



National Science Foundation • Office of Inspector General
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MEMORANDUM

DATE: September 28, 2012

TO: Mary S. 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: University of California, Santa Barbara
Audit of Incurred Costs for National Science Foundation Awards for
The Period January 1, 2008 to December 31, 2010
Report No. 12-1-005

Attached please find the final report for the University of California, Santa Barbara Audit of Incurred Costs for National Science Foundation Awards for the Period January 1, 2008 to December 31, 2010. The objectives of this performance audit were to determine whether (1) UCSB has adequate systems in place to account for and safeguard NSF funds, and (2) costs claimed by UCSB for its NSF awards were reasonable, allowable, and allocable and in conformity with NSF award terms and conditions and applicable federal financial assistance award requirements.

Our audit questioned \$6,325,483 of the costs claimed by UCSB to NSF because UCSB did not comply with Federal and NSF award requirements. Specifically, we found \$1,913,474 of overcharged summer salaries; \$2,821,676 of excess Federal Cash disbursements resulting from UCSB not fulfilling its grant cost share requirements; \$496,466 of inappropriate cost transfers into NSF awards; \$473,465 of indirect cost overcharges to NSF grants; \$440,148 of unallowable costs charged to NSF grants; and the utilization of \$180,255 of remaining fellowship funds for non-award purposes.

In accordance with Office of Management and Budget Circular A-50, *Audit Followup*, please coordinate with our office during the six month resolution period 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.

If you have any questions, please contact Laura Koren, Director, External Audits at (703) 292-8456.

Attachment

cc: Alex Wynnyk, Branch Chief, CAAR

University of California, Santa Barbara

**Audit of
Incurred Costs
For**

**National Science Foundation Awards
For the Period January 1, 2008 to December 31, 2010**

**National Science Foundation
Office of Inspector General**

**September 28, 2012
OIG 12-1-005**



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INTRODUCTION

The National Science Foundation (NSF) is an independent federal agency whose mission is “to promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense.” To support this mission, NSF funds research and education across all fields of science and engineering, primarily through grants and cooperative agreements to more than 2000 colleges, universities, and other institutions throughout the United States.

NSF makes awards to external entities – primarily universities, consortia of universities or nonprofit organizations. One such award recipient is the University of California, Santa Barbara.

UCSB is a public research university and is one of the 10 general campuses of the University of California system. The University was originally founded in 1891 and joined the University of California system in 1944.

UCSB is a comprehensive university, with more than 200 majors, degrees, and credentials offered from its five schools and Graduate Division. Based on Fall 2011 enrollment figures, UCSB is the 6th-largest in the University of California system, with 18,620 undergraduate and 3,065 graduate students. UCSB was recently ranked 42nd among "National Universities" and 10th among public universities by *U.S. News & World Report*. The university was also ranked 29th worldwide in 2010-2011 by the *Times Higher Education World University Rankings*. UCSB houses twelve national research centers, including the renowned Kavli Institute for Theoretical Physics, which is funded by the National Science Foundation. Indeed, UCSB receives significant funding from NSF. In Federal Fiscal Year 2011, UCSB had 451 active NSF awards that totaled \$279,583,861. Thus, UCSB was among the top 30 largest NSF award recipients.

In support of the NSF mission,¹ the NSF-OIG conducts independent and objective audits, investigations, and other proactive reviews, including the review of OMB-Circular A-133 audit reports of NSF grantees², to promote the economy, efficiency, effectiveness, and safeguarding the integrity of NSF programs and operations.

During one of our proactive reviews, we noted that the University of California System’s Fiscal Year 2009 OMB-Circular A-133 (A-133) audit report contained a finding related to untimely cost transfers. Finding 09-01 noted that the University did not follow its own policies and procedures because cost transfers took place past the 120 days required by the University policy. This finding referenced \$100,000 of untimely cost transfers related to NSF Award SCIO503944. This audit report also revealed that untimely cost transfers were a consistent issue for the

¹ For more information about NSF see the following website – <http://www.nsf.gov>

² Grantee – An organization or other entity that receives a grant and assumes legal and financial responsibility and accountability both for the awarded funds and for the performance of the grant-supported activity.

University for fiscal years 2008 through 2009, and that the A-133 auditors recommended that the University enhance its focus on achieving timely cost transfers to ensure compliance with the University and federal guidelines.

Because the University of California A-133 audit report finding for untimely cost transfers remained unresolved for several years and specifically referenced NSF, and because UCSB is one of the largest recipients of NSF award dollars, NSF selected UCSB for audit. Our audit of UCSB for the period January 1, 2008 through December 31, 2010 encompassed \$144,041,463.25 of costs claimed by UCSB to NSF for 604 active NSF awards.

Audit Results – \$6.3 Million Is Questioned Because UCSB Did Not Comply with Federal and NSF Award Requirements

Our audit questioned \$6,325,483 of the costs claimed by UCSB to NSF because UCSB did not comply with Federal and NSF award requirements. Specifically, we found \$1,913,473 of overcharged summer salaries; \$2,821,676 of excess Federal Cash disbursements resulting from UCSB not fulfilling its grant cost share requirements; \$496,466 of inappropriate cost transfers into NSF awards; \$473,465 of indirect cost overcharges to NSF grants; \$440,148 of unallowable costs charged to NSF grants; and utilizing \$180,255 of remaining fellowship funds for non-award purposes. We found that the University had a practice of charging untimely and unrelated costs into its federal awards. This practice continued at the University throughout our audit period and resulted in significant amounts of questioned costs, as outlined in our report Findings.

Finding 1: Over \$1.9 Million of Overcharged Summer Salaries

UCSB did not comply with either federal regulations and NSF award requirements nor its own policies and procedures that impose specific guidelines for salaries, wages and fringe benefit charges to federal awards. Our audit found that UCSB systematically overcharged faculty summer salaries totaling \$1,913,473 during the months of June, July, August, and September from 2008 to 2010.

According to UCSB policy, faculty are allowed to supplement their academic year salaries by working during the summer months. Faculty who choose to work during the summer can earn up to three months' salary in addition to their normal compensation earned during the academic year.³ However, we found that UCSB's system for allocating summer salaries to its NSF awards is not based on actual work performed on those NSF awards by faculty during the summer period.

³ Academic year appointments are generally considered to be nine months in duration. Consequently, the appointee earns 1/9 annual salary for each month worked. Thus, working up to three summer months could earn the employee an additional three months, or 3/9, the annual salary amount of additional compensation.

Instead, UCSB charged summer salary costs to its NSF awards based on a complex series of mathematical calculations that seek to charge the maximum salary budgeted for the NSF award while distributing a monthly salary costs over a summer period that does not coincide with exact calendar months. In 115 cases, we found amounts charged to NSF for summer salaries exceeded 100 percent of the respective employees' actual salaries. UCSB personnel explained that the Personnel Activity Reports (PARS) for summer periods, which by University policy should reflect actual labor effort worked, do not reflect the actual distribution of employee labor effort, but rather reflect the mathematical allocation of salaries to the summer compensation period. Thus, UCSB's PARS do not provide reliable support for the labor costs UCSB charged to its NSF awards for faculty summer salaries.

2 Code of Federal Regulations (CFR) 220 (formerly Office of Management and Budget Circular A-21), *Cost Principles for Educational Institutions*, Section J, Number 10, states that "charges for work performed by faculty members on sponsored agreements during the summer months or other period not included in the base salary period will be determined for each faculty member at a rate not in excess of the base salary divided by the period to which the base salary relates." "In no event will charges to sponsored agreements, irrespective of the basis of computation, exceed the proportionate share of the base salary for that period. This principle applies to all members of the faculty at an institution." NSF Award and Administrative Guide, Chapter V, Allowability of Costs, Section 1, Salaries, Wages, and Fringe Benefits, also indicates that "salary is to be paid at a monthly rate not in excess of the base salary divided by the number of months in the period for which the base salary is paid."

Additionally, 2 CFR 220 requires certification of labor effort/activity contributed by employees on Federal awards. Specifically, paragraph J.10.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." 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 ... " Accordingly, a timely certification is necessary to provide reliable support for sponsored award labor charges.

Despite these requirements, the University of California established policies and procedures that are inconsistent with the federal policy and NSF guidelines. Specifically, the University of California Office of the President (UCOP) issued the Academic Personnel Manual (APM), Section 600, Appendix 1, which includes Guidelines for Payment of Additional Compensation to Academic-Year Appointees During the Summer. UCSB follows the APM, which specifies that when the maximum period of service is to be 1/3 of the summer period, then the maximum allowable compensation for one service month is 1/9 of the annual salary rate. The APM further provides that when the maximum period of service is to be 2/3 or the full summer service period, the monthly payment installment for those months may exceed 1/9 of the annual rate; however, total compensation for that period may not exceed 2/9 or 3/9 of the annual salary rate, regardless of the amount paid in a particular month.

