

Audit Report

**University System of Maryland
University of Maryland, Baltimore**

February 2010



**OFFICE OF LEGISLATIVE AUDITS
DEPARTMENT OF LEGISLATIVE SERVICES
MARYLAND GENERAL ASSEMBLY**

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DEPARTMENT OF LEGISLATIVE SERVICES
OFFICE OF LEGISLATIVE AUDITS
MARYLAND GENERAL ASSEMBLY

February 5, 2010

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Executive Director

Bruce A. Myers, CPA
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Senator Verna L. Jones, Co-Chair, Joint Audit Committee
Delegate Steven J. DeBoy, Sr., Co-Chair, Joint Audit Committee
Members of Joint Audit Committee
Annapolis, Maryland

Ladies and Gentlemen:

We have audited the University System of Maryland (USM) – University of Maryland, Baltimore (UMB) for the period beginning December 1, 2005 and ending November 30, 2008. UMB is a comprehensive public institution of USM and provides professional and graduate level instruction through its schools of Dentistry, Law, Medicine, Nursing, Pharmacy, and Social Work.

Our audit disclosed that UMB made questionable compensation payments to a senior management employee totaling \$410,000, and had not established policies for certain other compensation payments (such as bonuses) made to other employees. These compensation payments were in addition to the employees' regular salaries and were not disclosed in UMB's annual budget submissions to the General Assembly. Furthermore, the employment agreement with the aforementioned senior management employee was not submitted for approval by the Office of the Attorney General, or for review by the USM Board of Regents, as required by USM policy.

Our audit also disclosed that UMB did not execute contracts with the University of Maryland Medical System Corporation on a timely basis as required by law, and did not always receive related contractual payments timely and assess late payment fees. Additionally, written plans had not been established to address deficit balances totaling \$2.9 million that existed in certain revolving fund accounts.

We also noted internal control and record keeping deficiencies over cash receipts, accounts receivable, purchasing and disbursement transactions, corporate purchasing cards, information systems security and control, and working fund. For example, UMB did not adequately pursue collection of outstanding accounts receivable, and transfer delinquent accounts to the Department of Budget and Management's Central Collection Unit, as required.

An Executive Summary of our findings can be found on page 5. The USM Office's response to this audit, on behalf of UMB, is included as an appendix to this report. We wish to acknowledge the cooperation extended to us during our audit by UMB.

Respectfully submitted,

Bruce A. Myers, CPA
Legislative Auditor

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Executive Summary

Legislative Audit Report on University System of Maryland (USM) University of Maryland, Baltimore (UMB) February 2010

- **UMB made questionable employment compensation payments totaling \$410,000 to a senior management employee, and had not established policies governing certain other compensation payments—including bonuses—made to employees. In addition, these payments were not always adequately supported and were not disclosed to the General Assembly’s budget committees. During fiscal year 2008, UMB compensated employees \$22.8 million in addition to their regular salaries.**

UMB should comply with existing USM and UMB compensation policies, and should develop policies governing other types of employee compensation. UMB should also fully disclose employee compensation payments in its annual budget submissions to the General Assembly.

- **The employment agreement for the aforementioned senior management employee had not been submitted to the Office of the Attorney General for approval, and to the USM Board of Regents for review, as required by USM policy.**

UMB should submit the employment agreement to the Office of the Attorney General and to the Board of Regents for approval and/or review.

- **UMB had not established adequate controls over cash receipts collected at one location. Specifically, three employees responsible for maintaining the grant accounts receivable records and issuing related billings also received the related collections. In addition, these collections were not always deposited timely. Collections deposited by this location totaled approximately \$93 million during fiscal year 2008.**

UMB should ensure that employees who maintain the accounts receivable records do not have access to the related collections, and that collections are deposited timely.

- **UMB did not transfer delinquent grant, and student dental clinic accounts receivable to the Department of Budget and Management's Central Collection Unit (CCU) timely, and did not always pursue timely collection of these outstanding accounts. In addition, adequate controls were not established over non-cash credit adjustments made to student dental clinic accounts.**

UMB should promptly forward delinquent accounts to CCU and pursue timely collection of outstanding accounts. UMB should also ensure that employees with access to cash collections not have the capability to process non-cash credits, and that non-cash credit adjustments are independently reviewed.

- **UMB did not always execute contracts and receive related payments timely from the University of Maryland Medical System Corporation, and did not assess related late payment fees totaling \$121,000.**

UMB should execute contracts with the Corporation prior to the beginning of each fiscal year and monitor receipt of payments from the Corporation. When such payments are not received timely, UMB should assess and collect the related late payment fees.

- **UMB had not established written plans to address the deficit balances that existed in certain revolving fund accounts related to physician associations. As of May 2009, the deficit balances in the accounts with these associations totaled \$2.9 million.**

UMB should develop written plans to address the deficit balances.

- **Sufficient access and security controls were not in place over UMB's network and over significant computer applications, including the Student Information Management System and the financial system. For example, password controls were inadequate, significant security events were not always logged, and the internal network was not properly protected from students and the public.**

UMB should take the recommended corrective actions to improve security over its network and these critical applications.

- **Control and record keeping deficiencies were noted with respect to UMB's purchasing and disbursement transactions, certain procurements, corporate purchasing cards, and working fund.**

UMB should take the recommended actions to improve controls in these areas.

Background Information

Agency Responsibilities

The University of Maryland, Baltimore (UMB) provides professional and graduate level instruction through its schools of Dentistry, Law, Medicine, Nursing, Pharmacy, and Social Work. UMB students who receive instruction in health care professions obtain clinical experience at various health care facilities. The largest of these facilities is the University of Maryland Hospital, which is a component of the University of Maryland Medical System Corporation. In addition to their duties at UMB, certain faculty members provide services to the Corporation as part of their duties and maintain private medical practices with professional associations.

For the spring 2009 semester, UMB's enrollment totaled 6,096 students. UMB's budget is funded by unrestricted revenues, such as tuition and student fees, a State general fund appropriation, and restricted revenues, such as federal grants and contracts. According to the State's records, fiscal year 2009 revenues totaled approximately \$909 million, which included a State general fund appropriation of \$173 million. These records also indicated that UMB's expenditures for fiscal year 2009 totaled approximately \$909 million.

Status of Findings From Preceding Audit Report

Our audit included a review to determine the status of the 13 findings contained in our preceding audit report dated December 22, 2006. We determined that UMB satisfactorily addressed 5 of the findings. The remaining 8 findings are repeated in this report, two of which appear as one item in this report.

