October 13, 2010

PALMER W. TAYLOR
Dean, Skaggs School of Pharmacy and Pharmaceutical Sciences
0657

Subject: Skaggs School of Pharmacy and Pharmaceutical Sciences Business Operations Audit Project 2010-24

The final audit report for the Skaggs School of Pharmacy and Pharmaceutical Sciences Business Operations Review, AMAS Project 2010-24, is attached. We would like to thank all members of the school for their cooperation during the audit.

Because we were able to reach agreement regarding corrective actions to be taken in response to the audit recommendations, a formal response to the report is not requested. The findings included in this report will be added to our follow-up system. We will contact you at the appropriate time to initiate audit follow-up procedures.

UC wide policy requires that all draft audit reports (copied on tan paper for ease of identification) be destroyed after the final report is issued. Because draft reports can contain sensitive information, please either return any remaining draft documents to mail code 0919 or destroy them at this time.

Stephanie Burke
Assistant Vice Chancellor,
Audit & Management Advisory Services

Attachment

cc: D Brenner
R. Espiritu
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Skaggs School of Pharmacy and Pharmaceutical Sciences
Business Operations Review
October 2010

Performed By:
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Approved By:
Stephanie Burke, Assistant Vice Chancellor

Project Number: 2010-24
# Table of Contents

I. Background ................................................................................................................................. 1
II. Audit Objective, Scope, and Procedures .......................................................................................... 1
III. Conclusion ...................................................................................................................................... 3
IV. Observations and Management Corrective Actions .......................................................................... 3
    A. Network Security Standards ......................................................................................................... 3

Attachment A: Audit Results by Business Office Functional Process
I. Background

Audit & Management Advisory Services (AMAS) has completed a review of the UCSD Skaggs School of Pharmacy and Pharmaceutical Sciences business processes in accordance with the approved audit plan for Fiscal Year 2009-2010. This report summarizes the results of our review.

The Skaggs School of Pharmacy and Pharmaceutical Sciences (SSPPS) was approved by the Regents in 2000, and enrolled its charter class of 24 students in fall 2002. As the second public Pharmacy school in California, SSPPS provides a valuable academic resource to the greater San Diego area. SSPPS was named in recognition of a $30 million gift from The Skaggs Institute for Research, which was used in part to fund a pharmaceutical sciences facility that provides 110,000 square-feet of space for teaching, research and administration activities. SSPPS currently employ 40 full time faculty members. Approximately 190 additional faculty members have SSPPS adjunct appointments or joint appointments with the School of Medicine (SOM).

SSPPS currently accepts 60 students annually into its four-year Doctor of Pharmacy program, which is accredited by the Accreditation Council for Pharmacy Education. The curriculum prepares students to become leaders in the Pharmacy profession and emphasizes the critical role of pharmacists as part of the patient care team. SSPPS clinical teaching facilities include UCSD affiliated teaching hospitals, outpatient clinics and other institutions in the San Diego area.

According to the USCD SOM Corporate Statement for the Fiscal Year ended June 30, 2009, SSPPS reported total revenue of $17.1M, which was augmented by $2.0M in development funds and other transfers. Total expenses during the same period were reported as $19.8M, and included $10.6M (53%) for salaries and benefits. The resulting net operating deficit of ($700K) has been an area of management focus and is addressed in the SSPPS five year strategic plan, which includes both management and financial initiatives and programs. The strategic plan is effective from Fiscal Year 2007-08 through Fiscal Year 2012-13.

II. Audit Objective, Scope, and Procedures

The objective of our audit was to evaluate whether SSPPS business process controls were adequate to provide reasonable assurance that operations were effective and efficient, in compliance with University policies and procedures, and resulted in accurate financial reporting. The scope of the review was limited to activities and business practices between July 1, 2008 and September 30, 2009.

