Audit Report

Post Award Administration

Report No. SC-23-06
April 2023

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Principal Auditor

Approved
James Dougherty, Director
Audit & Management Advisory Services
# Table of Contents

I. EXECUTIVE SUMMARY ..................................................................................................................................... 2

II. INTRODUCTION

   Purpose ............................................................................................................................................................. 3
   Background ....................................................................................................................................................... 3
   Scope ................................................................................................................................................................ 3

III. OBSERVATIONS REQUIRING MANAGEMENT CORRECTIVE ACTION

   A. Final Financial Report Submission and Fund Closeout ................................................................................. 4
   B. Subrecipient Risk Assessment and Monitoring ........................................................................................... 5
   C. Roles and Responsibilities Matrix ................................................................................................................ 7
   D. Research Administrator training .................................................................................................................. 8

IV. OTHER ISSUE

   Post Award Expense Tracking and PI Reporting System .................................................................................. 11

APPENDIX A. SUMMARY OF WORK PERFORMED AND RESULTS ............................................................................. 14
I. EXECUTIVE SUMMARY

Audit and Management Advisory Services has completed a review of Post Award Administration internal controls, which was included in the approved audit plan for Fiscal Year 2022-2023. This report summarizes the result of our review.

Overall, based on the results of work performed within the scope of the audit, we found that current processes ensure unit responsibilities are carried out appropriately in regards to post award financial administration in divisions, Office of Sponsored Projects (OSP) and the Extramural Funds Office (EMF). However, there are opportunities to improve EMF’s final financial reporting and fund closeout process, OSP’s subrecipient risk assessment processes, and the roles and responsibility matrix on OSP’s website.

In addition, we have recommendations regarding divisional research administrator training and a proper post award administration system to establish standard practices across the campus and increase the efficiency and effectiveness of their post award management activities. Lack of uniform research administrator (RA) training and inadequacy of the current award expense tracking and principal investigator (PI) reporting system negatively impact the effectiveness and efficiency of the post award fiscal management in divisions. Solving these issues will mainly depend upon resources that campus leadership prioritize.

We did not create a management corrective action for our observations on inadequacy of the current RA award expense tracking and PI reporting system, because it is a shared responsibility of senior campus management to provide the technology the PIs and RAs need for this process. We put our observations on section VI. to increase senior management’s awareness of the shortcomings of the current tools that are used for this process.

The following observations requiring management corrective action are identified below:

A. **Final Financial Report submission and Fund Closeout**
   We found some instances that final federal financial reports (FFR) were not submitted timely, not recorded in the FFR review/status log, and funds for expired awards were not closed in the Banner Financial System.

B. **Subrecipient Risk Assessment and Monitoring**
   The subrecipient risk assessment form was not completed for each subrecipient.

C. **Roles and Responsibility Matrix**
   The Roles and Responsibility Matrix does not include all of the major steps in research administration life cycle.

D. **Research Administrator Training**
   Trainings provided to campus RAs is insufficient and does not compare to RA training provided by other campuses across the system.

Agreement was reached with management on the recommended actions to address the risks identified in this area. The observations and the related management corrective actions are described in greater detail in Section III.
II. INTRODUCTION

Purpose
The purpose of this audit was to evaluate the processes and controls in place for the effective and efficient financial administration of extramural contract and grant funds, and compliance with university policies and award requirements.

Background
The post award phase of research administration includes implementing the project, monitoring expenses, reporting progress, billing, and completing the closeout process. During this phase of the award life cycle, principal investigators (PIs), divisional research administrators (RAs), Extramural Funds Office (EMF) and the Office of Sponsored Projects (OSP) work collaboratively to manage the award in compliance with the terms and conditions of the award, federal rules and regulations, and University policies.

In the post award phase, the PI has the primary responsibility for the scientific, technical and administrative conduct of the project and technical progress or narrative reports required by award.

The RA supports the PI in fiscal management of the project by monitoring spending against the award’s budget to ensure compliance with the sponsor’s terms and conditions, University policies, federal requirements related to financial management of the project, and providing the PI with regular financial status reports. Further, the RA monitors cost share commitments and subawards.

OSP advises the PI and RA during the period of the award regarding their obligations under the terms and conditions of awards, serves as a liaison between the PI, RA and the sponsor, executes modifications to the award, prepares subawards, and evaluates and monitors the risk of subrecipients.

EMF manages the financial information system accounts and reports for extramural funds, ensures compliance with university and agency regulations and guidelines, manages agency bills and account receivables, creates and submits agency and UCOP reports, advises and trains staff and faculty on extramural fund issues, and closes the awards.

