

# Performance Audit of Incurred Costs – University of California, San Francisco

REPORT PREPARED BY COTTON & COMPANY LLP

NATIONAL SCIENCE FOUNDATION  
OFFICE OF INSPECTOR GENERAL

September 29, 2021  
OIG 21-1-020





## AT A GLANCE

Performance Audit of Incurred Costs – University of California, San Francisco

Report No. OIG 21-1-020

September 29, 2021

### AUDIT OBJECTIVE

The National Science Foundation Office of Inspector General engaged Cotton & Company LLP (C&C) to conduct a performance audit of incurred costs at the University of California, San Francisco (UCSF) for the period March 1, 2017, to February 29, 2020. The auditors tested nearly \$2.1 million of the approximately \$34 million of costs claimed to NSF. The objective of the audit was to evaluate UCSF's award management environment to determine whether any further audit work was warranted, and to perform additional audit work, as determined appropriate. A full description of the audit's objective, scope, and methodology is attached to the report as Appendix B.

### AUDIT RESULTS

The report highlights concerns about UCSF's compliance with certain federal, NSF, and/or UCSF regulations and policies when allocating expenses to NSF awards. The auditors questioned \$136,810 of costs claimed by UCSF during the audit period. Specifically, the auditors found \$75,992 of inappropriately allocated expenses; \$36,699 of unallowable expenses; \$14,365 of inadequately supported expenses; and \$9,754 of indirect costs inappropriately applied. The auditors also identified two compliance-related findings for which there were no questioned costs: non-compliance with UCSF policies and insufficient controls related to the application of indirect cost rates. Additionally, the auditors identified one area for improvement related to UCSF's delays in providing its payroll subledger. C&C is responsible for the attached report and the conclusions expressed in this report. NSF OIG does not express any opinion on the conclusions presented in C&C's audit report.

### RECOMMENDATIONS

The auditors included 6 findings and one area for improvement in the report with associated recommendations for NSF to resolve the questioned costs and to ensure UCSF strengthens administrative and management controls.

### AUDITEE RESPONSE

UCSF expressed varying levels of agreement and disagreement with the findings throughout the audit report. UCSF's response is attached in its entirety as Appendix B.

FOR FURTHER INFORMATION, CONTACT US AT [OIGPUBLICAFFAIRS@NSF.GOV](mailto:OIGPUBLICAFFAIRS@NSF.GOV).



**National Science Foundation • Office of Inspector General**  
2415 Eisenhower Avenue, Alexandria, Virginia 22314

**MEMORANDUM**

**DATE:** September 29, 2021

**TO:** Dale Bell  
Director  
Division of Institution and Award Support

Jamie French  
Director  
Division of Grants and Agreements

**FROM:** Mark Bell  
Assistant Inspector General  
Office of Audits

**SUBJECT:** Audit Report No. 21-1-020, University of California, San Francisco

This memorandum transmits the Cotton & Company LLP (C&C) report for the audit of costs charged by the University of California, San Francisco (UCSF) to its sponsored agreements with the National Science Foundation during the period March 1, 2017, to February 29, 2020. The audit encompassed nearly \$2.1 million of the approximately \$34 million claimed to NSF during the period. The objective of the audit was to evaluate UCSF's award management environment to determine whether any further audit work was warranted, and to perform additional audit work, as determined appropriate. A full description of the audit's objective, scope, and methodology is attached to the report as Appendix B.

Please coordinate with our office during the 6-month resolution period, as specified by Office of Management and Budget Circular A-50, to develop a mutually agreeable resolution of the audit findings. The findings should not be closed until NSF determines that all recommendations have been adequately addressed and the proposed corrective actions have been satisfactorily implemented.

**OIG Oversight of the Audit**

C&C is responsible for the attached auditors' report and the conclusions expressed in this report. We do not express any opinion on the conclusions presented in C&C's audit report. To fulfill our responsibilities, we:

- reviewed C&C's approach and planning of the audit;
- evaluated the qualifications and independence of the auditors;

- monitored the progress of the audit at key points;
- coordinated periodic meetings with C&C, as necessary, to discuss audit progress, findings, and recommendations;
- reviewed the audit report prepared by C&C; and
- coordinated issuance of the audit report.

We thank your staff for the assistance that was extended to the auditors during this audit. If you have any questions regarding this report, please contact Jae Kim at 703.292.7100 or [OIGpublicaffairs@nsf.gov](mailto:OIGpublicaffairs@nsf.gov).

#### Attachment

cc:

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## EXECUTIVE SUMMARY

The Cotton & Company audit team determined that the University of California, San Francisco (UCSF) requires improved oversight of the allocation and documentation of expenses charged to NSF awards to ensure costs claimed are reasonable, allocable, and allowable, as well as in accordance with all federal and NSF regulations, NSF award terms and conditions, and UCSF policies. Specifically, the audit report includes \$136,810 in questioned costs, six findings, and one suggested area of improvement.

## AUDIT OBJECTIVES

The National Science Foundation Office of Inspector General engaged Cotton & Company LLP to conduct a performance audit of incurred costs at UCSF for the period of March 1, 2017, to February 29, 2020. The objectives of the audit included evaluating UCSF's award management environment to determine whether any further audit work was warranted, and performing additional audit work, as determined appropriate. A full description of the audit's objective, scope, and methodology is attached to the report as [Appendix B](#).

## AUDIT CRITERIA

The audit team assessed UCSF's compliance with relevant federal regulations (2 Code of Federal Regulations [CFR] 200 and 2 CFR 220), NSF Proposal and Award Policies and Procedures Guides [PAPPGs] (NSF 13-1, 14-1, 15-1, 16-1, 17-1, 18-1, and 19-1), NSF award terms and conditions and UCSF policies and procedures. The audit team included references to relevant criteria within each finding and defined key terms within the Glossary located in [Appendix E](#).

This performance audit was conducted in accordance with Generally Accepted Government Auditing Standards (GAGAS), 2018 Revision, issued by the Comptroller General of the United States.

## AUDIT FINDINGS

As summarized in [Appendix C](#), the auditors identified and questioned \$136,810 of direct and indirect costs that UCSF inappropriately claimed during the audit period, including:

- \$75,992 of inappropriately allocated expenses
- \$36,699 of unallowable expenses
- \$14,365 of inadequately supported expenses
- \$9,754 of indirect costs inappropriately applied

The audit report also includes two compliance-related findings for which the auditors did not question any costs:

- Non-compliance with UCSF policies
- Insufficient controls related to the application of indirect cost rates

Lastly, the auditors identified one area for improvement related to UCSF's inability to provide payroll subledger detail in a timely manner.

## RECOMMENDATIONS

The audit report includes 20 recommendations and 2 considerations for NSF's Director of the Division of Institution and Award Support related to resolving the \$136,810 in questioned costs and ensuring UCSF strengthens its award management environment, as summarized in [Appendix D](#).

## AUDITEE RESPONSE

UCSF expressed varying levels of agreement and disagreement with the findings throughout the audit report, agreeing to reimburse, or otherwise credit, NSF for \$36,980 in questioned costs, but disagreeing with the remaining \$99,830. UCSF's response is attached in its entirety to the report as [Appendix A](#).

## Table of Contents

<b>Background</b> .....	<b>1</b>
Audit Scope.....	1
<b>Audit Results</b> .....	<b>3</b>
Finding 1: Inappropriately Allocated Expenses.....	4
Finding 2: Unallowable Expenses.....	12
Finding 3: Inadequately Supported Expenses .....	21
Finding 4: Indirect Costs Inappropriately Applied .....	23
Finding 5: Non-Compliance with UCSF Policies.....	27
Finding 6: Insufficient Controls Related to the Application of Indirect Cost Rates.....	34
Area For Improvement: Payroll Subledger Availability.....	37
Appendix A: UCSF's Response.....	39
Appendix B: Objectives, Scope, and Methodology.....	49
Appendix C: Summary of Questioned Costs.....	54
Appendix D: Summary of Recommendations & Considerations .....	62
Appendix E: Glossary .....	67

## Abbreviations

<b>MTDC</b>	Modified Total Direct Costs
<b>NICRA</b>	Negotiated Indirect Cost Rate Agreement
<b>NSF</b>	National Science Foundation
<b>OIG</b>	Office of Inspector General
<b>PAPPG</b>	Proposal & Award Policies & Procedures Guide
<b>PI</b>	Principal Investigator
<b>REU</b>	Research Experience for Undergraduates
<b>UC</b>	University of California
<b>UCOP</b>	University of California, Office of the President
<b>UCSF</b>	University of California, San Francisco

## BACKGROUND

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The National Science Foundation is an independent federal agency created “to promote the progress of science; to advance the national health, prosperity, and welfare; and to secure the national defense; and for other purposes.” (Pub. L. No. 81-507). NSF funds research and education in science and engineering by awarding grants and contracts to educational and research institutions throughout the United States.

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

NSF OIG engaged Cotton & Company LLP (referred to as “we”) to conduct a performance audit of costs incurred by the University of California, San Francisco (UCSF). UCSF is a public research university, not-for-profit institution, located in San Francisco, California. In fiscal year 2020, UCSF reported over \$1.5 billion in revenue from grants and contracts, with \$787 million from federal sources, including NSF, as noted in Figure 1.

**Figure 1: UCSF’s Fiscal Year 2020 Grants and Contracts Portfolio**



Source: Auditor summary of Grants and Contracts revenue reported in the University of California’s 19/20 Annual Financial Report (*in thousands of dollars*). Aerial photo of UCSF’s campus is publicly available on UCSF’s website (<https://www.ucsf.edu/about/locations>).

## AUDIT SCOPE

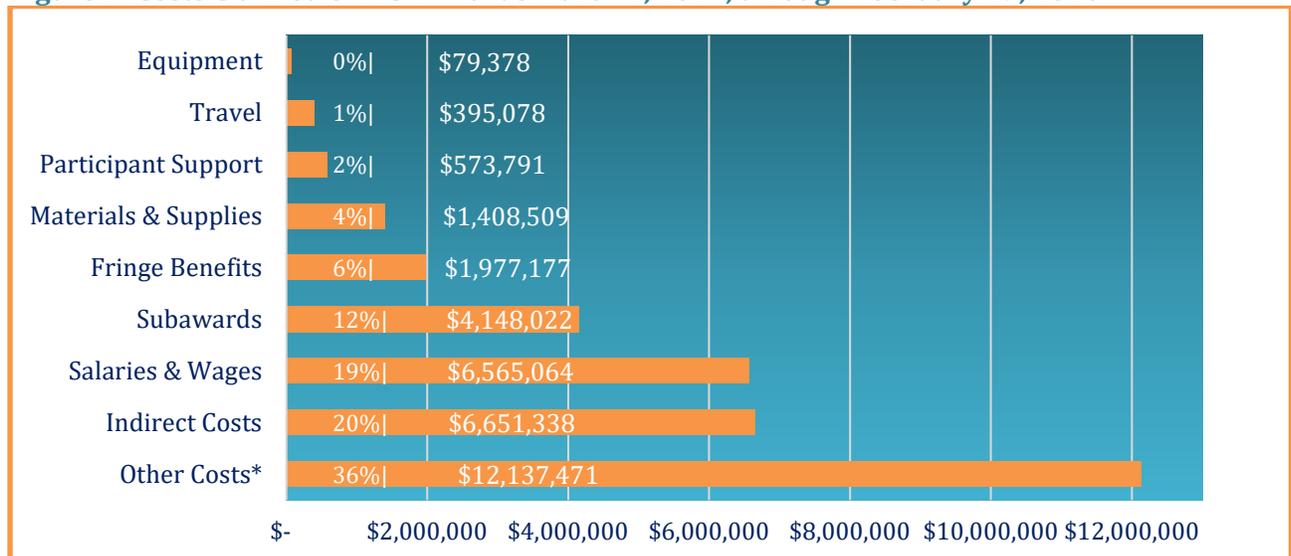
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This performance audit—conducted under Order No. 140D0420F0169—was designed to meet the objectives identified in the Objectives, Scope, and Methodology section of this report (**Appendix B**) and was conducted in accordance with *Generally Accepted Government Auditing Standards*, 2018 Revision, issued by the Comptroller General of the United States.

The objectives of this performance audit were to evaluate UCSF’s award management environment, to determine whether any further audit work was warranted, and to perform any additional audit work, as determined appropriate. Accordingly, we conducted this engagement in two phases: the Audit Survey Phase and the Audit Expanded Phase, as described in detail within [Appendix B](#).

As illustrated in Figure 2, UCSF provided general ledger data that supported the close to \$34 million in expenses UCSF claimed on 60 NSF awards during our audit [period of performance](#) of March 1, 2017, to February 29, 2020.

**Figure 2: Costs Claimed on NSF Awards March 1, 2017, through February 29, 2020**



*Source:* Auditor analysis of accounting data, provided by UCSF, illustrating total costs (\$33,935,828) by expense type using financial information provided by UCSF to support costs incurred on NSF awards during the audit period.

\*Other Costs include Computer Services, Consultant Services, Publications, and Other Direct Costs.

We judgmentally selected 129 transactions, totaling \$2,098,118<sup>1</sup> (See Table 1), and evaluated supporting documentation to determine whether costs claimed on NSF awards were [allocable](#), [allowable](#), [reasonable](#), and in conformity with NSF award terms and conditions, organizational policies, and applicable federal financial assistance requirements.

<sup>1</sup> The \$2,098,118 represents the total value of the 129 transactions selected for transaction-based testing; it does not represent the dollar base of the total costs reviewed during the audit.

**Table 1: Summary of Selected Transactions**

Budget Category	Transaction Count	Expense Amount <sup>2</sup>
Other Direct Costs*	55	\$1,070,317
Subawards	4	308,492
Participant Support Costs**	12	223,074
Salary and Wages	6	119,259
Equipment**	9	102,300
Travel	19	85,494
Materials and Supplies	13	71,083
Indirect Costs	4	69,677
Consultant Services	7	48,423
<b>Total</b>	<b><u>129</u></b>	<b><u>\$2,098,118</u></b>

Source: Auditor summary of selected transactions.

\*Other Costs include Computer Services, Publications, and Other **Direct Costs**

\*\*UCSF miscoded and inappropriately applied **indirect cost** to some **Equipment** and **Participant Support Costs**. (See Finding 4)

Additionally, we performed non-transaction-based cluster testing in three areas to evaluate whether: (1) UCSF's payroll subledger included credits that were not appropriately recorded within its general ledger; (2) UCSF removed and applied indirect costs at the appropriate rates when processing cost transfers; and (3) UCSF appropriately procured purchases over \$10,000.

## AUDIT RESULTS

We identified and questioned \$136,810 in costs that UCSF charged to 20 NSF awards. We also identified charges UCSF made to 18 NSF awards which resulted in non-compliance with federal, NSF, and/or UCSF-specific policies and procedures which did not result in questioned costs. See Table 2 for a summary of questioned costs by finding area. **Appendix C** provides a summary of questioned costs by NSF award.

**Table 2: Summary of Questioned Costs by Finding Area**

Finding Description	Questioned Costs
Inappropriately Allocated Expenses	\$75,992
Unallowable Expenses	36,699
Inadequately Supported Expenses	14,365
Indirect Costs Inappropriately Applied	9,754
Non-Compliance with UCSF Policies	-
Insufficient Controls Related to the Application of Indirect Cost Rates	-
<b>Total</b>	<b><u>\$136,810</u></b>

Source: Auditor summary of findings identified.

<sup>2</sup> The expense amounts reported represent the total dollar value of the transactions selected for our sample and do not include the total fringe benefit or indirect costs applied to the sampled transactions, which were also tested for allowability.

We made 20 recommendations and 2 suggested considerations for NSF’s Director of the Division of Institution and Award Support related to resolving the \$136,810 in questioned costs and ensuring UCSF strengthens its administrative and management procedures for monitoring federal funds. All recommendations and considerations are summarized in [Appendix D](#). We communicated the results of our audit and the related findings and recommendations to UCSF and NSF OIG. We also included UCSF’s response to this report in its entirety in [Appendix A](#).

**FINDING 1: INAPPROPRIATELY ALLOCATED EXPENSES**

UCSF could not support that it always allocated expenses to NSF awards based on the relative benefits the awards received, as required by both federal regulations<sup>3</sup> and [NSF Proposal & Award Policies & Procedures Guides \(PAPPGs\)](#).<sup>4</sup> As a result, UCSF inappropriately allocated a total of \$75,992 in publication and other direct costs to nine NSF awards.

***Inappropriately Allocated Publication Costs***

UCSF could not support that it allocated \$40,557 of [publication costs](#)<sup>5</sup> based on the relative benefits received by the NSF awards charged, as illustrated in Table 3.

**Table 3: Inappropriately Allocated Publication Costs**

Expense Date	NSF Award No.	Publication Expense			Notes
		Amount Charged	Percent Allocable	Amount Inappropriately Allocated	
June 2017	████████	\$1,691	Unable to Determine	\$1,691	a
January 2018	████████	3,869	Unable to Determine	3,869	b
March 2018	████████	1,712	Unable to Determine	1,712	c
October 2018	████████	66,570	50	33,285	d

Source: Auditor summary of identified exceptions.

- a) In June 2017, UCSF charged NSF Award No. ██████████ for \$1,691, or 20.5 percent, of an \$8,242 expense it incurred to publish a research paper. As this award was one of eight, or 12.5 percent, of the acknowledged funding sources for the publication, UCSF does not appear to have allocated expense to this award based on the relative benefits it received. As UCSF did not document or provide a reasonable justification

<sup>3</sup> According to 2 CFR § 220 Appendix A, C.4 and 2 CFR § 200.405 (a), a cost is allocable to a particular cost objective (e.g., a specific function, project, sponsored agreement, department) if the goods or services involved are chargeable or assignable to such cost objective in accordance with relative benefits received (or other equitable relationship).