The APM also specifies that if the length of the service period for the summer will be indeterminate or irregular, a daily rate should be applied to summer salary calculations. However, this daily rate is based on a 19 day month rather than the actual number of days in a summer month. Using 19 working days as the base for faculty summer salaries resulted in many monthly salary charges to NSF exceeding 1/9 of the annual rates. In fact, the effective monthly salary goes higher for each additional working day in a month where there are more than 19 days. As a result of understating the actual number of work days in a given month, monthly salaries allocated to NSF awards during the summer months were often greater than the 1/9 annual amount one would expect, and ranged as high as 21 percent more than the expected amount. The APM includes a table showing the salary factors to be used when calculating summer salary for federal awards. Indeed, such salary rates are unreasonable and are inconsistent with the Federal requirements as found in 2 CFR 220, Section J.

Number of Days In Summer Month	Factor For Calculating Summer Salary	Increase in Salary Base Rate
20 days	1.0526	+.0526
21 days	1.1053	+.1053
22 days	1.1579	+.1579
23 days	1.2105	+.2105
Specific Inflated Daily Rates		

Source: UCOP, Academic Personnel Manual, Section 600, Appendix 1

Moreover, our audit found, that although the UCOP policy set specific parameters on the use of this daily rate salary calculation (e.g., it should only be used for part-time employees or when the labor effort expended during the summer service period will be irregular), most faculty summer salaries were calculated using the summer salary factors listed above. We found that 30 percent of summer salary charges to NSF awards during the three summers in our audit period were for exactly 2/9 of an employee's annual salary, indicating that each faculty member worked exactly two summer months on their respective NSF awards in these years. However, UCSB's certified PARs did not support this labor cost allocation.

To illustrate, UCSB provided a certified PAR for a particular employee covering the summer 2008 term. According to the PAR, this employee worked 59 percent of his summer time on an NSF award and 41 percent on another project. However, UCSB payroll records show that \$21,978, two months of the employee's \$10,989 monthly salary, was charged to the NSF award. Thus, while the PAR states that the employee worked 59 percent of his summer effort on the NSF award, NSF was charged exactly 2/9th labor costs rather than what the employee actually worked on the award. Furthermore, based on the monthly day factors contained in APM 600, we determined that this employee's salary was allocated to the NSF award based on 11 work days in June 2008, 23 days in July 2008, and 4 days in August 2008. Although UCSB made these

specific monthly allocations, we were told faculty do not prepare daily or monthly PARs. Thus, UCSB could not provide documentation of actual days worked on the NSF awards that were charged these costs.

When we asked UCSB personnel to explain this, and other similar discrepancies, we were told that the PARs do not support actual allocation of labor effort, as stated on the PAR certification. Rather, the PARs reflect the mathematical operation of distributing 3/9 of each employee's annual salary over the summer period and allocating 2/9th of that summer salary to NSF awards. Thus, instead of charging actual incurred summer salary costs to NSF awards based on labor effort expended by its faculty on those federal awards, the University utilized these salary calculation factors during the summer periods in order to charge the maximum 2/9th salary to its NSF awards regardless of the actual labor effort expended by faculty on the NSF awards.

We also found that when a faculty person worked more than the policy-defined 19 working days in a summer month, that faculty person received salary payment that was in excess of their base salary payment. We found 115 transactions, or 11% of the summer salary transactions, where faculty received more than 100% of normal salary during the summer months, in violation of 2 CFR 220.

Thus, NSF overpaid salary and wages, fringe benefits and indirect costs in the amount of \$1,913,473 and we question these costs. These questioned costs are comprised of: \$425,259 of "payments in excess of the base salary" due to faculty member's monthly gross salary exceeding their monthly base salary (See first line in chart below) and \$1,488,214 of salary overcharges due to the usage of a complex series of mathematical calculations based on set factors for calculating summer salary rather than paying faculty based on actual labor effort expended on its NSF awards. (See second line in the chart below).

	Faculty Total Summer Salaries	Excessive Summer Salaries	Excessive Fringe Benefits	Indirect Costs Related to Overcharges	Total Questioned Costs
Payments More than 100% Base Salary	\$1,802,688.77	\$ 260,298.13			\$ 425,258.72
Inflated Daily Salary Rates	<u>\$6,774,093.25</u>	<u>\$ 922,416.21</u>			<u>\$1,488,213.81</u>
	\$8,576,782.02	\$1,182,714.34			\$1,913,472.53

Summer Salaries Questioned Costs

Finding 2: Over \$2.8 Million of Excess Federal Cash Disbursements Resulted From Not Fulfilling Grant Cost Share Requirements

UCSB could not provide adequate, verifiable cost share documentation that supported the required cost share for its four NSF Awards that ended during our audit period: Award No. 9982105 with required cost share of \$3,072,745; Award No. 0225676 with required cost share of \$954,743; Award No. 0330442 with required cost share of \$225,757; and Award No. 0821168 with required cost share of \$466,385. As a result, UCSB received \$2,821,676 in excess federal disbursements, which we question. Details of each award and the required UCSB cost share commitment are included in Appendix C.

2 CFR Part 215 (OMB Circular A-110), Section 23 and NSF's Grant Policy Manual (GPM), Section 333.6, Cost Sharing Records and Reports, require grantees to maintain records of all costs claimed as cost sharing, and states that those records are subject to audit. These regulations also state that cost-sharing expenses 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. Paragraph II.D.4 of NSF's Award and Administrative Guide also reiterates these requirements. Finally, the University of California Office of the President's Contract and Grant Manual, Chapter 5, Cost Sharing (issued April 23, 2004) states that when cost sharing contributions must be documented on a project-by-project basis, each campus must also have a centralized tracking system to capture committed cost sharing amounts, including those stated in effort reports.

During our audit, we requested that UCSB provide us with the cost share documentation that supported the required cost share for its four NSF Awards that ended during our audit period. However, UCSB was not able to provide verifiable documentation from its accounting system to support the allowability of the majority of its cost share claims. This occurred because UCSB does not require cost share contributions to be tracked on a project-by-project basis through its accounting system of record. Instead, UCSB relies on the respective departments that administer awards with cost share requirements to maintain their own independent, off-line systems to track cost share contributions. Furthermore, UCSB personnel explained that the University does not require certified labor effort reports from employees whose salaries are not paid, at least in part, by federal funds. Thus, UCSB has no contemporaneous documentation for claimed labor cost share of employees paid entirely with nonfederal funds.

For example, for NSF award 9982105 with required cost share of \$3,072,745, we received a series of annual Project Contribution Report signed by the Principal Investigator indicating UCSB provided more than \$3.4 million in cost share, including \$2.6 million in contributions from a private foundation. However, the supporting documentation provided with these contribution report consisted of a typed list of expenses (e.g., fees and tuition; salary and wages; equipment; supplies; boat, diving and marine shop; and, indirect costs). UCSB did not provide any other supporting documentation, such as labor effort reports, receipts for equipment purchases, and/or invoices showing costs and purposes of equipment purchases that would allow the auditor to verify that the costs were actually incurred and that those costs were allocable or allowable to the NSF award or that these costs were not claimed as cost share on any other federal award(s).

We did find one award for which UCSB maintained adequate accounting records for a portion of its reported cost share contribution. NSF Award No. 0821168 provided \$750,000 in federal funding and required cost share of \$446,385. UCSB provided two annual cost share reports claiming the University contributed a total of \$458,426 in nonfederal cost share. The claimed cost share consisted of \$295,356 in nonfederal funding of equipment purchases and \$163,070 in salary, benefits, and overhead for an UCSB employee who UCSB reported dedicated a portion of his time to the project during the two-year award period. We were able to verify the \$295,356 in nonfederal payments for equipment through UCSB's accounting system. However, UCSB personnel explained that since the employee was not paid, at least in part, with federal funds, there was no requirement for him to prepare certified time records, and thus, there were no records to support his claimed contribution to the project. Therefore, we accept \$295,356 of UCSB's claimed cost share on Award No. 0821168 and question \$163,070. This example demonstrates that UCSB's accounting system is capable of tracking and reporting cost share without having to rely on departments' off-line systems.

As a result of our audit work, we determined that UCSB lacked an adequate system to identify, account for, monitor and track the cost share it contributed to its NSF awards. Additionally, despite the existence of University of California System policies and procedures requiring centralized tracking and documentation of cost share, these requirements were not followed by UCSB personnel. These deficiencies prohibited us from verifying and validating that UCSB met the majority of its required cost share commitment for the four NSF awards we audited. Thus, we question \$2,821,676 of excess federal disbursements related to these four NSF awards due to UCSB's shortfall in meeting its cost share requirements.