In order to meet the project objective, we performed the following procedures:

- Interviewed management and staff to obtain information about operational issues and
departmental procedures;

- Reviewed the SSPPS organizational structure, strategic plan and budget projections;
- Analyzed departmental responses to internal control questionnaires and separation of duties matrices;
- Evaluated internal controls in the following key business processes:
  - Time Reporting and Payroll
  - Purchasing
  - Sponsored Research Administration (e.g., effort reporting)
  - Travel and Entertainment
  - Express Card Administration
  - Expense Transfers
  - Computer Network Security
  - Equipment Inventory Management
  - Recharge activities; and,
  - Operating ledger review (transaction sampling) and financial reporting;
- Performed additional evaluation and/or expense analyses to verify that approval processes and expense allocation was appropriate in the following areas:
  - Honoraria payments
  - Reimbursements to human subjects
  - Controlled substances used in research
  - Payments to visiting scholars
  - Relocation allowances
  - Outside consulting services;
- Selected a sample of grants for focused review and testing of grant expenditures;
- Reviewed the service agreement between SSPPS and a local non-profit organization; and,
- Completed a high level evaluation of network security for the file servers in two SSPPS research laboratories.
III. Conclusion

Based on our review procedures, we concluded that SSPPS business process controls were effective and provided reasonable assurance that operations were effective, financial reports contained accurate information and procedures were performed in compliance with University policy. SSPPS has a strong management team that is focused on ensuring that appropriate internal controls are incorporated into business processes, and committed to providing specialized training to staff and faculty.

In accordance with the SSPPS strategic plan, management is exploring several new pharmacy practice opportunities via potential collaborations with outside healthcare providers to help enhance patient care in the broader community. The new or expanded pharmacy practice opportunities currently being evaluated and/or developed by the SSPPS include:

- Partnering with the UCSD SOM on tele-pharmacy opportunities.
- Developing a Medical Therapy Management Services (MTMS) program to partner with physicians to provide clinical assessments of medication interactions in patients with multiple disease processes.
- Incorporating MTMS into contracts with payers such as HealthNet, and including these services in employer benefit programs. Efforts are currently underway to develop the first of these agreements.

One component of the school's mission is to serve as the regional center for dissemination of drug, toxicology and pharmacogenomic information for health professionals and the public. When fully operational these expanded pharmacy practice opportunities will increase School revenues and further enhance the SSPPS's ability to fulfill this objective.

*Attachment A* provides the results of the business process review. Specific management actions planned or in process for those areas that were rated “satisfactory” or “improvement needed” are noted in *Attachment A*. The two areas which were rated “improvement needed” are described in more detail in the remainder of this report.

IV. Observations and Management Corrective Actions

A. Network Security Standards

*Communication of UCSD Minimum Network Connections Standards to individuals who administer SSPPS research servers needed improvement.*
Because SSPPS system administrators who work directly for Principal Investigators (PIs) were not managed by the Business Office, AMAS selected two research systems for focused review.

AMAS interviewed one research server administrator who stated that he had not fully implemented the requirements of UCSD's Minimum Network Connections Standards. For example, software patches were not being installed on the servers in a timely manner, and workstations within the laboratory were not running antivirus software. The system administrator indicated that he only recently became aware of the UCSD Minimum Network Connections Standards, and that he planned to bring the system into compliance with the standards.

**Management Corrective Actions:**

SSPPS management will:

1. Require that SSPPS research units provide the Business Office with documentation indicating that systems connected to the UCSD network are compliant with UCSD Minimum Network Connections Standards.

2. Assign the Administrative Specialist in charge of network administration to meet individually with SSPPS system administrators and provide any additional consultation and training needed.

3. Seek advice from the Campus Information Security Manager if security standards are not compatible with research system configuration.
## Skaggs School of Pharmacy and Pharmaceutical Sciences
### Audit Results by Business Office Functional Process
#### Audit & Management Advisory Services Project 2010-24

<table>
<thead>
<tr>
<th>Business Office Process</th>
<th>AMAS Audit Review Procedure</th>
<th>Risk &amp; Controls Balance Reasonable</th>
<th>SAS 112 Key Control</th>
<th>Audit Conclusion</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contract &amp; Grant Activity (Post Award Admin.)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Reviewed award files operating ledger detail, and supporting documentation for five grants.</td>
<td>Yes</td>
</tr>
<tr>
<td>Operating Ledger Review &amp; Financial Reporting</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Reviewed Transaction Sampling ledger review process, SAS 112 documentation, and budget summaries.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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1 Department is not documenting key controls per campus requirement of SAS 112, refer to Section H of the audit report for further detail on this finding.