Findings and Recommendations

Employee Compensation

Finding 1

Questionable compensation payments totaling \$410,000 were made to a senior management employee. In addition, these payments were not disclosed to the General Assembly's budget committees.

Analysis

The University System of Maryland (USM) – University of Maryland, Baltimore (UMB) made questionable compensation payments totaling \$410,000 to a senior management employee. In addition, these payments were not disclosed to the General Assembly's budget committees. Specifically, our review disclosed the following conditions:

- During fiscal year 2007, this employee received four payments totaling \$350,000 as compensation for sabbatical leave that the employee was eligible for, but never actually took. These payments were approved by the UMB President and were in addition to the employee's regular salary of approximately \$360,000 per year. However, USM and UMB policies do not contain any provisions that allow employees to be paid for unused sabbatical leave.¹ We were advised by UMB management personnel that these payments were to compensate the employee since, while eligible, the employee's duties and responsibilities precluded the employee from being able to pursue academic growth by conducting sabbatical research.

The USM policy on sabbatical leave states that the primary purpose of sabbatical leave is to provide faculty members an opportunity to conduct research or to engage in creative work that will increase his or her contribution to the mission of the institution, and enhance his or her standing in the related discipline or profession. UMB's policy on sabbatical leave requires a faculty member to submit certain documentation relating to the sabbatical, including a description of the plan of activity to be undertaken during the sabbatical period and a summary report of sabbatical activity within six weeks of returning to UMB. However, this employee did not submit any of the documentation required by the UMB policy.

¹During periods of sabbatical leave, faculty members receive a salary, but are relieved of teaching responsibilities.

- Five payments, totaling \$60,000, were made to this same employee during fiscal years 2007 to 2009 for summer research (for example, to publish an article in a professional journal). However, these payments were approved by a subordinate of the employee rather than by the employee's supervisor. Although UMB provided us with documentation of the summer research conducted by this employee, we question the appropriateness of this summer research being approved by a subordinate. Furthermore, in Finding 2 of this report, we comment about the lack of a UMB policy governing payments for summer research.
- This employee's June 2008 compensation agreement had not been submitted to the Office of the Attorney General (OAG) for approval and to the USM Board of Regents (BOR) for review, as required by a USM policy for certain highly compensated employees, established December 9, 2005. This policy applies to contracts for specified personnel (such as institution officers, senior administrators, and deans) that contain certain provisions (such as terms exceeding one year and a provision for severance compensation or leave). This multi-year compensation agreement included a six-month paid sabbatical for the period ending December 2009. For calendar year 2010, the employee was given the option to resign from UMB and receive a full year's salary and benefits with no work responsibilities, or to return to UMB in another capacity with salary escalation clauses for subsequent years. The employee elected to continue employment with UMB in calendar year 2010.

Recommendation 1

We recommend that

- UMB strictly comply with established USM and UMB policies for compensation payments, including sabbatical leave;**
- payments for summer research be authorized by appropriate supervisory personnel;**
- UMB submit the aforementioned employment agreement to the Office of the Attorney General and the Board of Regents for approval and/or review, as required by USM policy; and**
- UMB formally disclose these additional compensation payments to the General Assembly.**

Finding 2**Certain additional employee compensation payments were made that were not supported by established policies.****Analysis**

Certain compensation payments made to employees in addition to their regular salaries were not supported by established policies. We tested 36 of these other compensation payments—including payments for summer research, employee bonuses, on-call coverage, and leave payouts—totaling approximately \$877,000 from fiscal years 2007 to 2009. Our test disclosed deficiencies, as noted below, with regard to all of the payments for summer research and employee bonuses:

- Seven payments totaling approximately \$52,500 of the 36 payments tested were made to faculty members of one school for summer research, as directed by the school's dean. (These are in addition to the payments mentioned in Finding 1.) However, UMB had not established a policy governing compensation for summer research. During calendar years 2007 and 2008, summer research payments made to faculty of this school totaled \$1,121,520 and ranged from \$8,000 to \$17,000 per employee. Although UMB was able to provide documentation supporting the research that was conducted by the faculty members who received the payments, there was no documentation to support how the amounts paid to each employee were determined.
- Of the 36 payments tested, 6 payments represented bonuses paid to employees, ranging from \$5,000 to \$50,000. However, UMB lacked sufficient documentation supporting how these 6 bonus payments, which totaled \$160,000, were determined. Specifically, although USM's policy on salary increases and bonuses requires each institution to develop its own policy for distribution of bonuses, UMB had not established such a policy. Rather, we were advised by UMB management personnel that the dean of each school and each department head had the authority to distribute bonuses to employees at their discretion.

The aforementioned payments to employees, which were in addition to their regular salaries, were not specifically disclosed in UMB's annual budget submissions to the General Assembly. Additionally, due to the manner in which these payments were processed, UMB could not readily identify the number or dollar amount of summer research and bonus payments made. During the period from July 2006 to November 2008, additional compensation payments made totaled approximately \$55 million, with approximately \$22.8 million occurring in fiscal year 2008. During fiscal year 2008, UMB salary costs totaled approximately \$550 million.

Recommendation 2

We recommend that UMB

- a. establish policies governing payments for summer research and employee bonuses, as well as for all other forms of additional compensation not currently covered by a policy, and adhere to such policies; and**
- b. specifically disclose additional compensation payments (including bonuses and summer research payments) in its annual budget submissions to the General Assembly.**

Cash Receipts

Finding 3

Adequate internal controls were not established over significant collections received at one department.

Analysis

UMB had not established adequate internal controls over collections received by the Department of Financial Services. Specifically, three Department employees, responsible for maintaining the related grant accounts receivable records and for issuing related billings, also received the related collections. In addition, collections were not always deposited timely. Our test of collections received for 15 days during fiscal years 2008 and 2009, totaling approximately \$7.1 million, disclosed that certain collections for 6 days, totaling approximately \$981,000, were not deposited for periods ranging from 5 to 12 business days after receipt.

As a result, errors or irregularities could occur that may not be detected timely, as well as a loss of interest income. The delay in depositing collections was commented upon in our preceding audit report. The Comptroller of Maryland's *Accounting Procedures Manual* requires that receipts be deposited no later than the first working day after the day of receipt. According to UMB records, fiscal year 2008 collections received by the Department totaled approximately \$93.2 million, representing about one-third of UMB's total collections.