Scope
Our review was limited to evaluating the effectiveness and efficiency of the divisional RAs post award administration, as well as the effectiveness of internal controls of OSP’s subrecipient risk assessment and monitoring process, and EMF’s final financial submission and closing expired awards fund processes. We conducted this audit in the following ways:

- Reviewed UC and UCSC policies, guidelines, best practices of other UC campuses relevant to post award research administration
- Reviewed audit reports conducted at UC campuses relevant to post award administration
- Reviewed UC Single Audit reports, NIH and NSF Performance Audit of Incurred Costs reports, and the NCURA peer review report
- Communicated with the managements of the Office of Research, the Arts, Humanities, Physical and Biological Science, and Social Science Divisions, the Baskin School of Engineering, EMF, and OSP regarding the post award administration process.
- Performed and documented a risk assessment based on the result of our preliminary work, such as interviews, review of documentation, and other observations.

For additional details, please see Appendix A. Summary of Work Performed and Results.
III. OBSERVATIONS FOR MANAGEMENT CORRECTIVE ACTION

A. Final Financial Report Submission and Fund Closeout

We found some instances that final federal financial reports (FFR) were not submitted timely, not recorded in the FFR review/status log, and funds for expired awards were not closed in the Banner Financial System.

Risk Statement/Effect

Late submission of final federal financial reports results in noncompliance with award terms and conditions, and Uniform Guidance. Without keeping the FFR log updated, the final report status could not be tracked.

When funds for expired awards are not closed in a timely manner, surplus/deficit budget balances stay in the fund ledger; and there is a risk of posting inappropriate expenditures to the award.

Agreements

A.1 Extramural Funds Office (EMF) will follow up with their accountants to make sure they are updating the FFR log and submitting the reports within the required time frame.

<table>
<thead>
<tr>
<th>Implementation Date</th>
<th>Responsible Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/30/23</td>
<td>EMF Accounting Director and EMF Assoc. Director</td>
</tr>
</tbody>
</table>

A.2 EMF will create a process document to close the funds in Banner.

<table>
<thead>
<tr>
<th>Implementation Date</th>
<th>Responsible Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>6/30/23</td>
<td>EMF Accounting Director and EMF Assoc. Director</td>
</tr>
</tbody>
</table>

A. Final Financial Report Submission and Fund Closeout – Detailed Discussion

EMF has a well-designed Consolidated Procedures Manual for the department’s activities. However, we found some opportunities to strengthen their internal controls.

Uniform Guidance 2 CFR 200.344 requires that the prime awardee has 120 days to financially closeout the award and submit all financial, performance and other reports as required by terms and conditions of the federal award. Submitting federal financial reports (FFRs) after 120 days results in noncompliance with the award terms and conditions, and federal regulations. Non-federal awards final financial reports should be submitted within the period determined in the award terms.

We found some instances where state and federal awards’ final financial reports were not submitted timely, and the FFR log was not updated. EMF explained that, their ability to submit timely final financial reports hinges on the
divisional RA’s timely submission of a divisional final report that accurately describes that final expenses have posted, encumbrances have been removed, and the award is ready to be reviewed against the divisional report, adjustment made to overhead and a final billing for expenses through the sponsor. More often than not, according to EMF, RAs were still posting expenses after the allocable period or they were behind in their workload and did not provide the relevant closing report (See Section VI.A below). This translates to a downstream push of urgency and stress on EMF accountants where they end up handling a large amount of FFRs at the same time. We were told there are some times that EMF accountants must submit the final FFR and have to rely on the ledger when the RA does not submit a divisional report or there are inaccuracies that the RAs do not resolve by the FFR due date. EMF has an escalation protocol with a three strikes rule where EMF accountants reach out once the award’s period of performance has ended, then the second time as they come up within a month or so of the FFR due date, and on the third attempt they start to include the management oversight in EMF.

Also, we identified that closing journal entries were not performed and funds were not inactivated in the financial system for expired awards in a timely manner.

When there is a delay in performing journal entries to close awards and inactivating the expired awards fund, indirect cost differences, surpluses and deficits remain unresolved as a result. This creates a discrepancy between the fund ledger and the final financial report values. Also, it increases the risk of charging inappropriate expenses on expired awards.

EMF stated that, they agree with this assessment but currently they are in a transition of losing key employees with experience and bringing new accountants that require intensive training and oversight. This has resulted in a focus on maintaining fund set up, budget allocations, cash flow and reporting as the priorities in their office. They are in the recruitment process of a new general accountant. They will begin creating a process document on their end to close the funds in Banner.

<table>
<thead>
<tr>
<th>B. Subrecipient Risk Assessments and Monitoring</th>
</tr>
</thead>
<tbody>
<tr>
<td>The subrecipient risk assessment form was not completed for each subrecipient.</td>
</tr>
</tbody>
</table>

**Risk Statement/Effect**

When risk assessment forms and monitoring activities for federal awards are not completed, there is noncompliance with federal regulations.