<sup>4</sup> NSF PAPPGs 13-1, 14-1, 15-1, and 16-1 Part II, Chapter V, Section A and 17-1 and 19-1, Chapter X, Section A state that grantees should ensure all costs charged to NSF awards meet the requirements of the applicable federal cost principles, grant terms and conditions, and any other specific requirements of both the award notice and the applicable program solicitation.

<sup>5</sup> According to 2 CFR § 220 Appendix A, J.39 and 2 CFR § 200.461, charges for professional journal publications are allowable where: (1) the publications report work supported by the federal government; and (2) the charges are levied impartially on all items published by the journal, whether or not under a federal award.

for its allocation methodology, we were unable to determine the percentage allocable to this award.

- b) In January 2018, UCSF charged NSF Award No. [REDACTED] for \$3,869, or 100 percent, of the costs it incurred to publish a research article. As this award was one of four, or 25 percent, of the acknowledged funding sources for the publication, UCSF does not appear to have allocated expense to this award based on the relative benefits it received. As UCSF did not document or provide a reasonable justification for its allocation methodology, we were unable to determine the percentage allocable to this award.
- c) In March 2018, UCSF charged NSF Award No. [REDACTED] for \$1,712, or 100 percent, of the costs it incurred to publish a research paper. As this award was one of seven, or 14 percent, of the acknowledged funding sources for the publication, UCSF does not appear to have allocated expense to this award based on the relative benefits it received. As UCSF did not document or provide a reasonable justification for its allocation methodology, we were unable to determine the percentage allocable to this award.
- d) In October 2018, UCSF charged NSF Award No. [REDACTED] for \$66,570, or 100 percent, of the costs it incurred to publish a research article. As this award was one of two, or 50 percent, of the acknowledged funding sources for the publication, UCSF does not appear to have allocated expense to this award based on the relative benefits it received. As the funding sources' collaboration agreement stated that research would be jointly publicized and disseminated, we determined that 50 percent of this publication expense, or \$33,285, was allocable to this award.

***Inappropriately Allocated Other Direct Costs***

UCSF could not support that the methodology it used to allocate \$35,435 of travel, salary, consultant, and material costs was based on the relative benefits received by the NSF awards(s) charged, as illustrated in Table 4.

**Table 4: Inappropriately Allocated Other Direct Costs**

Expense Date	NSF Award No.	Other Direct Cost Expense			Notes
		Amount Charged	Percent Allocable	Amount Inappropriately Allocated	
March 2018	[REDACTED]	\$1,618	Unable to Determine	\$1,618	a
March 2018	[REDACTED]	5,957	50	2,979	b
March 2018	[REDACTED]	15,850 <sup>6</sup>	33	2,695	c
	[REDACTED]		0	7,925	
June 2018	[REDACTED]	8,465	Unable to Determine	8,465	d

<sup>6</sup> UCSF charged \$15,850 equally to NSF Award No. [REDACTED] (\$7925) and NSF Award No. [REDACTED] (\$7,925).

Expense Date	NSF Award No.	Other Direct Cost Expense			Notes
		Amount Charged	Percent Allocable	Amount Inappropriately Allocated	
August 2018	████████	3,979	Unable to Determine	3,979	e
August 2019	████████	2,574	Unable to Determine	2,574	f
November 2019	████████	5,200	Unable to Determine	5,200	g

Source: Auditor summary of identified exceptions.

a) In March 2018, UCSF charged NSF Award No. ██████████ for \$1,618, or 100 percent, of travel costs for the Principal Investigator (PI) to travel to ██████████ to disseminate research at ██████ University without documenting how the trip benefitted this NSF award. Specifically, although UCSF stated that the trip benefitted this NSF award, it did not provide documentation to support whether the PI’s presentation related to the objectives of this award. Additionally, neither the trip nor the presented publication were reported within the annual report. As UCSF did not document or provide a reasonable justification for its allocation methodology, we were unable to determine the percentage allocable to this award.

Further, \$1,381, or 85 percent, of travel costs claimed for this trip were unallowable as UCSF claimed \$532 for lodging and meals that did not have a business purpose; \$502 for meal expenses claimed in addition to, and in excess of, per diem; and \$347 for lodging that was covered by the travel host.<sup>7</sup>

b) In March 2018, UCSF charged NSF Award No. ██████████ for \$5,957, or 100 percent, of a student’s tuition remission, when only 50 percent of their salary was charged to this NSF award. As the student certified that 50 percent of their effort was allocable to NSF Award No. ██████████ we determined that only \$2,979, or 50 percent, of the tuition expense was allocable to this NSF award.

c) In March 2018, UCSF charged NSF Award Nos. ██████████ and ██████████ for \$7,925 apiece, or 50 percent, of \$15,850 in contractor services invoiced, when, per the purchase order, none of the services were allocable to NSF Award No. ██████████ and only 33 percent of the services were allocable to NSF Award No. ██████████. Because UCSF’s purchase order for the contracted services supports that 67 percent of the contracted services were allocable to other funding sources, \$2,695<sup>8</sup> and \$7,925 were inappropriately allocated to NSF Award Nos. ██████████ and ██████████ respectively.

<sup>7</sup> According to 2 CFR § 220 Appendix A, C.2, costs must be reasonable and allocable to a sponsored agreement, and must conform to any limitations or exclusions set forth in federal regulations or in the sponsored agreement to be allowable.

<sup>8</sup> \$7,925 charged– \$5,290 (33 percent of the \$15,850 invoice) = \$2,695.

- d)** In June 2018, UCSF charged NSF Award No. [REDACTED] for \$8,465, or 100 percent, of the costs it incurred to purchase 3,400 consumable lab materials and supplies. Although the materials purchased, PlusPlates, were used to perform NSF award research, because the consumable supplies were purchased in the final month of the award's 3-year period of performance,<sup>9</sup> UCSF does not appear to have allocated the cost of these items to this NSF award based on the relative benefits received. As UCSF did not document or provide a reasonable justification for its allocation methodology, we were unable to determine the percentage allocable to this award.
- e)** In August 2018, UCSF charged NSF Award No. [REDACTED] for \$3,979, or 100 percent, of the costs it incurred to purchase a computer. Because this computer was purchased in the final 90 days of the award's 5-year period of performance,<sup>10</sup> UCSF does not appear to have allocated this expense to this NSF award based on the relative benefits received. As UCSF did not document or provide a reasonable justification for its allocation methodology, we were unable to determine the percentage allocable to this award.
- f)** In August 2019, UCSF charged NSF Award No. [REDACTED] for \$2,574, or 100 percent, of the costs it incurred for calibrating pipettes without documenting how it determined that 100 percent of these maintenance costs should be allocated to this award. Specifically, although UCSF stated that pipette calibrations must be performed at regular intervals to conduct award research, it did not provide evidence to support that it allocated the cost of the calibrated pipettes to this NSF award based on the relative benefits received. As UCSF did not document or provide a reasonable justification for its allocation methodology, we were unable to determine the percentage allocable to this award.
- g)** In November 2019, UCSF charged NSF Award No. [REDACTED] for \$5,200, or 100 percent, of the costs it incurred to purchase a general-purpose freezer. Although UCSF did state that freezer space would be used to support NSF award research, because UCSF did not request funding to purchase a freezer—specifically noting that freezer space would be available within the award proposal—and because UCSF did not provide evidence to support that this freezer was purchased or used exclusively to benefit this award, UCSF does not appear to have allocated the cost of the freezer to this NSF award based on the relative benefits received. As UCSF did not document a reasonable allocation for the freezer nor monitor the use of this freezer to evaluate how often it was used to benefit this award, we are unable to determine the percentage allocable to this award.

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<sup>9</sup> NSF Award No. [REDACTED] had a period of performance from July 15, 2015, to June 30, 2018.

<sup>10</sup> NSF Award No. [REDACTED] had a period of performance from October 1, 2013, to September 30, 2018.

## Conclusion

UCSF does not have sufficient policies, procedures, or internal controls in place to ensure it reasonably allocates costs incurred based on the relative benefits each NSF award receives, or to ensure it consistently documents its allocation methodology.

We are therefore questioning \$75,992 of inappropriately allocated expenses charged to nine NSF awards. UCSF concurred with \$20,253 of the questioned costs, but disagreed with \$55,739, as illustrated in Table 5.

**Table 5: Finding 1 Summary: Inappropriately Allocated Expenses**

NSF Award No.	Description	Fiscal Year	Questioned Costs			
			Direct	Indirect	Total	UCSF Agreed to Reimburse
	June 2017 Publication Costs	2017	\$1,067	\$624	\$1,691	\$661 <sup>11</sup>
	January 2018 Publication Costs	2018	2,441	1,428	3,869	2,902 <sup>12</sup>
	March 2018 Publication Costs	2018	1,080	632	1,712	1,473 <sup>13</sup>
	October 2018 Publication Costs	2019	21,000	12,285	33,285	-
	March 2018 PI Travel	2018	1,021	597	1,618	1,618
	March 2018 Tuition	2018	2,979	-	2,979	2,979
	March 2018 Contractor Services	2018	1,700	995	2,695	2,695
		2018	5,000	2,925	7,925	7,925
	June 2018 Consumables	2018	5,341	3,124	8,465	-
	August 2018 Computer	2019	2,510	1,469	3,979	-
	August 2019 Pipette Calibration	2020	1,624	950	2,574	-
	November 2019 Freezer	2020	5,200	-	5,200	-
<b>Total</b>			<b><u>\$50,963</u></b>	<b><u>\$25,029</u></b>	<b><u>\$75,992</u></b>	<b><u>\$20,253</u></b>

Source: Auditor summary of identified exceptions.

## Recommendations

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

<sup>11</sup> UCSF agreed to reimburse NSF \$661 of the \$1,691 of questioned cost. UCSF stated that \$1,030 should be allowable based on the other cited sources within the publication.

<sup>12</sup> UCSF agreed to reimburse NSF \$2,902 of the \$3,869 of questioned cost. UCSF stated that \$967 should be allowable based on the other cited sources within the publication.

<sup>13</sup> UCSF agreed to reimburse NSF \$1,473 of the \$1,712 of questioned cost. UCSF stated that \$239 should be allowable based on the other cited sources within the publication.

- 1.1 Resolve the \$55,739 in questioned, unallocable publication and other direct costs for which UCSF has not agreed to reimburse NSF and direct UCSF to repay or otherwise remove the sustained questioned costs from its NSF awards.
- 1.2 Direct UCSF to provide documentation supporting that it has repaid or otherwise credited the \$20,253 in questioned, unallocable publication and other direct costs for which UCSF has agreed to reimburse NSF.
- 1.3 Direct UCSF to strengthen its administrative and management controls and processes for supporting the allocation of expenses to sponsored projects. Updated processes could include:
  - 1.3.1 Requiring Principal Investigators or other designated staff to both document and justify the allocation methodologies used when charging expenses to sponsored projects.
  - 1.3.2 Implementing a standard documentation and retention process to support the allocation applied to costs which benefit multiple awards.
  - 1.3.3 Providing training on how to assess and document the methodology used to allocate publication costs across each sponsored award acknowledged in the publication.

**University of California, San Francisco Response:** UCSF agreed to reimburse NSF for \$20,253 of the inappropriately allocated expenses but disagreed with the remaining \$55,739 in costs questioned. Specifically:

Publication Costs: UCSF agreed to reimburse \$5,036 of the questioned publication costs but disagreed with the remaining \$35,521 as it believes those expenses were appropriately allocated to the awards consistent with actual project effort. Specifically:

- With regard to the \$1,691 in questioned publication costs charged to NSF Award No. [REDACTED] UCSF agreed to reimburse \$661;<sup>14</sup> however, it noted that the remaining \$1,030, or 12.5 percent of the publication expense, should be allowable as this award was one of eight, or 12.5 percent, of the cited research awards.
- With regard to the \$3,869 in questioned publication costs charged to NSF Award No. [REDACTED] UCSF agreed to reimburse \$2,902; however, it noted that the remaining \$967, or 25 percent of the publication expense, should be allowable as this award was one of four, or 25 percent, of the cited research awards.
- With regard to the \$1,712 in questioned publication costs charged to NSF Award No. [REDACTED] UCSF agreed to reimburse \$1,473; however, it noted that the remaining

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<sup>14</sup> \$1,691 in questioned costs - \$1,030 (12.5% of the \$8,242 publication expense) = \$661 UCSF agreed to reimburse.

\$239, or 14 percent of the publication expense, should be allowable as this award was 14 percent, of the cited research awards.

- With regard to the \$33,285 in questioned publication costs charged to NSF Award No. [REDACTED] UCSF disagreed with all questioned costs, stating that the publication related solely to the UCSF scope of work; therefore, the cost was not allocable to the cooperative agreement award cited. Specifically, UCSF noted that both funding sources were from NSF and that the PIs agreed to bear any cost of publications resulting from their component of the scope of work; therefore, 100 percent of this expenses should be allowable on NSF Award No. [REDACTED]

**Other Direct Costs:** Although UCSF noted that all questioned costs supported the NSF projects charged, it agreed to reimburse NSF for the \$15,217 in questioned costs on NSF Award Nos. [REDACTED] [REDACTED] [REDACTED] and [REDACTED]. However, UCSF disagreed with the remaining \$20,218 in questioned costs. Specifically:

- With regard to the \$8,465 in questioned consumables charged to NSF Award No. [REDACTED] UCSF stated the expenses should be allowable as: (i) the PI and research team confirmed all consumables were used to complete the segment of the award; and that (ii) no allocation methodology was provided or necessary as all consumables were used to benefit the one project.
- With regard to the \$3,979 in questioned computer costs charged to NSF Award No. [REDACTED] UCSF stated the expenses should be allowable as the computer was purchased for a postdoctoral scholar solely dedicated to the NSF award at the time of hire. Additionally, UCSF noted that, although the postdoctoral scholar was hired near the end of the grant's period of performance, the scholar continued to use the computer for research and publications after the award was complete and referenced the NSF award in all resulting publications.
- With regard to the \$2,574 in questioned supply costs charged to NSF Award No. [REDACTED] UCSF stated that the expenses should be allowable as the costs were for the regular calibration of pipettes used for the project, and the need for the calibration happened to coincide with the end of the award.
- With regard to the \$5,200 in questioned freezer costs charged to NSF Award No. [REDACTED] UCSF stated that the expenses should be allowable as the new freezer was purchased primarily for use on this award. Specifically, UCSF noted that its allocation practice is to charge an award for 100 percent of a freezer's cost if it anticipates that over 90 percent of the freezer's capacity will be dedicated to the award, which is why 100 percent of this cost was charged to this award.

**Auditors' Additional Comments:** As UCSF did not provide sufficient documentation to support the allocation methodology used to charge costs to the NSF grants were reasonable or documented, our conclusions regarding this finding have not changed. Specifically:

Publication Costs: Although UCSF argued that a portion of publication costs charged to each project should be allowable, it did not provide documented allocation methodologies to support which portion of each expense was allocable to each award. As such, our position regarding the \$40,557 of inappropriately allocated publication costs has not changed.

- With regard to the \$1,691 in questioned publication costs charged to NSF Award No. [REDACTED] although UCSF's response indicates that at least 12.5 percent of costs should be allowable based on the number of funding sources, because UCSF did not provide a documented methodology supporting that each funding source equally contributed to the research, our position regarding this finding has not changed.
- With regard to the \$3,869 in questioned publication costs charged to NSF Award No. [REDACTED] although UCSF's response indicates that at least 25.0 percent of costs should be allowable based on the number of funding sources, because UCSF did not provide a documented methodology supporting that each funding source equally contributed to the research, our position regarding this finding has not changed.
- With regard to the \$1,712 in questioned publication costs charged to NSF Award No. [REDACTED] although UCSF's response indicates that at least 14.0 percent of costs should be allowable based on the number of funding sources, because UCSF did not provide a documented methodology supporting that each funding source equally contributed to the research, our position regarding this finding has not changed.
- With regard to the \$33,285 in questioned publication costs charged to NSF Award No. [REDACTED] although UCSF stated that 100 percent of this expense is allocable to the award charged, because the publication appears to include contributions from research being performed at each site, and as the award proposal agreement states publications are to be jointly authored, our position regarding this finding has not changed.

Other Direct Costs: Although UCSF stated that \$20,218 of the questioned costs should be allowable based on the benefits each contract received, because its allocation methodologies do not appear reasonable and were not documented, our position regarding this finding has not changed. Specifically:

- With regard to the \$8,465 in questioned costs charged to NSF Award No. [REDACTED] although UCSF stated the consumables were used entirely for this award, UCSF did not provide documentation to support all 3,400 of the consumable items were used to benefit the project, nor does it appear reasonable that 3,400 PlusPlates were necessary to perform research in the final 22 days of the award. As such, our position regarding this finding has not changed.
- With regard to the \$3,979 in questioned costs charged to NSF Award No. [REDACTED] although UCSF stated the computer should be allowable because it was purchased

for an employee who would be fully dedicated to this award, because the majority of the computer’s useful life occurred after the grant’s period of performance expired, allocating 100 percent of the costs to this award does not appear reasonable. As such, our position regarding this finding has not changed.

- With regard to the \$2,574 in questioned costs charged to NSF Award No. [REDACTED] although UCSF stated that the cost was for the regular calibration of pipettes used for the project, it did not provide documentation to support that the pipettes were used exclusively on the award. As such, our position regarding this finding has not changed.
- With regard to the \$5,200 in questioned costs charged to NSF Award No. [REDACTED] although UCSF noted the cost of the freezer should be allowable as it anticipated that over 90 percent of the freezer’s capacity would be used to benefit this award, it did not create or maintain documentation to support the actual use of this freezer. Further, UCSF’s proposal stated that freezer space to support this project was already available. As such, our position related to this finding has not changed.