Finding 3: Approximately \$500,000 of Inappropriate Cost Transfers Into NSF Awards


UCSB posted \$496,466 of questionable cost transfers to its NSF grants. Cost transfers are defined as the changing of an expenditure initially posted to one project or award over to another project or award. We found \$276,234 of salary and wages cost transfers between NSF awards for labor costs incurred after the awards to which these costs were posted had expired; \$71,133 of unrelated equipment cost transfers into an NSF grant; \$101,355 of cost transfers made into an NSF grant at grant close out to spend out those grant funds; \$23,274 of cost transfers from one NSF grant that went over budget into an NSF grant with available funds; and \$24,470 of cost transfers for overhead, Department recharges, and materials and supplies that were unrelated to the NSF award to which they were charged.

2 CFR 220, Paragraph C.4.b states that costs cannot be shifted to other grants to meet deficiencies caused by overruns or for other reasons of convenience. Paragraph 71(b) of 2 CFR 215 requires recipients to liquidate⁴ all obligations incurred not later than 90 calendar dates after

⁴ According to federal administrative requirements, an awardee cannot incur costs on a federal award after the expiration date of the award. Additionally, an awardee is required to liquidate, that is, to settle or pay off all outstanding account balances related to expenditures incurred during the award period, not later than 90 calendar days after the final day of the federal award period.

the last day of the federal award period. NSF's Award and Administration Guide reiterates that costs incurred under an expired grant cannot be transferred to the new, continuation grant. UCSB policy requires grants to be closed out within 90 days of grant expiration and cost transfers which occur after 120 days from the original ledger month end date are subject to additional levels of review and approval.



 In reviewing cost transfers, we found that the practice of using cost transfers to charge costs to awards or projects that were unrelated to the costs incurred was prevalent throughout our audit period.

In reviewing cost transfers for salary and wage costs, we found 79 transactions totaling \$276,234 of salary and wages posted to NSF awards after the expiration dates of the award. These costs were posted in UCSB's official accounting records after the grants to which the costs were posted expired. These transactions were nonetheless presented to us by the University as costs claimed on its FFRs during our audit period. The 79 questioned transactions were for costs being moved from one NSF award to another, unrelated NSF award.

We noted another instance where a cost transfer of \$101,355 was made from an institutional account and another NSF award to NSF award 0305390 six months after that award had expired for salary and wages, laptop purchases, and indirect costs. We were advised that the original costs were charged to the wrong accounts. Such explanation was not in compliance with the University's own policies and procedures for processing cost transfers.

In another example, we noted 21 cost transfers totaling \$24,470 for Services – Dept. Recharges, overhead on accounts, and a travel transaction. All these costs were transferred among NSF grants and the final costs were transferred into already expired NSF grants to spend out remaining funds. The explanations for these transfers included employee error and that researchers had forgotten their NSF award had expired. Such explanations did not comply with UCSB policy specifically stating that “employee error” is not an acceptable explanation. Additionally, 50 percent of these questioned cost transfers were attributable to one Principal Investigator.

We also found \$71,133 of supplies charges transferred into an unrelated NSF grant. Per the approved grant budget for NSF Grant 0836757, other direct costs (ODCs) were to be 10% of the total grant costs. However, as of the end of our audit period, ODCs totaled \$124,878 or 56% of

the grant's total costs. The ODCs purchases were for general purpose lab supplies. Additionally, although 56% of the grant funds had been spent on these supplies, less than 33% of the salaries in the NSF approved grant budget had been incurred. The Annual Project report indicated that 12 people were working on the grant, however these numbers are not supported by the salaries paid and charged to the grant; two of the individuals paid with these grant funds were also not included in that report.

It is unreasonable to spend 56% of available grant funds on general purpose lab supplies when ODCs were only budgeted for 10%. This discrepancy is magnified when the project did not incur the requisite salaries to execute the grant objectives. Thus, we question \$71,133, which represents ODCs claimed (\$124,878) in excess of the approved grant budget for ODCs (\$53,745).

The remaining \$23,274 of cost transfers were for budget overruns on one NSF award into another NSF award. These cost transfers were made 4 months after the initial NSF award expired and the costs were transferred into a grant which had available funds at the time of the cost transfer.

For all these cost transfers, the University claimed costs to NSF on its FFRs for the original awards before costs were actually incurred and made cash draw downs for those amounts claimed. The University then spent the money after the grant expired for purposes which did not benefit the original award, and then booked journal entries into the official accounting records to "account for" funds that were originally drawn down without having incurred actual expenses.

Thus, UCSB grant managers and Principal Investigators did not adequately monitor NSF grant expenditures and did not always adhere to federal regulations, NSF award requirements or UCSB's own policies and procedures when processing cost transfers. Further, cost transfers were processed by UCSB personnel into grant accounts that were designated as closed in their accounting system, e.g., inactive accounts which should not have had any additional expenditure entries posted to them. As a result, UCSB claimed expenses on several NSF grants that were for costs unrelated to the NSF grant in order to spend out remaining available grant funds.

Finding 4: Over \$473,000 of Indirect Cost Overcharges to NSF Grants

UCSB charged indirect costs on 1,651 cost transactions that were not in compliance with its negotiated indirect cost rate agreement with HHS and NSF policy. This resulted in \$396,418 of indirect cost overcharges. We also noted UCSB directly charged \$77,047 of indirect costs to its NSF grants for costs related to website security certification, university garage parking, telephone calls, reproduction and photocopy, office furniture, and general purpose computer equipment; costs already reimbursed to UCSB through its Indirect Cost Rate and/or its Service Center Recharges.

2 CFR 220 (OMB Circular A-21) Section E.1 states that facilities and administration costs are incurred for common or joint objectives and therefore cannot be identified readily and specifically with a particular sponsored project, an instructional activity, or any other institutional activity. This guidance further indicates that no final cost objective shall have

allocated to it as a direct cost any cost, if other costs incurred for the same purpose, in like circumstances, have been included in any F&A cost pool to be allocated to that or any other final cost objective.

Additionally, UCSB's negotiated indirect cost rate agreement (NICRA) with the U.S. Department of Health and Human Services dated September 11, 2006, applicable to our audit period, states that the indirect cost rates are applicable to a modified total direct cost base which includes all the salaries and wages, fringe benefits, materials, supplies, services, travel, and subgrants and subcontracts up to the first \$25,000 of each subgrant or subcontract (regardless of the period covered by the subgrant or subcontract). However, the NICRA specifically indicates that equipment, capital expenditures, charges for patient care, tuition remission, rental costs of off-site facilities, scholarships, fellowships, and the portion of each subgrant and subcontract in excess of \$25,000 are excluded from the modified total direct cost base for calculation of indirect costs using the NICRA. Chapter 3 of UCSB's Extramural Fund Accounting Manual specifically reiterates the requirements of 2 CFR 220 and UCSB's NICRA. In addition to the NICRA exclusions, NSF generally prohibits allocation of indirect costs to participant support expenditures.

Overcharging Indirect Costs

UCSB relies on its accounting system to automatically calculate and record the amount of indirect costs it will charge to its NSF awards. Upon receipt of an award letter, the UCSB Office of Research prepares an Award Synopsis that includes information about the indirect costs applicable to that grant. UCSB's Extramural Funds Accounting is then responsible for setting up the accounting system with the appropriate indirect cost rate based on the Award Synopsis. The system-calculated indirect cost amount is then automatically charged to UCSB's NSF awards.

As part of our audit work, we compared the list of UCSB's accounting system "Object Codes Excluded from Indirect Cost" as found in UCSB's Extramural Fund Accounting Manual, and searched UCSB's general ledger data for all object codes that should be excluded from calculations of indirect cost. We then extracted all transactions in the general ledger for those listed object codes. We found 1,651 transactions with indirect costs totaling \$396,418 that were charged on costs explicitly excluded from indirect cost in the areas of tuition remission, rental costs of off-site facilities, participant support, and subawards in excess of \$25,000. Because the charging to UCSB's NSF grants of indirect cost to these particular costs was in violation of both UCSB's NICRA and UCSB's own policies and procedures, we are questioning the \$396,418 due to misapplication of indirect cost rates.

Charging Indirect Costs as Direct Costs

We conducted further data analytics on UCSB's general ledger and extracted all transactions within specific object codes for costs that appeared to be indirect in nature, but for which UCSB directly charged its NSF grants. We found a total of \$233,551 in UCSB's general ledger of costs for items such as website security certification, university garage parking, telephone calls, reproduction and photocopy, office furniture, and general purpose computer equipment. We

selected and tested 17 transactions totaling \$51,847 to determine if these costs were indirect costs. We found all 17 transactions were indirect costs that should not have been directly charged to UCSB's NSF grants.

In addition to these 17 transactions, we also tested telephone costs charged directly to NSF grant 0520415 in the amount \$17,143 and found that these costs should be recouped through the University's indirect cost rate rather than be charged directly to this award. Not only did UCSB charge the indirect costs as direct costs, it also added additional indirect costs of \$8,057 to the indirect telephone costs for a total of \$25,200 of unallowable, directly charged costs.

