



NATIONAL SCIENCE FOUNDATION
Division of Institution & Award Support

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September 29, 2023

Sharon E. Patterson
 Associate Vice President for Finance and Treasurer
 California Institute of Technology
 1200 E California Blvd. MC 229-6
 Pasadena, CA 91125
 Reference: OIG Report No. 21-1-014

Dear Sharon Patterson:

The National Science Foundation (NSF) has completed the review and resolution of the Office of Inspector General (OIG) audit report on costs incurred under NSF awards by the California Institute of Technology (CalTech) during the period of March 1st through September 30th, 2020.

The audit report questioned a total of \$50,721 in costs claimed under NSF awards and recommended that CalTech strengthen its administrative and management controls for the areas in which findings were identified. As a result of its resolution efforts, NSF has determined that \$31,856 will be allowed and that \$18,865 plus the additional costs of \$38,302 identified by CalTech for a total of \$57,167 will be disallowed. The table below summarizes the allowed and disallowed costs by finding number:

Finding	Audit Report Description	Questioned Costs	Sustained	Disallowed	Allowed	Repaid	Due to NSF
1	Unallowable Salary Expenses Charged After OMB M-20-17 Expired	\$16,769	\$16,769	\$16,769	\$0	\$418	\$16,351
2	Unapproved Subaward Expenses	\$31,856	\$0	\$0	\$31,856	\$0	\$0
3	Inaccurately applied indirect costs - April 2020 Rental Expense	\$1,263	*\$38,302	*\$38,302	\$0	\$39,565	\$0
	Additional inaccurately applied indirect costs - May 2020 Sales Tax	\$252	\$252	\$252	\$0	\$252	\$0
4	Unallowable Intergovernmental Personnel Act Expenses	\$581	\$581	\$581	\$0	\$581	\$0
5	Incorrect application of indirect rates	\$0	\$0	\$0	\$0	\$0	\$0
	Total	\$50,721	\$57,167	\$57,167	\$31,856	\$40,816	\$16,351

*Caltech provided an additional \$38,302 in disallowed indirect costs for an award.

To resolve the audit findings and questioned costs, NSF conducted detailed reviews of applicable Federal and NSF requirements, proposal and award information maintained by the Agency, and documentation provided by CalTech. The attached Schedule of Allowed and Disallowed Costs and the summary below provides the bases for the management decisions reached by NSF:

- **Finding 1: Unallowable Salary Expenses Charged After OMB M-20-17 Expired**

NSF sustains the finding. Flexibilities authorized under OMB Memorandum M-20-17 expired on June 16, 2020. An internal policy allowed CalTech employees to continue charging to federal awards until July 20, 2020. NSF's management decision is to disallow \$16,769; CalTech has already repaid \$418; therefore, Caltech must repay the remaining amount of \$16,351.

Corrective Action: NSF requires Caltech to repay the remaining disallowed costs of \$16,351.

Compliance and Internal Control Recommendation: NSF has determined that corrective actions taken by Caltech are responsive to the recommendations from the audit; Caltech provided its "Temporary Policy on Charging Costs to Sponsored Awards During the Covid-19 Situation" dated April 2, 2020, which retroactively updated its OPLP policy to include an expiration date that would allow departments to retire the use of the flexibilities granted by OMB Memorandum M-20-17.

NSF considers Finding 1 resolved. Final action will be complete upon repayment of \$16,351.

- **Finding 2: Unapproved Subaward Expenses**

NSF does not sustain the finding. Based on the analysis of the documentation provided, NSF determined that, in this case, the substance of the agreement more closely aligned with a contract than with a subaward agreement. Specifically, the purchase order and statement of work obligated the subcontractor to complete a particular task within a defined period of time (25 weeks) under a fixed price. Therefore, in this case, a request for prior approval through NSF's electronic system was not required. However, Caltech recognizes that the LIGO Project's collaborative model, which includes 100 universities and over 1400 scientists and researchers, could introduce unique levels of ambiguity and complexity when determining whether a subaward or contract exists, particularly when the university and contractor may also be part of the LIGO research community. Caltech agreed to enhance its determination process for subcontracts. **NSF's management decision is not to sustain the finding and to allow the questioned costs of \$31,856.**

Corrective Action: \$31,856 is allowed.

