October 29, 2018

BENJAMIN GRINSTEIN Chair Department of Physics Mail Code

Subject: Physics – Department Audit

Report 2018-07

The final report for the Physics Department Audit, Report 2018-07, is attached. We would like to thank all members of the department for their cooperation and assistance during the review.

Because we were able to reach agreement regarding management action plans in response to the audit recommendations, a formal response to the report is not requested. The findings included in this report will be added to our follow-up system. We will contact you at the appropriate time to evaluate the status of the management action plans.

UC wide policy requires that all draft reports be destroyed after the final report is issued. We also request that draft reports not be photocopied or otherwise redistributed.

David Meier Director Audit & Management Advisory Services

Attachment

cc: Steven Boggs

Judy Bruner

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AUDIT & MANAGEMENT ADVISORY SERVICES

Physics - Department Audit Report No. 2018-07 October 2018

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ATTACHMENT A – Audit Results by Business Office Functional Process

I. EXECUTIVE SUMMARY

Audit & Management Advisory Services (AMAS) has completed a review of the Department of Physics as part of the approved audit plan for Fiscal Year (FY) 2017-18. This report summarizes the results of our review.

The objective of our review was to perform an overall assessment of the department's administrative internal control environment, compliance with University policies and procedures, and effectiveness of Department operations. The scope of our review included activities and business practices for FY 2016-17 and for the period July 1, 2017 through February 28, 2018.

We concluded that the Department's internal controls provided reasonable assurance that financial activities were conducted in accordance with University and campus policies and procedures. However, we did identify opportunities to improve business processes and internal controls. Management action plans to address these observations are summarized briefly below:

A. Financial Oversight

Management will:

- 1. Perform a timely review of all sampled transactions within the Transaction Sampling system on a monthly basis to ensure that the transactions comply with policy and/or applicable regulations.
- 2. Review, document and monitor key internal control activities via Control Tracker, as required by policy.

B. Recharge Rates

Management will develop and submit an updated recharge rate proposal to the Recharge Rate Review Committee for the Computer Support recharge center to ensure that deficits or surpluses are reasonable and administered appropriately.

C. Express Card Management

Management will:

- 1. Cancel the Department Business Manager's Express Card, and limit provision of Express Cards to selected personnel.
- 2. Reinforce the Express Card policy with staff and faculty to ensure that Express Card purchases are compliant with Express Card guidelines, and that itemized receipts are obtained for all Express Card transactions.
- 3. Identify additional Express Card reviewers and limit the number of Express Cards assigned to each reviewer or ECDA to a maximum of 10 Express Cards.

D. Equipment Management

Management will:

1. Ensure the Campus Asset Management System (CAMS) Location Notes field is used to document the asset location when a UCID cannot reasonably be affixed.

2. Validate the completeness of the CAMS records as part of the biennial equipment inventory and on an on-going basis, as needed.

E. Expense Reimbursement

Management will send out periodic department reminders that all University travel and entertainment expenses be pre-authorized and reimbursements be submitted timely.

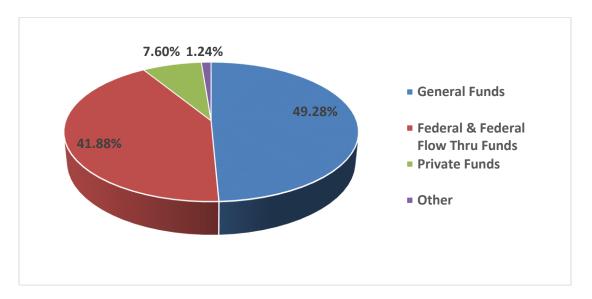
Observations and related management action plans are described in greater detail in section V. of this report.

II. BACKGROUND

Audit & Management Advisory Services (AMAS) has completed a review of the Department of Physics as part of the approved audit plan for Fiscal Year (FY) 2017-18. This report summarizes the results of our review.

Physics is one of three academic departments within the Division of Physical Sciences. The Department is comprised of 57 faculty and 30 staff, with faculty dedicated to research and education. The Business Office consists of a Chief Operating Officer, Department Business Manager, six Financial Managers, and a Financial Assistant.