2 Audit conclusions used in this report included the following four levels from highest to lowest; Satisfactory, Satisfactory/Improvement Suggested, Satisfactory/Improvement Needed and Improvement Needed.
<table>
<thead>
<tr>
<th>Business Office Process</th>
<th>AMAS Audit Review Procedure</th>
<th>Risk &amp; Controls Balance Reasonable</th>
<th>SAS 112 Key Control¹</th>
<th>Audit Conclusion²</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Payroll Expenditure Transfers</td>
<td>Analytical Review of Financial Data</td>
<td>Yes</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>Transfer explanations appeared reasonable. No exceptions were noted.</td>
</tr>
<tr>
<td></td>
<td>Internal Control Questionnaire/ Separation of Duties Matrix</td>
<td></td>
<td>Ledger Transaction Verification</td>
<td></td>
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<tr>
<td></td>
<td>Process Walk-through (Ltd Document Review)</td>
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<tr>
<td></td>
<td>Transaction Testing (Sample Basis)</td>
<td>Reviewed selected expense transfer explanations for reasonableness.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service Agreements</td>
<td></td>
<td>Yes</td>
<td>Yes</td>
<td>Satisfactory</td>
<td>The service agreement was properly established and documented.</td>
</tr>
<tr>
<td></td>
<td>Analytical Review of Financial Data</td>
<td></td>
<td>Ledger Transaction Verification</td>
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<tr>
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<tr>
<td></td>
<td>Transaction Testing (Sample Basis)</td>
<td>Reviewed and analyzed a service agreement and related financial documentation that SSPPS maintains with a local nonprofit organization</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Gift Funds</td>
<td></td>
<td>Yes</td>
<td>Internal Controls</td>
<td>Satisfactory</td>
<td>Gift funds are being properly managed consistent with University policies and donor intent.</td>
</tr>
<tr>
<td></td>
<td>Analytical Review of Financial Data</td>
<td></td>
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<tr>
<td></td>
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<td></td>
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<tr>
<td></td>
<td>Transaction Testing (Sample Basis)</td>
<td>Traced transfers of gift funds from the UCSD Foundation to SSPPS funds, examined gift fund documents. Reviewed expenditures.</td>
<td></td>
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</tr>
<tr>
<td>Business Office Process</td>
<td>AMAS Audit Review Procedure</td>
<td>Risk &amp; Controls Balance Reasonable</td>
<td>SAS 112 Key Control(^1)</td>
<td>Audit Conclusion(^2)</td>
<td>Comments</td>
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<tr>
<td>Express Card Purchases</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Effort Reporting (eCERT)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Equipment</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Yes</td>
<td>Yes</td>
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</tr>
<tr>
<td>Timekeeping &amp; Payroll</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Reviewed 100% of timesheets for one month selected at random.</td>
<td>Yes</td>
</tr>
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<tr>
<td>Travel &amp; Entertainment</td>
<td>X</td>
<td>Yes</td>
<td>Yes Ledger Transaction Verification</td>
<td>Needs Improvement</td>
<td>TEV and entertainment document preparation and approval processes were adequate and complied with University policies. During our review of selected travel expense documents, we identified four travel and entertainment expenditures for the Fiscal Year 2008-09 that were approved by staff who reported directly or indirectly to the individual who incurred the expense. SSPPS management modified approval hierarchies in Fiscal Year 2009-10 when they became aware of the policy requirements.</td>
</tr>
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</tr>
<tr>
<td>Information System Security</td>
<td>Analytical Review of Financial Data</td>
<td>X</td>
<td>No</td>
<td>Yes</td>
<td>Security Controls</td>
</tr>
<tr>
<td></td>
<td>Internal Control Questionnaire/ Separation of Duties Matrix</td>
<td>Interviewed System Administrators for two research laboratories.</td>
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<td></td>
<td>Process Walk-through (Ltd Document Review)</td>
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<tr>
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<td>Transaction Testing (Sample Basis)</td>
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</tbody>
</table>

Controls over Business Office computing were generally adequate. However, one research system administrator was unfamiliar with the UCSD Minimum Network Connections Standards. *(Audit Report Finding A)*