UC MERCED AUDIT AND ADVISORY SERVICES

October 12, 2018

To:	Sam Traina – Vice Chancellor for Research and Economic Development
Subject:	Post Award Spending Audit
Ref:	Audit Report No. M18A004

Internal Audit has completed an audit of post award spending. This audit was part of the Fiscal Year 2017 – 2018 audit plan.

We appreciate the help we received from staff in Sponsored Research Services and from the departmental research administrators in the schools and research institutes during this audit. If you have any questions, please feel free to contact me.

Jodd Jucken

Todd Kucker Director of Internal Audit

Attachment

cc Senior Vice President and Chief Compliance and Audit Officer Bustamante Chancellor Leland Vice Chancellor and Chief Financial Officer Mendez Associate Chancellor and Senior Advisor Putney Associate Vice Chancellor Motton Assistant Vice Chancellor and Controller Riley Executive Director Salazar Director Elizalde Director Ellington Manager Kalmin

UNIVERSITY OF CALIFORNIA, MERCED AUDIT AND ADVISORY SERVICES

Post Award Spending Audit Report No. M18A004

October 12, 2018

Work completed by: Brandi Masasso – Staff Auditor Todd Kucker – Director

Management Summary

Internal Audit has completed an audit of post award spending. The audit focused on the work of department research administrators in the schools and research institutes.

Department research administrators work closely with Principal Investigators and researchers to help ease the administrative burden related to managing awards. They play a key role in preventing unallowable costs from being charged to awards. The day to day work of department research administrators promotes the vision of "Excellence in Research" as the campus continues to strive towards achieving the Carnegie R1 designation.

The audit reviewed post award spending in the School of Natural Sciences, the School of Engineering, the School of Social Sciences, Humanities, and Arts, the Sierra Nevada Research Institute, and the Health Sciences Research Institute. While we identified some insignificant errors during the audit, overall, we concluded that internal controls were operating effectively to prevent unallowable costs from being charged to awards.

Based upon the errors we identified, to prevent unallowable costs from being charged to awards, we recommend periodic reconciliations of costs charged to awards. In the following report, our recommendations are discussed under the following headings:

- Improve the use of object codes and the recording of expenses
- Employee turnover and record retention requirements

Audit Objectives and Scope

As part of the Fiscal Year 2017 - 2018 audit plan, Internal Audit has completed an audit of post award spending. The purpose of the audit was to review that internal controls over post award spending are operating effectively so only allowable costs are charged to awards. The audit objectives were:

- To review post award spending managed by the different department research administrators in the schools and research institutes;
- To determine whether research-related costs are reviewed, approved, and accurately charged to awards; and,
- To review procedures managed by the department research administrators and Principal Investigators for monitoring overall spending on awards.

The scope of the audit included awards with expenditures during Fiscal Year 2017 - 2018. When an award was selected for testing, all of the spending on the particular award since inception was included in the audit scope. To achieve the objectives, we completed the following testing:

• We selected 15 awards that were active during Fiscal Year 2017 – 2018. In order to include the work of various campus department research administrators, we selected awards managed by the School of Natural Sciences, the School of Engineering, the

School of Social Sciences, Humanities, and Arts, the Sierra Nevada Research Institute (SNRI), and the Health Sciences Research Institute (HSRI). Spending on the selected awards totaled \$3,428,632 during Fiscal Year 2017 – 2018 which was around 15% of the total research spending at UC Merced during the year.

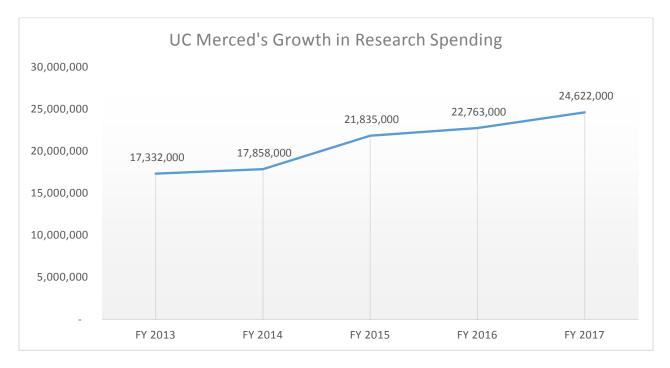
- We met with the various department research administrators responsible for the different selected awards to discuss policies, campus procedures, periodic reporting, and difficulties encountered in managing the awards.
- We reviewed the month to month spending on the selected awards (since award inception) and reviewed expenses charged to the awards. We examined backup documentation for various expenses to verify that the costs were allowable.

