



# AUDIT AND ADVISORY SERVICES

## Research Enterprise Services Audit Project No. 11-568

May 12, 2011

Prepared by:

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Jennifer Jones  
Auditor-in-Charge

Reviewed by:

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Jaime Jue  
Associate Director

Approved by:

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Wanda Lynn Riley  
Chief Audit Executive



AUDIT AND ADVISORY SERVICES  
Tel: (510) 642-8292

650 UNIVERSITY HALL #1170  
BERKELEY, CALIFORNIA 94720-1170

May 12, 2011

Graham Fleming  
Vice Chancellor  
Research

Vice Chancellor Fleming:

We have completed our audit of Research Enterprise Services as per our annual audit plan in accordance with the Institute of Internal Auditors *Standards for the Professional Practice of Internal Auditing* and the University of California Internal Audit Charter. Research Enterprise Services (RES) provides centralized administrative and compliance support activities to the majority of campus Organized Research Units (ORUs) that report to the Office of the Vice Chancellor for Research.

The objective of this audit was to assess the design and effectiveness of procedures and controls within RES to help ensure that sponsored project and gift funds are managed in accordance with federal, sponsor/donor, and University requirements. Based upon our risk assessment conducted as part of our preliminary survey and planning phase of this audit, our scope focused on an evaluation of those RES process areas with the most proximal impact on the management of sponsored project and gift funds, specifically those related to payroll and non-payroll transaction authorization and fund expense reviews. Our approach included reviews of policies, procedures and other documentation, interviews with RES and ORU personnel, and detailed testing of a sample of transactions.

Based on our testing, RES procedures and controls appear reasonably designed to mitigate the risk that sponsored project and gift funds are not managed in accordance with federal, sponsor, and University requirements. However, the operating effectiveness of these procedures and controls depends on the consistent manner of their execution and we did note certain opportunities for RES management to re-emphasize expectations related to transaction review and to formalize training programs for staff. As well, while RES has documented procedures for the majority of their internal business processes, procedures and accountabilities related to ensuring that cost sharing commitments are achieved and comply with relevant rules have not been delineated or documented.

The aforementioned and other observations with management action plans are expounded upon in the accompanying report. Please destroy all copies of draft reports and related documents. Thank you to the RES staff for their cooperative efforts throughout the audit process. Please do not hesitate to call on Audit and Advisory Services if we can be of further assistance in this or other matters.

Respectfully reported,

Wanda Lynn Riley  
Chief Audit Executive

cc: Assistant Vice Chancellor Diane Leite  
Senior Vice President Sheryl Vacca  
Associate Chancellor Linda Morris Williams  
Interim Associate Vice Chancellor and Controller Delphine Regalia

**University of California, Berkeley  
Audit and Advisory Services  
Research Enterprise Services**

**Table of Contents**

<b>Overview .....</b>	<b>2</b>
<b>Executive Summary .....</b>	<b>2</b>
<b>Source and Purpose of the Audit.....</b>	<b>2</b>
<b>Scope of the Audit .....</b>	<b>3</b>
<b>Background Information .....</b>	<b>3</b>
<b>Summary Conclusion.....</b>	<b>5</b>
<b>Summary of Observations &amp; Management Response and Action Plan .....</b>	<b>6</b>
<b>Expenditure Approval and Compliance .....</b>	<b>6</b>
<b>Cost Sharing Procedures.....</b>	<b>7</b>
<b>Training and Education .....</b>	<b>8</b>

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## OVERVIEW

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### Executive Summary

Research Enterprise Services (RES) provides centralized administrative and compliance support activities to the majority of campus Organized Research Units (ORUs) that report to the Office of the Vice Chancellor for Research.

The objective of this audit was to assess the design and effectiveness of procedures and controls within RES to help ensure that sponsored project and gift funds are managed in accordance with federal, sponsor/donor, and University requirements. Based upon our risk assessment conducted as part of our preliminary survey and planning phase of this audit, our scope focused on an evaluation of those RES process areas with the most proximal impact on the management of sponsored project and gift funds, specifically those related to payroll and non-payroll transaction authorization and fund expense reviews. Our approach included reviews of policies, procedures and other documentation, interviews with RES and ORU personnel, and detailed testing of a sample of transactions.