**FINDING 2: UNALLOWABLE EXPENSES**

UCSF charged ten NSF awards a total of \$36,699 in participant support costs, travel, and salary expenses that were unallowable under federal regulations<sup>15</sup> and NSF PAPPGs.<sup>16</sup>

***Unallowable Uses of Participant Support Cost Funding***

UCSF used \$18,694 in participant support cost funding awarded on four NSF awards to cover non-participant or other unallowable expenses, as illustrated in Table 6.<sup>17</sup>

**Table 6: Unallowable Uses of Participant Support Cost Funding**

Expense Date	NSF Award No.	Expense Total	Participant Support Cost Funding Used to Cover Costs Associated With:	Notes
February–May 2017	[REDACTED]	\$704	No-show expenses and lodging provided to a UCSF employee	a

<sup>15</sup> According to 2 CFR 220, Appendix A, Sections C.2 and C.3, and 2 CFR § 200.403(a), for costs to be allowable, they must be necessary and reasonable for the performance of the federal award. See [Appendix E](#) of this report for more information about allowable costs.

<sup>16</sup> NSF PAPPGs 14-1, 15-1 & 16-1 Part II, Chapter V, Section A and 17-1, 18-1 & 19-1, Chapter X, Section A, states grantees should ensure all costs charged to NSF awards meet the requirements of the applicable federal cost principles, grant terms and conditions, and any other specific requirements of both the award notice and the applicable program solicitation.

<sup>17</sup> NSF PAPPG 14-1, 16-1, & 18-1 Part I, Chapter II, Section C.2.g(v) states that participant support costs are 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 NSF-sponsored conferences or training projects. Additionally, 2 CFR § 200.75, *Participant Support Costs*, states that participant support costs include direct costs for stipends, subsistence allowances, travel allowances, and registration fees paid to or on behalf of participants or trainees, but not employees. Further, UCSF’s Controller Office policy on “Understanding Participant Support Costs” also states participant support costs include stipends or subsistence allowances, travel allowances, and registration fees paid to, or on behalf of, participants or trainees (but not employees).

Expense Date	NSF Award No.	Expense Total	Participant Support Cost Funding Used to Cover Costs Associated With:	Notes
May–June 2017	██████	1,135	UCSF employee travel, unreturned credits, and entertainment	<b>b</b>
March–April 2018	██████	6,307	Lodging, meal, and banquet costs for UCSF employees	<b>c</b>
August 2018	██████	2,163	Consultant costs incurred for marketing and video services	<b>d</b>
January 2019	██████	3,816	Conference facility and meal costs for UCSF employees	<b>e</b>
January–April 2019	██████	4,569	Lodging costs for UCSF employees	<b>f</b>

Source: Auditor summary of identified exceptions.

- a) Between February and May 2017, UCSF used participant support cost funds awarded for NSF Award No. ██████ to cover \$704 in unallowable lodging expenses, including \$469 associated with an unused room, which was not used to benefit a participant, and \$235 in lodging provided to a UCSF employee.
- b) Between May and June 2017, UCSF used participant support cost funds awarded for NSF Award No. ██████ to cover \$1,086 in travel costs for the Co-PI of the award, \$36 in credits that were not appropriately returned to NSF,<sup>18</sup> and \$13 for entertainment costs<sup>19</sup> associated with providing a fire pit for late-arrival ██████ ██████ program participants.
- c) Between March and April 2018, UCSF used participant support cost funds awarded for NSF Award No. ██████ to cover \$6,307 in lodging, meal, and other banquet costs incurred to support eight UCSF employees.
- d) In August 2018, UCSF used participant support cost funds for NSF Award No. ██████ to cover \$2,163 in costs paid to a consultant who provided marketing and video services.
- e) In January 2019, UCSF used participant support cost funding for NSF Award No. ██████ to cover \$3,816 of conference facility and meal expenses used to support six UCSF employees.

<sup>18</sup> According to 2 CFR § 200.406 (a), receipts or reduction-of-expenditure-type transactions that offset or reduce expense items allocable to the federal award as direct or indirect (F&A) costs (e.g., purchase discounts, rebates, allowances) must be credited to the federal award either as a cost reduction or cash refund, as appropriate.

<sup>19</sup> According to 2 CFR § 200.438, costs of entertainment—including amusement, diversion, and social activities—and any associated costs are unallowable.

- f) Between January and April 2019, UCSF used participant support cost funding for NSF Award No. [REDACTED] to cover \$4,569 in lodging costs used to support three UCSF employees.

### **Unallowable Travel Costs**

UCSF charged six NSF awards a total of \$14,104 in unallowable travel expenses, as illustrated in Table 7.<sup>20</sup>

**Table 7: Unallowable Travel Costs**

Expense Date	NSF Award No.	Expense Total	Unallowable Travel Expenses Associated With:	Notes
June 2017	[REDACTED]	\$88	Laundry expenses	a
January 2018	[REDACTED]	7,708	Travel that occurred after the award expired	b
March 2018	[REDACTED]	380	Insufficiently supported per diem costs	c
December 2018	[REDACTED]	2,702	Previously reimbursed airfare	d
March 2019	[REDACTED]	2,374	Personal travel not separated from business travel	e
August 2019	[REDACTED]	852	Non-U.S. flag carrier and upgraded airfare	f

Source: Auditor summary of identified exceptions.

- a) In June 2017, UCSF charged NSF Award No. [REDACTED] for \$88 in laundry expenses<sup>21</sup> claimed in addition to the Meals and Incidentals Expenses per diem claimed during travel to [REDACTED]
- b) In January 2018, UCSF charged NSF Award No. [REDACTED] for \$7,708 in travel costs incurred to allow five students to attend a conference scheduled for April 2018, 75 days after the NSF award’s period of performance expired.<sup>22</sup>
- c) In March 2018, UCSF charged NSF Award No. [REDACTED] for \$380<sup>23</sup> in per diem claimed by a traveler who did not maintain the receipts required to claim meals on

<sup>20</sup> According to 2 CFR § 200.474(b), *Travel Costs*, costs incurred by employees and officers for travel, including costs of lodging, other subsistence, and incidental expenses, must be considered reasonable and otherwise allowable only to the extent such costs do not exceed charges normally allowed by the non-Federal entity in its regular operations as the result of the non-Federal entity’s written travel policy. In addition, this policy states that, if travel costs are charged directly to a federal award, documentation must justify that participation of the individual is necessary to the federal award and that the costs are reasonable and consistent with the non-federal entity’s established travel policy.

<sup>21</sup> UCSF’s G-28 Travel Regulations cite that UCSF travelers will utilize the Department of State Federal Travel per diem allowances. The U.S. Department of State Office of Allowances states that the incidental expenses portion of foreign per diem rates includes laundry and dry-cleaning expenses. Therefore, these expenses may also not be claimed separately.

<sup>22</sup> NSF Award No. [REDACTED]’s period of performance expired on January 31, 2018.

<sup>23</sup> UCSF charged the [REDACTED] lunch per diem (\$40) for six days of travel. As such, the traveler charged \$380 (((\$40 lunch per diem x 6 travel days) x 1.585 indirect cost rate) to the award for lunch per diem.

Outside Continental United States travel, as required for the costs to be allowable per University of California (UC) travel regulations.<sup>24</sup>

- d) In December 2018, UCSF charged NSF Award No. [REDACTED] for \$2,702 in airfare costs claimed by the PI after attending a conference in [REDACTED] that the PI had also received a travel reimbursement for from the conference organizers.
- e) In March 2019, UCSF charged NSF Award No. [REDACTED] for \$2,374 in airfare costs for a conference mentor to oversee an NSF-organized workshop. Although the mentor’s attendance at the conference appears allocable to the award, the flight included personal travel, and UCSF did not provide documentation to support that additional costs were not incurred by the extended travel dates.<sup>25</sup>
- f) In August 2019, UCSF charged NSF Award No. [REDACTED] for \$533 in airline change fees incurred to allow the PI to book a flight on [REDACTED] a non-U.S. flag carrier, and \$319 in upgraded and preferred seating assignment fees.<sup>26</sup>

**Unallowable Salary Costs**

UCSF charged one NSF award for \$3,901 in unallowable salary expenses, as illustrated in Table 8.

**Table 8: Unallowable Salary Costs**

Expense Date	NSF Award No.	Expense Total	Unallowable Salary Expenses Associated With:	Notes
June 2018	[REDACTED]	\$3,901	Uncertified salary	a

Source: Auditor summary of identified exceptions.

- a) In June 2018, UCSF charged NSF Award No. [REDACTED] for \$3,901 in salary expenses that UCSF manually charged to the award as a consultant cost because UCSF’s year-end payroll reporting deadlines had already passed and UCSF wanted to charge the cost prior to its fiscal year-end on June 30, 2018. Although the employee was identified as a contributor to this award, UCSF did not provide documentation to support the salary was certified as having benefitted this award, as required for salary costs to be allowable per UCSF and federal policy.<sup>27</sup>

<sup>24</sup> UC Policy G-28, *Travel Regulations*, states Outside Continental United States travel shall be reimbursed at actual cost up to 100 percent of the per diem rates published by the Department of Defense.

<sup>25</sup> UC Policy G-28, *Travel Regulations*, states that when any personal leave is taken while on official travel status, the number of personal days must be specified on the travel expense claim and/or the expenses associated with such personal days of travel, as any personal expenses incurred on a trip will not be reimbursed by the university.

<sup>26</sup> NSF PAPPG 19-1, Chapter II, C,2.g.iv.(a), states that individuals traveling under NSF grants must, if available, use U.S. Flag Air Carriers and that allowance for air travel normally will not exceed the cost of round-trip economy airfares.

<sup>27</sup> According to 2 CFR § 200.430, *Compensation – personal services*, documentation of personnel expenses must comply with the established accounting policies and practices of the non-federal entity. UCSF’s Controller’s Office specifies that effort reports are required for all employees paid from federally sponsored agreements.

## Conclusion

UCSF does not have sufficient policies and procedures or internal controls in place to ensure it only charges allowable costs to NSF awards. Specifically, UCSF's procedures did not always ensure that it only used participant support cost funds to cover costs associated with participants, that it only reimbursed employees for allowable travel expenses, or that all salary costs charged to federal awards were appropriately certified.

We are therefore questioning \$36,699 of unallowable expenses charged to ten NSF awards. UCSF concurred with \$15,375 of the questioned costs; however, it disagreed with the remaining \$21,324, as illustrated in Table 9.

**Table 9: Finding 2 Summary: Unallowable Expenses**

NSF Award No.	Description	Fiscal Year	Questioned Costs			UCSF Agreed to Reimburse
			Direct	Indirect	Total	
██████	February–May 2017 Participant Travel Costs	2017	\$704	\$0	\$704	\$0
██████	May–June 2017 Participant Support Costs	2017	1,135	-	1,135	1,135
██████	March–April 2018 Participant Support Costs	2018	6,307	-	6,307	-
██████	August 2018 Participant Support Costs	2019	2,163	-	2,163	2,163
██████	January 2019 Participant Support Costs	2019	3,816	-	3,816	0
██████	January–April 2019 Participant Support Costs	2019	4,569	-	4,569	0
██████	June 2017 Per Diem Overcharge	2017	61	27	88	88
██████	January 2018 Travel after Award Expiration	2018	4,863	2,845	7,708	7,708
██████	March 2018 Per Diem	2018	240	140	380	380
	December 2018 Flight Costs	2019	1,705	997	2,702	-
	March 2019 Personal Travel	2019	1,884	490	2,374	-
	August 2019 Airfare Fees	2020	531	321	852	-
	June 2018 Uncertified Salary	2018	3,877	24	3,901	3,901
<b>Total</b>			<b><u>\$31,855</u></b>	<b><u>\$4,844</u></b>	<b><u>\$36,699</u></b>	<b><u>\$15,375</u></b>

Source: Auditor summary of identified exceptions.

## Recommendations

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

- 2.1 Resolve the \$21,324 in questioned participant support and travel costs for which UCSF has not agreed to reimburse NSF and direct UCSF to repay or otherwise remove the sustained questioned costs from its NSF awards.
- 2.2 Direct UCSF to provide documentation supporting that it has repaid or otherwise credited the \$15,375 of questioned participant support, travel and salary costs for which it has agreed to reimburse NSF.
- 2.3 Direct UCSF to establish clear guidance regarding the allowable uses of participant support cost funding. This guidance should address how to segregate and account for costs that cannot be covered with participant support cost funding, such as costs incurred for UCSF employees, entertainment costs, and expenses associated with unused participant lodging.
- 2.4 Direct UCSF to strengthen its administrative and management processes to ensure credits received from vendors are appropriately reimbursed to the original funding source(s) charged.
- 2.5 Direct UCSF to strengthen its administrative and management processes and procedures surrounding the approval of travel expense reports. Updated procedures could include:
  - 2.5.1 Conducting annual training that addresses how to ensure per diem expenses are appropriately reimbursed.
  - 2.5.2 Establishing controls within its travel reporting system to ensure costs associated with travel occurring after an award expires are not charged to the award.
  - 2.5.3 Requiring travelers to document the business purpose of each day of a planned trip before purchasing airfare, in order to enable UCSF to evaluate whether it must perform a travel comparison to support that airfare costs did not increase as a result of personal travel.
  - 2.5.4 Implementing additional reviews for all airfare purchases that require the reviewer to verify that airfare complies with the [Fly America Act](#) and relates to economy class airfare prior to the expenses being charged to NSF awards.
- 2.6 Direct UCSF to provide training regarding the policy requirements for salary charged to NSF awards to ensure payroll is processed timely, under the appropriate account codes, and appropriately certified.

**University of California, San Francisco Response:** Although UCSF agreed to reimburse or reclassify \$15,375 of the questioned costs, it generally disagreed with the finding, noting that the expenses were not expressly unallowable and that \$21,324 of questioned costs should be allowable. Further, UCSF stated that its end-of-award or interim reporting reviews would have identified a large majority of the identified exceptions, and that these exceptions were a result of the audit period. Specifically:

Participant Support Costs: UCSF agreed to reimburse \$3,298 of the questioned participant support costs, but disagreed with the remaining \$15,396, believing those expenses were allowable costs initially charged to the participant support cost budget category before being transferred to the correct budget category as part of the end-of-award or interim reporting review. Specifically:

- With regard to the \$704 in questioned participant support costs charged to NSF Award No. [REDACTED] UCSF did not agree with the finding, stating that \$235 of the questioned amount was incorrectly classified as participant support costs, but represents an allowable award expense. Additionally, UCSF argued that the remaining \$469 relates to the lodging costs for a participant who cancelled after the hotel refund policy period had ended and should therefore be allowable on the award.
- With regard to the \$6,307 in questioned participant support costs charged to NSF Award No. [REDACTED] UCSF did not agree with the finding, stating that although the amount was incorrectly classified as participant support costs, these costs represent allowable award expenses.
- With regard to the \$3,816 in questioned participant support costs charged to NSF Award No. [REDACTED] UCSF did not agree with the finding, stating that although the amount was incorrectly classified as participant support costs, these costs represent allowable award expenses. Further, UCSF stated that it had already identified and transferred these costs to the correct budget category through its routine ledger review at award closeout.
- With regard to the \$4,569 in questioned unallowable participant support costs charged to NSF Award No. [REDACTED] UCSF did not agree with the finding, stating that although the amount was incorrectly classified as participant support costs, these costs represent allowable award expenses. Further, UCSF stated that it had already identified and transferred these costs to the correct budget category through its routine ledger review at award closeout.

Travel Costs: UCSF agreed to reimburse \$8,176 of the questioned travel costs; however, it disagreed with the remaining \$5,928, believing those expenses to be allowable travel costs on the awards charged. Specifically:

- With regard to the \$2,702 in questioned travel costs charged to NSF Award No. [REDACTED] UCSF stated that it has already transferred the charges off the award and therefore no further reimbursement is necessary.
- With regard to the \$2,374 in questioned travel costs charged to NSF Award No. [REDACTED] UCSF did not agree with the finding, stating that the travel benefitted the award and was a reasonable amount. Additionally, it noted that although travel within a few days difference can vary, the difference is not 100 percent. Thus, UCSF does not agree to return the full amount of the expense.
- With regard to the \$852 in questioned travel costs charged to NSF Award No. [REDACTED] UCSF did not agree with the finding, stating that as [REDACTED] [REDACTED] is a Star Alliance partner with United, the flight was intended to be under the umbrella of that U.S. Flag Air Carrier's policy. Additionally, it stated that the upgraded seat fare was allowable as it was required by the traveler's doctor. Thus, UCSF does not agree to return the full amount of the expense.

Salary Costs: UCSF agreed to reimburse the \$3,901 of the questioned salary costs but disagreed that the cost was unallowable. Specifically:

- With regard to the \$3,901 in questioned salary costs charged to NSF Award No. [REDACTED] UCSF partially agreed with the finding, stating that although the cost was allowable on the award, because its transfer policy, which represents a critical payroll control, was not appropriately followed, it agreed to reimburse the costs.

**Auditors' Additional Comments:** As UCSF did not provide sufficient documentation to support the allowability of costs to the NSF contracts, our conclusions regarding this finding have not changed. Specifically:

Participant Support Cost: Although UCSF stated that \$15,396 of the questioned costs should be allowable as the costs were removed or reclassified as part of UCSF's review procedures, because the adjustments were performed after the expenses were selected as part of the audit sample, our position regarding this finding has not changed. Specifically:

- With regard to the \$704 in participant support costs charged to NSF Award No. [REDACTED] although UCSF stated \$235 of the participant support costs were already transferred to the correct budget category as a result of its internal review, the adjustment was not made until after the expense was selected during the audit. Additionally, although UCSF stated \$469 should be allowable for non-refundable lodging costs, the cost was not used to benefit a participant. As such, our position regarding this finding has not changed.
- With regard to the \$6,307 in questioned participant support costs charged to NSF Award No. [REDACTED] although UCSF stated the initially charged participant support costs were adjusted during the award closeout, the unallowable costs were initially

identified during the audit and adjusted after the audit's scope. As we are unable to verify the adjustments made, our position regarding this finding has not changed.