**Agreement**

<table>
<thead>
<tr>
<th>B.1</th>
<th>OSP will strengthen the subrecipient risk assessment process to ensure the risk assessment form is completed and documented in detail to support the risk ranking for each subrecipient.</th>
<th>Implementation Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>09/01/23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Responsible Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assistant Vice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chancellor Research</td>
</tr>
</tbody>
</table>

**B. Subrecipient Risk Assessment and Monitoring – Detailed Discussion**
2 CFR 200: Uniform Guidance Section 332 requires the pass-through entity to evaluate each subrecipient’s risk of noncompliance with federal statutes, regulations, and the terms and conditions of the subaward for purposes of determining the appropriate monitoring.

OSP is responsible for conducting subrecipient risk assessment and developing an appropriate monitoring plan to mitigate that risk. Monitoring activities should be tailored to the designated risk level.

OSP has a Subrecipient Commitment Form to collect information about the potential subrecipient during the proposal stage. If an entity is not subject to the annual Single Audit it is required to complete additionally the Mini Audit Questionnaire. OSP also has a step to verify that the entity and the entity’s PI are not listed as an excluded party via Visual Compliance, reviews the entity’s SAM.gov and Federal Demonstrated Partnership records for auditing findings and the eligibility of the entity.

For subrecipient risk assessment and ongoing monitoring processes, OSP has the following forms: Risk Assessment Questionnaire to assess and rank the risk as low, medium or high; Continuing Assessment Tool (CAT) to assess whether or not things are going as planned, and to uncover issues related to the sub award; and the Sub Recipient Mini Audit Questionnaire Follow Up form to monitor the risk of the entities that filled the Mini Audit Questionnaire at the proposal stage.

While it has these forms and is aware of the required processes, OSP only completes the Risk Assessment Questionnaire in cases where audit findings are identified or the agency is not registered in SAM.gov. OSP does not document a monitoring plan for the risk mitigation managed by the inclusion of terms and conditions specific to the identified risk factors. Uniform Guidance requires the pass-through entity to evaluate each subrecipient’s risk of noncompliance with federal statutes, regulations and the terms and conditions of the subaward for purposes of determining the appropriate monitoring, without exceptions.

We also found some instances where continuous monitoring information was not documented timely.

OSP agreed to perform and document risk assessments to support the assigned risk level for each subrecipient and document monitoring activities.

After a subaward is executed, the subrecipient monitoring process is a shared responsibility among OSP, the PI, and the RA. OSP is responsible for conducting continuing risk assessment and issue amendments to subaward agreements to add funds and extend the period of performance.

The PI is responsible for monitoring the performance of the subrecipient to ensure compliance with award terms and conditions, reviewing progress, and technical reports to ensure performance goals are achieved. RA monitoring activities include reviewing invoices to ensure costs are allowable, allocable, and reasonable, and ensuring funds are spent according to the project time lines.
We collected information from divisional research administration units regarding their subrecipient financial monitoring procedures. They have similar procedures to keep track of sub award invoices and processing them.

However, we recommend OSP to consider adding subrecipient risk assessment and monitoring steps for OSP, PIs and RAs in the Subaward Policy on the Office of Research website, the PI Handbook, as well as the Roles and Responsibilities Matrix to provide uniformity to the processes implemented by the campus.

C. Roles and Responsibility Matrix

The Roles and Responsibility Matrix does not include all of the major steps in the research administration life cycle.

<table>
<thead>
<tr>
<th>Risk Statement/Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>If the Roles and Responsibilities Matrix is not complete it creates confusion about the roles, inconsistency among divisional practices, and an inefficient process.</td>
</tr>
</tbody>
</table>

Agreement

C.1 OSP will form a team consisting of EMF, divisional RA managers and other related parties tasked with updating the Roles and Responsibility Matrix to include the major processes as well as the units in the award life cycle.

<table>
<thead>
<tr>
<th>Implementation Date</th>
<th>Responsible Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/01/23</td>
<td>Assistant Vice Chancellor Research</td>
</tr>
</tbody>
</table>

C. Roles and Responsibility Matrix – Detailed Discussion

The research administration Roles and Responsibilities Matrix is the formal document that outlines the roles, responsibilities, and responsible parties in Research Administration pre-award and post-award phases. It serves as a guide for PIs, RAs, OSP and EMF staff, and provides uniformity within research administration practices. This matrix is located on the OSP website as a spreadsheet.

We found that the matrix does not include some major processes, such as subrecipient monitoring for RAs and PIs, effort reporting, managing collaborative awards, which have multiple PIs in different divisions, etc. In addition, some other units in the award life cycle such as University Relations for some private grants and Research Development for the pre-award stage could be added to the matrix with input from EMF and RA managers.