We therefore question a total of \$77,047 of indirect costs that are unallowable because they should not have been charged directly to UCSB's NSF grants. We found this mischarging occurred because UCSB 1) allocated indirect costs to items that should have been excluded from indirect costs based on negotiated indirect cost rates and NSF policy, and 2) did not comply with 2 CFR 220 in ensuring that indirect costs are not charged directly to a federal award.

Finding 5: \$440,000 of Unallowable Costs Charged to NSF Grants

UCSB charged unallowable costs to its NSF grants for: pizza lunches \$6,085; pre-award cost made with personal credit card for equipment 5 months before grant \$3,166; [REDACTED] Computers (general purpose supplies and equipment) \$48,328; equipment not related to the award and not in the award budget \$204,996; and equipment purchases at the end or after the grant expired \$177,573.

According to 2 CFR 220, Section C.s, to be allowable for a federal grant, a cost must be allocable to the federal award and be necessary and reasonable for the administration and performance of the award. 2 CFR, Part 215 also requires that a federal award recipient's financial management system shall maintain "effective control over and accountability of all funds, property and other assets." NSF's Award and Administration Guide, Chapter V, Allowability of Costs, reiterates that unallowable costs, such as meals and entertainment, pre-award costs, general purpose equipment, and other unnecessary and unreasonable costs should not be charged to NSF awards.

General Purpose Supplies – [REDACTED] Computer Purchases

Our analysis of Purchase (flexcard) transactions posted into UCSB's general ledger revealed several transactions for purchases made for [REDACTED] computer products. We also noted that some of these transactions were conducted near the end of the NSF award periods. We selected 18 transactions totaling \$48,328, obtained supporting documentation for these transactions and inquired of UCSB key personnel as to why certain [REDACTED] computer products were purchased at the end of the grant period for three NSF grants. UCSB personnel advised us that the purchases were made because the computers were needed for new post-doctoral researchers, for visitors' offices, and for the server room. UCSB personnel could not explain how the purchases benefitted the NSF awards. We found that all 18 transactions were for the purchase of general purpose

supplies and according to NSF's Award and Administration Guide, Chapter 5, Section B.2, such purchases are unallowable charges. Thus, we question the \$48,328.

Unallowable Food Costs Charged to IGERT Grant 0801627

We noted payments for pizza were charged to the grant every two weeks to provide lunch during intramural meetings of IGERT students. Because food costs are considered unallowable by nature unless they are in the approved grant budget, and these food costs were not in the approved IGERT grant budget for intramural meetings, we question the \$6,085 of food costs.

Transaction Charged to NSF Award No. 0832090 Prior to Grant Start Date

In conducting data analytics on UCSB's general ledger, we found that UCSB accounting records contained a transaction with a date of April 14, 2008, which was nearly 5 months before the effective date of September 1, 2008 for NSF Award No. 0832090. UCSB personnel explained that the principal investigator (PI) on this award wanted equipment to be available at the start of the award and knew there was a long lead time involved for fabrication. The equipment was purchased with a personal credit card. However, our review of NSF's eJacket system award documents indicated that UCSB did not request, and thus, NSF did not provide, approval for these preaward costs. Therefore, we question the \$3,166 because UCSB could not demonstrate the transaction was not more than 90 days before the award effective date nor did it document NSF approval of the preaward costs.

Unreasonable and Unallocable Equipment Purchases Charged to NSF Awards

We conducted budget-to-actual analytics in the UCSB general ledger for equipment to determine if there were equipment costs charged to NSF awards for which there were no equipment costs in the approved NSF budget. We further reviewed equipment transactions and extracted for review those equipment costs which were purchased near the end of the award period or after the award period expired. The equipment transactions in this testing category are separate from the equipment transactions tested as part of the cost transfers presented within this report. We tested \$777,987 total from the largest transactions in each of these categories and questioned \$382,569 of the transactions as unallowable.

Equipment Test	Questioned costs
Near/After Award Period 15 NSF Awards	\$177,573
Not in Award Budget 10 NSF Awards	\$204,996
Total Questioned* *25 Different NSF Awards	\$382,569

Our transaction testing results found that equipment purchased near or after the award did not benefit the NSF program; equipment purchased for another federal program was charged to NSF; several of the purchases were for general purpose equipment that benefitted multiple cost centers and should have been capitalized and allocated across the University through the F&A rates; and, purchases were made after the award periods expired.

For equipment purchased at the end of the grant period, we found that 70% of the equipment costs charged to NSF Award 0507227 were incurred during the last 10 months of a No-Cost Extension that was made to this four year award. The approved grant budget only included \$17,000 for equipment, and UCSB could not explain how these late equipment purchases benefitted the NSF grant to which they were charged. Likewise, even though NSF Award 0833077 did not include a budget for equipment, UCSB charged \$23,164 for equipment to the grant with less than two months remaining. When we obtained supporting documentation for the purchase, we found the equipment was to be used on a subsequent grant from the Department of Homeland Security.

Our testing also concluded that for 5 of the 10 awards we questioned that did not have equipment in the approved NSF award budget, general purpose equipment such as computer servers and amplifiers were charged directly to NSF awards rather than to the University's overhead accounts.

In response to our asking why equipment was purchased when the budget did not include equipment cost, or purchased at the end of an award, UCSB personnel advised us they believed they could make such purchases because they were part of the Federal Demonstration Project (FDP). However, while FDP intends to streamline the administration of federally sponsored research, its ultimate goal is to improve "the productivity of research without compromising stewardship. Thus, FDP organizations must still adhere to the requirements of the awards and the federal regulations regarding costs claimed on their federal awards. Thus, participation in the FDP does not relieve UCSB of the requirement to only charge reasonable, allocable, and allowable costs on its NSF awards.

Finding 6: UCSB Used \$180,000 of Remaining Fellowship Funds for Non-Award Purposes

NSF award funds known as "fellowships" are awarded specifically to assist students in their cost of education and provide a stipend. To receive an NSF fellowship award, a student must apply for and be accepted for the award, and must be accepted into a specific institution of higher education program. UCSB reported all fellowship funds as expended at the end of its Cost of Education (COE) fellowship award, NSF Grant 0202759, drew down the remaining available cash balance of the grant, transferred that cash balance of \$180,255.35 to its institutional accounts, and then expended those funds over the next several years after the award expired, on costs unrelated to the fellowship program, for supplies and expenses, materials, and travel. We also noted that the transactions were initially from UCSB's general ledger Fund 21118 – NSF Grant 0202759 but were later transferred to Fund 21599 (UCSB Institutional Account).

According to the award terms and conditions, award 0202759 was to support the National Science Foundation Graduate Fellows affiliated with UCSB with an annual stipend of \$18,000 maximum and \$10,500 per Fellow as a cost-of-education institutional allowance. The grant period expired on November 30, 2006. Also incorporated into the award were the provisions NSF 97_26: Coordinating Officials' Guide, which further specified that fellowship funds may be carried forward from both current and prior year awards but only for use to support any ***NSF Fellow duly enrolled at the Institution for an advanced degree*** in a field supported by NSF. Finally, NSF fellows must apply for, and be approved, for the fellowship.

Upon further research, we found that UCSB had claimed costs for the \$180,255.35 on the award's final FFR despite not having incurring actual expenses under the award. The funds were transferred to the Institutional Fund and expended from 2007 through 2010, after the expiration of the NSF award. We also noted that the costs for which the funds were used were not in compliance with the award terms and conditions. For example, we found expenses for communication service, freight, indirect costs, and general materials and supplies. As such, we question the \$180,255.35.

Recommendations

We recommend that NSF's Director of the Division of Institution and Award Support (DIAS) request UCSB to:

1. Repay to NSF the \$6,325,483 of questioned costs in this report. Specifically: \$1,913,473 of questioned summer salaries; \$2,821,676 of excess Federal Cash disbursements; \$496,466 of inappropriate cost transfers into expired NSF awards; \$473,465 of indirect cost overcharges; \$440,148 of unallowable costs; and, \$180,255 of fellowship funds drawn down without having incurred expenses.
2. Strengthen the administrative and management controls and processes over its federal awards. Processes could include:
 - Developing monitoring and detective controls to ensure that employees are adhering to, and in compliance with, the University's own system of policies and procedures.
 - Reviewing its policies and procedures to include periodic reviews of individual departments and divisions for compliance with, and proper implementation of, established cost controls and to ensure that costs claimed on NSF awards relate to that specific award, are within the award budgets, and are incurred during the award period.

- Revising its policies and procedures regarding the salary and wage costs it charges to its NSF awards so that those policies and procedures comply with federal and NSF award requirements.
- Adhering to its existing policies and procedures regarding labor effort reporting and to enhance its cost share system so that the system complies with federal regulations and NSF award requirements.
- Revising policies and procedures related to its indirect cost rates to ensure appropriate indirect cost rates are applied appropriately throughout the life of the award.
- Conducting employee training to reinforce knowledge of UCSB cost control policies and procedures related to the use of federal funds.
- Conducting employee training regarding prohibitions of using cost transfers to spend out remaining NSF award funds or to compensate for NSF award project overruns.
- Developing procedures to ensure that cost transfers are prohibited from 90 days onward after an NSF award has expired.