Recommendation 3

We recommend that

- a. UMB ensure that employees who maintain the accounts receivable records not have access to the related collections; and**
- b. collections be deposited timely, in accordance with the Comptroller of Maryland's *Accounting Procedures Manual* (repeat).**

Accounts Receivable

Finding 4

UMB did not adequately pursue collection of certain outstanding accounts receivable, and transfer delinquent accounts to the Department of Budget and Management's Central Collection Unit. Additionally, sufficient controls were not established over certain non-cash credit adjustments.

Analysis

UMB did not adequately pursue collection of outstanding accounts receivable, and delinquent accounts were not transferred to the Department of Budget and Management's Central Collection Unit (CCU), as required. Additionally, internal controls over certain non-cash credit adjustments were inadequate. For example, we noted the following conditions:

- We tested 74 grant billings, totaling approximately \$17.6 million, which were made during the period from January 2006 to February 2009. Our test disclosed that 58 of the billings, totaling approximately \$11.4 million, were not paid timely or remained unpaid, and required dunning notices. However, no dunning notices had been sent for 39 of these billings and the required dunning notices for the remaining 19 billings were not sent for periods ranging from 76 days to 17 months after the initial invoices. Additionally, 16 grant billings, totaling approximately \$3.6 million, had been outstanding for periods ranging from 5 months to 38 months as of March 2009 but had not been referred to CCU for collection. As of December 31, 2008, outstanding grant receivables totaled approximately \$46.1 million, which included receivables totaling approximately \$13.6 million which were more than 180 days past due, and which consisted primarily of amounts due from governmental agencies and private corporations for sponsored research. UMB has had to use other funds, that would otherwise be available for investment purposes, to fund this research until payments were received.
- We tested 20 delinquent dental clinic patient accounts with outstanding balances totaling approximately \$29,800 as of December 2008. Our test disclosed that, although 10 of the accounts, totaling approximately \$20,400, had been transferred to CCU, 9 of these accounts totaling \$13,400 were transferred 40 days to 19 months after the required transfer dates. Additionally, 6 accounts totaling approximately \$2,400 had not been transferred to CCU as of December 2008, at which time these accounts had been delinquent for periods ranging from 6 months to 15 months after the required transfer dates. Furthermore, final billing notices for 14 of the 20 accounts totaling approximately \$13,500 were mailed from 2 months to 20

months after the dates required by UMB's written procedures. According to UMB's records, as of December 2008 dental clinic accounts receivable totaled approximately \$1.8 million, which included receivables totaling approximately \$615,000 that were more than 120 days past due. Similar conditions were commented upon in our preceding audit report.

- Internal controls over non-cash credit adjustments processed at the student dental clinic were inadequate. Specifically, the employees who initially received mail receipts also had the ability to record non-cash credit adjustments to patient accounts. Although a dental clinic supervisor reviewed documentation supporting 10 non-cash credit adjustments processed each month, this procedure did not provide sufficient control given that approximately 51,000 adjustments were processed during fiscal year 2008. Consequently, improper non-cash credit adjustments could be recorded to conceal misappropriations without detection. During fiscal year 2008, non-cash credit adjustments totaled approximately \$4 million, including adjustments totaling approximately \$2.4 million that were recorded by employees with access to cash receipts. A similar condition was commented upon in our preceding audit report.

CCU regulations, as amended for UMB, require that a delinquent grant account be referred to CCU 150 days (five months) after the initial invoice date, provided that UMB submits three dunning notices to the grantor at predetermined intervals beginning 60 days after the initial invoice date. The regulations also require that delinquent student accounts be transferred to CCU 120 days after the end of the preceding semester, and that dental patient accounts receivable be transferred to CCU after a maximum of 120 days have elapsed since the start of the contracted clinical procedure. Additionally, UMB's written procedures require that a final billing notice be sent to dental clinic patients 90 days after the date of the last payment or account activity.

Recommendation 4

We recommend that

- a. written payment demands be sent to the appropriate grantor agencies at required intervals;**
- b. UMB forward all delinquent accounts to CCU in accordance with CCU's regulations, as amended for UMB (repeat);**
- c. UMB ensure that final billing notices are prepared and sent to dental clinic patients in accordance with UMB written procedures (repeat);**
- d. employees with access to cash receipts at the student dental clinic not have the ability to record non-cash credit adjustments (repeat); and**

- e. the number of student dental clinic non-cash credit adjustments that are independently verified be increased, based on materiality and risk.

Contracts With Medical Systems

Finding 5

Annual contracts with the University of Maryland Medical System Corporation were not executed timely, resulting in lost interest income to UMB. Additionally, contractual payments from the Corporation and another medical system were not always received timely, and late payment fees were not assessed in accordance with the contracts.

Analysis

Annual contracts with the University of Maryland Medical System Corporation for fiscal years 2007, 2008, and 2009 were not executed until 23 months, 11 months, and 6 months, respectively, after the contracts were required to be executed. In that regard, State law requires UMB to execute an annual contract with the Corporation prior to the first day of the related fiscal year. Because of delays in executing these contracts, UMB was initially compensated by the Corporation under the previous fiscal year contract rates, which were significantly lower than the rates ultimately agreed upon. Subsequent payments received from the Corporation compensated UMB for the differences between the old and the new contract rates. For example, UMB received approximately \$10.4 million as supplemental payments for fiscal years 2007 and 2008. However, these delayed payments resulted in lost interest income to the State. For fiscal year 2008, more than \$100,000 in interest earnings were lost. We were advised by UMB personnel that a number of factors can delay the execution of new annual contracts, including negotiations concerning funding, organizational structure, and physician agreements. UMB received payments totaling \$62.3 million from the Corporation during fiscal year 2008.

In addition, UMB did not always receive timely contractual payments from the Corporation and a local hospital, and did not assess late payment fees in accordance with the related contracts. Specifically, our test of 32 payments received from the Corporation and the hospital during fiscal years 2006 to 2009, totaling approximately \$13.4 million, disclosed that 18 payments totaling approximately \$8.6 million were received from 14 to 165 days after the required due dates. Related late payments fees totaling approximately \$121,000 were not assessed by UMB. The contracts with the Corporation and the hospital provide that UMB is to be reimbursed for certain administrative, faculty, and physician services, as well as non-medical administrative services. The contracts also

stipulate that any payment due UMB from the Corporation and the hospital that is not received when due shall accrue a late payment charge. Similar conditions have been commented upon in our seven preceding audit reports, dating back to 1988. In response to our preceding report, USM, on behalf of UMB, stated that UMB would pursue the collection of late payments.