Based on our testing, RES procedures and controls appear reasonably designed to mitigate the risk that sponsored project and gift funds are not managed in accordance with federal, sponsor, and University requirements. However, the operating effectiveness of these procedures and controls depends on the consistent manner of their execution and we did note certain opportunities for RES management to re-emphasize expectations related to transaction review and to formalize training programs for staff. As well, while RES has documented procedures for the majority of their internal business processes, procedures and accountabilities related to ensuring that cost sharing commitments are achieved and comply with relevant rules have not been delineated or documented.

### Source and Purpose of the Audit

Audit and Advisory Services (A&AS) completed our audit of Research Enterprise Services (RES) as part of our annual audit plan for FY 2011. The objective of this audit was to assess the design and effectiveness of RES controls to help ensure that sponsored project and gift funds are managed in accordance with federal, sponsor/donor, and University requirements. Relevant federal regulations are outlined in Office of Management and Budget Circular (OMB) A-21 (*Cost Principles for Educational Institutions*). Key University policies referred to in connection with the audit included, but are not specifically limited to, the University of California Contract and Grant Manual, Sections 5 (Cost Sharing), 6 (Financial-General) and 7 (Budgets and Expenditures), Business and Finance Bulletins G-28 (*Policies and Regulations Governing Travel*) and BUS-79 (*Expenditures for Business Meetings, Entertainment, and Other Occasions*). Campus policies and procedures were also referred to, including Extramural Funds Accounting's "Cost Sharing Policies and Procedures", "Award Close Out Procedures" and "Post Award Management Responsibilities", and "A Guide to Major Projects and Charging Administrative Costs to Sponsored Projects" issued by the campus Sponsored Projects Office.

## Scope of the Audit

Based upon our risk assessment conducted as part of our preliminary survey and planning phase of this audit, our scope focused on an evaluation of those RES process areas with the most proximal impact on the management of sponsored project and gift funds, specifically those related to payroll and non-payroll transaction authorization and fund expense reviews. Our approach included reviews of policies, procedures and other documentation, interviews with RES and ORU personnel, and detailed testing of a sample of transactions as follows:

- We interviewed RES personnel and reviewed documentation to identify and evaluate procedures related to expense review, project close-out, cost sharing, and RES-managed recharge centers.
- We also interviewed a small number of Principal Investigators (PIs) and ORU Directors in order to validate our understanding of certain RES procedures and to obtain their perspective on the effectiveness of RES processes to support sponsored project management and fiscal compliance.
- In addition, we reviewed a sample of 65 transactions charged to ten RES-managed federal grants, and six transactions charged to one RES-managed restricted gift fund. Transactions selected were from the period January-December 2010, and included original charges and costs transfers related to payroll and a variety of non-payroll expenses. For each transaction, we verified that the transaction was processed and approved according to established RES procedures, and that the expense appeared to be allowable, allocable to the project, reasonable, and sufficiently documented per internal and external guidelines.

Our audit was not designed to provide an opinion of the overall compliance of those funds currently under RES purview, as our sample was judgmentally selected to examine certain categories of transactions we identified as having higher risk of non-compliance and was not large enough to have statistical relevance. As well, our audit did not seek to evaluate procedures related to research conduct compliance (e.g., human subjects, animal care and use, etc.).

## Background Information

### *RES Background and Current State*

RES provides centralized administrative and compliance support activities to the majority of campus ORUs that report to the Office of the Vice Chancellor for Research. RES was organized in July 2008, but underwent significant expansion in December 2009, with the number of ORUs in the group's purview growing approximately from 10 to 60. Services provided include those related to sponsored project administration and compliance, finance, human resources, procurement, and other general services. The majority of RES-supported ORU funds derive from sponsored project awards; according to management, in fiscal year 2010, RES-supported ORU sponsored project spending totaled \$150.5 million (total RES spending totaled \$197.5 million), representing 23% of all campus sponsored project expenditures.

RES personnel are generally assigned to support specific PI or Unit Directors. According to RES management, ensuring an appropriate level of staffing has been a challenge. With the assumption of approximately 50 ORUs in December 2009, we understand from discussion with RES management that they did not have a sufficient number of trained staff in place to immediately respond to the demands of the greatly increased volume of activity within RES purview. Throughout 2010, we understand that staffing assignments were adjusted to balance RES analyst workloads, as RES management acquired additional knowledge regarding the specific complexity of PI and ORU award/funding profiles and the effort required to support them. According to RES management, the unit is now considered close to fully staffed.