- With regard to the \$3,816 in questioned participant support costs charged to NSF Award No. [REDACTED] although UCSF stated the participant support costs were adjusted during award closeout, because the adjustment was not made until after the expense was selected during the audit, our position regarding this finding has not changed.
- With regard to the \$4,569 in questioned participant support costs charged to NSF Award No. [REDACTED] although UCSF stated the participant support costs were adjusted during award closeout, because the adjustment was not made until after the expense was selected during the audit, our position regarding this finding has not changed.

Travel Costs: Although UCSF stated that \$5,928 of the questioned costs should be allowable as the travel benefitted the awards charged, because UCSF did not provide documentation to support the costs were allowable in compliance with federal regulations, our position regarding this finding has not changed. Specifically:

- With regard to the \$2,702 in questioned travel costs charged to NSF Award No. [REDACTED] although UCSF indicated the amount was already transferred off the award, because the adjustment was not made until after the expense was selected during the audit, our position regarding this finding has not changed.
- With regard to the \$2,374 in questioned travel costs charged to NSF Award No. [REDACTED] although UCSF stated it did not agree with questioning 100 percent of the identified costs, because it did not provide any additional documentation or methodology to support what portion of this expense should be allowable, our position regarding this finding has not changed.
- With regard to the \$852 in questioned travel costs charged to NSF Award No. [REDACTED] although UCSF stated that the costs should be allowable as the upgraded airfare was required per the traveler's doctor, and as [REDACTED] is a StarAlliance partner with United Airlines, UCSF did not provide documentation to support the doctor's instruction for upgraded airfare, nor to support that the flight was shared between United and [REDACTED] [REDACTED] as required for compliance with the Fly America Act. Accordingly, our position regarding this finding has not changed.

Salary Costs: Although UCSF stated that the salary was allowable, because UCSF did not provide documentation to support the salary was charged in compliance with UCSF's internal policy, our position regarding this finding has not changed. Specifically:

- With regard to the \$3,901 in questioned salary costs charged to NSF Award No. [REDACTED] because the salary payment was not certified as having benefitted the

award and was not appropriately transferred to the award in accordance with UCSF policies, our position regarding this finding has not changed.

**FINDING 3: INADEQUATELY SUPPORTED EXPENSES**

UCSF did not provide adequate documentation to support the allocability, allowability, and reasonableness of \$14,365 in expenses charged to two NSF awards during the audit period, as required for the costs to be allowable under federal regulations<sup>28</sup> and NSF PAPPGs,<sup>29</sup> as illustrated in Table 10:

**Table 10: Inadequately Supported Expenses**

Expense Date	NSF Award No.	Expense Total	Insufficient Documentation to Support the Allowability of:	Notes
October 2018	██████████	\$11,197	PI approval of a subaward invoice	<b>a</b>
August 2019	██████████	3,168	Animal housing charges	<b>b</b>

Source: Auditor summary of identified exceptions.

- a) In October 2018, UCSF charged NSF Award No. ██████████ for \$11,197 in subaward costs invoiced by another organization within the UC system without obtaining the PI’s approval of the invoice, as required by UCSF policy.<sup>30</sup>
- b) In August 2019, UCSF charged NSF Award No. ██████████ for \$3,168 in animal care charges paid to the UCSF Laboratory Animal Resource Center without supporting the quantity or description of the animal charges allocated to the project.

**Conclusion**

UCSF did not have appropriate policies and procedures in place to ensure it received and maintained adequate documentation supporting the allowability of all costs charged to federal awards. Specifically, UCSF’s procedures did not ensure that PIs approved subaward invoices prior to payment, or that costs invoiced by the Laboratory Animal Resources

<sup>28</sup> According to 2 CFR § 200.403, *Factors affecting allowability of costs*, for a cost to be allowable, it must be adequately documented, as well as both necessary and reasonable for the performance of the federal award. Additionally, according to 2 CFR § 200.405(a), *Allocable Costs*, a cost is allocable to a particular cost objective if the goods or services involved are chargeable or assignable to such cost objective in accordance with relative benefits received. Further, 2 CFR § 200.302(b)(3), *Financial Management*, states records must adequately identify the source and application of funds, including authorizations and source documentation. See **Appendix E** of this report for additional factors affecting the allowability and allocability of costs.

<sup>29</sup> NSF PAPPGs 15-1 and 16-1 Part II, Chapter V.A, and 17-1, Chapter X,A , state 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.

<sup>30</sup> The UCSF Outgoing Subawards Process and Monitoring Policy states that, for federal awards, PI approval and the required certification should be included on each invoice. Specifically, PIs will review invoices received from the subrecipient for allocability, allowability, and reasonableness of costs, and they will confirm whether charges are within the period of performance of the prime award. At this point, the invoice will be approved and submitted to Accounts Payable for processing. Further, NSF PAPPG 15-1, Part II, Chapter II, A.1.a., states that 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.

Center were sufficiently detailed to allow reviewers to verify the allowability of the expenses.

We are therefore questioning \$14,365 of inadequately supported expenses charged to two NSF awards, as illustrated in Table 11.

**Table 11: Finding 3 Summary: Inadequately Supported Expenses**

NSF Award No.	Description	Fiscal Year	Questioned Costs			UCSF Agreed to Reimburse
			Direct	Indirect	Total	
██████	October 2018 Subaward Costs	2019	11,197	-	11,197	-
██████	August 2019 Animal Care	2020	1,999	1,169	3,168	-
<b>Total</b>			<b><u>\$13,196</u></b>	<b><u>\$1,169</u></b>	<b><u>\$14,365</u></b>	<b><u>\$0</u></b>

Source: Auditor summary of identified exceptions.

### Recommendations

We recommend that NSF’s Director of the Division of Institution and Award Support:

- 3.1 Resolve the \$14,365 in questioned, inadequately supported subaward and animal care expenses for which UCSF has not agreed to reimburse NSF and direct UCSF to repay or otherwise remove the sustained questioned costs from its NSF awards.
- 3.2 Direct UCSF to strengthen its policies and procedures related to creating and retaining documentation, including introducing additional controls to help ensure it appropriately creates and maintains all documentation necessary to support the allowability of expenses charged to sponsored programs. Updated procedures could include:
  - 3.2.1 Updating its current subaward approval procedures to ensure Principal Investigators appropriately approve invoices submitted through Intercampus Requests for Reimbursement by organizations within the University of California system.
  - 3.2.2 Implementing additional procedures to ensure the rate(s) and service(s) provided by the Laboratory Animal Resource Center are appropriately documented within invoices it uses to charge expenses to federal awards.

**University of California, San Francisco Response:** UCSF disagreed with the \$14,365 of questioned costs, noting UCSF maintains a strong internal control environment to provide reasonable assurance that expenses charged to federally sponsored awards are allowable, allocable, reasonable, and necessary. Specifically:

- With regard to the \$11,197 in questioned subaward costs charged to NSF Award No. [REDACTED] UCSF disagreed with the finding, stating that the costs are adequately supported as allowable. Specifically, UCSF stated a PI signature is not needed when handling awards within the UC system due to the universities being one entity.
- With regard to the \$3,168 in questioned lab animal care costs charged to NSF Award No. [REDACTED] UCSF disagreed with the finding, stating that the costs are adequately supported as allowable. Specifically, UCSF stated that lab animals were a required component of the research and that UCSF requires the monthly reallocation of lab animal care across a PI's portfolio, consistent with the PI's use of the lab.

**Auditors' Additional Comments:** As UCSF did not provide sufficient documentation to support the allowability of these costs, our position regarding this finding has not changed. Specifically:

- With regard to the \$11,197 in questioned subaward costs charged to NSF Award No. [REDACTED] because the PI did not approve the invoice prior to its payment, as required by UCSF policy, UCSF does not have adequate documentation to support that the PI—or other designated personnel—verified the costs included in the invoice were allowable, allocable, reasonable, and within the period of performance. As such, our position regarding this finding has not changed.
- With regard to the \$3,168 in questioned lab animal care costs charged to NSF Award No. [REDACTED] because UCSF did not provide support for the quantity or description of animal charges allocated to the award, we are unable to determine whether the costs invoiced are allowable, allocable, or reasonable on the award charged. As such, our position regarding this finding has not changed.

#### **FINDING 4: INDIRECT COSTS INAPPROPRIATELY APPLIED**

UCSF charged three NSF awards a total of \$9,754 in indirect costs it inappropriately applied to participant support costs and equipment that it should not have accounted for as

Modified Total Direct Costs (MTDCs), per federal regulations,<sup>31</sup> NSF PAPPGs,<sup>32</sup> and UCSF's Negotiated Indirect Cost Rate Agreements (NICRAs),<sup>33</sup> as illustrated in Table 12.

**Table 12: Indirect Costs Inappropriately Applied**

Expense Date	NSF Award No.	Indirect Expense	Indirect Cost Rate Inappropriately Applied to:	Notes
May 2018	████████	\$1,296	Graphics cards to be installed on server equipment	a
May 2018–June 2019	████████	5,088	Housing and transportation expenses for REU program participant support costs	b
May 2019–June 2019	████████	2,018	Parking and a stipend for NSF workshop participants	c
November 2019	████████	1,352	A \$5,200 freezer	d

Source: Auditor summary of identified exceptions.

- a) In May 2018, UCSF charged NSF Award No. ██████████ for \$1,296 in indirect costs applied to costs incurred to purchase graphics cards for installation on specialized server equipment. As the materials contributed to the value of **fabricated equipment**, these costs should have been accounted for as **capital expenditures**.
- b) Between May 2018 and June 2019, UCSF charged NSF Award No. ██████████ for \$5,088 in indirect costs applied to participant support travel costs incurred to provide ██████████ program participants with housing and transportation.
- c) Between May and June 2019, UCSF charged NSF Award No. ██████████ for \$2,018 in indirect costs applied to costs incurred to purchase participant parking stickers and to provide a stipend to a participant attending an NSF-funded Cellular Construction Workshop.

<sup>31</sup> According to 2 CFR § 200.68, MTDCs includes all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and subawards and subcontracts up to the first \$25,000 of each subaward or subcontract (regardless of the period of performance of the subawards and subcontracts under the award). MTDCs exclude equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs, and the portion of each subaward and subcontract in excess of \$25,000. Other items may only be excluded when necessary to avoid a serious inequity in the distribution of indirect costs, and with the approval of the cognizant agency for indirect costs.

<sup>32</sup> NSF PAPPGs 17-1 and 19-1, Chapter X, Section D.1.a., state that grantees are entitled to reimbursement from grant funds for indirect costs allocable to the NSF share of allowable direct costs of a project. Additionally, NSF PAPPGs, 17-1 and 19-1, Chapter II, Section C.2.g(v), state that indirect costs are not allowed on participant support costs. Participant support costs must be accounted for separately, should an award be made.

<sup>33</sup> UCSF's May 23, 2012, and November 27, 2017, NICRA Rate Agreements state that MTDCs shall exclude equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs, and the portion of each subaward in excess of \$25,000.

- d) In November 2019, UCSF charged NSF Award No. [REDACTED] for \$1,352 in indirect costs applied to costs incurred to purchase a \$5,200 freezer that should have been capitalized as a piece of equipment because the purchase price was over \$5,000.<sup>34</sup>

## Conclusion

UCSF does not have sufficient policies and procedures or internal controls in place to ensure participant support costs and equipment are appropriately charged to account codes that are excluded from its MTDC base.

We are therefore questioning \$9,754 of inappropriately applied indirect costs charged to three NSF awards. UCSF concurred with \$1,352 of the questioned costs; however, it disagreed with the remaining \$8,402, as illustrated in Table 13.

**Table 13: Finding 4 Summary: Indirect Costs Inappropriately Applied**

NSF Award No.	Description	Fiscal Year	Questioned Costs			
			Direct	Indirect	Total	UCSF Agreed to Reimburse
[REDACTED]	May 2018 Graphic Cards	2018	\$0	\$1,296	\$1,296	\$0
[REDACTED]	May 2018 – June 2019 Participant Housing & Transportation	2018–2019	-	5,088	5,088	-
[REDACTED]	May 2019 – June 2019 Participant Support Costs	2019	-	2,018	2,018	-
[REDACTED]	November 2019 Freezer	2020	-	1,352	1,352	1,352
<b>Total</b>			<b><u>\$0</u></b>	<b><u>\$9,754</u></b>	<b><u>\$9,754</u></b>	<b><u>\$1,352</u></b>

Source: Auditor summary of identified exceptions.

## Recommendations

We recommend that NSF’s Director of the Division of Institution and Award Support:

- 4.1 Resolve the \$8,402 in questioned indirect costs for which UCSF has not agreed to reimburse NSF and direct UCSF to repay or otherwise remove the sustained questioned costs from its NSF awards.

<sup>34</sup> In UCSF’s Supply Chain Management – Buying Capital Equipment Guide, departments make the determination that the purchase is capital equipment by verifying that the capitalized cost will exceed \$5,000. The \$5,000 value includes the price of the equipment and other costs needed to put the equipment into service, such as required installation services, startup components, accessories, startup kits (e.g., regents), freight, handling, and sales tax. Additionally, UCSF’s Capital Asset Management Guide states equipment assembled with components where the direct cost of labor and materials total or exceed \$5,000 should be considered fabricated equipment. Lastly, according to 2 CFR § 200.13, capital expenditures include expenditures to acquire capital assets.

- 4.2 Direct UCSF to provide documentation supporting that it has repaid or otherwise credited the \$1,352 of questioned indirect costs for which it has agreed to reimburse NSF.
- 4.3 Direct UCSF to strengthen its monitoring procedures and internal control processes for applying indirect costs to federal awards. Updated procedures could include:
  - 4.3.1 Conducting annual training regarding the treatment of materials used in the fabrication of equipment. Specifically, on determining when materials used in the fabrication of an asset should be part of the capitalized cost of an asset.
  - 4.3.2 Implementing an annual review process for costs charged to awards that include funding for participant support costs to ensure UCSF is appropriately segregating these expenses in accounts that it has excluded from its Modified Total Direct Cost base.
  - 4.3.3 Requiring that personnel manually review purchases in excess of UCSF's policy for assets to be capitalized to ensure assets have been appropriately capitalized and excluded from the Modified Total Direct Cost base.

**University of California, San Francisco Response:** UCSF agreed to reimburse NSF for \$1,352 in indirect costs applied to the freezer expense but disagreed with the remaining \$8,402 in questioned costs, noting that the indirect costs had already been adjusted as a result of transferring the direct costs to expense accounts that do not apply indirect costs. Specifically:

- With regard to the \$1,296 in questioned indirect costs charged to NSF Award No. [REDACTED] UCSF stated that it did not agree with the finding as the graphic card costs were previously transferred to a capital account that does not apply indirect costs.
- With regard to the \$5,088 in questioned indirect costs charged to NSF Award No. [REDACTED] UCSF stated that it did not agree with the finding as the participant support costs were previously identified and transferred to an account that does not apply indirect costs during the award review process. Further, UCSF stated that the transfer resulted in an automatic reduction in indirect costs, which have already been returned to NSF, and therefore no further reimbursement is needed.
- With regard to the \$2,018 in questioned indirect costs charged to NSF Award No. [REDACTED] UCSF stated that it did not agree with the finding as the participant support costs were previously identified and transferred to an account that does not apply indirect costs during the award review process. Further, UCSF stated that the transfer resulted in an automatic reduction in indirect costs, which have already been returned to NSF, and therefore no further reimbursement is needed.

**Auditors' Additional Comments:** As UCSF did not provide documentation to support the direct costs were transferred to accounts that do not apply indirect costs prior to the expenses being selected as part of our audit, our position regarding this finding has not changed. Specifically:

- With regard to the \$1,296 in questioned indirect costs charged to NSF Award No. [REDACTED] although UCSF indicated the graphic card costs had been transferred to an account that does not apply indirect costs, because the adjustment was not made until after the expense was selected during the audit, our position regarding this finding has not changed.
- With regard to the \$5,088 in questioned indirect costs charged to NSF Award No. [REDACTED] although UCSF indicated the participant support costs had been transferred to an account that does not apply indirect costs, because the adjustment was not made until after the expense was selected during the audit, our position regarding this finding has not changed.
- With regard to the \$2,018 in questioned indirect costs charged to NSF Award No. [REDACTED] although UCSF indicated the participant support costs had been transferred to an account that does not apply indirect costs, because the adjustment was not made until after the expense was selected during the audit, our position regarding this finding has not changed.

**FINDING 5: NON-COMPLIANCE WITH UCSF POLICIES**

UCSF did not always comply—or did not always document its compliance—with its travel, subaward, procurement, and NICRA policies and procedures when incurring costs charged to NSF awards.

***Non-Compliance with UCSF Travel Policies***

We identified two instances in which UCSF did not comply with its internal travel policies and procedures, which require employees to book rental cars through UCSF’s travel platform, Connexus,<sup>35</sup> as illustrated in Table 14.

**Table 14: Non-Compliance with UCSF Travel Policies**

Expense Date	NSF Award No.	UCSF Policy Violated	Notes
June 2018	[REDACTED]	UCSF Supply Chain Management’s Travel Guidelines	<b>a</b>
August 2018	[REDACTED]	UCSF Supply Chain Management’s Travel Guidelines	<b>b</b>

Source: Auditor summary of identified instances of non-compliance with UCSF’s travel policies.

- a) In June 2018, UCSF charged NSF Award No. [REDACTED] for \$354 for a rental car that was not booked through Connexus.