During FY 2016-17, Physics incurred approximately \$38.6 million in expenditures, comprised of \$25.5 million in salaries and benefits, \$5.3 million in supplies and other expenses, \$2.3 million in equipment, \$1.1 million in travel, and \$4.4 million in overhead. Expenses by funding source were as follows:



III. AUDIT OBJECTIVE, SCOPE, AND PROCEDURES

The objective of our review was to perform an overall assessment of the department's administrative internal control environment, compliance with University policies and procedures, and effectiveness of Department operations. The scope of our review included activities and business practices for FY 2016-17 and for the period July 1, 2017 through February 28, 2018. In order to achieve our objective, we performed the following:

- Reviewed the Department website, organizational structure, and financial information;
- Reviewed applicable federal requirements;
- Reviewed University policies including, but not limited to:
 - UC Accounting Manual,

- Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards (Uniform Guidance),
- UC Contract and Grant Manual,
- UC Business Finance Bulletin (BFB) Bus 29: Management and Control of University Equipment,
- UC BFB BUS 43: Materiel Management;
- Interviewed management and key personnel to discuss business processes and any potential areas of concern;
- Evaluated the following:
 - o IFIS electronic financial approval hierarchies,
 - Business Unit Management Tool roles,
 - Express Card roles and responsibilities;
- Evaluated business process controls utilizing internal control questionnaires and segregation of duties matrices;
- Verified the financial status of department funds and indices for the audit scope; and Analyzed procedures and performed detailed transaction testing in the following areas to verify that internal controls were adequate and functioning in compliance with University policy:
 - Contract and grant administration,
 - Campus Asset Management System (CAMS) review
 - Operating ledger review,
 - o Payroll and non-payroll expense transfers,
 - Non-payroll expenditures, including:
 - Travel,
 - Entertainment,
 - Express cards
 - Effort reporting.

IV. CONCLUSION

Based on our review, we concluded that the Department's internal controls provided reasonable assurance that financial activities were conducted in accordance with University and campus policies and procedures. However, we did identify opportunities to improve business processes and internal controls. Our observations are discussed in the balance of this report.

V. OBSERVATIONS REQUIRING MANAGEMENT ACTION

A. Financial Oversight

We noted areas in which the Department has not shown effective financial management and oversight. Areas of concern include the use of UCSD's Control Tracker and Transaction Sampling.

Risk Statement/Effect

The absence of appropriate controls for financial activity could potentially lead to unauthorized

transa	transactions, inaccurate reporting and/or financial deficits.							
Mana	Management Action Plan							
Mana	Management will:							
A.1	Perform a timely review of all sampled transactions within the Transaction Sampling system on a monthly basis to ensure that the transactions comply with policy and/or applicable regulations.							
A.2 Review, document and monitor key internal control activities via Control Tracker, as required by policy.								

A. Financial Oversight - Detailed Discussion

University policy provides that all departments complete certain key control activities and document the completion of activities within Control Tracker¹. During our review, we noted that the following control processes were not complete:

Ledger Reviewer

On a monthly basis, departments are required to validate transactions posted to the operating ledger to ensure expenditures, liens, and revenues are correct, accurate and reasonable. The transaction sampling process includes verifying amounts to supporting documentation, resolving exceptions, and ensuring that corrective actions are taken in a timely manner. The Ledger Reviewer system samples transactions, reducing the administrative burden of reviewing all transactions during reconciliation activities. Departments should complete the transaction sampling process on a monthly basis, prior to the closing of the following month's ledger.

We reviewed transaction sampling reports for FY 2016-17 and the period July 1, 2017 through February 28, 2018 and noted that out of 4,589 transactions selected for review, 745 sampled transactions were not reviewed (16%). In order for the transaction sampling process to be regarded as a valid method of ledger review, all sampled transactions should be reviewed on a monthly basis.

Control Tracker

University policy requires that all departments document the completion of their key control activities within Control Tracker on a regular periodic basis to demonstrate that the controls are working properly. The application allows fund managers and others who are assigned responsibility for performing key controls to electronically attest that their assigned control activities have been completed. Management then certifies that the key control procedures have been completed.

During our review, we observed that monthly control activities had not been certified since May 2017. Additionally, the majority of quarterly control activities were not performed in the first two quarters of

¹ Control Tracker is a web-based application developed by UCDS to document the performance and certification of control activities within a unit in compliance with Statement of Auditing Standards (SAS) 112/115.

FY 2017-18. Further, annual control activities for FY 15-2016 and FY 16-2017 were not certified.

B. Recharge Rates

The recharge rate for the Computer Support recharge center was insufficient to ensure that year-end deficits or surpluses do not exceed one months of the recharging unit's activity, as required by policy.

Risk Statement/Effect

Insufficient recharge rates result in over- or under-charging recharge customers and the accumulation of fund deficits or surpluses that are not compliant with policy.

Management Action Plan

B.1 Management will develop and submit an updated recharge rate proposal to the Recharge Rate Review Committee for the Computer Support recharge center to ensure that deficits or surpluses are reasonable and administered appropriately.