A well-designed matrix would also bring consistency where there is a high turnover in any of the units involved in the award life cycle, and help to ensure clarity about roles and responsibilities among units.

OSP should form a team that includes EMF, RA managers and other related parties to update the Roles and Responsibility Matrix to include the major processes as well as the units in the award life cycle. We also recommend the matrix is designed in user friendly format.
Other UC Campuses and universities also use Roles and Responsibilities Matrixes for research administration processes. We provided couple links below as examples of user-friendly formats:

https://research.ucr.edu/spa/roles_and_responsibilities
https://www.umass.edu/research/about/roles-and-responsibilities

<table>
<thead>
<tr>
<th>D.</th>
<th>Research Administrator Training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Training provided to campus RAs is insufficient and does not compare to RA training provided by other campuses across the system</td>
</tr>
</tbody>
</table>

**Risk Statement/Effect**

Without adequate training it is difficult to establish uniform standards and support RAs in the complex environment of research administration.

**Agreement**

D.1 The VC for Research will form a team, including EMF and other relevant units to create and document a plan for providing uniform RA trainings and ongoing learning opportunities for RAs with the support of senior management.

<table>
<thead>
<tr>
<th>Implementation Date</th>
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</thead>
<tbody>
<tr>
<td>02/01/24</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsible Manager</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice Chancellor Research</td>
</tr>
</tbody>
</table>

**D. Research Administrator Training – Detailed Discussion**

Providing research administration training is a very common practice in universities to establish uniform standards and to support RAs in the complex environment of research administration. Based on our analysis, some universities provide post award training through their Office of Research, some of them divide the training as pre-award and post award, with pre-award trainings provided by their Office of Research and post-award training provided by their Controller’s Office.

At UCSC, each division’s RA unit gives training to new RAs. EMF provides contract and grant specialized training for transfer of expenses and budgetary adjustments for the campus.

We reviewed the trainings offered to RAs across the UC system and their ongoing communication practices/tools. All the UC campuses except UCSC have RA training programs in the form of eCourses, instructor led training or a combination of both, case studies, or video webinars. UC Berkeley, UC Davis, UC San Diego, UC Santa Barbara offer RA certification programs. UCLA holds RA forums monthly to update campus personnel on emerging and changing topics in research administration. We provided the result our training review in Table 1 to serve as possible benchmarks.

We recommend that a uniform training opportunity that includes the fundamentals of research administration, research compliance, applicable federal and state requirements, University policies and other critical topics should
be offered to all our RAs. As research administration is a dynamic field, on-going training and professional development opportunities are also important for experienced RAs.

We also recommend EMF should consider to set up periodic meetings with RAs to inform them of any changes in procedures before they are in place, create a platform for RAs to discuss their challenges and vocalize their suggestions regarding improvements of current processes, learn best practices from each other, and communicate topics such as changes in sponsored agencies (e.g. NIH, NSF) requirements.

Also, EMF could share internal and external audit findings related to sponsored projects as well as performance and cost incurred audits of other universities performed by federal agencies (e.g. NIH, NSF) to increase awareness of common audited areas. Examples of publicly available links for Federal agency audits are given below;

https://oig.nsf.gov/reports-publications/reports/audit
https://www.nsf.gov/bfa/responses.jsp

See Table 1 on next page
## TABLE 1: RESEARCH ADMINISTRATION TRAININGS PROVIDED IN UC CAMPUSES