Recommendation 5

We recommend that UMB

- a. execute annual contracts with the Corporation prior to the beginning of each fiscal year, as required by State law;**
- b. monitor the receipt of payments related to these contracts, and assess late payment fees when payments are untimely (repeat); and**
- c. assess and take appropriate action to collect the aforementioned late payment fees from the Corporation and the hospital (repeat).**

Revolving Fund Accounts

Finding 6

UMB did not establish written plans to eliminate deficit balances, totaling \$2.9 million, in certain revolving fund accounts.

Analysis

UMB did not always establish written plans to eliminate deficit balances in revolving fund accounts. Our test of 10 revolving fund accounts, with deficit balances totaling approximately \$5.4 million as of March 31, 2009, disclosed that written plans had not been established as of May 2009 to address the deficit balances for 6 accounts with deficit balances totaling approximately \$2.9 million. According to UMB's records, the negative balances in these 6 accounts, which related to physician associations established under UMB's Medical Service Plan (MSP), have existed since at least July 2007. The MSP allows faculty members to establish professional associations to engage in private practices within the UMB or at affiliated hospitals. Since deficit balances exist in these accounts, UMB has had to use other funds, that would otherwise be available for investment purposes, to cover the deficits.

One of the aforementioned physician associations, with deficit revolving fund account balances totaling approximately \$584,000 as of March 31, 2009, has experienced recurring financial losses. In this regard, the most recent independent auditor's opinion on the association's financial statements for the fiscal years ended June 30, 2007 and 2008 commented on these recurring losses from operations and questioned the association's viability as a going concern.

Consequently, the ability of the association to make sufficient payments to UMB to eliminate the deficit balances is questionable.

As of March 31, 2009, UMB had 172 revolving fund accounts with deficit balances totaling approximately \$14.7 million.

Recommendation 6

We recommend that UMB

- a. establish written plans to eliminate the deficit balances in the aforementioned revolving fund accounts, as well as any other accounts with large deficit balances; and**
- b. in consultation with legal counsel, determine any legal remedies available in the event the aforementioned physicians associations are unable to make sufficient payments to UMB to eliminate deficit balances.**

Purchasing and Disbursement Transactions

Finding 7

Proper internal controls were not established over purchasing and disbursement transactions, and Board of Public Works approval was not always obtained for service contracts that exceeded \$500,000, as required.

Analysis

UMB had not established adequate internal controls over the processing of certain critical purchasing and disbursement transactions in its automated system, and had not always obtained Board of Public Works (BPW) approval for service contracts, as required. Specifically, our review disclosed the following conditions:

- Fifteen employees had the ability to process invoice payments, and to add or edit vendors in the system without independent approval, including four employees whose job duties did not require such access. Additionally, four employees had the ability to process purchase orders that were not subject to independent approval and could record the related purchases as received in the automated system. Three of these four employees could also add or edit vendors in the system. Finally, one former employee had purchasing and receiving capabilities in the system as of December 2008 even though the employee had left employment with UMB in February 2008. As a result, these employees could potentially process unauthorized purchases and disbursement transactions without detection.

- UMB did not always request approval of the BPW for service contracts in excess of \$500,000, as required. Our test of nine service contracts totaling approximately \$7.9 million, disclosed that BPW approval was required for three contracts totaling \$6.7 million; however, for two of these contracts totaling approximately \$1.8 million, the approval was not obtained. Payments made by UMB under these two service contracts totaled approximately \$ 1.1 million during our audit period.

State Procurement Regulations, as applicable to USM, require BPW approval for service contracts that exceed \$500,000. UMB used its automated system to process expenditures totaling approximately \$167 million during fiscal year 2008.

Recommendation 7

We recommend that UMB ensure that adequate controls are in place over all critical transactions processed on its automated system and follow State procurement regulations. Specifically, we recommend that

- UMB ensure that purchases and disbursements are subject to independent approval;**
- the ability to process critical transactions be restricted to only those employees whose job responsibilities require such access;**
- UMB ensure that the ability to process transactions on its automated system is immediately removed for employees who have left employment with UMB; and**
- UMB report the aforementioned service contracts to the BPW and, in the future, comply with State Procurement Regulations by requesting approval from the BPW for service contracts in excess of \$500,000.**

Finding 8

Purchases totaling approximately \$1.2 million were made without a formal written procurement process, as required.

Analysis

UMB did not use a competitive procurement process for repetitive purchases that were reasonably expected to exceed \$100,000, as required. Specifically, our test of corporate purchasing card purchases totaling approximately \$5.1 million made from 10 vendors during the period from July 2006 to October 2008 disclosed that purchases totaling approximately \$1.2 million were made from 4 of these vendors without formal written procurement processes (such as competitive sealed bidding). Purchases made from each of the 4 vendors during the aforementioned period for lab products, moving services, and electrical work ranged from

approximately \$198,000 to \$513,000, and during fiscal year 2008, the number of purchases made from the 4 vendors using corporate purchasing cards ranged from 76 to 397.

The UMB *Purchasing Guide* requires that a formal written procurement process (such as competitive sealed bidding) be utilized for purchases that are reasonably expected to exceed \$100,000. This can help ensure that items are purchased at the lowest cost.

Recommendation 8

We recommend that UMB comply with the requirements of the aforementioned *Purchasing Guide* and use a formal written procurement process for purchases that are reasonably expected to exceed \$100,000.

Corporate Purchasing Cards

Finding 9

Corporate purchasing card transactions made by a former employee who pled guilty to felony theft of approximately \$470,000 from UMB in February 2009 were not always properly reviewed and approved. Additionally, documentation was not maintained to substantiate the disposition of gift cards totaling \$40,700 purchased by another employee.

Analysis

Corporate purchasing card transactions were not always properly reviewed and approved for a former employee who pled guilty to felony theft of approximately \$470,000 from UMB. Additionally, documentation substantiating the disposition of gift cards totaling \$40,700 purchased by another employee was not maintained. Specifically, our review disclosed the following conditions:

- Cardholder logs were not prepared for transactions incurred by a former employee during the period from January 2007 through February 2008, as required. Furthermore, the purchasing card transaction logs prepared for calendar year 2006 were not reviewed by the employee's supervisor until March 2007. Although we were advised by UMB management personnel that a review of some of this former employee's transaction logs (for available periods) and bank statements was performed by UMB's purchasing card program administrator, there was no documentation to substantiate that any reviews had been conducted.

In a report dated August 25, 2008, the USM Office of Internal Audit identified 209 potentially fraudulent purchases made by this former employee during the period from February 2006 to January 2008 totaling approximately \$332,000. The report further noted that this former employee had misappropriated a check made payable to UMB for approximately \$138,000. UMB discovered the alleged theft of the check in January 2008, and after an investigation by the Office, the matter was referred to the Office of the Attorney General. On February 27, 2009, the Attorney General announced that this former employee had pled guilty to felony theft of approximately \$470,000 from UMB, and on June 3, 2009, the former employee was sentenced to one year in prison.