Compliance and Internal Control Recommendations: NSF has determined that corrective actions taken by Caltech are responsive to the recommendations from the audit; Caltech implemented its *Research Administration at Caltech* guide, dated January 2019.

NSF considers Finding 2 resolved and closed.

- **Finding 3: Inaccurately Applied Indirect Costs**

NSF sustains this finding and disallows the questioned cost amount of \$1,515. Caltech reviewed the ledgers for the two awards in question and returned additional funds considered unallowable in the amount of \$38,302 which was refunded to NSF. Based on CalTech's concurrence, NSF's management decision is to disallow total questioned costs of \$39,817.

Corrective Action: CalTech has provided evidence of \$39,817 in repayment.

Compliance and Internal Control Recommendation: NSF has determined that corrective actions taken by Caltech are responsive to the recommendations from the audit; Caltech implemented training procedures, *Expenditure & Audit Support*, dated June 2019.

NSF considers Finding 3 resolved and closed.

- **Finding 4: Unallowable Intergovernmental Personnel Act Expenses**
NSF sustains the finding. Based on Caltech's concurrence NSF's management decision to disallow \$581.
Corrective Action: Caltech agreed with the finding and provided evidence of \$581 in repayment.
Compliance and Internal Control Recommendation: NSF has determined that corrective actions taken by Caltech are responsive to the recommendations to strengthen administrative and management controls and processes surrounding the charging of salary to Intergovernmental Personnel Act awards.

NSF considers Finding 4 resolved and closed.

- **Finding 5: Incorrect Application of Indirect Cost Rates**
NSF sustains the finding. Caltech did not apply indirect costs using the rates included in the NICRA that was in effect as of the date of award, as required by Federal and NSF guidance, two NSF awards. Also, Caltech applied a 10 percent indirect cost rate to direct costs charged to an NSF award, rather than the 11.11 percent indirect cost rate awarded for the grant.
Corrective Action: NSF requires that Caltech's policies and procedures ensure that NSF awards are not charged indirect costs in excess of the rates in effect at the time of the award; Caltech systems allow input of indirect cost rates specific to the award.
Compliance and Internal Control Recommendation: NSF has determined that corrective actions taken by Caltech are responsive to the recommendations.

NSF considers Finding 5 resolved and closed.

Area for Improvement 1: Monitoring of Employee-Booked Travel Credits

Caltech should have policies and internal controls in place to ensure travel credits are credited back to the awards where the expense was originally incurred. **NSF has determined that corrective actions taken by Caltech are responsive to Areas for Improvement 1.**

Area for Improvement 2: Monitoring of Supply Costs Incurred in Response to the COVID-19 Pandemic

Caltech should have sufficient internal controls and monitoring to ensure the methodology for allocating costs incurred for supplies that enabled the employees to continue performing research and public health emergency supplies during COVID-19 were allocable and benefited the award charged. **NSF has determined that corrective actions taken by Caltech are responsive to Areas for Improvement 2.**

Based on the above, the total disallowed amount is \$57,167. CalTech has provided NSF evidence of \$40,816 in repayment. **Repayment of the remaining \$16,351** must be made via www.pay.gov. Please reference OIG Audit Report No. 21-1-014. Any necessary adjustments to ACM\$ because of the repayment will be made by the NSF Division of Financial Management (DFM). **Repayment of disallowed costs must be received no later than 90 days from the date of this letter, or December 28, 2023. Failure to provide timely repayment may result in DFM initiating formal collection through the Department of Treasury, Debt Management Services.**

Please be aware that CalTech's right to appeal cost disallowances by NSF is outlined in Chapter XII.B of the NSF Proposal and Award Policies and Procedures Guide (PAPPG), which may be found online at:

https://www.nsf.gov/publications/pub_summ.jsp?ods_key=pappg. **An appeal must be filed within 30 days from the date of this letter, or October 29, 2023.**

NSF considers all audit report findings and questioned costs resolved. Upon verification that repayment of **\$16,351** disallowed costs has been completed the audit report will be closed out by NSF.