<table>
<thead>
<tr>
<th>UC Campus</th>
<th>Offered or Sponsored by</th>
<th>Name of the Training</th>
<th>Form of Training</th>
<th>Link</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC Berkeley</td>
<td>UCB HR website</td>
<td>Research Administration Professional Development Program (RAPDP)</td>
<td>eCourse, Instructor Led Training (ILT) or a combination of both</td>
<td><a href="https://hr.berkeley.edu/grow/grow-your-skillsdevelopment-professionals/research-administration-professional-development">https://hr.berkeley.edu/grow/grow-your-skillsdevelopment-professionals/research-administration-professional-development</a></td>
<td>The Research Administration Professional Development Program (RAPDP) is a training curriculum designed for both new and experienced Research Administrators (RAs) as well as anyone interested possibly becoming an RA. The program consists of 21 topics that cover foundational, pre-award, post-award and specialized topic categories, delivered via eCourse, ILT (Instructor-led Training), or a combination of both.</td>
</tr>
<tr>
<td>UC Davis</td>
<td>Sponsored jointly by the Office of Research and Extramural Fund Accounting</td>
<td>Research Administration Certificate Series</td>
<td>eCourse, Instructor Led Training (ILT) or a combination of both</td>
<td><a href="https://hr.ucdavis.edu/departments/funding/certificate/research-administration">https://hr.ucdavis.edu/departments/funding/certificate/research-administration</a></td>
<td>The Research Administration Certification Series (RACS) is sponsored jointly by the Office of Research and Extramural Funds Accounting.</td>
</tr>
<tr>
<td>UC Irvine</td>
<td>UCI Accounting &amp; Fiscal Services</td>
<td>Contract &amp; Grants Training</td>
<td>Courses via UC Learning Center</td>
<td><a href="https://accounting.uci.edu/cg/training.html">https://accounting.uci.edu/cg/training.html</a></td>
<td>Contracts and Grants Accounting offers several classes that focus on fund accounting processes for sponsored projects. These classes are geared toward individuals that are relatively new to managing contract or grant award funds in a University setting.</td>
</tr>
<tr>
<td>UCLA</td>
<td>UCLA Office of Research Administration</td>
<td>ORA Training Programs; Research Administration Forum (monthly); Post Award Administrations (LMS Course)</td>
<td>eCourse, Research Administration Forum, Classes</td>
<td><a href="https://oora.research.ucla.edu/ora-training-programs/">https://oora.research.ucla.edu/ora-training-programs/</a> <a href="https://efn.research.ucla.edu/fund-management-training-resources/">https://efn.research.ucla.edu/fund-management-training-resources/</a></td>
<td>Classes are offered by EFM twice a year. Also training classes and programs offered by the Office of Research Administration:</td>
</tr>
<tr>
<td>UC Merced</td>
<td>UCM Office of Research &amp; Economic Development</td>
<td>Research Administrator Workshops</td>
<td>Workshops, Power Points, Exercises, Questions, Exercise</td>
<td><a href="https://spa.ucmerced.edu/training-and-workshops">https://spa.ucmerced.edu/training-and-workshops</a></td>
<td>The Research Administrator Workshop series is designed for new and junior research administrators. All new research administrators are required to complete the training.</td>
</tr>
<tr>
<td>UC Riverside</td>
<td>UCR Research &amp; Economic Development</td>
<td>Life Cycle of the Award Series</td>
<td>On-demand educational portal contains video webinars and supporting resources</td>
<td><a href="https://research.ucr.edu/spa/training">https://research.ucr.edu/spa/training</a></td>
<td>The award life cycle refers to the entire process of an award — from finding an opportunity and developing a proposal through award implementation and ending with the closeout of an award. This on-demand education portal contains video webinars and supporting resources which will walk the participant through the entire life cycle.</td>
</tr>
<tr>
<td>UC San Diego</td>
<td>UCSD Office of Research Affairs</td>
<td>Four level Research Administration (RA) Training Certificate Program</td>
<td>Virtual instructor led courses</td>
<td><a href="https://blink.ucsd.edu/research/training/index.html">https://blink.ucsd.edu/research/training/index.html</a></td>
<td>Offerings include knowledge-based training such as the RA Essentials class for new research administrators, the four-level Research Administration (RA) Training Certificate Program, as well as targeted skills training on the tools and systems used, such as virtual instructor-led courses on the Kuali Research system.</td>
</tr>
<tr>
<td>UC San Francisco</td>
<td>UCSF Office of Research, UCSF Controller’s Office</td>
<td>Research Administration 101 (RA-101) Eight week course offer three times a year; Post Award Management (PAM) training series</td>
<td>Recurring courses in research administration topics; Eight week courses offered three times a year.</td>
<td><a href="https://orr.ucsf.edu/research-administrator-training">https://orr.ucsf.edu/research-administrator-training</a> <a href="https://controller.ucsf.edu/news/20209/new-post-award-training-series-research-administrators">https://controller.ucsf.edu/news/20209/new-post-award-training-series-research-administrators</a></td>
<td>Pre Award -Recurring courses in research administration topics. Eight week course offered three times per year. Post Award PAM-Self-paced training series for the sponsored research post-award community. Training resources have been developed by the committee with input from the Office of Sponsored Research and the Controller’s Office. Over time, the series will encompass a range of post-award topics, including communicating with PIs, managing subcontracts, and closing out awards.</td>
</tr>
<tr>
<td>UC Santa Barbara</td>
<td>UCSB Office of Research</td>
<td>Sponsored Projects Training for Administrators in Research (STAR) Certification program</td>
<td>Series of Courses: To obtain the STAR certificate, 11 required courses must be completed within 2 years from the date you begin the series</td>
<td><a href="https://www.research.ucsb.edu/star-classes">https://www.research.ucsb.edu/star-classes</a></td>
<td>The Sponsored Projects Training for Administrators in Research (STAR) program is a comprehensive certificated program developed by the UCSB Office of Research to meet our campus research administration needs. The program’s goals are to improve campus understanding of regulations, policies, and procedures; to strengthen internal controls; and to provide staff members with access to key resources and contacts when they need help.</td>
</tr>
<tr>
<td>UC Santa Cruz</td>
<td>Extramural Fund (EMF)</td>
<td>Contract and Grant Training</td>
<td>EMF provides Contract &amp; Grant fund specialized training for transfer expenses and budgetary adjustments.</td>
<td><a href="https://financial.ucsb.edu/Pages/TrainingCG.aspx">https://financial.ucsb.edu/Pages/TrainingCG.aspx</a></td>
<td>The Extramural Funds Office offers Contract and Grant funds specialized training for transfers of expenses and budgetary adjustments.</td>
</tr>
</tbody>
</table>
VI. OTHER ISSUE