<sup>35</sup> UCSF Supply Chain Management Travel Guidelines instruct travelers to reserve a rental car using Connexus to ensure it is on a UCSF-negotiated contract and automatically covered by UCSF’s rental car insurance for business travel.

- b) In August 2018, UCSF charged NSF Award No. [REDACTED] for \$61 for a rental car that was not booked through Connexus.

### ***Non-Compliance with UCSF Subaward Policies***

We identified three instances in which UCSF did not comply with its internal subaward policies, which require PIs to obtain **Subrecipient Commitment Forms**,<sup>36</sup> as illustrated in Table 15.

**Table 15: Non-Compliance with UCSF Subaward Policies**

Expense Date	NSF Award No.	Subaward Agreement Date	Subawardee	Fiscal Year
June 2017	[REDACTED]	4/6/2017	[REDACTED]	2017
August 2017	[REDACTED]	2/14/2017	[REDACTED]	2018
March 2018	[REDACTED]	2/14/2017	[REDACTED]	2018

Source: Auditor summary of identified instances of non-compliance with UCSF’s subaward policies.

### ***Non-Compliance with UCSF Procurement Policies***

We identified 14 instances in which UCSF did not comply with its procurement policies, which require **Sole Source Justifications**<sup>37</sup> and a **Federal Funds Checklist**<sup>38</sup> for purchases greater than or equal to \$10,000 and **BearBuy Professional Services/Consulting forms**<sup>39</sup> when buying professional, personal, or consulting services with federal funds, as illustrated in Table 16.

**Table 16: Non-Compliance with UCSF Procurement Policies**

Expense Date	NSF Award No.	UCSF Policy Violated	Notes
February 2017	[REDACTED]	Sole-Source Justification Guide	a
September 2017	[REDACTED]	Sole-Source Justification Guide	b
May 2018	[REDACTED]	Sole-Source Justification Guide	c
June 2019	[REDACTED]	Sole-Source Justification Guide	d
October 2019	[REDACTED]	Sole-Source Justification Guide	e
November 2019	[REDACTED]	Sole-Source Justification Guide	f
January 2019	[REDACTED]	Federal Funds Checklist	g
June 2019	[REDACTED]	Federal Funds Checklist	h

<sup>36</sup> In UCSF’s Subaward Proposal Toolkit, the UCSF Office of Sponsored Research lists the Subrecipient Commitment Form as one of the required documents from each proposed subrecipient. See **Appendix E** of this report for more information about the Subrecipient Commitment Form.

<sup>37</sup> UCSF Supply Chain Management’s Sole-Source Justification Guide specifies that competition is required for all federal funds purchase orders \$10,000 or above. However, it notes that if there is no other option, a sole-source justification must be documented. See **Appendix E** of this report for more information about Sole-Source Justifications.

<sup>38</sup> UCSF Procurement Services created a Federal Funds Checklist, last revised on January 22, 2019, which indicates the form is required for all federally funded purchases ≥ \$10,000.

<sup>39</sup> UCSF Supply Chain Management’s Professional Services/Independent Consulting policy instructs purchasers to complete the BearBuy Professional/Personal/Consulting Services form when buying professional, personal, or consulting services.

Expense Date	NSF Award No.	UCSF Policy Violated	Notes
November 2019		Federal Funds Checklist	<b>i</b>
June 2017		Professional Services/Independent Consulting Policy	<b>j</b>
July 2017		Professional Services/Independent Consulting Policy	<b>k</b>
December 2017		Professional Services/Independent Consulting Policy	<b>l</b>
June 2018		Professional Services/Independent Consulting Policy	<b>m</b>
May 2019		Professional Services/Independent Consulting Policy	<b>n</b>

Source: Auditor summary of identified instances of non-compliance with UCSF's procurement policies.

- a) In February 2017, UCSF charged \$14,464 in rooms and meals expenses to NSF Award No. [REDACTED] related to a \$32,000 purchase order with the Oceano Hotel that was not supported by a sole-source justification.
- b) In September 2017, UCSF charged \$11,581 in housing costs to NSF Award No. [REDACTED] related to a \$163,200 purchase order with the University of San Francisco that was not supported by a sole-source justification.
- c) In May 2018, UCSF charged \$22,440 in housing costs to NSF Award No. [REDACTED] related to a \$170,000 purchase order with University of San Francisco that was not supported by a sole-source justification.
- d) In June 2019, UCSF charged \$35,363 in housing costs to NSF Award No. [REDACTED] related to a \$190,944 purchase order with the University of San Francisco that was not supported by a sole-source justification.
- e) In October 2019, UCSF charged \$10,413 in consultant costs to NSF Award No. [REDACTED] related to a \$65,000 purchase order with [REDACTED] that was not supported by a sole-source justification.
- f) In November 2019, UCSF charged \$15,680 for a Special Use Permit to NSF Award No. [REDACTED] related to a \$15,680 purchase order with the [REDACTED] that was not supported by a sole-source justification.
- g) In January 2019, UCSF charged \$47,500 in contractor services to NSF Award No. [REDACTED] without completing a Federal Funds checklist.
- h) In June 2019, UCSF charged \$35,363 in housing services to NSF Award No. [REDACTED] without completing a Federal Funds checklist.
- i) In November 2019, UCSF charged \$15,680 in facility rental costs to NSF Award No. [REDACTED] without completing a Federal Funds checklist.
- j) In June 2017, UCSF charged NSF Award No. [REDACTED] for \$7,500 for consulting costs not supported by BearBuy Professional Services/Consulting forms.

- k) In July 2017 UCSF charged NSF Award No. [REDACTED] for \$4,478 for consulting costs not supported by BearBuy Professional Services/Consulting forms.
- l) In December 2017, UCSF charged NSF Award No. [REDACTED] for \$7,500 for consulting costs not supported by BearBuy Professional Services/Consulting forms.
- m) In June 2018, UCSF charged NSF Award No. [REDACTED] for \$10,000 for consulting costs not supported by BearBuy Professional Services/Consulting forms.
- n) In May 2019 UCSF charged NSF Award No. [REDACTED] for \$4,655 for consulting costs not supported by BearBuy Professional Services/Consulting forms.

***Non-Compliance with UCSF Accounting Policies***

We identified three instances in which UCSF did not comply with its accounting policies, which require that it document its **Intercampus/Multi-campus Appointments** through **interlocation appointment forms**<sup>40</sup> and apply its indirect cost rate to expenses incurred for travel,<sup>41</sup> as illustrated in Table 17.

**Table 17: Non-Compliance with UCSF Accounting Policies**

Expense Date	NSF Award No.	UCSF Policy Violated	Notes
July 2017	[REDACTED]	UC Controller’s Office’s Intercampus/ Multi-campus Policy	a
May 2019	[REDACTED]	UC Controller’s Office’s Intercampus/ Multi-campus Policy	b
July 2018	[REDACTED]	UCSF’s NICRA	c

Source: Auditor summary of identified instances of non-compliance with UCSF accounting policies.

- a) In July 2017, UCSF established an intercampus appointment between UCSF and [REDACTED] for a consultant working on NSF Award No. [REDACTED] without completing the required interlocation appointment form.
- b) In May 2019, UCSF established an intercampus appointment between UCSF and [REDACTED] for a consultant working on NSF Award No. [REDACTED] without completing the required interlocation appointment form.
- c) In July 2018, UCSF did not apply indirect costs to \$1,000 in travel costs charged NSF Award No. [REDACTED] that should have been included in its MTDC base.

<sup>40</sup> The University of California Controller’s Office’s description of Intercampus/Multi-campus Appointments states that: for one-time intercampus/multi-campus payments, departments should use the Interlocation One-Time Payment Form; and for appointments, the Temporary Interlocation or Multi-location Appointment Form. See **Appendix E** of this report for more information about the Intercampus Appointments.

<sup>41</sup> UCSF’s NICRA states that MTDCs consist of all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first \$25,000 of each subaward.

## Conclusion

UCSF did not have adequate procedures in place to ensure it consistently complied with—and documented its compliance with—its travel, subaward, procurement, and accounting policies and procedures.

Because these instances of non-compliance did not directly result in UCSF charging unallowable costs to NSF awards, we are not questioning any costs for these exceptions; however, we are noting the 22 instances of non-compliance with UCSF policies when charging costs to nine NSF awards as compliance findings, as illustrated in Table 18.

**Table 18: Finding 5 Summary: Non-Compliance with UCSF Policies**

NSF Award No.	Compliance Exception Identified	Fiscal Year
	Non-Compliance with UCSF Travel Policies	2018
	Non-Compliance with UCSF Travel Policies	2019
	Non-Compliance with UCSF Subaward Policies	2017
	Non-Compliance with UCSF Subaward Policies	2018
	Non-Compliance with UCSF Subaward Policies	2018
	Non-Compliance with UCSF Procurement Policies	2017
	Non-Compliance with UCSF Procurement Policies	2018
	Non-Compliance with UCSF Procurement Policies	2018
	Non-Compliance with UCSF Procurement Policies	2019
	Non-Compliance with UCSF Procurement Policies	2020
	Non-Compliance with UCSF Procurement Policies	2020
	Non-Compliance with UCSF Procurement Policies	2019
	Non-Compliance with UCSF Procurement Policies	2019
	Non-Compliance with UCSF Procurement Policies	2020
	Non-Compliance with UCSF Procurement Policies	2017
	Non-Compliance with UCSF Procurement Policies	2017
	Non-Compliance with UCSF Procurement Policies	2017
	Non-Compliance with UCSF Procurement Policies	2018
	Non-Compliance with UCSF Procurement Policies	2019
	Non-Compliance with UCSF Accounting Policies	2018
	Non-Compliance with UCSF Accounting Policies	2019
	Non-Compliance with UCSF Accounting Policies	2019

*Source: Auditor summary of identified instances of non-compliance with UCSF’s policies.*

## Recommendations

We recommend that NSF’s Director of the Division of Institution and Award Support:

- 5.1 Direct UCSF to strengthen its administrative and management procedures for rentals to ensure employees use Connexus to rent vehicles, thereby ensuring the rental is covered by University of California’s rental car insurance for business travel.

- 5.2 Direct UCSF to strengthen its administrative and management procedures related to subaward processing to confirm subrecipient commitment forms are completed for each subawardee at the proposal stage.
- 5.3 Direct UCSF to strengthen its directives, procedures, and internal controls for procuring contract services on sponsored projects. Updated processes could include the following:
- 5.3.1 Conducting annual training for those individuals who procure contract services, including Principal Investigators. Specifically, the training should include the following:
- 5.3.1.1 Clarification on the documentation requirements for entering into a contract or consulting agreement, including when to use the Sole Selection & Price Reasonableness Justification Form, Federal Funds Checklist, and BearBuy Professional Services/Consulting form.
- 5.3.1.2 An overview of the process for contracting the services of a University of California-system employee, including the requirement to complete the Temporary Interlocation or Multi-location Appointment Form.
- 5.3.2 Implementing a manual review process to ensure individuals who initiate contract services complete all applicable forms required by University of California and UCSF procurement policy.
- 5.4 Direct UCSF to strengthen its procedures and internal controls for reviewing expense(s) eligibility for inclusion or exclusion from the Modified Total Direct Cost base.

**University of California, San Francisco Response:** UCSF did not explicitly state whether it agreed or disagreed with this finding but noted that it has policies and procedures in place to ensure expenses charged to federal awards are allowable, benefit the award, and are reasonable for the completion of the research. Additionally, UCSF stated that it updates policies at regular or necessary intervals to ensure compliance as laws, regulations, and guidelines change. Specifically:

- With regard to its non-compliance with travel policies, UCSF stated that it makes it a priority to book travel using the UC travel system.
- With regard to its non-compliance with subaward policies, UCSF stated that it created and implemented a tool in the summer of 2020 to tighten existing controls and allow the online management of all required documentation for the issuance of a subaward. The tool now provides easy access for the subaward team and research administrators to collaborate and verify all UCSF policies are followed.

- With regard to its non-compliance with procurement policies, UCSF stated that its procurement unit has continued to update all policies and processes to better manage the requirements for purchasing under federal awards since the implementation of the Uniform Guidance and new tools provided by the University of California, Office of the President.
- With regard to its non-compliance with accounting policies, UCSF stated campuses are required to file the appropriate paperwork or transfer costs to ensure proper indirect cost recovery.

**Auditors' Additional Comments:** As UCSF did not provide documentation to support that costs were incurred in compliance with its policies and procedures, our position regarding this finding has not changed. Specifically:

- With regard to UCSF's non-compliance with its travel policies, although UCSF stated that it prioritizes booking travel through the UC travel system, we identified two instances where travel was not booked using the UC travel system. As such, our position regarding this finding has not changed.
- With regard to UCSF's non-compliance with its subaward policies, although UCSF stated that it created and implemented a tool in summer 2020 to improve compliance with UCSF policies related to subawards, as we identified three instances where UCSF did not comply with its internal subaward policies, our position regarding this finding has not changed.
- With regard to UCSF's non-compliance with its procurement policies, although UCSF explained that different campus policies were in place over the audit period, it did not provide documentation to support the cited policies and procedures were not in place at the time of the identified procurement exceptions. Therefore, our position regarding this finding has not changed.
- With regard to UCSF's non-compliance with its accounting policies, although UCSF stated campuses are required to file the appropriate paperwork or transfer costs to ensure proper indirect cost recovery, as we identified three instances where UCSF did not comply with its accounting policies, our position regarding this finding has not changed.

## FINDING 6: INSUFFICIENT CONTROLS RELATED TO THE APPLICATION OF INDIRECT COST RATES

UCSF did not have sufficient controls in place to ensure it consistently applied indirect costs using the rate(s) in effect as of the NSF award date, as required by federal<sup>42</sup> and NSF guidance.<sup>43</sup>

### Provisional Indirect Cost Rates Not Adjusted

UCSF applied the **provisional rates** in effect as of the NSF grant's award date,<sup>44</sup> rather than adjusting to rates applied to reflect the **negotiated indirect cost rate(s)** approved by its cognizant agency, as required by federal regulations.<sup>45</sup> Specifically, UCSF did not appropriately adjust the provisional indirect cost rate it applied to at least ten NSF awards, as illustrated in Table 19.

**Table 19: Provisional Indirect Cost Rates Not Adjusted**

NSF Award No.	Award Date	Transaction Date(s)	Rate Applied (%) <sup>46</sup>	Appropriate Rate (%) <sup>47</sup>
██████	7/20/2016	12/4/2018	58.50	60.00
██████	7/20/2016	12/17/2019	58.50	60.50
██████	9/12/2016	7/25/2017– 5/16/2019	34.00	35.00
██████	9/12/2016	7/31/2019	58.50	60.50
██████	9/22/2016	5/21/2018	58.50	59.50
██████	9/22/2016	9/27/2018– 6/17/2019	58.50	60.00
██████	9/22/2016	10/15/2019– 1/31/2020	58.50	60.50
██████	5/1/2017	6/30/2018	44.00	45.00
██████	5/1/2017	7/19/2018	44.00	46.00

<sup>42</sup> According to 2 CFR 200, Appendix III, Section C.7., federal agencies must use the negotiated rates in effect at the time of the initial award throughout the life of the federal award.

<sup>43</sup> NSF requires Institutions of Higher Education to use the negotiated indirect cost rate in effect of the date of the award throughout the life of the award. See NSF PAPPGs 15-1, 16-1, 17-1, 18-1, and 19-1, Part I, Chapter II, Section C.2.g.(viii).

<sup>44</sup> UCSF's NICRA dated May 23, 2012, specifies a provisional rate of the same rates and conditions as those cited for fiscal year ending June 30, 2016, from: 07/01/2016 to: until amended. As of November 27, 2017, UCSF had a new NICRA.

<sup>45</sup> Although UCSF was permitted to use its provisional indirect cost rate when grants were awarded in a provisional rate period, per 2 CFR 200, Appendix III, Section C.7, because provisional rates are not considered negotiated rates, the provisional rates used at the time of the award must be adjusted once a rate is negotiated and approved by the cognizant agency for indirect costs.

<sup>46</sup> UCSF's NICRA dated May 23, 2012, established provisional indirect cost rates of 58.50 percent for on-campus organized research, 34.00 percent for on-campus other sponsored activities, and 44.00 percent for on-campus instruction for July 1, 2016, until amended.

<sup>47</sup> UCSF's NICRA dated November 27, 2017, established indirect cost rates of 60.00 percent for on-campus instruction for July 1, 2018, to June 30, 2019, 60.50 percent for on-campus organized research for July 1, 2019, to June 30, 2020, 35.00 percent for on-campus other sponsored activities for July 1, 2017, to June 30, 2018, 59.50 percent for on-campus organized research for July 1, 2017, to June 30, 2018, 45.00 percent for on-campus instruction for July 1, 2017, to June 30, 2018, and 46 percent for on-campus instruction for July 1, 2018, to June 30, 2021.

NSF Award No.	Award Date	Transaction Date(s)	Rate Applied (%) <sup>46</sup>	Appropriate Rate (%) <sup>47</sup>
██████	6/14/2017	7/10/2018–9/21/2018	58.50	60.00
██████	6/14/2017	1/31/2020	58.50	60.50
██████	8/17/2017	7/24/2018	58.50	60.00
██████	8/17/2017	8/15/2019–12/31/2019	58.50	60.50
██████	8/23/2017	9/5/2019	58.50	60.50
██████	8/23/2017	7/23/2018	58.50	60.00
██████	8/29/2017	5/8/2018	58.50	59.50
██████	11/2/2017	6/28/2018	34.00	35.00

Source: Auditor summary of identified instances of indirect costs being applied using provisional indirect cost rates.

### ***Proposed Indirect Cost Rates Not Adjusted***

UCSF applied the negotiated indirect cost rates in effect as of the UCSF proposal date without determining whether adjustments needed to be made to reflect the rate(s) in effect when the NSF awards were issued. Specifically, UCSF applied indirect cost rates effective at the time the grant was proposed to at least two NSF awards, as illustrated in Table 20.