Summary of Awardee Response and OIG Comments

The University of California, Santa Barbara (UCSB) does not agree with the findings in this report and stated that it did not have adequate time to respond to the draft report. UCSB also indicated that the findings could and should have been resolved during the audit stage, that UCSB wanted to resolve the issues during the audit stage, but that the NSF OIG would not provide requested information to UCSB regarding the findings, would not consider additional information UCSB had related to the findings, and was not consistent in the reasons for questioning certain costs.

The NSF OIG disagrees with these statements. The NSF OIG's position is that the University has been on notice regarding the contents of the draft report since August 14, 2012 and thus, had 45 days to respond to the findings in the draft report. Specifically:

- 1) The University received notification, and obtained knowledge of, the contents of the notification of findings for our audit report on August 14, 2012. On that date, we also advised the University that the notification of findings would comprise the contents of the draft audit report. There are no additional findings from those which were presented to UCSB in the notification of findings in either the draft or final audit reports. At this meeting, we also advised UCSB that the role of the OIG was to make recommendations regarding the findings in the audit report and that the resolution of those findings would occur during the audit resolution process.
- 2) NSF OIG had an in-depth discussion of the findings with the University on August 14, 2012, and provided a data presentation to the University regarding those findings on August 21, 2012.
- 3) NSF OIG had numerous telephone conferences and email exchanges with UCSB personnel regarding the notification of findings which comprised the contents of the draft and final audit reports.
- 4) In response to UCSB's request, NSF OIG sent our Audit Manager back to the University for an additional field visit during the last week of August 2012 to consider additional documentation and to conduct additional interviews with University personnel regarding the findings in our report. This is beyond the normal practice of the OIG. We considered all additional data, documentation, interviews and meeting presentations provided to us by UCSB as a result of this visit. However, the majority of what UCSB provided to us to respond to the report findings did not change our position regarding the findings in the report.
- 5) In response to UCSB's requests for more information regarding what we questioned, NSF OIG did provide transactional and other data to the University for the questioned costs in the notification of findings. We provided transactional data for questioned costs for cost transfers for salaries, grant overruns, costs unrelated to the purpose of the grant, cost transfers to closed NSF awards, details regarding the indirect costs charged directly

to NSF awards, as well as sent details related to the allocation of overhead to all excludable items. We also provided a specific list of the transactions we questioned for equipment and provided the names of the individuals at UCSB that we communicated with regarding those questioned costs. We did not send back to the University their summer salary transactions but advised them the questioned costs for summer salary were related to the transactions that they had provided to us. As noted above, we returned to the University to consider cost share documentation that was not initially provided to us.

Additionally, during the course of the audit, the OIG kept UCSB apprised of its communications with various UCSB personnel and officials as OIG was required to coordinate all its activities through one designated individual at UCSB's campus, the Manager of Extramural Funds Accounting. The Manager of Extramural Funds Accounting was responsible for coordinating all audit questions, answers, and requests for documentation related to our audit. This coordination included communications between the OIG and UCSB personnel. Thus, UCSB should have full knowledge of the individuals that OIG communicated with on the audit issues and should have the information it needs from its management of the audit process with regard to the items questioned in the report.

As discussed during the Exit Conference with UCSB on September 19, 2012, the purpose of the draft report was to communicate the auditor's draft findings and recommendations to the University for their review and comment. According to Federal policy regarding audit resolution found in OMB Circular A-50, the response to the audit report can include "agreement or disagreement on reported findings and recommendations." Once the report is final, the audit resolution process then takes over to resolve outstanding disagreements on the report's findings and determine a course of action to take on agreed-upon recommendations.

Finally, we did not indicate to the UCSB that the findings presented in the report were resolved but instead stated on several occasions that the findings remain as stated. Thus, we believe the audit report is clear and stands as it is.

Appendix A: Awardee Response

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

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September 28, 2012

Laura Ann Koren, CPA, CFF
Acting Director / External Audits
National Science Foundation
Office of Inspector General
4201 Wilson Blvd.
Arlington, Virginia 22230

Re: **University of California, Santa Barbara Response to
Draft Audit No. OIG 12-1-006 (September 19, 2012)**

Dear Ms. Koren:

The University of California, Santa Barbara ("UCSB") is pleased to comment on the draft Performance Audit of Incurred Costs for National Science Foundation ("NSF") Awards for the Period January 1, 2008 to December 31, 2010 prepared by the NSF Office of the Inspector General ("NSF/OIG"). At the outset, we note that the draft audit report includes a number of findings that easily could have been, and in our view should be, resolved during this audit stage. We specifically requested sufficient time to respond to NSF/OIG's draft report, as eight days is insufficient time to respond fully to all of the issues NSF/OIG has raised in this draft report. Nonetheless, NSF/OIG has made clear that it wishes to meet its arbitrary, self-imposed deadline for concluding this audit and leave resolution of fairly straightforward audit issues to NSF's Grants and Awards officers rather than consider additional facts that will fully resolve its stated concerns in its draft report.

Because NSF/OIG has raised a number of fact-specific issues, such as the timing of certain transactions, it is impossible to fully respond within the short time provided, especially in light of the fact that UCSB is just starting the new academic year. Given that NSF/OIG has stated it has no intention of resolving these issues at the audit stage, we instead respectfully request that NSF/OIG's final report reflect a full and accurate basis for NSF/OIG's findings. During the exit conference, we confirmed there are a number of material facts that NSF/OIG has not included in its draft audit report and that certain findings do not accurately reflect all the material facts underlying the issues identified by NSF/OIG. While we appreciate that the NSF/OIG's role is limited to making findings and others at NSF are responsible for resolving those findings, it is not fair to either NSF or UCSB who now must work together to resolve all of these findings if the final report omits these material facts.

Background

UCSB is sensitive to the fact that this audit may have taken much longer than ordinary due to the many auditor staffing changes that occurred at NSF over the course of this two-year audit. It appears that these staffing changes may account for the gaps in the information that NSF/OIG considered in its audit and the resulting erroneous conclusions reached in preparing the draft audit. It is worth noting that there were minimal communications between NSF/OIG and UCSB during the nine-month period between the last visit to the campus on November 2011 and NSF/OIG did not identify any concerns for UCSB's consideration and response until the issuance of the Notice of Findings ("NOF") on August 8, 2012.

The prolonged nature of this engagement also appears to have resulted in inconsistencies in the data requests submitted to UCSB. NSF/OIG submitted hundreds of data requests to many different personnel at UCSB. As a result of NSF/OIG's decentralized process for gathering data, it is apparent that many data requests were not submitted to the appropriate persons at UCSB. Additionally, throughout the draft report NSF/OIG relies on a number of statements attributed generally to UCSB personnel, but without identifying the anonymous source. It is unclear who made these representations (or the context in which the representations were made). Because these purported statements are generally incorrect, it appears NSF/OIG is relying on information from individuals who are not in a position to speak for UCSB regarding specific issues. UCSB has repeatedly requested copies of those communications, so we can evaluate the source and what was actually communicated to NSF/OIG and provide a meaningful response, however, NSF/OIG has refused to provide these communications.

While we appreciate the fact that NSF/OIG does not always provide a copy of its NOF and NSF/OIG did engage in some additional discussions after it issued its NOF on some of its findings, by the time NSF/OIG issued its NOF, NSF/OIG dismissively informed UCSB that it would not consider additional data on four of its seven findings. We do not believe these last minute opportunities to provide limited comments remedy the issues noted above consistent with the due professional care required by the United States Government Accountability Office, Government Auditing Standards ("GAGAS"). For example, NSF/OIG gave UCSB only 4 days advance notice of the sample selection for the June 6, 2011 NSF/OIG visit. At no time during the nine months from November 2011 through August 8, 2012 did NSF/OIG attempt to confirm that it had an accurate factual basis to support its findings. Of the three findings in the NOF for which NSF/OIG was willing to consider additional information, it is noteworthy that NSF/OIG removed one finding in its entirety and substantially changed its positions on the other two findings. This fact demonstrates that the impact was not merely theoretical, but that NSF/OIG's failure to communicate with UCSB as required under GAGAS during the audit process precludes the necessary assurances about the accuracy and sufficiency of the underlying data to support NSF/OIG's conclusions.