B. Recharge Rates - Detailed Discussion

University policy requires that academic support activities be operated on a no-gain/no-loss basis. Any surplus or deficit occurring in any one year should be corrected by adjusting the rates in the succeeding year to achieve a break-even balance at the succeeding year end. Every effort should be made to ensure that year-end surpluses or deficits do not exceed one month of the recharging unit's activity, in accordance with UC policy.

The Physics department has two recharge facilities; Computer Support and High Bay Liquid Helium. During our review, we noted that as of June 30, 2017, the recharge rates for the Computer Support recharge center had resulted in the accumulation of a \$53,876 deficit, which was 1439% over the allowable deficit amount (approximately \$3,500).

C. Express Card Management

The number of Express Cards assigned to the ECDA exceeded recommended guidelines, and the ECDA was subordinate to one of the Express Card holders. Further, two of the 15 Express Card purchases that were reviewed were for items exceeding \$4,999, which is not allowed per policy, and five transactions were not supported by an itemized receipt.

Risk Statement/Effect

Non-compliance with policy and Express Card purchasing guidelines could put the cardholder and the University at risk of incurring unallowable or fraudulent purchases.

Management Action Plan

Management will:

C.1	Cancel the Department Business Manager's Express Card, and limit provision of Express Cards to selected personnel.	
C.2	Reinforce the Express Card policy with staff and faculty to ensure that Express Card purchases are compliant with Express Card guidelines, and that itemized receipts are obtained for all Express Card transactions.	
C.3	Identify additional Express Card reviewers and limit the number of Express Cards assigned to each reviewer or ECDA to a maximum of 10 Express Cards.	

C. Express Card Management - Detailed Discussion

University policy sets forth University requirements on use of procurement cards. UCSD's Express Card (EC) is a procurement option in the form of a Visa credit card for faculty and staff who have delegated buying responsibilities. The EC program simplifies buying and paying for most routine, low-cost goods and services. Certain types of purchases are restricted. EC cardholders are responsible for abiding by EC usage guidelines. Designated ECDAs are responsible for reviewing expenditures to make sure they are compliant with UC policy. UCSD guidance (BLINK) states if there are more than ten ECs assigned to a single ECDA, at least one transaction reviewer must be designated to assist in the review process.

In order to ensure that verification of expenditures is an entirely independent process, the administrative and reviewer should not be the subordinate of any EC cardholder. University policy states that, in general, this means that Department Heads and Management Services Officers cannot be issued an Express Card.

We noted the Department Business Officer has been issued an Express Card, with a subordinate as their ECDA and reviewer. Additionally, one ECDA is assigned responsibility to review transactions that are incurred on 19 different Express Cards.

Further, we noted that two of the 15 transactions that we selected for testing were restricted purchases in that they exceeded the EC limit of \$4,999, and five transactions were not supported by itemized receipts.

D. **Equipment Management**

The Biennial inventory validation of capital assets was incomplete.

Risk Statement/Effect

Control weaknesses in equipment management could result in lost or stolen assets, inaccurate equipment records, and non-compliance with federal and local policy.

Management Action Plan

Management will:

D.1 Ensure the Campus Asset Management System (CAMS) Location Notes field is used to document the asset location when a UCID cannot reasonably be affixed.
 D.2 Validate the completeness of the CAMS records as part of the biennial equipment inventory and on an on-going basis, as needed.

D. Equipment Management – Detailed Discussion

Uniform Guidance requires the maintenance of an inventory system that demonstrates an effective system of controls to track and account for equipment purchased with federal funds. University policy also requires the proper safeguarding and timely and accurate verification of capital assets by custodial departments.

UCSD guidance (BLINK) requires, that every department take a physical inventory of all University inventorial equipment, government equipment, other government property, and other inventorial items, at least once every two years in accordance with UC Policy Bus 29. After an inventory effort has been completed, the department is responsible for the proper disposal and/or transfer of any equipment on longer in their custody.

CAMS is UCSD's web-based inventory system used to track inventorial equipment with an acquisition cost of \$5,000 or more. CAMS records a number of details about individual assets including, but not limited to, the unique UCID number, building, serial number, and inventory date.

The Development Technician is responsible for receipt of all UCID tags from the campus Equipment Management office for inventorial equipment within the department. Once received, the Development Technician locates and places the UCID tag on the equipment, and then updates CAMS with the location.

During our review, we examined Physics' complete equipment inventory list in CAMS. We noted 81 out of 771 capital assets were over a year past due on inventory validation. We selected five of the 81 for detailed review. The department was unable to locate one of the five capital assets. Additionally, one of the five was not tagged due to the high temperatures obtained while in operation. However, there was no indication in CAMS that the UCID tag could not be affixed to the equipment.

E. Expense Reimbursement

Documentation supporting travel and entertainment transactions was not always submitted timely, as required by policy.