**Table 20: Proposed Indirect Cost Rates Not Adjusted**

NSF Award No.	Award Date	Transaction Date	Rate Applied (%) <sup>48</sup>	Appropriate Rate (%) <sup>49</sup>
██████	6/26/2014	3/31/2017	58.00	58.50
██████	2/23/2018	8/11/2018	44.00	46.00

Source: Auditor summary of identified instances of indirect costs applied using the indirect cost rates effective at the time the award was proposed.

### **Conclusion**

We are not reporting any questioned costs for this finding, as the rates UCSF applied were lower than the appropriate rates, resulting in UCSF claiming lower indirect costs to NSF than were otherwise allowable. However, because UCSF did not appear to have sufficient controls in place to identify differences between the rates it applied and the rates that should have been applied based on the NSF award date, its current process could result in unallowable costs being charged to NSF awards if rates were to decrease in future NICRAs. Therefore, we are noting the 19 instances where indirect costs were applied to 12 NSF awards using rates in effect prior to the award date as compliance findings, as illustrated in Table 21.

<sup>48</sup> UCSF's NICRA dated May 23, 2012, established an indirect cost rate of 58.00 percent for on-campus organized research for July 1, 2014, to June 30, 2015, and UCSF's NICRA dated November 27, 2017, established an indirect cost rate of 44.00 percent for on-campus instruction for July 1, 2016, to June 30, 2017.

<sup>49</sup> UCSF's NICRA dated May 23, 2012, established an indirect cost rate of 58.50 percent for on-campus organized research for July 1, 2015, until amended, and UCSF's NICRA dated November 27, 2017, established an indirect cost rate of 46.00 percent for on-campus instruction for July 1, 2018, to June 30, 2021.

**Table 21: Finding 6 Summary: Insufficient Controls Related to the Application of Indirect Cost Rates**

NSF Award No.	Compliance Exception Identified	Fiscal Year
	Provisional Indirect Cost Rates Not Adjusted	2019
	Provisional Indirect Cost Rates Not Adjusted	2020
	Provisional Indirect Cost Rates Not Adjusted	2018–2019
	Provisional Indirect Cost Rates Not Adjusted	2020
	Provisional Indirect Cost Rates Not Adjusted	2018
	Provisional Indirect Cost Rates Not Adjusted	2019
	Provisional Indirect Cost Rates Not Adjusted	2020
	Provisional Indirect Cost Rates Not Adjusted	2018
	Provisional Indirect Cost Rates Not Adjusted	2019
	Provisional Indirect Cost Rates Not Adjusted	2019
	Provisional Indirect Cost Rates Not Adjusted	2020
	Provisional Indirect Cost Rates Not Adjusted	2019
	Provisional Indirect Cost Rates Not Adjusted	2020
	Provisional Indirect Cost Rates Not Adjusted	2020
	Provisional Indirect Cost Rates Not Adjusted	2019
	Provisional Indirect Cost Rates Not Adjusted	2018
	Provisional Indirect Cost Rates Not Adjusted	2018
	Proposed Indirect Cost Rates Not Adjusted	2017
	Proposed Indirect Cost Rates Not Adjusted	2019

*Source:* Auditor summary of identified instances where indirect costs were applied using rates in effect prior to the NSF award date.

### Recommendations

We recommend that NSF’s Director of the Division of Institution and Award Support:

- 6.1 Direct UCSF to develop and implement a control to identify when indirect cost rates change between provisional rates and newly negotiated indirect cost rates; as well as to take appropriate steps to avoid claiming unallowable indirect costs on NSF awards.
- 6.2 Direct UCSF to develop and implement a control to identify when indirect cost rates change between proposal submission and award date, as well as to take appropriate steps to avoid claiming unallowable indirect costs on NSF awards.

**University of California, San Francisco Response:** UCSF did not explicitly state whether it agreed or disagreed with this finding but noted that it follows the standard practice of charging the provisional indirect cost rate until the establishment of new funding or new competitive segments based on the indirect cost rate in effect at the time of proposal. Further, UCSF noted that this methodology led to its undercharging of indirect costs to NSF in all cases.

**Auditors' Additional Comments:** Although UCSF noted that it undercharged NSF, because UCSF does not appear to have sufficient controls in place to ensure it reviews the NICRA rates in effect at the time of award issuance, if rates were to decrease in future NICRAs, UCSF could overcharge indirect costs to NSF awards. As such, our position regarding this finding has not changed.

### **AREA FOR IMPROVEMENT: PAYROLL SUBLEDGER AVAILABILITY**

UCSF did not provide the detailed transaction-level payroll subledger data requested to support the batched payroll expenses recorded within its general ledger on a timely basis.<sup>50</sup> Specifically, because UCSF does not perform payroll reconciliations on a costs claimed basis, it did not provide detailed payroll subledger data that reconciled to its general ledger until 11 months into the audit period, after the majority of the audit work had been completed, as noted in Figure 3.

**Figure 3: Timeline of Payroll Subledger Request/Receipt Activity**



Source: Auditor-developed timeline of payroll subledger request/receipt activity.

### **Conclusion**

Because UCSF was eventually able to provide a payroll subledger to support the payroll recorded within its general ledger, we are not noting a finding related to UCSF's payroll subledger system; however, we are noting an area for improvement, as UCSF's payroll reconciliation procedures did not allow for a timely identification, review, or testing of detailed payroll costs charged to NSF awards.

### **Considerations**

<sup>50</sup> According to 2 CFR § 215.21(b), *Standards for Financial Management Systems*, and 2 CFR § 200.302(b), *Financial Management*, non-federal entities must provide accurate, current, and complete disclosure of the financial results of each federal award. This includes the identification of all federal awards received and expended. Lastly, the records must contain authorizations, obligations, assets expenditures, and be supported by source documentation. Additionally, 2 § 200.336, *Access to records*, states that the federal awarding agency, Inspectors General, the Comptroller General of the United States, and the pass-through entity, or any of their authorized representatives, must have the right of access to any documents, papers, or other records of the non-federal entity which are pertinent to the federal award, in order to make audits, examinations, excerpts, and transcripts. The right also includes timely and reasonable access to the non-federal entity's personnel for the purpose of interview and discussion related to such documents.

We suggest that NSF's Director of the Division of Institution and Award Support consider the following:

1. Directing UCSF to work with its financial system administrators to identify potential improvements for the communication of data from low-level input to high-level output.
2. Directing UCSF to strengthen the administrative and management internal controls and processes over the communication within its financial systems. Processes could include a centralized approach to perform more frequent periodic reconciliations with its departments between its general ledger and any applicable subledgers/subsystems on a cost claimed basis.

**University of California, San Francisco Response:** UCSF disagreed with this area for improvement, stating it has more than adequate availability of subledger detail reconciliations, detailed data, and sophisticated reporting abilities. Specifically, it stated that it has produced numerous versions of reconciled payroll ledgers for specific periods and that Cotton & Company did not emphasize the timing of this request or the actual requirements needed. Therefore, the final reconciled file was delayed in being produced.

**Auditors' Additional Comments:** With regard to the area for improvement, we requested subledger details multiple times throughout the audit, communicating our need for the subledger data during regularly scheduled status meetings held with UCSF's point of contact for this engagement. As such, our position regarding this area for improvement has not changed.

COTTON & COMPANY LLP



Megan Mesko, CPA, CFE  
Partner  
September 27, 2021

**APPENDIX A: UCSF'S RESPONSE**

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San Francisco

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September 3, 2021

Cotton & Company, LLC  
Attn: Megan Mesko, CPA, CFE - Partner  
635 Slaters Lane, 4<sup>th</sup> Floor  
Alexandria, VA 22314

Dear Ms. Mesko,

University of California, San Francisco (UCSF) appreciates the opportunity to work with the National Science Foundation Office of Inspector General and Cotton & Company, LLC to review our research post award management policies, practices and procedures. UCSF takes our obligation to administer federally funded awards to ensure compliance with all applicable laws, policies, and requirements very seriously. UCSF has a robust internal control environment to provide reasonable assurance that expenses charged to federally funded awards are allowable, allocable, reasonable, relevant, and necessary. Additionally, UCSF continuously evaluates and enhances policies, procedures and systems in place related to our post award management practices.

UCSF agrees to reimburse the NSF \$33,030, having already reallocated, in advance of these findings, \$26,031 to a different budget category within the same NSF award of questioned costs identified by Cotton & Company. We do not agree with \$77,700 of questioned costs and look forward to the opportunity to discuss further with the NSF.

Please find our specific responses per finding and item following.

Best regards,

DocuSigned by:

*Michael S. Clune*

667450011460580

Michael Clune, PhD  
Senior Associate Vice Chancellor and Chief Financial Officer



**UCSF Response Finding 1: Inappropriately Allocated Expenses**

**Publication Costs:** UCSF disagrees with the direct link of sited research awards to support the allocation methodology of publication costs. The portion of publication costs charged to a project should reflect the actual amount of effort that resulted from that research used for the article. In addition, awards may be identified that are no longer ongoing but are sited since they represent work that was a pre-cursor to the current research. To this end, UCSF feels that a portion, or all of these publications should be deemed allowable as the NSF award under review did contribute to the publication. Bearing in mind, that the allocation method should be identified when the cost is charged, we agree that a portion may be appropriate to reimburse the NSF based on references sited when there is no other support provided.

NSF Award No.	Amount Questioned	UCSF Response
██████	\$1,691	UCSF does not agree with this finding. At least \$1,030 should be considered allowable as 12.5 percent of the sited research and UCF agrees the remaining \$661 will be returned to NSF.
██████	3,869	UCSF does not agree with this finding. At least \$967 should be considered allowable as 25 percent of the sited research and UCSF agrees the remaining \$2,902 will be returned to NSF.
██████	1,712	UCSF does not agree with this finding. At least \$239 should be considered allowable as 14 percent of the sited research and the remaining \$1,473 will be returned to NSF.
██████	33,285	UCSF strongly disagrees with this finding. These publication costs were allocated to this award consistently with other expenses based on the relative benefit received. The funding for this publication was the result of one scope of work that was split between two investigators at different universities. Both funding sources were from the NSF and the PIs agreed to bear the cost of any publications resulting from their component of the scope of work wholly. This specific publication resulted from work that the UCSF PI completed and sited the other NSF grant award as a component of the cooperative agreement. UCSF does not agree to the return of any funds under this finding. UCSF will discuss further with the NSF during remediation.

**Other Direct Costs:** UCSF follows a consistent methodology in charging an award those costs that are appropriate and allocable in the amount that benefited the research project. These costs may be of a higher risk such as travel or near the end of a research project but does not mean that the supplies or costs were inappropriate. UCSF firmly believes that all travel and the other related costs were for the benefit of the awards they were charged. The appropriate support should always be included per the terms of the award or agency.

UCSF PIs and RSAs are integral parts of UCSF's system of controls. PIs and RSAs document and approve allocation methodologies at the time of purchase and based on the benefit to the funding source. Additionally, we require review and level of approvals for transactions to provide internal controls over how costs are charged and appropriated to an award to ensure they benefit of the project. Our ongoing training and education of the research community will continue to emphasize the importance of using the UC travel portal, including support in progress reports and including the appropriate support of all costs at time of purchase.

NSF Award No.	Amount Questioned	UCSF Response
██████	\$1,618	While these costs supported the research projects for the identified awards, UCSF will reimburse NSF.
██████	2,979	While these costs supported the research projects for the identified awards, UCSF will reimburse NSF.
██████	2,695	While these costs supported the research projects for the identified awards, UCSF will reimburse NSF.
██████	7,925	While these costs supported the research projects for the identified awards, UCSF will reimburse NSF.
██████	8,465	UCSF does not agree with this finding. These consumables costs were allocated to this award consistently with other expenses based on the relative benefit received. The purchase of consumables at the end of the award does not necessarily mean that they were not used in their entirety to support the research project. The PI and research team has confirmed that these were used to complete this segment of the award. No allocation methodology would be given because they were all used to benefit the one project. Therefore, UCSF argues that this cost is fully appropriate and should not be reimbursed. UCSF will discuss further with the NSF during remediation.

[REDACTED]	3,979	UCSF does not agree with this finding. These computer costs were allocated to this award consistently with other expenses based on the relative benefit received. The computer was purchased for the use of a postdoctoral scholar hired near the end of the performance period that was solely dedicated to the NSF award at that time. The postdoctoral scholar used that computer for continued development of research and publications even after the award was complete and the award was referenced in all resulting publications. Therefore, UCSF disagrees with the inappropriateness of this cost. UCSF will discuss further with the NSF during remediation.
[REDACTED]	2,574	UCSF does not agree with this finding. These supply costs were allocated to this award consistently with other expenses based on the relative benefit received. These costs were for the regular calibration of pipettes used for the research project. The timing at the end of the award happened to coincide with the need for this task. The use of pipettes to perform this research was documented and therefore, this cost is appropriately charged to this award. UCSF therefore disagrees with the return of cost under this item. UCSF will discuss further with the NSF during remediation.
[REDACTED]	5,200	UCSF does not agree with this finding. These freezer costs were allocated to this award consistently with other expenses based on the relative benefit received. The NSF award required the use of a freezer to store materials for the research project. During the original proposal period, adequate storage was available in departmental owned freezers. However, as the project progressed, usage of the available freezers became limited. Following a local practice where one award is using over 90% of the freezer capacity, a new freezer was purchased for the primary use of this award. Therefore, UCSF disagrees that the purchase of this freezer is inappropriate. Therefore, UCSF does not agree to the reimbursement of this cost. UCSF will discuss further with the NSF during remediation.

**UCSF Response Finding 2: Unallowable Expenses**

**Unallowable Expenses:** UCSF believes the term unallowable expense is used inappropriately in this section and is not an accurate representation of these expenditures. Unallowable implies these costs are expressly unallowable and should not be charged to the sponsored project. UCSF's stance is the majority of these costs are allowable and included correctly on the subject awards. The review completed at the end of an award or during interim reporting to review the proper budget category identified a large majority of these and resulted in the proper reallocation to the correct budget category. However, some of these award reviews, which were perfectly

reasonable given the award performance period, coincided with the audit period, and ultimately are included in this report. Generally, UCSF does not agree with the findings in this section as explained in further detail below.

**Participant Support Cost:**

NSF Award No.	Amount Questioned	UCSF Response
██████	\$704	UCSF does not agree with this finding. \$235 of this total are allowable costs for this award but were initially classified as participant support costs. Through routine ledger review at award closeout, UCSF already identified and transferred these costs to the correct budget category, so there is no need for reimbursement of the \$235 required. The remaining \$469 relates to lodging costs for the participant that cancelled after the hotel refund policy period and therefore is allowable to remain on the NSF award. Therefore, UCSF disagrees with the allowability determination of this \$469 charge and will discuss further with the NSF during remediation.
██████	1,135	UCSF agrees to return \$1,135 to the NSF.
██████	6,307	UCSF does not agree with this finding. These are allowable costs for this award but were initially classified as participant support costs. Through routine ledger review at award closeout, UCSF already identified and transferred these costs to the correct budget category. No need for reimbursement required.
██████	2,163	UCSF agrees to return \$2,163 to the NSF.
██████	3,816	UCSF does not agree with this finding. These are allowable costs for this award but were initially classified as participant support costs. Through routine ledger review at award closeout, UCSF already identified and transferred these costs to the correct budget category. No need for reimbursement required.
██████	4,569	UCSF does not agree with this finding. These are allowable costs for this award but were initially classified as participant support costs. Through routine ledger review at award closeout, UCSF already identified and transferred these costs to the correct budget category. No need for reimbursement required.

**Travel Costs:**

NSF Award No.	Amount Questioned	UCSF Response
██████	\$88	UCSF agrees to return these funds to the NSF.
██████	7,708	UCSF agrees to return these funds to the NSF.

██████████	380	UCSF agrees to return these funds to the NSF.
██████████	2,702	UCSF has already transferred these charges off of the award. No further reimbursement required.
██████████	2,374	UCSF does not agree with this finding. This travel clearly benefited the award and was a reasonable amount for the travel. Travel within a few days of each other can vary but is not 100 percent difference. UCSF does not agree to the full return of this cost and will discuss further with the NSF during remediation.
██████████	852	UCSF does not agree with this finding. ██████████ is a Star Alliance partner with United and as such, it was intended to be under the umbrella of that U.S Flag carrier policy. Additionally, the upgraded seat was required per the traveler's doctor and therefore is considered allowable under federal and UCSF policy. UCSF does not agree to the full reimbursement of this cost and will discuss further with the NSF during remediation.

**Salary Costs:**

NSF Award No.	Amount Questioned	UCSF Response
██████████	\$3,901	The salary charged to this award was allowable as the cost was for the salary of a contributor to the award. Therefore, the charges clearly benefited the award. UCSF performs routine monitoring for this type of activity resulting in the correction of these situations where the proper transfer of payroll is not followed. Since the transfer policy was not followed in this case, UCSF agrees that adherence to the payroll policy is a critical control and therefore, we agree to the reimbursement of these costs.

**UCSF Response Finding 3: Inadequately Supported Expenses**

**Expense Support:** UCSF has a robust internal control environment to provide reasonable assurance that expenses charged to federally sponsored awards are allowable, allocable, reasonable, relevant and necessary. Additionally, UCSF ensures we have policies, procedures and systems in place to ensure costs are supported by sufficient documentation. UCSF emphasizes the need for appropriate documentation and has controls and monitoring in place to limit the ability to veer from the proper established process. In the case of the two identified transactions in this section, UCSF disagrees in total that these are inadequately supported.