A. Post Award Administration Expense Tracking and PI Reporting System

RAs use a labor intensive, spreadsheet-based process for expense tracking, reporting and projections for PIs instead of a post award management system like other higher-level research universities use.

Risk Statement/Effect

The labor intensive, manual input of financial information for many PIs with multiple research projects risks errors that undermine confidence in financial reporting. This method does not provide PIs with anytime access to their projects’ financial status.

Recommendation

We recommend that campus leadership give priority to provide the technology needed to support divisional post award financial monitoring and PI reporting process to improve efficiency and effectiveness of post award financial management, and allow PIs to access financial status of the awards and manage RAs workloads.

VI. Post Award Administration Expense Tracking and PI Reporting System – Detailed Discussion

The Current Spreadsheet-based Process

RAs use both Infoview corporate reports and Excel spreadsheets for expense tracking, reporting and projections for PIs. Infoview corporate reports provide information about the award budget, expense details and some of the encumbrances. The only approved expenses that appear as encumbrances in Infoview are purchase orders for supplies, services, equipment and subawards. Other commitments such as salaries and benefits, GSR tuition and fees, approved recharges, intercampus recharges, fleet service charges, fellowships and stipend payments, travel expenses etc. are commitments that are not seen as encumbrances in Infoview reports, and are tracked manually in Excel spreadsheets.

RAs use spreadsheet for tracking expenses, securing funds for approved future expenses, maintaining actual budget balances, and providing PIs with financial status reports for their projects and making projections.

After receiving a new award notice and fund number, the RA creates a spreadsheet for the award and establish the budget on the spreadsheet. When approving expenses, the RA enters the expense amount, date of the transaction, type of the expense and calculates the associated indirect cost on this spreadsheet manually to secure the funds for the expense and to maintain the actual balance of the award. The RA monitors each activity code, cost share commitments and subaward invoicing by using the spreadsheet.

RAs provides PIs with the financial status report of the project as a bundle of the spreadsheet and the infoview report. Before sending the spreadsheet to the PI, the RA enters the expenditure totals from an Infoview report to the spreadsheet, reviews all encumbrances and compares with Infoview expense details, and removes the encumbrances in the spreadsheet if they are posted as expenses in the Infoview report. When the spreadsheet edits are completed, the RA sends both the spreadsheet to provide information regarding the actual balance and list of commitments, and the Infoview report for expense detail to the PI. The RA stores a copy of the spreadsheet and Infoview report as a bundle in the local server of the division.
This process is similar in all the divisions across the campus.

RAs in divisions send periodic reports to PIs generally every one to three months. Only one division stated that they send reports to PI almost every month, sometimes quarterly. Other divisions RA managers told us they have a goal to send reports every two to three months. Besides periodic reporting, RAs send ad hoc reports at the PIs request.

This heavily manual expense tracking, projection and reporting practice increase the RA’s workload substantially, increases the risk of inaccurate status reports, risks overspending or underspending the award budget, and causes serious delays in providing status reports to PIs.

An Effort to Improve the Process

During our interview with the interim Vice Chancellor of Research (VCR), we learned that a workgroup was formed to discuss alternatives to improve the current process or to consider other options. We were told that the group decided to make improvement to the current process.

In our opinion, the spreadsheet-based award expense tracking and reporting method has inherent limitations. The campus should have a goal to eliminate spreadsheet-based practice and respond to needs of the PIs and RAs with a proper tool for tracking financial activity on funds and making projections. In addition, it should be capable of flexible reporting and available to PIs via a dashboard.

Post Award Financial Systems in the UC System

The PBSci RA unit conducted a survey to learn what systems are used in other UC campuses for performing research administration activities and providing reports to PIs. We used that survey report as a reference and collected information from each UC campus website to document the features of the systems they use. We summarized the information in Table 2.

The other UC campuses have award management systems that allow users to review balances for all sponsored and non-sponsored funds attributed to the PI, reports are available automatically to PIs; users can see the detailed breakdown of expenses; and they allow making / showing projections and flexible reporting.

