Fieldwork Performed by:
Laotong Ea, Principal Auditor
Tim Bryan, Associate Director

Approved by:
Jeremiah Maher, Director
MANAGEMENT SUMMARY

Research is one of the three critical components of the University's constitutionally mandated mission of teaching, research, and public service, including patient care. The UC Davis School of Medicine (SOM) is part of a nationally recognized health system that excels at translating scientific discoveries and new technology into improved patient care and community-wide health. Faculty in the SOM specialize in a wide range of basic and applied research including those related to cancer biology, vascular biology, genetic diseases and functional genomics, health services, infectious diseases, neuroscience, nutrition, telemedicine, and vision science. More than 500 research studies are currently underway in SOM facilities in Davis and Sacramento, funded by federal, state, foundation, and pharmaceutical/biotechnology sources.

The SOM Office of Research facilitates and oversees research activity involving SOM faculty, operating under the leadership of the Associate Dean for Research in the Office of the Dean. The SOM Office of Sponsored Programs oversees the administration of extramural grants and contracts. All extramural grants and contracts, clinical trials, and human subject protocols submitted by SOM faculty are processed in the Office of Sponsored Programs before being reviewed by the UC Davis Office of Research. The Office of Research serves as the primary campus office for matters related to research, including the review and acceptance of extramural research awards, oversight of intramural research support, and review and approval of the use of human subjects and conflict of interest disclosures.

As part of planned audits for FY11, Internal Audit Services conducted a review of federal research awards in the School of Medicine. The audit focused on determining if; a) certified effort reports exist and accurately reflect effort on awards; b) salaries charged are consistent with the award budget; c) non-payroll expenses are accurately recorded and are allowable and allocable; d) cost transfers to/from the selected award were appropriate and properly supported; and e) progress reporting and closeout reports have been filed timely.

To conduct our examination, we selected four SOM federal grant awards with award end dates after January 1, 2010. We also interviewed management and staff at the four SOM departments/divisions that administered the selected awards and conferred with the UC Davis Office of Research and UC Davis Extramural Funds Accounting regarding the processes and procedures employed in managing federal grant awards. Our examination did not include detailed expenditure testing.

Our review of federal grant administration at the four SOM departments/divisions verified that: a) effort reports were properly certified and accurately reflected effort on the awards; b) salaries charged were consistent with the award’s budget; and c) cost transfers to/from the selected awards were appropriate and adequately supported for all of the grants. However, we also determined that:

- costs associated with research projects were apparently not charged or not accurately charged to project accounts for three of the grants;
- Principal Investigators (PIs) were not acknowledging general ledger reviews of the grant expenditures on all four of the grants;
- final reports on the results of the grant award project were not completed on a timely basis for two of the grants, and
- monitoring of a sub recipient was insufficient on one of the grants.

One of the current goals of the UC Davis Health System (UCDHS) is to increase the scope, quality and impact of the research program. To grow the research enterprise, the UCDHS needs to attract researchers and additional funding. We concluded that improvements in the current research management infrastructure are necessary to enhance program potential and become more competitive for available funding. Our observations and recommendations are presented within the body of this report along with corresponding management actions.
OBSERVATIONS, RECOMMENDATIONS & MANAGEMENT CORRECTIVE ACTIONS

A. Accounting Accuracy

Accounting oversight could be strengthened to ensure that costs associated with federally funded research projects are accurately charged to project accounts.

We identified the following practices which may have resulted in inaccurate charges to federal research projects:

- Expenditures for salary and wages were apparently not posted to the research project account for one grant reviewed and were apparently charged to the project account for the purpose of exhausting the available funds from another grant award.
- Expenditures for travel and supplies that appeared unrelated and not benefiting the research project were charged to the project account for two of the grants.

PPM 330-63, *Expenditure Adjustments*, stipulates that expenses be charged directly to the account to which they pertain. PPM 330-31, *Administration of Contract and Grant Projects*, stipulates that expenses must be allowable, allocable, reasonable, and specifically benefit the project. This policy also stipulates that the Account Manager/Approver is to review documents for compliance with University policies and procedures, external regulations, and terms and conditions of agreements.

Based on the results of this and previous audits and investigations, we have concluded that staff members lack the training, independence and management support necessary to recognize and challenge inappropriate charging practices. Failure to accurately charge federally sponsored projects may result in federal agencies placing special conditions on awards or precluding the University from obtaining future awards for a specified period, and increased federal monitoring to prevent future non-compliance. Federal agencies may also suspend a grant or terminate a grant for cause, recover funds paid to the University at any time during the life cycle of a grant, and temporarily withhold payment or require conversion from an advance payment method to a reimbursement method.