NSF Award No.	Amount	UCSF Response
██████████	\$11,197	UCSF does not agree with this finding. These costs are adequately supported expenses. The UCSF need for PI signature is removed when handling awards within the

		University of California system. We are considered one entity and follow the same processes and policy as determined by our office of the president. Therefore, when doing business of this nature, it has been agreed that there is no need for Investigator signature on routine invoices. In this case, the work benefited the award and was appropriate and supported per UC policy. UCSF does not agree to a reimbursement of this cost and will discuss further with the NSF during remediation.
██████	3,168	UCSF does not agree with this finding. These costs are adequately supported expenses. Lab animals were a required component of this research. UCSF requires the reallocation of lab animal care monthly across a PIs portfolio. The allocation was identified during the transfer of these charges onto the award. Therefore, UCSF does not agree to the reimbursement of the total charges for this cost. UCSF will discuss further with the NSF during remediation.

#### UCSF Response Finding 4: Indirect Costs Inappropriately Applied

**Inadequately Supported Indirect Costs:** UCSF has a robust system to manage the charging of indirect cost to all sponsored projects. Indirect cost calculation and subsequent charging is a highly developed process and is considered an integral component of our research enterprise. We agree that the proper recording of expenses and the resulting indirect cost is a top priority. UCSF has internal controls in place to provide reasonable assurance that funds expended for equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward and subcontract in excess of \$25,000 are excluded from the direct cost base. Using participant support costs as an example, when changes are identified during the regular review of an award, any changes to cost categories that impact indirect cost recovery will be systematically recalculated and automatically recorded. Therefore, some of these charges were already identified and reimbursement is not necessary.

NSF Award No.	Amount	UCSF Response
██████	\$1,296	UCSF does not agree with this finding. UCSF indirect cost recovery policy and procedures adhere to appropriate exclusions of indirect cost recovery. These components of capital equipment, when fabricated, become excluded from indirect cost recovery at UCSF and these costs were previously transferred. No further reimbursement is needed.
██████	5,088	UCSF does not agree with this finding. UCSF indirect cost recovery policy and procedures adhere to appropriate exclusions of indirect cost recovery. The participant support costs were identified and were transferred during the award

		review process. The resulting automated reduction in indirect cost was already returned to the NSF. No further reimbursement is needed.
██████	2,018	UCSF does not agree with this finding. UCSF indirect cost recovery policy and procedures adhere to appropriate exclusions of indirect cost recovery. The participant support costs were identified and were transferred during the award review process. The resulting automated reduction in indirect cost was already returned to the NSF. No further reimbursement is needed.
██████	1,352	UCSF agrees to return these funds to the NSF.

**UCSF Response Finding 5: Non-Compliance with UCSF Policies**

UCSF believes we have policies and procedures in place to ensure expenses charged to federal awards are allowable, benefit the award and are reasonable for the completion of the research. UCSF updates policies at regular or necessary intervals to ensure compliance as laws, regulations and guidelines change.

**Travel:**

UCSF has a well-developed travel program that monitors and helps investigators to comply with all applicable laws and policies. UCSF makes it priority to book travel using the UC travel system.

**Subaward:**

UCSF has a team dedicated to the review and issuance of subawards for the campus. In an environment of continuous improvement, a systematic tool was created and implemented in the summer of 2020 to tighten existing controls and allow the online management all documentation required when issuing a subaward. The tool now provides easy access for the subaward team as well as the research administrators to collaborate and double check that all UCSF policies are followed.

**Procurement:**

The procurement of goods and services has changed dramatically with the implementation of the Uniform Guidance and with the multiple revisions since. The UCSF Procurement unit, based on these changes and new tools provided by our Office of the President, has continued to update all policies and processes to better manage the requirements for purchasing under federal awards. Therefore, different campus policies were in place over the audit period.

**Accounting Policies:**

UCSF has well defined processes and policies for the campus to follow. The ability to collaborate and share resources with our other sister campuses is a great privilege.

With privilege comes the responsibility to file the appropriate paperwork or transfer costs to ensure the proper indirect cost recovery.

**UCSF Response Finding 6: Insufficient Controls Related to the Application of Indirect Cost Rates**

**Application of Indirect Cost Rates:** UCSF follows the standard practice of charging the provisional indirect cost rate until the establishment of new funding or new competitive segment based on the indirect cost rate in effect at the time of proposal. This is in compliance with NSF policy per [PAPPG \(NSF 20-1\) FAQs](#). See Indirect Costs (Facilities and Administrative (F&A) Costs). In all cases, this meant a reduced cost recovery on the part of UCSF therefore, undercharging the NSF.

**UCSF Response Area for Improvement: Payroll Subledger Availability**

UCSF has a very complex payroll and therefore requires a sophisticated payroll processing system. It is monitored closely and comes under much scrutiny for accuracy and appropriateness of charges of the highest component of expense in our research entity. UCSF feels we have more than adequate availability of subledger detail reconciliation, detailed data and sophisticated reporting abilities. UCSF has produced numerous versions of reconciled payroll ledgers for specific periods of time including pay periods, general ledger periods and draw down calendar dates. Additionally, these reconciliations are produced at all levels of the organization including all employee payroll, award payroll or specific employee payroll. Cotton & Company did not emphasize the timing of this request or the actual requirements needed. Therefore, the final reconciled file was delayed in being produced.

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

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## OBJECTIVES

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The NSF OIG Office of Audits engaged Cotton & Company LLP (referred to as “we”) to conduct an audit survey, the objectives of which were to evaluate UCSF’s award management environment, to determine whether any further audit work was warranted and to recommend a path forward as described in the task order performance work statement, and to perform any additional audit work determined appropriate.

## SCOPE

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The audit population included approximately \$34 million in expenses UCSF claimed on 60 NSF awards during our audit period of performance, March 1, 2017, to February 29, 2020.

## METHODOLOGY

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Based on the objectives and scope of the audit, we conducted this engagement in two phases, as follows:

### *Audit Survey Phase*

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After obtaining NSF OIG’s approval for our audit plan, we performed all of the audit survey steps outlined in the original audit plan. Generally, these steps included:

- Assessing the reliability of the general ledger data that UCSF provided by comparing the costs charged to NSF awards per UCSF’s accounting records to the reported net expenditures reflected in the ACM\$ drawdown requests.
  - Our work required us to rely on computer-processed data obtained from UCSF and NSF OIG. NSF OIG provided award data that UCSF reported through ACM\$ during our audit period.
    - We assessed the reliability of the general ledger data that UCSF provided by (1) comparing the costs charged to NSF awards per UCSF’s accounting records to the reported net expenditures reflected in the ACM\$ drawdown requests that UCSF submitted to NSF during the audit survey period of performance; and (2) reviewing the parameters that UCSF used to extract transaction data from its accounting systems. Although UCSF did not provide transaction-level payroll data that reconciled to the general ledger until 11 months into the audit period ([See Area for Improvement: Payroll Reconciliation for Costs Claimed on NSF Awards](#)), we found UCSF’s computer-processed data to be sufficiently reliable overall for the purposes of the audit, and we did not identify any issues with the parameters that UCSF used to extract the accounting data.
    - We found NSF’s computer-processed data to be sufficiently reliable for the purposes of this audit. We did not review or test whether the data contained in, or the controls over, NSF’s databases were accurate

or reliable; however, the independent auditor's report on NSF's financial statements for fiscal year 2020 found no reportable instances in which NSF's financial management systems did not substantially comply with applicable requirements.

- UCSF provided detailed transaction-level data to support all costs charged to NSF awards during the period. This data resulted in a total audit universe of \$33,935,828 in expenses claimed on 60 NSF awards.
- Obtaining and reviewing all available accounting and administrative policies and procedures, external audit reports, desk review reports, and other relevant information that UCSF and NSF OIG provided, as well as any other relevant information that was available online.
- Summarizing our understanding of federal, NSF, and UCSF-specific policies and procedures surrounding costs budgeted for and/or charged to NSF awards and specifically identifying the controls in place to ensure that costs charged to sponsored projects were reasonable, allocable, and allowable.
  - In planning and performing this audit, we considered UCSF's internal controls, within the audit's scope, solely to understand the directives/policies and procedures UCSF has in place to ensure that charges against NSF awards were in compliance with relevant federal regulations, NSF award terms, and UCSF policies.
- Evaluating the strengths and weaknesses of the policies and procedures that UCSF has in place to control the inherent, fraud, and control risks identified for each budget category.
- Providing UCSF with a list of 45 transactions that we selected based on our data analytics and requesting that UCSF provide documentation to support each transaction.
  - Due to delays in receiving payroll subledger data that reconciled to the general ledger, we only selected samples from the general ledger detail provided.
- Reviewing the supporting documentation that UCSF provided and requesting additional documentation as necessary to ensure that we obtained sufficient,

appropriate evidence to enable us to assess the allowability of each sampled transaction under relevant federal,<sup>51</sup> NSF,<sup>52</sup> and UCSF policies.<sup>53</sup>

- Holding virtual interviews and walkthroughs with UCSF in July 2020 to discuss payroll (including effort reporting), fringe benefits, travel, participant support costs, procurement, equipment (including an inventory check), the graduate research fellowship program, other direct costs (e.g., patent, relocation, recruiting, interest, advertising/public relations, entertainment, fundraising, lobbying, selling/marketing, and training costs), grant close-out procedures, subawards, ACM\$ processing, indirect costs, and other general policies (e.g., pre- and post-award costs, program income, whistle-blower information, research misconduct, and conflict of interest policies).
- Preparing an organizational risk assessment that (1) summarized the results of our planning/initial fieldwork, (2) included areas of elevated risk of noncompliance that we identified in the organization's award management environment, and (3) contained our recommendations for expanded testing.

### ***Expanded Testing Audit Phase***

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Based on the areas of elevated risk of noncompliance identified during the survey phase, we determined that we should perform further audit procedures added to our audit plan that included:

- Conducting additional data analytics, evaluating the results of the analytics, and re-running analytical tests, as necessary.
- Selecting an additional audit sample of 84 transactions.
- Conducting additional fieldwork, which included providing the list of 84 transactions to UCSF and requesting/reviewing supporting documentation until we had obtained sufficient, appropriate evidence to enable us to assess the allowability of each sampled transaction.
- Conducting additional audit work in three areas to evaluate whether UCSF (1) appropriately applied credits recorded in the payroll subledger within its general ledger; (2) removed and applied indirect costs at the appropriate rates when processing cost transfers; and (3) appropriately procured purchases that exceeded \$10,000.

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<sup>51</sup> We assessed UCSF's compliance with 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards, and 2 CFR Part 220, Cost Principles for Educational Institutions (Office of Management and Budget Circular A-21), as appropriate.

<sup>52</sup> We assessed UCSF's compliance with *NSF Proposal and Award Policies and Procedures Guides* 13-1, 14-1, 15-1, 16-1, 17-1, 18-1, and 19-1 and with NSF award-specific terms and conditions, as appropriate.

<sup>53</sup> We assessed UCSF's compliance with internal UCSF policies and procedures surrounding costs budgeted for and/or charged to NSF awards.

At the conclusion of our fieldwork, we provided a summary of our results to NSF OIG personnel for review. We also provided the summary to UCSF personnel to ensure that UCSF was aware of each of our findings and that it did not have additional documentation to support the questioned costs.

We conducted this performance audit from March 2020 to July 2021 in accordance with *Generally Accepted Government Auditing Standards, 2018 Revision*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

## **APPENDIX C: SUMMARY OF QUESTIONED COSTS**

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**Appendix C, Table 1: Schedule of Questioned Costs by Finding**

Finding	Description	Questioned Costs		Total
		<i>Unsupported</i>	<i>Unallowable</i>	
1	Inappropriately Allocated Expenses	\$0	\$75,992	\$75,992
2	Unallowable Expenses	-	36,699	36,699
3	Inadequately Supported Expenses	-	14,365	14,365
4	Indirect Costs Inappropriately Applied	-	9,754	9,754
5	Non-Compliance with UCSF Policies	-	-	-
6	Insufficient Controls Related to the Application of Indirect Costs	-	-	-
<b>Total</b>		<b><u>\$0</u></b>	<b><u>\$136,810</u></b>	<b><u>\$136,810</u></b>

*Source:* Auditor summary of identified exceptions.

**Appendix C, Table 2: Summary of Questioned Costs by NSF Award Number**

NSF Award No.	No. of Transaction Exceptions	Questioned Direct Costs	Questioned Indirect Costs	Questioned Total	UCSF Agreed to Reimburse <sup>54</sup>
	2	\$1,135	-	\$1,135	\$1,135
	1	1,700	995	2,695	2,695
	3	23,510	13,754	37,264	-
	1	1,067	624	1,691	661
	1	-	-	-	-
	4	10,827	-	10,827	-
	3	2,101	1,229	3,330	3,091
	1	4,863	2,845	7,708	7,708
	2	5,420	1,428	6,848	5,881
	1	240	140	380	380
	1	5,341	3,124	8,465	-
	1	11,197	-	11,197	-
	13	7,163	6,239	13,402	10,088
	1	61	27	88	88
	3	1,705	997	2,702	-
	1	-	-	-	-
	8	-	-	-	-
	6	-	5,088	5,088	-
	2	-	-	-	-
	2	-	-	-	-
	1	-	-	-	-
	4	3,623	2,119	5,742	-
	1	-	-	-	-
	2	3,877	24	3,901	3,901
	1	531	321	852	-
	1	-	-	-	-
	3	6,453	490	6,943	-
	2	5,200	1,352	6,552	1,352
<b>Grand Total</b>	<b><u>72</u></b>	<b><u>\$96,014</u></b>	<b><u>40,796</u></b>	<b><u>\$136,810</u></b>	<b><u>\$36,980</u></b>

Source: Auditor summary of identified exceptions.

<sup>54</sup> Although the cover letter of UCSF’s formal response states that it agrees to reimburse NSF for \$33,030 and to reallocate \$26,031 in questioned costs to different budget categories, this column only includes costs questioned for each finding that UCSF agreed to within the body of its formal response.

**Appendix C, Table 3: Summary of Questioned Costs by NSF Award Number and Expense Description**

Finding Description	Award No.	Expense Description	Questioned Direct Costs	Questioned Indirect Costs	Total Questioned Costs	UCSF Agreed to Reimburse
1) Inappropriately Allocated Expenses	[REDACTED]	June 2017 Publication Costs	\$1,067	\$624	\$1,691	\$661
		January 2018 Publication Costs	2,441	1,428	3,869	2,902
		March 2018 Publication Costs	1,080	632	1,712	1,473
		October 2018 Publication Costs	21,000	12,285	33,285	-
		March 2018 PI Travel	1,021	597	1,618	1,618
		March 2018 Tuition	2,979	-	2,979	2,979
		March 2018 Contractor Services	1,700	995	2,695	2,695
		March 2018 Contractor Services	5,000	2,925	7,925	7,925
		June 2018 Consumables	5,341	3,124	8,465	-
		August 2018 Computer	2,510	1,469	3,979	-
		August 2019 Pipette Calibration	1,624	950	2,574	-
		November 2019 Freezer	5,200	-	5,200	-
		2) Unallowable Expenses	[REDACTED]	February-May 2017 Participant Travel Costs	704	-
[REDACTED]	May-June 2017 Participant Support Costs		1,135	-	1,135	1,135
[REDACTED]	March-April 2018 Participant Support Costs		6,307	-	6,307	-
[REDACTED]	August 2018 Participant Support Costs		2,163	-	2,163	2,163
[REDACTED]	January 2019 Participant Support Costs		3,816	-	3,816	-
[REDACTED]	January-April 2019 Participant Support Costs		4,569	-	4,569	-
[REDACTED]	June 2017 Per Diem Overcharge		61	27	88	88
[REDACTED]	January 2018 Travel after Award Expiration		4,863	2,845	7,708	7,708
[REDACTED]	March 2018 Per Diem		240	140	380	380
[REDACTED]	December 2018 Flight Costs		1,705	997	2,702	-
[REDACTED]	March 2019 Personal Travel	1,884	490	2,374	-	

Finding Description	Award No.	Expense Description	Questioned Direct Costs	Questioned Indirect Costs	Total Questioned Costs	UCSF Agreed to Reimburse
		August 2019 Airfare Fees	531	321	852	-
		June 2018 Uncertified Salary	3,877	24	3,901	3,901
3) Inadequately Supported Expenses		October 2018 Subaward Costs	11,197	-	11,197	-
		August 2019 Animal Care	1,999	1,169	3,168	-
4) Indirect Costs Inappropriately Applied		May 2018 Graphic Cards	-	1,296	1,296	-
		May 2018 - June 2019 Participant Housing & Transportation	-	5,088	5,088	-
		May 2019 - June 2019 Participant Support Costs	-	2,018	2,018	-
		November 2019 Freezer	-	1,352	1,352	1,352
5) Non-Compliance with UCSF Policies		Non-Compliance with UCSF Travel Policies	-	-	-	-
		Non-Compliance with UCSF Travel Policies	-	-	-	-
		Non-Compliance with UCSF Subaward Policies	-	-	-	-
		Non-Compliance with UCSF Subaward Policies	-	-	-	-
		Non-Compliance with UCSF Subaward Policies	-	-	-	-
		Non-Compliance with UCSF Procurement Policies	-	-	-	-
		Non-Compliance with UCSF Procurement Policies	-	-	-	-
		Non-Compliance with UCSF Procurement Policies	-	-	-	-
		Non-Compliance with UCSF Procurement Policies	-	-	-	-

Finding Description	Award No.	Expense Description	Questioned Direct Costs	Questioned Indirect Costs	Total Questioned Costs	UCSF Agreed to Reimburse
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Procurement Policies	-	-	-	-
	██████	Non-Compliance with UCSF Accounting Policies	-	-	-	-
	██████	Non-Compliance with UCSF Accounting Policies	-	-	-	-
	██████	Non-Compliance with UCSF Accounting Policies	-	-	-	-
6) Insufficient Controls Related to the Application of	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-

Finding Description	Award No.	Expense Description	Questioned Direct Costs	Questioned Indirect Costs	Total Questioned Costs	UCSF Agreed to Reimburse
Indirect Cost Rates	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Provisional Indirect Cost Rates Not Adjusted	-	-	-	-

Finding Description	Award No.	Expense Description	Questioned Direct Costs	Questioned Indirect Costs	Total Questioned Costs	UCSF Agreed to Reimburse
	██████	Proposed Indirect Cost Rates Not Adjusted	-	-	-	-
	██████	Proposed Indirect Cost Rates Not Adjusted	-	-	-	-
<b>Total</b>			<b><u>\$96,014</u></b>	<b><u>\$40,796</u></b>	<b><u>\$136,810</u></b>	<b><u>\$36,980</u></b>

Source: Auditor summary of identified exceptions.