Risk Statement/Effect

Inadequate controls for travel and entertainment expenses increase the risk of inappropriate reimbursements and potential individual income tax consequences.

Management Action Plan

E.1 Management will send out periodic department reminders that all University travel and entertainment expenses be pre-authorized and reimbursements be submitted timely.

E. Expense Reimbursement – Detailed Discussion

In support of IRS regulations, UC's accountable plan, best practices, and UCSD guidance (BLINK) requires that employees submit supporting documentation for travel and entertainment expenses within 21 days. Expenses submitted after 45 days may be treated as taxable and reported on the employee's W-2.

During our review, we sampled 10 travel reimbursements totaling approximately \$170,000 and 10 entertainment reimbursements totaling approximately \$7,500. Of the trips selected, we noted three of the trips were submitted after 21 days of the end of the trip. For five of the 10 entertainment expenses sampled, we noted the timeframe between the event date and the reimbursement prepared date exceeded 21 days.

	AMAS Audit Review Procedure				Risk & Controls		
Business Office Process	Analytical Review of Financial Data	Internal Control Questionnaire/ Separation of Duties Matrix	Process Walk-through (Ltd Document Review)	Transaction Testing (Sample Basis)	Ralanca	Audit Conclusion ¹	Comments
Effort Reporting (PAR's)	V		√	Reviewed E-CERT Reports and data; traced to Payroll Expenditure Transfers.	Yes	Satisfactory	Effort report certifications were current.
Contract & Grant Activity (Post Award Admin.)	V	√	V	Reviewed 3 awards totaling \$11 million; evaluated journal vouchers, non-payroll and payroll expenses, PAR's, and DOPE reports.	Yes	Satisfactory	No issue noted.
Payroll Expenditure Transfers		V		Verified adjusted payroll charges per operating ledgers & distribution of payroll expense reports (DOPE's).	Yes	Satisfactory	Expense transfers appeared reasonable and timely.

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 $^{^{\}rm 1}$ Scale: Satisfactory - Improvement Suggested - Improvement Needed - Unsatisfactory

		AMAS Audi	t Review Procedur	Risk & Controls			
Business Office Process	Analytical Review of Financial Data	Internal Control Questionnaire/ Separation of Duties Matrix	Process Walk-through (Ltd Document Review)	Transaction Testing (Sample Basis)	Balance Reasonable (Yes or No)	Audit Conclusion ¹	Comments
Non-Payroll Expenditure Transfers		V		Reviewed timeliness, and business justifications for reasonableness.	Yes	Satisfactory	Expense transfers appeared reasonable and timely.
Financial Oversight	V	V	V	Reviewed transaction sampling and control tracker reports for completeness. Reviewed self- supporting activities yearend balances.	No	Improvement Needed	Transaction Sampling had not been completed for the period included in the scope of our review. Further, several Control Tracker internal control activities had not been performed and/or certified.
Recharge Activities	V	V		Reviewed year-end balances.	No	Improvement Needed	Recharge rates for one recharge center were insufficient and need to be updated.

		AMAS Audi	t Review Procedur	e	Risk & Controls		
Business Office Process	Analytical Review of Financial Data	Internal Control Questionnaire/ Separation of Duties Matrix	Process Walk-through (Ltd Document Review)	Transaction Testing (Sample Basis)	Balance Reasonable (Yes or No)	Audit Conclusion	Comments
Express Card	√	√	V	Reviewed process and division management of express cards. Judgmentally selected and reviewed 15 transactions; traced to supporting documentation.	No	Improvement Needed	Express Cards assigned to the ECDA exceeded recommended guidelines, and the ECDA was subordinate to two of the Express Card holders. Two of the Express Card transactions reviewed were not compliant with policy, and five transactions were not supported by an itemized receipt.
Travel	V	V	V	Reviewed 10 trips totaling \$170,000; traced to vouchers (TEV's) & supporting documents.	No	Improvement Needed	Selected travel was not always processed in a timely manner.
Entertainment	V	V	V	Reviewed 10 entertainment expense reimbursements & traced to supporting documentation.	No	Improvement Needed	Selected entertainment was not always processed in a timely manner.

		AMAS Audi	t Review Procedur	Risk &			
Business Office Process	Analytical Review of Financial Data	Internal Control Questionnaire/ Separation of Duties Matrix	Process Walk-through (Ltd Document Review)	Transaction Testing (Sample Basis)	Controls Balance Reasonable (Yes or No)	Audit Conclusion	Comments
Equipment Management	V		V	Reviewed inventory listing and equipment file for purchases, transfers, and deletes.	No	Improvement Needed	The financial controls over purchases appeared adequate. Some assets did not have a UCID tag affixed to them and details had not been updated in CAMS, while other assets were unable to be identified.