Response to Finding #1

Finding No. 1 questions \$1.9 million in faculty summer salaries because NSF/OIG has concluded that the Personnel Activity Reports (PARS) do not provide reliable support for labor costs charged to NSF awards. (Draft Report, page 6.) Notably, NSF/OIG changed its theory regarding summer faculty salaries between the NOF and the draft report. During the exit conference, we confirmed with NSF/OIG that its concern currently is that it could not determine whether summer salaries were properly charged to NSF award because it was unable to reconcile the PARS with payroll records. Previously, in its NOF, NSF/OIG questioned the same amount (to the penny) because it claimed that the summer salary rates used by UCSB improperly resulted in inflated rates of pay higher than the faculty members' base salary paid during the academic year. UCSB was able to easily demonstrate that was not the case.

Although NSF/OIG has changed its theory from an overcharging concern to a documentation concern, much of the same language from NSF/OIG's legacy theory in its NOF remains in the draft report. For example, the title of the finding is "Over \$1.9 Million of Overcharged Summer Salaries" and further NSF/OIG asserts that "UCSB systematically overcharged faculty summer salaries" during summer months. (Draft Report, page 5.) Of course, if NSF/OIG has been unable to determine whether summer salaries were properly charged to NSF awards, it has no basis to assert whether summer salaries were overcharged or undercharged. Accordingly, this language is inaccurate and misleading and should be revised in the final report to accurately reflect NSF/OIG's current position.

Similarly, NSF/OIG continues to question pay rates based on a 19 work-day month. As explained previously, salaries are based on an academic year. An academic year includes 171 days of service over a nine month period. Accordingly, on average a month during the academic year has 19 days of service. ($171/9=19$). Thus, NSF/OIG's assumption—for which NSF/OIG cites no support—that a typical month during the academic year is 22 days is misplaced. And, the conclusion that NSF/OIG reaches based on its misplaced assumption that "[u]sing 19 days per summer month unreasonably raises the salary rates UCSB charges for faculty summer salaries because a faculty person works less hours (e.g., 19 days) but still receives the same salary he would have earned during the academic year had he worked the entire month (e.g., 22 days)" is objectively wrong. (See Draft Report, page 7). Simple arithmetic belies NSF/OIG's conclusion that any faculty members were paid in excess of their base salary.

Indeed, this finding should be removed in its entirety. The day after the exit conference, the parties conducted a conference call in which UCSB explained in detail the process for allocating summer salaries to NSF awards. And further, UCSB confirmed that the alleged discrepancy identified as an example in the draft report between an employee's PAR and payroll records resulted from NSF/OIG improperly comparing records from different time periods. As discussed at length during that call, PARS at UCSB are prepared on a quarterly basis. Because Summer term runs between mid-June and mid-September, efforts devoted to NSF awards during the Summer term will be captured in two PARS covering two different quarters - i.e., Q2 and Q3. That is, no single PAR covers the entire Summer term. Yet, NSF/OIG questioned these costs because it was unable to reconcile an entire Summer term with a single PAR report. When the PARS and payroll records for the same time periods are compared, the numbers reconcile. This can be demonstrated at other campuses where PARS are prepared on an annual basis because annual payroll records would match the annual PAR.

During that conference call after the exit conference, UCSB walked through the process and provided detailed written explanations of the process. (A copy of the detailed written explanation provided to NSF/OIG is included in Attachment 1). In this discussion, UCSB demonstrated that the specific examples raised by NSF/OIG are effortlessly reconciled when PARS covering the same time periods are compared to summer salary data. This fact also eviscerates the concern that the University of California Academic Personnel Manual (APM) deviates from applicable federal policy and NSF guidelines. At the end of that conference call NSF/OIG confirmed that it now understood the process and did not have any additional questions. (See Attachment 1.) Because UCSB has answered all of NSF/OIG's questions regarding this issue, we believe that this finding has been resolved and should not be included in the final audit report. While UCSB stands ready to present this same information to NSF during the resolution process, there appears to be no reasonable basis for leaving this finding and requiring duplicative efforts.

Notwithstanding NSF/OIG's confirmation that UCSB has provided it with all the necessary information, to the extent that NSF/OIG chooses not to resolve this finding and instead leaves this finding for NSF to resolve, UCSB respectfully requests that this finding be updated to accurately reflect NSF/OIG's current concerns, including an

explanation as to why the additional information provided to NSF/OIG subsequent to the exit conference does not resolve this finding in its entirety.

Finally, in the draft report, NSF/OIG attributed two statements to UCSB personnel that we have been unable to identify and which appear to misstate the facts. (Draft Report, page 6.) ("UCSB personnel explained Personnel Activity Reports (PARS) for summer periods, which by University policy should reflect actual labor effort worked, do not reflect the actual distribution of employee labor efforts, but rather reflect the mathematical allocation of salaries to the summer compensation period.") and *Id.* at 8 ("When we asked UCSB personnel to explain this, and other similar discrepancies, we were told that the PARs do not support actual allocation of labor effort, as stated in the PAR certification."). These statements are not accurate. As discussed above, we have demonstrated that the PARS and payroll for the same time periods do, in fact, reconcile. We have requested copies of these communications to understand the basis for NSF/OIG's misunderstanding. However, NSF/OIG has refused to provide them. Accordingly, to the extent that NSF/OIG is continuing to rely on these statements in light of the additional information provided, we respectfully request that copies be included with the final report so that UCSB and NSF can evaluate the source data upon which NSF/OIG is relying.

Response to Finding #2

Finding No. 2 questions \$2.8 million in charges because "UCSB was not able to provide verifiable documentation from its accounting system to support the allowability of the majority of its cost share claims." (Draft Report, page 9.)

NSF/OIG's theory under finding number 2 has also changed between the NOF and the draft report. In the NOF, NSF/OIG claimed that "UCSB could not provide cost share documentation that supported the required cost share for its four NSF Awards." Upon review of the NOF and follow up inquiries with UCSB departments, it became clear that NSF/OIG had not requested the cost share documentation from the relevant department. At UCSB, the departments are the office of record for this documentation. During NSF/OIG's visit on August 30-31, 2012, the respective departments presented several hundred pages of cost share documentation to NSF/OIG for the four awards identified in the NOF.

During the exit conference, we confirmed with NSF/OIG that the additional information reviewed by NSF/OIG did provide sufficient documentation that UCSB had incurred the costs. However, NSF/OIG now maintains that UCSB's manual process presented a weakness in UCSB's accounting system because the auditor was not able to verify in the accounting system that the costs were tied to the specific award and that the funds were not allocated to another federal award. Accordingly, because NSF/OIG now characterizes this concern as a systems question, NSF/OIG's legacy header for finding 2 that "Over \$2.8 Million of Excess Federal Cash Disbursements Resulted From Not Fulfilling Grant Cost Share Requirements" as inconsistent with NSF/OIG's actual findings and should be corrected in the final report.

Further, during the exit conference, we discussed that UCSB does have a process for reconciling the manual systems maintained by the departments with UCSB's central accounting system, which has been audited and found to be adequate by UCSB's outside auditors. And therefore, UCSB disagrees with NSF/OIG's assertion that the manual reconciliation does not provide verifiable documentation. We would note that UCSB personnel spent a lot of time showing NSF/OIG how it reconciled to the ledger, including running requested reports for various account/funds and demonstrating how they tied into the G/L in June 2011. However, NSF/OIG's auditor did not review this process during the August 30-31, 2012 visit. During the exit conference, NSF/OIG indicated for the first time that as part of its audit its earlier review of UCSB's G/L reconciliation resulted in a finding that UCSB's process

was inadequate. Because UCSB disagrees and, more importantly, there was no mention of this finding in either the NOF or the draft report, we have requested a copy of NSF/OIG's finding. However, that information has not yet been provided. Accordingly, we respectfully request that NSF/OIG include a copy of that finding and articulate in the final report the basis for its determination that UCSB's G/L reconciliation process is inadequate and why it disagrees with UCSB's outside auditors, so that UCSB and NSF can understand NSF/OIG's concerns during the resolution process.

Response to Finding #3

Finding No. 3 questions over 200 transactions representing approximately \$500,000 in cost transfers into NSF awards. These transfers all raise fact-specific questions as to the timing and reasons for these transfers. Based on the draft report, NSF/OIG is challenging a number of transactions because they either were made after an award had expired or the transfers resulted in actual costs for equipment exceeding the amounts included in the original budget. Because the issues identified by NSF/OIG are not *per se* prohibited, a full understanding of the facts and circumstances surrounding these transactions, which the draft report does not provide, is necessary to evaluate the appropriateness of these transfers. It is simply impossible for UCSB to meaningfully respond to all of the questioned transactions in the limited time provided. Accordingly, UCSB is in the process of reviewing all of these questioned transactions with the individuals responsible for conducting the research and determine the reasons for the purportedly inappropriate cost transfers.