**APPENDIX D: SUMMARY OF RECOMMENDATIONS & CONSIDERATIONS**

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

- 1.1 Resolve the \$55,739 in questioned, unallocable publication and other direct costs for which UCSF has not agreed to reimburse NSF and direct UCSF to repay or otherwise remove the sustained questioned costs from its NSF awards.
- 1.2 Direct UCSF to provide documentation supporting that it has repaid or otherwise credited the \$20,253 in questioned, unallocable publication and other direct costs for which UCSF has agreed to reimburse NSF.
- 1.3 Direct UCSF to strengthen its administrative and management controls and processes for supporting the allocation of expenses to sponsored projects. Updated processes could include:
  - 1.3.1 Requiring Principal Investigators or other designated staff to both document and justify the allocation methodologies used when charging expenses to sponsored projects.
  - 1.3.2 Implementing a standard documentation and retention process to support the allocation applied to costs which benefit multiple awards.
  - 1.3.3 Providing training on how to assess and document the methodology used to allocate publication costs across each sponsored award acknowledged in the publication.
- 2.1 Resolve the \$21,324 in questioned participant support and travel costs for which UCSF has not agreed to reimburse NSF and direct UCSF to repay or otherwise remove the sustained questioned costs from its NSF awards.
- 2.2 Direct UCSF to provide documentation supporting that it has repaid or otherwise credited the \$15,375 of questioned participant support, travel and salary costs for which it has agreed to reimburse NSF.
- 2.3 Direct UCSF to establish clear guidance regarding the allowable uses of participant support cost funding. This guidance should address how to segregate and account for costs that cannot be covered with participant support cost funding, such as costs incurred for UCSF employees, entertainment costs, and expenses associated with unused participant lodging.
- 2.4 Direct UCSF to strengthen its administrative and management processes to ensure credits received from vendors are appropriately reimbursed to the original funding source(s) charged.
- 2.5 Direct UCSF to strengthen its administrative and management processes and procedures surrounding the approval of travel expense reports. Updated procedures could include:

- 2.5.1 Conducting annual training that addresses how to ensure per diem expenses are appropriately reimbursed.
- 2.5.2 Establishing controls within its travel reporting system to ensure costs associated with travel occurring after an award expires are not charged to the award.
- 2.5.3 Requiring travelers to document the business purpose of each day of a planned trip before purchasing airfare, in order to enable UCSF to evaluate whether it must perform a travel comparison to support that airfare costs did not increase as a result of personal travel.
- 2.5.4 Implementing additional reviews for all airfare purchases that require the reviewer to verify that airfare complies with the [Fly America Act](#) and relates to economy class airfare prior to the expenses being charged to NSF awards.
- 2.6 Direct UCSF to provide training regarding the policy requirements for salary charged to NSF awards to ensure payroll is processed timely, under the appropriate account codes, and appropriately certified.
- 3.1 Resolve the \$14,365 in questioned, inadequately supported subaward and animal care expenses for which UCSF has not agreed to reimburse NSF and direct UCSF to repay or otherwise remove the sustained questioned costs from its NSF awards.
- 3.2 Direct UCSF to strengthen its policies and procedures related to creating and retaining documentation, including introducing additional controls to help ensure it appropriately creates and maintains all documentation necessary to support the allowability of expenses charged to sponsored programs. Updated procedures could include:
  - 3.2.1 Updating its current subaward approval procedures to ensure Principal Investigators appropriately approve invoices submitted through Intercampus Requests for Reimbursement by organizations within the University of California system.
  - 3.2.2 Implementing additional procedures to ensure the rate(s) and service(s) provided by the Laboratory Animal Resource Center are appropriately documented within invoices it uses to charge expenses to federal awards.
- 4.1 Resolve the \$8,402 in questioned indirect costs for which UCSF has not agreed to reimburse NSF and direct UCSF to repay or otherwise remove the sustained questioned costs from its NSF awards.

- 4.2 Direct UCSF to provide documentation supporting that it has repaid or otherwise credited the \$1,352 of questioned indirect costs for which it has agreed to reimburse NSF.
- 4.3 Direct UCSF to strengthen its monitoring procedures and internal control processes for applying indirect costs to federal awards. Updated procedures could include:
  - 4.3.1 Conducting annual training regarding the treatment of materials used in the fabrication of equipment. Specifically, on determining when materials used in the fabrication of an asset should be part of the capitalized cost of an asset.
  - 4.3.2 Implementing an annual review process for costs charged to awards that include funding for participant support costs to ensure UCSF is appropriately segregating these expenses in accounts that it has excluded from its Modified Total Direct Cost base.
  - 4.3.3 Requiring that personnel manually review purchases in excess of UCSF's policy for assets to be capitalized to ensure assets have been appropriately capitalized and excluded from the Modified Total Direct Cost base.
- 5.1 Direct UCSF to strengthen its administrative and management procedures for rentals to ensure employees use Connexus to rent vehicles, thereby ensuring the rental is covered by University of California's rental car insurance for business travel.
- 5.2 Direct UCSF to strengthen its administrative and management procedures related to subaward processing to confirm subrecipient commitment forms are completed for each subawardee at the proposal stage.
- 5.3 Direct UCSF to strengthen its directives, procedures, and internal controls for procuring contract services on sponsored projects. Updated processes could include the following:
  - 5.3.1 Conducting annual training for those individuals who procure contract services, including Principal Investigators. Specifically, the training should include the following:
    - 5.3.1.1 Clarification on the documentation requirements for entering into a contract or consulting agreement, including when to use the Sole Selection & Price Reasonableness Justification Form, Federal Funds Checklist, and BearBuy Professional Services/Consulting form.
    - 5.3.1.2 An overview of the process for contracting the services of a University of California-system employee, including the requirement to complete the Temporary Interlocation or Multi-location Appointment Form.

- 5.3.2 Implementing a manual review process to ensure individuals who initiate contract services complete all applicable forms required by University of California and UCSF procurement policy.
- 5.4 Direct UCSF to strengthen its procedures and internal controls for reviewing expense(s) eligibility for inclusion or exclusion from the Modified Total Direct Cost base.
- 6.1 Direct UCSF to develop and implement a control to identify when indirect cost rates change between provisional rates and newly negotiated indirect cost rates; as well as to take appropriate steps to avoid claiming unallowable indirect costs on NSF awards.
- 6.2 Direct UCSF to develop and implement a control to identify when indirect cost rates change between proposal submission and award date, as well as to take appropriate steps to avoid claiming unallowable indirect costs on NSF awards.

### **Considerations**

We suggest that NSF's Director of the Division of Institution and Award Support consider the following:

1. Directing UCSF to work with its financial system administrators to identify potential improvements of the communication of data from low-level input to high-level output.
2. Directing UCSF to strengthen the administrative and management internal controls and processes over the communication within its financial systems. Processes could include a centralized approach to perform more frequent periodic reconciliations with its departments between its general ledger and any applicable subledgers/subsystems on a cost claimed basis.

## **APPENDIX E: GLOSSARY**

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**Allocable cost.** A cost is allocable to a particular federal award or other cost objective if the goods or services involved are chargeable or assignable to that federal award or cost objective in accordance with relative benefits received. This standard is met if the cost:

- (a) Is incurred specifically for the federal award;
- (b) Benefits both the federal award and other work of the non-federal entity and can be distributed in proportions that may be approximated using reasonable methods; and
- (c) Is necessary to the overall operation of the non-federal entity and is assignable in part to the federal award in accordance with the principles in this subpart. (2 CFR § 200.405)

[Return to the term's initial use.](#)

**Factors affecting allowability of costs.** The tests of allowability of costs under these principles are: they must be reasonable; they must be allocable to sponsored agreements under the principles and methods provided herein; they must be given consistent treatment through application of those generally accepted accounting principles appropriate to the circumstances; and they must conform to any limitations or exclusions set forth in these principles or in the sponsored agreement as to types or amounts of cost items (2 CFR 220, Appendix A, Section C.2.).

**Allowable cost.** Except where otherwise authorized by statute, costs must meet the following general criteria in order to be allowable under federal awards:

- (a) Be necessary and reasonable for the performance of the federal award and be allocable thereto under these principles.
- (b) Conform to any limitations or exclusions set forth in these principles or in the federal award as to types or amount of cost items.
- (c) Be consistent with policies and procedures that apply uniformly to both federally-financed and other activities of the non-federal entity (2 CFR § 200.403).

[Return to the term's initial use.](#)

**BearBuy Professional/Personal/Consulting Services Forms.** UCSF Supply Chain Management instructs purchasers to complete the BearBuy Professional/Personal/Consulting Services form when buying professional, personal, or consulting services. UCSF Supply Chain Management further states that personnel must attach a detailed statement of work to the Professional/Personal/Consulting Services form in BearBuy.

[Return to the term's initial use.](#)

**Capital expenditures** means expenditures to acquire capital assets or expenditures to make additions, improvements, modifications, replacements, rearrangements, reinstallations, renovations, or alterations to capital assets that materially increase their value or useful life (2 CFR § 200.13).

[Return to the term's initial use.](#)

**Direct Costs** are those costs that can be identified specifically with a particular final cost objective, such as a federal award, or other internally or externally funded activity, or that can be directly assigned to such activities relatively easily with a high degree of accuracy. Costs incurred for the same purpose in like circumstances must be treated consistently as either direct or indirect (F&A) costs (2 CFR § 200.413).

[Return to the term's initial use.](#)

**Equipment** means tangible personal property (including information technology systems) having a useful life of more than 1 year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-federal entity for financial statement purposes, or \$5,000 (2 CFR § 200.33).

[Return to the term's initial use.](#)

**Fabricated equipment** means equipment that is being assembled with components from different sources and the value with direct cost of labor and materials totaling or exceeding \$5,000 (UCSF Capital Asset Management Guide).

[Return to the term's initial use.](#)

**Federal Funds Checklist.** UC Procurement Services requires personnel to use a Federal Funds Checklist for all federally funded purchases that exceed \$10,000 (UCSF Procurement).

[Return to the term's initial use.](#)

**Fly America Act.** All air travel and cargo transportation services funded by the federal government are required to use a "U.S. flag" air carrier service (49 U.S.C. 40118).

[Return to the term's initial use.](#)

**Indirect (Facilities & Administrative (F&A)) Costs** means those costs incurred for a common or joint purpose benefitting more than one cost objective, and not readily assignable to the cost objectives specifically benefitted, without effort disproportionate to the results achieved. To facilitate equitable distribution of indirect expenses to the cost objectives served, it may be necessary to establish a number of pools of indirect (F&A) costs. Indirect (F&A) cost pools must be distributed to benefitted cost objectives on bases that will produce an equitable result in consideration of relative benefits derived (2 CFR § 200.56).

[Return to the term's initial use.](#)

**Interlocation Appointment Forms** include one-time payments use the Interlocation One-Time Payment Form and for appointments, departments should use the Temporary Interlocation or Multi-location Appointment Form (UCSF Inter/Multi-Campus Appointments).

[Return to the term's initial use.](#)

**Inter/Multi-Campus Appointments.** UC creates inter-campus appointments for employees who work at two or more locations (i.e., campuses). One location/campus

serves as the employee's home campus, while the other locations/campuses are considered host campuses. The home campus pays the employee and uses inter-campus journals (source code 53X) to transfer the relevant costs to the host campus(es). It is important for the home and host campus departments to work closely together to ensure that they pay employees properly and timely (UCSF Inter/Multi-Campus Appointments).

[Return to the term's initial use.](#)

**Negotiated Indirect Cost Rate** are generally charged to federal awards through the development and application of an indirect cost rate. In order to recover indirect costs related to federal awards, most organizations must negotiate an indirect cost rate with the federal agency that provides the preponderance of funding, or Health and Human Services in the case of colleges and universities (NSF Office of Budget, Finance and Award Management).

[Return to the term's initial use.](#)

**Participant Support Costs** means 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 conferences or training projects (2 CFR § 200.75)

[Return to the term's initial use.](#)

**Period of Performance** means the time during which the non-federal entity may incur new obligations to carry out the work authorized under the federal award. The federal awarding agency or pass-through entity must include start and end dates of the period of performance in the federal award (2 CFR § 200.77).

[Return to the term's initial use.](#)

**Proposal & Award Policies & Procedures Guide (PAPPG)** is comprised of documents relating to the Foundation's proposal and award process for the assistance programs of NSF. The PAPPG, in conjunction with the applicable standard award conditions incorporated by reference in award, serve as the Foundation's implementation of 2 CFR § 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for federal Awards. If the PAPPG and the award conditions are silent on a specific area covered by 2 CFR § 200, the requirements specified in 2 CFR § 200 must be followed (NSF PAPPG 20-1).

[Return to the term's initial use.](#)

**Provisional Indirect Cost Rate** is a temporary rate established to permit funding and reimbursement of indirect costs pending establishment of a final rate (that rate determined at the end of an accounting period using "actual" direct and indirect cost data.) (NSF Office of Budget, Finance and Award Management)

[Return to the term's initial use.](#)

**Publication Costs** for electronic and print media, including distribution, promotion, and general handling are allowable. If these costs are not identifiable with a particular cost objective, they should be allocated as indirect costs to all benefiting activities of the non-

federal entity.

Page charges for professional journal publications are allowable where:

- (1) The publications report work supported by the federal government; and
- (2) The charges are levied impartially on all items published by the journal, whether or not under a federal award.
- (3) The non-federal entity may charge the federal award before closeout for the costs of publication or sharing of research results if the costs are not incurred during the period of performance of the federal award (2 CFR § 200.461).

[Return to the term's initial use.](#)

**Reasonable Costs.** A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person under the circumstances prevailing at the time the decision was made to incur the cost. The question of reasonableness is particularly important when the non-federal entity is predominantly federally funded. In determining reasonableness of a given cost, consideration must be given to:

- a) Whether the cost is of a type generally recognized as ordinary and necessary for the operation of the non-federal entity or the proper and efficient performance of the federal award.
- b) The restraints or requirements imposed by such factors as: sound business practices; arm's-length bargaining; federal, state, local, tribal, and other laws and regulations; and terms and conditions of the Federal award.
- c) Market prices for comparable goods or services for the geographic area.
- d) Whether the individuals concerned acted with prudence in the circumstances considering their responsibilities to the non-federal entity, its employees, where applicable its students or membership, the public at large, and the federal Government.
- e) Whether the non-federal entity significantly deviates from its established practices and policies regarding the incurrence of costs, which may unjustifiably increase the federal award's cost (2 CFR § 200.404).

**Reasonable Cost.** A reasonable cost is a cost that, in its nature and amount, does not exceed that which would have been incurred by a prudent person under the circumstances prevailing at the time the decision to incur the cost was made (2 CFR § 200.404, 2 CFR § 220 Appendix A, C.3.).

[Return to the term's initial use.](#)

**Sole Source Justification.** UCSF Supply Chain Management provides the following instructions for buying professional and consulting services: "University purchases require demonstration of selection of an appropriate supplier and of price reasonableness for all federally funded purchases over \$10,000 and for all non-federally funded purchases over \$25,000. Attach any supporting documentation you may have. Please explain why this supplier was selected, and why their price is reasonable, in the selection justification box. If

this is the only vendor who can provide this good or service, then please complete and attach a Single or Sole Source Justification instead.” (UCSF Procurement)

During the course of our audit, we identified several versions of a “Justification - Single or Sole Source Request” and Source Selection & Price Reasonableness Justification Form,” with the earliest form used for a purchase in December 2016. The most recent version of the form that we identified was revised in March 2019. Below, we have provided the names and instructions for each form:

Justification – Single or Sole Source Request – Revision date unknown; used 12/1/2016, 12/5/2017

*List technical reasons for the purchase of specific brand, type or vendor of equipment, services, or supplies. Attach this completed form to purchase Requisition.*

Source Selection & Price Reasonableness Justification Form - Revision date unknown; used 11/26/2018

*For federally funded purchases ≥ \$10,000 and non-federally funded purchases ≥ \$100,000. This document must be completed by the requesting Department for all federally funded purchases ≥ \$10,000 (including tax and shipping) & non-federally funded purchases ≥ \$100,000 (excluding tax, but including shipping), to substantiate the appropriateness of source selection and price reasonableness.*

Source Selection & Price Reasonableness Justification Form - Revised 3/6/2019

*For federally funded purchases ≥ \$10,000 and non-federally funded purchases ≥ \$25,000.*

[\*\*Return to the term’s initial use.\*\*](#)

**Subrecipient Commitment Form.** “UCSF’s Subrecipient Commitment Form is designed to collect information about the subrecipient organization at the proposal stage and to help subrecipients understand what will be required of them by UCSF should an award be made. To be completed and signed by the subrecipient.” (UCSF Subaward Proposal Toolkit)

[\*\*Return to the term’s initial use.\*\*](#)

**U.S. Flag Air Carrier** means an air carrier holding a certificate under section 401 of the Federal Aviation Act of 1958 (49 U.S.C. App. 1371) (48 CFR § 47.401).

[\*\*Return to the term’s initial use.\*\*](#)



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