See Table 2 on the next page
<table>
<thead>
<tr>
<th>UC Campus</th>
<th>Award Management System</th>
<th>Link</th>
<th>Brief Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>UC Berkeley</td>
<td>Call Answer-PI Portfolio</td>
<td><a href="https://calanswers.berkeley.edu/cps-portfolio/about-pi-portfolio/">https://calanswers.berkeley.edu/cps-portfolio/about-pi-portfolio/</a></td>
<td>This dashboard displays budgets, spending and balances for all faculty-managed funds. PI portfolio allows users to review balances for all sponsored and non-sponsored funds attributed to a faculty member, and then click on a specific fund for more information. The view selectors allow users to choose between a single line summary by fund or more detailed breakdown. Shows all projections, line by line, across all of the faculty member’s funds.</td>
</tr>
<tr>
<td>UC Irvine</td>
<td>PI Report</td>
<td><a href="https://accounting.uci.edu/support/pireport/index.html">https://accounting.uci.edu/support/pireport/index.html</a></td>
<td>The Principal Investigator (PI) Report is a financial projection tool that can be used by campus departments and Contracts &amp; Grants financial analysts to anticipate future expenses and appropriations. This allows C&amp;G Principal Investigators and Department finance staff to help monitor their funding balances throughout the life of the account, or through the end of the funding period.</td>
</tr>
</tbody>
</table>
| UCLA       | ORIS                             | [https://oris.research.ucla.edu/services-we-provide/](https://oris.research.ucla.edu/services-we-provide/) | ORIS supports the following enterprise research applications that facilitate the communication and data exchange between central research administrators and researchers:  
* Proposal Development System – S2S Grants  
* Extramural Proposal Approval and Submission Summary – EPASS  
* Proposal and Award Tracking System – PATS  
* Post-Award Management System (PAMS)  
* Effort Reporting System (ERS)  
* Research Administration Portal (ORC)  
* Research Faculty Portal (PI Portal)  
* Human Research Protocol Management System (webIRB)  
* Animal Research Protocol Management System (RATS)  
* Research Safety Management System (SafetyNet)  
* Electronic Disclosure Gateway (eDGE) |
| UC Merced  | Project Management in Oracle      | [https://dfa.ucmerced.edu/oracle-project](https://dfa.ucmerced.edu/oracle-project) | Provides Faculty Portfolio Report and Project data. |
| UC Riverside| PI Web Reporting System (PIWRS)  | [https://www.ucop.edu/information-technology-services/initiatives/sautter-award-program/award-winners-and-applications/ucr_piwrs.pdf](https://www.ucop.edu/information-technology-services/initiatives/sautter-award-program/award-winners-and-applications/ucr_piwrs.pdf) | PIWRS is the principal tool in use at UCR for tracking financial activity on contract and grant funding sources. PIWRS is automatically available to every Principal Investigator via UCR’s single-sign-on portal environment. Coordinators are users which work in the same accountability structure and are given access to make projections on the monthly reports. |
| UC San Diego| Faculty and Researcher Dashboard| [https://blink.ucsd.edu/finance/b-financial-reporting/faculty-researchers/faculty-researcher-dashboard.html](https://blink.ucsd.edu/finance/b-financial-reporting/faculty-researchers/faculty-researcher-dashboard.html) | The Faculty and Researcher Dashboard provides balances, expenditure details, and payroll information to faculty, researchers, and PIs for their entire project portfolio. This dashboard helps answer business questions related to a consumer’s portfolio (awards/projects/tasks), money available to spend, money already spent, awards ending soon, payroll spent and projected, and the status of the budget. |
| UC San Francisco| Faculty Portfolio Reports| [https://controller.ucsf.edu/quick-reference/strategic-initiatives/myreports/faculty-portfolio-reports](https://controller.ucsf.edu/quick-reference/strategic-initiatives/myreports/faculty-portfolio-reports) | Faculty Portfolio is a financial reporting tool designed to aid in the management of a faculty member’s contract, grants, gifts, start-up, retention, and other discretionary funding. The set of Faculty Portfolio Reports include:  
MyPortfolio Report  
Award/Parent Summary Report  
Faculty Portfolio Monthly Report  
Payroll Detail By Month Report  
Program Portfolio Report  
Project Summary Report  
Sponsored Awards Summary Report |
| UC Santa Barbara| GUS (Grand Unified System)| [https://www.it.ucsb.edu/administration-business/gus](https://www.it.ucsb.edu/administration-business/gus) | GUS is a custom database system for managing and maintaining funding source, purchasing, lien, and other financial information for departments and research organizations across the UCSB campus. The primary goal of developing GUS was to simplify the time consuming and laborious tasks that are essential to managing intramural and extramural funds, expenses, and reconciliation, while minimizing errors. |
APPENDIX A. SUMMARY OF WORK PERFORMED AND RESULTS