### *Related Policies*

Our audit was an assessment of the RES procedures and controls in place to help ensure that sponsored project and gift funds are managed in accordance with federal, sponsor/donor, and University requirements. However, in order to assess the design and effectiveness of procedures/controls, we did consider certain aspects of campus policy/guidance and federal rules. Specifically, for general principles and definitions related to the allowability of transactions, we referred to OMB A-21 (*Cost Principles for Educational Institutions*), Sections C.2-C.5 and Section J, the University of California Contract and Grant Manual, Sections 5 (Cost Sharing), 6 (Financial-General) and 7 (Budgets and Expenditures), and “A Guide to Major Projects and Charging Administrative Costs to Sponsored Projects” issued by the campus Sponsored Projects Office. We also referred to University Business and Finance Bulletins G-28 (*Policies and Regulations Governing Travel*) and BUS-79 (*Expenditures for Business Meetings, Entertainment, and Other Occasions*) in our review of the travel and entertainment expenses in our sample. In connection with our evaluation of RES practices related to cost sharing and sponsored project close-out, we referred to Berkeley campus Extramural Funds Accounting (EFA) “Cost Sharing Policies and Procedures” and “Award Close Out Procedures”. Finally, we referred to the EFA “Post Award Management Responsibilities” to understand general campus expectations for roles/responsibilities for PIs, departments and central campus.

### *Shared Service Risk Considerations*

The transition to a centralized services support model was guided by the point of view that centrally managed processes enable greater efficiencies and control, and was necessitated by campus budget cuts. Along with these benefits, however, the shared services model presents certain inherent risks that should be appropriately addressed in order to promote operational efficiency and effectiveness. In addition to the question of ensuring the right level of staffing to support activities, the importance of defining and ensuring staff core competencies is heightened given the increased transaction volume and funds that each employee is responsible for processing/reviewing. As well, because employees in a shared services model support more than one PI/unit and might not be co-located with the PI/unit they support, it can be more difficult for the shared service employee to garner a comprehensive knowledge base regarding the portfolio they support and/or to develop effective communication channels with the PI/Director. Based on our discussions with a small number of PIs and Unit Directors, it appears that they perceive and have been affected by these challenges. As RES matures as an organization, it is likely that these inherent challenges will be easier to overcome.

### **Summary Conclusion**

Based on our testing, RES procedures and controls appear reasonably designed to mitigate the risk that sponsored project and gift funds are not managed in accordance with federal, sponsor, and University requirements. However, the operating effectiveness of these procedures and controls depends on the consistent manner of their execution and we did note certain opportunities for RES management to re-emphasize expectations related to transaction review and to formalize training programs for staff. As well, while RES has documented procedures for the majority of their internal business processes, procedures and accountabilities related to ensuring that cost sharing commitments are achieved and comply with relevant rules have not been delineated or documented.

Our specific observations, along with management's responses, follow in descending order of significance.



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# SUMMARY OF OBSERVATIONS & MANAGEMENT RESPONSE AND ACTION PLAN

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## Expenditure Approval and Compliance

### Observation

In our review of a sample of expenses charged to federal awards, we identified a few categories of expenses processed by RES that do not appear consistent with campus policy and/or federal A-21 principles, and therefore may be disallowed. The issues noted pertained mainly to travel and entertainment vouchers, transactions that were non-routine, and expenses that would not normally be allowed to be claimed as direct costs. We also noted instances when PI (or PI delegate) transaction approval and relevant supporting documentation for transactions did not appear to have been obtained. We have provided the details of the specific exceptions to RES management so that the transactions can be appropriately transferred and/or their appropriateness under A-21 can be confirmed.

RES provides detailed expense reporting monthly to each PI/Unit Director supported by RES, and also has processes and systems in place to help ensure PI/Director approval of expenses before they are incurred. RES personnel also review grant expenses on a monthly basis. We believe these controls are generally functioning as intended by management, but noted exceptions suggest an opportunity for management to evaluate current RES transaction review procedures and staff knowledge of relevant policies and regulations to ensure their robustness to identify anomalies.

### Management Response and Action Plan

Following our evaluation of the current RES transaction review procedures we agree with the audit's findings that this is an opportunity to further strengthen RES's processes. Specifically the following actions have been or will be taken to amend procedures and improve the unit's review of transactions.

#### Issue #1 – Expenditure reviews

- RES included in its April newsletter a review of the general use expenditure policy when general use items and/or services are being paid for by federal funds. This will help continue to educate faculty and researchers on federal regulations and restrictions that govern these types of expenses.
  
