identifying deficiencies in payroll controls, asset management and compilation of schedules of federal expenditures. Also, internal control deficiencies have been identified in the areas of grants and financial management, with specific reference to journal entry approvals, grant oversight, and a decentralized environment. The University's Internal Audit Department has also conducted audits in several cost-related areas and specifically covered the subjects of effort reporting, cost share and cost transfers. A summary of the specific findings applicable to the audited NSF awards and their status as resolved or continuing follows:

<u>Finding</u>	<u>Status</u>
Findings from the fiscal year 2009 A-133 audit:	
1. Inadequate controls over the automated PeopleSoft payroll system	Resolved
2. Inaccurate schedule of expenditures of federal awards	Resolved
3. Inaccurate recording of cost share	Continuing
Findings from the fiscal year 2009 internal audit:	
1. Inadequate documentation for the direct charging of costs typically classified as indirect	Continuing
Findings from the fiscal year 2007 internal audit:	
1. Awards with committed cost share were not fulfilling the cost share commitment in proportion to the time elapsed	Continuing
2. Cost transfers initiated more than 90 days after the effective date did not provide a justification for the transfer request	Resolved
Findings from the fiscal year 2005 internal audit:	
1. Inappropriate delegation of time and effort authorizations	Resolved
2. Lack of suitable means of verification for those certifying effort reports	Resolved
3. Delinquent certifications (certifications more than 45 days after the end of the quarter)	Resolved
4. Inaccurate certifications (certifying effort totaling more than 100%)	Resolved
5. Failure to prepare journal entries to account for effort adjustments	Resolved
6. Inadequate training in the area of effort reporting	Continuing

Our audit period began November 1, 2003, with the commencement of Award No. HRD-0331560 (LSAMP). Accordingly, we tested the status of the above findings to determine whether they impacted the NSF awards in years subsequent to the period of initial audit.

HOW TO CONTACT
THE OFFICE OF INSPECTOR GENERAL

Internet
www.oig.nsf.gov

Email Hotline
oig@nsf.gov

Telephone
703-292-7100

Toll-Free Anonymous Hotline
1-800-428-2189

Fax
703-292-9158

Mail
Office of Inspector General
National Science Foundation
4201 Wilson Blvd., Suite 1135
Arlington, VA 22230