**Recommendation**

While additional training, education and empowerment of research personnel could improve accounting oversight, we believe the SOM should also consider models that increase centralization of the accounting functions to facilitate a more efficient and effective use of personnel and provide the requisite independence necessary to ensure transparency and accountability related to the use of federal funds.

**Management Corrective Action**

The SOM has initiated training and education efforts to improve accounting oversight and will evaluate opportunities to regionalize the current research infrastructure to include grouping small areas of research into larger supported clusters by July 1, 2013.
B. Project Fiscal Oversight

**Procedures designed to facilitate project fiscal oversight could be strengthened.**

Per PPM 330-31, the PI is responsible for the technical, administrative, and fiscal management of the project, including assuring that expenditures do not exceed the total amount of funds awarded, that specific budget category expenditure limits are adhered to, and that appropriate budgetary control is maintained. The PI in charge of the award shall review the Transaction Listing (FIS2) monthly and make adjustments as necessary to the general ledger.

Only costs that directly benefit a project may be charged to a project and must be in accordance with the terms and conditions of the award. The PI Ledger Review (325) report in DaFIS Decision Support was created to provide PIs with financial information in a format that allows efficient and timely review of expenditures for allowability and allocability and to identify errors and omissions for resolution in a timely manner. The PIs were supposed to review their accounts (federal and federal flow-through fund sources) beginning with the November 2008 ledger for the following:

- Salary and Benefits
- Supplies and Expense
- Equipment
- Travel
- Subcontracts
- Effort Commitments
- Budget vs. Percentage of Completion

We determined that PIs are not reviewing the monthly transaction listings and/or the PI Ledger Review reports as required by University policy. The SOM departments we reviewed were providing PIs with summary data in a format that facilitated the PI's oversight responsibility. One department, for example, provided a PI with bar graphs and pie charts to facilitate their project review. However, there are no standardized practices established to accommodate PI oversight responsibility for ensuring that expenses are charged directly to the account to which they pertain and are allowable, allocable, reasonable, and specifically benefit the project. Failure to implement standards that ensure proper fiscal oversight increases the risk that expenses will be improperly charged and that the SOM will be required to subsidize the research project.

**Recommendation**

The SOM should implement standards to facilitate PI fiscal oversight and ensure a clear understanding of that responsibility.

**Management Corrective Action**

The SOM will implement standards for ensuring appropriate PI oversight of project fiscal management by January 1, 2013.
C. Project Management

Procedures for monitoring the progress and completion of research projects could be improved.

Per PPM 330-31, the PI is responsible for conducting the work supported by the grant or contract in a timely manner and for complying with the reporting requirements of each contract and grant, which may include periodic progress reports, annual reports of project accomplishments, reports of inventions, reports of publications generated, reports of major items of equipment acquired, financial reports, and final technical and invention reports. However, we determined that more than one 12-month extension was required for three of the four federal research projects we reviewed for the purpose of preparing the final technical report or continuation grant application and that final technical reports for two of the grants were not submitted for more than two years after the original grant period ended. We also determined that a sub award recipient for one of the grants had not provided the progress reports and final report as required by the sub award agreement.

The UC Davis Office of Research is responsible for monitoring compliance with contract and grant final/closeout reporting requirements and coordinating agencies' inquiries regarding delinquent final reports. UC Davis Extramural Funds Accounting is responsible for submitting the requisite expenditure reports to the sponsoring agencies. However, there is no formal performance measurement and evaluation system for the SOM to monitor project management. Failure to adopt efficient and effective project management principals and methodology and to monitor project progress to completion increases the risk that research projects will not be completed in a timely manner and/or additional non reimbursable expenses will be incurred to complete a project. Furthermore, failure to complete the research projects in a timely manner increases the risk of improper charges and may adversely impact the ability to obtain future awards, thereby impeding the University's effort to expand its research program.

Recommendation

The SOM should collaborate with the Office of Research in developing and implementing procedures for monitoring the progress and completion of all federally funded research projects and sub awards to identify opportunities for improvement in the project management process for each PI and SOM department.

Management Corrective Action

The SOM will collaborate with the Office of Research in developing a technology strategy for research administration that incorporates the use of Kuali Coeus by January 1, 2013.