The financial institution that administers the State's corporate purchasing card program will waive liability for fraudulent charges if the charges are incurred within 75 days of termination of the cardholder's account. However, we were advised by UMB management personnel that, due to untimely detection of the fraudulent purchasing card charges, the financial institution would not waive UMB's liability for these charges.

- Gift cards, totaling \$40,700, were purchased from retailers, under a federally funded program, with a corporate purchasing card by another UMB employee during the period from July 2006 to June 2008. However, UMB could not document who received the gift cards or what was purchased with the gift cards. The employee who purchased the gift cards advised us that these gift cards were distributed to various staff and students of UMB's School of Social Work to purchase items for needy families. We contacted several staff and students of the School and were advised that the aforementioned employee had provided them with a number of gift cards. Effective November 2008, the Comptroller of Maryland prohibits the purchase of gift cards with corporate purchasing cards.

The Comptroller of Maryland's *Corporate Purchasing Card Program Policy and Procedures Manual* requires agencies to ensure cardholder logs and related documentation are approved and signed by the cardholder and the cardholder's supervisor and forwarded to the agency's purchasing card program administrator or fiscal officer for review and retention. During fiscal year 2008, UMB's corporate purchasing card expenditures totaled approximately \$39.5 million.

Recommendation 9

We recommend that UMB

- a. enforce existing procedures to help ensure that supervisory personnel perform thorough reviews of employees' monthly corporate purchasing card statements to ensure that all purchases are appropriate,**
- b. ensure that cardholder logs and related documentation are forwarded to UMB's purchasing card program administrator or fiscal officer for review and retention, and**
- c. in conjunction with the USM Office of Internal Audit, review the aforementioned gift card purchases to determine the disposition of the cards and take corrective actions, as appropriate.**

Information Systems Security and Control

Background

UMB's Center for Information Technology Services (CITS) provides campus-level information technology support to UMB and to the associated professional schools by developing and maintaining campus-wide administrative applications, such as the Student Information Management System (SIMS) and the financial system.

CITS also operates UMB's core internal network, which is used for both administrative and academic purposes, with connections to numerous buildings on the UMB campus. The internal network has Internet connectivity and network connections to the USM institutions over the University of Maryland Academic Telecommunication System. In addition, the campus network is connected to the networks of several affiliated entities (for example, the University of Maryland Medical System).

Finding 10

Proper user account and password controls for certain critical systems were not established.

Analysis

User account and password controls over certain critical components of the financial system and SIMS were not adequate, as noted in the following examples.

- For numerous accounts on the financial system and SIMS databases, password length, complexity, and history requirements were not enforced.

- Three database administrators did not have their own accounts; rather, they shared several accounts, resulting in a lack of accountability.
- Four highly privileged accounts on the server hosting the SIMS application had not had their passwords changed for a period ranging from 112 days to more than five years.

Accordingly, defined control settings for accounts and passwords did not comply with the *USM Guidelines in Response to the State IT Security Policy*. Similar conditions were commented upon in our two preceding audit reports.

Recommendation 10

We recommend that UMB comply with account and password requirements and recommendations of the aforementioned *USM Guidelines in Response to the State IT Security Policy* (repeat). We made detailed recommendations to UMB which, if implemented, should provide adequate security in this area.

Finding 11

Significant security-related events were not always logged and monitored.

Analysis

Logging and monitoring of significant security-related events for the financial system and SIMS databases, as well as for the financial system application and the SIMS application server were not adequate. Specifically, we noted the following conditions:

- The financial database was not configured to log any database security activity. Examples of database activity that should be logged include changes to database accounts and permissions, and failed access attempts.
- Although direct modifications to several critical SIMS database tables (including the student grade table) were logged, the information captured was not sufficient to assess the propriety of the changes made.
- Financial system application security logs were not being created for management's review.
- Although we were advised that the SIMS application server's log files were regularly reviewed to identify significant security events, these reviews were not documented.

As a result, unauthorized or erroneous changes to critical financial system and SIMS production applications, databases, and application servers could occur without detection by management. Accordingly, defined security reporting did not comply with the *USM Guidelines in Response to the State IT Security Policy*, which requires that institutions maintain appropriate audit trails of significant events and actions related to critical applications, that these logged events and actions be reviewed, and that the reviews be documented. Similar conditions were commented upon in our preceding audit report.

Recommendation 11

We recommend that, for its critical databases, applications, and host servers, UMB comply with the logging and monitoring provisions of the aforementioned USM *Guidelines in Response to the State IT Security Policy* (repeat).

Finding 12

UMB's internal computer network, including key administrative systems, was not adequately secured.

Analysis

Adequate security measures had not been established to properly protect UMB's internal computer network from internal and external threats. Specifically, we noted the following conditions:

- Key administrative systems (including SIMS and the financial system) were not adequately protected from both internal and external exposures. For example, untrusted UMB network segments (such as student dormitories and UMB affiliated parties) could access computers running critical administrative systems. Protecting critical administrative portions of UMB's network from untrusted parties by use of proven security measures (such as a properly configured firewall) is essential in ensuring the integrity of the administrative systems and applications. A similar condition was commented upon in our two preceding audit reports.
- Thirty-two publicly accessible servers were located on internal network segments rather than being placed in a neutral network zone. Publicly accessible servers should be placed in a neutral network zone, separate from the internal network, to enhance protection of sensitive data and systems on the internal network. The Department of Information Technology's *Information Security Policy* requires that all publicly accessible servers be placed in a neutral network zone and that strict access controls be enforced

between the neutral network zone and the internal network. A similar condition was commented upon in our two preceding audit reports.

Recommendation 12

We recommend that UMB improve network security to protect its key administrative systems (repeat). We made detailed recommendations which, if implemented, should provide for adequate security over the described network components.

Working Fund

Finding 13

Internal controls deficiencies existed for UMB's two working funds.

Analysis

UMB had not established adequate controls over its two working funds, which included its main working fund and the student accounting working fund. Specifically, seven employees with access to blank checks had the ability to record disbursements in the automated working fund system, and print and sign checks. In addition, two of the seven employees also prepared the monthly bank reconciliations and fund compositions. As a result, unauthorized working fund disbursements could be processed without detection. Similar conditions were commented upon in our three preceding audit reports.