Because it does not appear that NSF/OIG interviewed the individuals actually responsible for making the questioned cost transfers, we question the source of certain statements relied upon by NSF/OIG in reaching its conclusions. Specifically, in the draft report, NSF/OIG attributes certain statements to UCSB that we have requested, but have yet to be provided. See Draft Report, page 12 ("Eventually, University personnel did acknowledge to us that the costs were transferred to utilize remaining funds on award 0305390.") and *Id.* ("The explanations for these transfers were 'employee error because PI was too busy to monitor expenses' and each cost transfer, again, did not comply with the University policy to explain why the costs transfers were required."). We have not been able to identify anyone with personal knowledge of these transfers who made such representations, and these statements are inconsistent with University and UCSB policy. Therefore, we respectfully request that copies be included with the final report so that UCSB and NSF can evaluate the source information upon which NSF/OIG is relying.

Response to Finding #4

Finding No. 4 questions the allocation of indirect costs on two bases. First, NSF/OIG questions approximately \$396,000 that were allocated to direct costs that are excluded from the allocation base under UCSB's negotiated indirect cost rate agreement. Second, NSF/OIG also questions approximately \$77,000 in purportedly indirect costs that were directly charged to NSF awards.

A material fact omitted from NSF/OIG's draft report is that in each instance of purported improper charging of indirect costs is that UCSB was acting in accordance with the terms of its specific grant awards. Specifically, those awards required UCSB to charge indirect costs to the award at a specific rate rather than use its negotiated indirect cost rate agreement. During the exit conference, UCSB confirmed with NSF/OIG that it had reviewed the terms of the individual grant awards and that UCSB was in fact performing consistently with the terms of those awards, which called for a specific indirect cost reimbursement. Further, NSF/OIG clarified its basis for questioning these indirect costs is NSF/OIG's legal position that NSF Grants officers do not have authority to issue awards requiring a special indirect cost reimbursement rate when the institution at issue has a negotiated indirect cost rate agreement.

with a federal agency. Most significantly, in most instances, the award-specific indirect reimbursements resulted in UCSB recovering less indirect costs than it would have had it used its negotiated indirect cost rate agreement. Accordingly, UCSB respectfully requests that NSF/OIG revise this finding to include these material facts.

Additionally, NSF/OIG has omitted from its finding the fact that the purportedly direct costs charged as indirect costs were incurred at specific centers on campus. These centers are treated as separate segments for cost accounting purposes and therefore, under the terms of their awards, all direct and indirect costs are chargeable to the award. Accordingly, UCSB respectfully requests that NSF/OIG revise this finding to include this material fact.

Response to Finding #5

Finding No. 5 questions approximately \$463,000 as being expressly unallowable under NSF's applicable regulations.

General Purpose Equipment [REDACTED] Computer Purchases

NSF/OIG asserts that certain computers are unallowable "general purpose equipment." However, this conclusion is erroneous because the computers in question are *not* "general purpose equipment." NSF's Award and Administration Guide defines equipment as "tangible nonexpendable personal property including exempt property charged directly to the grant having a useful life of more than one year and an acquisition cost of \$5,000 or more per unit. However, consistent with grantee policy, lower limits may be established." NSF's Award and Administration Guide, Chapter V, Section B.2. During the exit conference, UCSB questioned whether any of these questioned computers satisfied this definition because the average transaction cost ($\$48,327.86/18 = \$2,684.88$) was well below the \$5,000 per unit threshold. This fact was confirmed when UCSB reviewed the transactions in question and found only two were over \$5,000. NSF/OIG admitted this was the case, but informed us that it was relying on the UCSB's records describing these computers as "equipment" rather than the definition of equipment in the applicable regulations. This assertion is factually inaccurate as well, as most transactions are listed as "Supplies & Materials – Other" or "Non-Invent Equip 1,500-4,999."

Accordingly, while this finding should be removed, at a minimum, UCSB respectfully requests that NSF/OIG amend this finding to include the material facts discussed above. Namely, that NSF/OIG's finding that UCSB violated NSF's Award and Administration Guide, Chapter 5, Section B.2, is not based on the definitions set forth in that cited provision.

Further, NSF/OIG's finding relies, at least in part, on the purported fact that "UCSB personnel advised us that the purchases were made because the equipment was needed for new graduate students, for visitors' offices, and for the server room." (Draft Report, page 15.) This statement is inconsistent with our understanding and therefore, UCSB requested that NSF/OIG the source of the alleged statement. Accordingly, we respectfully request that information be included with the final report so that UCSB and NSF can evaluate the information upon which NSF/OIG is relying.

Unallowable Food Costs Charged to IGERT Grant 0801627

NSF/OIG questions certain food costs as being unallowable under NSF's regulations. However, NSF/OIG omits from its draft report the fact that UCSB has an approved grant budget specifically authorizing lunch costs for working meals during IGERT seminars, which is expressly allowable under NSF's Award and Administration Guide, Chapter V, Section C.5.g. (See Attachment 2.) During the exit conference, NSF/OIG explained that its finding was

based on the fact that it could not find those authorized costs in the copy of the budget it had retrieved from NSF's eJacket system. We have requested a copy of the referenced budget NSF/OIG. However, to date, NSF/OIG has refused to provide a copy of the requested document.

UCSB believes that this issue could easily have been resolved well ahead of the draft report. Indeed, it appears there is no basis to include this finding in the final report given Attachment 2. Nonetheless, to the extent that NSF/OIG includes this finding in the final report for UCSB to resolve with NSF, we respectfully request that NSF/OIG revise this finding to include the fact that UCSB relied on an approved grant budget. Further, UCSB requests that NSF/OIG include in the final report whatever documentation it believes is inconsistent UCSB's approved budget.

Transaction Charged to NSF Award No. 0832090 Prior to Grant Start Date

NSF/OIG has questioned a *de minimis* amount because the costs charged to the award, that are otherwise allowable and allocable, were incurred more than 90 days prior to the award effective date. UCSB is in the process of contacting the responsible personnel to determine whether this purchase was authorized.

Unreasonable and Unallocable Equipment Purchases Charged to NSF Awards

This finding raises fact-specific questions about the research conducted under the individual awards. UCSB is in the process of investigation these concerns. In the draft audit report, NSF/OIG notes: "UCSB could not explain how these late equipment purchases benefitted the NSF grant to which they were charged." (Draft Report, page 16.) It also asserts that "In response to our asking why equipment was purchased when the budget did not include equipment or purchased at the end of an award, UCSB Personnel advised us they believed they could make such purchases because they were part of the Federal Demonstration Project (FDP)." *Id.* at 17. It is our understanding NSF/OIG did not speak with the individuals within UCSB with sufficient understanding of the facts to answer these questions. We have requested copies of these communications that NSF/OIG relies. However, to date, those have not been provided. Accordingly, we respectfully request that those communications be included with the final report.

Response to Finding #6

Finding 6 questions approximately \$180,000 in fellowship funds because the funds were drawn down on one award, and used to fund fellowships on subsequent awards after the expiration of the grant period.

Absent from the draft report is any reference to the fact that the UCSB Graduate Division received explicit, written guidance from NSF stating that the Cost of Education ("COE") Allowance was not strictly cost reimbursement but an "allowance" that may be disbursed at UCSB's discretion. See e-mail from NSF dated May 15, 2002 quoting NSF 97-26 ("The actual use of the COE Allowance is at the discretion of the GRFP institution.") (a copy is included at Attachment 3). NSF/OIG has not questioned that virtually all of the \$180,000 was appropriately spent on the NSF Fellows in fellowship support. UCSB provided NSF/OIG with copies of the documentation supporting these facts. Specifically, at the request of NSF/OIG during an August 31, 2012 meeting, UCSB Graduate Division reviewed the documents originally provided by UCSB to NSF/OIG in June 2011 which included the following:

- (1) Documentation clarifying how UCSB calculated entitled-GRFP –COE-Allowance- amounts in detail for years 02-03, 03-04, 04-05, 05-06, listing out named Fellows with individual amounts of COE attached to

each; total fee payments made to BARC accounts for them; yearly balances of residual COE Allowance monies totaling \$180; and,

(2) Summarized and reconciled fund 21599 expenses 2006-11 and documented Graduate Deans' policy statements behind such expenditures in 2006-2011.

UCSB explained that it spent all of its NSF COE Allowance funds entirely on support for its GRFP Fellows over the period 2006-2011. UCSB documentation shows that UCSB funded research proposals for research travel, lab research supplies and equipment, conference travel, all developing research capabilities beyond what the basic 3-year GRFP Fellowship monies supported.

UCSB clearly articulated this point to NSF/OIG during the August 31, 2012 meeting and UCSB even provided GRFP *Guide's* statements on the use of COE Allowance. UCSB stated its understanding of COE Allowance use guidelines as interpreted in a clarifying e-mail to UCSB dated May 21, 2002, written by GRFP Program Director Eric Shepherd. UCSB again provided NSF/OIG with a copy of Director Shepherd's May 21, 2011 e-mail which UCSB had previously provided to NSF/OIG on June 13, 2011.

NSF's guidance is clearly relevant to resolution of this issue, yet the draft report makes no mention of this guidance. Accordingly, these material facts should be included in the final report as well as NSF/OIG's explanation as to why these directives from NSF do not resolve this finding.