Overall, the testing and scope provided an overview of spending on research grants and the responsibilities of department research administrators at UC Merced.

Background

During 2016, UC Merced first appeared on the Carnegie Classification of Institutions of Higher Education. The university was designated a "doctoral-granting university with higher research activity" or R2, the second highest classification for American research universities. Research spending has continued to rapidly increase at UC Merced during recent years.

The following graph shows the increase in spending during FY 2012 - 2013 through FY 2016 - 2017. This data is from the audited UC Financial Statements.



In comparison with the other UC campuses, UC Merced's research growth during recent years has been remarkable. The following chart shows the change in grant revenues and research spending comparing Fiscal Year 2012 – 2013 with Fiscal Year 2016 - 2017 at the UC campuses.

Location	% Change in	% Change in
	Grant Revenue	Research Spending
	over 4 Years	over 4 Years
UC Merced	+35%	+42%
UC Berkeley	(-1%)	+4%
UC Davis	+6%	+2%
UC Irvine	(-1%)	+5%
UCLA	+6%	+12%
UC Riverside	+26%	+21%
UC San Diego	(-1%)	+4%
UC San Francisco	+23%	+36%
UC Santa Barbara	(-5%)	+2%
UC Santa Cruz	(-22%)	(-19%)
UC System	+7%	+11%

One reason for the rapid growth in research at UC Merced has been the increase in the number of faculty members conducting research. To ease the administrative burden related to conducting research, department research administrators work closely with Principal Investigators and researchers to help manage the spending on the awards.

Department research administrators provide guidance related to the federal uniform guidance administrative requirements and cost principles by reviewing that only allowable costs are charged to awards. They work closely with Principal Investigators and researchers to manage the day to day administrative tasks related to the awards and provide periodic reports to monitor spending versus the award budget. They also work in partnership with the central office, Sponsored Research Services, to manage formal requests with the sponsors and other requirements.

During the past few years, there have been around eleven staff employees at UC Merced who fulfill the role of department research administrators in the schools and research institutes. A couple of the schools have experienced significant turnover among these employees. With the increasing research spending and employee turnover, providing support and training to department research administrators is critical in order to comply with award requirements and to ease administrative burden on Principal Investigators and researchers.

Audit Results

From our audit testing, we concluded that internal controls related to post award spending are operating effectively. While we noted instances where some unallowable costs were charged to awards, the errors were not significant. We identified areas for improvement which are discussed under the following headings:

- Improve the use of object codes and the recording of expenses
- Employee turnover and record retention requirements

Observations and Recommendations

1. Improve the use of object codes and the recording of expenses

In the financial system, every financial entry made to an expenditure account must have an object code that appropriately identifies the nature of the expense. Departments must utilize object codes in a consistent manner and exercise care that expenses are recorded to the code that most accurately describes the charge. This accuracy is important to ensure proper financial and management reporting. It is also important to utilize appropriate codes so that costs considered unallowable are excluded from awards and indirect costs (based upon the indirect rates) are accurately calculated in the financial system.

Object codes have been flagged in the financial system to prevent the charging of unallowable costs on awards. A listing of object codes which are unallowable on federal awards or which should be monitored closely ("Warning List") has been established for the financial system. Examples of unallowable object codes, expenses that typically should not be charged to federal awards, include: promotional materials, entertainment, office supplies, food, etc. Examples of object codes on the Warning List which require closer scrutiny include: Visa applications, telephone charges, books and maps, and inventorial equipment.

During our review of expenses charged to federal awards, we noted various instances where the recording of costs and use of object codes could be improved. The following are examples of what we noted during the testing.