According to the records of the Comptroller of Maryland, UMB's working fund advance for both accounts totaled \$495,000. UMB's main working fund is used to process general expenses, such as travel expenses and salary advances. The student accounting working fund is used to process items related to student accounts receivable, such as financial aid settlements. According to UMB's records, during fiscal year 2008, disbursements from the main working fund and the student accounting working fund totaled approximately \$3.3 million and \$5.5 million, respectively.

Recommendation 13

We recommend that UMB establish adequate control over its working fund accounts. Specifically, we recommend that

- a. employees who record working fund disbursements in the automated systems not have the ability to print and sign the related checks (repeat), and**

- b. employees responsible for preparing the working fund bank reconciliations and fund compositions not have the ability to record disbursements and print and sign checks (repeat).**

Audit Scope, Objectives, and Methodology

We have audited the University System of Maryland (USM) – University of Maryland, Baltimore (UMB) for the period beginning December 1, 2005 and ending November 30, 2008. The audit was conducted in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

As prescribed by the State Government Article, Section 2-1221 of the Annotated Code of Maryland, the objectives of this audit were to examine UMB's financial transactions, records and internal control, and to evaluate its compliance with applicable State laws, rules, and regulations. The areas addressed by the audit included cash receipts, procurements and disbursements, information systems, student accounts receivable, payroll, and equipment. We also determined the status of the findings contained in our preceding audit report.

In planning and conducting our audit, we focused on the major financial-related areas of operations based on assessments of materiality and risk. Our audit procedures included inquiries of appropriate personnel, inspections of documents and records, and observations of UMB's operations. We also tested transactions and performed other auditing procedures that we considered necessary to achieve our objectives. Data provided in this report for background or informational purposes were deemed reasonable, but were not independently verified.

Our audit included support services provided by UMB to certain other USM institutions (such as processing certain construction vendor payments). Our audit did not include certain support services provided to UMB by the USM Office (such as endowment accounting and bond financing) and by the University of Maryland, College Park (such as payroll). These support services are included within the scope of our audits of the USM Office and the University of Maryland, College Park, respectively. In addition, our audit did not include an evaluation of internal controls for federal financial assistance programs and an assessment of UMB's compliance with federal laws and regulations pertaining to those programs because the State of Maryland engages an independent accounting firm to annually audit such programs administered by State agencies, including the components of the USM.

UMB's management is responsible for establishing and maintaining effective internal control. Internal control is a process designed to provide reasonable assurance that objectives pertaining to the reliability of financial records, effectiveness and efficiency of operations including safeguarding of assets, and compliance with applicable laws, rules, and regulations are achieved.

Because of inherent limitations in internal control, errors or fraud may nevertheless occur and not be detected. Also, projections of any evaluation of internal control to future periods are subject to the risk that conditions may change or compliance with policies and procedures may deteriorate.

Our reports are designed to assist the Maryland General Assembly in exercising its legislative oversight function and to provide constructive recommendations for improving State operations. As a result, our reports generally do not address activities we reviewed that are functioning properly.

This report includes findings that we consider to be significant deficiencies in the design or operation of internal control that could adversely affect UMB's ability to maintain reliable financial records, operate effectively and efficiently, and/or comply with applicable laws, rules, and regulations. Our report also includes findings regarding significant instances of noncompliance with applicable laws, rules, or regulations. Other less significant findings were communicated to UMB that did not warrant inclusion in this report.

The response from the USM Office, on behalf of UMB, to our findings and recommendations is included as an appendix to this report. As prescribed in the State Government Article, Section 2-1224 of the Annotated Code of Maryland, we will advise the USM Office regarding the results of our review of its response.

APPENDIX



OFFICE OF THE CHANCELLOR

February 4, 2010

Mr. Bruce A. Myers
Legislative Auditor
Office of Legislative Audits
State Office Building, Room 1202
301 West Preston Street
Baltimore, MD 21201

Re: Audit of University System of Maryland -
University of Maryland, Baltimore
Period of Audit: December 1, 2005 to –
November 30, 2008

Dear Mr. Myers:

I have enclosed the University System of Maryland's response to your draft report covering the examination of processes and controls of the University of Maryland, Baltimore. Our comments refer to the individual items contained in the report.

Sincerely,

WE Kirwan

William E. Kirwan
Chancellor

Enclosure

WEK:mpk

cc: Dr. David J. Ramsay, President, UMB
Mr. Clifford M. Kendall, Chair, Board of Regents, USM
Mr. Robert L. Page, Comptroller, USM
Mr. Kevin M. O'Keefe, Chair, MHEC
Dr. James E. Lyons, Sr., Secretary of Higher Education, MHEC

1807
University of Maryland,
Baltimore

1856
University of Maryland,
College Park

1865
Bowie State University

1866
Towson University

1886
University of Maryland
Eastern Shore

1898
Frostburg State University

1900
Coppin State University

1925
Salisbury University

1925
University of Baltimore

1925
University of Maryland
Center for Environmental
Science

1947
University of Maryland
University College

1966
University of Maryland,
Baltimore County

1985
University of Maryland
Biotechnology Institute

University of Maryland, Baltimore
Legislative Audit
Findings and Recommendations
December 1, 2005 to November 30, 2008

Employee Compensation

Finding 1

Questionable compensation payments totaling \$410,000 were made to a senior management employee. In addition, these payments were not disclosed to the General Assembly's budget committees.

Recommendation 1

We recommend that

- a. UMB strictly comply with established USM and UMB policies for compensation payments, including sabbatical leave;**
- b. payments for summer research be authorized by appropriate supervisory personnel;**
- c. UMB submit the aforementioned employment agreement to the Office of the Attorney General and the Board of Regents for approval and/or review, as required by USM policy; and**
- d. UMB formally disclose these additional compensation payments to the General Assembly.**

University Response

- A. UMB concurs with the recommendation that it should follow USM and UMB policies for compensation payment, including the sabbatical leave policy.**
- B. UMB concurs that a policy addressing supervisory approval of summer salary is needed. UMB has adopted a policy concerning summer salary supplements. The policy sets out a process for approval of such payments and states that only 10-month faculty are eligible for the payments.**
- C. UMB has submitted the agreement to the Chancellor and to the Office of the Attorney General as required by USM policy.**
- D. UMB is not aware of any request for disclosure to the General Assembly of the additional compensation payments discussed in the Finding.**

Finding 2

Certain additional employee compensation payments were made that were not supported by established policies.