CalTech's timely responses and full cooperation with the NSF audit resolution process have been greatly appreciated. Should you have any questions regarding this letter or the NSF audit resolution process, please contact me at 703-292-7827.

Sincerely,
Charlotte Grant-Cobb
Charlotte Grant-Cobb
Team Lead – Audit Resolution
Resolution and Advanced Monitoring Branch
Division of Institution and Award Support

Attachment: Summary Schedule of Sustained, Allowed and Disallowed Costs

21-1-014 Caltech

Summary Schedule of Sustained, Allowed and Disallowed Costs

						REPAYMENTS	
						Repaid	To Repay via Pay.gov
Finding	Award Number	Questioned Costs	Sustained Costs	Allowed Costs	Disallowed Costs		
Finding 1							
1.1	1440341	\$ 52.00	\$ 52.00	\$ -	\$ 52.00		\$ 52.00
	1646307	\$ 276.00	\$ 276.00	\$ -	\$ 276.00		\$ 276.00
	1764464	\$ 1,199.00	\$ 1,199.00	\$ -	\$ 1,199.00		\$ 1,199.00
	1935357	\$ 1,296.00	\$ 1,296.00	\$ -	\$ 1,296.00		\$ 1,296.00
	1937902	\$ 60.00	\$ 60.00	\$ -	\$ 60.00		\$ 60.00
	1440341	\$ 200.00	\$ 200.00	\$ -	\$ 200.00		\$ 200.00
	1646307	\$ 689.00	\$ 689.00	\$ -	\$ 689.00		\$ 689.00
	1764464	\$ 5,384.00	\$ 5,384.00	\$ -	\$ 5,384.00		\$ 5,384.00
	1935357	\$ 2,594.00	\$ 2,594.00	\$ -	\$ 2,594.00		\$ 2,594.00
	1937902	\$ 143.00	\$ 143.00	\$ -	\$ 143.00		\$ 143.00
	1440341	\$ 301.00	\$ 301.00	\$ -	\$ 301.00		\$ 301.00
	1764464	\$ 3,998.00	\$ 3,998.00	\$ -	\$ 3,998.00		\$ 3,998.00
	1937902	\$ 159.00	\$ 159.00	\$ -	\$ 159.00		\$ 159.00
	1440341	\$ 418.00	\$ 418.00	\$ -	\$ 418.00	\$ 418.00	\$0
Total Finding 1		\$ 16,769.00	\$ 16,769.00	\$ -	\$ 16,769.00	\$ 418.00	\$ 16,351.00
Finding 2							
2.1	1764464	\$ 31,856.00	\$ -	\$ 31,856.00	\$ -		
Total Finding 2		\$ 31,856.00	\$ -	\$ 31,856.00	\$ -	\$ -	
Finding 3							
3.1	1764464	\$ 1,263.00	\$ 39,565.00	\$ -	\$ 39,565.00	\$ 39,565.00	
	2032467	\$ 252.00	\$ 252.00		\$ 252.00	\$ 252.00	
Total Finding 3		\$ 1,515.00	\$ 39,817.00	\$ -	\$ 39,817.00	\$ 39,817.00	

Finding 4							
4.1	2034238	\$ 581.00	\$ 581.00	\$ -	\$ 581.00	\$ 581.00	
Total Finding 4		\$ 581.00	\$ 581.00	\$ -	\$ 581.00	\$ 581.00	
Finding 5	1545949	\$ -					
	19389894	\$ -					
	No Questioned Costs	\$ -					
		\$ -					
Totals		\$ 50,721.00	\$ 57,167.00	\$ 31,856.00	\$ 57,167.00	\$ 40,816.00	\$ 16,351.00

Compliance and Internal Control Recommendations:

Finding	Recommendations	Final Action Required
1	1.2	No
	1.3	No
2	2.2	No
	2.2a	No
	2.2b	No
	2.2c	No
	2.2d	No
3	3.2	No
	3.2a	No
	3.2b	No
	3.3	No
4	4.2	No
5	5.1	No