- RES had in place a process to review general use expenditures and responsibility for justification was placed on the principal investigator if he/she felt the expenditure appropriate on a federal fund. RES has changed this procedure to now include a requirement that a written justification of the expenditure be provided by the PI prior to procurement of the item/service and kept in the grant's central electronic file. This new procedure will be documented in the RES contracts and grants procedure manual and will be communicated to staff by July 1, 2011.

- A review of general use expenditures that were inherited such as phone expenditures will begin by September 1, 2011 to ensure that each charge is either justified or moved to an appropriate funding source.
- The RES Research Administration Unit is providing a monthly list of all funds noting restrictions to the procurement and HR unit. This list is used prior to the processing of transactions to ensure that all activity is allowable.
- By July 1, 2011, RES senior management will review with the procurement and HR staff the importance of reviewing closely all transactions to ensure allowability and the completeness of relevant supporting documentation with an emphasis on activity that is not generally allowable on federal or sponsored projects.

#### Issue #2 – PI approval

In the early phases of the transition, RES was receiving requests through various routes and although the staff tried to ensure at all times that PI approval was included or obtained this was a difficult task. With all researchers now using the RES online purchasing system that includes a PI approval step, this issue is no longer present for procurement activity. Written approval is still required for all other areas and RES senior management has reinforced this with all staff.

### **Cost Sharing Procedures**

#### **Observation**

RES has documented procedures for the majority of internal business processes in the human resources, research administration, finance, and procurement areas. The procedures are generally comprehensive and appear sufficiently detailed to help ensure consistency in their performance by employees. As well, forms and other tools (e.g., checklists and approval routing systems) have also been developed for employee use.

In the area of research administration, however, we noted that procedures related to managing cost share commitments have not yet been formally delineated or documented. Depending on the complexity of a cost share commitment, this process area can be inherently complicated to manage and has significance from a federal funding perspective; absent documented and approved procedures, there is an increased risk that errors could occur or other issues could arise. Cost share commitments on RES-managed awards that had spending activity during fiscal years 2010 and 2011 totaled approximately \$50 million.

#### **Management Response and Action Plan**

Ideally the campus will develop and implement a centralized cost sharing tracking system much like the central effort reporting system. Absent a centralized system, RES is implementing the following procedures. The RES Research Administration Unit will coordinate with the RES Finance Unit when appropriate at the proposal stage when cost share is included. When awarded, budget allocations for the cost sharing commitments will be made into project codes that will be used to track the budget and expenditures for each commitment. These will be managed by the PI's research administrator and will be included in the PI's monthly financial reporting. These

procedures will be communicated and documented in the RES contracts and grants procedure manual by July 1, 2011.

## **Training and Education**

### **Observation**

Through our interactions with a subset of RES contract and grants analysts, we identified that personnel possess a wide range of experience related to research administration and compliance and varying degrees of familiarity with federal funding rules. Currently, new analysts are supported in their on-boarding through the identification of key materials that analysts should familiarize themselves with, through the partnering of new analysts with more experienced team members, and through other ad hoc training opportunities. Because of the complexity of research administration and compliance activities and the varied background of team members, however, absent such a formal training approach, there is a risk that personnel may not be adequately prepared to identify and mitigate the compliance and operational risks associated with award management.

### **Management Response and Action Plan**

Ideally the campus will develop and implement a centralized research administration training program such as offered by Stanford (<http://ora.stanford.edu/cardinal/default.asp>). In the past when the campus provided training opportunities in research administration, RES staff were required to take advantage of them. Absent a centralized training program, RES has in the past sent its research administrators to UCSF to obtain formalized research administration training, as well as to training offered by the National Council of University Research Administrators (NCURA) and the Society of Research Administrators International (SRA). Unfortunately, UCSF no longer is offering this program. There might be an opportunity to partner with Stanford in this area. We will look for additional opportunities for formalized training. In addition, we will work with Research Administration and Compliance (RAC) and Extramural Funds Accounting to see what we might be able to develop centrally at the campus level in this area.

Currently, RES requires all research administration staff to attend bi-monthly training sessions on specific topics. These will be continued. RES is revising the training orientation for new research administrators that will include a formalized training schedule and a formal process for evaluating training progress. This will augment the formal desk manual that RES has developed for research administrators, and will be rolled out by January 1, 2012.