<table>
<thead>
<tr>
<th>Preliminary Analysis</th>
<th>Work Performed</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reviewed UC and UC Santa Cruz policies, best practices, and other relevant guidance.</td>
<td>We identified the most relevant policies and guidance:</td>
</tr>
<tr>
<td></td>
<td>Reviewed relevant audit or advisory reports conducted at UC campuses.</td>
<td>Gained an understanding of campus processes and procedures.</td>
</tr>
<tr>
<td></td>
<td>Communicated related units to obtain information</td>
<td>Developed a risk matrix and audit program to address the risk areas identified.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fieldwork</th>
<th>Work Performed</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>To determine whether EMF processes ensure Final Financial Reports are submitted timely and funds are closed in FIS system for expired awards.</strong></td>
<td><strong>EMF could not locate the Final Financial report for one State and one Federal award. Two Federal Final Reports were submitted late which means later than 120 days of expiration date of the award.</strong></td>
</tr>
<tr>
<td></td>
<td>We judgmentally selected a sample of eight expired awards from the list we retrieved from Cayuse system. The scope of the review covered expired awards from 6/30/2020 through 6/30/2022.</td>
<td>We identified that three awards’ FFR sent to agency but not recorded in the log, four federal awards closed and inactivated in Banner but those awards were not recorded in FFR log, one award’s record was duplicate, one award’s project end date was not correct.</td>
</tr>
<tr>
<td></td>
<td>Obtained and reviewed the final reports of the awards selected as sample.</td>
<td>Awards funds have active status in the FIS System for 8 expired awards. The following problems were identified with the expired awards;</td>
</tr>
</tbody>
</table>
|           | EMF has an FFR log to track the review and sign off status of the Federal Financial Reports. We obtained the log and reviewed the 16 awards’ status in the log. | *Direct, Indirect and total expenses in Infoview report are not matching with FFR report submitted to agency. The closeout Journal entries needs to be performed timely to provide uniformity between final reports and funds ledgers. 
*Fund ledgers show expenses charged to fund 120 days after the project.                                                                 |
|           | Reviewed fund status of expired awards in Banner and Infoview systems.          |                                                                                                                                                                                                       |
### Fieldwork

<table>
<thead>
<tr>
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</tr>
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<tbody>
<tr>
<td>* Expenses charged to fund with a wrong org code.</td>
<td>* Expenses charged to fund with a wrong org code.</td>
</tr>
<tr>
<td>* Surpluses and deficits were not resolved and appear in the fund ledgers.</td>
<td>* Surpluses and deficits were not resolved and appear in the fund ledgers.</td>
</tr>
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</table>

### To determine whether Subrecipient Risk Assessment and Monitoring activities ensure the compliance with Federal requirements.

- Reviewed Federal Regulations and University policy, relevant audit documents
- Communicated with OSP staff
- Retrieved the active sub awards in FY2022 from Infoview.
- Judgmentally selected four subrecipients from the list
- Obtained sample sub awards documents from OSP and reviewed them

- We reviewed four subrecipients risk monitoring and screening documents. We identified the problems below;
  - OSP does not complete the risk assessment form for each subrecipient
  - Yearly assessment for subrecipient risk is not performed regularly
  - Subrecipient monitoring documents such as Visual Compliance obtained after the amendment was signed.

### To determine whether Roles and Responsibility Matrix is well design to provide clarity regarding the responsibilities of parties involve general Research Administration process

- We obtained Roles and Responsibilities Matrix from the Office of Research Sponsored Projects’ website.
- We reviewed some of the other UC Campuses and Universities Risks and Responsibilities Matrixes as similar practices examples

- The matrix does not include some of the processes such as subrecipient monitoring, effort reporting, managing collaborative awards which have multiple PIs in different divisions. Also, some units can be added such as Research Development unit at pre-award stage. The format of the matrix is open to improvements.

### To evaluate the Research Administrator’s training activities.

- Meet with division’s RA managers, directors, collect information regarding their processes and reporting
  - Review websites of other campuses

- All the UC campuses except UCSC have Research Administration training programs in the form of eCourse, Instructor Led training or a combination of both, case studies, or video webinars

### To evaluate current post award financial system capabilities

- Meet with division’s RA managers, directors, collect information regarding their processes and reporting
  - Review websites of other campuses

- The other UC campuses have a research administration system are in place. Their systems allow users to review balances for all sponsored and non-sponsored funds attributed to the faculty, reports available automatically to PIs, the detailed breakdown of the expenses can be seen by users, allow to make/show projections and flexible reporting.
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<tbody>
<tr>
<td>UCSC has Infoview reporting system, but most of the encumbrances are not captured by the system. Research accountant use Excel spreadsheets to monitor award expenses and encumbrances and provide spreadsheet status report to PIs along with the Infoview expenditure details.</td>
<td></td>
</tr>
</tbody>
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