- Unallowable costs were inaccurately coded to the wrong object codes and charged to the awards. For example, we noted instances where general office supplies were coded as lab supplies and charged to an award. This incorrect use of object codes made it more difficult to exclude unallowable expenses.
- Allowable costs were inaccurately coded to object codes which are unallowable on federal awards. For example, we noted lab supplies incorrectly coded to kitchen supplies or office supplies. While the supplies were allowable, the poor use of object codes would create red flags for auditors.
- All computers purchased through the UC Merced campus store and charged to the awards were recorded as "Professional Services". As it is important to closely review the purpose of computer purchases on awards, the recording of computer purchases in this manner would be a red flag.
- For the financial system to accurately calculate indirect costs charged for subawards, the first \$25,000 charged to the subaward should be recorded in one object code while the remainder of the subaward is charged to another object code. This enables the system to correctly apply the indirect rate against the first \$25,000. We noted multiple errors with

the use of these codes and, as a result, the indirect costs were undercharged and overcharged on different awards.

During our review of approval processes, we noted that while department research administrators determine whether expenditures are allowable, they do not always review the object codes eventually used to record the expenses in the financial system. The coding of the expenses was sometimes managed by a department purchaser after the expenditure was approved.

While periodic reports are put together to help Principal Investigators monitor spending on awards, it appears that full monthly reconciliations of amounts charged to the awards are not completed. Many of the errors identified during audit testing should have been identified during an effective reconciliation process and corrected in a timely manner.

We recommend that Sponsored Research Services and department research administrators work together to provide training to employees who process purchases and transactions on awards. Departments should be completing periodic reconciliations of costs charged to awards in order to identify and correct errors in a timely manner.

Management Corrective Action

The Office of Research is currently establishing a formal training and certification program for departmental research administrators. Improving the coding of expenditures and the monthly reconciliation process will be included in this training program. This ongoing training will help employees involved with research administration understand how the poor coding of expenditures creates audit red flags. The new training program will be deployed by June 30, 2019.

2. Employee Turnover and Record Retention Requirements

During our discussion with the department research administrator in the School of Social Sciences, Humanities, and Arts (SSHA), we were told that documentation related to SSHA awards had been lost after a former department research administrator separated from the university. Department research administrators usually maintain a separate file for each award which includes: Principal Investigator approvals of expenditures, communications with the Principal Investigator and other researchers, and other documentation which shows the status of spending on the awards. After the former department research administrator left the university, other employees could not determine whether the former employee had been maintaining this information for the SSHA awards or whether the information had been lost or destroyed. Before he separated, no one from the department identified what documents he kept and where he maintained the records.

Approvals and similar documentation are records of the university. As the records were not properly maintained, the UC record retention requirements and award requirements were violated. The department research administrator who took over the former employee's

responsibilities discussed the time and resources required to attempt to rebuild the award files that were lost, but she also separated from the university before such actions were taken.

Before an employee separates from the university, the employee's supervisor should review the files being maintained by the separating employee and take custody of the university files so they are not lost. This should be part of a standard employee separation checklist. We recommend that the Records Management department work with Human Resources to establish procedures related to records retention for separating employees.

Management Corrective Action

Records Management has been working on an interim procedure for records preservation that requires the supervisor of a separating employee to complete a records management exit checklist to certify all university equipment is returned and university records are identified, retained, and preserved in accordance with UC policy. The draft of the interim procedure should be completed during October 2018.

While this interim procedure will provide controls over the records management aspect of offboarding, the campus has not implemented a standardized procedure or tools to assist management and separating employees during the off-boarding process. Records management is just one facet of off-boarding an employee. A standardized off-boarding process should be a larger effort led by the Academic Personnel Office and Human Resources across multiple administrative departments such as IT, Legal, Facilities Management, and Payroll to ensure all risks – besides records loss – associated with off-boarding are identified and mitigated.

The campus is currently implementing a new document management system, OnBase. As part of this implementation, standardized off-boarding processes are being discussed. The new processes and the new system will provide a long term solution to the identified issue.