Conclusion

Under OMB Circular A-50, NSF will need to resolve the findings in NSF/OIG's audit within six months. As noted above, UCSB believes that NSF/OIG should have resolved a number of the findings during the audit process rather than leaving them for other NSF personnel to address. Nonetheless, while it is NSF/OIG's prerogative to simply make its findings without considering additional information, it is clearly in the mutual interest of both NSF and UCSB to resolve the findings as promptly as possible. For that reason, we respectfully request that NSF/OIG's final report reflect all of the material facts, in particular, those discussed above that were omitted from the draft report and revise its findings to accurately state the basis for questioning certain costs.

Sincerely yours,

A large black rectangular redaction box covering the signature and name of the sender.

Attachments

Appendix B: Objectives, Scope, and Methodology

The objectives of this performance audit were to determine whether (1) UCSB has adequate systems in place to account for and safeguard NSF funds, and (2) costs claimed by UCSB under a number of NSF awards were reasonable, allowable, and allocable and in conformity with NSF award terms and conditions and applicable federal financial assistance award requirements. To accomplish the first objective, we reviewed UCSB policies, procedures, and systems, as well as relevant policies and procedures imposed on UCSB by the University of California, Office of the President (UCOP). We also interviewed appropriate UCSB personnel responsible for establishing and implementing control policies, procedures, and systems and performed tests of UCSB systems to assess their effectiveness in providing reliable management information and safeguarding NSF funds. Weaknesses identified are discussed in relevant sections of this report. To the extent weaknesses affected our ability to rely on UCSB data, we limited reliance on those data and expanded substantive tests of transactions.

To accomplish the second objective of determining reasonableness, allowability, and allocability of costs, we examined all awards for which costs were reported to NSF during the period of January 1, 2008, through December 31, 2010. This provided an audit universe of approximately \$143.4 million, in more than 266,000 transactions, across 604 individual NSF awards. Our work required reliance on computer-processed data obtained from UCSB and NSF. At our request, UCSB provided detailed transaction data for all costs charged to NSF awards during the audit period. We obtained NSF data by directly accessing NSF's various data systems. To select transactions for further review, we designed and performed automated tests of UCSB and NSF data to identify areas of risk and conducted detailed reviews of transactions in those areas.

We assessed the reliability of the data provided by UCSB by (1) comparing costs charged to NSF award accounts within UCSB's accounting records to reported net expenditures, as reflected in UCSB's quarterly financial reports submitted to NSF for the corresponding periods, (2) performing General Ledger to Sub-Ledger reconciliations of UCSB accounting data, and (3) reviewing and testing the parameters UCSB used to extract transaction data from its accounting records and systems. Based on our testing, we found UCSB's computer-processed data sufficiently reliable for the purposes of this audit. We did not review or test whether the data contained in, or controls over, NSF's databases were accurate or reliable; however the independent auditor's report on NSF's financial statements for fiscal years 2010 and 2011 found no reportable instances in which NSF's financial management systems did not substantially comply with applicable requirements.⁵ As this office monitored the work of the auditor, we believe a reasonable basis exists for relying on the accuracy and completeness of NSF's data.

In assessing the allowability of costs reported to NSF by UCSB, we also gained an understanding of the internal controls structure applicable to the scope of this audit through interviews with UCSB staff, review of policies and procedures, conducting walkthroughs as applicable and reviews

⁵ The financial statements were audited by an independent public accounting firm operating under a contract monitored by NSF's Office of Inspector General.

of general ledger transactions and accounting system and database documentation. We determined UCSB's compliance with UCSB and UCOP policies and procedures, as well as the following:

- Office of Management and Budget Circular A-21, *Cost Principles for Educational Institutions* (2 C.F.R., Part 220)
- Office of Management and Budget Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-profit Organizations* (2 C.F.R., Part 215)
- National Science Foundation Proposal and Award Policies and Procedures Guide, Part II: Award & Administration Guide
- National Science Foundation Federal Demonstration Partnership Terms and Conditions
- Award-specific terms and conditions

We identified instances of noncompliance resulting in questioned costs that are discussed in the relevant sections of this report.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions, based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions.

We held an exit conference with UCSB officials on September 19, 2012.

Appendix C: Calculation of Questioned Costs Due to Cost Share Shortfall

Award #9982105

Award 9982105 required cost share of \$3,072,745. UCSB provided a series of annual Project Contribution Reports, signed by the Principal Investigator, indicating UCSB provided more than \$3.4 million in cost share. This amount included \$2.6 million in contributions from a private foundation. However, the supporting documentation provided with this contribution report consisted of a typed list of expenses (e.g., fees and tuition; salary and wages; equipment; supplies; boat, diving and marine shop; and, indirect costs). UCSB did not provide any other documentation, such as labor effort reports, receipts for equipment purchases, description or details of what was purchased or any other type of supporting documentation that would allow us to verify that the costs were actually incurred and that those costs were allocable or allowable to this NSF award.

Thus, UCSB did not provide verifiable documentation for the cost share UCSB claims it contributed to NSF Award 9982105. As a result of the questioned cost share, the maximum federal share to which UCSB is entitled is calculated as follows:

Federal funds disbursed	\$5,037,908
Nonfederal contributions	<u>- 0 -</u>
Total project costs	\$5,037,908
Federal share %	<u>x 0.621</u>
Federal funds earned	\$3,128,541

UCSB received excess federal disbursements of \$1,909,367 (\$5,037,908 - \$3,128,541).

Award #0225676

This award provided NSF funding in the amount of \$2,910,756 and required UCSB to provide a nonfederal cost share of \$935,550. We again received a series of Project Contribution Reports, signed by the Principal Investigator, indicating UCSB provided cost share of \$954,743, including \$585,346 provided by a private foundation. The reports indicated the majority of the cost share was in the form of salary, benefits, and indirect costs. However, UCSB did not provide certified effort reports for the employees whose time was claimed as cost share on the award. Thus, we were unable to independently verify that the salaries and associated benefits and overhead were allocable to the NSF award and were not claimed as cost share on other award(s).

Thus, UCSB did not provide verifiable detail to support its contribution claims of cost share for NSF Award 0225676. Therefore, we questioned all claimed nonfederal cost share contributions. As a result of the questioned cost share, the maximum federal share to which UCSB is entitled is \$2,202,892, calculated as follows:

Federal funds disbursed	\$2,910,029	
Nonfederal contributions	<u>- 0 -</u>	-
Total project costs	\$2,910,029	
Federal share %	<u>x 0.757</u>	
Federal funds earned	\$2,202,892	

Thus, UCSB received excess federal disbursements of \$707,137 (\$2,910,029 - \$2,202,892).

Award #0330442

We received two Annual Project Contribution Reports signed by the Principal Investigator to support the required cost share of \$225,757 for this award. The two forms indicated total nonfederal cost share contributions from a major corporation in the amount of \$251,304.48 (\$42,213.48 for the period 12/03 through 6/04 and \$209,091.08 for the period 7/04 through 6/05). However, UCSB did not provide any other additional supporting documents, e.g., documentation to show the details of the cost share (e.g., how the amounts on the form were derived, e.g., salary, wages, purchases, etc.).

As such, UCSB did not provide verifiable documentation for the cost share contributions it claims for NSF Award #0330444. Therefore, we question all claimed nonfederal cost share contributions. **Based on the approved federal share ratio of 50%, UCSB received excess federal disbursements of \$110,605.50 (\$221,211 x 50%).**

Award #0821168

NSF Award No. 0821168 provided \$750,000 in federal funding and required UCSB to provide a nonfederal cost share of \$446,385. UCSB provided a pair of annual cost share reports claiming it contributed a total of \$458,426 in nonfederal cost share. The claimed cost share consisted of \$295,356 in nonfederal funding of equipment purchases and \$163,070 in salary, benefits, and overhead of a UCSB employee who supposedly dedicated a portion of his time to the project during the two-year award period. We were able to verify the \$295,356 in nonfederal payments for equipment through UCSB's accounting system during a meeting with several UCSB personnel at the university on August 30, 2012. However, UCSB personnel explained that since the employee in question was not paid at least in part with federal funds there was no requirement for him to prepare certified time records of his claimed contribution to the project. Thus, there is no contemporaneous record of actual labor effort contributed to the NSF project. Therefore, we are questioning a portion of the cost share contributions claimed by UCSB. As a result of the questioned cost share, the maximum federal share to which UCSB is entitled is \$655,438, calculated as follows:

Federal funds disbursed	\$ 750,000	
Nonfederal contributions	<u>295,356</u>	
Total project costs	\$1,045,356	
Federal share %	<u>x 0.627</u>	
Federal funds earned	\$ 655,438	

Thus, UCSB received excess federal disbursements of \$94,562 (\$750,000 - \$655,438).