Recommendation 2

We recommend that UMB

- a. establish policies governing payments for summer research and employee bonuses, as well as for all other forms of additional compensation not currently covered by a policy, and adhere to such policies; and**
- b. specifically disclose additional compensation payments (including bonuses and summer research payments) in its annual budget submissions to the General Assembly.**

University Response

- A. UMB accepts and will implement the recommendation that policies be established concerning forms of additional compensation not currently covered by UMB policies. UMB policies currently address payments for revenue-generating clinical practice; revenue-generating research and contract work; summer support for 10-month faculty; and changes in staff and faculty compensation during a fiscal year due to changes in assigned responsibilities. A policy concerning bonus payments will be developed by March 1, 2010.

UMB generates two-thirds of its annual budget through clinical revenues and research support. As a result of UMB's receipt of revenues under grants, contracts, and clinical services agreements, UMB requires and has developed faculty and staff compensation policies that provide for changes in effort and compensation as required in order for UMB to fulfill the commitments it has undertaken.

- B. UMB is not aware of any request for specific disclosure of additional compensation payments to the General Assembly.

Cash Receipts**Finding 3**

Adequate internal controls were not established over significant collections received at one department.

Recommendation 3

We recommend that

- a. UMB ensure that employees who maintain the accounts receivable records not have access to the related collections; and**

- b. collections be deposited timely, in accordance with the Comptroller of Maryland's *Accounting Procedures Manual* (repeat).**

University Response

A. UMB agrees. All checks received in the Department of Financial Services are received by employees who do not maintain accounts receivable records. This process began July, 2009.

B. UMB agrees. All funds received by the Department of Financial Services are deposited on a daily basis. This process began July, 2009.

Accounts Receivable

Finding 4

UMB did not adequately pursue collection of certain outstanding accounts receivable, and transfer delinquent accounts to the Department of Budget and Management's Central Collection Unit. Additionally, sufficient controls were not established over certain non-cash credit adjustments.

Recommendation 4

We recommend that

- a. written payment demands be sent to the appropriate grantor agencies at required intervals;**
- b. UMB forward all delinquent accounts to CCU in accordance with CCU's regulations, as amended for UMB (repeat);**
- c. UMB ensure that final billing notices are prepared and sent to dental clinic patients in accordance with UMB written procedures (repeat);**
- d. employees with access to cash receipts at the student dental clinic not have the ability to record non-cash credit adjustments (repeat); and**
- e. the number of student dental clinic non-cash credit adjustments that are independently verified be increased, based on materiality and risk.**

University Response

A. UMB agrees. Written payment demands are now sent to granting agencies at the required intervals. This process began October, 2009.

B.

- 1. Contracts and Grants

UMB agrees that delinquent accounts will be sent to SCCU in accordance with its regulations as amended for UMB. The SCCU regulations have been amended since the audit was carried out and now provide for 180 days (not 150) for UMB to attempt to collect delinquent accounts for

grants and contracts before send them to SCCU. In a case by case basis, additional deferrals may be needed due to the nature of ongoing relationships between UMB and grant sponsors. UMB is reviewing this matter and may suggest further amendments to SCCU to accommodate documented special circumstances that justify deferrals.

The fifty eight items cited have been resolved. Forty six have been collected by the campus for a total of \$10.1 Million. Five have been sent to SCCU. The remaining seven have been resolved by negotiation of disputed obligations and/or correction of charges.

B.

2. Dental Clinic

UMB agrees. In response to the similar finding from the prior legislative audit, significant effort was focused to reduce the backlog of accounts not sent to SCCU in accordance with UMB policy. Between September 1, 2007 and June 30, 2009, 5,581 accounts with balances totaling \$1,151,135 were sent to SCCU for collection. Prior to this concentrated effort, an average of 1,250 accounts totaling \$148,000 were transferred annually.

In July, 2009, the Dental School requested a modification to the policy with SCCU to allow the transfer of patient accounts 120 days from the completion of a treatment or 120 days late on a payment plan when the value of care provided exceeds the payment received to date.

C. UMB agrees that final notices should be sent in accordance with UMB policies and procedures. Current policy will be reviewed, revised if appropriate in light of agreed and proposed changes in the SCCU policy, and implemented by July 1, 2010.

D. UMB disagrees. The University believes that adequate controls are in place to ensure that cash receipts cannot be misappropriated without detection. The area of concern is where employees have both the ability to record non-cash credit adjustments and have access to cash receipts. This occurs in the Insurance and Billing department which processes incoming payments by check and credit cards (no cash is handled by this group). By the nature of dental billing, checks from insurance companies are received for amounts that are less than the amount invoiced. The clinic administration software processes the application of the check and either writes off the amount not paid by insurance or records the transfer of the balance to the patient's responsibility as one transaction. These two functions cannot be separated. To insure that funds cannot be misappropriated, the mail is logged in by two

employees who do not enter the day's checks into the system. The receipt log is compared to total of receipts posted to the system and additionally, the amount posted to the system is compared to both the receipt log and the amount of the deposit in the Finance Department.

- E. UMB agrees. As a result of the recommendation from the legislative auditor, the number of adjustments analyzed has been increased to 2 of each type resulting in the review of an average of 43 credits per month for the period April to December 2009. Additionally, the credits selected are the largest dollar amount credits of each type. While the number reviewed is a small percentage of the total, the dollar amount reviewed represents 25 percent of all credits issued in the period. This review is completed by an accountant in the finance department who does not have access to enter either cash or credits into the system.

Contracts With Medical Systems

Finding 5

Annual contracts with the University of Maryland Medical System Corporation were not executed timely, resulting in lost interest income to UMB. Additionally, contractual payments from the Corporation and another medical system were not always received timely, and late payment fees were not assessed in accordance with the contracts.

Recommendation 5

We recommend that UMB

- a. execute annual contracts with the Corporation prior to the beginning of each fiscal year, as required by State law;**
- b. monitor the receipt of payments related to these contracts, and assess late payment fees when payments are untimely (repeat); and**
- c. assess and take appropriate action to collect the aforementioned late payment fees from the Corporation and the hospital (repeat).**

University Response

- A. UMB agrees to use all reasonable efforts to execute the annual contract with the Corporation on a timely basis. The FY2010 contract was executed June 28, 2009.
- B. UMB agrees. Late payments will be assessed when payments are untimely.

- C. UMB agrees. UMB is pursuing the late payment fees from both the Corporation and the hospital. UMB collected the late payment fees from the Corporation and has invoiced the hospital. We expect payment no later than March 31, 2010.

Revolving Fund Accounts

Finding 6

UMB did not establish written plans to eliminate deficit balances, totaling \$2.9 million, in certain revolving fund accounts.

Recommendation 6

We recommend that UMB

- a. establish written plans to eliminate the deficit balances in the aforementioned revolving fund accounts, as well as any other accounts with large deficit balances; and**
- b. in consultation with legal counsel, determine any legal remedies available in the event the aforementioned physicians associations are unable to make sufficient payments to UMB to eliminate deficit balances.**

University Response

- A. UMB agrees. Written plans have been established to eliminate deficit balances in the aforementioned revolving accounts as well as others with large deficit balances. As of June 30, 2009, five of the six accounts cited in the audit had positive balances. The remaining one has a written plan that would lead to a positive balance as of June 30, 2010.
- B. UMB agrees. UMB will consult with legal counsel in the event that physicians associations cannot eliminate deficit balances.

Purchasing and Disbursement Transactions

Finding 7

Proper internal controls were not established over purchasing and disbursement transactions, and Board of Public Works approval was not always obtained for service contracts that exceeded \$500,000, as required.

Recommendation 7

We recommend that UMB ensure that adequate controls are in place over all critical transactions processed on its automated system and follow State procurement regulations. Specifically, we recommend that

- a. UMB ensure that purchases and disbursements are subject to independent approval;**
- b. the ability to process critical transactions be restricted to only those employees whose job responsibilities require such access;**
- c. UMB ensure that the ability to process transactions on its automated system is immediately removed for employees who have left employment with UMB; and**
- d. UMB report the aforementioned service contracts to the BPW and, in the future, comply with State Procurement Regulations by requesting approval from the BPW for service contracts in excess of \$500,000.**

University Response

- A. UMB agrees. All purchases and disbursements will be subject to independent approval. This process was implemented February 1, 2010.
- B. UMB agrees. Critical transactions are restricted to only those employees whose job responsibilities require such access. This was implemented February 1, 2010.
- C. UMB agrees. All employees who have left the employment of the University and had access to the automated system will be removed immediately.
- D. UMB agrees. UMB will report the service contract the Board of Public Works by March 31, 2010. In the future, UMB will comply with applicable procurement regulations.

Finding 8

Purchases totaling approximately \$1.2 million were made without a formal written procurement process, as required.

Recommendation 8

We recommend that UMB comply with the requirements of the aforementioned *Purchasing Guide* and use a formal written procurement process for purchases that are reasonably expected to exceed \$100,000.

University Response

UMB agrees. UMB will review aggregate procurement card purchases with vendors exceeding \$100,000 to determine if indefinite delivery contracts can be established for those items that are repetitively purchased.

Corporate Purchasing Cards

Finding 9

Corporate purchasing card transactions made by a former employee who pled guilty to felony theft of approximately \$470,000 from UMB in February 2009 were not always properly reviewed and approved. Additionally, documentation was not maintained to substantiate the disposition of gift cards totaling \$40,700 purchased by another employee.

Recommendation 9

We recommend that UMB

- a. enforce existing procedures to help ensure that supervisory personnel perform thorough reviews of employees' monthly corporate purchasing card statements to ensure that all purchases are appropriate,**
- b. ensure that cardholder logs and related documentation are forwarded to UMB's purchasing card program administrator or fiscal officer for review and retention, and**
- c. in conjunction with the USM Office of Internal Audit, review the aforementioned gift card purchases to determine the disposition of the cards and take corrective actions, as appropriate.**

University Response

- A. UMB agrees. As of March, 2009, UMB has added the requirement of a third signature on the transaction log. This third signature is that of a verification reviewer. The verification reviewer is responsible for ensuring that the cardholder and authorized reviewer have performed their monthly reconciliation and signed the transaction log. The verification reviewers are provided a list via email at the end of each billing period of the cardholders they are responsible for that month. The verification reviewers are required to notify the PCPA if they do not receive the documents to verify by the 15th of the month preceding the end of the billing cycle.
- B. UMB disagrees. UMB has on average 590 cardholders. The State's Corporate Card Manual Section 12.04, states the review can be done by the fiscal officer or designee. The campus has designated the review to be done by the verification reviewer in the department as stated above.

- C. UMB agrees. UMB is working with the USM office of internal audit. Its audit is scheduled to begin February 8, 2010 and will take approximately two months to complete. Corrective actions will be taken after the completion of the audit and be finalized by June 30, 2010.

Information Systems Security and Control

Finding 10

Proper user account and password controls for certain critical systems were not established.

Recommendation 10

We recommend that UMB comply with account and password requirements and recommendations of the aforementioned USM *Guidelines in Response to the State IT Security Policy* (repeat). We made detailed recommendations to UMB which, if implemented, should provide adequate security in this area.

University Response

UMB agrees with this recommendation. CITS has implemented these recommendations during fall, 2009, and is enforcing stronger password controls.

Finding 11

Significant security-related events were not always logged and monitored.

Recommendation 11

We recommend that, for its critical databases, applications, and host servers, UMB comply with the logging and monitoring provisions of the aforementioned USM *Guidelines in Response to the State IT Security Policy* (repeat).

University Response

UMB agrees with this recommendation. CITS is undertaking an analysis to determine the appropriate monitoring cycle for capturing and reviewing security logs. As an outcome of the analysis, which includes an assessment of risk as well as resource availability, a plan for monitoring logs on a regular basis will be developed by December 31, 2010.

Finding 12

UMB's internal computer network, including key administrative systems, was not adequately secured.

Recommendation 12

We recommend that UMB improve network security to protect its key administrative systems (repeat). We made detailed recommendations which, if implemented, should provide for adequate security over the described network components.

University Response

UMB agrees with this recommendation. CITS has begun this process; the estimated completion date is December 31, 2010.

Working Fund**Finding 13**

Internal controls deficiencies existed for UMB's two working funds.

Recommendation 13

We recommend that UMB establish adequate control over its working fund accounts. Specifically, we recommend that

- a. employees who record working fund disbursements in the automated systems not have the ability to print and sign the related checks (repeat), and**
- b. employees responsible for preparing the working fund bank reconciliations and fund compositions not have the ability to record disbursements and print and sign checks (repeat).**

University Response

- A. UMB agrees. The campus has revised its business processes to insure that employees who record disbursements do not have the ability to print and sign checks. This has been in effect since July 1, 2009.
- B. UMB agrees. The campus has revised its business processes to insure that the employee responsible for the bank reconciliation cannot record disbursements or print and sign checks. This has been in effect since July 1, 2009.

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Information Systems Senior Auditors

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Athenia M. Rock, CFE

Matthew D. Straw

Staff Auditors

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Jacquelyn M. Tindall

Information Systems Staff Auditors

Bijan A. Mohandessi

Staff Auditor Intern